Appendix I: Statistical Models for Claims Analyses, for DID Trend Testing, and Regression Models

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Overview

This appendix provides an overview of and the results of the statistical modeling and testing of the outcome measures calculated for this evaluation. See Table 1, Description of Measures and Statistical Testing for descriptions of the dependent and independent variables, covariates and model parameters. More technical descriptions of the measure operationalization may be found in Appendix M. Description and Operationalization of Utilization Measures Report.

The study population is comprised of four study groups:

- Pre-WCM: Intervention group pre-WCM implementation
- Post-WCM: Intervention group post-WCM implementation
- Classic Pre-WCM: Classic comparison group pre-WCM implementation
- Classic Post-WCM: Classic comparison group post-WCM implementation

The comparisons of interest are:

- Pre-WCM vs. Post-WCM
- Classic Pre-WCM vs. Classic Post-WCM
- Pre-WCM vs. Classic Pre-WCM
- Post-WCM vs. Classic Post-WCM

The Difference in Difference (DiD) examines whether the pre-to-post change among the intervention group is statistically different than the pre-to-post change among the Classic CCS comparison group.

List of Outcome and Independent/Covariate Measures and Statistical Tests Used in the SB586 report

The model results to follow are for the following outcome variables analyzed from the claims analysis described in the main body of the SB586 report:

Primary Outcome Variables

1. Case Management
2. CCS Paneled Provider Visits
3. Deaths
4. Durable Medical Equipment
5. Emergency Department (ED) Visits

6. Emergency Department Follow-Up (28-day)
7. Grievances
8. Hospital Follow-Up (28-Day)
9. Hospital Readmission (All Cause 30-Day)
10. Hospitalizations
11. In-Home Supportive Services
12. Length of Hospital Stay
13. Mental Health Visits
14. New Enrollment
15. Pharmacy
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17. Specialty Care Center Visit within 90-Days of Referral
18. Specialist Visit
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    a. Childhood, Age Two
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21. Well-Child Visits 15 months
22. Well-Child Visits 30 months
23. Well-Child Visits Age 3-6 years
24. Well-Child Visits Age 12-20 years
25. Miles traveled to providers: Table including mean, median, 99th percentile upper and lower bound and max value and DID regression model
    a. Travel to All Outpatient Provider Visits
    b. Travel to Specialty Provider Visits
    c. Travel to CCS Paneled Providers Visits
    d. Travel to Specialty Care Centers Visits
    e. Travel to Primary care Visits
26. Transition outcomes
    a. Primary Care
    b. Specialty care
    c. ED visits
    d. Hospitalizations

Primary Independent Variables/Covariates

Key outcomes, unless otherwise specified, were modeled with each of the six possible covariates listed below. Covariates were removed if there was no statistical significance noted with that variable. The exception was with Language and Ethnicity, which were always kept in the model unless mentioned otherwise.

1. Chronic Illness and Disability Payment System (CDPS) Score[1] (CDPS_log2): log transformed due to right skewed distribution.
2. Ethnicity (ethnic4): Black, Latinx, Other/Unknown, White
3. Language (lang4): Spanish, English, Asian language, Other
4. Age Category (AgeCat): <12 Months, 1 year, 2-6 years, 7-11 years, 12-20 years
5. Gender
6. Disability derived from the Children with Disabilities Algorithm[2] (CWDA): 0/1 (1 = has childhood disability)
7. Season: Winter, Spring, Summer, Fall to adjust for seasonal changes in healthcare utilization

Table 1. Description of Measures and Statistical Testing

Measure	Dependent Variable Notes	Model or Statistical Test	Model Notes	Level I Covariates	Level II Covariate
Case Management	Although there is sometimes more than one case management claim/encounter per month there were rarely more than two. Thus a 0/1 dichotomous variable was modeled. 1=one or more ED visits in a given month, 0=none.	Segmented regression repeated measures by month. Dist=negative biniomial	The unit of analysis is a month of enrollment.	Ethnic4 Lang2 Age_Cat CDPS_log2	Clients (repeated measure)

[1] Krosnick R, Gilmer T, Dreyfus T, Lee L. Improving health-based payment for Medicaid beneficiaries: CDPS. Health Care Financ Rev. 2000 Spring;21(3):29-64. PMID: 11481767; PMCID: PMC4194678.

[2]Chien AT, Kuhlthau KA, Toomey SL, Quinn JA, Houtrow AJ, Kuo DZ, Okumura MJ, Van Cleave JM, Johnson CK, Mahoney LL, Martin J, Landrum MB, Schuster MA. Development of the Children With Disabilities Algorithm. Pediatrics. 2015 Oct;136(4):e871-8. doi: 10.1542/peds.2015-0228. PMID: 26416938.

Measure	Dependent Variable Notes	Model or Statistical Test	Model Notes	Level I Covariates	Level II Covariate
CCS Paneled Provider Visits	If there were any visits to a CCS paneled provider in a given month it would not be uncommon to have 1, 2, 3, or more. Thus, counts of visits per month were modeled.	Segmented regression repeated measures by enrollment month. Dist=negative binomial.	The unit of analysis is a month of enrollment.	Season Ethnic4 Lang2 Age_Cat CDPS_log2 CWDA	Clients (repeated measure)
Deaths	Dichotomous 0/1 variable. 1=died, 0=not	Z-Test of two Proportions	The unit of analysis is a month of enrollment.	None	None
Durable Medical Equipment (DME)	If there were any claim/encounters for DME provision in a given month it would not be uncommon to have 1, 2, 3, or more. Thus, counts of visits per month were modeled	Segmented regression repeated measures by enrollment month. Dist=negative binomial.	The unit of analysis is a month of enrollment.	Season Ethnic4 Lang2 Age_Cat Gender CDPS_log2 CWDA	Clients (repeated measure)
ED Visits	Although there is sometimes more than one ED visit per month there were rarely more than two. Thus a 0/1 dichotomous variable was modeled. 1=one or more ED visits in a given month, 0=none.	Segmented regression repeated measures by enrollment month. Dist=binary.	The unit of analysis is a month of enrollment.	Season Ethnic4 Lang2 Age_Cat CDPS_log2 CWDA	Clients (repeated measure)

Measure	Dependent Variable Notes	Model or Statistical Test	Model Notes	Level I Covariates	Level II Covariate
Emergency Department Follow-Up (28-day)	A follow-up visit with a primary care medical provider or specialist within 28-days of an Emergency Department visit.	Segmented regression repeated measures by enrollment month. Dist=binary.	The unit of analysis is aa Emergency Department visit.	Season Ethnic4 Lang2 Age_Cat CDPS_log2 CWDA	Clients (repeated measure)
Grievances	Number of grievances per member month.	Logistic Regression.The interaction of Intervention group X Period was modeled to test DiD	The unit of analysis is a month of enrollment.	None	None
Hospital Follow-up (28-Day)	A follow-up visit with a primary care medical provider or specialist within 28-days of a hospital discharge.	Segmented regression repeated measures by month in which a discharge occurred. Dist=binary.	The unit of analysis is a hospital discharge.	Season Ethnic4 Lang2 Age_Cat CDPS_log2 CWDA	Clients (repeated measure)
Hospital Readmission (All Cause 30-Day)	Readmission to a hospital within 30-day of a hospital discharge	Segmented regression repeated measures by month in which a discharge occurred. Dist=binary.	The unit of analysis is a hospital discharge.	Ethnic4 Lang2 Age_Cat CDPS_log2 CWDA	Clients (repeated measure)

Measure	Dependent Variable Notes	Model or Statistical Test	Model Notes	Level I Covariates	Level II Covariate
Hospitalizations	Although there is sometimes more than one inpatient stay per month there were rarely more than two. Thus a 0/1 dichotomous variable was modeled. 1=one or more inpatient stays in a given month, 0=none.	Segmented regression repeated measures by enrollment month. Dist=binary.	The unit of analysis is a month of enrollment.	Ethnic4 Lang2 Age_Cat CDPS_log2	Clients (repeated measure)
ED visit followed by Hospitalization	Data is from OSHPD PDD file Every hospitalization has an admit source indicating if it is from the Emergency Department. Prior to 2017 OSHPD did not distinguish between other departments ER's and none-ER	Logistic regression model The interaction of Intervention group X Period was modeled to test the DiD	The unit of analysis is ED visit	None	None
Hospital Length of Stay	Days in a hospital stay.	Negative Binomial Regression on count of days in the hospital stay.	The unit of analysis is a hospital admission	CDPS_log2 Ethnic4 Lang3 Age_cat	Clients (repeated measure)

Measure	Dependent Variable Notes	Model or Statistical Test	Model Notes	Level I Covariates	Level II Covariate
In-Home Supportive Services	If there is an IHSS claim in a given month there is rarely more than 1 or 2. IHSS is routinely billed in 15 day increments and the number of days of service provision is not available in the MIS/DSS. Thus a 0/1 dichotomous variable was modeled. 1=one or more IHSS claims in a given month, 0=none.	Segmented regression repeated measures by enrollment month. Dist=binary.	The unit of analysis is a month of enrollment.	Ethnic4 Lang2 Age_Cat CDPS_log2 CWDA	Clients (repeated measure)
Mental Health	This measure included any MH claim/encounter regardless of severity. If there were any MH claims/encounters in a given month it would not be uncommon to have 1, 2, 3, or more. Thus, counts of visits per month were modeled.	Segmented regression repeated measures by enrollment month. Dist=negative binomial.	The unit of analysis is a month of enrollment.	Season Ethnic4 Lang2 Age_Cat CDPS_log2 CWDA	Clients (repeated measure)
Distance (Miles) between provider and client	Euclidian distance between a billing provider and a client's residence	Z test of the average provider-client distance between study groups	The unit of analysis is a visit.	Season Ethnic4 Lang2 Age_Cat Gender CWDA	Clients (repeated measure)

Measure	Dependent Variable Notes	Model or Statistical Test	Model Notes	Level I Covariates	Level II Covariate
New Enrollment	Dichotomous 0/1 variable. 1=newly enrolled into CCS, 0=Not	Z test of the difference of two proportions; pre-to-post change of the intervention group vs. pre-to-post change of the classic comparison group.	The unit of analysis is a month of enrollment.	None	None
Pharmacy	If there were any claim/encounters for pharmacy provision in a given month it would not be uncommon to have 1, 2, 3, or more. Thus, counts of pharmacy items per month were modeled.	Segmented regression repeated measures by enrollment month. Dist=negative binomial.	The unit of analysis is a month of enrollment.	Season Ethnic4 Lang2 Age_Cat CDPS_log2 CWDA	Clients (repeated measure)
Primary Care Physician Visit	If there were any PCP visits in a given month it would not be uncommon to have 1, 2, 3, or more. Thus, counts of visits per month were modeled.	Segmented regression repeated measures by enrollment month. Dist=negative binomial.	The unit of analysis is a month of enrollment.	Season Ethnic4 Lang2 Gender Age_Cat CDPS_log2	Clients (repeated measure)

Measure	Dependent Variable Notes	Model or Statistical Test	Model Notes	Level I Covariates	Level II Covariate
Specialty Care Center Visit within 90-Days of Referral	If there were any PCP visits in a given month it would not be uncommon to have 1, 2, 3, or more. Thus, counts of visits per month were modeled.	Segmented regression repeated measures by in which a referral to an SCC occurred. Dist=negative binomial.	The unit of analysis is a referral to an SCC.	Season Ethnic4 Lang2 Age_Cat CDPS_log2 CWDA	Clients (repeated measure)
Specialist Visit	If there were any specialist visits in a given month it would not be uncommon to have 1, 2, 3, or more. Thus, counts of visits per month were modeled.	Segmented regression repeated measures by enrollment month. Dist=negative binomial.	The unit of analysis is a month of enrollment.	Ethnic4 Lang2 Gender Age_Cat CDPS_log2	Clients (repeated measure)
Specialty Care Center Visits	If there were any SCC visits in a given month it would not be uncommon to have 1, 2, 3, or more. Thus, counts of visits per month were modeled.	Segmented regression repeated measures by enrollment month. Dist=negative binomial.	The unit of analysis is a month of enrollment.	Ethnic4 Lang2 Age_Cat CDPS_log2 CWDA	Clients (repeated measure)
Transition from CCS to Medi-Cal	Transitioned to Medi-Cal after discharged from CCS at age 21=1, Else 0;	Logistic regression	The unit of analysis is the month after a client turns age 21.	None	None

Measure	Dependent Variable Notes	Model or Statistical Test	Model Notes	Level I Covariates	Level II Covariate
Transition Outcomes (ED visits, Hospitalizations Primary care Specialty Care)	The difference in service provision in the year after turning 21 as compared to the year before.	Linear regression	The unit of analysis is a client transitioning to Medi-Cal at age 21	Ethnic4 Lang2 CDPS_log2 CWDA	None
Childhood Vaccination/ Immunization	Dichotomous 0/1 variable. 1=full immunization schedule completed, 0=not fully complete	Segmented regression repeated measures by enrollment month. Dist=binary.	The unit of analysis is a month a client turns age two.	Ethnic4 Lang2	None
Well-Child Visits 15 months	Dichotomous 0/1 variable. 1=6 or more well-child visits by age 15 months, 0=less than 6 visits	Segmented regression repeated measures by enrollment month. Dist=binary.	The unit of analysis is the month a client turns age 15 months	Ethnic4 Lang2 CDPS_log2 (no covariates used for RCHSD DP)	None
Well-Child Visits 30 months	Dichotomous 0/1 variable. 1=2 or more well-child visits between age 15 and 30 15 months, 0=less than 2 visits	Segmented regression repeated measures by enrollment month. Dist=binary.	The unit of analysis is the month a client turns age 30 months	Ethnic4 Lang2 CDPS_log2 CWDA (no covariates	None

Measure	Dependent Variable Notes	Model or Statistical Test	Model Notes	Level I Covariates	Level II Covariate
				used for RCHSD DP)	
Well-Child Visits Age 3-6	Dichotomous 0/1 variable. 1= annual well-child visit among clients 3 to 6 years of age. 0=no annual visit	Logistic Regression The interaction of group X period was modeled to test DiD	The unit of analysis is any year in which an enrolled client is between the ages 3 to 6	Ethnic4 Lang2 CDPS_log2	None
Well-Child Visits Age 12-20	Dichotomous 0/1 variable. 1= annual well-child visit among clients 12 to 20 years of age. 0=no annual visit	Logistic Regression The interaction of group x period was modeled to test DiD	The unit of analysis is any year in which an enrolled client is between the ages 12 to 20	Ethnic4 Lang2 CDPS_log2 CWDA	None

Model Descriptions

Most of the following models include multiple observations per client over time and thus most utilize a multi-level design accounting for the within and between client correlation. Multi-level models increase a model's ability to detect differences between groups. However, the number of observations in most of these analyses are very large and thus easily detect statistically significant differences regardless.

Also, most of these models are segmented regressions, regressing the dependent variable by month separately for each study group. Other models were reduced to tests of the means among study groups. Table 1, Description of Measures and Statistical Testing identifies which model was employed for each measure. Regression models that have a *time-variant* covariate variable are run twice, first with *time variant* and another without. The model with *a time-variant* provides analysis of trends and the second model is used to compare means among study groups. Beyond the following results and analyses, details including beta coefficients are found in the section below.

Segmented regressions were conducted using generalized estimating equations (GEE), logistic model for dichotomous outcomes and negative binomial for count outcomes to account for confounding and within-subject correlation (exchangeable correlation assumed). For outcomes that were binary, the logit link function was used in SAS PROC GENMOD. The UCSF evaluation team simultaneously estimated intercept and slopes for each group.

Using post-hoc estimate statements in SAS, the UCSF evaluation team estimated the "difference-in-difference" by first estimating the difference in the slopes of each group and for each time period. Evaluators then compared the difference of those slopes between periods; that is, the adjusted outcome between post-intervention and preintervention. Adjusted odds ratios (aOR), and associated 95% confidence intervals, and two-tailed p-values were reported. Statistical analysis was performed SAS v9.4 (SAS Institute, Cary, NC).

For a DiD model to be valid it is assumed that the pre-period slopes are parallel to each other. If not, one could suggest that the pre-to-post-period differences could be due to a trend resulting from something other than the intervention. Such a model may not be entirely invalid, but the interpreter must use caution and discuss how trends might be affecting the results.

DiD Full Regression Model Results and Model Line Fit for Each Outcome for each WCM Phase

Overview

1. For each measure that includes measures over time, a figure representing the trend of the measured outcome over time is included. A trend line of the measure is included in both the pre- and post-period for the WCM and Classic CCS comparison Group. For each measure modeled with a time varying covariate, UCSF provides a statement about the trends shown in the figure with an interpretation of the slopes of the lines pre (as described below described in the section below) and post implementation.
2. For each time-variant measure, the UCSF evaluation team provides a statement about slopes over time in the pre-implementation. An assumption of a DiD model is that the slopes of these trends are not statistically different. Non-parallel slopes may be an indication that the WCM group and the Classic CCS comparison group may be being impacted differently over time. As such it may be difficult to separate future differences resulting from unobserved phenomena from the impact of the WCM. Therefore, commentary is provided about the interpretation of the DiD model based on the parallel slopes assumption after the trend line figure.
3. DiD time variant regression model for each WCM Phase for each outcome that was used to describe covariates in the main report. Please note that the adjusted odds ratio (aOR) reported in the main report were means derived from the model that did not include time. The coefficients that were significant in the model that was reported in the main report were from the time variant model. There was little difference from the time variant to non-time variant model, but aORs could not be reported from the time variant model. Non-time variant models are also included (and noted when they occur).
4. Models for Grievances, New Enrollment, Emergency Department (ED) Visits that led to Hospitalization/Inpatient Stay and Deaths are not included in the models, as they were modeled differently and described in the main report.

Case Management per 1000 MM

Figure 1. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for Case Management claims in HPSM: The slopes in the pre-period are not statistically significant (Table 2), and thus meets the parallel assumptions criteria for the DiD model. There was a statistically significant difference in trend post implementation between the WCM and Classic control group, with decreasing visits for WCM group and relatively flatter visits for Classic CCS group over time (Figure 1).

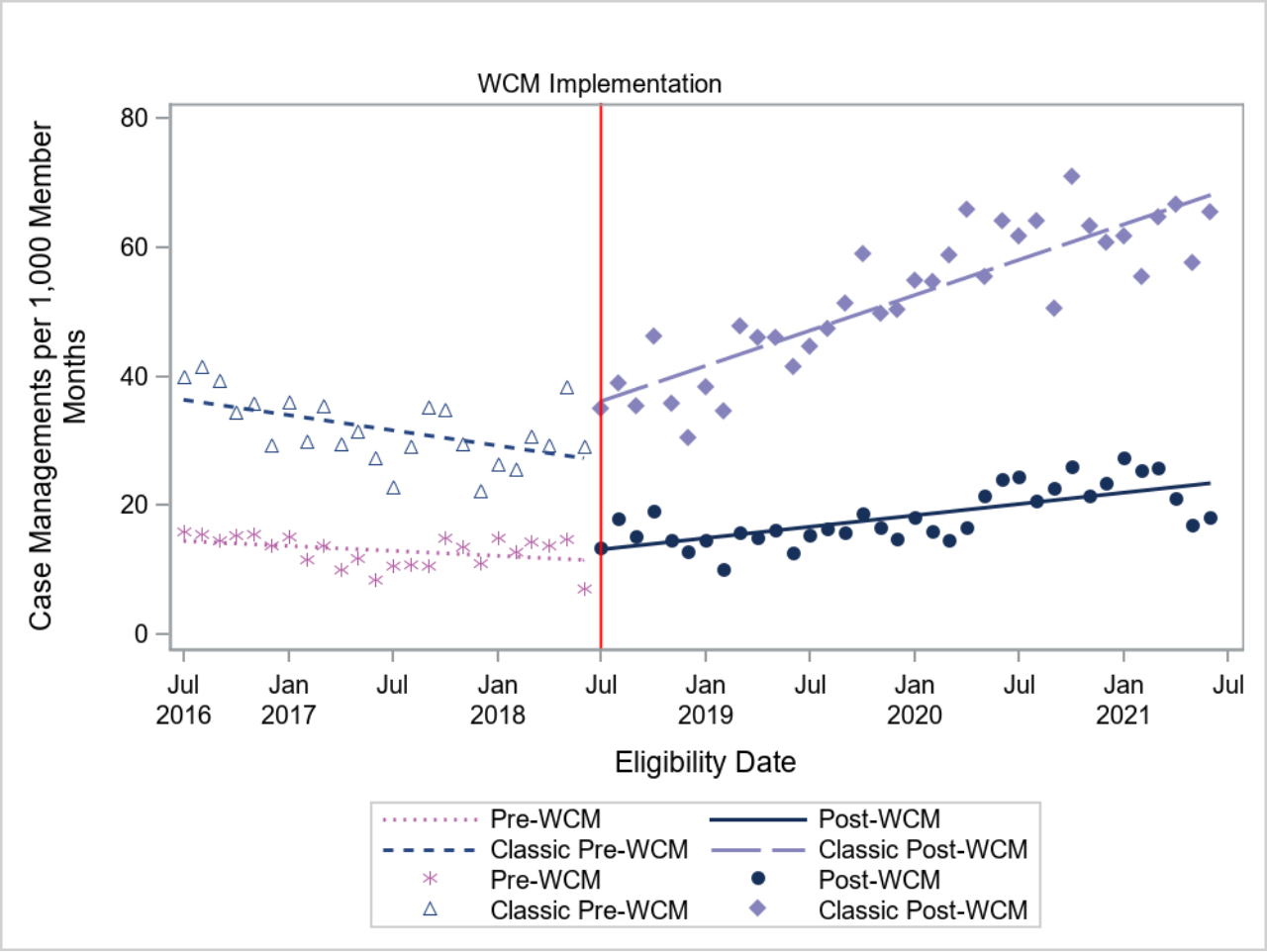
Table 2. Slopes Test for HPSM WCM Case Management

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.8515	0.7033	1.0311	-0.1607	0.0976	0.05	-0.3520	0.0306	2.71	0.0997
Post-period slopes test	0.9711	0.9479	0.9948	-0.0294	0.0123	0.05	-0.0535	-0.0052	5.69	0.0170

Table 3. Regression Model for HPSM WCM Case Management

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.8902	0.2787	-2.4365	-1.3438	-6.78	<.0001
Post*WCM_Cnty	Post	1	-1.0556	0.4461	-1.9300	-0.1812	-2.37	0.0180
Post*WCM_Cnty	Pre	0	-1.9681	0.2069	-2.3737	-1.5626	-9.51	<.0001
Post*WCM_Cnty	Pre	1	-2.9233	0.8824	-4.6528	-1.1939	-3.31	0.0009
Time*Post*WCM_Cnty	Post	0	0.0027	0.0058	-0.0086	0.0140	0.47	0.6401
Time*Post*WCM_Cnty	Post	1	-0.0267	0.0110	-0.0483	-0.0051	-2.42	0.0155
Time*Post*WCM_Cnty	Pre	0	0.0001	0.0101	-0.0197	0.0200	0.01	0.9894
Time*Post*WCM_Cnty	Pre	1	-0.1606	0.0972	-0.3510	0.0299	-1.65	0.0984
CDPS_Log2			0.1724	0.0172	0.1386	0.2061	10.02	<.0001
Cwda	1		0.0874	0.1738	-0.2533	0.4280	0.50	0.6152
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 2. Trend Line for Phase I Case Management



Trend statement for Case Management claims in Phase I: The slopes in the pre-period are not statistically significant (Table 4), and thus meets the parallel assumptions criteria for the DiD model. There was no statistically significant difference in trend post implementation between the WCM and Classic control group, with increase in claims for both Classic CCS and Phase I groups over time (Figure 2).

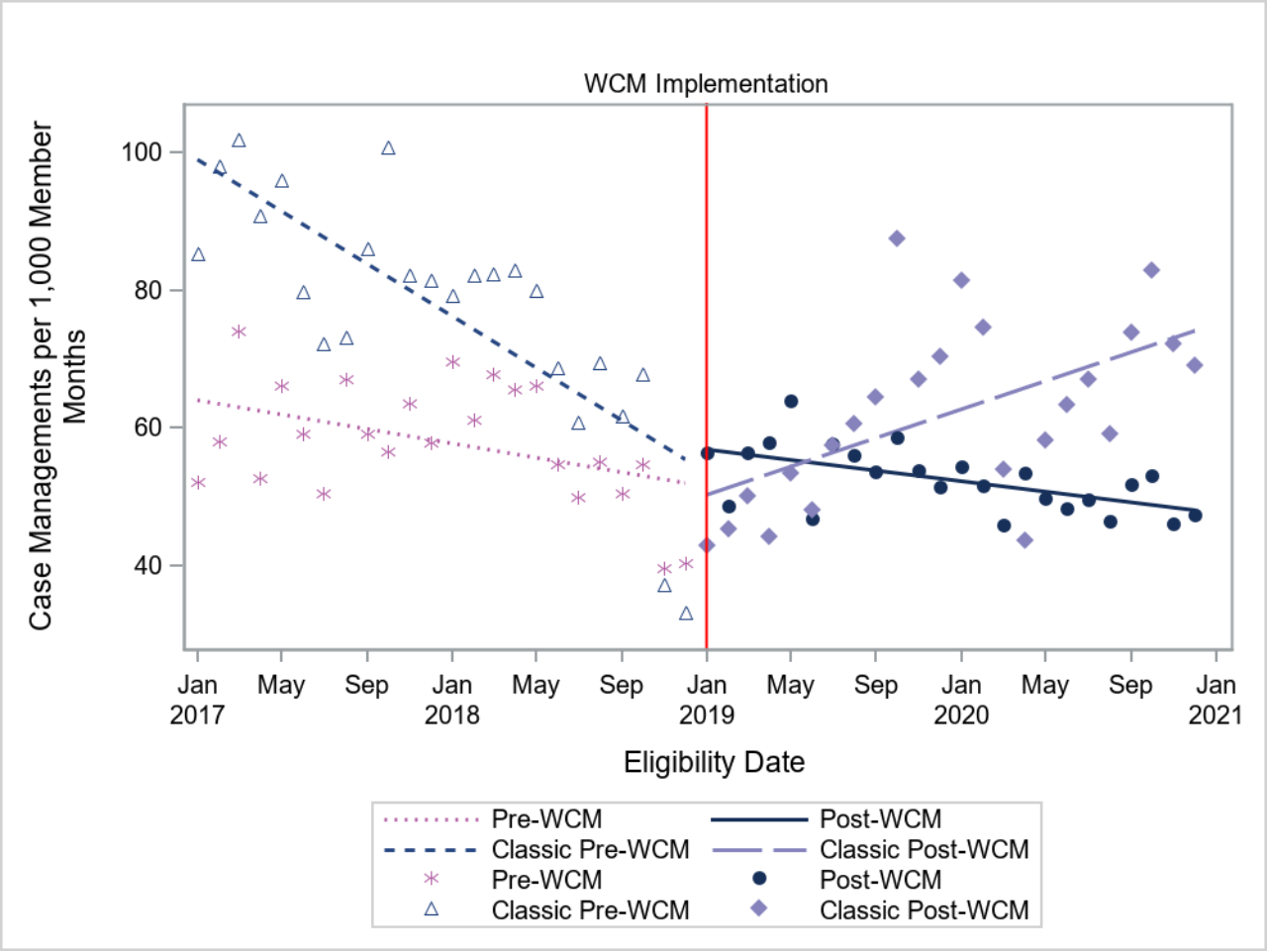
Table 4. Slopes Test for Phase I Case Management

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.9944	0.9713	1.0180	-0.0056	0.0120	0.05	-0.0291	0.0179	0.22	0.6391
Post-period slopes test	0.9964	0.9841	1.0088	-0.0036	0.0063	0.05	-0.0160	0.0087	0.33	0.5645

Table 5. Regression Model for Phase I Case Management

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-4.5029	0.1841	-4.8637	-4.1422	-24.46	<.0001
Post*WCM_Cnty	Post	1	-5.3837	0.2202	-5.8153	-4.9520	-24.44	<.0001
Post*WCM_Cnty	Pre	0	-4.1118	0.1430	-4.3921	-3.8315	-28.75	<.0001
Post*WCM_Cnty	Pre	1	-5.1118	0.1763	-5.4573	-4.7662	-28.99	<.0001
Time*Post*WCM_Cnty	Post	0	0.0152	0.0036	0.0081	0.0223	4.19	<.0001
Time*Post*WCM_Cnty	Post	1	0.0115	0.0051	0.0014	0.0216	2.24	0.0251
Time*Post*WCM_Cnty	Pre	0	-0.0124	0.0070	-0.0262	0.0013	-1.78	0.0755
Time*Post*WCM_Cnty	Pre	1	-0.0181	0.0098	-0.0372	0.0011	-1.85	0.0641
Season	Fall		-0.0162	0.0291	-0.0733	0.0409	-0.56	0.5780
Season	Spring		0.0482	0.0303	-0.0111	0.1075	1.59	0.1111
Season	Winter		-0.0888	0.0309	-0.1493	-0.0283	-2.88	0.0040
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.2817	0.0160	0.2503	0.3132	17.57	<.0001
ethnic4	Black		0.0149	0.2114	-0.3994	0.4291	0.07	0.9439
ethnic4	Latinx		-0.2612	0.0945	-0.4463	-0.0761	-2.77	0.0057
ethnic4	Other/ Unknown		-0.2296	0.1000	-0.4256	-0.0337	-2.30	0.0216
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0879	0.0814	-0.2474	0.0717	-1.08	0.2803
Lang3	Other/ Unknown		-0.1711	0.3069	-0.7726	0.4305	-0.56	0.5773
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.0318	0.0817	-0.1283	0.1919	0.39	0.6971
AgeCat	2-6		1.1120	0.1122	0.8921	1.3319	9.91	<.0001
AgeCat	7-11		1.5232	0.1007	1.3259	1.7206	15.12	<.0001
AgeCat	12-20		1.5998	0.0990	1.4057	1.7939	16.16	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 3. Trend Line for Phase II Case Management



Trend statement for Case Management claims in Phase II: The slopes in the pre-period are statistically significant ($p<0.001$), and thus the parallel slopes assumption of the DiD model is not satisfied (Table 6). As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. There was a statistically significant difference in trend post implementation between the WCM and Classic control group, with decrease in claims for Phase II and increase for Classic CCS comparison group over time (Figure 3).

Table 6. Slopes Test for Phase II Case Management

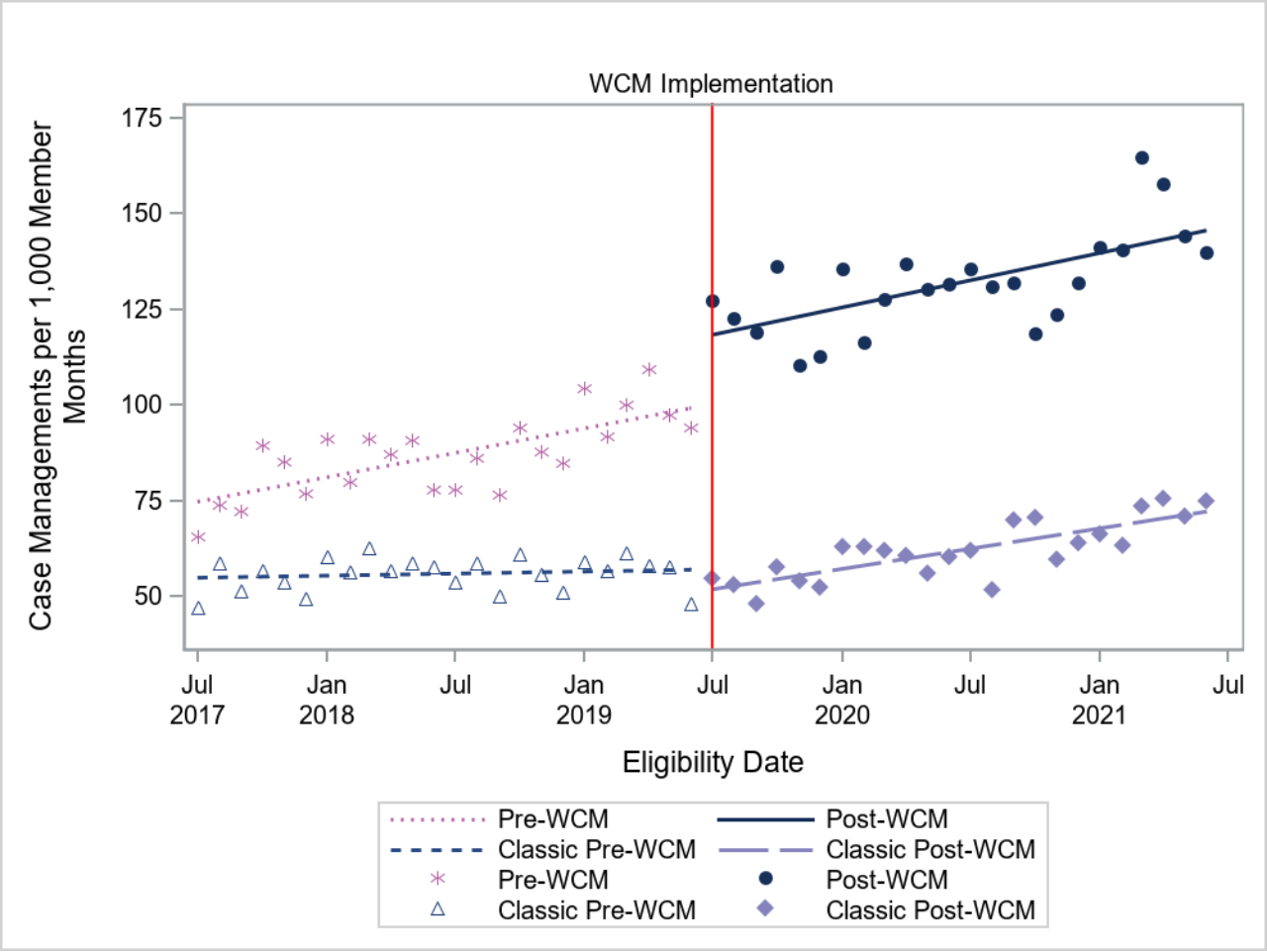
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0259	1.0134	1.0386	0.0256	0.0063	0.05	0.0133	0.0379	16.56	<.0001
Post-period slopes test	0.9837	0.9695	0.9981	-0.0165	0.0074	0.05	-0.0310	-0.0019	4.93	0.0264

Table 7. Regression Model for Phase II Case Management

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-3.7756	0.1894	-4.1468	-3.4044	-19.93	<.0001
Post*WCM_Cnty	Post	1	-3.3705	0.2197	-3.8012	-2.9398	-15.34	<.0001
Post*WCM_Cnty	Pre	0	-2.7607	0.1021	-2.9609	-2.5606	-27.03	<.0001
Post*WCM_Cnty	Pre	1	-3.5681	0.1252	-3.8136	-3.3226	-28.49	<.0001
Time*Post*WCM_Cnty	Post	0	0.0071	0.0049	-0.0026	0.0167	1.43	0.1523
Time*Post*WCM_Cnty	Post	1	-0.0094	0.0056	-0.0203	0.0016	-1.68	0.0933
Time*Post*WCM_Cnty	Pre	0	-0.0364	0.0033	-0.0428	-0.0300	-11.16	<.0001
Time*Post*WCM_Cnty	Pre	1	-0.0109	0.0055	-0.0216	-0.0001	-1.98	0.0473
Season	Fall		0.0665	0.0264	0.0148	0.1181	2.52	0.0116
Season	Spring		0.1108	0.0258	0.0603	0.1614	4.30	<.0001
Season	Winter		0.0531	0.0278	-0.0015	0.1076	1.91	0.0565
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.2305	0.0126	0.2059	0.2552	18.34	<.0001
ethnic4	Black		0.2792	0.1518	-0.0184	0.5767	1.84	0.0659
ethnic4	Latinx		-0.0085	0.0940	-0.1928	0.1758	-0.09	0.9281

ethnic4	Other/ Unknown		0.0300	0.0702	-0.1077	0.1677	0.43	0.6694
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.3598	0.0882	-0.5326	-0.1870	-4.08	<.0001
Lang3	Other/ Unknown		0.4875	0.2026	0.0903	0.8847	2.41	0.0161
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1384	0.0736	-0.0057	0.2826	1.88	0.0598
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.1995	0.0747	-0.3458	-0.0532	-2.67	0.0075
AgeCat	2-6		0.7624	0.0868	0.5923	0.9325	8.78	<.0001
AgeCat	7-11		0.9893	0.0989	0.7955	1.1831	10.01	<.0001
AgeCat	12-20		0.9147	0.0918	0.7348	1.0946	9.97	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 4. Trend Line for Phase III Case Management



Trend statement for Case Management claims in Phase III: The slopes in the pre-period are statistically significant (p=0.0124), and thus the parallel slopes assumption of the DiD model is not satisfied (Table 8). As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. There was a statistically significant difference in trend post implementation between the WCM and Classic control group, with increase in claims for both Phase III and Classic CCS comparison groups over time (Figure 4).

Table 8. Slopes Test for Phase III Case Management

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0123	1.0026	1.0220	0.0122	0.0049	0.05	0.0026	0.0218	6.25	0.0124
Post-period slopes test	0.9905	0.9814	0.9996	-0.0096	0.0047	0.05	-0.0187	-0.0004	4.22	0.0400

Table 9. Regression Model for Phase III Case Management

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-4.3130	0.1606	-4.6278	-3.9982	-26.85	<.0001
Post*WCM_Cnty	Post	1	-3.4836	0.1298	-3.7380	-3.2292	-26.84	<.0001
Post*WCM_Cnty	Pre	0	-3.8815	0.1055	-4.0882	-3.6747	-36.80	<.0001
Post*WCM_Cnty	Pre	1	-3.8286	0.0959	-4.0165	-3.6407	-39.93	<.0001
Time*Post*WCM_Cnty	Post	0	0.0156	0.0037	0.0083	0.0229	4.17	<.0001
Time*Post*WCM_Cnty	Post	1	0.0060	0.0028	0.0005	0.0115	2.14	0.0322
Time*Post*WCM_Cnty	Pre	0	-0.0021	0.0035	-0.0091	0.0048	-0.61	0.5447
Time*Post*WCM_Cnty	Pre	1	0.0100	0.0034	0.0035	0.0166	3.00	0.0027
CDPS_Log2			0.2625	0.0082	0.2465	0.2785	32.10	<.0001
ethnic4	Black		0.2511	0.1346	-0.0126	0.5149	1.87	0.0620
ethnic4	Latinx		0.0862	0.0763	-0.0632	0.2357	1.13	0.2583
ethnic4	Other/ Unknown		-0.1165	0.0740	-0.2617	0.0286	-1.57	0.1155
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.1499	0.0500	0.0518	0.2479	2.99	0.0027

Lang3	Other/ Unknown		-0.6112	0.1006	-0.8084	-0.4140	-6.08	<.0001
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1980	0.0464	0.1072	0.2889	4.27	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.1520	0.0645	-0.2785	-0.0256	-2.36	0.0185
AgeCat	2-6		0.5923	0.0662	0.4626	0.7220	8.95	<.0001
AgeCat	7-11		1.1030	0.0689	0.9679	1.2380	16.01	<.0001
AgeCat	12-20		1.4073	0.0660	1.2779	1.5367	21.32	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

CCS Paneled-Provider Visits per 1000 MM (Includes both Medicaid and non-Medicaid (out of network) CCS providers)

Figure 5. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for CCS Paneled Provider visits in HPSM: The slopes in the pre- period are not statistically significant (Table 10), and thus meets the parallel assumptions criteria for the DiD model has been met. HPSM CCS paneled provider claims appear to be stable over time for Classic CCS group while decreasing for HPSM WCM (Figure 5).

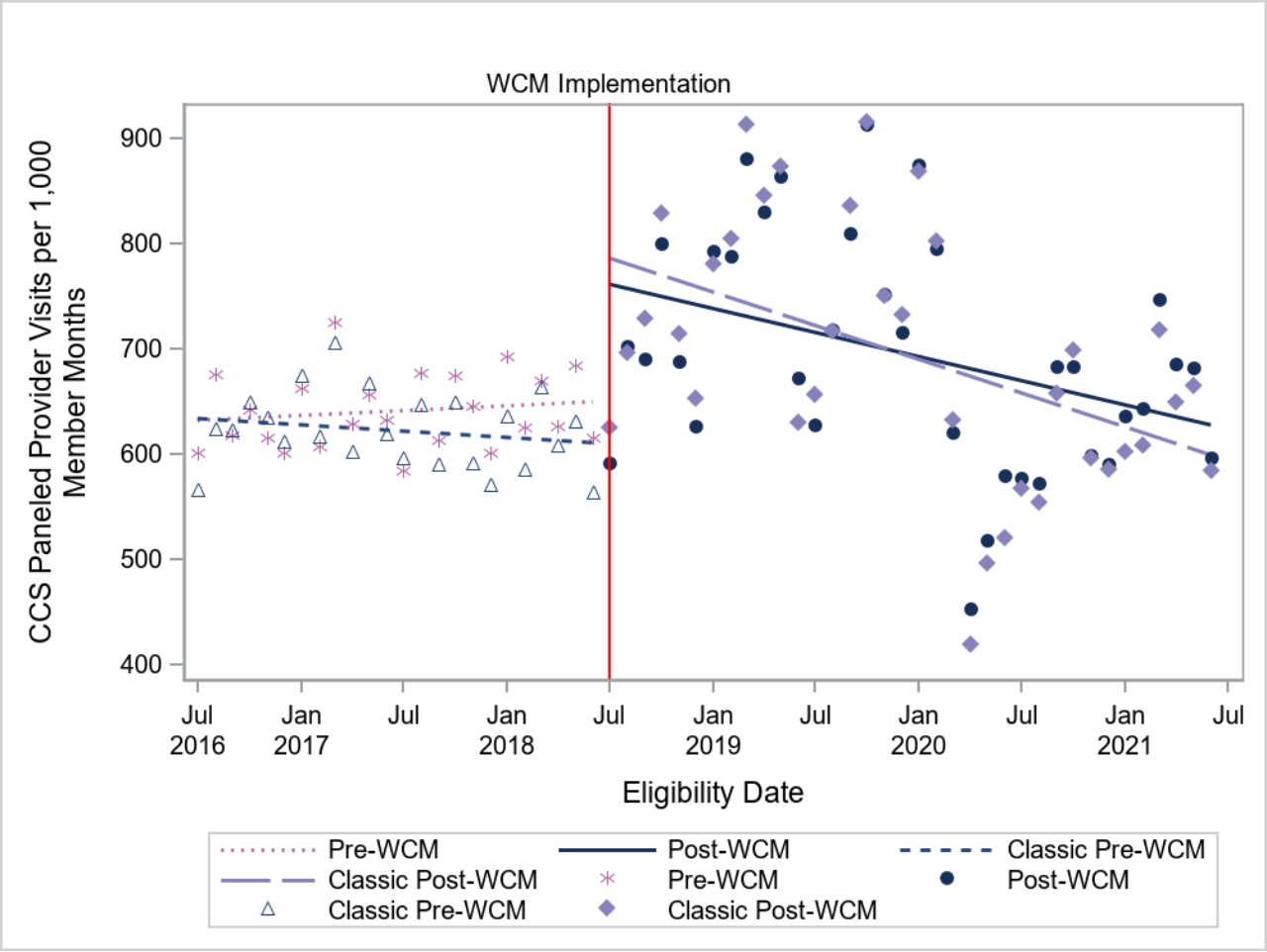
Table 10. Slopes Test for HPSM WCM CCS Paneled Provider

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.9633	0.9069	1.0232	-0.0374	0.0308	0.05	-0.0977	0.0230	1.47	0.2248
Post-period slopes test	0.9828	0.9741	0.9916	-0.0173	0.0045	0.05	-0.0262	-0.0084	14.55	0.0001

Table 11. Regression Model for HPSM WCM CCS Paneled Provider

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	0.3482	0.0893	0.1732	0.5232	3.90	<.0001
Post*WCM_Cnty	Post	1	1.4282	0.2026	1.0312	1.8253	7.05	<.0001
Post*WCM_Cnty	Pre	0	-0.0395	0.0508	-0.1392	0.0601	-0.78	0.4368
Post*WCM_Cnty	Pre	1	0.0543	0.3995	-0.7288	0.8374	0.14	0.8918
Time*Post*WCM_Cnty	Post	0	-0.0019	0.0018	-0.0053	0.0016	-1.05	0.2925
Time*Post*WCM_Cnty	Post	1	-0.0192	0.0041	-0.0273	-0.0111	-4.63	<.0001
Time*Post*WCM_Cnty	Pre	0	-0.0002	0.0029	-0.0059	0.0056	-0.06	0.9548
Time*Post*WCM_Cnty	Pre	1	-0.0375	0.0307	-0.0976	0.0225	-1.22	0.2208
CDPS_Log2			0.2554	0.0110	0.2339	0.2769	23.26	<.0001
cwda	0		-0.4439	0.0427	-0.5277	-0.3602	-10.39	<.0001
cwda	1		0.0000	0.0000	0.0000	0.0000	.	.

Figure 6. Trend Line for Phase I CCS Paneled Provider



Trend statement for CCS Paneled Provider visits in Phase I: In the pre-WCM period, the slopes of the WCM group and Classic CCS comparison group are not statistically different and thus the parallel slopes assumption of the DiD model is satisfied (Table 12). There was no statistically significant difference in trend post implementation between the WCM and Classic CCS comparison group, and there was convergence of lines over time.

Table 12. Slopes Test for Phase I CCS Paneled Provider

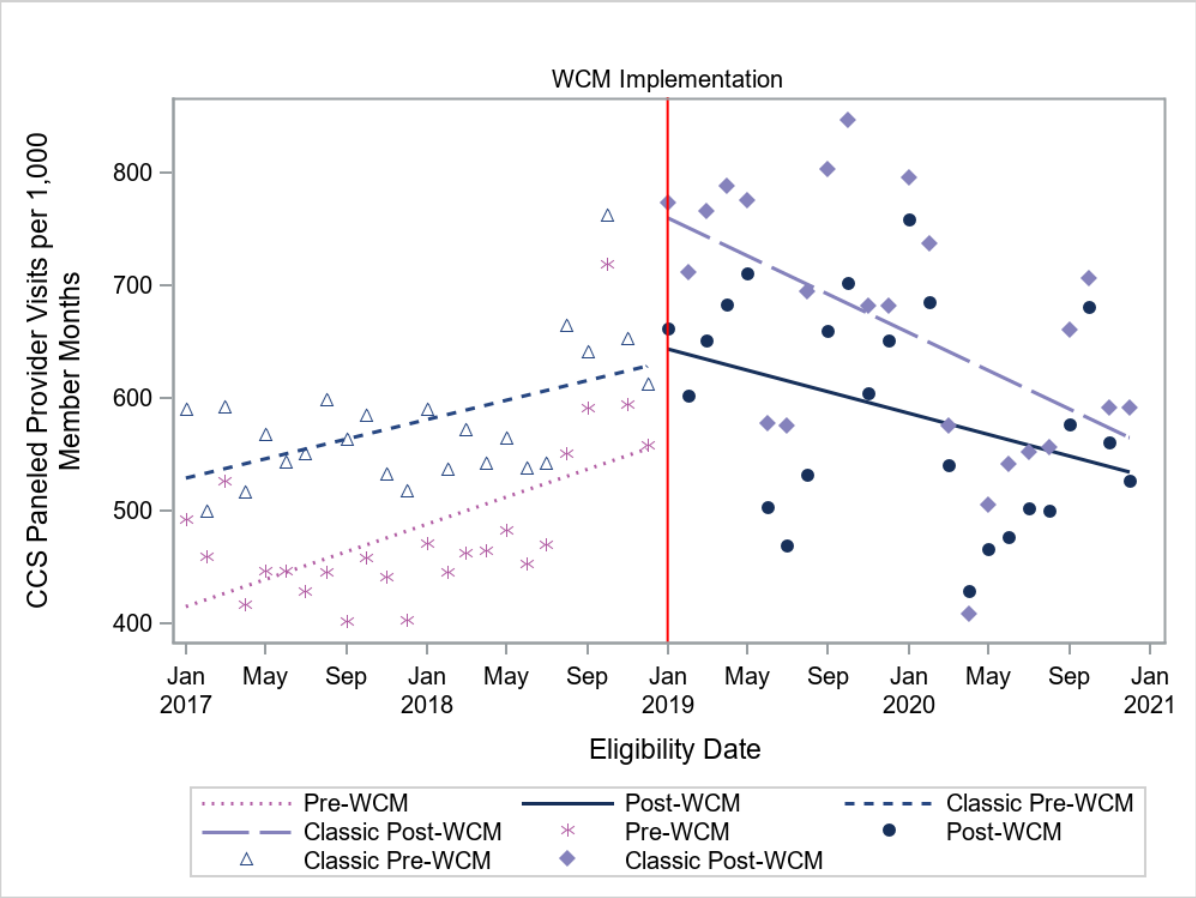
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0009	0.9979	1.0039	0.0009	0.0015	0.05	-0.0021	0.0039	0.33	0.5678
Post-period slopes test	1.0013	0.9994	1.0032	0.0013	0.0010	0.05	-0.0006	0.0032	1.70	0.1924

Table 13. Regression Model for Phase I CCS Paneled Provider

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	0.1334	0.0384	0.0580	0.2087	3.47	0.0005
Post*WCM_Cnty	Post	1	0.0647	0.0338	-0.0017	0.1310	1.91	0.0560
Post*WCM_Cnty	Pre	0	-0.1719	0.0235	-0.2181	-0.1258	-7.30	<.0001
Post*WCM_Cnty	Pre	1	-0.1389	0.0220	-0.1820	-0.0958	-6.31	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0042	0.0007	-0.0055	-0.0028	-5.85	<.0001
Time*Post*WCM_Cnty	Post	1	-0.0029	0.0007	-0.0042	-0.0016	-4.36	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0001	0.0011	-0.0021	0.0023	0.12	0.9058
Time*Post*WCM_Cnty	Pre	1	0.0010	0.0011	-0.0011	0.0031	0.96	0.3371
CDPS_Log2			0.2718	0.0038	0.2644	0.2792	72.00	<.0001
cwda	0		-0.3267	0.0136	-0.3534	-0.3000	-23.94	<.0001
cwda	1		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0406	0.0489	-0.1364	0.0553	-0.83	0.4070
ethnic4	Latinx		-0.0514	0.0163	-0.0833	-0.0195	-3.16	0.0016
ethnic4	Other/Unknown		0.0201	0.0185	-0.0161	0.0564	1.09	0.2764
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.0900	0.0131	0.0644	0.1157	6.87	<.0001

Lang3	Other/Unknown		0.0431	0.0478	-0.0506	0.1368	0.90	0.3674
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.

Figure 7. Trend Line for Phase II CCS Paneled Provider



Trend statement for CCS Paneled Provider claims in Phase II: Trend statement for CCS Paneled Provider visits in Phase II. The slopes in the pre- period are not statistically significant (Table 14), and thus meets the parallel assumptions criteria for the DiD model has been met. During the post-period, there is significant difference in the CCS paneled provider claims between Phase II and Classic CCS comparison group, with decrease in claims for both groups over time (Figure 7).

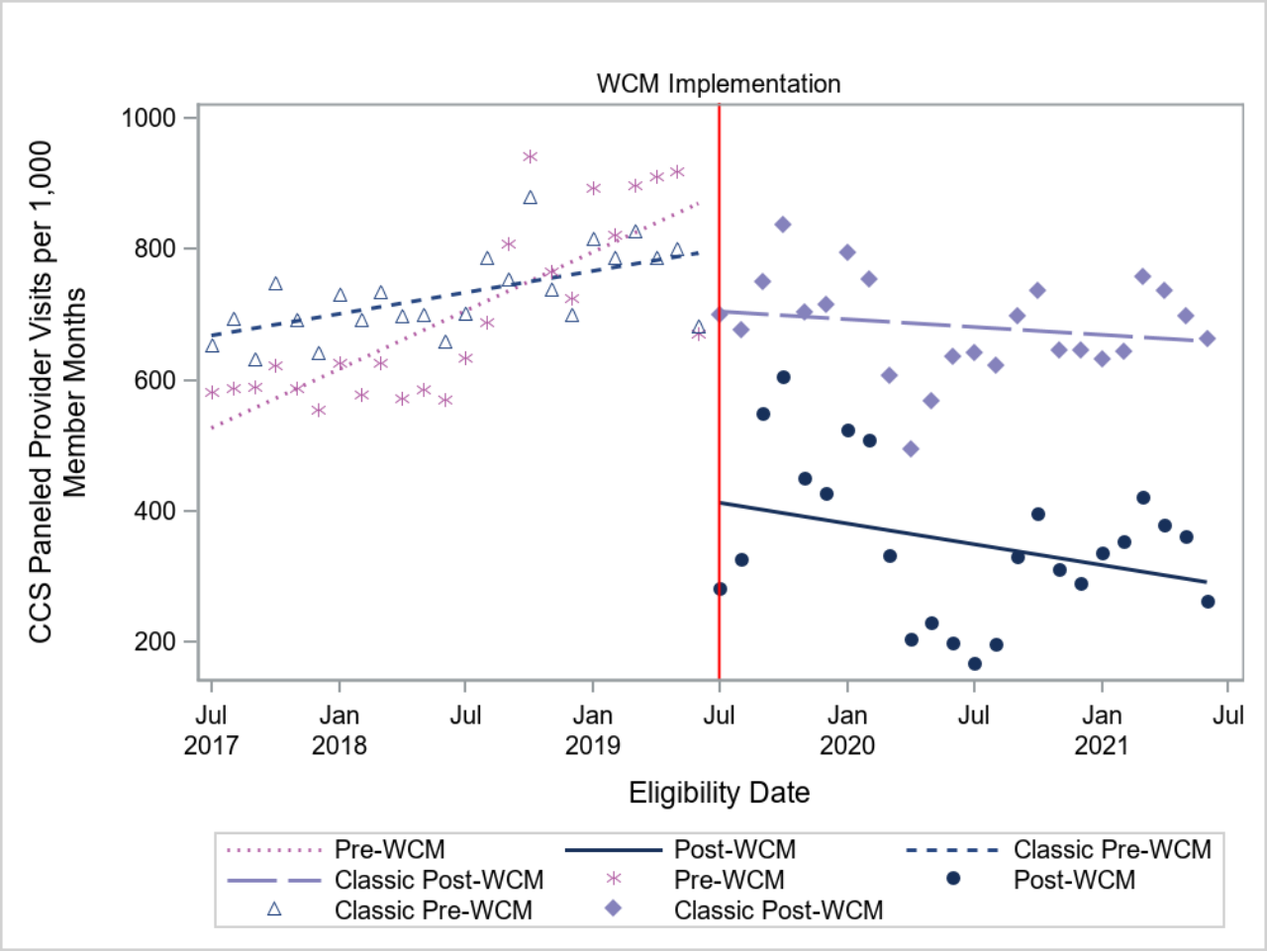
Table 14. Slopes Test for Phase II CCS Paneled Provider

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0037	0.9997	1.0078	0.0037	0.0021	0.05	-0.0003	0.0077	3.22	0.0729
Post-period slopes test	1.0092	1.0055	1.0130	0.0092	0.0019	0.05	0.0055	0.0129	23.64	<.0001

Table 15. Regression Model for Phase II CCS Paneled Provider

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	0.3295	0.0557	0.2204	0.4386	5.92	<.0001
Post*WCM_Cnty	Post	1	-0.1722	0.0554	-0.2808	-0.0636	-3.11	0.0019
Post*WCM_Cnty	Pre	0	-0.3430	0.0304	-0.4026	-0.2835	-11.30	<.0001
Post*WCM_Cnty	Pre	1	-0.6455	0.0333	-0.7109	-0.5802	-19.37	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0127	0.0013	-0.0152	-0.0101	-9.64	<.0001
Time*Post*WCM_Cnty	Post	1	-0.0035	0.0014	-0.0061	-0.0008	-2.52	0.0116
Time*Post*WCM_Cnty	Pre	0	0.0059	0.0014	0.0031	0.0087	4.11	<.0001
Time*Post*WCM_Cnty	Pre	1	0.0096	0.0015	0.0067	0.0125	6.47	<.0001
CDPS_Log2			0.2897	0.0054	0.2790	0.3003	53.42	<.0001
cwda	1		0.2255	0.0171	0.1920	0.2590	13.21	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.0396	0.0331	-0.0252	0.1044	1.20	0.2311
ethnic4	Latinx		0.0268	0.0222	-0.0167	0.0704	1.21	0.2272
ethnic4	Other/ Unknown		0.0373	0.0194	-0.0007	0.0753	1.92	0.0543
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.0481	0.0214	0.0062	0.0900	2.25	0.0244
Lang3	Other/ Unknown		0.0260	0.0370	-0.0465	0.0985	0.70	0.4818
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.7877	0.0229	-0.8327	-0.7428	-34.33	<.0001
AgeCat	2-6		-0.2089	0.0283	-0.2644	-0.1535	-7.39	<.0001
AgeCat	7-11		-0.1640	0.0286	-0.2201	-0.1079	-5.73	<.0001
AgeCat	12-20		-0.3578	0.0273	-0.4113	-0.3043	-13.11	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 8. Trend Line for Phase III CCS Paneled Provider



Trend statement for CCS Paneled Provider visits in Phase III: In the pre-WCM period, the slopes of the WCM group and Classic comparison group are statistically different ($p<0.0001$) and thus the parallel slopes assumption of the DiD model is not satisfied (Table 16). As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. There was a statistically significant difference in trend

post implementation between the WCM and Classic comparison group, showing higher decline in Phase III WCM compared to comparison group over time.

Table 16. Slopes Test for Phase III CCS Paneled Provider

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0105	1.0074	1.0135	0.0104	0.0015	0.05	0.0074	0.0134	46.14	<.0001
Post-period slopes test	0.9922	0.9883	0.9961	-0.0079	0.0020	0.05	-0.0118	-0.0039	15.47	<.0001

Table 17. Regression Model for Phase III CCS Paneled Provider

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-0.2310	0.0471	-0.3234	-0.1386	-4.90	<.0001
Post*WCM_Cnty	Post	1	-0.6484	0.0673	-0.7803	-0.5164	-9.63	<.0001
Post*WCM_Cnty	Pre	0	-0.3350	0.0322	-0.3980	-0.2719	-10.41	<.0001
Post*WCM_Cnty	Pre	1	-0.5458	0.0325	-0.6095	-0.4821	-16.78	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0001	0.0010	-0.0022	0.0019	-0.14	0.8859
Time*Post*WCM_Cnty	Post	1	-0.0080	0.0017	-0.0114	-0.0046	-4.67	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0068	0.0010	0.0048	0.0088	6.72	<.0001
Time*Post*WCM_Cnty	Pre	1	0.0172	0.0012	0.0150	0.0195	14.83	<.0001
Season	Fall		0.1461	0.0074	0.1317	0.1605	19.87	<.0001
Season	Spring		0.0962	0.0067	0.0832	0.1093	14.41	<.0001
Season	Winter		0.1029	0.0074	0.0884	0.1174	13.94	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.2606	0.0049	0.2509	0.2703	52.69	<.0001

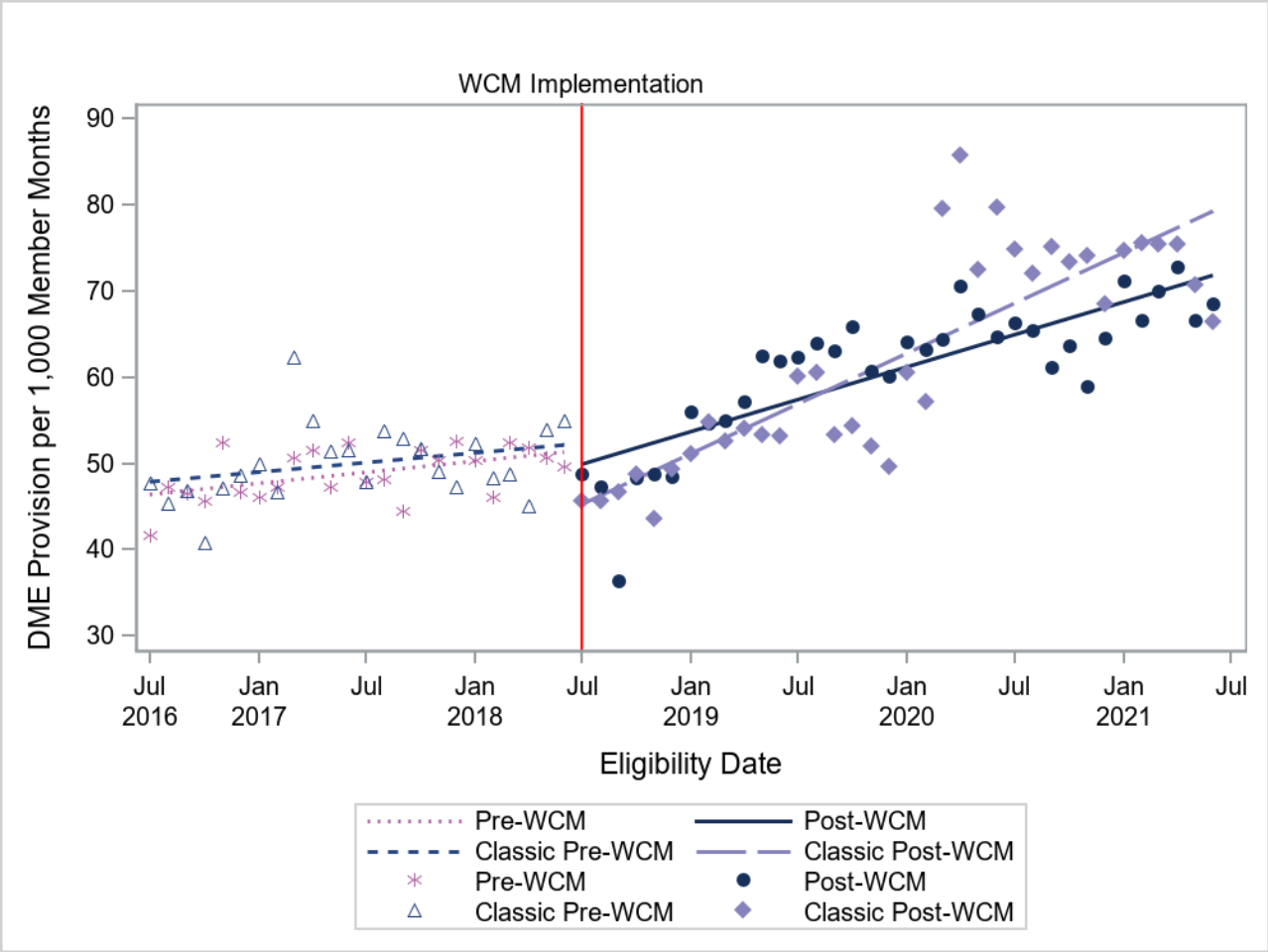
cwda	1		0.5568	0.0155	0.5264	0.5871	35.97	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.1552	0.0386	-0.2308	-0.0796	-4.03	<.0001
ethnic4	Latinx		-0.1415	0.0247	-0.1899	-0.0931	-5.73	<.0001
ethnic4	Other/ Unknown		-0.0792	0.0255	-0.1291	-0.0293	-3.11	0.0019
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0334	0.0167	-0.0661	-0.0007	-2.00	0.0454
Lang3	Other/ Unknown		-0.1027	0.0362	-0.1737	-0.0318	-2.84	0.0046
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.7696	0.0208	-0.8104	-0.7288	-36.95	<.0001
AgeCat	2-6		-0.1397	0.0243	-0.1874	-0.0920	-5.74	<.0001
AgeCat	7-11		-0.1252	0.0255	-0.1752	-0.0751	-4.90	<.0001
AgeCat	12-20		-0.3239	0.0241	-0.3713	-0.2766	-13.42	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Durable Medical Equipment (DME) claims per 1000 MM

Figure 9. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

There were insufficient instances of DME provision for HPSM WCM in the pre-period to generate stable estimates for the DiD analysis or to perform regression analysis. Instead, we report the proportion of DME claims.

Figure 10. Trend Line for Phase I DME Claims



Trend statement for DME claims in Phase I: In the pre-WCM period, the slopes of the Phase I group and Classic comparison group are not statistically different (p=0.8786) and thus the parallel slopes assumption of the DiD model is satisfied (Table 18). The DME claims increased for both the WCM and Classic control group, but there was no a statistically significant difference in trend post implementation (p=0.5111)

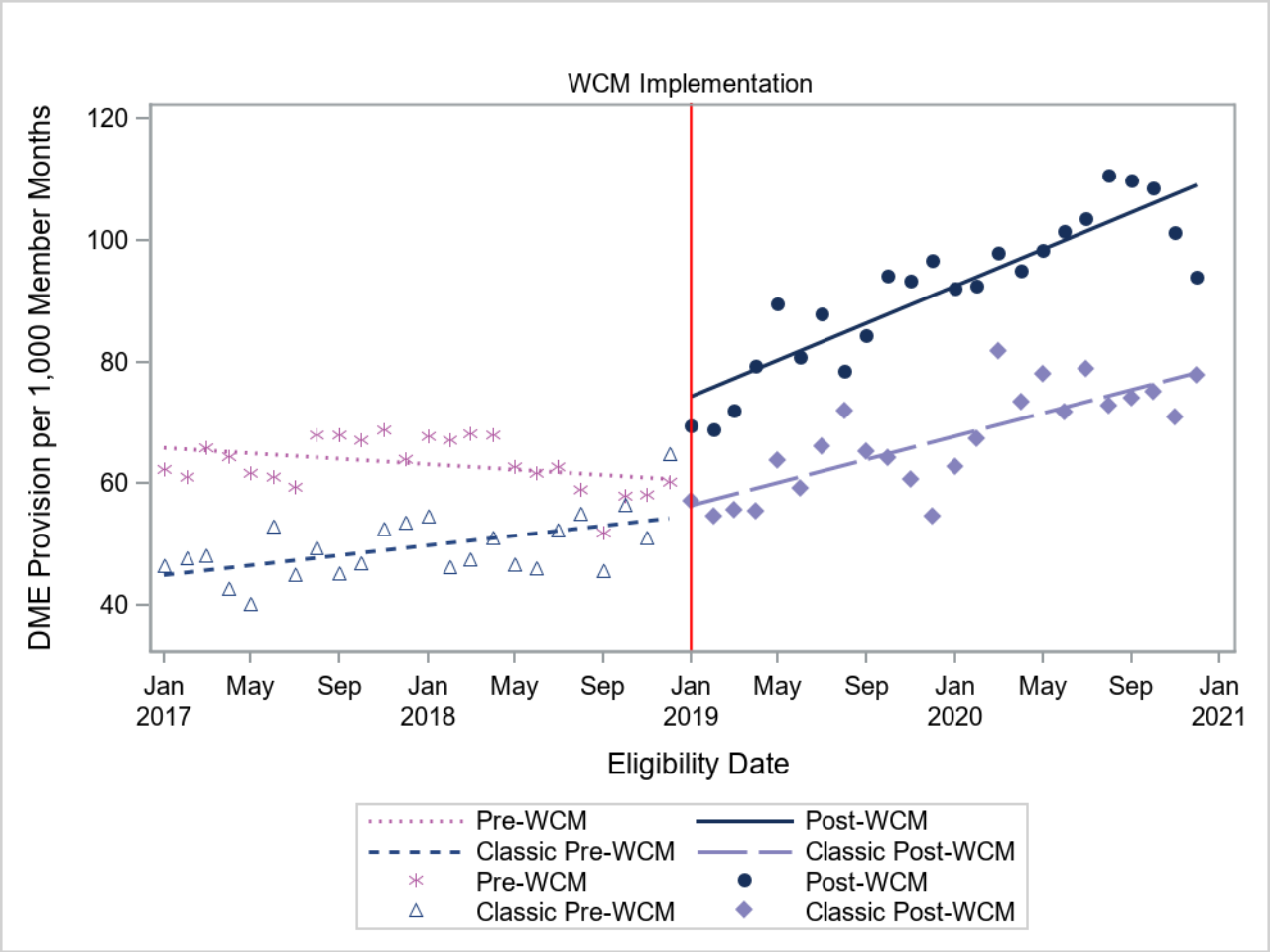
Table 18. Slopes Test for Phase I DME claims

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0007	0.9920	1.0094	0.0007	0.0044	0.05	-0.0080	0.0093	0.02	0.8786
Post-period slopes test	0.9980	0.9921	1.0040	-0.0020	0.0030	0.05	-0.0080	0.0040	0.43	0.5111

Table 19. Regression Model for Phase I DME Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-5.6656	0.1258	-5.9121	-5.4190	-45.04	<.0001
Post*WCM_Cnty	Post	1	-5.4992	0.1104	-5.7157	-5.2828	-49.80	<.0001
Post*WCM_Cnty	Pre	0	-5.1680	0.0878	-5.3401	-4.9960	-58.87	<.0001
Post*WCM_Cnty	Pre	1	-5.2055	0.0849	-5.3719	-5.0392	-61.33	<.0001
Time*Post*WCM_Cnty	Post	0	0.0166	0.0023	0.0120	0.0212	7.07	<.0001
Time*Post*WCM_Cnty	Post	1	0.0146	0.0020	0.0108	0.0184	7.44	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0022	0.0034	-0.0045	0.0089	0.63	0.5263
Time*Post*WCM_Cnty	Pre	1	0.0028	0.0028	-0.0026	0.0083	1.02	0.3098
CDPS_Log2			0.9137	0.0185	0.8774	0.9499	49.39	<.0001
cwda	1		1.0677	0.0512	0.9673	1.1681	20.84	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.0541	0.1434	-0.2270	0.3352	0.38	0.7060
ethnic4	Latinx		-0.0757	0.0577	-0.1888	0.0373	-1.31	0.1893
ethnic4	Other/ Unknown		-0.1165	0.0646	-0.2431	0.0101	-1.80	0.0713
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0538	0.0499	-0.1516	0.0439	-1.08	0.2806
Lang3	Other/ Unknown		-0.0169	0.1721	-0.3541	0.3203	-0.10	0.9218
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.1226	0.0602	-0.2407	-0.0045	-2.03	0.0419
AgeCat	2-6		1.2605	0.0716	1.1201	1.4009	17.59	<.0001
AgeCat	7-11		1.3520	0.0729	1.2091	1.4949	18.54	<.0001
AgeCat	12-20		1.3388	0.0664	1.2088	1.4689	20.18	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 11. Trend Line for Phase II DME Claims



Trend statement for DME claims in Phase II: In the pre-WCM period, the slopes of the WCM group and Classic comparison group are statistically different (p=0.0018) and thus the parallel slopes assumption of the DiD model is not satisfied (Table 20). As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. There was a statistically significant difference in trend post implementation between the WCM and Classic comparison group, showing higher increase in Phase II WCM compared to comparison group over time.

Table 20. Slopes Test for Phase II DME Claims

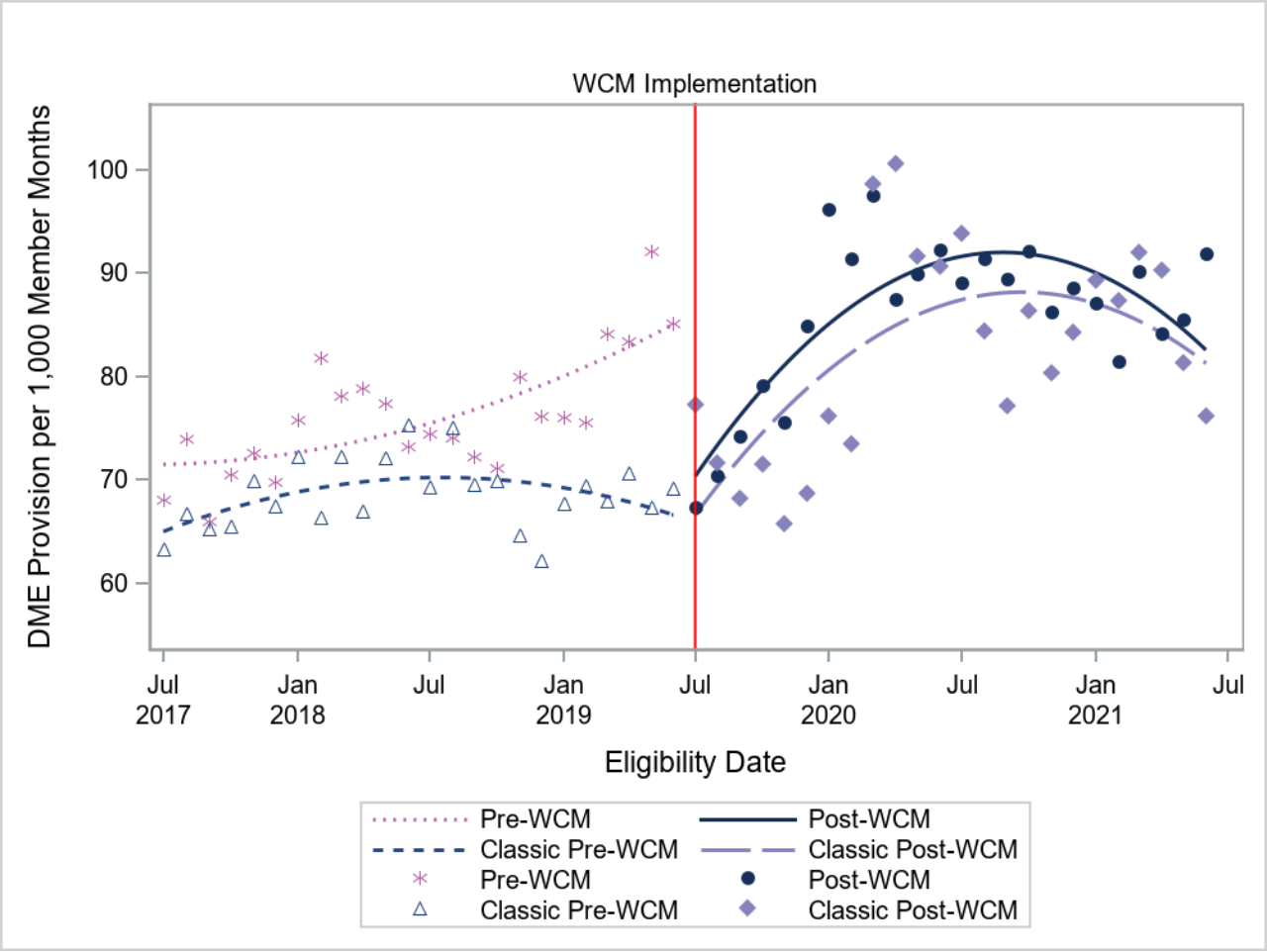
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.9856	0.9767	0.9946	-0.0145	0.0046	0.05	-0.0236	-0.0054	9.78	0.0018
Post-period slopes test	1.0115	1.0004	1.0228	0.0114	0.0057	0.05	0.0004	0.0225	4.09	0.0431

Table 21. Regression Model for Phase II DME Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-5.1382	0.1601	-5.4518	-4.8245	-32.10	<.0001
Post*WCM_Cnty	Post	1	-5.4189	0.1668	-5.7458	-5.0920	-32.49	<.0001
Post*WCM_Cnty	Pre	0	-5.0706	0.1063	-5.2789	-4.8623	-47.71	<.0001
Post*WCM_Cnty	Pre	1	-4.8440	0.0997	-5.0393	-4.6486	-48.60	<.0001
Time*Post*WCM_Cnty	Post	0	0.0096	0.0036	0.0026	0.0167	2.67	0.0075
Time*Post*WCM_Cnty	Post	1	0.0211	0.0044	0.0125	0.0297	4.81	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0089	0.0036	0.0019	0.0159	2.48	0.0131
Time*Post*WCM_Cnty	Pre	1	-0.0056	0.0030	-0.0116	0.0003	-1.85	0.0639
CDPS_Log2			0.8405	0.0196	0.8021	0.8788	42.97	<.0001
cwda	1		0.9591	0.0549	0.8514	1.0667	17.46	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0199	0.0807	-0.1781	0.1382	-0.25	0.8049
ethnic4	Latinx		0.0367	0.0659	-0.0924	0.1659	0.56	0.5774
ethnic4	Other/ Unknown		-0.1341	0.0598	-0.2513	-0.0169	-2.24	0.0249
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		-0.1820	0.0692	-0.3176	-0.0464	-2.63	0.0085
Lang3	Other/ Unknown		0.1097	0.1142	-0.1142	0.3336	0.96	0.3368
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.0004	0.0773	-0.1511	0.1519	0.01	0.9955
AgeCat	2-6		1.3011	0.0896	1.1255	1.4767	14.52	<.0001
AgeCat	7-11		1.3995	0.0942	1.2149	1.5841	14.86	<.0001
AgeCat	12-20		1.4579	0.0842	1.2929	1.6229	17.32	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
Season	Fall		-0.0280	0.0189	-0.0651	0.0092	-1.48	0.1398
Season	Spring		0.0037	0.0194	-0.0344	0.0418	0.19	0.8483
Season	Winter		-0.0167	0.0211	-0.0581	0.0248	-0.79	0.4311
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		-0.0268	0.0488	-0.1224	0.0687	-0.55	0.5821
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Figure 12. Trend Line for Phase III DME Claims



Trend statement for DME claims in Phase III: In the pre-WCM period, the slopes of the Phase III group and Classic comparison group are not statistically different (p=0.5097) and thus the parallel slopes assumption of the DiD model is satisfied (Table 22). There was no statistically significant difference in trend post implementation between the Phase 3 WCM and control groups, with both groups showing an initial increase followed by decline in claims over time (p=0.1231)

Table 22. Slopes Test for Phase III DME Claims

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.9918	0.9679	1.0163	-0.0082	0.0125	0.05	-0.0326	0.0162	0.43	0.5097
Post-period slopes test	1.0594	0.9845	1.1401	0.0577	0.0375	0.05	-0.0157	0.1312	2.38	0.1231

Table 23. Regression Model for Phase III DME Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-5.2381	0.5070	-6.2317	-4.2444	-10.33	<.0001
Post*WCM_Cnty	Post	1	-6.3895	0.4506	-7.2727	-5.5062	-14.18	<.0001
Post*WCM_Cnty	Pre	0	-4.8377	0.0946	-5.0232	-4.6523	-51.13	<.0001
Post*WCM_Cnty	Pre	1	-4.7910	0.0878	-4.9630	-4.6190	-54.58	<.0001
Time*Post*WCM_Cnty	Post	0	0.0289	0.0283	-0.0265	0.0844	1.02	0.3070
Time*Post*WCM_Cnty	Post	1	0.0866	0.0246	0.0385	0.1348	3.52	0.0004
Time*Post*WCM_Cnty	Pre	0	0.0111	0.0092	-0.0070	0.0292	1.20	0.2297
Time*Post*WCM_Cnty	Pre	1	0.0029	0.0083	-0.0135	0.0192	0.34	0.7315
Time*Time*Post*WCM_C	Post	0	-0.0003	0.0004	-0.0010	0.0005	-0.78	0.4375
Time*Time*Post*WCM_C	Post	1	-0.0010	0.0003	-0.0016	-0.0003	-2.93	0.0034
Time*Time*Post*WCM_C	Pre	0	-0.0004	0.0004	-0.0011	0.0003	-1.10	0.2702
Time*Time*Post*WCM_C	Pre	1	0.0002	0.0003	-0.0004	0.0009	0.71	0.4782
CDPS_Log2			0.8724	0.0153	0.8425	0.9023	57.14	<.0001
cwda	1		1.2567	0.0467	1.1651	1.3483	26.89	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0651	0.0856	-0.2328	0.1027	-0.76	0.4472

ethnic4	Latinx		-0.0418	0.0598	-0.1589	0.0754	-0.70	0.4847
ethnic4	Other/ Unknown		-0.0736	0.0591	-0.1895	0.0422	-1.25	0.2128
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0012	0.0448	-0.0890	0.0866	-0.03	0.9788
Lang3	Other/ Unknown		-0.0155	0.0893	-0.1905	0.1594	-0.17	0.8617
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.1486	0.0497	-0.2460	-0.0513	-2.99	0.0028
AgeCat	2-6		0.8326	0.0638	0.7076	0.9576	13.05	<.0001
AgeCat	7-11		0.8542	0.0670	0.7228	0.9856	12.74	<.0001
AgeCat	12-20		0.9171	0.0593	0.8008	1.0333	15.46	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Emergency Department (ED) Visits per 1000 MM

Figure 13. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for ED visits in HPSM: In the pre-WCM period, the slopes of the HPSM group and Classic comparison group are not statistically different (p=0.0990) and thus the parallel slopes assumption of the DiD model is satisfied (Table 24). There was no statistically significant difference in trend post implementation between the HPSM WCM and control groups, with HPSM showing decline in claims over time (p=0.0607)

Table 24. Slopes Test for HPSM WCM ED visits

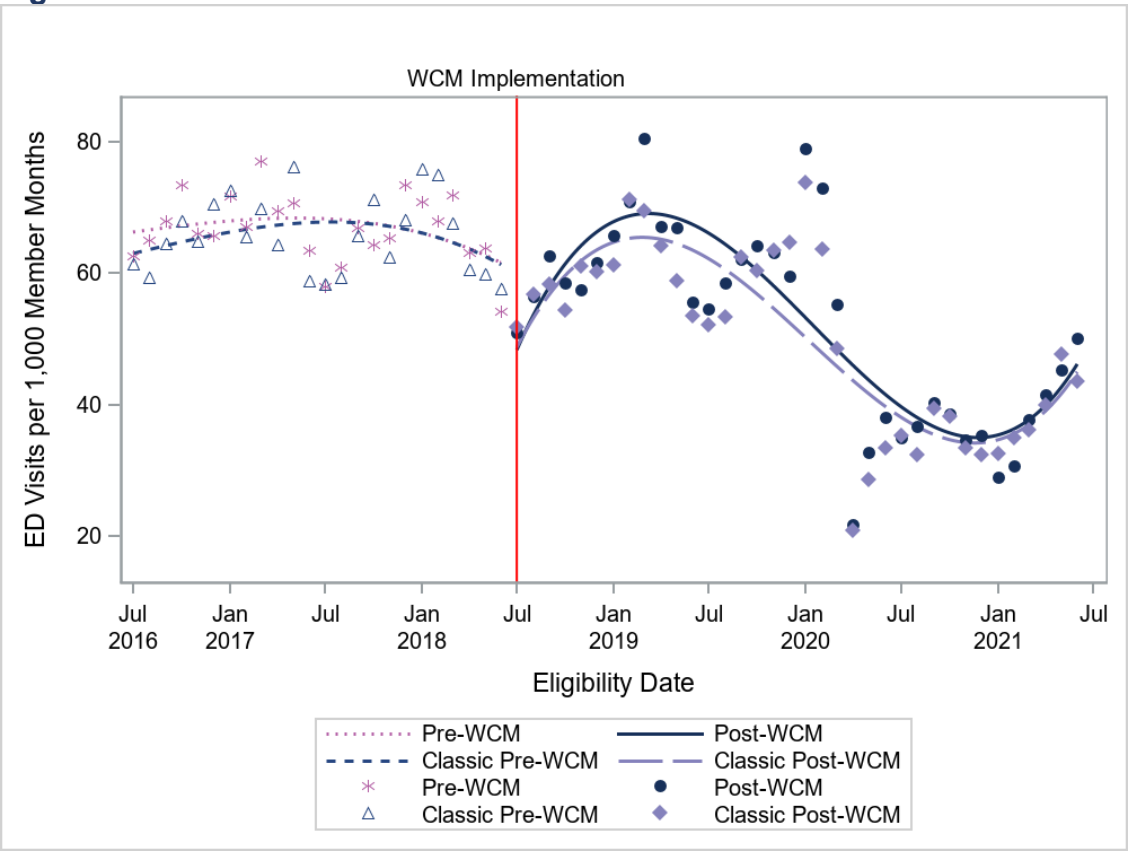
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.7651	0.4447	0.9298	1.1811	0.7159	0.05	-0.2221	2.5843	2.72	0.0990
Post-period slopes test	0.3509	0.2214	0.5069	-0.6150	0.3279	0.05	-1.2577	0.0277	3.52	0.0607

Table 25. Regression Model for HPSM WCM ED Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-12.4076	1.9177	-16.1662	-8.6490	-6.47	<.0001
Post*WCM_Cnty	Post	1	-3.2005	4.0981	-11.2327	4.8317	-0.78	0.4348
Post*WCM_Cnty	Pre	0	-3.0130	0.1406	-3.2887	-2.7374	-21.42	<.0001
Post*WCM_Cnty	Pre	1	-8.0766	2.5973	-13.1672	-2.9861	-3.11	0.0019
Time*Post*WCM_Cnty	Post	0	0.7638	0.1453	0.4790	1.0485	5.26	<.0001
Time*Post*WCM_Cnty	Post	1	0.1488	0.2938	-0.4270	0.7246	0.51	0.6125
Time*Post*WCM_Cnty	Pre	0	0.1193	0.0441	0.0330	0.2057	2.71	0.0068
Time*Post*WCM_Cnty	Pre	1	1.3004	0.7146	-0.1001	2.7010	1.82	0.0688
Time*Time*Post*WCM_C	Post	0	-0.0189	0.0035	-0.0259	-0.0120	-5.33	<.0001
Time*Time*Post*WCM_C	Post	1	-0.0045	0.0068	-0.0179	0.0089	-0.65	0.5134
Time*Time*Post*WCM_C	Pre	0	-0.0096	0.0039	-0.0174	-0.0019	-2.45	0.0144
Time*Time*Post*WCM_C	Pre	1	-0.0983	0.0566	-0.2092	0.0126	-1.74	0.0824
Tim*Tim*Tim*Pos*WCM_	Post	0	0.0001	0.0000	0.0001	0.0002	5.26	<.0001
Tim*Tim*Tim*Pos*WCM_	Post	1	0.0000	0.0001	-0.0001	0.0001	0.66	0.5078
Tim*Tim*Tim*Pos*WCM_	Pre	0	0.0002	0.0001	0.0000	0.0004	2.18	0.0294
Tim*Tim*Tim*Pos*WCM_	Pre	1	0.0022	0.0013	-0.0004	0.0048	1.66	0.0974

CDPS_Log2			0.1886	0.0120	0.1650	0.2121	15.70	<.0001
cwda	1		-0.1354	0.0578	-0.2487	-0.0221	-2.34	0.0192
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 14. Trend Line for Phase I ED Visits



Trend statement for ED visits in Phase I: In the pre-WCM period, the slopes of the Phase I group and Classic comparison group are not statistically different (p=0.8862) and thus the parallel slopes assumption of the DiD model is satisfied (Table 26). There was no statistically significant difference in trend post implementation between the Phase I WCM and control groups (p=0.3559)

Table 26. Slopes Test for Phase I WCM ED visits

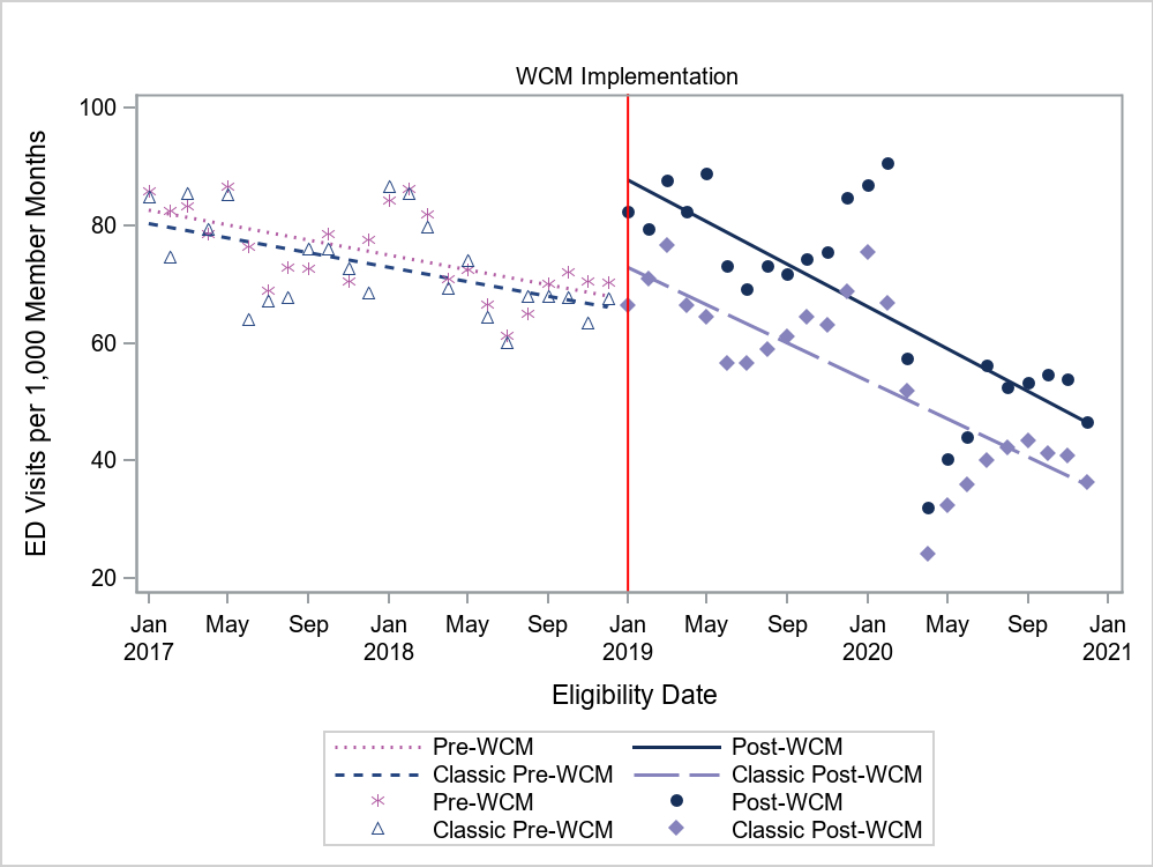
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4993	0.4898	0.5088	-0.0028	0.0195	0.05	-0.0409	0.0354	0.02	0.8862
Post-period slopes test	0.5168	0.4811	0.5523	0.0672	0.0728	0.05	-0.0754	0.2098	0.85	0.3559

Table 27. Regression Model for Phase I ED Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-12.2376	0.7084	-13.6261	-10.8492	-17.27	<.0001
Post*WCM_Cnty	Post	1	-13.0877	0.6727	-14.4062	-11.7692	-19.45	<.0001
Post*WCM_Cnty	Pre	0	-2.6336	0.0501	-2.7318	-2.5354	-52.55	<.0001
Post*WCM_Cnty	Pre	1	-2.5550	0.0468	-2.6468	-2.4632	-54.56	<.0001
Time*Post*WCM_Cnty	Post	0	0.7396	0.0533	0.6351	0.8440	13.88	<.0001
Time*Post*WCM_Cnty	Post	1	0.8068	0.0506	0.7075	0.9060	15.94	<.0001
Time*Post*WCM_Cnty	Pre	0	-0.0061	0.0145	-0.0345	0.0223	-0.42	0.6742
Time*Post*WCM_Cnty	Pre	1	-0.0089	0.0134	-0.0352	0.0175	-0.66	0.5090
Time*Time*Post*WCM_C	Post	0	-0.0183	0.0013	-0.0208	-0.0157	-14.10	<.0001

Time*Time*Post*WCM_C	Post	1	-0.0198	0.0012	-0.0222	-0.0174	-16.13	<.0001
Time*Time*Post*WCM_C	Pre	0	0.0011	0.0013	-0.0015	0.0037	0.81	0.4151
Time*Time*Post*WCM_C	Pre	1	0.0010	0.0012	-0.0014	0.0034	0.79	0.4277
Tim*Tim*Tim*Pos*WCM_	Post	0	0.0001	0.0000	0.0001	0.0002	13.92	<.0001
Tim*Tim*Tim*Pos*WCM_	Post	1	0.0002	0.0000	0.0001	0.0002	15.86	<.0001
Tim*Tim*Tim*Pos*WCM_	Pre	0	-0.0000	0.0000	-0.0001	0.0000	-1.15	0.2501
Tim*Tim*Tim*Pos*WCM_	Pre	1	-0.0000	0.0000	-0.0001	0.0000	-1.09	0.2746
GENDER_CD	F		0.0879	0.0146	0.0594	0.1165	6.03	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
Season	Fall		0.1034	0.0116	0.0807	0.1261	8.94	<.0001
Season	Spring		0.0868	0.0123	0.0627	0.1108	7.07	<.0001
Season	Winter		0.1603	0.0118	0.1372	0.1834	13.61	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.2122	0.0040	0.2044	0.2200	53.30	<.0001
cwda	1		-0.1517	0.0159	-0.1828	-0.1205	-9.55	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.3032	0.0450	0.2150	0.3914	6.74	<.0001
ethnic4	Latinx		0.1674	0.0192	0.1298	0.2049	8.73	<.0001
ethnic4	Other/ Unknown		0.0688	0.0223	0.0252	0.1125	3.09	0.0020
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.1584	0.0160	-0.1898	-0.1271	-9.91	<.0001
Lang3	Other/ Unknown		-0.4254	0.0669	-0.5566	-0.2942	-6.35	<.0001
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.0445	0.0202	-0.0842	-0.0048	-2.20	0.0279
AgeCat	2-6		0.2031	0.0233	0.1574	0.2487	8.72	<.0001
AgeCat	7-11		-0.1281	0.0255	-0.1781	-0.0782	-5.03	<.0001
AgeCat	12-20		0.0184	0.0233	-0.0272	0.0640	0.79	0.4283
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 15. Trend Line for Phase II ED Visits



Trend statement for ED visits in Phase II: In the pre-WCM period, the slopes of the Phase II group and Classic comparison group are not statistically different (p=0.7731) and thus the parallel slopes assumption of the DiD model is satisfied (see Table 28). There was no statistically significant difference in trend post implementation between the Phase II WCM and control groups, with both groups showing decline in claims over time (p=0.1333).

Table 28. Slopes Test for Phase II WCM ED visits

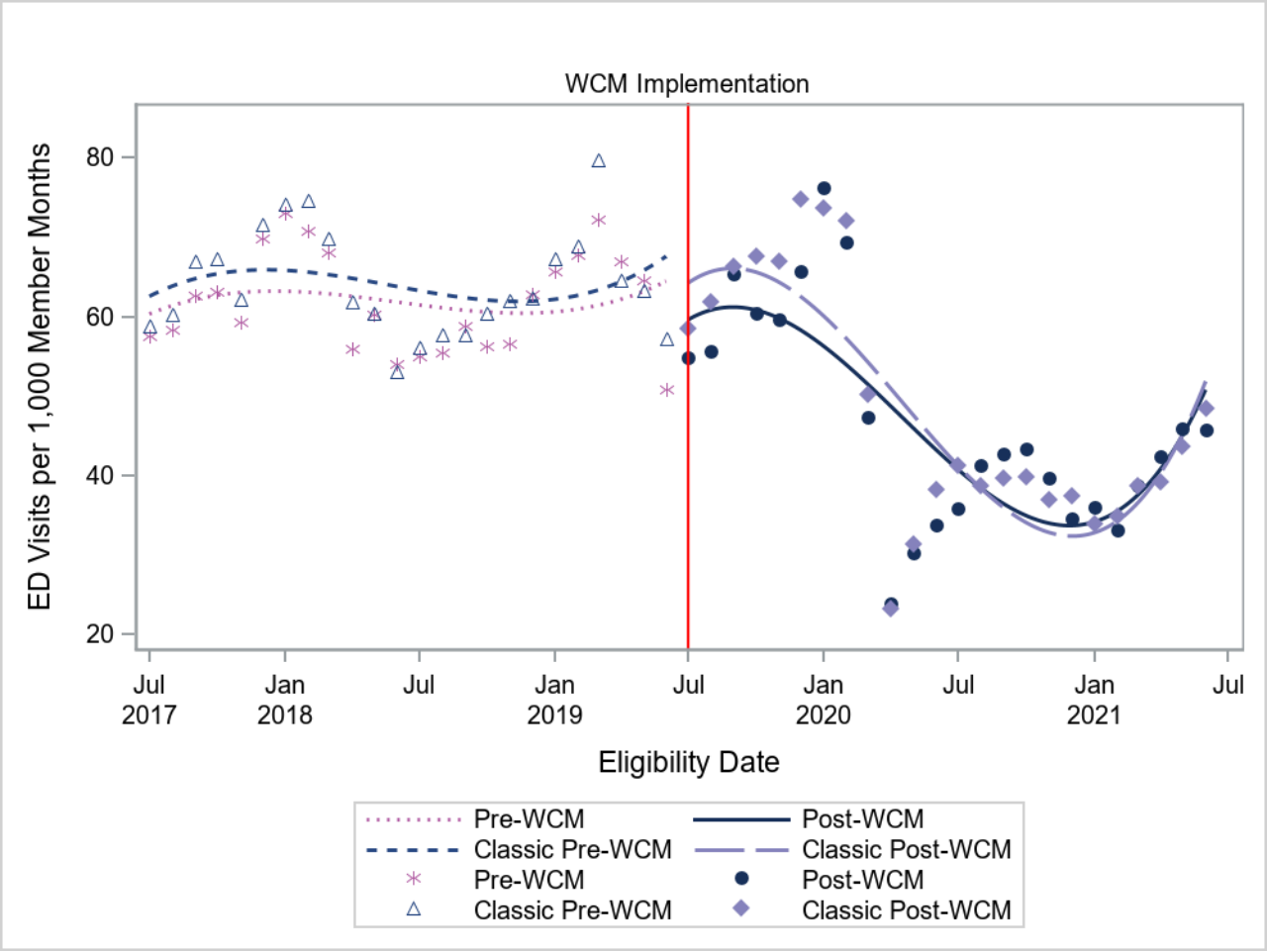
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4999	0.4989	0.5008	-0.0006	0.0020	0.05	-0.0045	0.0033	0.08	0.7731
Post-period slopes test	0.5009	0.4997	0.5020	0.0034	0.0023	0.05	-0.0010	0.0079	2.25	0.1333

Table 29. Regression Model for Phase II ED Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.7235	0.0677	-1.8561	-1.5908	-25.47	<.0001
Post*WCM_Cnty	Post	1	-1.6451	0.0616	-1.7659	-1.5243	-26.70	<.0001
Post*WCM_Cnty	Pre	0	-2.3880	0.0351	-2.4568	-2.3192	-68.00	<.0001
Post*WCM_Cnty	Pre	1	-2.3701	0.0332	-2.4352	-2.3050	-71.32	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0302	0.0017	-0.0335	-0.0268	-17.66	<.0001
Time*Post*WCM_Cnty	Post	1	-0.0268	0.0015	-0.0298	-0.0238	-17.40	<.0001
Time*Post*WCM_Cnty	Pre	0	-0.0085	0.0015	-0.0114	-0.0056	-5.75	<.0001
Time*Post*WCM_Cnty	Pre	1	-0.0091	0.0014	-0.0118	-0.0063	-6.53	<.0001
GENDER_CD	F		0.0700	0.0167	0.0372	0.1028	4.19	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Season	Fall		0.1139	0.0134	0.0875	0.1402	8.48	<.0001
Season	Spring		0.0824	0.0132	0.0565	0.1083	6.23	<.0001
Season	Winter		0.1792	0.0130	0.1537	0.2047	13.76	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.2145	0.0045	0.2056	0.2234	47.21	<.0001
cwda	1		-0.2228	0.0180	-0.2580	-0.1876	-12.41	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.2691	0.0322	0.2060	0.3321	8.36	<.0001
ethnic4	Latinx		0.0393	0.0249	-0.0096	0.0882	1.58	0.1149
ethnic4	Other/ Unknown		-0.0308	0.0215	-0.0730	0.0113	-1.43	0.1515
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.1320	0.0244	-0.1798	-0.0842	-5.41	<.0001
Lang3	Other/ Unknown		-0.2577	0.0525	-0.3607	-0.1548	-4.91	<.0001
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.0067	0.0244	-0.0411	0.0546	0.28	0.7828
AgeCat	2-6		0.2749	0.0282	0.2195	0.3302	9.73	<.0001
AgeCat	7-11		-0.0277	0.0300	-0.0865	0.0310	-0.93	0.3544
AgeCat	12-20		0.1091	0.0279	0.0545	0.1637	3.92	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 16. Trend Line for Phase III ED Visits



Trend statement for ED visits in Phase III: In the pre-WCM period, the slopes of the Phase III group and Classic comparison group are not statistically different (p=0.9326) and thus the parallel slopes assumption of the DiD model is satisfied (Table 30). There was no statistically significant difference in trend post implementation between the Phase III WCM and control groups (p=0.1671).

Table 30. Slopes Test for Phase III ED Visits

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4996	0.4910	0.5082	-0.0015	0.0176	0.05	-0.0360	0.0330	0.01	0.9326
Post-period slopes test	0.4349	0.3467	0.5274	-0.2620	0.1896	0.05	-0.6336	0.1096	1.91	0.1671

Table 31. Regression Model for Phase III ED Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-16.8619	1.5515	-19.9027	-13.8211	-10.87	<.0001
Post*WCM_Cnty	Post	1	-14.0343	1.5900	-17.1507	-10.9179	-8.83	<.0001
Post*WCM_Cnty	Pre	0	-2.6737	0.0493	-2.7704	-2.5771	-54.23	<.0001
Post*WCM_Cnty	Pre	1	-2.6477	0.0453	-2.7366	-2.5589	-58.42	<.0001
Time*Post*WCM_Cnty	Post	0	1.3678	0.1334	1.1063	1.6293	10.25	<.0001
Time*Post*WCM_Cnty	Post	1	1.1059	0.1369	0.8376	1.3741	8.08	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0110	0.0132	-0.0148	0.0368	0.84	0.4026
Time*Post*WCM_Cnty	Pre	1	0.0095	0.0121	-0.0142	0.0332	0.79	0.4306
Time*Time*Post*WCM_C	Post	0	-0.0423	0.0037	-0.0497	-0.0350	-11.28	<.0001
Time*Time*Post*WCM_C	Post	1	-0.0346	0.0038	-0.0421	-0.0270	-8.99	<.0001
Time*Time*Post*WCM_C	Pre	0	-0.0022	0.0012	-0.0045	0.0002	-1.81	0.0706
Time*Time*Post*WCM_C	Pre	1	-0.0017	0.0011	-0.0039	0.0005	-1.54	0.1227
Tim*Tim*Tim*Pos*WCM_	Post	0	0.0004	0.0000	0.0003	0.0005	12.03	<.0001
Tim*Tim*Tim*Pos*WCM_	Post	1	0.0003	0.0000	0.0003	0.0004	9.67	<.0001
Tim*Tim*Tim*Pos*WCM_	Pre	0	0.0001	0.0000	0.0000	0.0001	2.43	0.0152
Tim*Tim*Tim*Pos*WCM_	Pre	1	0.0001	0.0000	0.0000	0.0001	1.97	0.0488

GENDER_CD	F		0.0639	0.0145	0.0355	0.0923	4.41	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
Season	Fall		0.1189	0.0119	0.0955	0.1422	9.99	<.0001
Season	Spring		0.0761	0.0130	0.0506	0.1015	5.86	<.0001
Season	Winter		0.2377	0.0123	0.2136	0.2618	19.36	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.2257	0.0039	0.2182	0.2333	58.61	<.0001
cwda	1		-0.0984	0.0151	-0.1280	-0.0688	-6.51	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.2643	0.0394	0.1871	0.3415	6.71	<.0001
ethnic4	Latinx		0.2371	0.0245	0.1890	0.2852	9.67	<.0001
ethnic4	Other/ Unknown		0.0141	0.0262	-0.0374	0.0655	0.54	0.5922
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.1456	0.0166	-0.1782	-0.1130	-8.75	<.0001
Lang3	Other/ Unknown		-0.2977	0.0381	-0.3723	-0.2231	-7.82	<.0001
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.0288	0.0224	-0.0727	0.0152	-1.28	0.1992
AgeCat	2-6		0.1666	0.0247	0.1183	0.2150	6.75	<.0001
AgeCat	7-11		-0.1783	0.0261	-0.2294	-0.1271	-6.83	<.0001
AgeCat	12-20		-0.1352	0.0238	-0.1819	-0.0885	-5.68	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Emergency Department (ED) follow visits (28 day) per 100 ED visits

Figure 17. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for ED claims with follow up visits in HPSM: In the pre-WCM period, the slopes of the HPSM group and Classic comparison group are not statistically different and thus the parallel slopes assumption of the DiD model is satisfied (Table 32). There was a statistically significant difference in trend post implementation between the HPSM WCM and control groups, with convergence of lines between the two groups over time (p=0.0072).

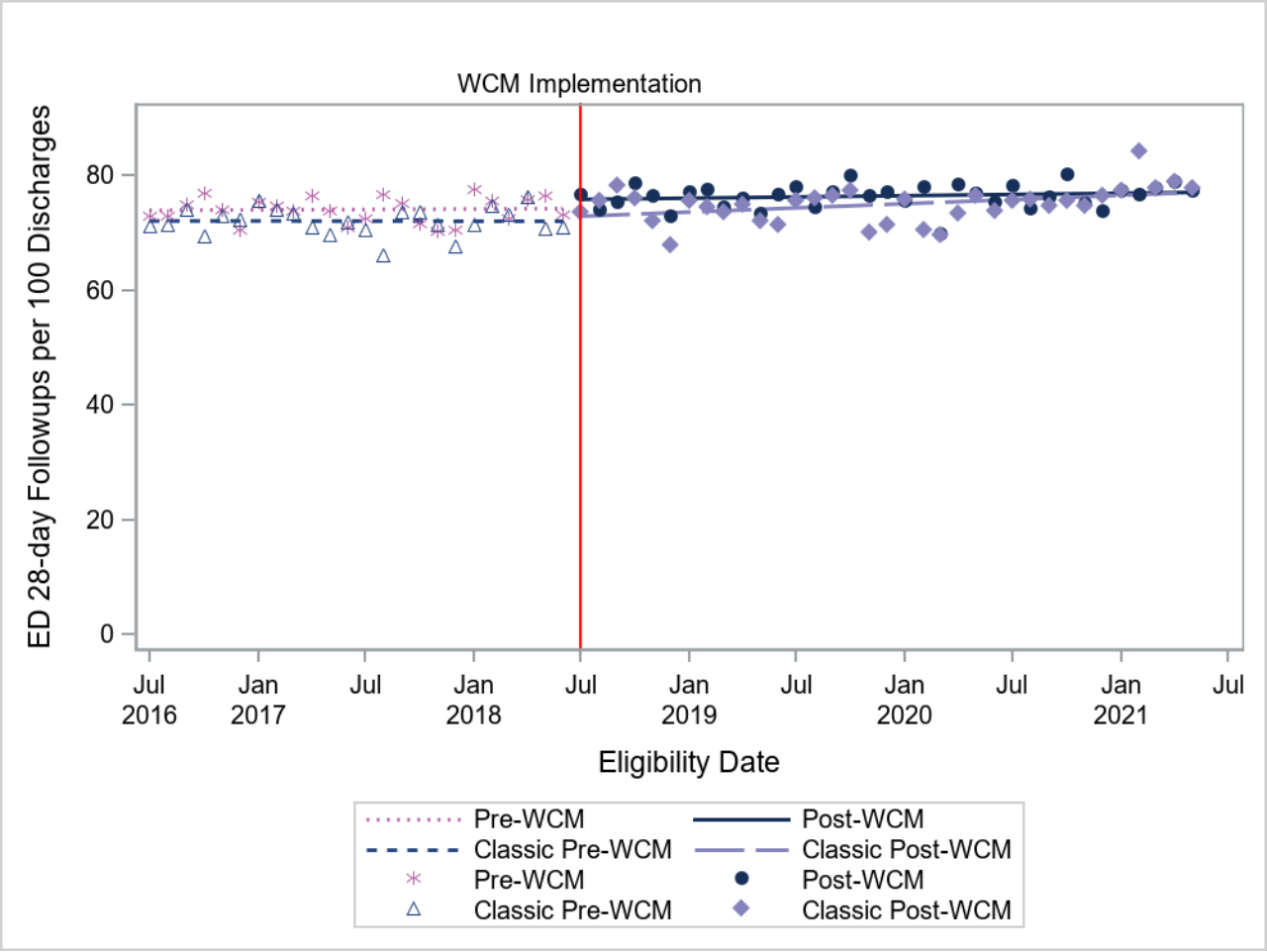
Table 32. Slopes Test for HPSM WCM ED with Follow-Up Visit

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5043	0.4562	0.5523	0.0172	0.0983	0.05	-0.1756	0.2099	0.03	0.8614
Post-period slopes test	0.4924	0.4868	0.4979	-0.0306	0.0114	0.05	-0.0529	-0.0083	7.23	0.0072

Table 33. Regression Model for HPSM WCM ED with Follow-Up Visit

Analysis Of GEE Parameter Estimates Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	0.7797	0.2442	0.3010	1.2584	3.19	0.0014
Post*WCM_Cnty	Post	WCM	2.4707	0.4326	1.6228	3.3186	5.71	<.0001
Post*WCM_Cnty	Pre	Classic	1.0617	0.1457	0.7762	1.3473	7.29	<.0001
Post*WCM_Cnty	Pre	WCM	0.8694	1.5339	-2.1371	3.8758	0.57	0.5709
Time*Post*WCM_Cnty	Post	Classic	0.0078	0.0059	-0.0037	0.0192	1.32	0.1854
Time*Post*WCM_Cnty	Post	WCM	-0.0228	0.0097	-0.0419	-0.0037	-2.34	0.0190
Time*Post*WCM_Cnty	Pre	Classic	-0.0101	0.0090	-0.0277	0.0074	-1.13	0.2588
Time*Post*WCM_Cnty	Pre	WCM	0.0070	0.0979	-0.1849	0.1990	0.07	0.9427
CDPS_Log2			0.1813	0.0185	0.1450	0.2175	9.81	<.0001
cwda	1		0.3755	0.0986	0.1824	0.5687	3.81	0.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 18. Trend Line for Phase I with Follow-Up Visit



Trend statement for ED claims in Phase I: In the pre-WCM period, the slopes of the Phase I group and Classic comparison group are not statistically different (p=0.7113) and thus the parallel slopes assumption of the DiD model is satisfied (Table 34). There was no statistically significant difference in trend post implementation between the Phase I WCM and control groups, with visits remaining flat in both groups (p=0.2060).

Table 34. Slopes Test for Phase I ED Visit with Follow-Up Visit

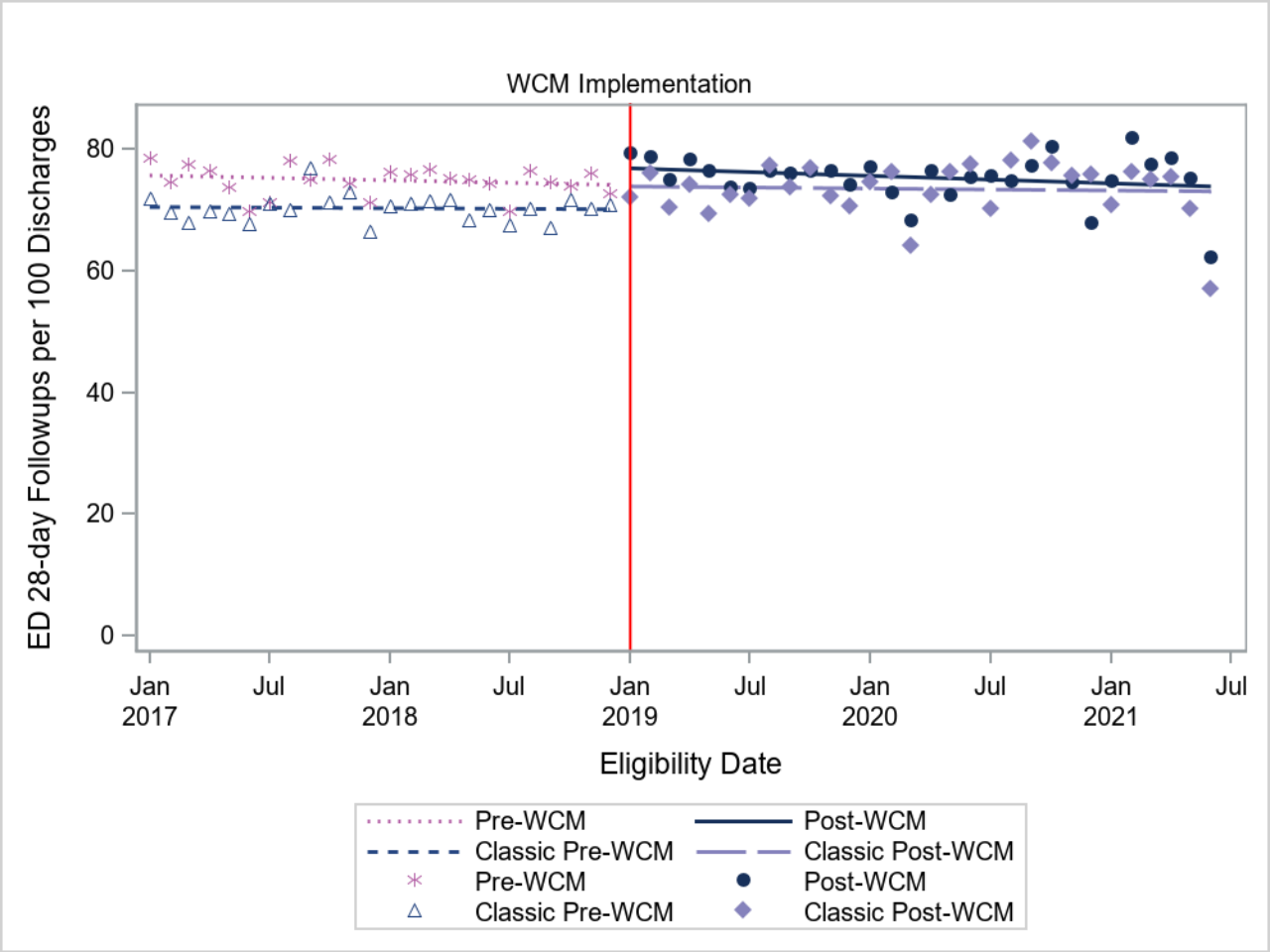
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4996	0.4976	0.5016	-0.0015	0.0041	0.05	-0.0097	0.0066	0.14	0.7113
Post-period slopes test	0.4991	0.4977	0.5005	-0.0036	0.0028	0.05	-0.0091	0.0020	1.60	0.2060

Table 35. Regression Model for Phase I ED with Follow-Up Visit

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	0.5860	0.0934	0.4029	0.7692	6.27	<.0001
Post*WCM_Cnty	Post	WCM	0.8263	0.0933	0.6434	1.0092	8.85	<.0001
Post*WCM_Cnty	Pre	Classic	0.6622	0.0615	0.5417	0.7826	10.78	<.0001
Post*WCM_Cnty	Pre	WCM	0.7848	0.0599	0.6675	0.9022	13.11	<.0001
Time*Post*WCM_Cnty	Post	Classic	0.0046	0.0020	0.0006	0.0086	2.26	0.0240
Time*Post*WCM_Cnty	Post	WCM	0.0010	0.0020	-0.0030	0.0050	0.50	0.6189
Time*Post*WCM_Cnty	Pre	Classic	0.0006	0.0030	-0.0053	0.0065	0.20	0.8390
Time*Post*WCM_Cnty	Pre	WCM	-0.0009	0.0029	-0.0067	0.0048	-0.31	0.7529
CDPS_Log2			0.2418	0.0060	0.2300	0.2536	40.21	<.0001
cwda	1		0.2334	0.0260	0.1825	0.2842	8.99	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.1325	0.0678	-0.2654	0.0004	-1.95	0.0506
ethnic4	Latinx		-0.1310	0.0306	-0.1909	-0.0711	-4.29	<.0001
ethnic4	Other/ Unknown		0.0271	0.0415	-0.0544	0.1085	0.65	0.5149

ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.3271	0.0257	0.2767	0.3775	12.72	<.0001
Lang3	Other/ Unknown		0.2306	0.1152	0.0048	0.4563	2.00	0.0453
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.4407	0.0418	-0.5225	-0.3589	-10.55	<.0001
AgeCat	2-6		0.2296	0.0432	0.1449	0.3144	5.31	<.0001
AgeCat	7-11		0.4749	0.0480	0.3809	0.5689	9.90	<.0001
AgeCat	12-20		0.3035	0.0412	0.2227	0.3843	7.36	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
Season	Fall		0.0722	0.0268	0.0197	0.1247	2.69	0.0071
Season	Spring		0.0401	0.0279	-0.0146	0.0949	1.44	0.1508
Season	Winter		0.0679	0.0270	0.0149	0.1209	2.51	0.0121
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.

Figure 19. Trend Line for Phase II ED Visit with Follow-Up Visit



Trend statement for ED claims in Phase II: In the pre-WCM period, the slopes of the Phase II group and Classic comparison group are not statistically different (p=0.3246) and thus the parallel slopes assumption of the DiD model is satisfied (Table 36). There was no statistically significant difference in trend post implementation between the Phase II WCM and control groups, with visits remaining flat in both groups (p=0.4217).

Table 36. Slopes Test for Phase II ED with Follow-Up Visit

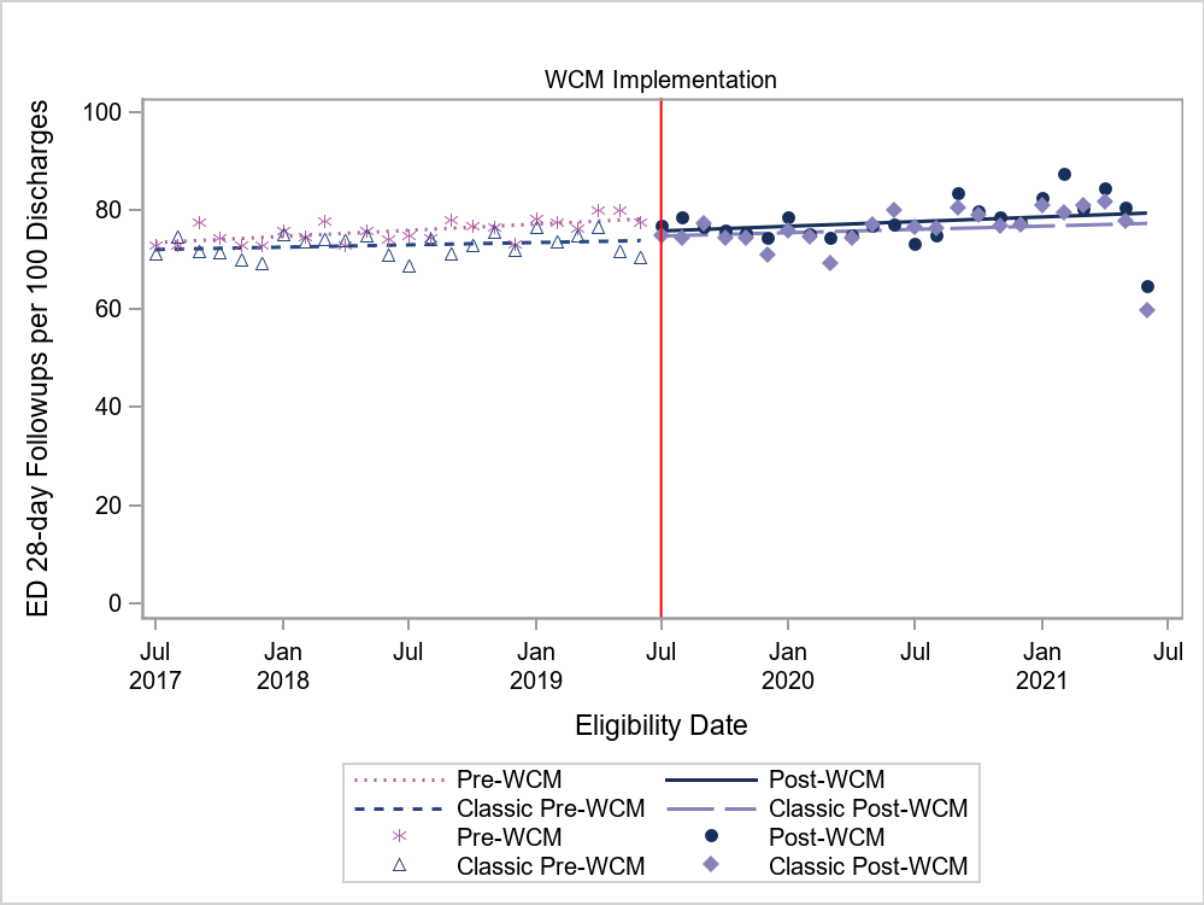
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4989	0.4968	0.5010	-0.0042	0.0043	0.05	-0.0127	0.0042	0.97	0.3246
Post-period slopes test	0.4993	0.4975	0.5011	-0.0029	0.0036	0.05	-0.0101	0.0042	0.65	0.4217

Table 37. Regression Model for Phase II ED with Follow-Up Visit

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	0.7487	0.1165	0.5203	0.9771	6.43	<.0001
Post*WCM_Cnty	Post	WCM	0.9454	0.1047	0.7402	1.1506	9.03	<.0001
Post*WCM_Cnty	Pre	Classic	0.5807	0.0703	0.4430	0.7184	8.26	<.0001
Post*WCM_Cnty	Pre	WCM	0.7798	0.0656	0.6512	0.9084	11.88	<.0001
Time*Post*WCM_Cnty	Post	Classic	-0.0031	0.0028	-0.0086	0.0024	-1.10	0.2703
Time*Post*WCM_Cnty	Post	WCM	-0.0060	0.0023	-0.0106	-0.0015	-2.59	0.0095
Time*Post*WCM_Cnty	Pre	Classic	-0.0026	0.0032	-0.0088	0.0036	-0.83	0.4078
Time*Post*WCM_Cnty	Pre	WCM	-0.0069	0.0030	-0.0128	-0.0010	-2.28	0.0226
CDPS_Log2			0.2585	0.0064	0.2460	0.2710	40.60	<.0001
cwda	1		0.2553	0.0280	0.2004	0.3103	9.11	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0856	0.0503	-0.1842	0.0130	-1.70	0.0888
ethnic4	Latinx		0.0421	0.0380	-0.0323	0.1165	1.11	0.2679
ethnic4	Other/ Unknown		0.0225	0.0358	-0.0477	0.0926	0.63	0.5303
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		0.2631	0.0385	0.1875	0.3386	6.83	<.0001
Lang3	Other/ Unknown		0.3700	0.0891	0.1954	0.5446	4.15	<.0001
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.4908	0.0489	-0.5867	-0.3949	-10.03	<.0001
AgeCat	2-6		0.2706	0.0516	0.1694	0.3718	5.24	<.0001
AgeCat	7-11		0.4194	0.0545	0.3125	0.5263	7.69	<.0001
AgeCat	12-20		0.2529	0.0489	0.1571	0.3486	5.18	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
Season	Fall		0.1362	0.0298	0.0779	0.1945	4.58	<.0001
Season	Spring		0.0632	0.0280	0.0085	0.1180	2.26	0.0237
Season	Winter		0.0901	0.0285	0.0343	0.1459	3.16	0.0016
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.

Figure 20. Trend Line for Phase III ED with Follow-Up Visit



Trend statement for ED claims in Phase III: In the pre-WCM period, the slopes of the Phase III group and Classic comparison group are not statistically different (p=0.1485) and thus the parallel slopes assumption of the DiD model is satisfied (Table 38). There was no statistically significant difference in trend post implementation between the Phase III WCM and control groups, with convergence of lines between the two groups (p=0.3130).

Table 38. Slopes Test for Phase III ED with Follow-Up Visit

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5014	0.4995	0.5032	0.0055	0.0038	0.05	-0.0019	0.0129	2.09	0.1485
Post-period slopes test	0.5011	0.4990	0.5032	0.0044	0.0044	0.05	-0.0041	0.0129	1.02	0.3130

Table 39. Regression Model for Phase III ED with Follow-Up Visit

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	0.7865	0.1215	0.5483	1.0247	6.47	<.0001
Post*WCM_Cnty	Post	WCM	0.6963	0.1251	0.4512	0.9414	5.57	<.0001
Post*WCM_Cnty	Pre	Classic	0.6608	0.0663	0.5309	0.7907	9.97	<.0001
Post*WCM_Cnty	Pre	WCM	0.6996	0.0640	0.5742	0.8249	10.94	<.0001
Time*Post*WCM_Cnty	Post	Classic	0.0000	0.0031	-0.0060	0.0061	0.01	0.9886
Time*Post*WCM_Cnty	Post	WCM	0.0044	0.0032	-0.0018	0.0107	1.39	0.1657
Time*Post*WCM_Cnty	Pre	Classic	0.0020	0.0028	-0.0034	0.0074	0.71	0.4773
Time*Post*WCM_Cnty	Pre	WCM	0.0074	0.0027	0.0021	0.0127	2.75	0.0060
CDPS_Log2			0.2554	0.0057	0.2442	0.2667	44.48	<.0001
cwda	1		0.3029	0.0247	0.2544	0.3513	12.26	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.1813	0.0583	-0.2956	-0.0670	-3.11	0.0019
ethnic4	Latinx		-0.0079	0.0408	-0.0878	0.0719	-0.19	0.8455
ethnic4	Other/ Unknown		0.0505	0.0453	-0.0384	0.1394	1.11	0.2656
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		0.2011	0.0265	0.1491	0.2531	7.58	<.0001
Lang3	Other/ Unknown		0.2049	0.0674	0.0728	0.3369	3.04	0.0024
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.6095	0.0469	-0.7014	-0.5176	-13.00	<.0001
AgeCat	2-6		0.1424	0.0469	0.0505	0.2342	3.04	0.0024
AgeCat	7-11		0.3260	0.0497	0.2286	0.4234	6.56	<.0001
AgeCat	12-20		0.1717	0.0429	0.0876	0.2558	4.00	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
Season	Fall		0.1099	0.0265	0.0580	0.1618	4.15	<.0001
Season	Spring		0.1368	0.0289	0.0801	0.1936	4.73	<.0001
Season	Winter		0.1116	0.0265	0.0596	0.1636	4.21	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.

Hospitalizations (All-Cause) per 1000MM

Figure 21. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for Hospitalizations in HPSM: In the pre-WCM period, the slopes of the HPSM and Classic comparison group are not statistically different (p=0.3956) and thus the parallel slopes assumption of the DiD model is satisfied (Table 40). There was statistically significant difference in trend post implementation between the HPSM WCM and control groups (p<0.0001), with decline in ED visits for HPSM and stable visits for Classic group over time.

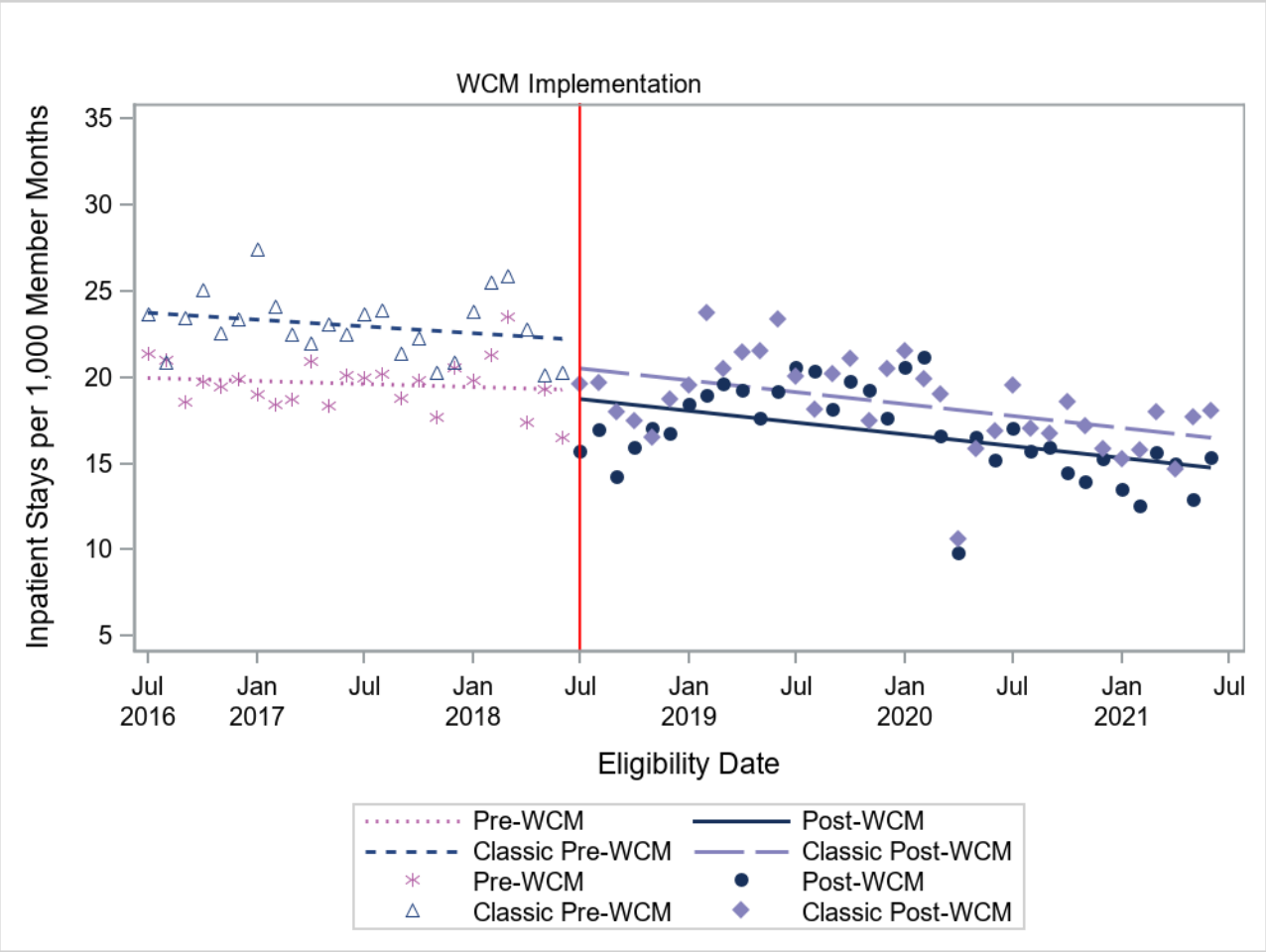
Table 40. Slopes Test for HPSM WCM Hospitalizations

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5118	0.4846	0.5389	0.0472	0.0555	0.05	-0.0616	0.1559	0.72	0.3956
Post-period slopes test	0.4904	0.4865	0.4943	-0.0384	0.0080	0.05	-0.0541	-0.0227	23.09	<.0001

Table 41. Regression Model for HPSM WCM ED Visit

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-4.0237	0.1934	-4.4028	-3.6446	-20.80	<.0001
Post*WCM_Cnty	Post	1	-1.9326	0.3088	-2.5378	-1.3274	-6.26	<.0001
Post*WCM_Cnty	Pre	0	-3.8012	0.1119	-4.0205	-3.5819	-33.97	<.0001
Post*WCM_Cnty	Pre	1	-5.0894	0.9235	-6.8995	-3.2793	-5.51	<.0001
Time*Post*WCM_Cnty	Post	0	0.0030	0.0045	-0.0059	0.0120	0.67	0.5025
Time*Post*WCM_Cnty	Post	1	-0.0353	0.0066	-0.0483	-0.0224	-5.35	<.0001
Time*Post*WCM_Cnty	Pre	0	-0.0055	0.0074	-0.0200	0.0090	-0.74	0.4572
Time*Post*WCM_Cnty	Pre	1	0.0417	0.0550	-0.0662	0.1495	0.76	0.4489
CDPS_Log2			0.5005	0.0307	0.4403	0.5607	16.29	<.0001

Figure 22. Trend Line for Phase I Hospitalizations



Trend statement for Hospitalizations in Phase I: In the pre-WCM period, the slopes of the Phase I and Classic comparison group are not statistically different (p=0.7962) and thus the parallel slopes assumption of the DiD model is satisfied (see Table 42). There was no statistically significant difference in trend post implementation between the Phase I WCM and control groups (p=0.6628), with decline in ED visits for both Phase I and Classic groups over time.

Table 42. Slopes Test for Phase I Hospitalizations

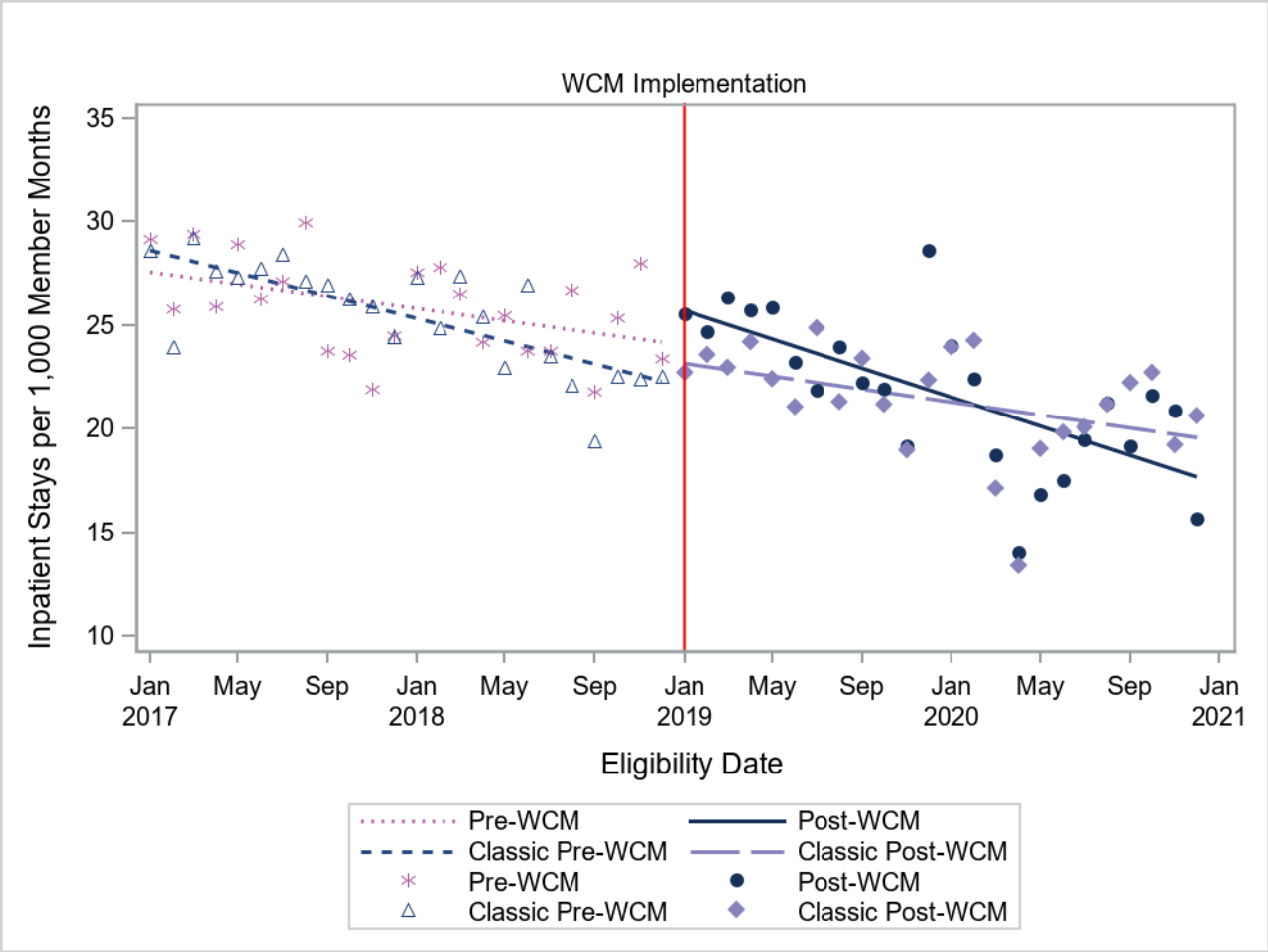
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5002	0.4984	0.5020	0.0009	0.0037	0.05	-0.0062	0.0081	0.07	0.7962
Post-period slopes test	0.4998	0.4986	0.5009	-0.0010	0.0023	0.05	-0.0055	0.0035	0.19	0.6628

Table 43. Regression Model for Phase I Hospitalizations

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-3.9585	0.0789	-4.1131	-3.8040	-50.20	<.0001
Post*WCM_Cnty	Post	1	-4.0395	0.0788	-4.1939	-3.8851	-51.27	<.0001
Post*WCM_Cnty	Pre	0	-3.8998	0.0543	-4.0062	-3.7933	-71.83	<.0001
Post*WCM_Cnty	Pre	1	-4.0644	0.0531	-4.1685	-3.9603	-76.53	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0042	0.0016	-0.0074	-0.0011	-2.64	0.0082
Time*Post*WCM_Cnty	Post	1	-0.0052	0.0016	-0.0084	-0.0020	-3.20	0.0014
Time*Post*WCM_Cnty	Pre	0	-0.0032	0.0026	-0.0083	0.0019	-1.24	0.2134
Time*Post*WCM_Cnty	Pre	1	-0.0023	0.0026	-0.0073	0.0028	-0.88	0.3762
cwda	1		-0.0217	0.0293	-0.0790	0.0357	-0.74	0.4585
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.5898	0.0119	0.5665	0.6130	49.66	<.0001
ethnic4	Black		0.2915	0.0743	0.1460	0.4371	3.93	<.0001
ethnic4	Latinx		0.0449	0.0333	-0.0204	0.1101	1.35	0.1781
ethnic4	Other/ Unknown		0.1079	0.0377	0.0339	0.1819	2.86	0.0043
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		-0.1049	0.0298	-0.1634	-0.0465	-3.52	0.0004
Lang3	Other/ Unknown		-0.2578	0.0951	-0.4443	-0.0714	-2.71	0.0067
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1159	0.0257	0.0656	0.1663	4.51	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.6471	0.0375	-0.7207	-0.5736	-17.24	<.0001
AgeCat	2-6		0.3176	0.0437	0.2319	0.4034	7.26	<.0001
AgeCat	7-11		0.0915	0.0446	0.0041	0.1790	2.05	0.0401
AgeCat	12-20		0.3666	0.0384	0.2914	0.4417	9.56	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 23. Trend Line for Phase II Hospitalizations



Trend statement for Hospitalizations in Phase II: In the pre-WCM period, the slopes of the Phase II and Classic comparison group are not statistically different (p=0.1693) and thus the parallel slopes assumption of the DiD model is satisfied (see Table 44). There was no statistically significant difference in trend post implementation between the Phase II WCM and control groups (p=0.0810), with convergence of Phase II and Classic group lines over time (Figure 23).

Table 44. Slopes Test for Phase II Hospitalizations

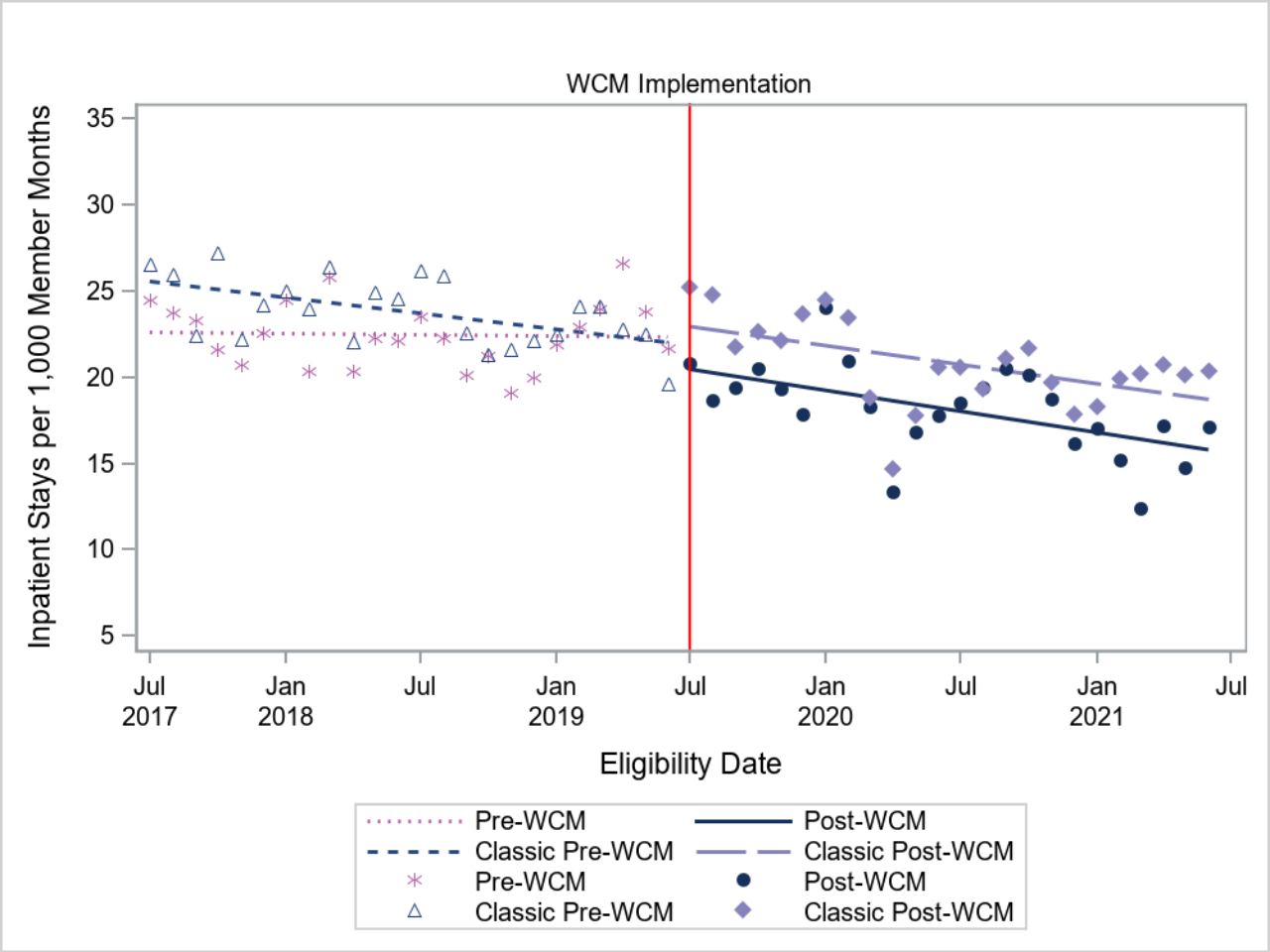
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5012	0.4995	0.5030	0.0049	0.0036	0.05	-0.0021	0.0119	1.89	0.1693
Post-period slopes test	0.4982	0.4961	0.5002	-0.0073	0.0042	0.05	-0.0156	0.0009	3.04	0.0810

Table 45. Regression Model for Phase II Hospitalizations Visit

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-3.5221	0.1169	-3.7512	-3.2931	-30.14	<.0001
Post*WCM_Cnty	Post	1	-3.3091	0.1146	-3.5338	-3.0845	-28.88	<.0001
Post*WCM_Cnty	Pre	0	-3.4583	0.0562	-3.5684	-3.3482	-61.56	<.0001
Post*WCM_Cnty	Pre	1	-3.5540	0.0535	-3.6588	-3.4491	-66.43	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0069	0.0030	-0.0127	-0.0010	-2.31	0.0211
Time*Post*WCM_Cnty	Post	1	-0.0142	0.0030	-0.0200	-0.0084	-4.81	<.0001
Time*Post*WCM_Cnty	Pre	0	-0.0116	0.0026	-0.0166	-0.0065	-4.51	<.0001
Time*Post*WCM_Cnty	Pre	1	-0.0067	0.0025	-0.0115	-0.0018	-2.70	0.0069
cwda	1		-0.1815	0.0322	-0.2447	-0.1183	-5.63	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.5536	0.0124	0.5293	0.5780	44.60	<.0001
ethnic4	Black		0.2686	0.0529	0.1650	0.3723	5.08	<.0001
ethnic4	Latinx		0.0416	0.0441	-0.0449	0.1280	0.94	0.3462
ethnic4	Other/ Unknown		0.0538	0.0368	-0.0184	0.1260	1.46	0.1444
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		-0.0509	0.0431	-0.1353	0.0335	-1.18	0.2375
Lang3	Other/ Unknown		-0.1619	0.0798	-0.3183	-0.0056	-2.03	0.0424
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.0638	0.0277	0.0095	0.1181	2.30	0.0214
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.6892	0.0412	-0.7699	-0.6085	-16.73	<.0001
AgeCat	2-6		0.2144	0.0478	0.1207	0.3080	4.49	<.0001
AgeCat	7-11		-0.0145	0.0506	-0.1137	0.0846	-0.29	0.7738
AgeCat	12-20		0.1619	0.0458	0.0722	0.2516	3.54	0.0004
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 24. Trend Line for Phase III Hospitalizations



Trend statement for Hospitalizations in Phase III: In the pre-WCM period, the slopes of the Phase III and Classic CCS comparison group are not statistically different (p=0.1944) and thus the parallel slopes assumption of the DiD model is satisfied (Table 46). There was no statistically significant difference in trend post implementation between the Phase III WCM and control groups (p=0.6301), with decline in visits for both Phase III and Classic CCS groups over time (Figure 24).

Table 46. Slopes Test for Phase III Hospitalizations

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5010	0.4995	0.5025	0.0040	0.0031	0.05	-0.0020	0.0100	1.68	0.1944
Post-period slopes test	0.4996	0.4978	0.5013	-0.0017	0.0035	0.05	-0.0086	0.0052	0.23	0.6301

Table 47. Regression Model for Phase III Hospitalizations

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-3.6782	0.0965	-3.8673	-3.4891	-38.12	<.0001
Post*WCM_Cnty	Post	1	-3.7514	0.1028	-3.9530	-3.5499	-36.48	<.0001
Post*WCM_Cnty	Pre	0	-3.7515	0.0568	-3.8629	-3.6401	-66.01	<.0001
Post*WCM_Cnty	Pre	1	-3.7842	0.0532	-3.8884	-3.6800	-71.18	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0063	0.0023	-0.0109	-0.0017	-2.67	0.0076
Time*Post*WCM_Cnty	Post	1	-0.0080	0.0027	-0.0132	-0.0028	-3.01	0.0026
Time*Post*WCM_Cnty	Pre	0	-0.0055	0.0022	-0.0099	-0.0012	-2.51	0.0122
Time*Post*WCM_Cnty	Pre	1	-0.0016	0.0021	-0.0057	0.0026	-0.73	0.4657
cwda	1		-0.0147	0.0265	-0.0666	0.0371	-0.56	0.5775
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.5470	0.0095	0.5284	0.5656	57.59	<.0001
ethnic4	Black		0.1991	0.0620	0.0776	0.3206	3.21	0.0013
ethnic4	Latinx		0.0904	0.0408	0.0104	0.1704	2.21	0.0269
ethnic4	Other/ Unknown		0.0595	0.0442	-0.0272	0.1461	1.34	0.1787
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		-0.1382	0.0285	-0.1941	-0.0823	-4.84	<.0001
Lang3	Other/ Unknown		-0.1794	0.0608	-0.2985	-0.0602	-2.95	0.0032
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1080	0.0247	0.0597	0.1564	4.38	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.5692	0.0387	-0.6451	-0.4934	-14.71	<.0001
AgeCat	2-6		0.1435	0.0401	0.0650	0.2221	3.58	0.0003
AgeCat	7-11		-0.0801	0.0431	-0.1645	0.0043	-1.86	0.0628
AgeCat	12-20		0.1042	0.0368	0.0321	0.1763	2.83	0.0046
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Hospital Outpatient Follow-up (28-Day) per 100 Discharges

Figure 25. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for hospitalization with follow up in HPSM: In the pre-WCM period, the slopes of the HPSM and Classic CCS comparison group are not statistically different (p=0.2422) and thus the parallel slopes assumption of the DiD model is satisfied (Table 48). There was a statistically significant difference in trend post implementation between the HPSM WCM and control groups (p=0.0088), with increase in hospital follow up visits in HPSM and stable visits in Classic CCS groups over time (Figure 25).

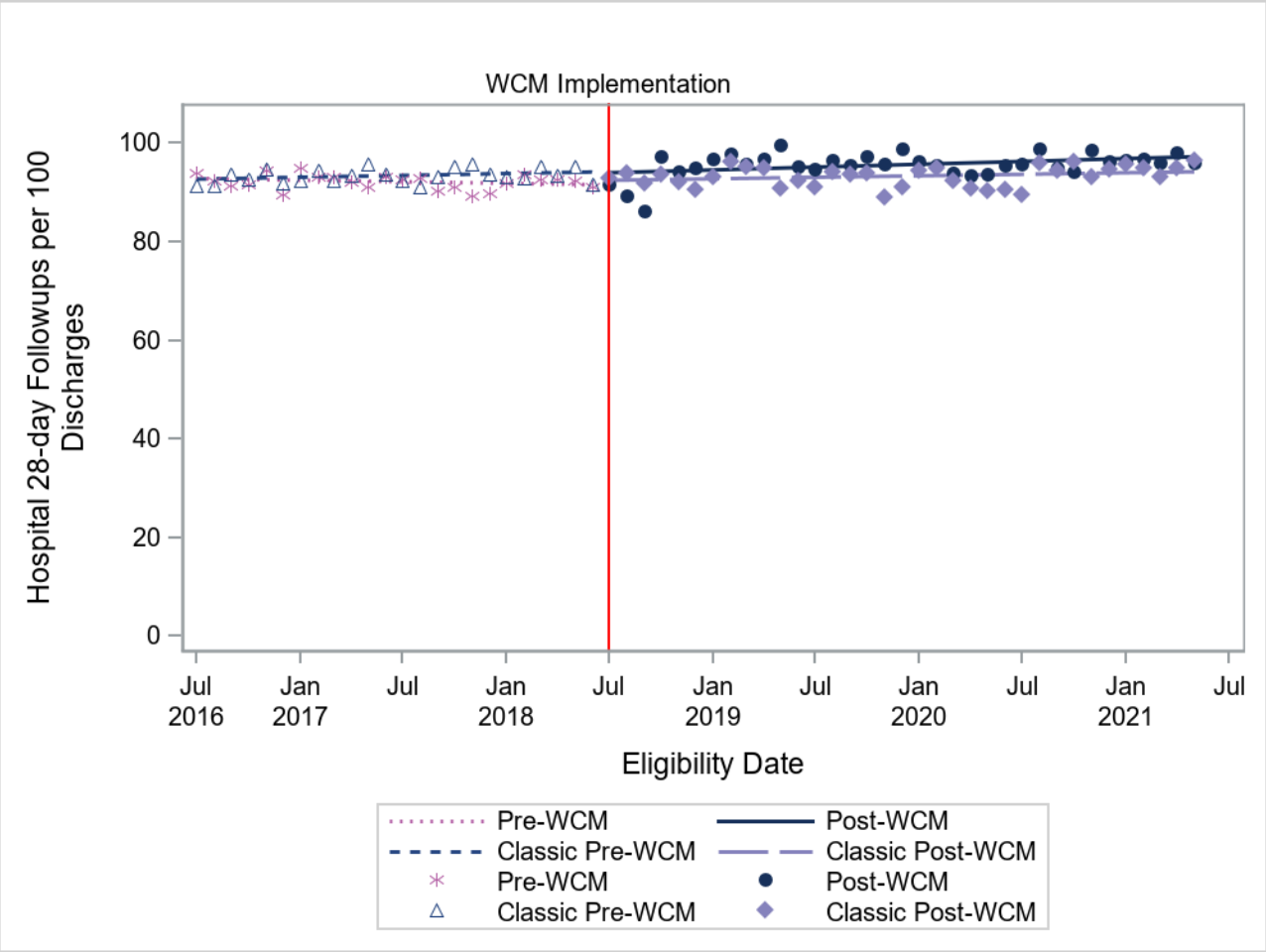
Table 48. Slopes Test for HPSM WCM Hospitalization with Follow-Up Visit

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4739	0.4305	0.5177	-0.1045	0.0894	0.05	-0.2797	0.0706	1.37	0.2422
Post-period slopes test	0.5176	0.5044	0.5308	0.0706	0.0269	0.05	0.0178	0.1234	6.86	0.0088

Table 49. Regression Model for HPSM WCM Hospitalization with Follow-Up Visit

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	2.8762	0.6560	1.5904	4.1620	4.38	<.0001
Post*WCM_Cnty	Post	WCM	0.4611	0.9103	-1.3230	2.2453	0.51	0.6125
Post*WCM_Cnty	Pre	Classic	3.3643	0.5139	2.3570	4.3715	6.55	<.0001
Post*WCM_Cnty	Pre	WCM	2.7029	1.5512	-0.3374	5.7431	1.74	0.0814
Time*Post*WCM_Cnty	Post	Classic	-0.0091	0.0151	-0.0386	0.0205	-0.60	0.5471
Time*Post*WCM_Cnty	Post	WCM	0.0615	0.0225	0.0173	0.1057	2.73	0.0064
Time*Post*WCM_Cnty	Pre	Classic	-0.0417	0.0305	-0.1015	0.0181	-1.37	0.1715
Time*Post*WCM_Cnty	Pre	WCM	-0.1462	0.0839	-0.3107	0.0182	-1.74	0.0813
CDPS_Log2			0.2264	0.0551	0.1184	0.3344	4.11	<.0001
cwda	1		0.1550	0.2871	-0.4077	0.7176	0.54	0.5894
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 26. Trend Line for Phase I Hospitalization with Follow-Up Visit



Trend statement for hospitalization with follow up in Phase I: In the pre-WCM period, the slopes of the Phase I group and Classic CCS comparison group are statistically different (p=0.0164) and thus the parallel slopes assumption of the DiD model is not satisfied (Table 50). As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. There was no statistically significant difference in trend post implementation between the Phase I WCM and control groups (p=0.2268), with stable visits in both groups over time (Figure 26).

Table 50. Slopes Test for Phase I Hospitalization Visit with Follow-Up Visit

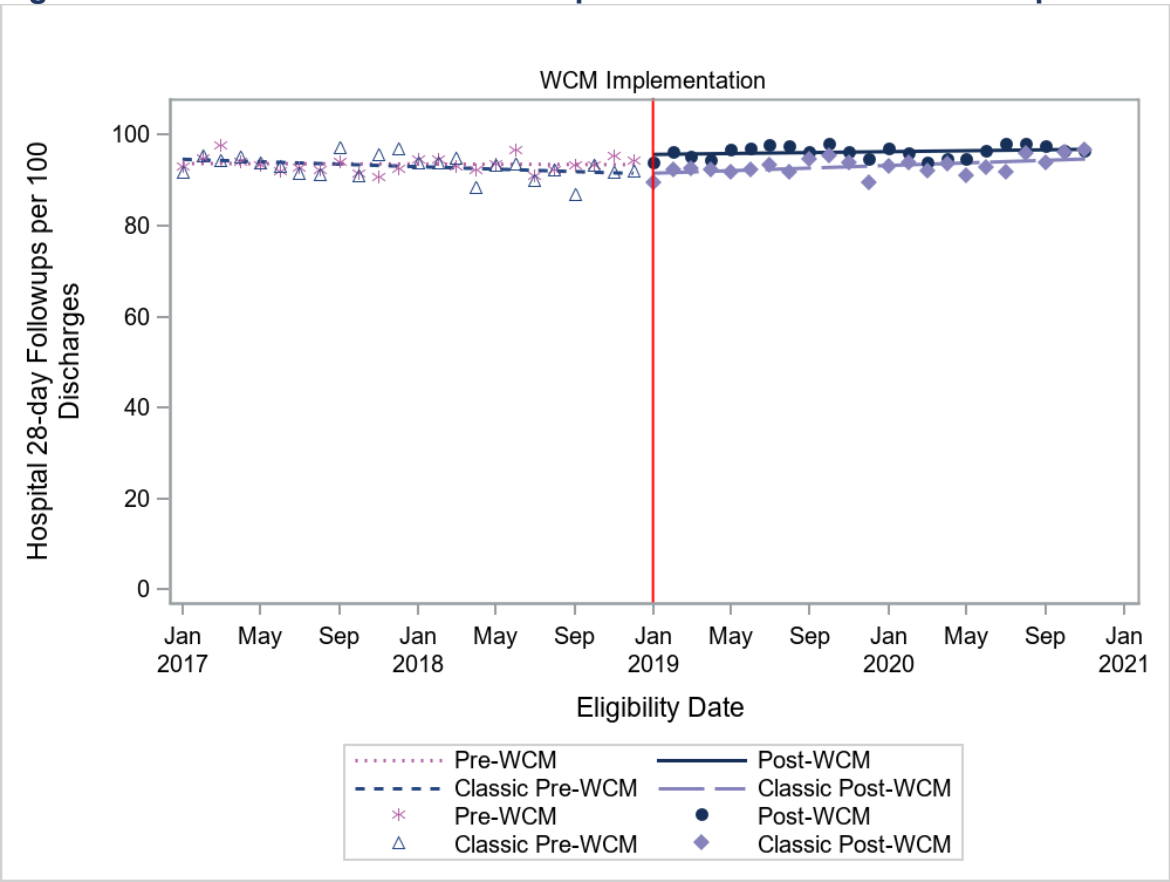
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4931	0.4874	0.4987	-0.0278	0.0116	0.05	-0.0505	-0.0051	5.76	0.0164
Post-period slopes test	0.5032	0.4980	0.5085	0.0129	0.0107	0.05	-0.0080	0.0339	1.46	0.2268

Table 51. Regression Model for Phase I Hospitalization with Follow-Up Visit

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	0.6726	0.2395	0.2032	1.1421	2.81	0.0050
Post*WCM_Cnty	Post	WCM	0.5976	0.3969	-0.1802	1.3754	1.51	0.1321
Post*WCM_Cnty	Pre	Classic	0.6015	0.1433	0.3206	0.8825	4.20	<.0001
Post*WCM_Cnty	Pre	WCM	0.8862	0.1343	0.6229	1.1494	6.60	<.0001
Time*Post*WCM_Cnty	Post	Classic	0.0022	0.0054	-0.0083	0.0128	0.42	0.6774
Time*Post*WCM_Cnty	Post	WCM	0.0152	0.0093	-0.0031	0.0334	1.63	0.1032
Time*Post*WCM_Cnty	Pre	Classic	0.0093	0.0088	-0.0079	0.0264	1.06	0.2910
Time*Post*WCM_Cnty	Pre	WCM	-0.0185	0.0079	-0.0341	-0.0030	-2.34	0.0191
CDPS_Log2			0.3044	0.0201	0.2651	0.3438	15.18	<.0001
cwda	1		0.3578	0.0863	0.1886	0.5271	4.14	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.2904	0.1792	-0.0608	0.6416	1.62	0.1050
ethnic4	Latinx		0.3757	0.0847	0.2097	0.5416	4.44	<.0001
ethnic4	Other/ Unknown		0.2548	0.1007	0.0574	0.4521	2.53	0.0114
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		0.2993	0.0765	0.1493	0.4492	3.91	<.0001
Lang3	Other/ Unknown		0.1884	0.3070	-0.4134	0.7901	0.61	0.5395
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		1.0447	0.1304	0.7890	1.3003	8.01	<.0001
AgeCat	2-6		1.7468	0.1152	1.5211	1.9725	15.17	<.0001
AgeCat	7-11		1.6951	0.1314	1.4375	1.9526	12.90	<.0001
AgeCat	12-20		1.6339	0.0998	1.4384	1.8295	16.38	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
Season	Fall		0.1101	0.0815	-0.0497	0.2699	1.35	0.1768
Season	Spring		0.1608	0.0841	-0.0040	0.3255	1.91	0.0558
Season	Winter		0.1742	0.0801	0.0172	0.3312	2.18	0.0296
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.

Figure 27. Trend Line for Phase II Hospitalization Visit with Follow-Up Visit



Trend statement for hospitalization with follow up in Phase II: In the pre-WCM period, the slopes of the Phase II and Classic CCS comparison group are not statistically different (p=0.1538) and thus the parallel slopes assumption of the DiD model is satisfied (Table 52). There was no statistically significant difference in trend post implementation between the Phase II WCM and control groups (p=0.9447), with stable hospital follow up visits in both groups over time (Figure 27).

Table 52. Slopes Test for Phase II Hospitalization with Follow-Up Visit

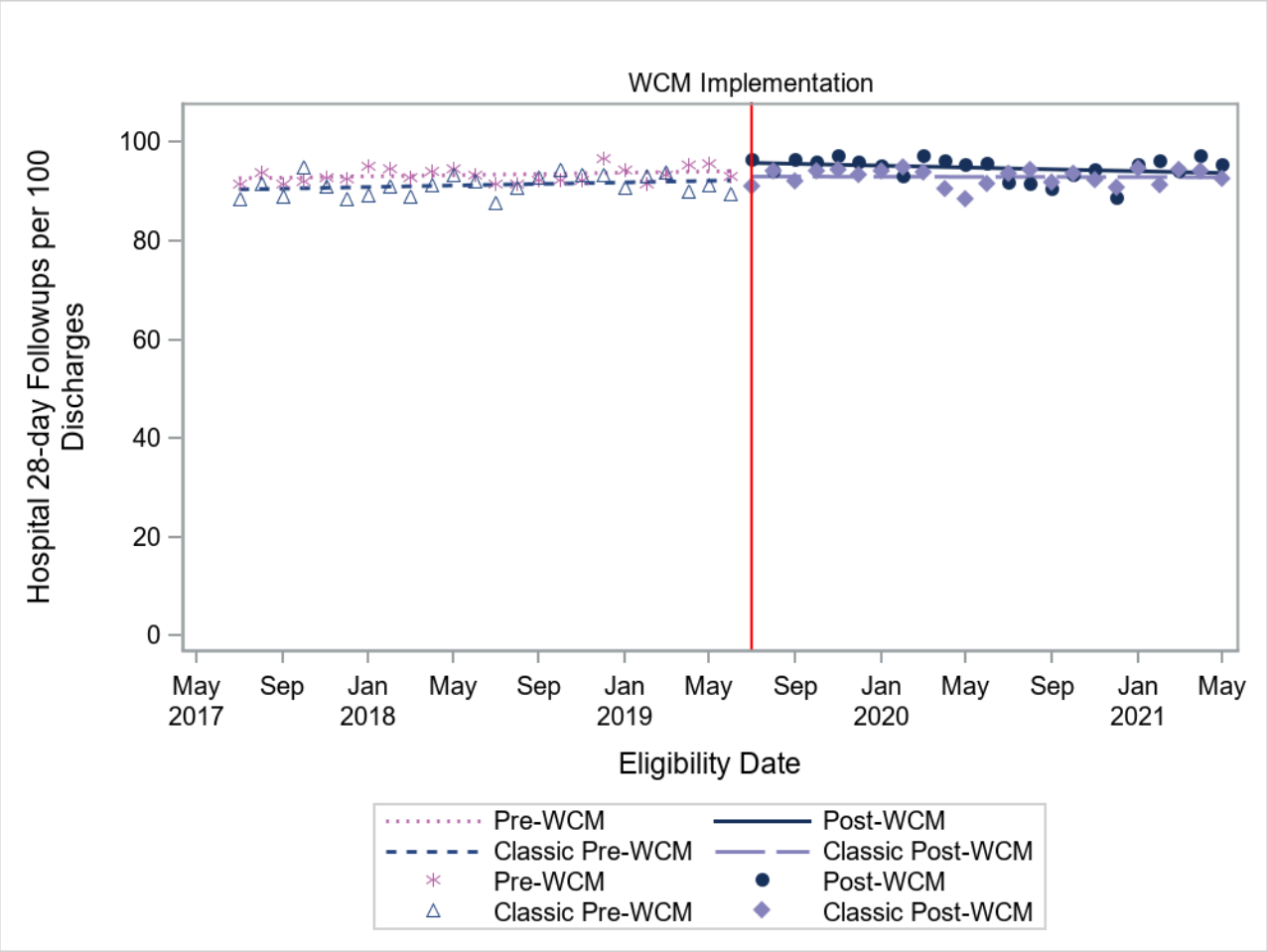
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5042	0.4984	0.5100	0.0168	0.0118	0.05	-0.0063	0.0399	2.03	0.1538
Post-period slopes test	0.5003	0.4916	0.5090	0.0012	0.0177	0.05	-0.0334	0.0359	0.00	0.9447

Table 53. Regression Model for Phase II Hospitalization with Follow-Up Visit

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	2.0123	0.3712	1.2848	2.7399	5.42	<.0001
Post*WCM_Cnty	Post	WCM	2.5612	0.5210	1.5400	3.5824	4.92	<.0001
Post*WCM_Cnty	Pre	Classic	2.9037	0.1536	2.6028	3.2047	18.91	<.0001
Post*WCM_Cnty	Pre	WCM	2.7891	0.1604	2.4747	3.1035	17.39	<.0001
Time*Post*WCM_Cnty	Post	Classic	0.0197	0.0102	-0.0002	0.0397	1.94	0.0524
Time*Post*WCM_Cnty	Post	WCM	0.0210	0.0145	-0.0074	0.0493	1.45	0.1470
Time*Post*WCM_Cnty	Pre	Classic	-0.0232	0.0082	-0.0394	-0.0071	-2.83	0.0047
Time*Post*WCM_Cnty	Pre	WCM	-0.0064	0.0084	-0.0230	0.0101	-0.76	0.4453
CDPS_Log2			0.1927	0.0178	0.1578	0.2276	10.82	<.0001
cwda	0		-0.4781	0.0908	-0.6562	-0.3001	-5.26	<.0001
cwda	1		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.1299	0.1378	-0.4000	0.1402	-0.94	0.3460
ethnic4	Latinx		0.1127	0.1173	-0.1172	0.3427	0.96	0.3367
ethnic4	Other/ Unknown		-0.0862	0.0983	-0.2789	0.1064	-0.88	0.3803
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		0.5232	0.1259	0.2764	0.7699	4.16	<.0001
Lang3	Other/ Unknown		0.5383	0.2689	0.0112	1.0654	2.00	0.0453
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.

Figure 28. Trend Line for Phase III Hospitalization with Follow-Up Visit



Trend statement for hospitalization with follow up in Phase III: In the pre-WCM period, the slopes of the Phase III and Classic CCS comparison group are not statistically different (p=0.9896) and thus the parallel slopes assumption of the DiD model is satisfied (see Table 54). There was no statistically significant difference in trend post implementation between the Phase III WCM and control groups (p=0.3801), with stable hospital follow up visits in both groups over time (Figure 28).

Table 54. Slopes Test for Phase III Hospitalization with Follow-Up Visit

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5000	0.4948	0.5053	0.0001	0.0107	0.05	-0.0208	0.0211	0.00	0.9896
Post-period slopes test	0.4968	0.4895	0.5040	-0.0130	0.0148	0.05	-0.0420	0.0160	0.77	0.3801

Table 55. Regression Model for Phase III Hospitalization with Follow-Up Visit

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	0.6812	0.3205	0.0530	1.3094	2.13	0.0336
Post*WCM_Cnty	Post	WCM	1.6214	0.4766	0.6872	2.5556	3.40	0.0007
Post*WCM_Cnty	Pre	Classic	0.6334	0.1789	0.2828	0.9841	3.54	0.0004
Post*WCM_Cnty	Pre	WCM	1.1582	0.1949	0.7761	1.5403	5.94	<.0001
Time*Post*WCM_Cnty	Post	Classic	0.0061	0.0080	-0.0095	0.0217	0.76	0.4447
Time*Post*WCM_Cnty	Post	WCM	-0.0069	0.0129	-0.0322	0.0184	-0.53	0.5932
Time*Post*WCM_Cnty	Pre	Classic	0.0028	0.0070	-0.0110	0.0165	0.39	0.6939
Time*Post*WCM_Cnty	Pre	WCM	0.0029	0.0084	-0.0135	0.0193	0.34	0.7301
CDPS_Log2			0.3065	0.0188	0.2697	0.3433	16.32	<.0001
cwda	1		0.3259	0.0948	0.1401	0.5116	3.44	0.0006

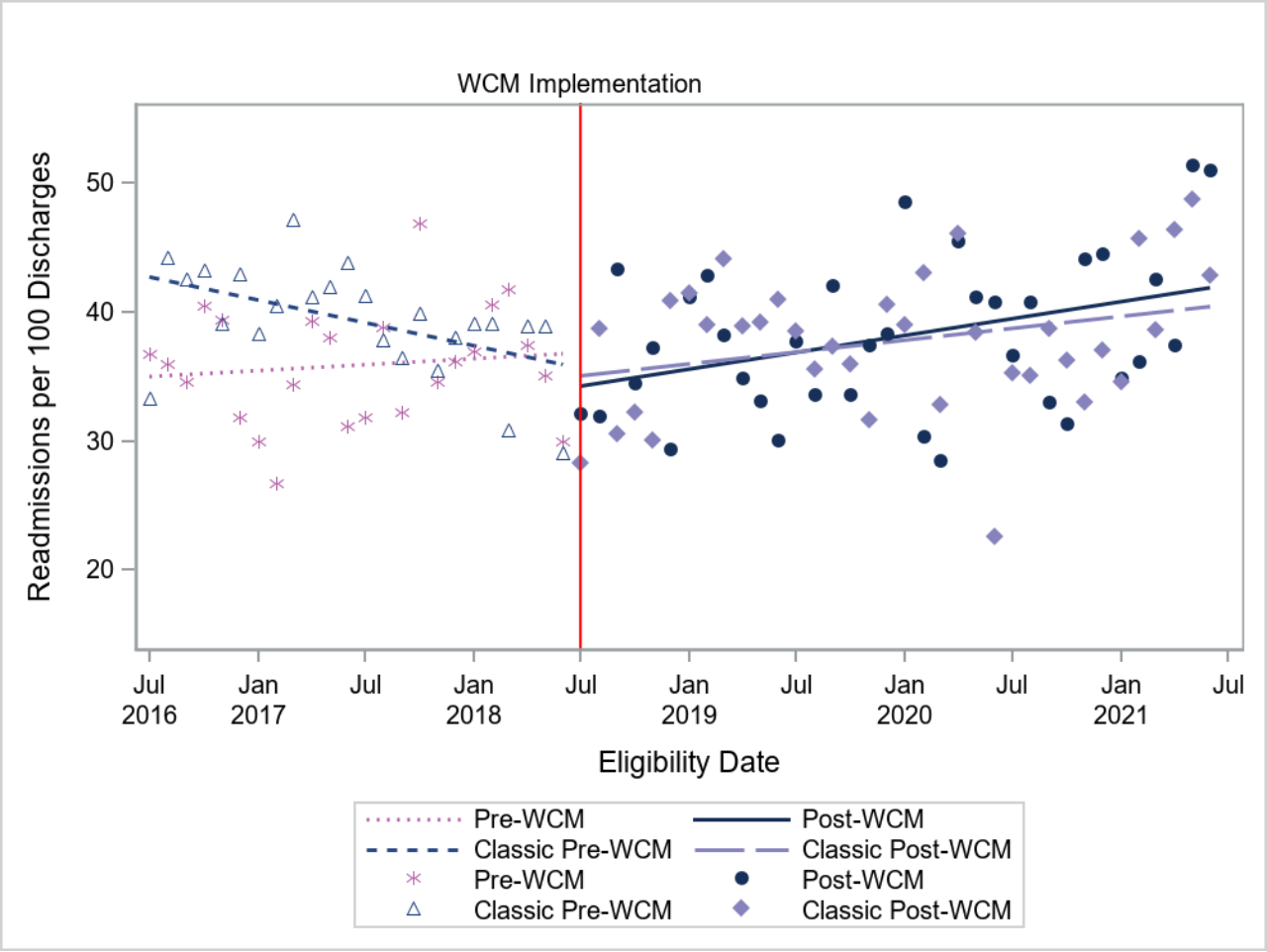
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0197	0.1841	-0.3804	0.3411	-0.11	0.9149
ethnic4	Latinx		0.3373	0.1669	0.0101	0.6645	2.02	0.0433
ethnic4	Other/ Unknown		0.1253	0.1967	-0.2601	0.5108	0.64	0.5240
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.4902	0.0773	0.3387	0.6416	6.34	<.0001
Lang3	Other/ Unknown		0.5264	0.1910	0.1519	0.9008	2.76	0.0059
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.4723	0.1215	0.2341	0.7105	3.89	0.0001
AgeCat	2-6		1.1200	0.1048	0.9145	1.3255	10.68	<.0001
AgeCat	7-11		1.3308	0.1173	1.1008	1.5607	11.34	<.0001
AgeCat	12-20		0.9750	0.1142	0.7512	1.1987	8.54	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
Season	Fall		0.0960	0.0711	-0.0435	0.2354	1.35	0.1773
Season	Spring		0.1294	0.0757	-0.0189	0.2778	1.71	0.0873
Season	Winter		0.0726	0.0730	-0.0705	0.2157	0.99	0.3200
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.

Hospital Readmission (All Cause 30-Day) per 100 Discharges

Figure 29. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

There were insufficient observations in the pre-period for hospital readmission visits to generate stable estimates for the DiD analysis or regression model. Instead, we report the proportion of readmissions

Figure 30. Trend Line for Phase I Hospital Readmissions



Trend statement for Hospital Readmission in Phase I: In the pre-WCM period, the slopes of the Phase I and Classic CCS comparison group are not statistically different (p=0.0647) and thus the parallel slopes assumption of the DiD model is satisfied (see Table 56). There was no statistically significant difference in trend post implementation between the Phase I WCM and control groups (p=0.9784), with increase in readmissions in both groups over time (Figure 30).

Table 56. Slopes Test for Phase I Hospital Readmissions

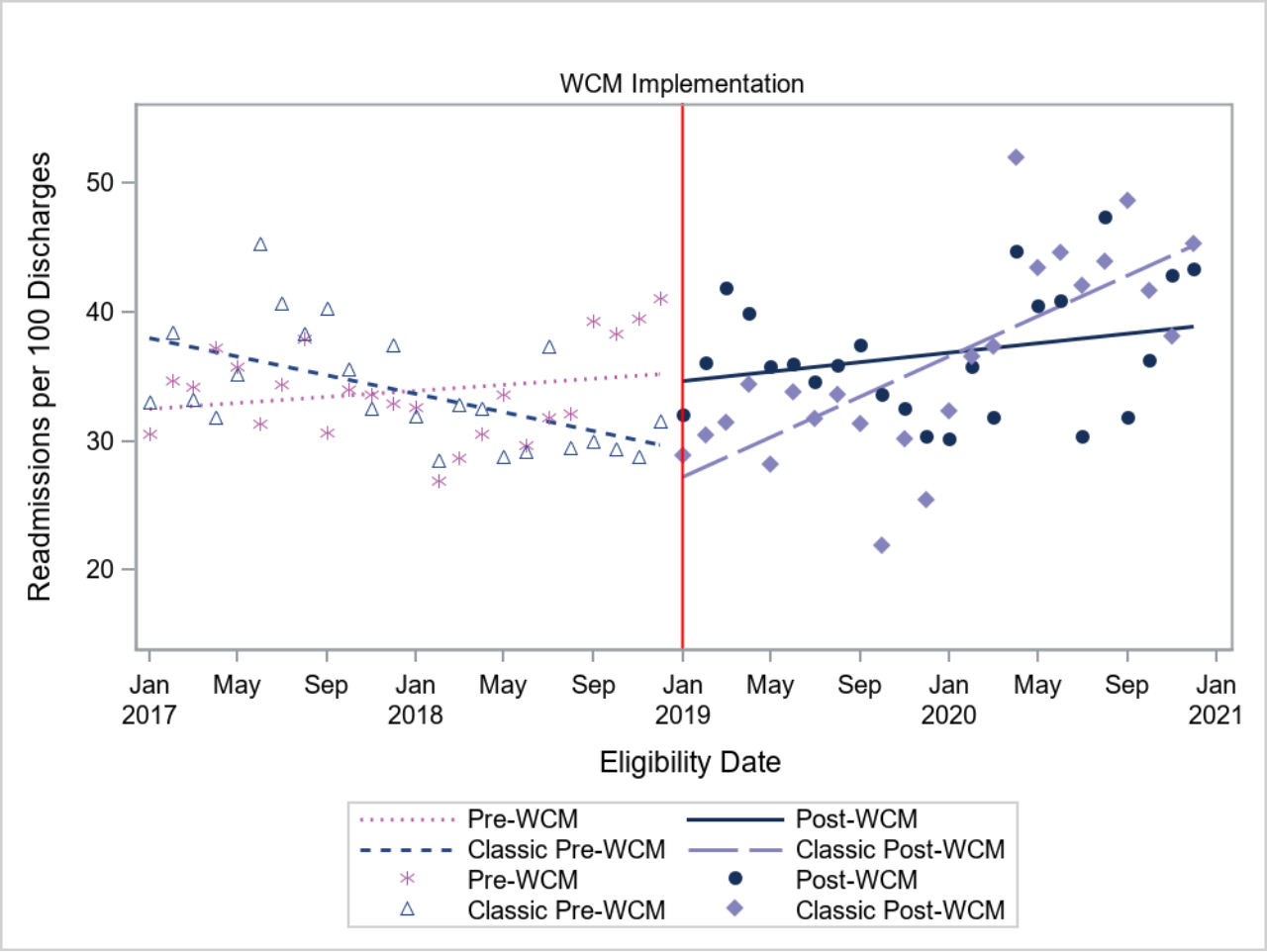
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5033	0.4998	0.5069	0.0133	0.0072	0.05	-0.0008	0.0274	3.41	0.0647
Post-period slopes test	0.5000	0.4977	0.5023	0.0001	0.0047	0.05	-0.0090	0.0093	0.00	0.9784

Table 57. Regression Model for Phase I Hospital Readmissions

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	1	-1.1266	0.1474	-1.4161	-0.8382	58.41	<.0001
Post*WCM_Cnty	Post	1	1	-1.2157	0.1637	-1.5372	-0.8954	55.15	<.0001
Post*WCM_Cnty	Pre	0	1	-0.6194	0.0926	-0.8013	-0.4381	44.71	<.0001
Post*WCM_Cnty	Pre	1	1	-0.9236	0.0958	-1.1118	-0.7364	93.04	<.0001
Time*Post*WCM_Cnty	Post	0	1	0.0073	0.0032	0.0012	0.0135	5.41	0.0200
Time*Post*WCM_Cnty	Post	1	1	0.0075	0.0035	0.0007	0.0143	4.64	0.0313
Time*Post*WCM_Cnty	Pre	0	1	-0.0125	0.0049	-0.0221	-0.0030	6.57	0.0104
Time*Post*WCM_Cnty	Pre	1	1	0.0008	0.0053	-0.0096	0.0112	0.02	0.8837
CDPS_Log2			1	0.3935	0.0144	0.3655	0.4218	751.27	<.0001
cwda	1		1	-0.5313	0.0362	-0.6024	-0.4603	215.00	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-0.0298	0.0961	-0.2191	0.1578	0.10	0.7568
ethnic4	Latinx		1	-0.0555	0.0477	-0.1489	0.0382	1.35	0.2451
ethnic4	Other/ Unknown		1	0.0127	0.0525	-0.0901	0.1157	0.06	0.8081
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		1	0.1343	0.0377	0.0604	0.2080	12.71	0.0004
Lang3	Other/ Unknown		1	-0.3469	0.1514	-0.6486	-0.0544	5.25	0.0219
Lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		1	-0.2399	0.0750	-0.3872	-0.0933	10.24	0.0014
AgeCat	2-6		1	0.2559	0.0568	0.1447	0.3672	20.32	<.0001
AgeCat	7-11		1	0.2057	0.0603	0.0875	0.3240	11.62	0.0007
AgeCat	12-20		1	0.2602	0.0521	0.1581	0.3625	24.89	<.0001
AgeCat	<12 Mo.		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	-0.1646	0.0337	-0.2307	-0.0985	23.79	<.0001
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 31. Trend Line for Phase II Hospital Readmissions



Trend statement for Hospital Readmissions in Phase II: In the pre-WCM period, the slopes of the Phase II and Classic CCS comparison group are not statistically different (p=0.1155) and thus the parallel slopes assumption of the DiD model is satisfied (Table 58). There was a statistically significant difference in trend post implementation between the Phase II WCM and control groups (p=0.0075), with convergence of slopes over time (Figure 31).

Table 58. Slopes Test for Phase II Hospital Readmissions

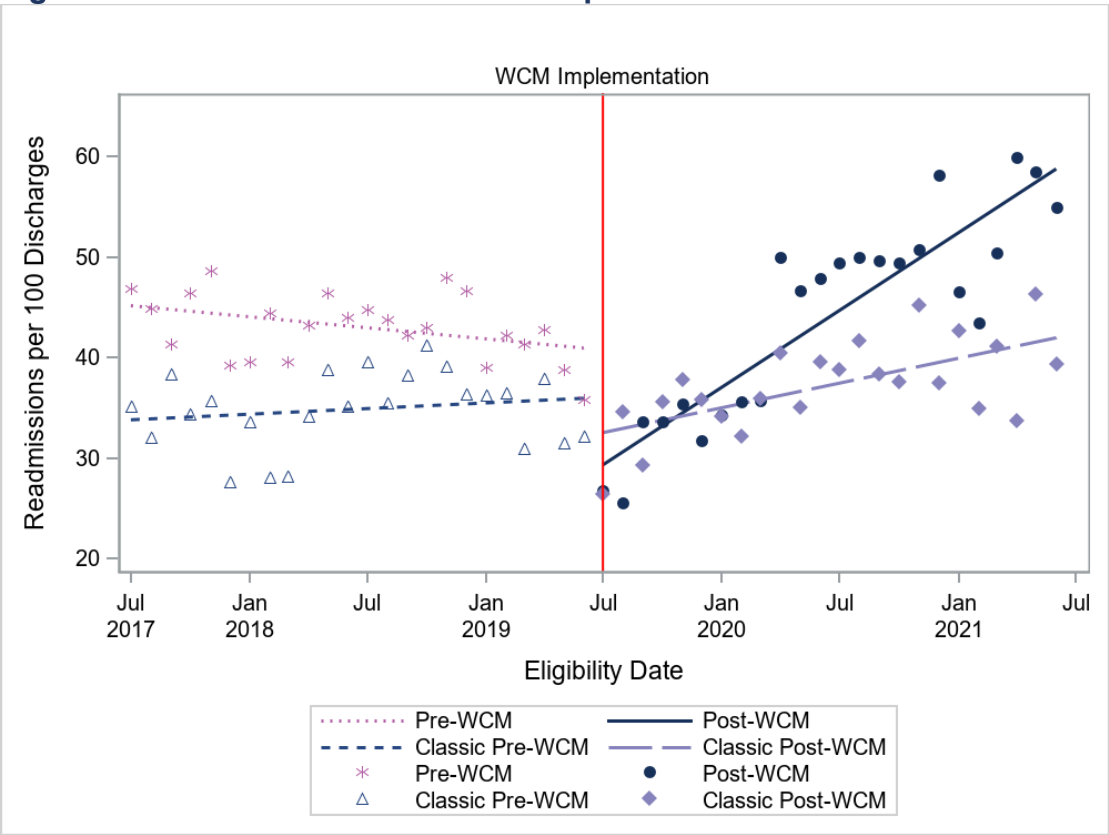
Contrast Estimate Results										
Label	Mean Estimate	Mean Confidence Limits		L'Beta Estimate	Standard Error	Alpha	L'Beta Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5031	0.4992	0.5069	0.0123	0.0078	0.05	-0.0030	0.0277	2.48	0.1155
Post-period slopes test	0.4943	0.4902	0.4985	-0.0227	0.0085	0.05	-0.0393	-0.0060	7.14	0.0075

Table 59. Regression Model for Phase II Hospital Readmissions

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.8556	0.2393	-2.3247	-1.3865	-7.75	<.0001
Post*WCM_Cnty	Post	1	-1.1638	0.2396	-1.6334	-0.6943	-4.86	<.0001
Post*WCM_Cnty	Pre	0	-1.2213	0.1364	-1.4888	-0.9539	-8.95	<.0001
Post*WCM_Cnty	Pre	1	-1.3823	0.1317	-1.6405	-1.1241	-10.49	<.0001
Time*Post*WCM_Cnty	Post	0	0.0294	0.0060	0.0175	0.0412	4.86	<.0001
Time*Post*WCM_Cnty	Post	1	0.0067	0.0061	-0.0052	0.0187	1.10	0.2705
Time*Post*WCM_Cnty	Pre	0	0.0099	0.0058	-0.0016	0.0213	1.69	0.0912
Time*Post*WCM_Cnty	Pre	1	0.0222	0.0055	0.0114	0.0329	4.05	<.0001
CDPS_Log2			0.3404	0.0283	0.2849	0.3959	12.03	<.0001
cwda	1		-0.4640	0.0642	-0.5899	-0.3381	-7.22	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0143	0.1044	-0.2190	0.1904	-0.14	0.8912
ethnic4	Latinx		0.0303	0.0793	-0.1251	0.1857	0.38	0.7021
ethnic4	Other/ Unknown		0.0731	0.0727	-0.0694	0.2155	1.01	0.3147
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		0.0023	0.0782	-0.1511	0.1557	0.03	0.9766
Lang3	Other/ Unknown		0.1457	0.1705	-0.1884	0.4799	0.85	0.3927
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.2896	0.0807	-0.4477	-0.1315	-3.59	0.0003
AgeCat	2-6		0.0206	0.0893	-0.1544	0.1956	0.23	0.8173
AgeCat	7-11		-0.0494	0.0997	-0.2448	0.1459	-0.50	0.6198
AgeCat	12-20		0.0529	0.0871	-0.1179	0.2237	0.61	0.5436
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		-0.1063	0.0612	-0.2263	0.0137	-1.74	0.0826
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
Season	Fall		-0.1098	0.0504	-0.2087	-0.0110	-2.18	0.0295
Season	Spring		-0.0587	0.0492	-0.1552	0.0378	-1.19	0.2329
Season	Winter		-0.0529	0.0489	-0.1487	0.0429	-1.08	0.2790
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.

Figure 32. Trend Line for Phase III Hospital Readmissions



Trend statement for Hospital Readmissions in Phase III: In the pre-WCM period, the slopes of the Phase III and Classic CCS comparison group are not statistically different (p=0.2848) and thus the parallel slopes assumption of the DiD model is satisfied (Table 60). There was no statistically significant difference in trend post implementation between the Phase III WCM and control groups (p=0.7620), with increase in readmissions in both groups over time (Figure 32).

Table 60. Slopes Test for Phase III Hospital Readmissions

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4983	0.4952	0.5014	-0.0067	0.0063	0.05	-0.0190	0.0056	1.14	0.2848
Post-period slopes test	0.5024	0.4991	0.5057	0.0096	0.0068	0.05	-0.0038	0.0229	1.98	0.1594

Table 61. Regression Model for Phase III Hospital Readmissions

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.3636	0.1958	-1.7473	-0.9800	-6.97	<.0001
Post*WCM_Cnty	Post	1	-1.6791	0.2012	-2.0735	-1.2847	-8.34	<.0001
Post*WCM_Cnty	Pre	0	-1.2799	0.1365	-1.5475	-1.0123	-9.38	<.0001
Post*WCM_Cnty	Pre	1	-1.0199	0.1337	-1.2819	-0.7579	-7.63	<.0001
Time*Post*WCM_Cnty	Post	0	0.0202	0.0044	0.0116	0.0288	4.61	<.0001
Time*Post*WCM_Cnty	Post	1	0.0298	0.0052	0.0196	0.0400	5.72	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0210	0.0047	0.0118	0.0302	4.48	<.0001
Time*Post*WCM_Cnty	Pre	1	0.0143	0.0042	0.0060	0.0225	3.40	0.0007
CDPS_Log2			0.3085	0.0206	0.2680	0.3489	14.95	<.0001
cwda	1		-0.4277	0.0625	-0.5502	-0.3053	-6.85	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.2463	0.1593	-0.5586	0.0660	-1.55	0.1221
ethnic4	Latinx		-0.1938	0.1168	-0.4228	0.0352	-1.66	0.0972
ethnic4	Other/ Unknown		0.0599	0.1281	-0.1911	0.3110	0.47	0.6398

ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0598	0.0666	-0.1903	0.0707	-0.90	0.3695
Lang3	Other/ Unknown		0.1888	0.1304	-0.0667	0.4444	1.45	0.1476
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.

In-Home Supportive Services (IHSS) per 1000 MM

Figure 33. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for IHSS claims in HPSM: The slopes in the pre-period are not statistically significant (p=0.1087), and the parallel assumptions criteria for the DiD model has been met. The post-period slopes between HPSM and Classic CCS comparison group are significantly different (p=0.0007), with HPSM claims appear to be increasing while Classic CCS claims appear to be relatively flat over time (Figure 33).

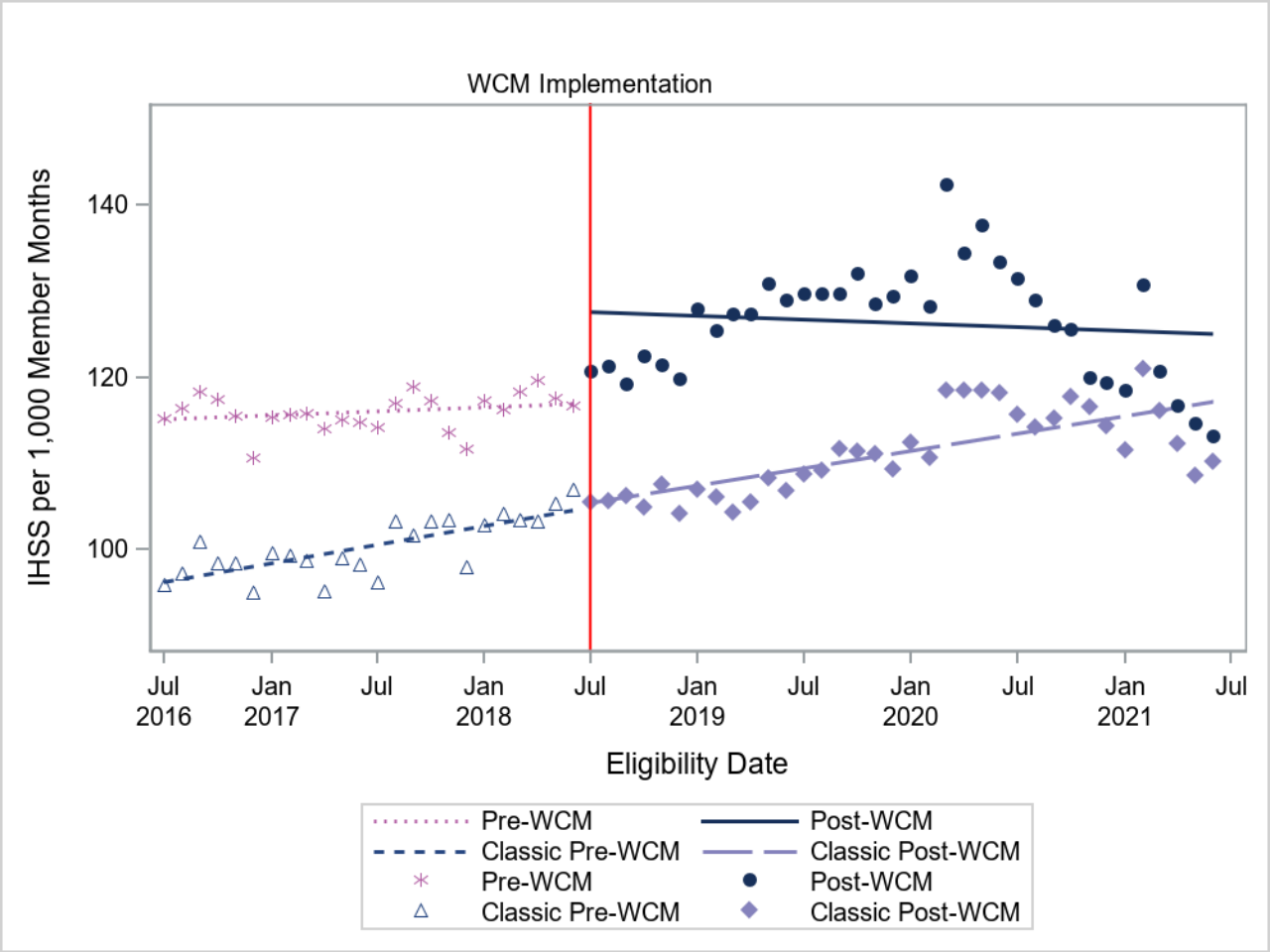
Table 62. Slopes Test for HPSM WCM IHSS Claims

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5192	0.4957	0.5426	0.0770	0.0480	0.05	-0.0171	0.1710	2.57	0.1087
Post-period slopes test	0.5036	0.5015	0.5057	0.0145	0.0043	0.05	0.0061	0.0229	11.36	0.0007

Table 63. Regression Model for HPSM WCM IHSS Claims

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	1	-3.2865	0.0663	-3.4168	-3.1569	2457.46	<.0001
Post*WCM_Cnty	Post	1	1	-4.2588	0.1974	-4.6481	-3.8742	465.51	<.0001
Post*WCM_Cnty	Pre	0	1	-3.4726	0.0472	-3.5655	-3.3804	5411.40	<.0001
Post*WCM_Cnty	Pre	1	1	-5.9732	0.8823	-8.0565	-4.4957	45.83	<.0001
Time*Post*WCM_Cnty	Post	0	1	0.0025	0.0014	-0.0002	0.0053	3.29	0.0695
Time*Post*WCM_Cnty	Post	1	1	0.0170	0.0041	0.0091	0.0250	17.54	<.0001
Time*Post*WCM_Cnty	Pre	0	1	0.0060	0.0026	0.0008	0.0111	5.05	0.0246
Time*Post*WCM_Cnty	Pre	1	1	0.0829	0.0479	-0.0047	0.1884	3.00	0.0835
CDPS_Log2			1	0.3482	0.0059	0.3366	0.3599	3448.27	<.0001
cwda	1		1	2.5665	0.0306	2.5069	2.6268	7030.62	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 34. Trend Line for Phase I IHSS Claims



Trend statement for IHSS claims in Phase I: The slopes in the pre-period are not statistically significant (p=0.4952), and the parallel assumptions criteria for the DiD model has been met. The post-period slopes between Phase 1 and Classic CCS comparison group are not significantly different (p=0.1297), showing a potential convergence of lines over time.

Table 64. Slopes Test for Phase I IHSS Claims

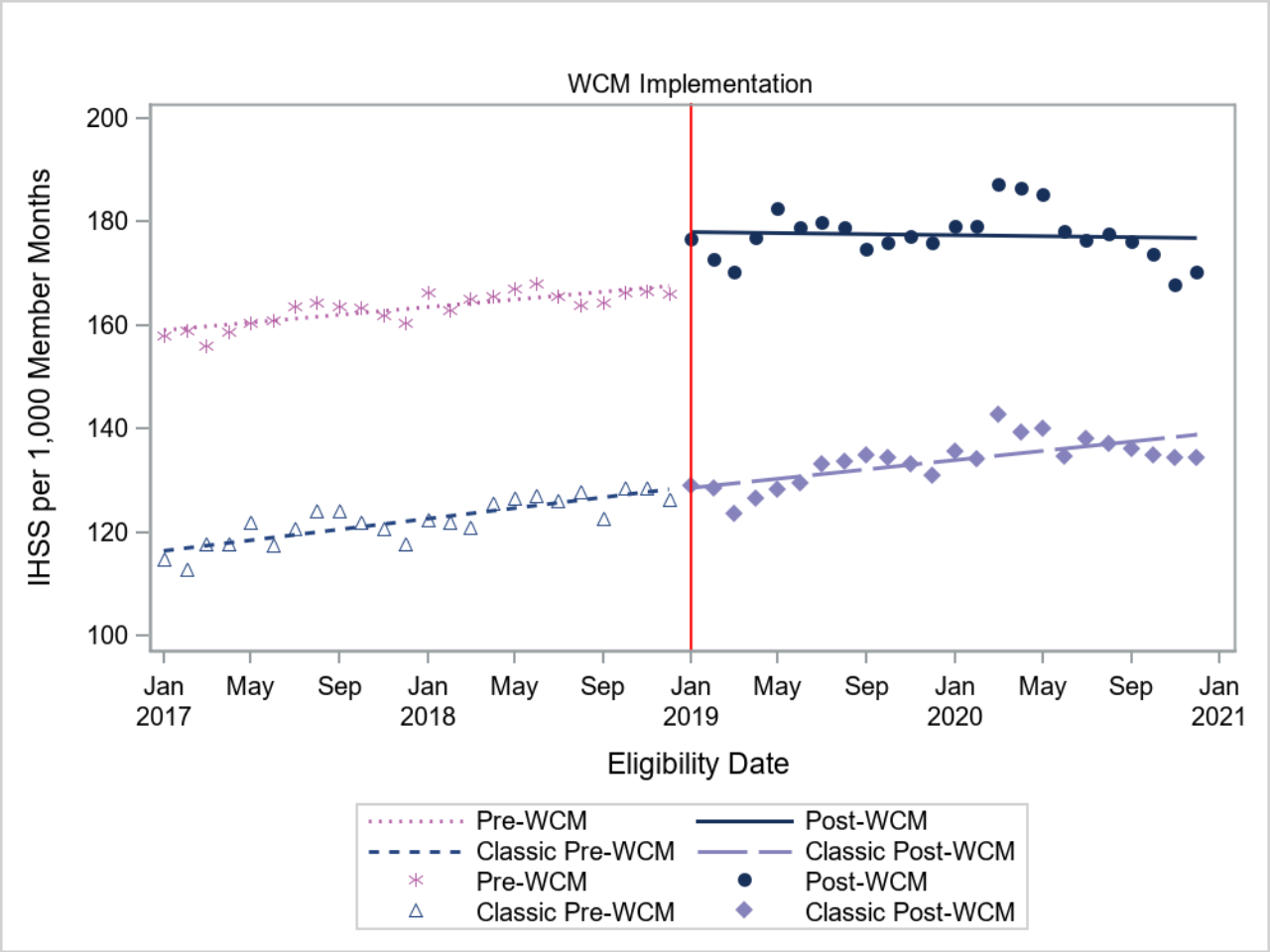
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4997	0.4989	0.5005	-0.0011	0.0016	0.05	-0.0042	0.0021	0.47	0.4952
Post-period slopes test	0.4997	0.4992	0.5001	-0.0013	0.0009	0.05	-0.0030	0.0004	2.30	0.1297

Table 65. Regression Model for Phase I IHSS Claims

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	1	-5.7731	0.0336	-5.8390	-5.7073	29538.2	<.0001
Post*WCM_Cnty	Post	1	1	-5.4700	0.0319	-5.5326	-5.4076	29415.4	<.0001
Post*WCM_Cnty	Pre	0	1	-5.6468	0.0254	-5.6968	-5.5971	49270.2	<.0001
Post*WCM_Cnty	Pre	1	1	-5.4099	0.0240	-5.4570	-5.3629	50754.1	<.0001
Time*Post*WCM_Cnty	Post	0	1	0.0083	0.0006	0.0070	0.0095	171.18	<.0001
Time*Post*WCM_Cnty	Post	1	1	0.0070	0.0006	0.0058	0.0081	137.53	<.0001
Time*Post*WCM_Cnty	Pre	0	1	0.0046	0.0012	0.0022	0.0069	14.67	0.0001
Time*Post*WCM_Cnty	Pre	1	1	0.0035	0.0011	0.0014	0.0056	10.51	0.0012
CDPS_Log2			1	0.5030	0.0022	0.4987	0.5073	52118.1	<.0001
cwda	1		1	2.9286	0.0110	2.9071	2.9503	70841.0	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-0.3524	0.0240	-0.3995	-0.3055	216.16	<.0001
ethnic4	Latinx		1	-0.4413	0.0093	-0.4594	-0.4231	2266.37	<.0001
ethnic4	Other/ Unknown		1	-0.4135	0.0107	-0.4345	-0.3926	1500.51	<.0001
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		1	-0.4003	0.0079	-0.4157	-0.3848	2570.39	<.0001
Lang3	Other/ Unknown		1	0.4348	0.0264	0.3830	0.4865	271.39	<.0001
Lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	0.0492	0.0070	0.0354	0.0629	48.93	<.0001
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	2-6		1	1.8361	0.0171	1.8027	1.8696	11589.1	<.0001
AgeCat	7-11		1	2.1973	0.0168	2.1644	2.2303	17112.0	<.0001
AgeCat	12-20		1	2.3891	0.0162	2.3574	2.4210	21668.7	<.0001
AgeCat	0-1 year		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 35. Trend Line for Phase II IHSS Claims



Trend statement for IHSS claims in Phase II: The slopes in the pre-period are not statistically significant (p=0.4952), and the parallel assumptions criteria for the DiD model has been met. The post-period slopes between Phase II and Classic CCS comparison group are significantly different (p=0.0253). Based on the graph, Classic CCS claims appear to be increasing while Phase II claims appear to be relatively flat or decreasing over time (Figure 35).

Table 66. Slopes Test for Phase II IHSS Claims

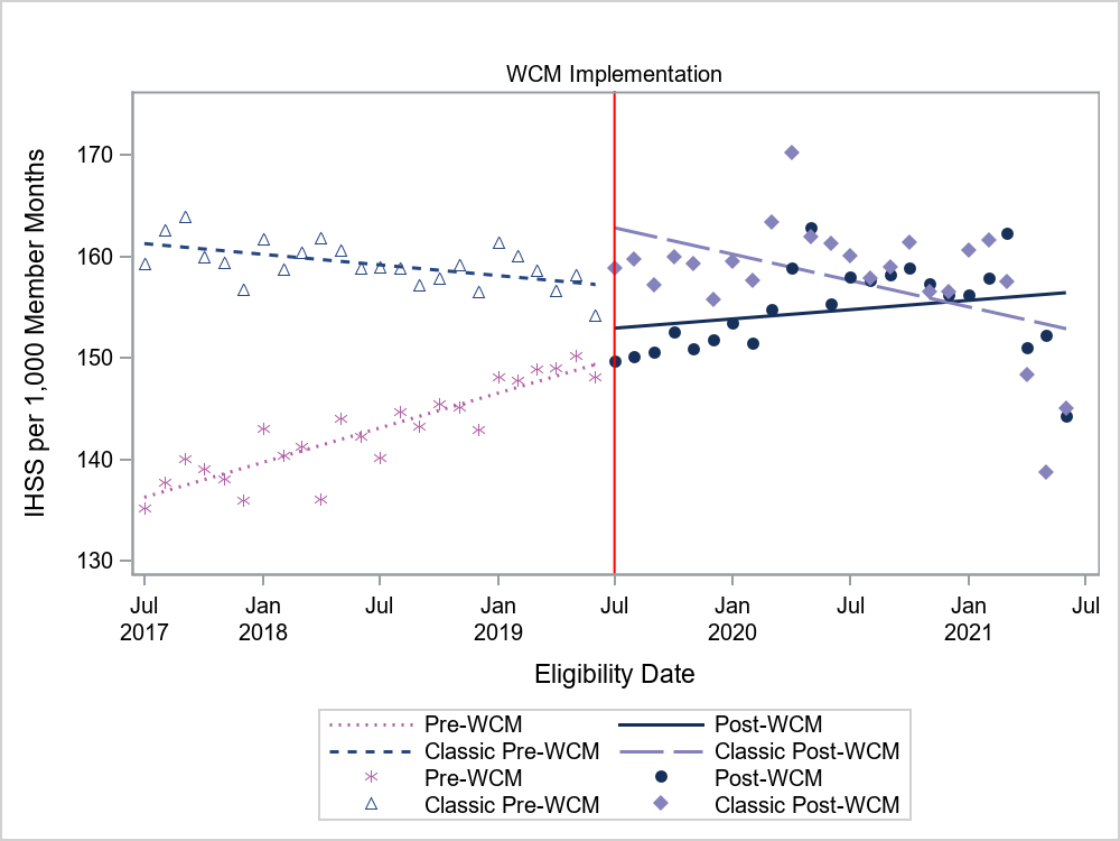
Contrast Estimate Results										
Label	Mean Estimate	Mean Confidence Limits		L'Beta Estimate	Standard Error	Alpha	L'Beta Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4997	0.4990	0.5005	-0.0011	0.0016	0.05	-0.0042	0.0021	0.44	0.5071
Post-period slopes test	0.5009	0.5001	0.5017	0.0036	0.0016	0.05	0.0004	0.0067	5.00	0.0253

Table 67. Regression Model for Phase II IHSS Claims

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	1	-5.1099	0.0492	-5.2065	-5.0136	10782.5	<.0001
Post*WCM_Cnty	Post	1	1	-4.8785	0.0455	-4.9678	-4.7894	11498.8	<.0001
Post*WCM_Cnty	Pre	0	1	-5.0401	0.0266	-5.0923	-4.9880	35902.9	<.0001
Post*WCM_Cnty	Pre	1	1	-4.7248	0.0250	-4.7738	-4.6759	35757.3	<.0001
Time*Post*WCM_Cnty	Post	0	1	0.0061	0.0012	0.0037	0.0084	25.26	<.0001
Time*Post*WCM_Cnty	Post	1	1	0.0097	0.0011	0.0075	0.0118	77.17	<.0001
Time*Post*WCM_Cnty	Pre	0	1	0.0037	0.0012	0.0013	0.0061	9.22	0.0024
Time*Post*WCM_Cnty	Pre	1	1	0.0026	0.0011	0.0005	0.0047	5.88	0.0153
CDPS_Log2			1	0.5321	0.0025	0.5271	0.5371	43592.9	<.0001
cwda	1		1	2.6841	0.0113	2.6621	2.7062	56917.1	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-0.0344	0.0159	-0.0656	-0.0033	4.69	0.0304
ethnic4	Latinx		1	-0.4030	0.0120	-0.4266	-0.3795	1122.19	<.0001
ethnic4	Other/ Unknown		1	-0.5329	0.0104	-0.5533	-0.5125	2632.27	<.0001
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		1	-0.3322	0.0121	-0.3560	-0.3084	749.77	<.0001
Lang3	Other/ Unknown		1	0.6518	0.0207	0.6112	0.6922	995.01	<.0001
Lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	-0.0183	0.0079	-0.0338	-0.0029	5.39	0.0203
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	2-6		1	1.6403	0.0174	1.6062	1.6745	8853.87	<.0001
AgeCat	7-11		1	1.9375	0.0173	1.9036	1.9715	12507.1	<.0001
AgeCat	12-20		1	2.0914	0.0166	2.0589	2.1241	15813.4	<.0001
AgeCat	0-1 year		0	0.0000	0.0000	0.0000	0.0000	.	.
Season	Fall		1	-0.0202	0.0112	-0.0421	0.0016	3.29	0.0697
Season	Spring		1	0.0026	0.0111	-0.0193	0.0244	0.05	0.8189
Season	Winter		1	-0.0279	0.0111	-0.0497	-0.0062	6.35	0.0118
Season	Summer		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 36. Trend Line for Phase III IHSS Claims



Trend statement for IHSS claims in Phase III: In the pre-WCM period, the slopes of the Phase III group and Classic CCS comparison group are statistically different (p=0.0140) and thus the parallel slopes assumption of the DiD model is not satisfied (see Table 68). As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. There was a statistically significant difference in trend post implementation between the WCM and Classic CCS comparison group, showing convergence of lines over time.

Table 68. Slopes Test for Phase III IHSS Claims

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5008	0.5002	0.5014	0.0030	0.0012	0.05	0.0006	0.0055	6.04	0.0140
Post-period slopes test	0.5016	0.5010	0.5022	0.0064	0.0013	0.05	0.0039	0.0089	25.77	<.0001

Table 69. Regression Model for Phase III IHSS Claims

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	1	-4.1535	0.0368	-4.2256	-4.0815	12770.1	<.0001
Post*WCM_Cnty	Post	1	1	-4.5089	0.0368	-4.5811	-4.4368	15014.0	<.0001
Post*WCM_Cnty	Pre	0	1	-4.0878	0.0206	-4.1282	-4.0475	39405.0	<.0001
Post*WCM_Cnty	Pre	1	1	-4.2895	0.0200	-4.3287	-4.2504	46219.3	<.0001
Time*Post*WCM_Cnty	Post	0	1	0.0049	0.0009	0.0032	0.0067	30.38	<.0001
Time*Post*WCM_Cnty	Post	1	1	0.0113	0.0009	0.0096	0.0131	159.48	<.0001
Time*Post*WCM_Cnty	Pre	0	1	0.0012	0.0009	-0.0005	0.0030	1.85	0.1736
Time*Post*WCM_Cnty	Pre	1	1	0.0043	0.0009	0.0026	0.0059	24.39	<.0001
CDPS_Log2			1	0.4700	0.0018	0.4664	0.4735	65920.3	<.0001
cwda	1		1	2.6789	0.0090	2.6613	2.6966	88867.7	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-0.2693	0.0157	-0.3001	-0.2385	293.30	<.0001
ethnic4	Latinx		1	-0.6772	0.0099	-0.6967	-0.6578	4656.33	<.0001
ethnic4	Other/ Unknown		1	-0.9392	0.0106	-0.9601	-0.9184	7785.94	<.0001
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.

Lang3	Spanish		1	-0.2413	0.0073	-0.2555	-0.2271	1107.18	<.0001
Lang3	Other/ Unknown		1	0.3614	0.0147	0.3326	0.3901	606.64	<.0001
Lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	0.0716	0.0062	0.0595	0.0837	134.22	<.0001
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	2-6		1	1.1952	0.0145	1.1668	1.2237	6767.54	<.0001
AgeCat	7-11		1	1.5029	0.0141	1.4753	1.5306	11382.7	<.0001
AgeCat	12-20		1	1.6588	0.0133	1.6327	1.6850	15494.7	<.0001
AgeCat	0-1 year		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Length of Hospital Stay (No Time Variant analysis)

Figure 37. Average Hospital LOS for HPSM WCM

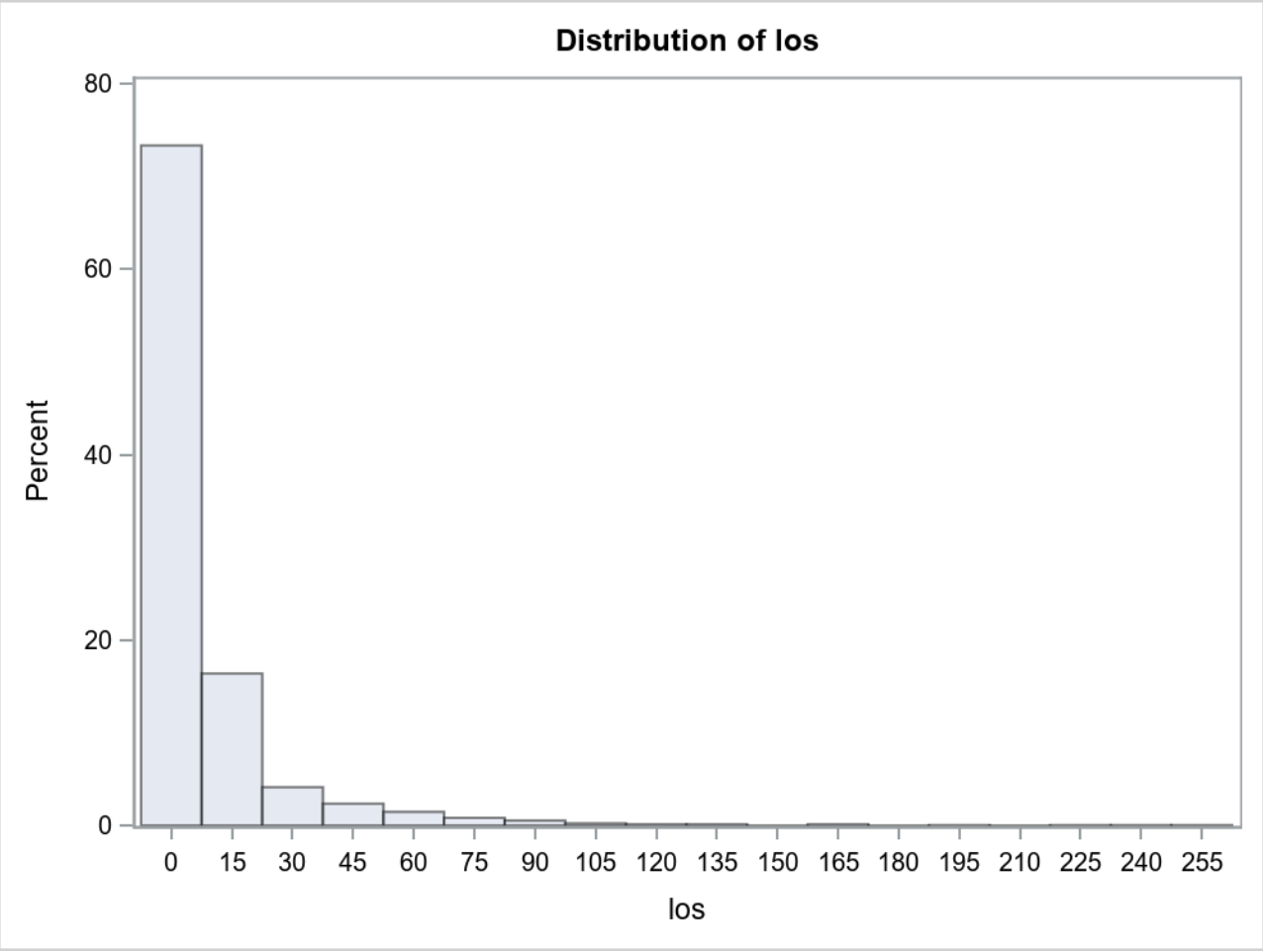


Table 70. Regression Model for HPSM WCM LOS

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	2.8932	0.1551	2.5893	3.1972	18.66	<.0001
Post*WCM_Cnty	Post	WCM	2.9932	0.1816	2.6372	3.3491	16.48	<.0001
Post*WCM_Cnty	Pre	Classic	2.8420	0.1858	2.4778	3.2062	15.29	<.0001
Post*WCM_Cnty	Pre	WCM	2.6573	0.2100	2.2456	3.0690	12.65	<.0001
CDPS_Log2			0.1921	0.0423	0.1091	0.2750	4.54	<.0001
Ethnic4	Black		-0.0640	0.2138	-0.4830	0.3550	-0.30	0.7647
Ethnic4	Latinx		-0.0960	0.1731	-0.4352	0.2432	-0.55	0.5790
Ethnic4	Other/ Unknown		-0.0120	0.1647	-0.3349	0.3109	-0.07	0.9421
Ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.2702	0.1166	-0.4987	-0.0416	-2.32	0.0205
Lang3	Other/ Unknown		-0.1805	0.1425	-0.4598	0.0988	-1.27	0.2053
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 - 4		-1.1896	0.1046	-1.3946	-0.9847	-11.38	<.0001
AgeCat	5- 11		-1.3474	0.1254	-1.5932	-1.1015	-10.74	<.0001
AgeCat	12-17		-0.9796	0.1401	-1.2541	-0.7051	-6.99	<.0001
AgeCat	18+		-1.0598	0.1626	-1.3784	-0.7412	-6.52	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 38. Average Hospital LOS for Phase I

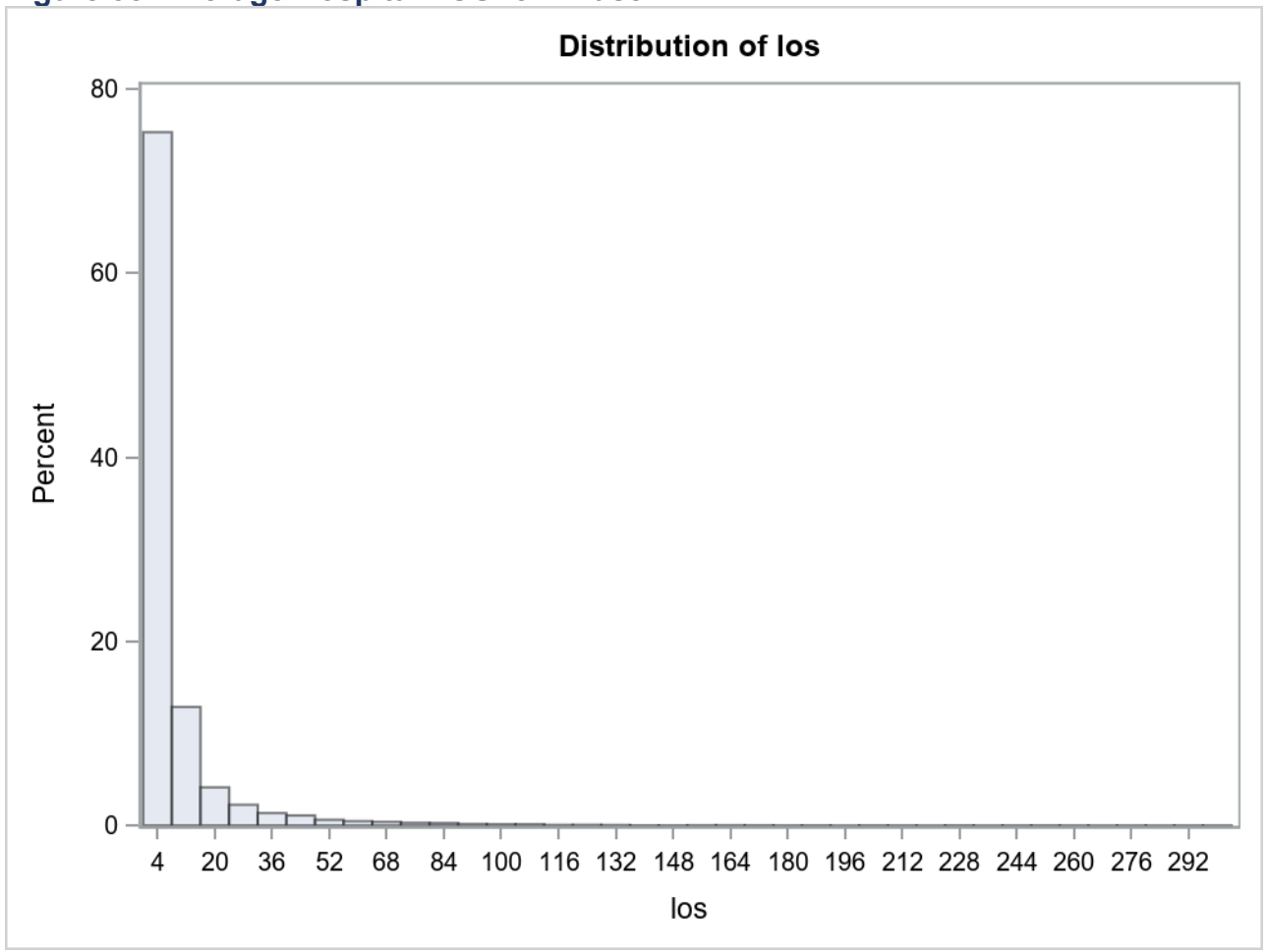


Table 71. Regression Model for Phase I LOS

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	2.4797	0.0427	2.3961	2.5634	58.13	<.0001
Post*WCM_Cnty	Post	WCM	2.4959	0.0445	2.4086	2.5831	56.08	<.0001
Post*WCM_Cnty	Pre	Classic	2.5085	0.0408	2.4286	2.5884	61.52	<.0001
Post*WCM_Cnty	Pre	WCM	2.5352	0.0379	2.4609	2.6094	66.91	<.0001
CDPS_Log2			0.2073	0.0094	0.1888	0.2257	22.03	<.0001
Ethnic4	Black		0.0453	0.0694	-0.0908	0.1814	0.65	0.5142
Ethnic4	Latinx		-0.0532	0.0374	-0.1265	0.0201	-1.42	0.1549
Ethnic4	Other/ Unknown		-0.0138	0.0419	-0.0959	0.0684	-0.33	0.7426
Ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.0341	0.0266	-0.0180	0.0862	1.28	0.2000
Lang3	Other/ Unknown		0.1118	0.0985	-0.0813	0.3049	1.13	0.2564
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 - 4		-1.1377	0.0349	-1.2061	-1.0692	-32.57	<.0001
AgeCat	5- 11		-1.0747	0.0396	-1.1524	-0.9970	-27.12	<.0001
AgeCat	12-17		-0.9672	0.0358	-1.0375	-0.8970	-26.99	<.0001
AgeCat	18+		-0.9422	0.0398	-1.0202	-0.8641	-23.66	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
cwda	1		0.1540	0.0266	0.1019	0.2062	5.79	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 39. Average Hospital LOS for Phase II

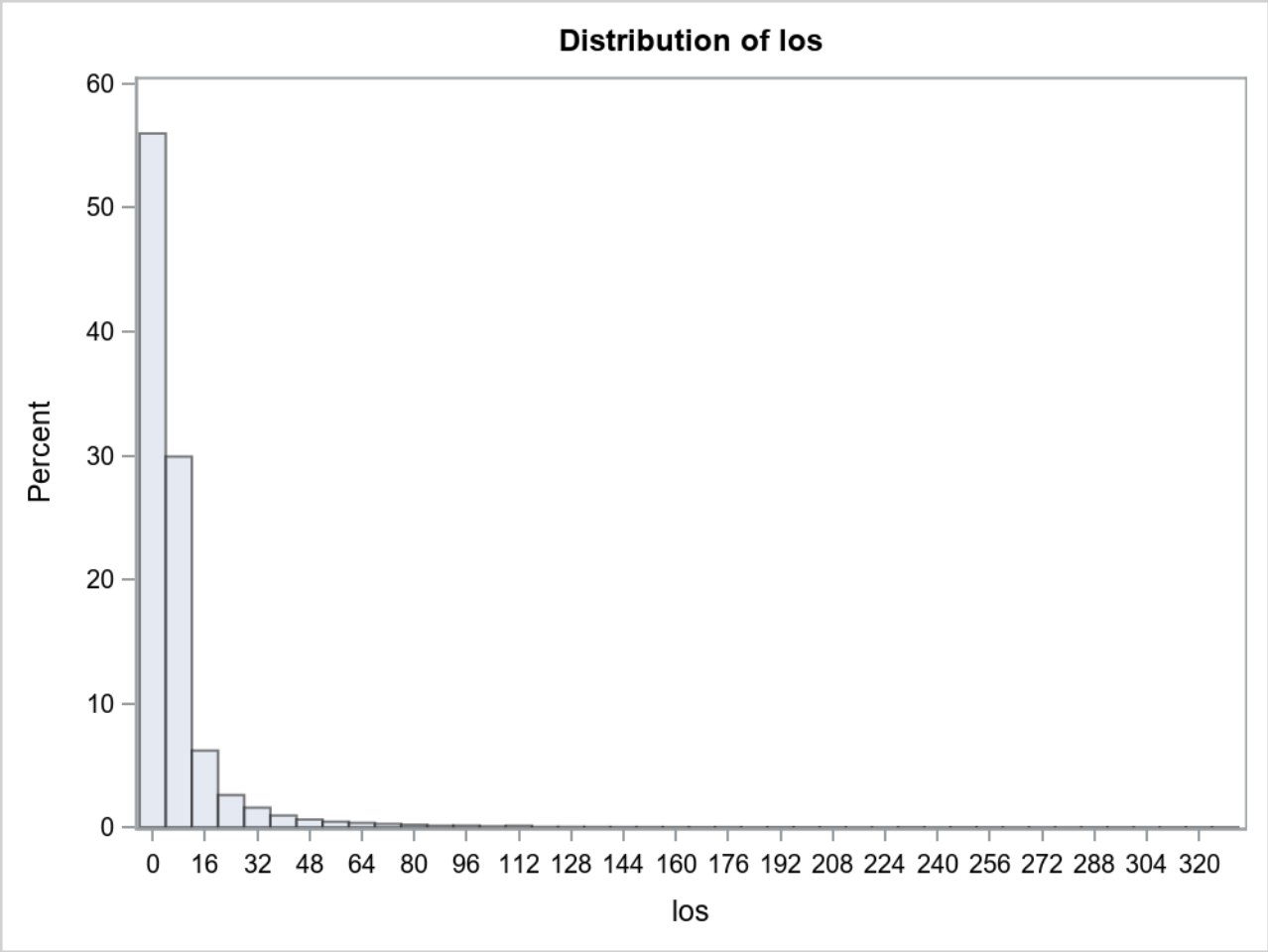


Table 72. Regression Model for Phase II LOS

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	2.4185	0.0450	2.3302	2.5067	53.71	<.0001
Post*WCM_Cnty	Post	WCM	2.3054	0.0461	2.2151	2.3957	50.02	<.0001
Post*WCM_Cnty	Pre	Classic	2.4364	0.0445	2.3491	2.5236	54.74	<.0001
Post*WCM_Cnty	Pre	WCM	2.3692	0.0428	2.2853	2.4530	55.36	<.0001
CDPS_Log2			0.1874	0.0104	0.1670	0.2077	18.05	<.0001
Ethnic4	Black		0.0897	0.0512	-0.0106	0.1900	1.75	0.0796
Ethnic4	Latinx		0.0477	0.0395	-0.0296	0.1250	1.21	0.2267
Ethnic4	Other/ Unknown		0.1117	0.0369	0.0394	0.1841	3.03	0.0025
Ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0700	0.0381	-0.1446	0.0047	-1.84	0.0663
Lang3	Other/ Unknown		-0.0445	0.0818	-0.2048	0.1158	-0.54	0.5862
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 - 4		-1.0494	0.0422	-1.1320	-0.9668	-24.90	<.0001
AgeCat	5- 11		-1.0241	0.0414	-1.1053	-0.9429	-24.72	<.0001
AgeCat	12-17		-0.9558	0.0409	-1.0361	-0.8756	-23.35	<.0001
AgeCat	18+		-0.8948	0.0505	-0.9938	-0.7958	-17.72	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
cwda	1		0.1550	0.0294	0.0974	0.2126	5.27	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 40. Average Hospital LOS for Phase III

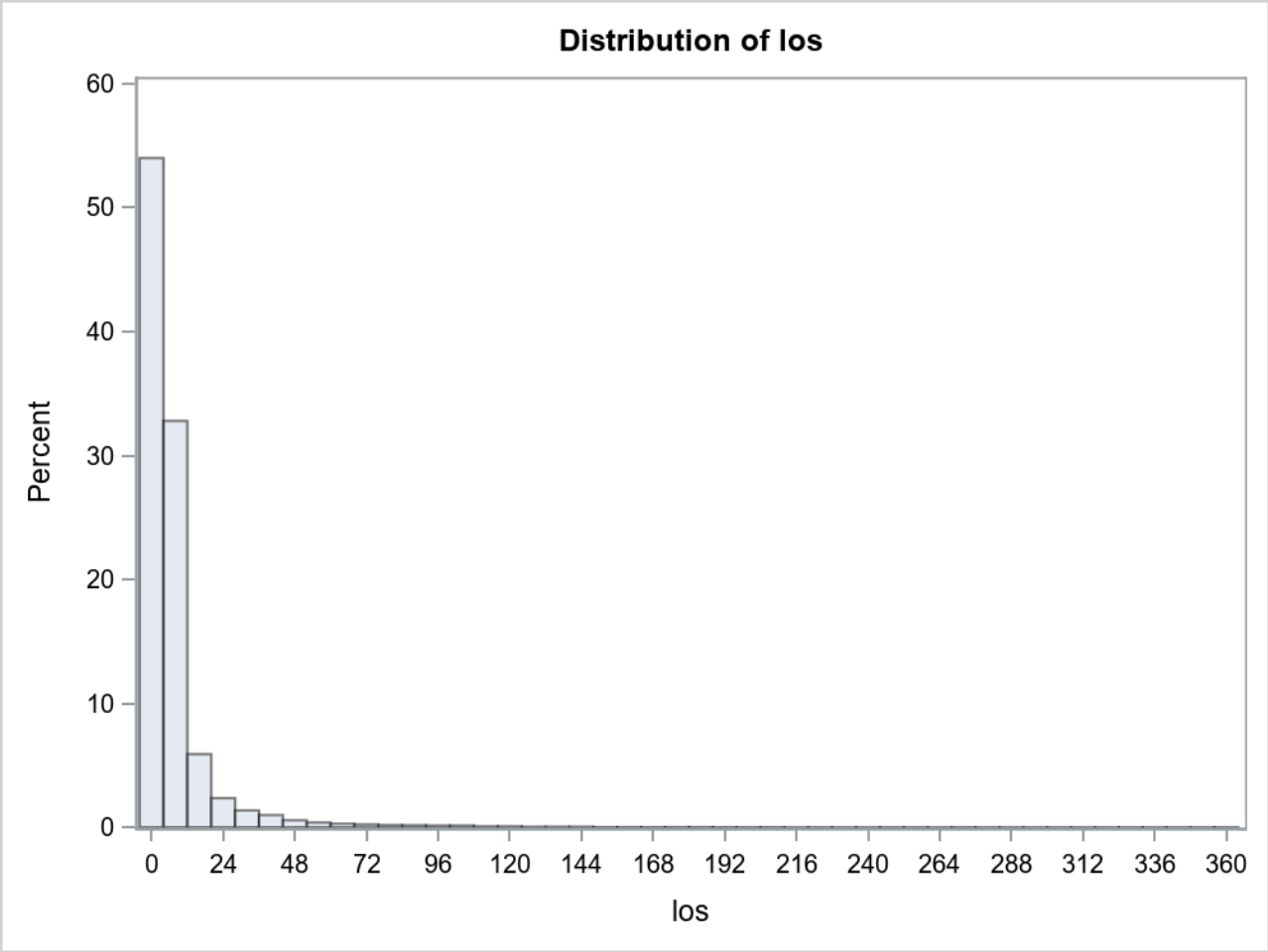


Table 73. Regression Model for Phase III LOS

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1.9299	0.0541	1.8239	2.0360	35.68	<.0001
Post*WCM_Cnty	Post	WCM	1.7479	0.0463	1.6571	1.8388	37.72	<.0001
Post*WCM_Cnty	Pre	Classic	1.9333	0.0520	1.8313	2.0353	37.14	<.0001
Post*WCM_Cnty	Pre	WCM	1.9429	0.0447	1.8554	2.0305	43.51	<.0001
cwda	1		0.0677	0.0277	0.0133	0.1221	2.44	0.0146
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic4	Black		0.1514	0.0751	0.0041	0.2986	2.02	0.0439
Ethnic4	Latinx		0.0261	0.0488	-0.0697	0.1218	0.53	0.5935
Ethnic4	Other/ Unknown		0.1938	0.0516	0.0927	0.2950	3.76	0.0002
Ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0451	0.0322	-0.1082	0.0181	-1.40	0.1623
Lang3	Other/ Unknown		-0.1826	0.0763	-0.3321	-0.0331	-2.39	0.0167
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.

Mental Health Visits per 1000 MM

Figure 41. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for Mental Health claims in HPSM: In the pre-WCM period, the slopes of the HPSM group and Classic CCS comparison group are statistically different ($p<0.0001$) and thus the parallel slopes assumption of the DiD model is not satisfied (Table 74). As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. There was no statistically significant difference in trend of mental health visits post implementation between the HPSM WCM and Classic CCS comparison group (Figure 41).

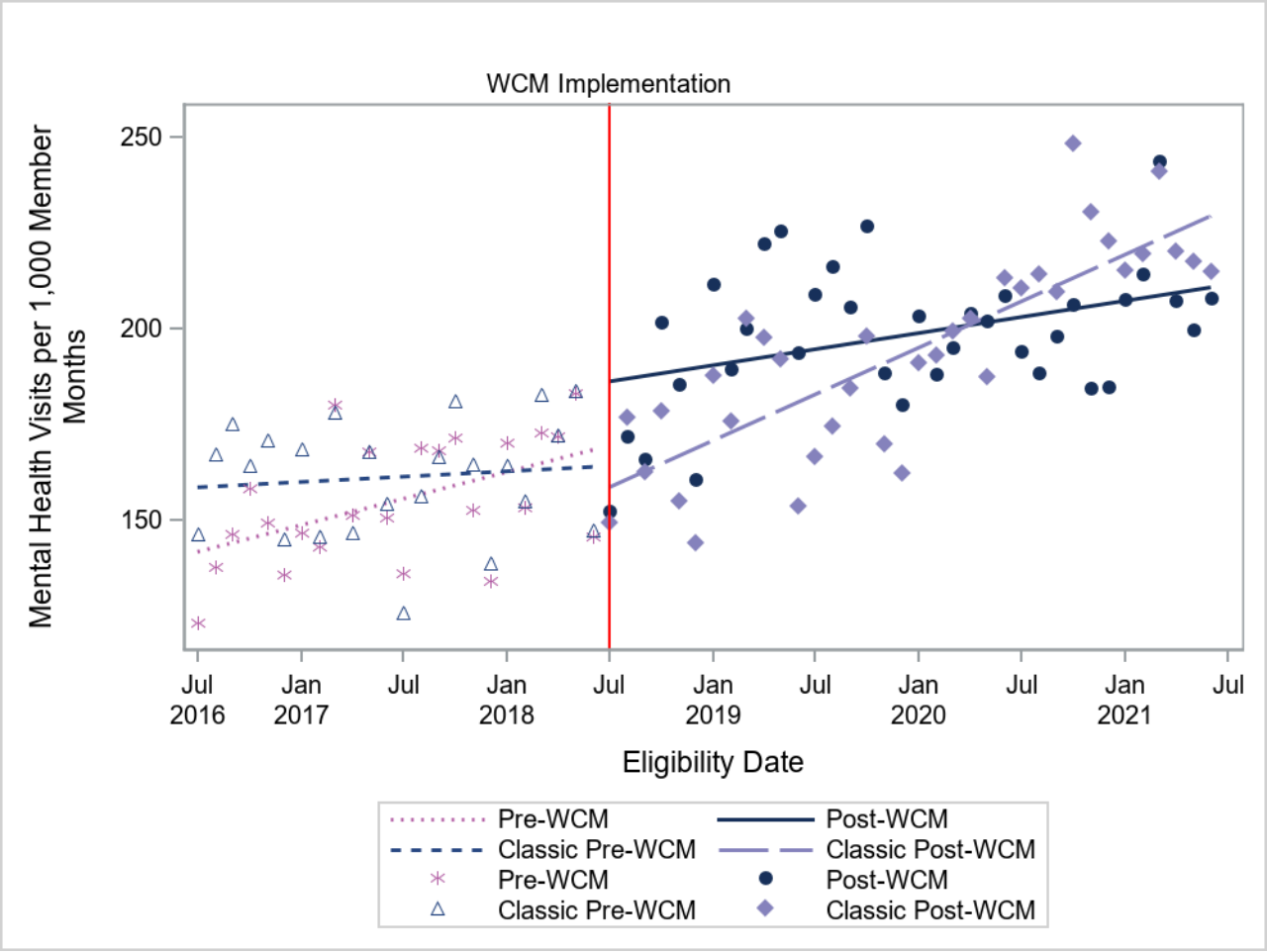
Table 74. Slopes Test for HPSM WCM Mental Health Claims

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.5179	1.2888	1.7876	0.4173	0.0835	0.05	0.2537	0.5809	25.00	<.0001
Post-period slopes test	0.9894	0.9503	1.0301	-0.0107	0.0206	0.05	-0.0510	0.0297	0.27	0.6044

Table 75. Regression Model for HPSM WCM Mental Health Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-0.9557	0.3235	-1.5897	-0.3217	-2.95	0.0031
Post*WCM_Cnty	Post	1	-0.7539	0.9410	-2.5982	1.0904	-0.80	0.4230
Post*WCM_Cnty	Pre	0	-0.6670	0.1589	-0.9784	-0.3555	-4.20	<.0001
Post*WCM_Cnty	Pre	1	-10.6837	1.9947	-14.5933	-6.7740	-5.36	<.0001
Time*Post*WCM_Cnty	Post	0	0.0062	0.0071	-0.0078	0.0202	0.87	0.3861
Time*Post*WCM_Cnty	Post	1	-0.0045	0.0187	-0.0412	0.0322	-0.24	0.8115
Time*Post*WCM_Cnty	Pre	0	-0.0014	0.0093	-0.0196	0.0168	-0.15	0.8830
Time*Post*WCM_Cnty	Pre	1	0.4159	0.0829	0.2535	0.5784	5.02	<.0001
CDPS_Log2			0.7699	0.0231	0.7246	0.8151	33.33	<.0001

Figure 42. Trend Line for Phase I Mental Health Claims



Trend statement for Mental Health claims in Phase I: In the pre-WCM period, the slopes of the Phase I group and Classic CCS comparison group are statistically different (p=0.0409) and thus the parallel slopes assumption of the DiD model is not satisfied (Table 76). As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. There was no statistically significant difference in trend of mental health visits post implementation between the Phase I WCM and Classic CCS comparison group, showing convergence of lines over time.

Table 76. Slopes Test for Phase I Mental Health Claims

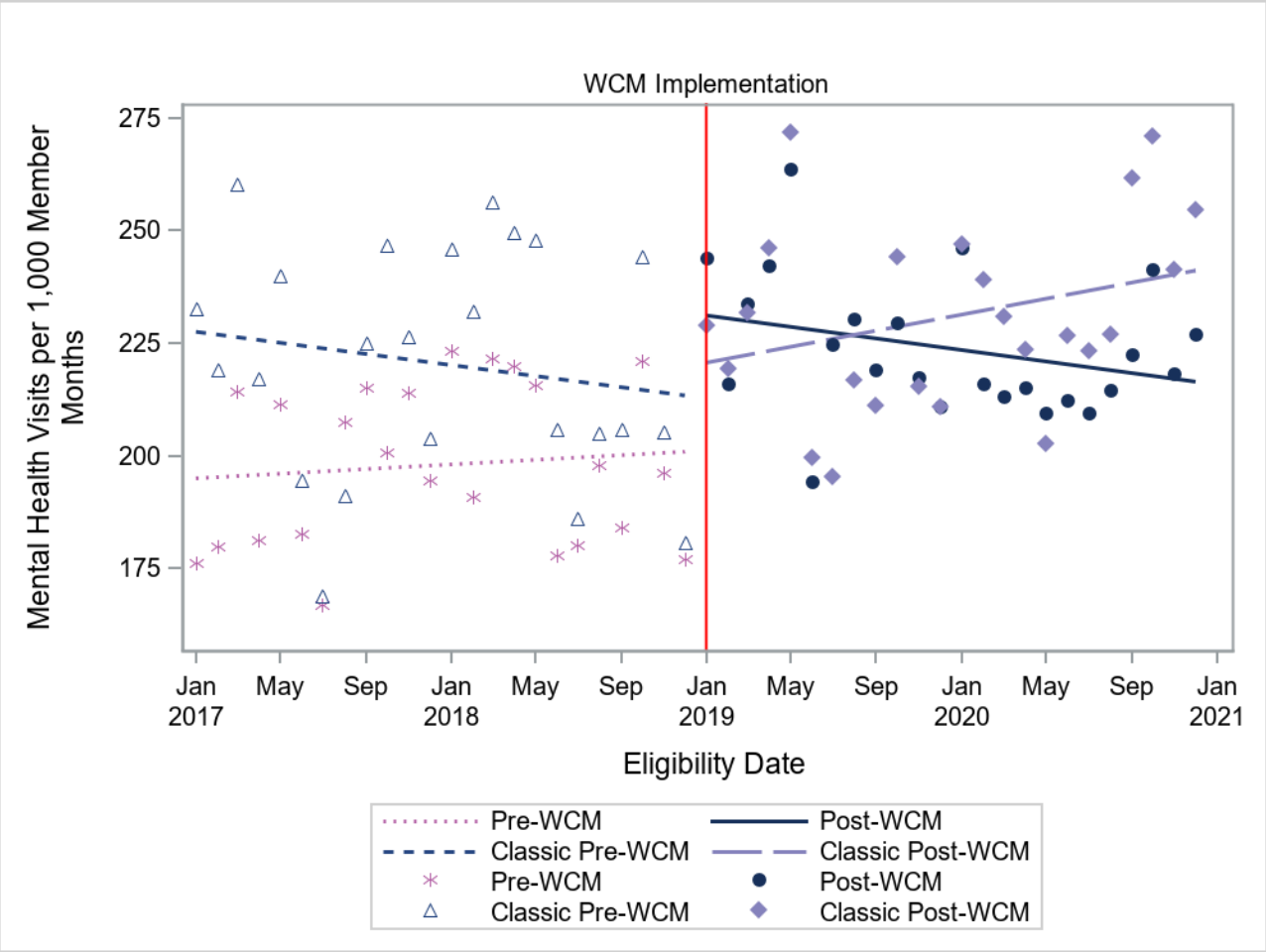
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0107	1.0004	1.0211	0.0107	0.0052	0.05	0.0004	0.0209	4.18	0.0409
Post-period slopes test	0.9935	0.9871	1.0000	-0.0065	0.0033	0.05	-0.0130	0.0000	3.78	0.0517

Table 77. Regression Model for Phase I Mental Health Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.2427	0.1154	-1.4690	-1.0165	-10.76	<.0001
Post*WCM_Cnty	Post	1	-1.0481	0.1096	-1.2629	-0.8333	-9.56	<.0001
Post*WCM_Cnty	Pre	0	-0.9629	0.0840	-1.1275	-0.7983	-11.47	<.0001
Post*WCM_Cnty	Pre	1	-1.2470	0.0815	-1.4066	-1.0873	-15.31	<.0001
Time*Post*WCM_Cnty	Post	0	0.0098	0.0024	0.0051	0.0145	4.09	<.0001
Time*Post*WCM_Cnty	Post	1	0.0033	0.0023	-0.0011	0.0078	1.46	0.1442
Time*Post*WCM_Cnty	Pre	0	-0.0002	0.0039	-0.0078	0.0074	-0.05	0.9612
Time*Post*WCM_Cnty	Pre	1	0.0105	0.0035	0.0036	0.0174	2.98	0.0029
Season	Fall		0.0388	0.0122	0.0150	0.0626	3.19	0.0014
Season	Spring		0.0961	0.0116	0.0734	0.1188	8.30	<.0001
Season	Winter		-0.0309	0.0132	-0.0567	-0.0050	-2.34	0.0194
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.7007	0.0078	0.6854	0.7160	89.76	<.0001
cwda	1		0.2404	0.0465	0.1493	0.3315	5.17	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0858	0.0954	-0.2728	0.1012	-0.90	0.3685

ethnic4	Latinx		-0.1897	0.0408	-0.2696	-0.1098	-4.65	<.0001
ethnic4	Other/ Unknown		-0.0587	0.0435	-0.1439	0.0265	-1.35	0.1773
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.2766	0.0441	-0.3631	-0.1901	-6.27	<.0001
Lang3	Other/ Unknown		-0.3863	0.1278	-0.6367	-0.1359	-3.02	0.0025
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	2-6		-0.5423	0.0522	-0.6446	-0.4399	-10.39	<.0001
AgeCat	7-11		-0.1218	0.0385	-0.1973	-0.0463	-3.16	0.0016
AgeCat	12-20		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		-0.0603	0.0444	-0.1472	0.0267	-1.36	0.1743
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Figure 43. Trend Line for Phase II Mental Health Claims



Trend statement for Mental Health claims in Phase II: The slopes in the pre-period are not statistically significant (p=0.3608), and the parallel assumptions criteria for the DiD model has been met. The post-period slopes between Phase II and Classic CCS comparison group are not significantly different (p=0.6628). Based on the graph, Phase II mental health visit claims appear to be decreasing while Classic CCS claims appear to be increasing over time (Figure 43).

Table 78. Slopes Test for Phase II Mental Health Claims

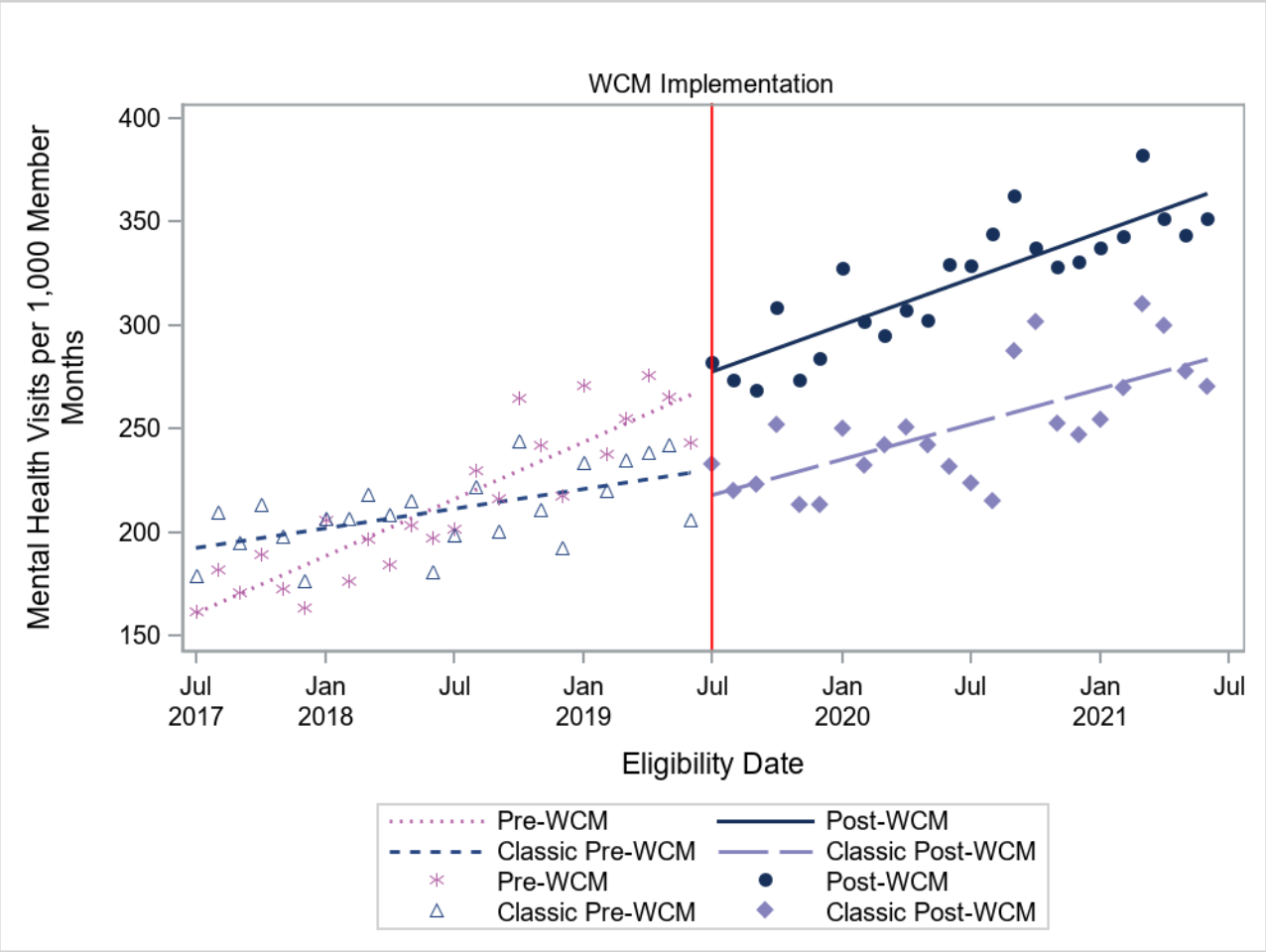
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0046	0.9947	1.0147	0.0046	0.0051	0.05	-0.0053	0.0146	0.83	0.3608
Post-period slopes test	0.9977	0.9872	1.0082	-0.0023	0.0054	0.05	-0.0129	0.0082	0.19	0.6628

Table 79. Regression Model for Phase II Mental Health Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-0.9582	0.1499	-1.2521	-0.6643	-6.39	<.0001
Post*WCM_Cnty	Post	1	-0.9402	0.1413	-1.2173	-0.6632	-6.65	<.0001
Post*WCM_Cnty	Pre	0	-0.8125	0.0772	-0.9637	-0.6612	-10.53	<.0001
Post*WCM_Cnty	Pre	1	-1.0209	0.0814	-1.1804	-0.8614	-12.54	<.0001
Time*Post*WCM_Cnty	Post	0	0.0020	0.0039	-0.0057	0.0097	0.50	0.6145
Time*Post*WCM_Cnty	Post	1	-0.0004	0.0037	-0.0075	0.0068	-0.10	0.9222
Time*Post*WCM_Cnty	Pre	0	-0.0119	0.0037	-0.0192	-0.0046	-3.21	0.0013
Time*Post*WCM_Cnty	Pre	1	-0.0073	0.0035	-0.0142	-0.0003	-2.05	0.0400
Season	Fall		0.0396	0.0138	0.0125	0.0666	2.87	0.0041
Season	Spring		0.1226	0.0138	0.0955	0.1497	8.88	<.0001
Season	Winter		0.0142	0.0150	-0.0151	0.0435	0.95	0.3430
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.6444	0.0091	0.6266	0.6622	70.89	<.0001
cwda	1		0.1965	0.0505	0.0974	0.2955	3.89	0.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.1013	0.0755	-0.0467	0.2493	1.34	0.1799

ethnic4	Latinx		-0.1578	0.0514	-0.2585	-0.0571	-3.07	0.0021
ethnic4	Other/ Unknown		-0.0911	0.0406	-0.1706	-0.0117	-2.25	0.0246
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.2547	0.0575	-0.3675	-0.1419	-4.43	<.0001
Lang3	Other/ Unknown		-0.3414	0.1077	-0.5524	-0.1303	-3.17	0.0015
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	2-6		-0.5721	0.0557	-0.6814	-0.4629	-10.26	<.0001
AgeCat	7-11		-0.0951	0.0454	-0.1841	-0.0061	-2.09	0.0362
AgeCat	12-20		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		-0.0207	0.0503	-0.1193	0.0778	-0.41	0.6800
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Figure 44. Trend Line for Phase III Mental Health Claims



Trend statement for Mental Health claims in Phase III: The slopes in the pre-period are not statistically significant (p=0.1095), and the parallel assumptions criteria for the DiD model has been met. The post-period slopes between Phase III and Classic CCS comparison group are not significantly different (p=0.3342). Based on the graph, both Phase III and Classic CCS claims appear to be increasing over time (Figure 44).

Table 80. Slopes Test for Phase III Mental Health Claims

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0066	0.9985	1.0148	0.0066	0.0041	0.05	-0.0015	0.0147	2.56	0.1095
Post-period slopes test	1.0039	0.9960	1.0118	0.0039	0.0040	0.05	-0.0040	0.0117	0.93	0.3342

Table 81. Regression Model for Phase III Mental Health Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.3211	0.1237	-1.5635	-1.0788	-10.68	<.0001
Post*WCM_Cnty	Post	1	-1.3625	0.1040	-1.5663	-1.1588	-13.11	<.0001
Post*WCM_Cnty	Pre	0	-1.3165	0.0808	-1.4749	-1.1580	-16.28	<.0001
Post*WCM_Cnty	Pre	1	-1.4593	0.0685	-1.5935	-1.3251	-21.31	<.0001
Time*Post*WCM_Cnty	Post	0	0.0078	0.0030	0.0018	0.0137	2.57	0.0102
Time*Post*WCM_Cnty	Post	1	0.0116	0.0025	0.0067	0.0166	4.58	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0042	0.0031	-0.0020	0.0103	1.33	0.1839
Time*Post*WCM_Cnty	Pre	1	0.0108	0.0026	0.0056	0.0159	4.11	<.0001
Season	Fall		0.0092	0.0097	-0.0098	0.0282	0.95	0.3439
Season	Spring		0.0511	0.0095	0.0325	0.0696	5.39	<.0001
Season	Winter		-0.0332	0.0106	-0.0541	-0.0124	-3.12	0.0018
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.6641	0.0077	0.6490	0.6793	86.02	<.0001
cwda	1		0.4276	0.0416	0.3461	0.5092	10.28	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.1679	0.0822	0.0068	0.3290	2.04	0.0411

ethnic4	Latinx		-0.0699	0.0488	-0.1657	0.0258	-1.43	0.1522
ethnic4	Other/ Unknown		-0.0787	0.0465	-0.1699	0.0125	-1.69	0.0909
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0767	0.0372	-0.1497	-0.0037	-2.06	0.0394
Lang3	Other/ Unknown		-0.2301	0.0686	-0.3646	-0.0956	-3.35	0.0008
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	2-6		-0.3416	0.0456	-0.4310	-0.2521	-7.48	<.0001
AgeCat	7-11		-0.0680	0.0329	-0.1324	-0.0035	-2.07	0.0388
AgeCat	12-20		0.0000	0.0000	0.0000	0.0000	.	.

Pharmacy claims per 1000 MM

Figure 45. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for Pharmacy claims in HPSM: The slopes in the pre-period are not statistically significant, and the parallel assumptions criteria for the DiD model has been met. There is no statistically significant difference between HPSM and Classic CCS comparison group post-period slopes, with increase in claims for both groups (Figure 45).

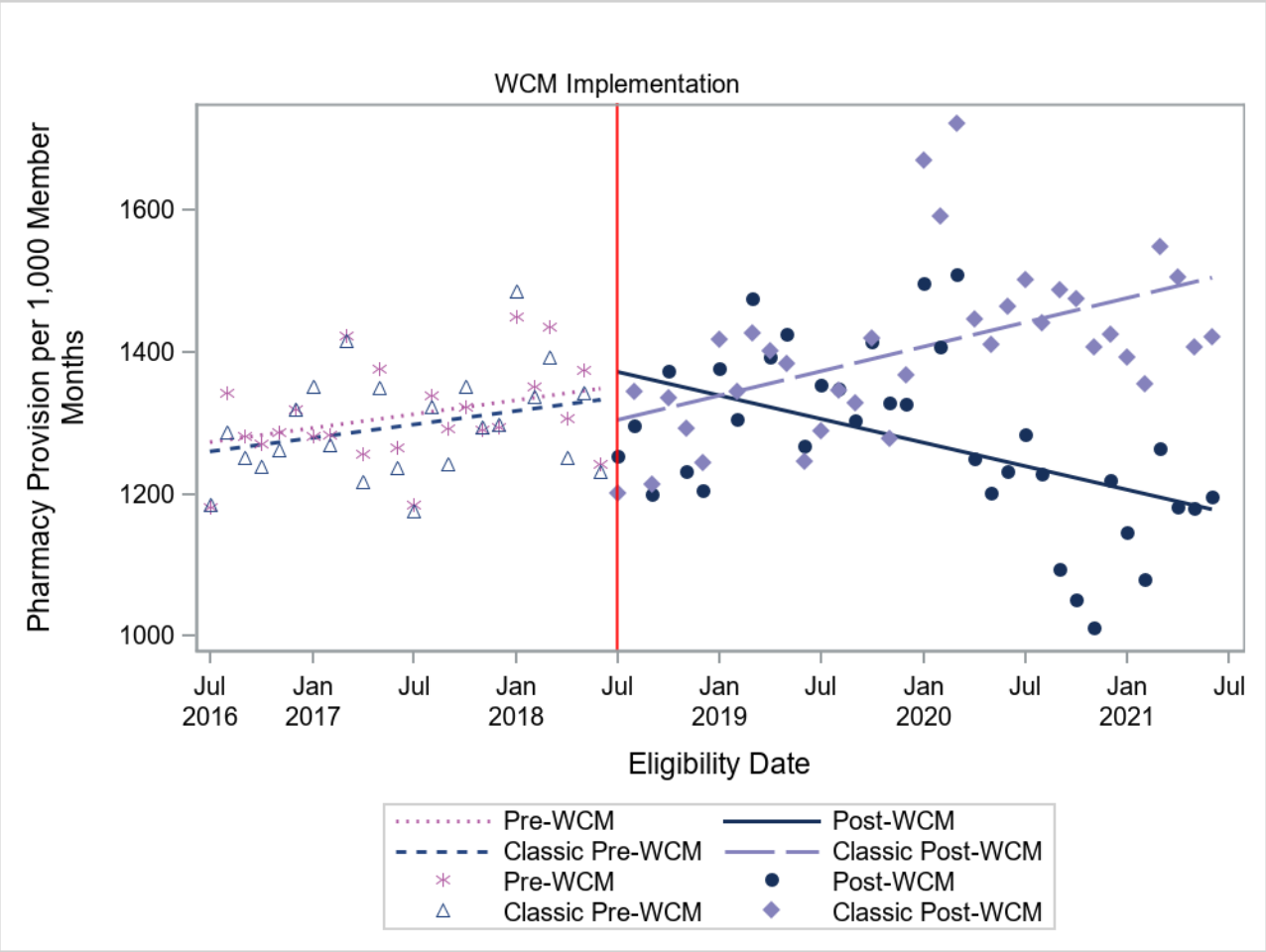
Table 82. Slopes Test for HPSM WCM Pharmacy Claims

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0550	0.9723	1.1448	0.0536	0.0417	0.05	-0.0281	0.1353	1.65	0.1986
Post-period slopes test	1.0059	0.9969	1.0150	0.0059	0.0046	0.05	-0.0031	0.0149	1.66	0.1971

Table 83. Regression Model for HPSM WCM Pharmacy Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-0.2778	0.0807	-0.4359	-0.1197	-3.44	0.0006
Post*WCM_Cnty	Post	1	-0.4215	0.2180	-0.8488	0.0058	-1.93	0.0532
Post*WCM_Cnty	Pre	0	0.0297	0.0513	-0.0709	0.1303	0.58	0.5630
Post*WCM_Cnty	Pre	1	-2.0359	0.5461	-3.1064	-0.9655	-3.73	0.0002
Time*Post*WCM_Cnty	Post	0	0.0092	0.0016	0.0060	0.0123	5.73	<.0001
Time*Post*WCM_Cnty	Post	1	0.0151	0.0043	0.0066	0.0236	3.50	0.0005
Time*Post*WCM_Cnty	Pre	0	0.0018	0.0022	-0.0025	0.0060	0.82	0.4138
Time*Post*WCM_Cnty	Pre	1	0.0553	0.0416	-0.0263	0.1369	1.33	0.1837
CDPS_Log2			0.2156	0.0099	0.1963	0.2350	21.86	<.0001
cwda	1		0.2548	0.0585	0.1400	0.3695	4.35	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 46. Trend Line for Phase I Pharmacy Claims



Trend statement for Pharmacy claims in Phase I: The slopes in the pre-period are not statistically significant (p=0.5823), and the parallel assumptions criteria for the DiD model has been met. There is statistically significant difference between Phase I and Classic CCS comparison group post-period slopes (p<0.0001), with decline in claims for Phase I and increase in claims for Classic CCS group over time (Figure 46).

Table 84. Slopes Test for Phase I Pharmacy Claims

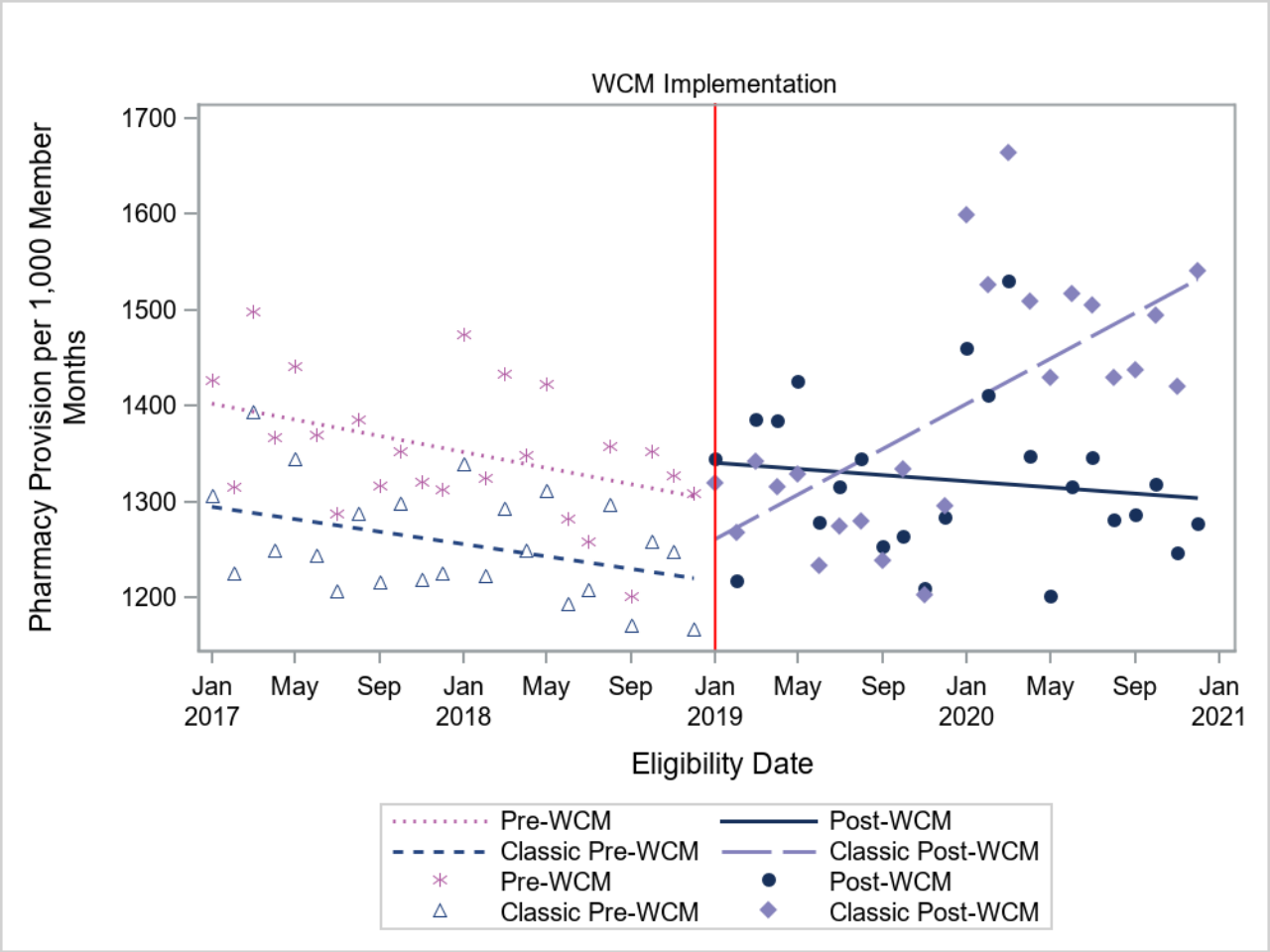
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0006	0.9984	1.0028	0.0006	0.0011	0.05	-0.0016	0.0028	0.30	0.5823
Post-period slopes test	0.9938	0.9922	0.9954	-0.0062	0.0008	0.05	-0.0078	-0.0046	57.30	<.0001

Table 85. Regression Model for Phase I Pharmacy Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.0038	0.0356	-1.0735	-0.9341	-28.22	<.0001
Post*WCM_Cnty	Post	1	-0.7465	0.0334	-0.8120	-0.6810	-22.34	<.0001
Post*WCM_Cnty	Pre	0	-0.9726	0.0276	-1.0267	-0.9186	-35.29	<.0001
Post*WCM_Cnty	Pre	1	-0.9357	0.0256	-0.9858	-0.8855	-36.57	<.0001
Time*Post*WCM_Cnty	Post	0	0.0025	0.0006	0.0013	0.0037	4.04	<.0001
Time*Post*WCM_Cnty	Post	1	-0.0038	0.0006	-0.0048	-0.0027	-6.75	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0014	0.0008	-0.0003	0.0030	1.66	0.0974
Time*Post*WCM_Cnty	Pre	1	0.0020	0.0008	0.0005	0.0035	2.63	0.0085
Season	Fall		-0.0338	0.0043	-0.0423	-0.0253	-7.80	<.0001
Season	Spring		0.0655	0.0044	0.0569	0.0741	14.96	<.0001
Season	Winter		0.0079	0.0048	-0.0015	0.0173	1.65	0.0980
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.2965	0.0042	0.2882	0.3047	70.58	<.0001
cwda	1		0.2395	0.0166	0.2069	0.2721	14.40	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.0046	0.0436	-0.0809	0.0900	0.10	0.9169

ethnic4	Latinx		-0.0783	0.0198	-0.1172	-0.0394	-3.95	<.0001
ethnic4	Other/ Unknown		-0.0243	0.0226	-0.0685	0.0199	-1.08	0.2816
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0649	0.0168	-0.0978	-0.0319	-3.86	0.0001
Lang3	Other/ Unknown		-0.1149	0.0508	-0.2145	-0.0153	-2.26	0.0237
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.2039	0.0160	0.1724	0.2353	12.70	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.1430	0.0174	0.1088	0.1772	8.21	<.0001
AgeCat	2-6		1.0576	0.0253	1.0080	1.1072	41.76	<.0001
AgeCat	7-11		1.2781	0.0266	1.2260	1.3303	48.02	<.0001
AgeCat	12-20		1.4230	0.0232	1.3775	1.4685	61.34	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 47. Trend Line for Phase II Pharmacy Claims



Trend statement for Pharmacy claims in Phase II: The slopes in the pre-period are not statistically significant (p=0.8570), and the parallel assumptions criteria for the DiD model has been met. There is statistically significant difference between Phase II and Classic CCS comparison group post-period slopes (p=0.0122), with stable decline in claims for Phase II and increase in claims for Classic CCS group over time (Figure 47).

Table 86. Slopes Test for Phase II Pharmacy Claims

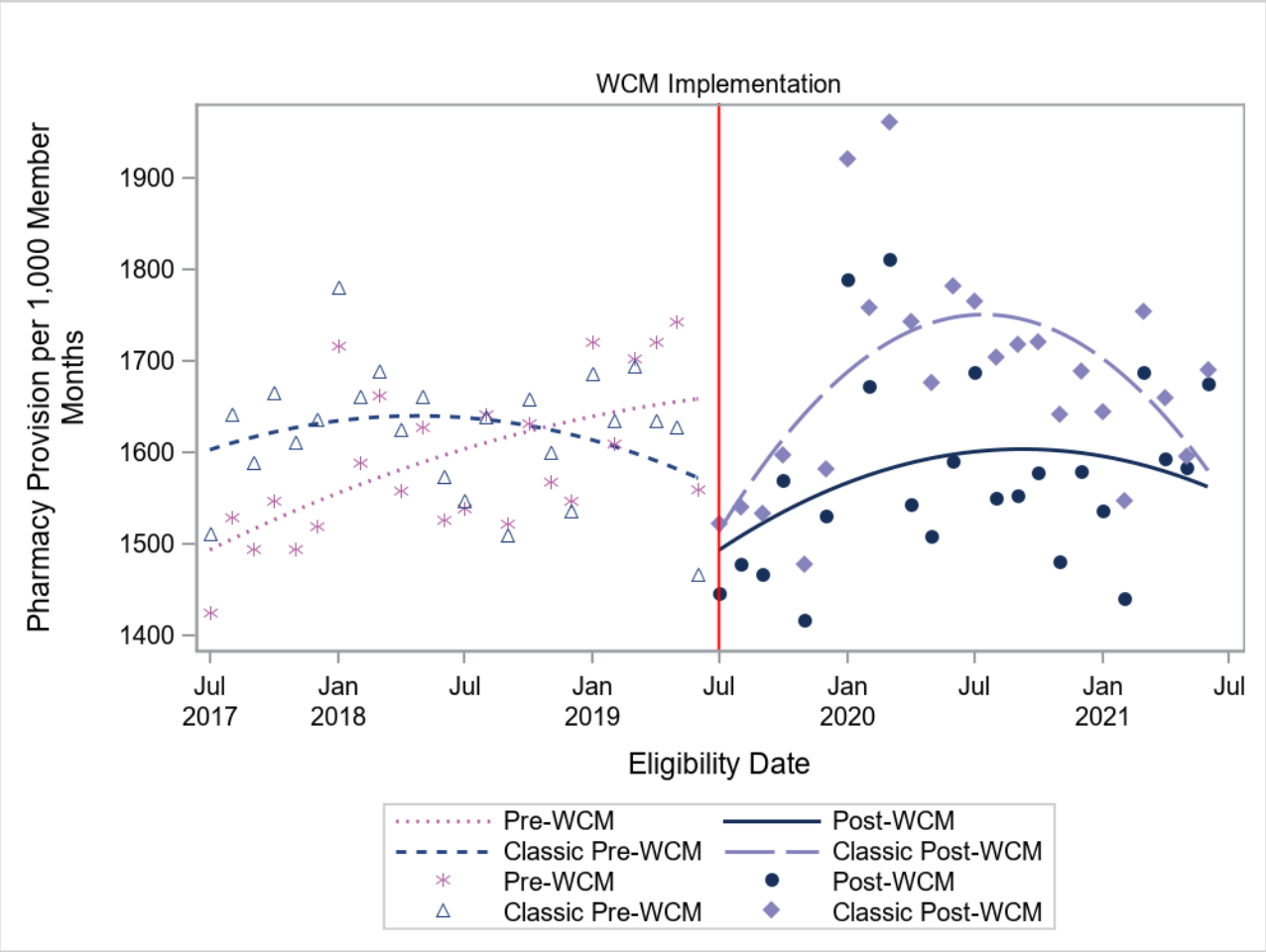
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0002	0.9977	1.0028	0.0002	0.0013	0.05	-0.0023	0.0028	0.03	0.8570
Post-period slopes test	0.9965	0.9938	0.9992	-0.0035	0.0014	0.05	-0.0062	-0.0008	6.29	0.0122

Table 87. Regression Model for Phase II Pharmacy Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.0860	0.0460	-1.1762	-0.9958	-23.59	<.0001
Post*WCM_Cnty	Post	1	-1.0511	0.0428	-1.1350	-0.9672	-24.56	<.0001
Post*WCM_Cnty	Pre	0	-0.8879	0.0314	-0.9494	-0.8264	-28.31	<.0001
Post*WCM_Cnty	Pre	1	-0.8978	0.0305	-0.9576	-0.8380	-29.43	<.0001
Time*Post*WCM_Cnty	Post	0	0.0052	0.0011	0.0031	0.0072	4.92	<.0001
Time*Post*WCM_Cnty	Post	1	0.0017	0.0009	-0.0001	0.0035	1.89	0.0583
Time*Post*WCM_Cnty	Pre	0	-0.0056	0.0010	-0.0074	-0.0037	-5.79	<.0001
Time*Post*WCM_Cnty	Pre	1	-0.0053	0.0009	-0.0071	-0.0036	-6.04	<.0001
Season	Fall		-0.0369	0.0051	-0.0469	-0.0268	-7.18	<.0001
Season	Spring		0.0638	0.0052	0.0537	0.0740	12.34	<.0001
Season	Winter		-0.0051	0.0056	-0.0161	0.0060	-0.90	0.3695
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.3135	0.0045	0.3047	0.3224	69.12	<.0001
cwda	1		0.1570	0.0184	0.1210	0.1931	8.54	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.0311	0.0320	-0.0316	0.0937	0.97	0.3315

ethnic4	Latinx		-0.0782	0.0255	-0.1282	-0.0281	-3.06	0.0022
ethnic4	Other/ Unknown		-0.0758	0.0204	-0.1159	-0.0358	-3.71	0.0002
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.1006	0.0255	-0.1505	-0.0507	-3.95	<.0001
Lang3	Other/ Unknown		0.0043	0.0461	-0.0860	0.0946	0.09	0.9262
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1597	0.0184	0.1237	0.1958	8.68	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.1093	0.0216	0.0669	0.1517	5.05	<.0001
AgeCat	2-6		1.0998	0.0295	1.0420	1.1576	37.32	<.0001
AgeCat	7-11		1.3853	0.0296	1.3272	1.4433	46.77	<.0001
AgeCat	12-20		1.5023	0.0266	1.4502	1.5545	56.48	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 48. Trend Line for Phase III Pharmacy Claims



Trend statement for Pharmacy claims in Phase III: The slopes in the pre-period are not statistically significant (p=0.2259), and the parallel assumptions criteria for the DiD model has been met. The post-period slopes between Phase III and Classic CCS comparison group are not significantly different (p=0.8628), with an initial increase followed by decrease in claims (Figure 48).

Table 88. Slopes Test for Phase III Pharmacy Claims

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0037	0.9977	1.0098	0.0037	0.0031	0.05	-0.0023	0.0097	1.47	0.2259
Post-period slopes test	0.9984	0.9803	1.0168	-0.0016	0.0093	0.05	-0.0198	0.0166	0.03	0.8628

Table 89. Regression Model for Phase III Pharmacy Claims

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-0.9894	0.1234	-1.2313	-0.7475	-8.02	<.0001
Post*WCM_Cnty	Post	1	-1.0223	0.1224	-1.2622	-0.7824	-8.35	<.0001
Post*WCM_Cnty	Pre	0	-0.5371	0.0342	-0.6041	-0.4702	-15.72	<.0001
Post*WCM_Cnty	Pre	1	-0.6088	0.0335	-0.6744	-0.5432	-18.20	<.0001
Time*Post*WCM_Cnty	Post	0	0.0267	0.0067	0.0135	0.0400	3.96	<.0001
Time*Post*WCM_Cnty	Post	1	0.0251	0.0067	0.0120	0.0382	3.76	0.0002
Time*Post*WCM_Cnty	Pre	0	0.0070	0.0022	0.0026	0.0113	3.12	0.0018
Time*Post*WCM_Cnty	Pre	1	0.0107	0.0022	0.0064	0.0149	4.89	<.0001
Time*Time*Post*WCM_C	Post	0	-0.0004	0.0001	-0.0005	-0.0002	-3.85	0.0001
Time*Time*Post*WCM_C	Post	1	-0.0003	0.0001	-0.0005	-0.0001	-3.25	0.0012
Time*Time*Post*WCM_C	Pre	0	-0.0003	0.0001	-0.0005	-0.0002	-4.01	<.0001
Time*Time*Post*WCM_C	Pre	1	-0.0003	0.0001	-0.0005	-0.0002	-3.92	<.0001
Season	Fall		-0.0359	0.0041	-0.0438	-0.0279	-8.86	<.0001
Season	Spring		0.0363	0.0040	0.0285	0.0442	9.08	<.0001
Season	Winter		-0.0060	0.0047	-0.0151	0.0032	-1.28	0.2018
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.

CDPS_Log2			0.3089	0.0036	0.3018	0.3160	85.49	<.0001
cwda	0		-0.2873	0.0152	-0.3171	-0.2576	-18.93	<.0001
cwda	1		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.0099	0.0377	-0.0639	0.0837	0.26	0.7926
ethnic4	Latinx		-0.0747	0.0233	-0.1203	-0.0290	-3.20	0.0014
ethnic4	Other/ Unknown		-0.1063	0.0233	-0.1519	-0.0607	-4.57	<.0001
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.0015	0.0165	-0.0308	0.0338	0.09	0.9273
Lang3	Other/ Unknown		0.0790	0.0315	0.0173	0.1407	2.51	0.0121
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1868	0.0150	0.1574	0.2161	12.47	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.1242	0.0200	0.0850	0.1633	6.21	<.0001
AgeCat	2-6		0.9834	0.0256	0.9332	1.0336	38.41	<.0001
AgeCat	7-11		1.2121	0.0272	1.1589	1.2653	44.62	<.0001
AgeCat	12-20		1.3810	0.0244	1.3331	1.4289	56.50	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Primary care Visits per 1000 MM

Figure 49. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for Primary Care visits in HPSM: The slopes in the pre-period are not statistically significant (p=0.2242), and the parallel assumptions criteria for the DiD model has been met. The post-period slopes between HPSM and Classic CCS comparison group are not significantly different (p=0.4367). Based on the graph, HPSM primary care visit claims appear to be decreasing over time while Classic CCS claims appear to be flat (Figure 49).

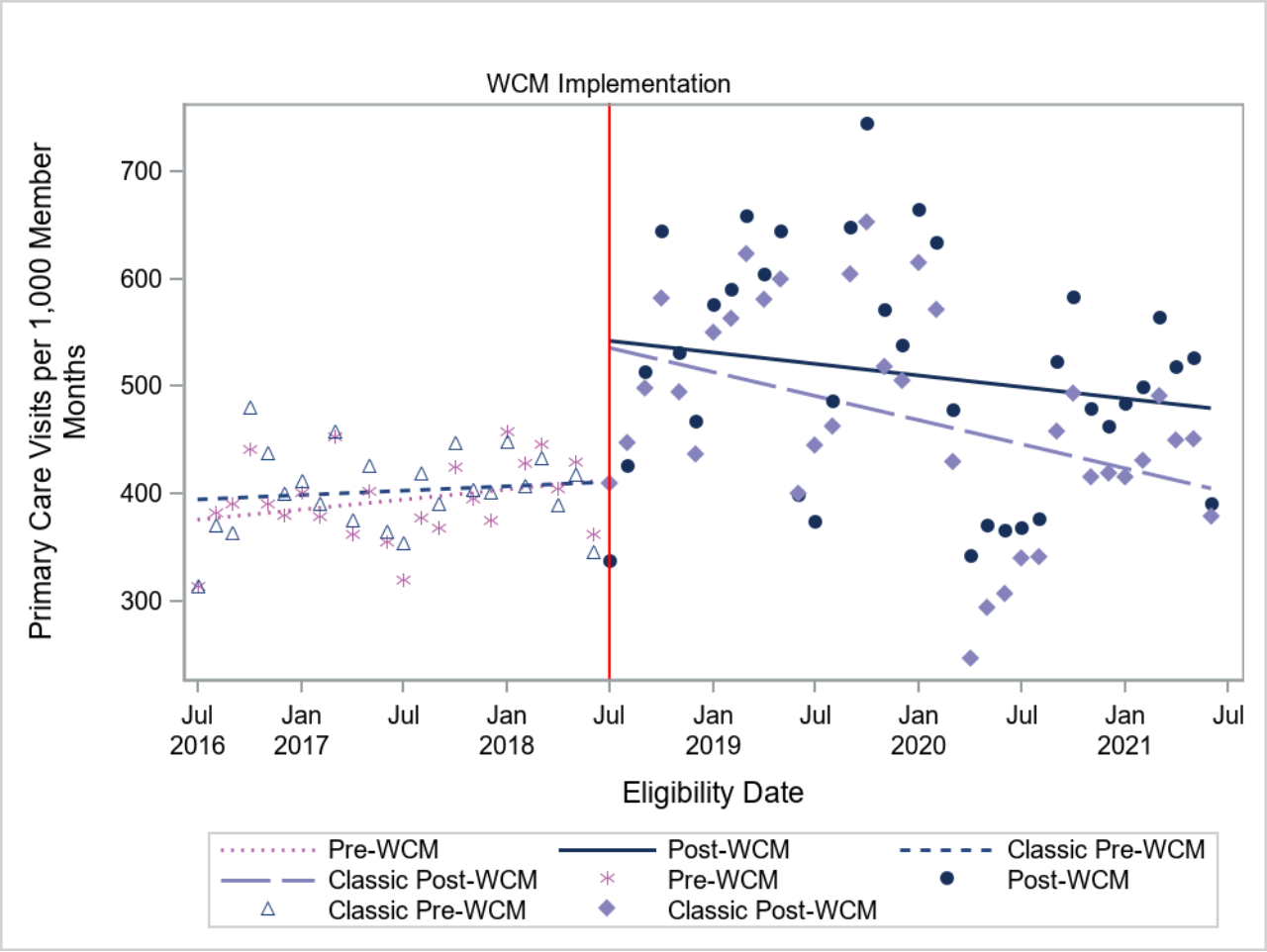
Table 90. Slopes Test for HPSM WCM Primary Care Visits

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.1640	0.9111	1.4871	0.1519	0.1250	0.05	-0.0931	0.3968	1.48	0.2242
Post-period slopes test	0.9715	0.9031	1.0450	-0.0290	0.0372	0.05	-0.1019	0.0440	0.60	0.4367

Table 91. Regression Model for HPSM WCM Primary Care Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-0.8250	0.3023	-1.4175	-0.2325	-2.73	0.0064
Post*WCM_Cnty	Post	1	0.2746	0.7327	-1.1615	1.7107	0.37	0.7079
Post*WCM_Cnty	Pre	0	-1.1455	0.0679	-1.2786	-1.0125	-16.87	<.0001
Post*WCM_Cnty	Pre	1	-2.0757	0.6850	-3.4182	-0.7332	-3.03	0.0024
Time*Post*WCM_Cnty	Post	0	0.0038	0.0147	-0.0251	0.0327	0.26	0.7978
Time*Post*WCM_Cnty	Post	1	-0.0252	0.0332	-0.0903	0.0399	-0.76	0.4487
Time*Post*WCM_Cnty	Pre	0	-0.0004	0.0139	-0.0276	0.0268	-0.03	0.9768
Time*Post*WCM_Cnty	Pre	1	0.1515	0.1242	-0.0919	0.3948	1.22	0.2225
Time*Time*Post*WCM_C	Post	0	-0.0001	0.0002	-0.0005	0.0002	-0.67	0.5045
Time*Time*Post*WCM_C	Post	1	0.0001	0.0004	-0.0006	0.0008	0.30	0.7611
Time*Time*Post*WCM_C	Pre	0	-0.0001	0.0005	-0.0012	0.0009	-0.26	0.7959
Time*Time*Post*WCM_C	Pre	1	-0.0060	0.0046	-0.0151	0.0031	-1.30	0.1938
CDPS_Log2			0.1812	0.0120	0.1577	0.2047	15.11	<.0001
cwda	1		0.6285	0.0496	0.5312	0.7258	12.66	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 50. Trend Line for Phase I Primary Care Visits



Trend statement for Primary Care visits in Phase I: In the pre-WCM period, the slopes of the Phase I group and Classic CCS comparison group are statistically different (p=0.0152) and thus the parallel slopes assumption of the DiD model is not satisfied (see Table 92). As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. The post-period slopes between Phase I and Classic CCS comparison group are significantly different (p<0.001). Based on the graph, both Phase I and Classic CCS claims appear to be decreasing over time (Figure 50).

Table 92. Slopes Test for Phase I Primary Care Visits

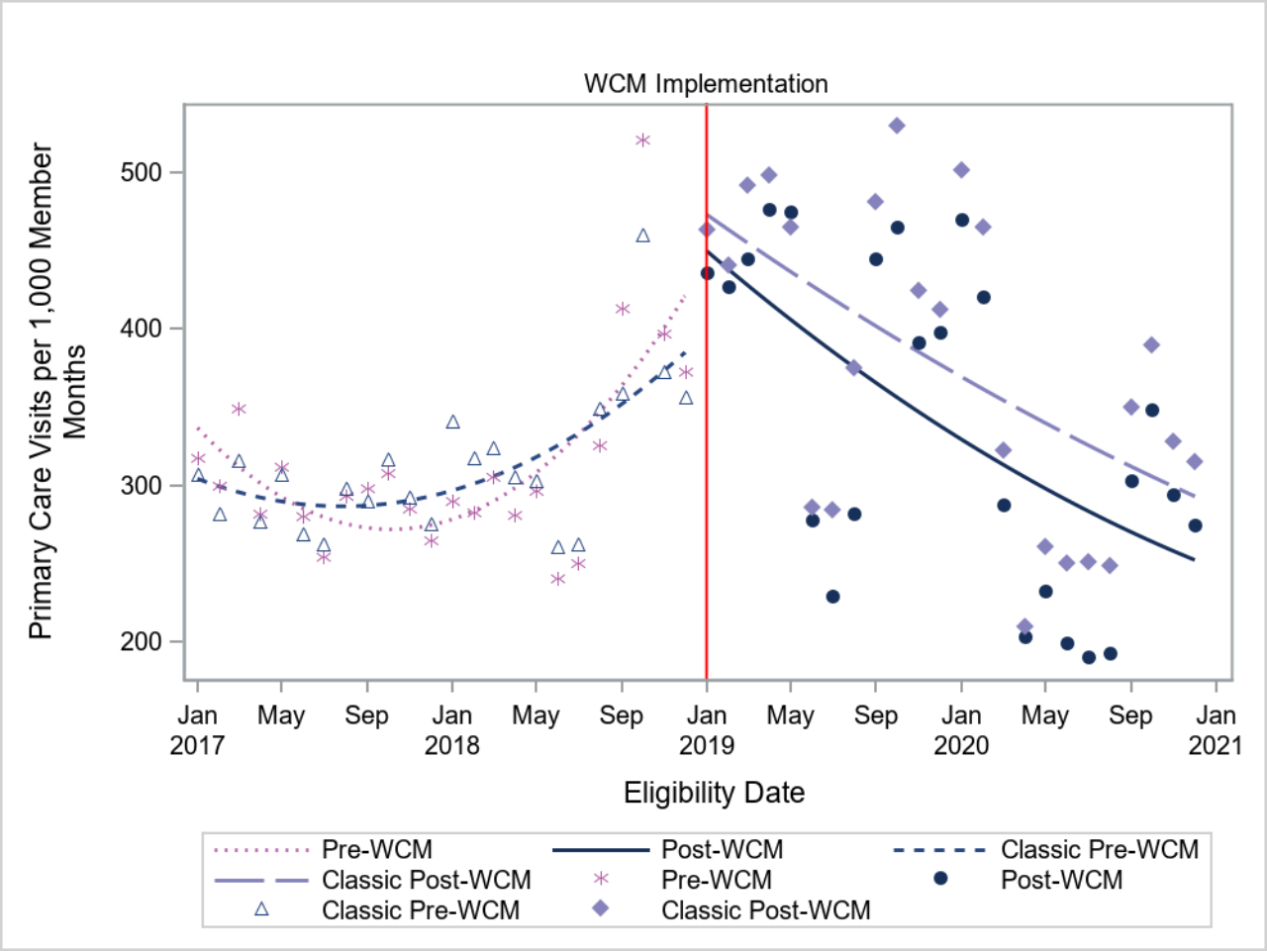
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0037	1.0007	1.0067	0.0037	0.0015	0.05	0.0007	0.0067	5.89	0.0152
Post-period slopes test	1.0048	1.0028	1.0067	0.0047	0.0010	0.05	0.0028	0.0066	23.86	<.0001

Table 93. Regression Model for Phase I Primary Care Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-0.8793	0.0413	-0.9603	-0.7983	-21.29	<.0001
Post*WCM_Cnty	Post	1	-1.0139	0.0328	-1.0782	-0.9495	-30.89	<.0001
Post*WCM_Cnty	Pre	0	-1.2722	0.0263	-1.3237	-1.2206	-48.38	<.0001
Post*WCM_Cnty	Pre	1	-1.3389	0.0257	-1.3892	-1.2886	-52.18	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0053	0.0008	-0.0068	-0.0038	-7.02	<.0001
Time*Post*WCM_Cnty	Post	1	-0.0006	0.0006	-0.0018	0.0006	-0.99	0.3214
Time*Post*WCM_Cnty	Pre	0	0.0012	0.0012	-0.0012	0.0035	0.98	0.3270
Time*Post*WCM_Cnty	Pre	1	0.0049	0.0010	0.0029	0.0068	4.90	<.0001
Season	Fall		0.2087	0.0075	0.1941	0.2234	27.99	<.0001
Season	Spring		0.1959	0.0071	0.1820	0.2099	27.54	<.0001
Season	Winter		0.1802	0.0075	0.1656	0.1949	24.08	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.1779	0.0038	0.1705	0.1853	47.08	<.0001
cwda	1		0.4866	0.0155	0.4562	0.5171	31.34	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0607	0.0770	-0.2117	0.0903	-0.79	0.4309

ethnic4	Latinx		0.0182	0.0213	-0.0236	0.0600	0.85	0.3935
ethnic4	Other/ Unknown		0.0514	0.0241	0.0041	0.0986	2.13	0.0332
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.1033	0.0141	0.0757	0.1309	7.34	<.0001
Lang3	Other/ Unknown		-0.0717	0.0574	-0.1843	0.0408	-1.25	0.2114
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1070	0.0143	0.0790	0.1349	7.50	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Figure 51. Trend Line for Phase II Primary Care Visits



Trend statement for Primary Care visits in Phase II: In the pre-WCM period, the slopes of the Phase I group and Classic CCS comparison group are statistically different (p=0.0036) and thus the parallel slopes assumption of the DiD model is not satisfied (Table 94). As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. The post-period slopes between Phase II and Classic CCS comparison group are not significantly different (p=0.2754).

Table 94. Slopes Test for Phase II Primary Care Visits

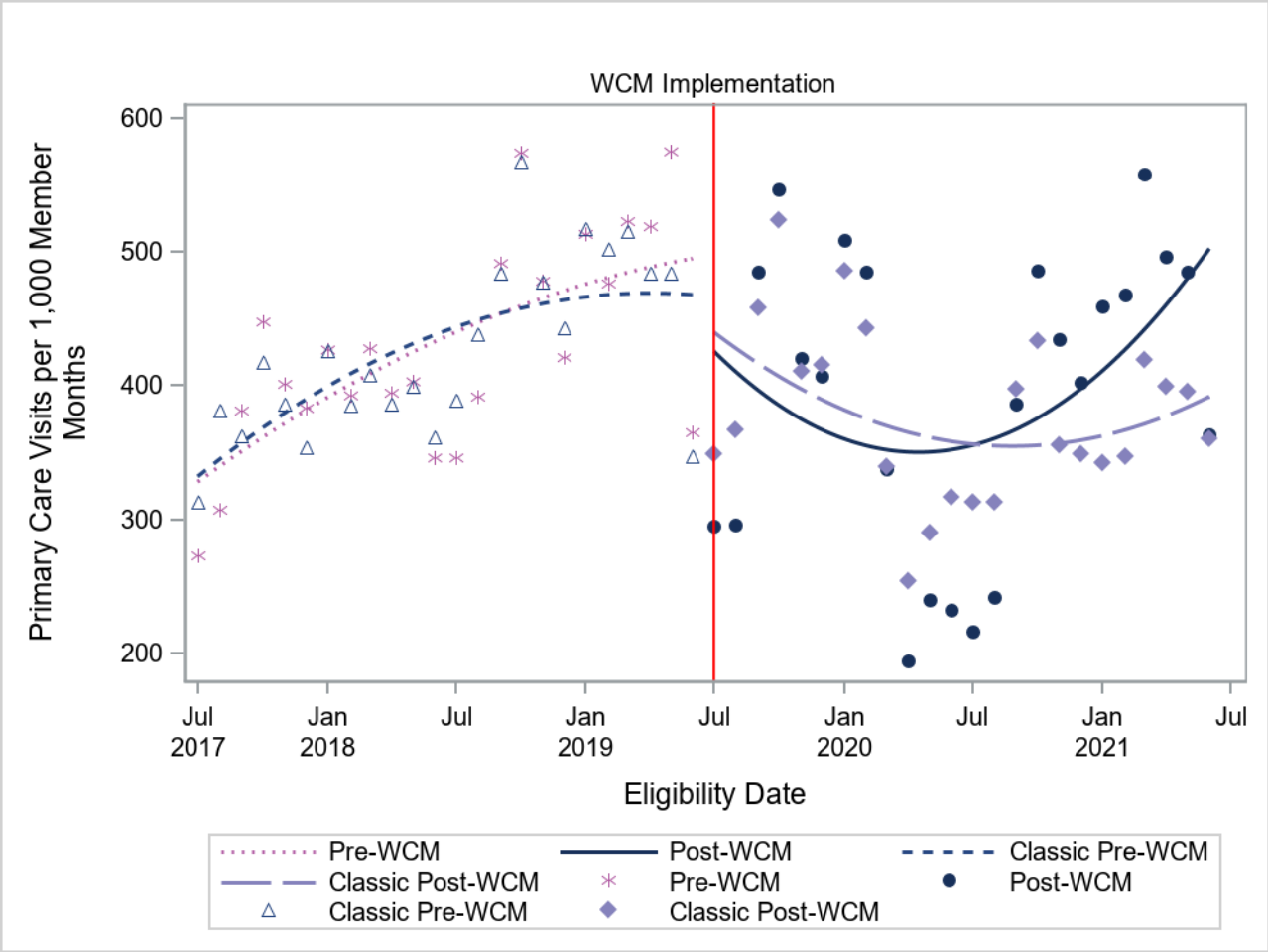
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.9808	0.9682	0.9937	-0.0193	0.0066	0.05	-0.0324	-0.0063	8.49	0.0036
Post-period slopes test	0.9789	0.9422	1.0171	-0.0213	0.0195	0.05	-0.0595	0.0170	1.19	0.2754

Table 95. Regression Model for Phase II Primary Care Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-0.4929	0.2409	-0.9651	-0.0208	-2.05	0.0407
Post*WCM_Cnty	Post	1	-0.1909	0.2594	-0.6994	0.3176	-0.74	0.4618
Post*WCM_Cnty	Pre	0	-1.3006	0.0378	-1.3746	-1.2265	-34.42	<.0001
Post*WCM_Cnty	Pre	1	-1.2600	0.0378	-1.3341	-1.1860	-33.35	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0147	0.0136	-0.0414	0.0120	-1.08	0.2805
Time*Post*WCM_Cnty	Post	1	-0.0360	0.0146	-0.0647	-0.0073	-2.46	0.0139
Time*Post*WCM_Cnty	Pre	0	-0.0088	0.0049	-0.0184	0.0009	-1.79	0.0742
Time*Post*WCM_Cnty	Pre	1	-0.0281	0.0045	-0.0368	-0.0194	-6.32	<.0001
Time*Time*Post*WCM_C	Post	0	-0.0001	0.0002	-0.0004	0.0003	-0.27	0.7835
Time*Time*Post*WCM_C	Post	1	0.0002	0.0002	-0.0002	0.0006	1.02	0.3099
Time*Time*Post*WCM_C	Pre	0	0.0006	0.0002	0.0003	0.0010	3.27	0.0011
Time*Time*Post*WCM_C	Pre	1	0.0014	0.0002	0.0010	0.0018	7.59	<.0001
Season	Fall		0.2637	0.0113	0.2416	0.2859	23.31	<.0001
Season	Spring		0.1855	0.0098	0.1663	0.2048	18.87	<.0001
Season	Winter		0.2165	0.0113	0.1943	0.2387	19.12	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.

CDPS_Log2			0.1709	0.0061	0.1588	0.1829	27.83	<.0001
cwda	1		0.5763	0.0203	0.5364	0.6162	28.32	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0894	0.0451	-0.1778	-0.0009	-1.98	0.0476
ethnic4	Latinx		0.0091	0.0293	-0.0484	0.0666	0.31	0.7563
ethnic4	Other/ Unknown		-0.0073	0.0297	-0.0655	0.0509	-0.25	0.8051
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.2050	0.0242	0.1576	0.2525	8.47	<.0001
Lang3	Other/ Unknown		0.1630	0.0444	0.0759	0.2501	3.67	0.0002
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1203	0.0225	0.0763	0.1643	5.35	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.4047	0.0177	-0.4394	-0.3700	-22.86	<.0001
AgeCat	2-6		-0.2276	0.0299	-0.2862	-0.1689	-7.60	<.0001
AgeCat	7-11		-0.2781	0.0304	-0.3376	-0.2185	-9.15	<.0001
AgeCat	12-20		-0.5374	0.0311	-0.5983	-0.4766	-17.30	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Figure 52. Trend Line for Phase III Primary Care Visits



Trend statement for Primary Care visits in Phase III: The slopes in the pre-period are not statistically significant (p=0.1174), and the parallel assumptions criteria for the DiD model has been met. The post-period slopes between Phase III and Classic CCS comparison group are not significantly different (p=0.7209).

Table 96. Slopes Test for Phase III Primary Care Visits

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0009	0.9902	1.0116	0.0009	0.0054	0.05	-0.0098	0.0116	0.03	0.8722
Post-period slopes test	1.0056	0.9752	1.0369	0.0056	0.0156	0.05	-0.0251	0.0363	0.13	0.7209

Table 97. Regression Model for Phase III Primary Care Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	1.1452	0.2116	0.7305	1.5600	5.41	<.0001
Post*WCM_Cnty	Post	1	0.8035	0.2045	0.4026	1.2043	3.93	<.0001
Post*WCM_Cnty	Pre	0	-1.2439	0.0481	-1.3381	-1.1496	-25.86	<.0001
Post*WCM_Cnty	Pre	1	-1.2985	0.0455	-1.3876	-1.2094	-28.57	<.0001
Time*Post*WCM_Cnty	Post	0	-0.1232	0.0118	-0.1463	-0.1001	-10.44	<.0001
Time*Post*WCM_Cnty	Post	1	-0.1176	0.0110	-0.1392	-0.0960	-10.68	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0249	0.0040	0.0170	0.0329	6.16	<.0001
Time*Post*WCM_Cnty	Pre	1	0.0258	0.0038	0.0183	0.0333	6.74	<.0001
Time*Time*Post*WCM_C	Post	0	0.0017	0.0002	0.0014	0.0020	10.42	<.0001
Time*Time*Post*WCM_C	Post	1	0.0018	0.0001	0.0015	0.0020	11.91	<.0001
Time*Time*Post*WCM_C	Pre	0	-0.0004	0.0002	-0.0007	-0.0001	-2.64	0.0082
Time*Time*Post*WCM_C	Pre	1	-0.0003	0.0001	-0.0006	-0.0000	-2.09	0.0368
Season	Fall		0.2713	0.0090	0.2536	0.2889	30.08	<.0001
Season	Spring		0.1983	0.0081	0.1825	0.2141	24.54	<.0001
Season	Winter		0.2139	0.0091	0.1961	0.2317	23.54	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.

CDPS_Log2			0.1943	0.0058	0.1830	0.2055	33.78	<.0001
cwda	1		0.7268	0.0166	0.6943	0.7592	43.91	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.3098	0.0664	-0.4400	-0.1796	-4.66	<.0001
ethnic4	Latinx		-0.2051	0.0383	-0.2802	-0.1300	-5.35	<.0001
ethnic4	Other/ Unknown		-0.1742	0.0385	-0.2496	-0.0987	-4.53	<.0001
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0225	0.0237	-0.0689	0.0239	-0.95	0.3421
Lang3	Other/ Unknown		0.0152	0.0584	-0.0993	0.1297	0.26	0.7951
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.0682	0.0235	0.0221	0.1144	2.90	0.0037
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.3278	0.0201	-0.3672	-0.2884	-16.30	<.0001
AgeCat	2-6		0.0170	0.0260	-0.0341	0.0680	0.65	0.5146
AgeCat	7-11		-0.0612	0.0311	-0.1222	-0.0003	-1.97	0.0491
AgeCat	12-20		-0.3194	0.0297	-0.3776	-0.2612	-10.76	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Specialist Visits per 1000 MM

Figure 53. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for Specialist visits in HPSM: The slopes in the pre-period are not statistically significant between the HPSM and Classic CCS control groups (Table 98), and thus meets the parallel assumptions criteria for the DiD model. The post-period slopes between the HPSM and Classic CCS comparison group are statistically different, with a decrease over time in HPSM while the Classic CCS claims appear to be stable over time (Figure 53).

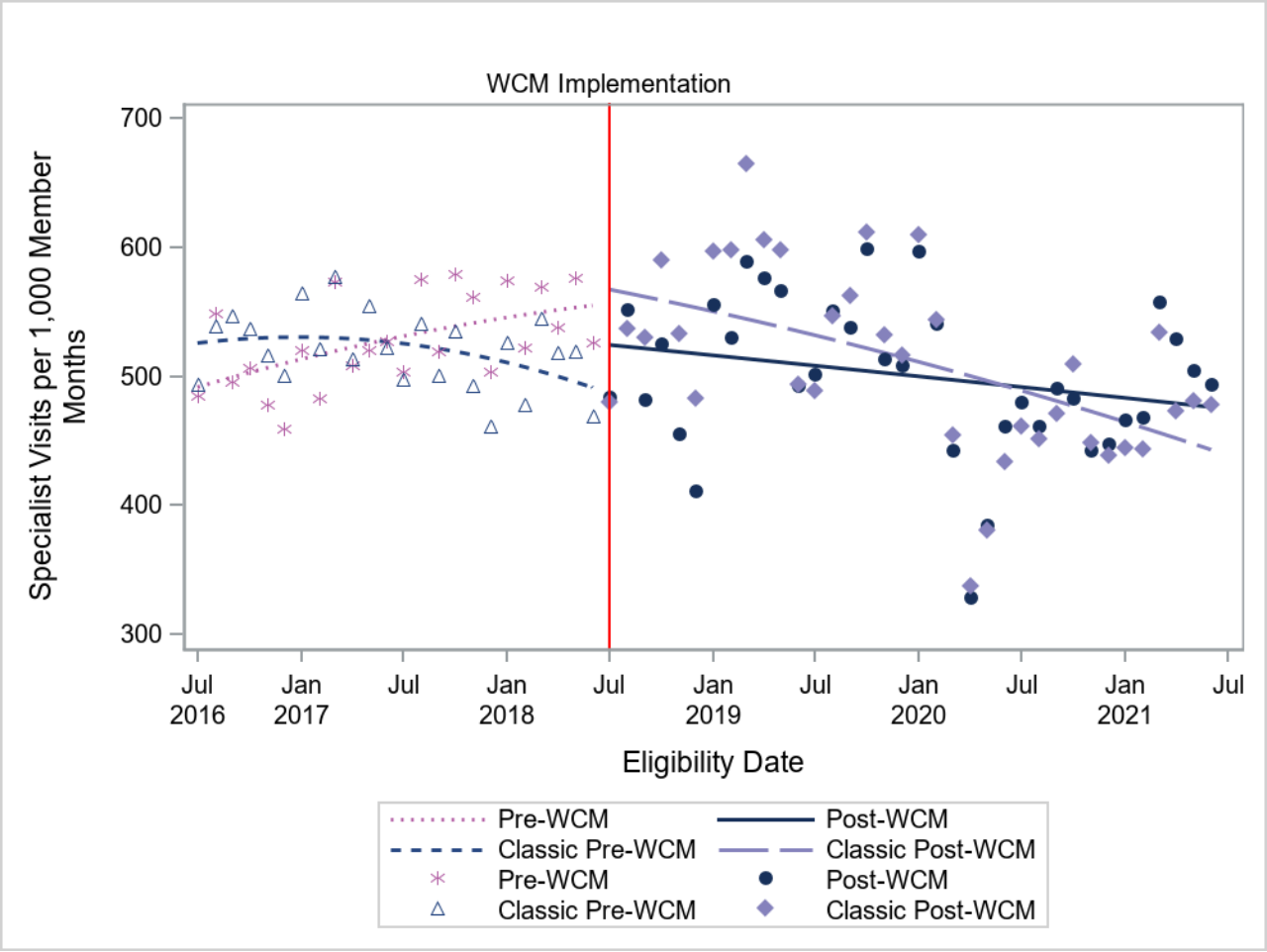
Table 98. Slopes Test for HPSM WCM Specialist Visits

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.9962	0.8143	1.2187	-0.0038	0.1029	0.05	-0.2055	0.1978	0.00	0.9702
Post-period slopes test	0.8957	0.8206	0.9776	-0.1102	0.0447	0.05	-0.1977	-0.0226	6.08	0.0136

Table 99. Regression Model for HPSM WCM Specialist Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-0.7749	0.3391	-1.4396	-0.1102	-2.28	0.0223
Post*WCM_Cnty	Post	1	2.2955	0.8909	0.5495	4.0416	2.58	0.0100
Post*WCM_Cnty	Pre	0	-0.5511	0.0745	-0.6971	-0.4050	-7.39	<.0001
Post*WCM_Cnty	Pre	1	-0.7494	0.5344	-1.7967	0.2980	-1.40	0.1608
Time*Post*WCM_Cnty	Post	0	0.0213	0.0174	-0.0128	0.0553	1.22	0.2207
Time*Post*WCM_Cnty	Post	1	-0.0889	0.0403	-0.1679	-0.0098	-2.20	0.0276
Time*Post*WCM_Cnty	Pre	0	-0.0036	0.0126	-0.0282	0.0210	-0.29	0.7746
Time*Post*WCM_Cnty	Pre	1	-0.0074	0.1021	-0.2075	0.1926	-0.07	0.9419
Time*Time*Post*WCM_C	Post	0	-0.0003	0.0002	-0.0007	0.0001	-1.37	0.1715
Time*Time*Post*WCM_C	Post	1	0.0008	0.0004	-0.0001	0.0017	1.81	0.0709
Time*Time*Post*WCM_C	Pre	0	0.0002	0.0005	-0.0007	0.0012	0.44	0.6621
Time*Time*Post*WCM_C	Pre	1	-0.0009	0.0042	-0.0091	0.0072	-0.23	0.8217
CDPS_Log2			0.2809	0.0125	0.2565	0.3053	22.54	<.0001
cwda	1		0.1926	0.0526	0.0895	0.2957	3.66	0.0003
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 54. Trend Line for Phase I Specialist Visits



Trend statement for Specialist visits in Phase I: The slopes in the pre-period are not statistically significant (p=0.1907), and thus meets the parallel assumptions criteria for the DiD model. The post-period slopes of both Phase I and Classic CCS converged over time with no statistically significant difference between the two groups (Figure 54).

Table 100. Slopes Test for Phase I Specialist Visits

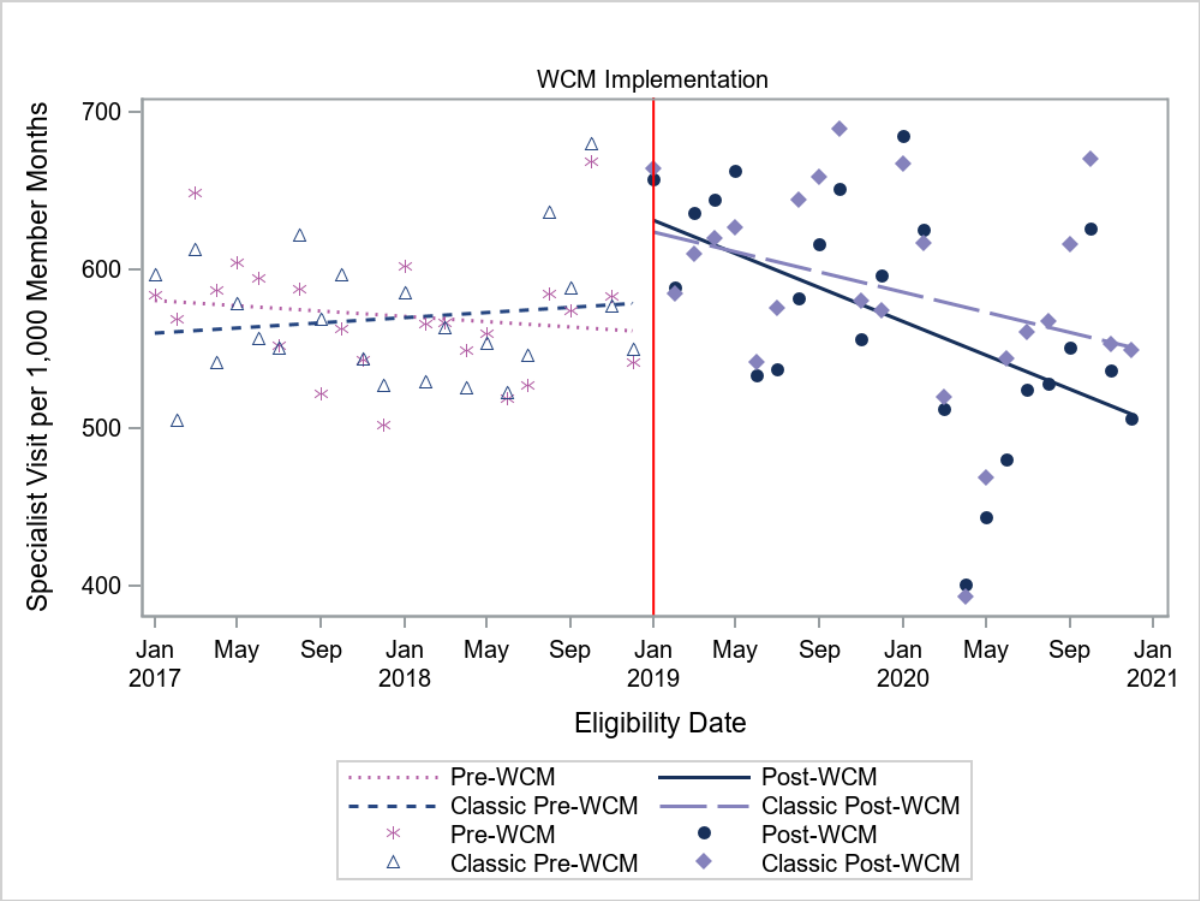
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0028	0.9986	1.0070	0.0028	0.0021	0.05	-0.0014	0.0069	1.71	0.1907
Post-period slopes test	1.0025	0.9998	1.0052	0.0025	0.0014	0.05	-0.0002	0.0052	3.40	0.0652

Table 101. Regression Model for Phase I Specialist Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-0.3543	0.0447	-0.4418	-0.2668	-7.93	<.0001
Post*WCM_Cnty	Post	1	-0.4734	0.0469	-0.5654	-0.3815	-10.09	<.0001
Post*WCM_Cnty	Pre	0	-0.5651	0.0308	-0.6255	-0.5048	-18.35	<.0001
Post*WCM_Cnty	Pre	1	-0.5549	0.0283	-0.6102	-0.4995	-19.64	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0058	0.0009	-0.0076	-0.0039	-6.10	<.0001
Time*Post*WCM_Cnty	Post	1	-0.0033	0.0010	-0.0052	-0.0013	-3.33	0.0009
Time*Post*WCM_Cnty	Pre	0	-0.0001	0.0015	-0.0031	0.0029	-0.09	0.9266
Time*Post*WCM_Cnty	Pre	1	0.0026	0.0015	-0.0003	0.0055	1.78	0.0754
ethnic4	Black		0.0967	0.0504	-0.0020	0.1955	1.92	0.0548
ethnic4	Latinx		-0.0655	0.0210	-0.1065	-0.0244	-3.12	0.0018
ethnic4	Other/ Unknown		0.1644	0.0233	0.1188	0.2099	7.07	<.0001
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.0071	0.0189	-0.0300	0.0442	0.38	0.7064
Lang3	Other/ Unknown		0.0117	0.0618	-0.1093	0.1328	0.19	0.8494

Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.

Figure 55. Trend Line for Phase II Specialist Visits



Trend statement for Specialist visits in Phase II: The slopes in the pre-period are not statistically significant (p=0.2009), and thus meets the parallel assumptions criteria for the DiD model. The post-period slopes between the Phase II and Classic CCS control group are not statistically different, with decrease in visits in Phase II and Classic CCS groups over time.

Table 102. Slopes Test for Phase II Specialist Visits

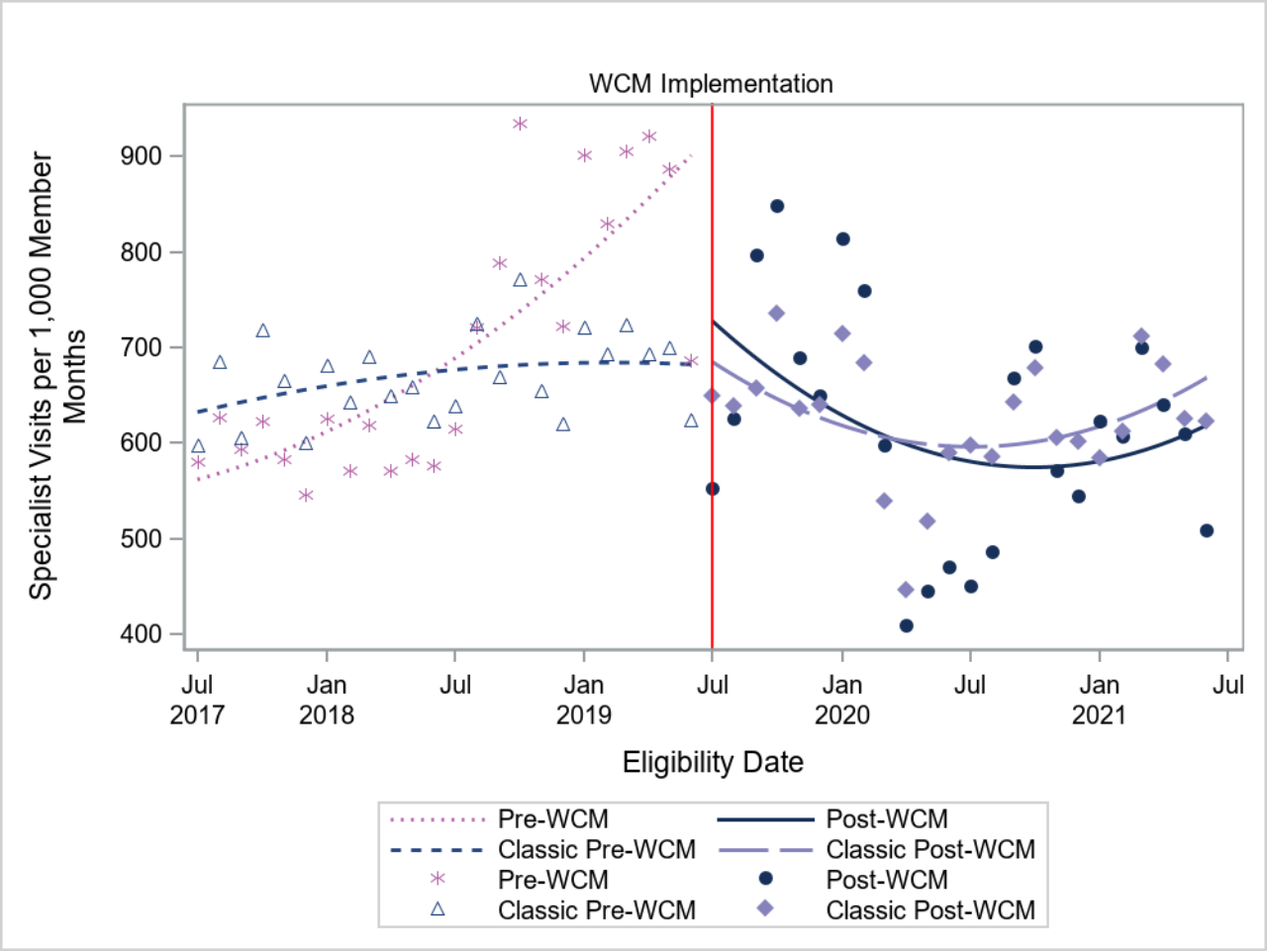
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.9976	0.9939	1.0013	-0.0024	0.0019	0.05	-0.0061	0.0013	1.64	0.2009
Post-period slopes test	0.9990	0.9952	1.0028	-0.0010	0.0019	0.05	-0.0048	0.0028	0.25	0.6162

Table 103. Regression Model for Phase II Specialist Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	0.0867	0.0590	-0.0289	0.2022	1.47	0.1417
Post*WCM_Cnty	Post	1	0.0500	0.0551	-0.0580	0.1579	0.91	0.3645
Post*WCM_Cnty	Pre	0	-0.2329	0.0321	-0.2959	-0.1699	-7.25	<.0001
Post*WCM_Cnty	Pre	1	-0.2536	0.0313	-0.3149	-0.1923	-8.11	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0080	0.0014	-0.0108	-0.0052	-5.54	<.0001
Time*Post*WCM_Cnty	Post	1	-0.0089	0.0013	-0.0115	-0.0064	-6.78	<.0001
Time*Post*WCM_Cnty	Pre	0	-0.0003	0.0014	-0.0031	0.0025	-0.22	0.8229
Time*Post*WCM_Cnty	Pre	1	-0.0027	0.0013	-0.0052	-0.0003	-2.19	0.0282
Season	Fall		0.0341	0.0081	0.0181	0.0500	4.19	<.0001
Season	Spring		-0.0055	0.0077	-0.0206	0.0095	-0.72	0.4713

Season	Winter		-0.0107	0.0086	-0.0276	0.0062	-1.24	0.2140
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.3009	0.0049	0.2912	0.3106	61.01	<.0001
ethnic4	Black		0.0270	0.0304	-0.0327	0.0866	0.89	0.3754
ethnic4	Latinx		0.0207	0.0220	-0.0224	0.0637	0.94	0.3469
ethnic4	Other/ Unknown		0.0131	0.0186	-0.0233	0.0494	0.70	0.4811
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		-0.0481	0.0221	-0.0915	-0.0047	-2.17	0.0297
Lang3	Other/ Unknown		-0.0464	0.0377	-0.1203	0.0275	-1.23	0.2184
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.8565	0.0252	-0.9058	-0.8071	-34.01	<.0001
AgeCat	2-6		-0.2327	0.0275	-0.2865	-0.1788	-8.47	<.0001
AgeCat	7-11		-0.1527	0.0283	-0.2082	-0.0972	-5.39	<.0001
AgeCat	12-20		-0.1898	0.0260	-0.2408	-0.1388	-7.29	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.0984	0.0152	0.0686	0.1281	6.48	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Figure 56. Trend Line for Phase III Specialist Visits



Trend statement for Specialist visits in Phase III: The slopes in the pre-period are not statistically significant, and thus meet the parallel assumptions criteria for the DiD model. The post-period slopes between the Phase III and Classic CCS control group are statistically different (p=0.0474), with both Phase III and Classic CCS groups appearing to have a decreasing trend over time (Figure 56).

Table 104. Slopes Test for Phase III Specialist Visits

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0058	0.9960	1.0156	0.0057	0.0049	0.05	-0.0040	0.0154	1.34	0.2462
Post-period slopes test	1.0272	1.0003	1.0548	0.0268	0.0135	0.05	0.0003	0.0533	3.93	0.0474

Table 105. Regression Model for Phase III Specialist Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	0.8271	0.1775	0.4792	1.1750	4.66	<.0001
Post*WCM_Cnty	Post	1	0.4048	0.1672	0.0770	0.7326	2.42	0.0155
Post*WCM_Cnty	Pre	0	-0.5551	0.0337	-0.6211	-0.4891	-16.49	<.0001
Post*WCM_Cnty	Pre	1	-0.6428	0.0330	-0.7074	-0.5783	-19.51	<.0001
Time*Post*WCM_Cnty	Post	0	-0.0776	0.0101	-0.0973	-0.0579	-7.71	<.0001
Time*Post*WCM_Cnty	Post	1	-0.0508	0.0094	-0.0692	-0.0324	-5.41	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0027	0.0037	-0.0045	0.0098	0.73	0.4681
Time*Post*WCM_Cnty	Pre	1	0.0084	0.0034	0.0017	0.0151	2.45	0.0142
Time*Time*Post*WCM_C	Post	0	0.0011	0.0001	0.0008	0.0013	7.75	<.0001
Time*Time*Post*WCM_C	Post	1	0.0006	0.0001	0.0004	0.0009	5.04	<.0001
Time*Time*Post*WCM_C	Pre	0	0.0001	0.0001	-0.0002	0.0003	0.41	0.6835
Time*Time*Post*WCM_C	Pre	1	0.0004	0.0001	0.0001	0.0006	2.89	0.0039
Season	Fall		0.1116	0.0069	0.0982	0.1251	16.28	<.0001
Season	Spring		0.0623	0.0062	0.0501	0.0745	10.01	<.0001
Season	Winter		0.0692	0.0071	0.0553	0.0831	9.76	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.

CDPS_Log2			0.2728	0.0044	0.2641	0.2816	61.34	<.0001
cwda	1		0.3568	0.0142	0.3289	0.3846	25.10	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0171	0.0378	-0.0913	0.0571	-0.45	0.6519
ethnic4	Latinx		0.0310	0.0212	-0.0105	0.0725	1.46	0.1436
ethnic4	Other/ Unknown		0.0347	0.0219	-0.0082	0.0776	1.59	0.1125
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.0732	0.0147	0.0445	0.1019	4.99	<.0001
Lang3	Other/ Unknown		0.0335	0.0285	-0.0222	0.0893	1.18	0.2386
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.0881	0.0129	0.0628	0.1135	6.81	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.7451	0.0209	-0.7860	-0.7041	-35.62	<.0001
AgeCat	2-6		-0.0508	0.0241	-0.0980	-0.0037	-2.11	0.0347
AgeCat	7-11		-0.0430	0.0250	-0.0921	0.0060	-1.72	0.0857
AgeCat	12-20		-0.1705	0.0239	-0.2174	-0.1237	-7.14	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Specialty Care Center Visits per 1000 MM

Figure 57. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for Specialty Care Center visits in HPSM: The slopes in the pre-period are not statistically significant, and thus meets the parallel assumptions criteria for the DiD model. There is no statistically significant difference in the post-period slopes between HPSM and Classic CCS groups, with convergence of lines over time (Figure 57).

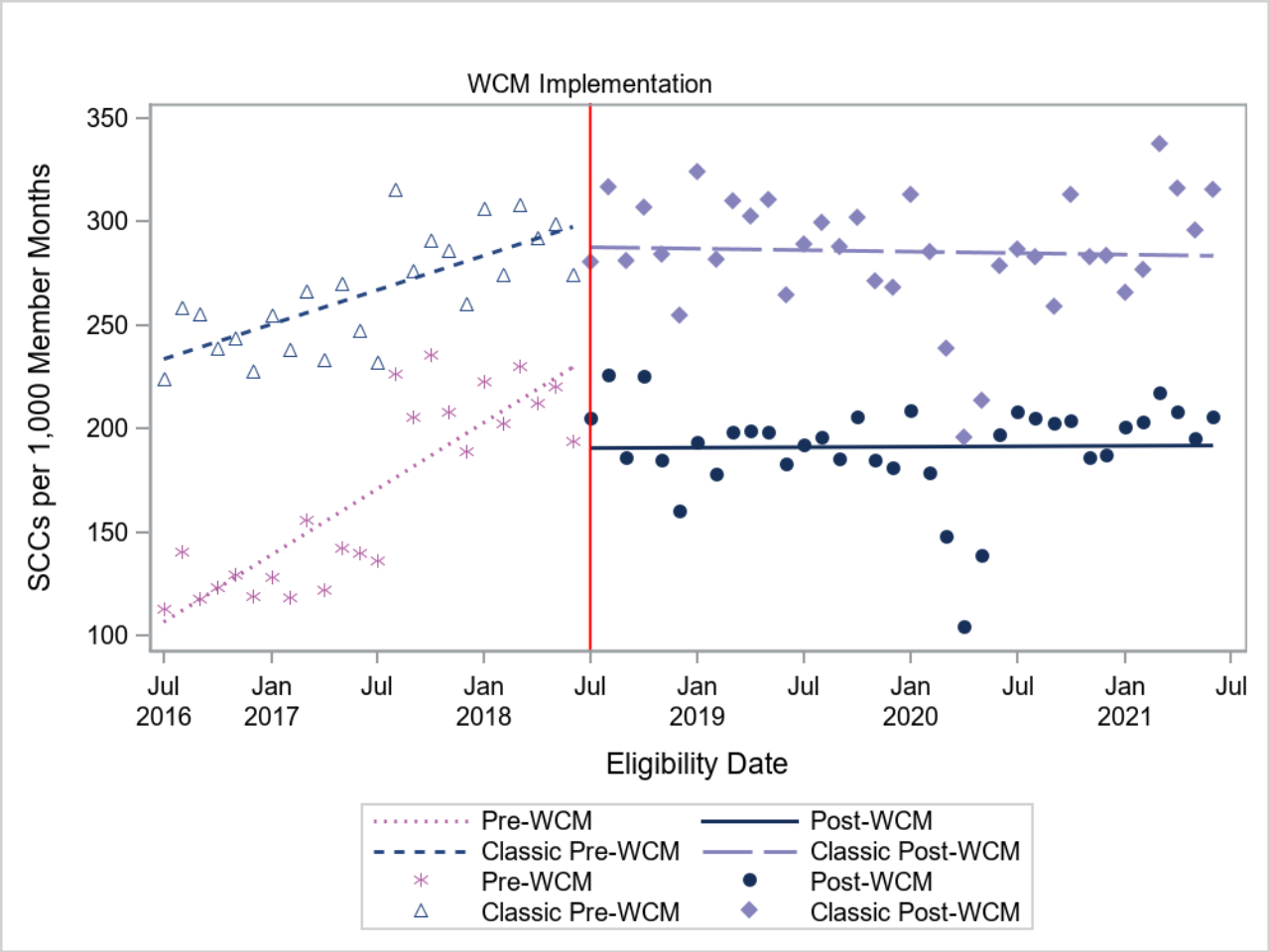
Table 106. Slopes Test for HPSM WCM Specialty Care Center Visits

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0318	0.9894	1.0761	0.0313	0.0214	0.05	-0.0107	0.0733	2.14	0.1436
Post-period slopes test	0.9906	0.9808	1.0005	-0.0094	0.0051	0.05	-0.0193	0.0005	3.49	0.0616

Table 107. Regression Model for HPSM WCM Specialty Care Center Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.0294	0.1471	-1.3176	-0.7411	-7.00	<.0001
Post*WCM_Cnty	Post	1	-0.8263	0.1913	-1.2013	-0.4514	-4.32	<.0001
Post*WCM_Cnty	Pre	0	-1.1705	0.1141	-1.3942	-0.9468	-10.25	<.0001
Post*WCM_Cnty	Pre	1	-3.5620	0.5272	-4.5953	-2.5287	-6.76	<.0001
Time*Post*WCM_Cnty	Post	0	0.0082	0.0032	0.0020	0.0144	2.59	0.0095
Time*Post*WCM_Cnty	Post	1	-0.0013	0.0040	-0.0090	0.0065	-0.32	0.7486
Time*Post*WCM_Cnty	Pre	0	0.0164	0.0055	0.0056	0.0272	2.98	0.0029
Time*Post*WCM_Cnty	Pre	1	0.0477	0.0208	0.0070	0.0885	2.30	0.0216
CDPS_Log2			0.1868	0.0116	0.1639	0.2096	16.03	<.0001
cwda	1		0.0071	0.0909	-0.1711	0.1853	0.08	0.9379
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 58. Trend Line for Phase I Specialty Care Center Visits



Trend statement for Specialty Care Center visits in Phase I: The slopes in the pre-period are statistically significant ($p<0.0001$), and thus do not meet the parallel assumptions criteria for the DiD model. As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. The post-period slopes between the Phase I and Classic CCS groups are not statistically different ($p=0.9949$), with both Phase I and Classic CCS groups appearing to be stable over time (Figure 58).

Table 108. Slopes Test for Phase I Specialty Care Center Visits

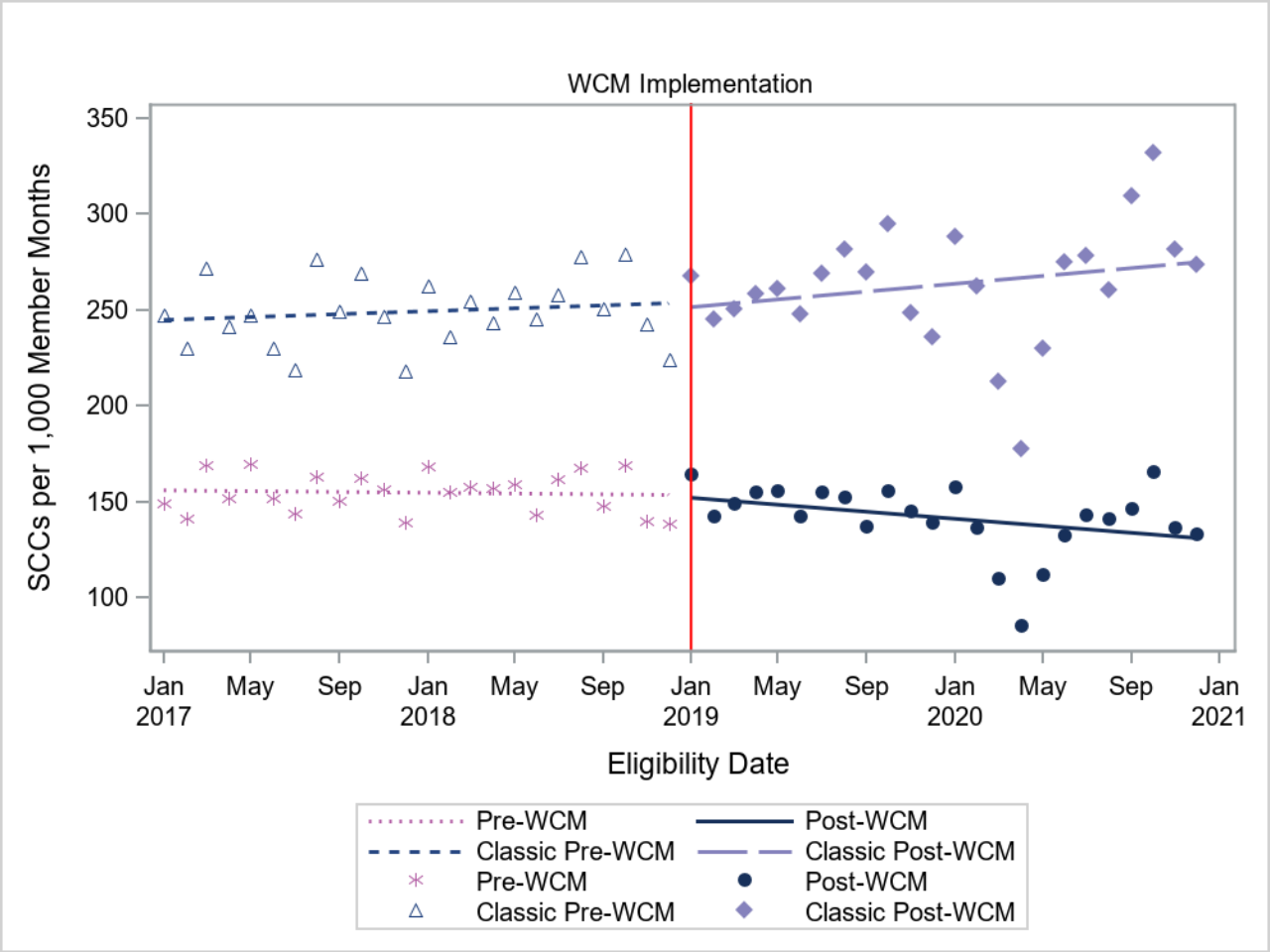
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0187	1.0146	1.0228	0.0185	0.0020	0.05	0.0145	0.0225	81.73	<.0001
Post-period slopes test	1.0000	0.9974	1.0026	0.0000	0.0013	0.05	-0.0026	0.0026	0.00	0.9949

Table 109. Regression Model for Phase I Specialty Care Center Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.6013	0.0519	-1.7030	-1.4997	-30.87	<.0001
Post*WCM_Cnty	Post	1	-2.0183	0.0420	-2.1006	-1.9360	-48.05	<.0001
Post*WCM_Cnty	Pre	0	-1.7563	0.0362	-1.8273	-1.6854	-48.53	<.0001
Post*WCM_Cnty	Pre	1	-2.4835	0.0329	-2.5479	-2.4191	-75.59	<.0001
Time*Post*WCM_Cnty	Post	0	0.0010	0.0010	-0.0010	0.0029	0.97	0.3321
Time*Post*WCM_Cnty	Post	1	0.0010	0.0008	-0.0006	0.0026	1.21	0.2254
Time*Post*WCM_Cnty	Pre	0	0.0088	0.0016	0.0057	0.0119	5.62	<.0001
Time*Post*WCM_Cnty	Pre	1	0.0273	0.0013	0.0247	0.0299	20.54	<.0001
Season	Fall		-0.0309	0.0073	-0.0452	-0.0166	-4.24	<.0001
Season	Spring		-0.0341	0.0073	-0.0484	-0.0198	-4.67	<.0001
Season	Winter		-0.0751	0.0076	-0.0900	-0.0602	-9.86	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.2683	0.0045	0.2594	0.2772	59.24	<.0001
cwda	1		0.0442	0.0189	0.0071	0.0813	2.34	0.0194
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		-0.0013	0.0576	-0.1141	0.1116	-0.02	0.9826

ethnic4	Latinx		-0.0163	0.0252	-0.0657	0.0330	-0.65	0.5161
ethnic4	Other/ Unknown		0.0099	0.0275	-0.0441	0.0639	0.36	0.7188
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.1373	0.0170	0.1039	0.1707	8.06	<.0001
Lang3	Other/ Unknown		0.1539	0.0600	0.0364	0.2714	2.57	0.0103
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.1978	0.0192	-0.2353	-0.1602	-10.32	<.0001
AgeCat	2-6		0.5206	0.0254	0.4708	0.5704	20.49	<.0001
AgeCat	7-11		0.5414	0.0257	0.4911	0.5917	21.10	<.0001
AgeCat	12-20		0.4887	0.0257	0.4383	0.5391	19.01	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.0983	0.0171	0.0648	0.1318	5.74	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Figure 59. Trend Line for Phase II Specialty Care Center Visits



Trend statement for Specialty Care Center visits in Phase II: The slopes in the pre-period are not statistically significant, and thus meets the parallel assumptions criteria for the DiD model. The post-period slopes of Phase II and Classic CCS control group are significantly different, with specialty care center visits increasing for Classic CCS while decreasing for Phase II over time (Figure 59).

Table 110. Slopes Test for Phase II Specialty Care Center Visits

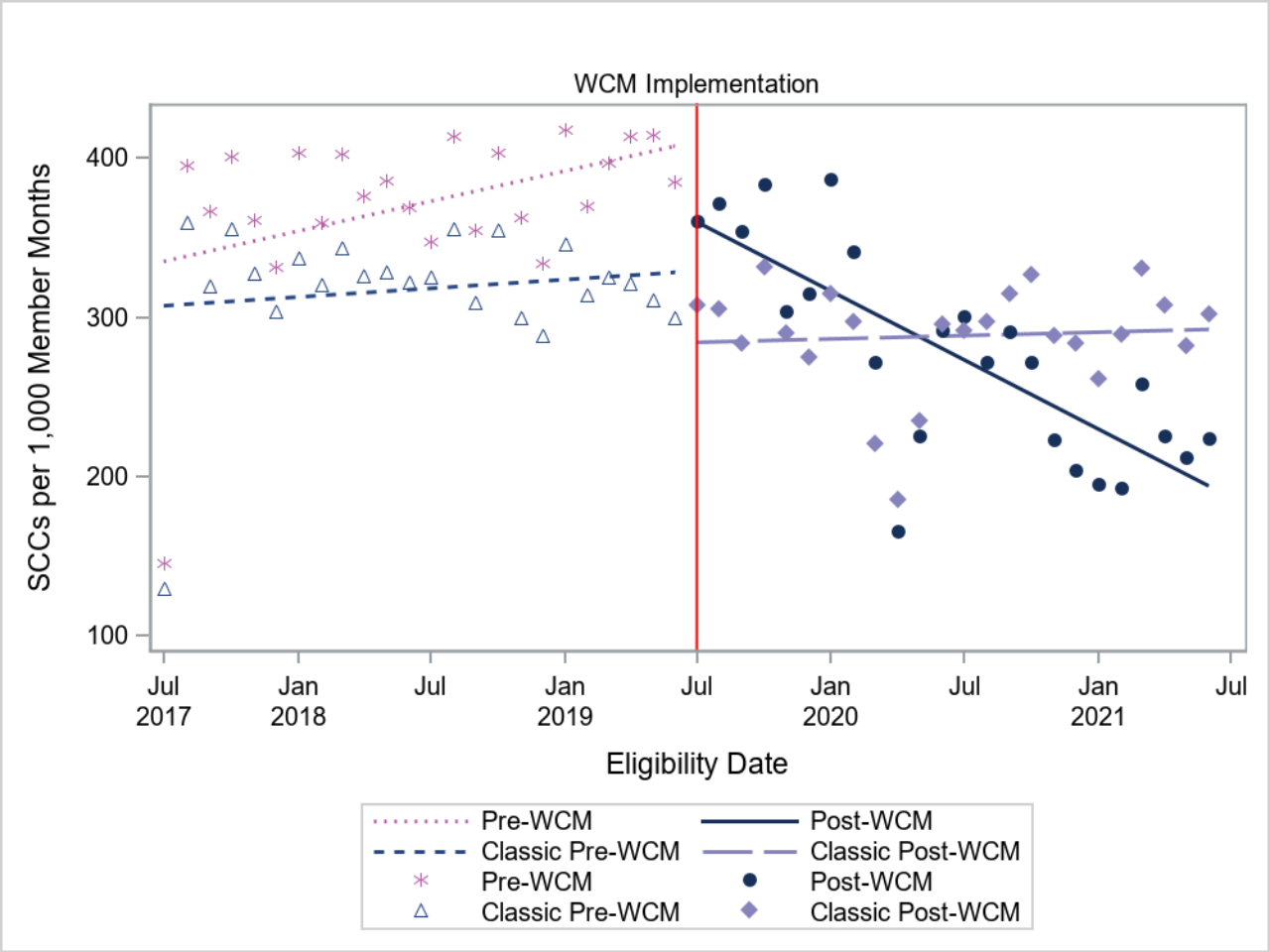
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.9981	0.9937	1.0024	-0.0019	0.0022	0.05	-0.0063	0.0024	0.76	0.3831
Post-period slopes test	0.9918	0.9870	0.9966	-0.0083	0.0025	0.05	-0.0131	-0.0034	11.00	0.0009

Table 111. Regression Model for Phase II Specialty Care Center Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.5066	0.0720	-1.6478	-1.3654	-20.91	<.0001
Post*WCM_Cnty	Post	1	-1.8281	0.0750	-1.9751	-1.6811	-24.38	<.0001
Post*WCM_Cnty	Pre	0	-1.4749	0.0437	-1.5605	-1.3893	-33.77	<.0001
Post*WCM_Cnty	Pre	1	-1.9420	0.0485	-2.0370	-1.8470	-40.06	<.0001
Time*Post*WCM_Cnty	Post	0	0.0023	0.0017	-0.0010	0.0057	1.37	0.1712
Time*Post*WCM_Cnty	Post	1	-0.0059	0.0018	-0.0095	-0.0024	-3.25	0.0011
Time*Post*WCM_Cnty	Pre	0	-0.0012	0.0015	-0.0040	0.0017	-0.80	0.4240
Time*Post*WCM_Cnty	Pre	1	-0.0031	0.0017	-0.0064	0.0002	-1.83	0.0676
Season	Fall		0.0172	0.0102	-0.0028	0.0372	1.68	0.0925
Season	Spring		-0.0434	0.0104	-0.0638	-0.0229	-4.15	<.0001
Season	Winter		-0.0473	0.0107	-0.0682	-0.0264	-4.43	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.2637	0.0063	0.2513	0.2761	41.57	<.0001
cwda	1		0.1339	0.0225	0.0897	0.1781	5.94	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.2499	0.0383	0.1749	0.3249	6.53	<.0001

ethnic4	Latinx		0.1070	0.0319	0.0445	0.1695	3.35	0.0008
ethnic4	Other/ Unknown		0.0840	0.0264	0.0322	0.1358	3.18	0.0015
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.1276	0.0316	0.0656	0.1896	4.03	<.0001
Lang3	Other/ Unknown		0.1905	0.0537	0.0854	0.2957	3.55	0.0004
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.4703	0.0359	-0.5407	-0.3999	-13.09	<.0001
AgeCat	2-6		0.1561	0.0430	0.0719	0.2403	3.63	0.0003
AgeCat	7-11		0.0995	0.0438	0.0137	0.1853	2.27	0.0230
AgeCat	12-20		0.0143	0.0422	-0.0684	0.0969	0.34	0.7352
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.0680	0.0205	0.0277	0.1082	3.31	0.0009
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Figure 60. Trend Line for Phase III Specialty Care Center Visits



Trend statement for Specialty Care Center visits in Phase III: The slopes in the pre-period are statistically significant (p=0.0002), and thus do not meet the parallel assumptions criteria for the DiD model. As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. The post-period slopes between the Phase III and Classic CCS groups are significantly different, with specialty care center visits decreasing over time for Phase III and flat for Classic CCS group (Figure 60).

Table 112. Slopes Test for Phase III Specialty Care Center Visits

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	1.0055	1.0026	1.0084	0.0055	0.0015	0.05	0.0026	0.0084	13.69	0.0002
Post-period slopes test	0.9766	0.9733	0.9799	-0.0237	0.0017	0.05	-0.0271	-0.0203	186.02	<.0001

Table 113. Regression Model for Phase III Specialty Care Center Visits

Analysis Of GEE Parameter Estimates Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	0	-1.6156	0.0499	-1.7135	-1.5177	-32.35	<.0001
Post*WCM_Cnty	Post	1	-0.8245	0.0653	-0.9525	-0.6965	-12.62	<.0001
Post*WCM_Cnty	Pre	0	-1.6221	0.0369	-1.6945	-1.5498	-43.95	<.0001
Post*WCM_Cnty	Pre	1	-1.5182	0.0395	-1.5957	-1.4408	-38.41	<.0001
Time*Post*WCM_Cnty	Post	0	0.0020	0.0010	0.0000	0.0041	1.96	0.0497
Time*Post*WCM_Cnty	Post	1	-0.0216	0.0014	-0.0244	-0.0189	-15.45	<.0001
Time*Post*WCM_Cnty	Pre	0	0.0071	0.0010	0.0052	0.0090	7.43	<.0001
Time*Post*WCM_Cnty	Pre	1	0.0126	0.0011	0.0104	0.0148	11.04	<.0001
Season	Fall		-0.0040	0.0063	-0.0163	0.0084	-0.63	0.5301
Season	Spring		-0.0287	0.0064	-0.0412	-0.0163	-4.51	<.0001
Season	Winter		-0.0405	0.0066	-0.0535	-0.0274	-6.09	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.2338	0.0054	0.2231	0.2444	42.97	<.0001
cwda	0		-0.3590	0.0181	-0.3946	-0.3235	-19.81	<.0001

cwda	1		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.0176	0.0407	-0.0621	0.0974	0.43	0.6647
ethnic4	Latinx		0.1129	0.0264	0.0610	0.1647	4.27	<.0001
ethnic4	Other/ Unknown		0.1195	0.0280	0.0645	0.1744	4.26	<.0001
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.1930	0.0183	0.1571	0.2289	10.53	<.0001
Lang3	Other/ Unknown		0.0358	0.0376	-0.0379	0.1095	0.95	0.3414
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.0084	0.0213	-0.0333	0.0501	0.39	0.6931
AgeCat	2-6		0.7484	0.0265	0.6965	0.8004	28.26	<.0001
AgeCat	7-11		0.5224	0.0270	0.4694	0.5753	19.32	<.0001
AgeCat	12-20		0.3226	0.0260	0.2716	0.3736	12.40	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.0848	0.0167	0.0521	0.1175	5.08	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Specialty Care Center Visit within 90-Days of Referral per 1000 referrals.

Figure 61. Figure is withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Trend statement for seen at Specialty Care Center within 90 days in HPSM: The slopes in the pre-period are not statistically significant, and thus meets the parallel assumptions criteria for the DiD model. There was no significant difference in the slopes between the HPSM and Classic CCS control group, with visits decreasing for HPSM while flat for Classic CCS group over time (Figure 61).

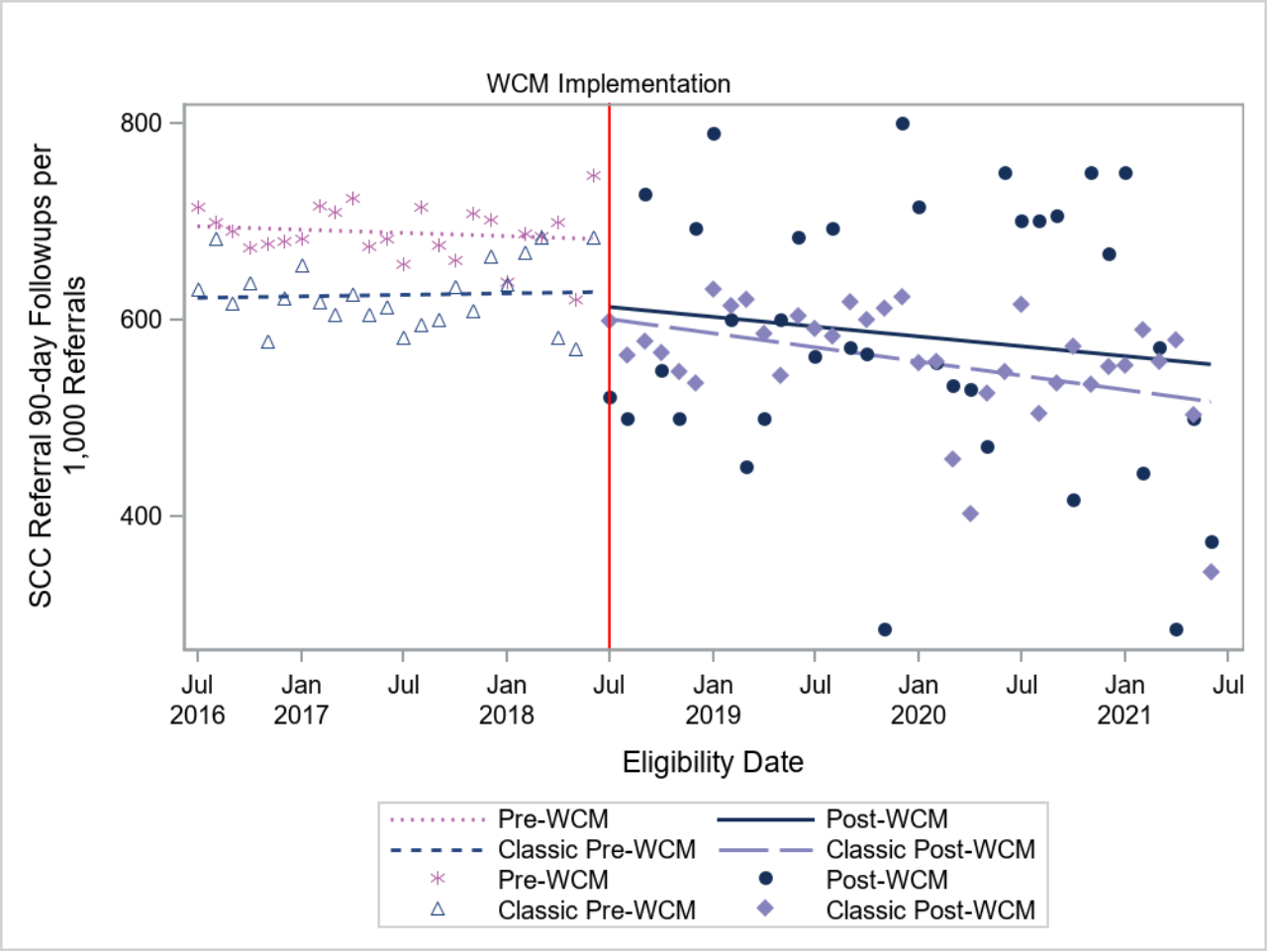
Table 114. Slopes Test for HPSM WCM Seen at Specialty Care Center Within 90 Days

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.5060	0.4868	0.5251	0.0238	0.0392	0.05	-0.0530	0.1006	0.37	0.5433
Post-period slopes test	0.4966	0.4893	0.5040	-0.0135	0.0150	0.05	-0.0429	0.0160	0.80	0.3698

Table 115. Regression Model for HPSM WCM Seen at Specialty Care Center Within 90 Days

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	0.0878	0.2301	-0.3632	0.5389	0.38	0.7027
Post*WCM_Cnty	Post	WCM	1.6660	0.5953	0.4992	2.8328	2.80	0.0051
Post*WCM_Cnty	Pre	Classic	0.1829	0.1434	-0.0981	0.4639	1.28	0.2021
Post*WCM_Cnty	Pre	WCM	-1.1122	0.5433	-2.1771	-0.0473	-2.05	0.0406
Time*Post*WCM_Cnty	Post	Classic	-0.0056	0.0050	-0.0154	0.0042	-1.12	0.2633
Time*Post*WCM_Cnty	Post	WCM	-0.0191	0.0142	-0.0468	0.0087	-1.35	0.1776
Time*Post*WCM_Cnty	Pre	Classic	-0.0059	0.0093	-0.0241	0.0124	-0.63	0.5286
Time*Post*WCM_Cnty	Pre	WCM	0.0179	0.0381	-0.0567	0.0926	0.47	0.6373
CDPS_Log2			0.1044	0.0172	0.0708	0.1381	6.08	<.0001
cwda	1		0.5284	0.0996	0.3331	0.7237	5.30	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.

Figure 62. Trend Line for Phase I Ween at Specialty Care Center Within 90 Days



Trend statement for seen at Specialty Care Center within 90 days in Phase I: The slopes in the pre-period are not statistically significant, and thus meets the parallel assumptions criteria for the DiD model. There was no significant difference in the slopes between the Phase I and Classic CCS control group, with visits decreasing for both groups over time (Figure 62).

Table 116. Slopes Test for Phase I Seen at Specialty Care Center Within 90 Days

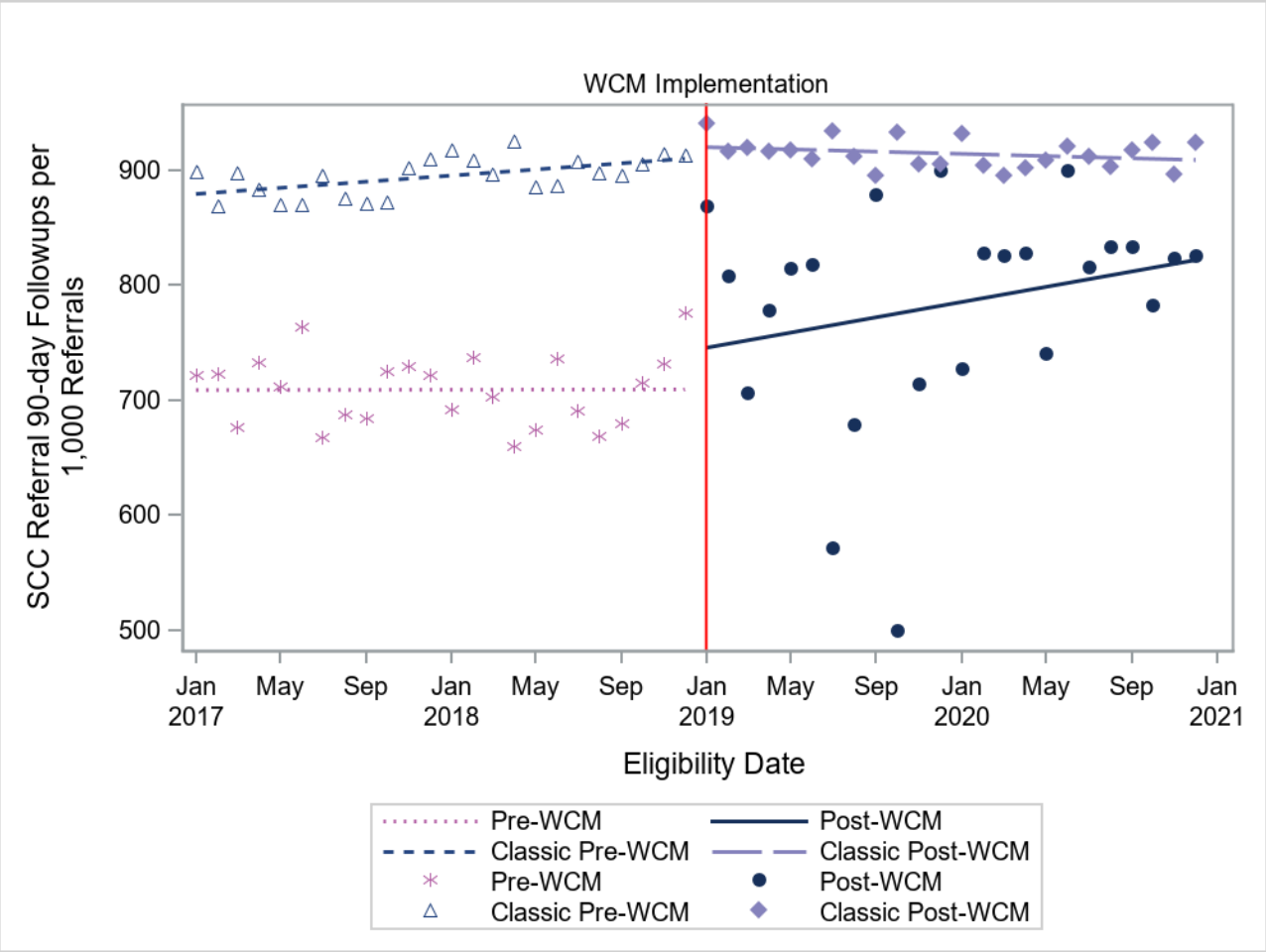
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4988	0.4964	0.5012	-0.0047	0.0049	0.05	-0.0142	0.0048	0.93	0.3343
Post-period slopes test	0.5018	0.4979	0.5056	0.0071	0.0079	0.05	-0.0083	0.0225	0.81	0.3677

Table 117. Regression Model for Phase I Seen at Specialty Care Center Within 90 Days

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	0.0832	0.0802	-0.0739	0.2405	1.08	0.2995
Post*WCM_Cnty	Post	WCM	1	-0.1455	0.3148	-0.7614	0.4736	0.21	0.6439
Post*WCM_Cnty	Pre	Classic	1	-0.0491	0.0554	-0.1576	0.0596	0.79	0.3756
Post*WCM_Cnty	Pre	WCM	1	0.2454	0.0616	0.1248	0.3664	15.85	<.0001
Time*Post*WCM_Cnty	Post	Classic	1	-0.0098	0.0017	-0.0131	-0.0066	35.03	<.0001
Time*Post*WCM_Cnty	Post	WCM	1	-0.0027	0.0077	-0.0178	0.0123	0.13	0.7206
Time*Post*WCM_Cnty	Pre	Classic	1	0.0004	0.0032	-0.0059	0.0067	0.01	0.9040
Time*Post*WCM_Cnty	Pre	WCM	1	-0.0043	0.0036	-0.0115	0.0028	1.40	0.2371
CDPS_Log2			1	0.2139	0.0056	0.2029	0.2249	1460.77	<.0001
ethnic4	Black		1	0.0187	0.0698	-0.1178	0.1559	0.07	0.7884
ethnic4	Latinx		1	0.0940	0.0332	0.0288	0.1591	8.01	0.0047
ethnic4	Other/ Unknown		1	0.1091	0.0388	0.0332	0.1851	7.93	0.0049
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		1	0.2440	0.0276	0.1898	0.2982	77.89	<.0001

Lang3	Other/ Unknown		1	0.2749	0.1122	0.0568	0.4970	6.00	0.0143
Lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		1	0.2072	0.0524	0.1047	0.3103	15.62	<.0001
AgeCat	2-6		1	0.8836	0.0413	0.8027	0.9647	457.10	<.0001
AgeCat	7-11		1	0.8523	0.0403	0.7733	0.9315	446.14	<.0001
AgeCat	12-20		1	0.6234	0.0337	0.5574	0.6894	342.27	<.0001
AgeCat	<12 Mo.		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 63. Trend Line for Phase II Seen at Specialty Care Center Within 90 Days



Trend statement for seen at Specialty Care Center within 90 days in Phase II: The slopes in the pre-period are statistically significant (p=0.0400), and thus do not meet the parallel assumptions criteria for the DiD model. As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. There was no significant difference in the slopes between the Phase II and Classic CCS control group, with visits increasing for Phase II while flat to decreasing for Classic group over time (Figure 63).

Table 118. Slopes Test for Phase II Seen at Specialty Care Center Within 90 Days

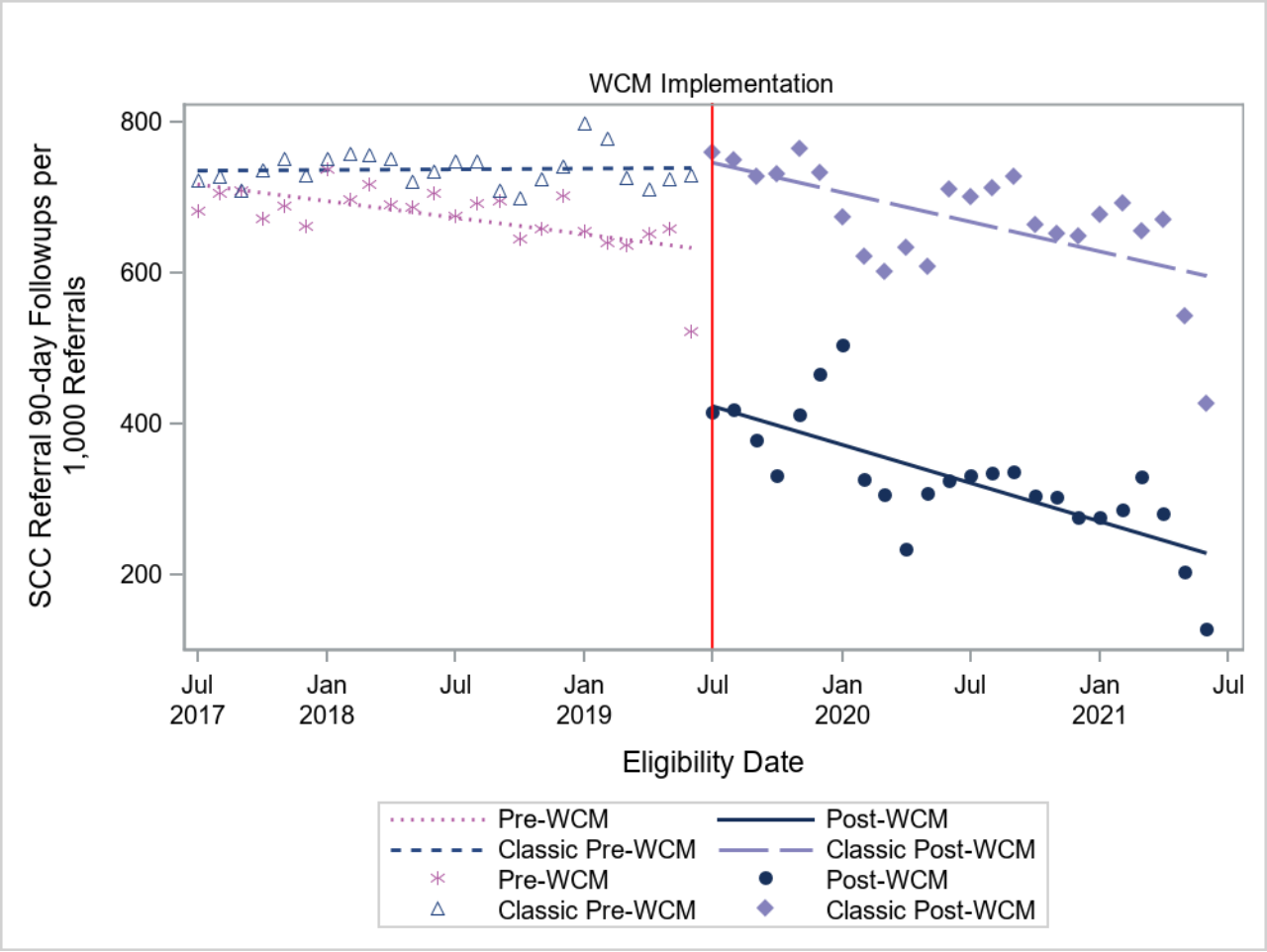
Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4985	0.4970	0.4999	-0.0061	0.0030	0.05	-0.0119	-0.0003	4.22	0.0400
Post-period slopes test	0.5016	0.4961	0.5071	0.0065	0.0112	0.05	-0.0154	0.0285	0.34	0.5607

Table 119. Regression Model for Phase II Seen at Specialty Care Center Within 90 Days

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	0.6443	0.0975	0.4532	0.8354	6.61	<.0001
Post*WCM_Cnty	Post	WCM	-0.3873	0.3941	-1.1597	0.3850	-0.98	0.3257
Post*WCM_Cnty	Pre	Classic	0.5128	0.0698	0.3759	0.6497	7.34	<.0001
Post*WCM_Cnty	Pre	WCM	-0.4690	0.0687	-0.6037	-0.3344	-6.83	<.0001
Time*Post*WCM_Cnty	Post	Classic	0.0041	0.0021	0.0000	0.0082	1.96	0.0500
Time*Post*WCM_Cnty	Post	WCM	0.0106	0.0110	-0.0110	0.0322	0.96	0.3347
Time*Post*WCM_Cnty	Pre	Classic	0.0091	0.0021	0.0050	0.0132	4.32	<.0001
Time*Post*WCM_Cnty	Pre	WCM	0.0030	0.0021	-0.0012	0.0072	1.41	0.1595
Season	Fall		0.0167	0.0295	-0.0412	0.0746	0.57	0.5714
Season	Spring		0.0061	0.0290	-0.0507	0.0630	0.21	0.8324
Season	Winter		0.1025	0.0312	0.0413	0.1637	3.28	0.0010
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.1666	0.0069	0.1531	0.1802	24.12	<.0001
cwda	1		0.6953	0.0416	0.6138	0.7769	16.71	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.5843	0.0906	0.4067	0.7619	6.45	<.0001

ethnic4	Latinx		0.2554	0.0629	0.1322	0.3786	4.06	<.0001
ethnic4	Other/ Unknown		0.1259	0.0557	0.0167	0.2350	2.26	0.0238
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.2323	0.0606	0.1134	0.3511	3.83	0.0001
Lang3	Other/ Unknown		0.0603	0.1158	-0.1668	0.2873	0.52	0.6029
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.0701	0.0451	-0.0183	0.1584	1.55	0.1202
AgeCat	2-6		0.5028	0.0547	0.3956	0.6100	9.19	<.0001
AgeCat	7-11		0.4483	0.0577	0.3352	0.5614	7.77	<.0001
AgeCat	12-20		0.2657	0.0537	0.1605	0.3709	4.95	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.0613	0.0410	-0.0191	0.1417	1.49	0.1350
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Figure 64. Trend Line for Phase III Seen at Specialty Care Center Within 90 Days



Trend statement for seen at Specialty Care Center within 90 days in Phase III: The slopes in the pre-period are statistically significant (p=<0.0001), and thus do not meet the parallel assumptions criteria for the DiD model. As such, the pre-to-post differences may be due to underlying trends and not the result of the WCM implementation. Results should be interpreted with caution. There was a significant difference noted in the slopes between the Phase III and Classic CCS control group, with visits decreasing for both groups over time (Figure 64).

Table 120. Slopes Test for Phase III Seen at Specialty Care Center Within 90 Days

Contrast Estimate Results										
		Mean					L'Beta			
Label	Mean Estimate	Confidence Limits		L'Beta Estimate	Standard Error	Alpha	Confidence Limits		Chi-Square	Pr > ChiSq
Pre-period slopes test	0.4952	0.4931	0.4972	-0.0193	0.0041	0.05	-0.0274	-0.0112	21.65	<.0001
Post-period slopes test	0.4950	0.4925	0.4975	-0.0199	0.0051	0.05	-0.0300	-0.0099	15.18	<.0001

Table 121. Regression Model for Phase III Seen at Specialty Care Center Within 90 Days

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	0.3111	0.1182	0.0795	0.5427	2.63	0.0085
Post*WCM_Cnty	Post	WCM	-0.4093	0.1699	-0.7423	-0.0763	-2.41	0.0160
Post*WCM_Cnty	Pre	Classic	-0.2398	0.0727	-0.3822	-0.0974	-3.30	0.0010
Post*WCM_Cnty	Pre	WCM	-0.2703	0.0716	-0.4106	-0.1300	-3.78	0.0002
Time*Post*WCM_Cnty	Post	Classic	-0.0253	0.0027	-0.0307	-0.0199	-9.20	<.0001
Time*Post*WCM_Cnty	Post	WCM	-0.0452	0.0043	-0.0537	-0.0367	-10.46	<.0001
Time*Post*WCM_Cnty	Pre	Classic	-0.0008	0.0030	-0.0067	0.0051	-0.27	0.7849
Time*Post*WCM_Cnty	Pre	WCM	-0.0201	0.0030	-0.0259	-0.0143	-6.79	<.0001
Season	Fall		0.1002	0.0300	0.0414	0.1591	3.34	0.0008
Season	Spring		0.0272	0.0293	-0.0303	0.0847	0.93	0.3534
Season	Winter		0.1320	0.0290	0.0750	0.1889	4.54	<.0001
Season	Summer		0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			0.1601	0.0062	0.1479	0.1722	25.83	<.0001
cwda	1		0.2219	0.0301	0.1630	0.2808	7.38	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		0.0789	0.0772	-0.0724	0.2302	1.02	0.3066

ethnic4	Latinx		0.2809	0.0526	0.1778	0.3840	5.34	<.0001
ethnic4	Other/ Unknown		0.1266	0.0579	0.0131	0.2402	2.19	0.0289
ethnic4	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		0.2158	0.0340	0.1491	0.2826	6.34	<.0001
Lang3	Other/ Unknown		0.0360	0.0789	-0.1186	0.1906	0.46	0.6483
Lang3	English		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.5100	0.0584	0.3957	0.6244	8.74	<.0001
AgeCat	2-6		1.1431	0.0525	1.0402	1.2459	21.78	<.0001
AgeCat	7-11		1.1394	0.0486	1.0441	1.2348	23.42	<.0001
AgeCat	12-20		1.0638	0.0411	0.9832	1.1443	25.88	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1316	0.0294	0.0740	0.1892	4.48	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.

Annual Depression Screen per 100 Clients.

Figure 65. Probability for HPSM WCM Annual Depression Screen

There were insufficient observations in the pre-period for annual depression screens to generate stable estimates for the DiD analysis. Instead, we report the proportion of annual depression screens.

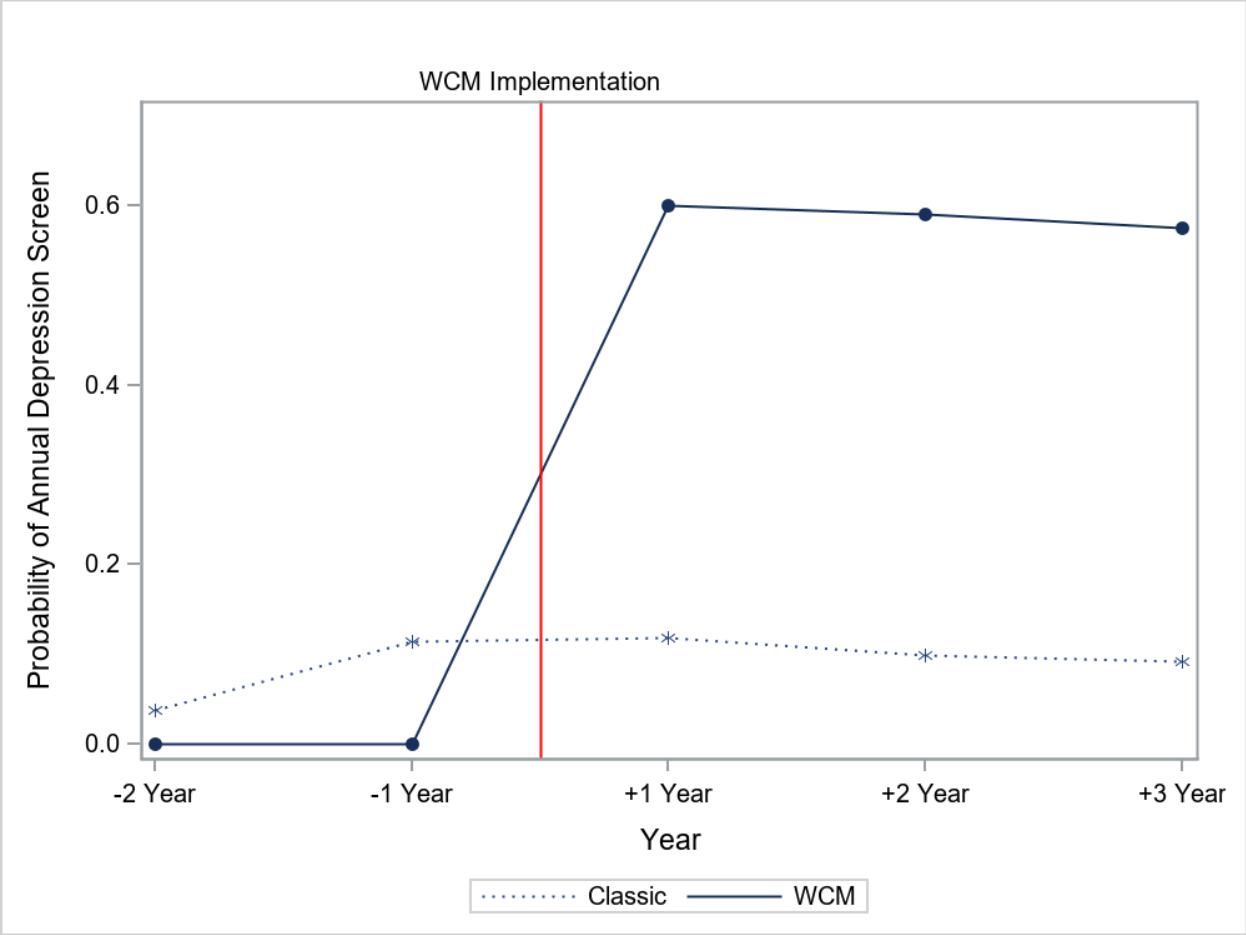


Table 122. Regression Model for HPSM WCM Annual Depression Screen

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	-2.1154	0.1204	-2.1154	-2.1154	308.87	<.0001
Post*WCM_Cnty	Post	WCM	1	0.3259	0.2184	0.3259	0.3259	2.23	0.1358
Post*WCM_Cnty	Pre	Classic	1	-2.4453	0.1527	-2.4453	-2.4453	256.55	<.0001
Post*WCM_Cnty	Pre	WCM	1	-21.5121	30455.06	-21.5121	-21.5121	0.00	0.9994
cwda	0		1	0.4153	0.1496	0.4153	0.4153	7.70	0.0055
cwda	1		0	0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			1	0.1976	0.0352	0.1976	0.1976	31.57	<.0001
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 66. Probability for Phase I Annual Depression Screen

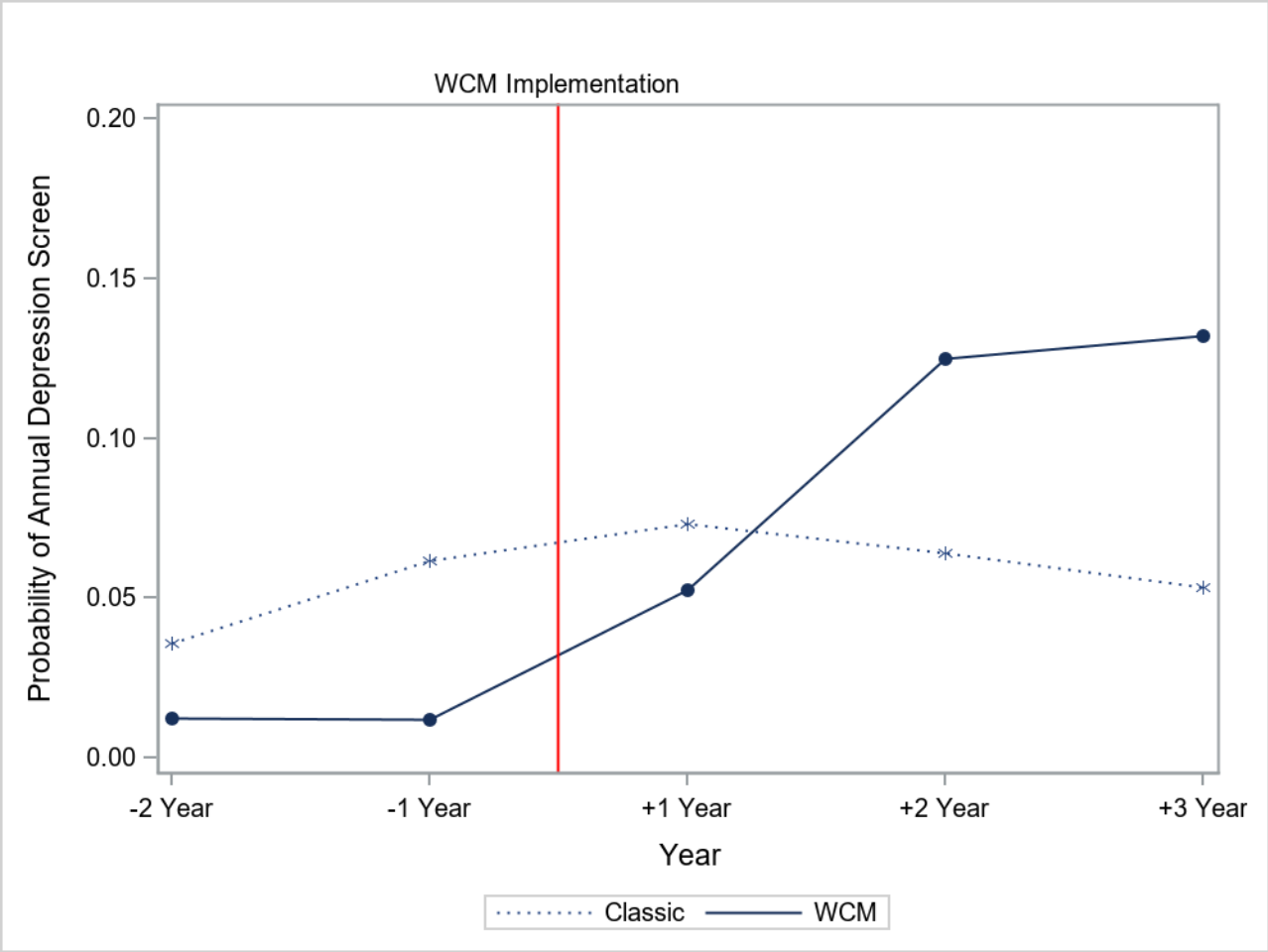


Table 123. Regression Model for Phase I Annual Depression Screen

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	-2.2989	0.0726	-2.4423	-2.1578	1003.37	<.0001
Post*WCM_Cnty	Post	WCM	1	-1.7849	0.0659	-1.9151	-1.6566	733.22	<.0001
Post*WCM_Cnty	Pre	Classic	1	-2.5663	0.0865	-2.7377	-2.3986	880.85	<.0001
Post*WCM_Cnty	Pre	WCM	1	-4.0436	0.1322	-4.3107	-3.7918	935.29	<.0001
cwda	1		1	-0.2091	0.0509	-0.3092	-0.1095	16.85	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			1	0.1088	0.0118	0.0858	0.1320	85.09	<.0001
Ethnic4	Black		1	0.0192	0.1487	-0.2814	0.3023	0.02	0.8974
Ethnic4	Latinx		1	-0.5279	0.0644	-0.6538	-0.4012	67.13	<.0001
Ethnic4	Other/ Unknown		1	-0.4311	0.0830	-0.5950	-0.2694	26.96	<.0001
Ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		1	0.2644	0.0563	0.1541	0.3748	22.05	<.0001
Lang3	Other/ Unknown		1	0.2618	0.1837	-0.1137	0.6084	2.03	0.1541
Lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	0.2224	0.0493	0.1260	0.3191	20.38	<.0001
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 67. Probability for Phase II Annual Depression Screen

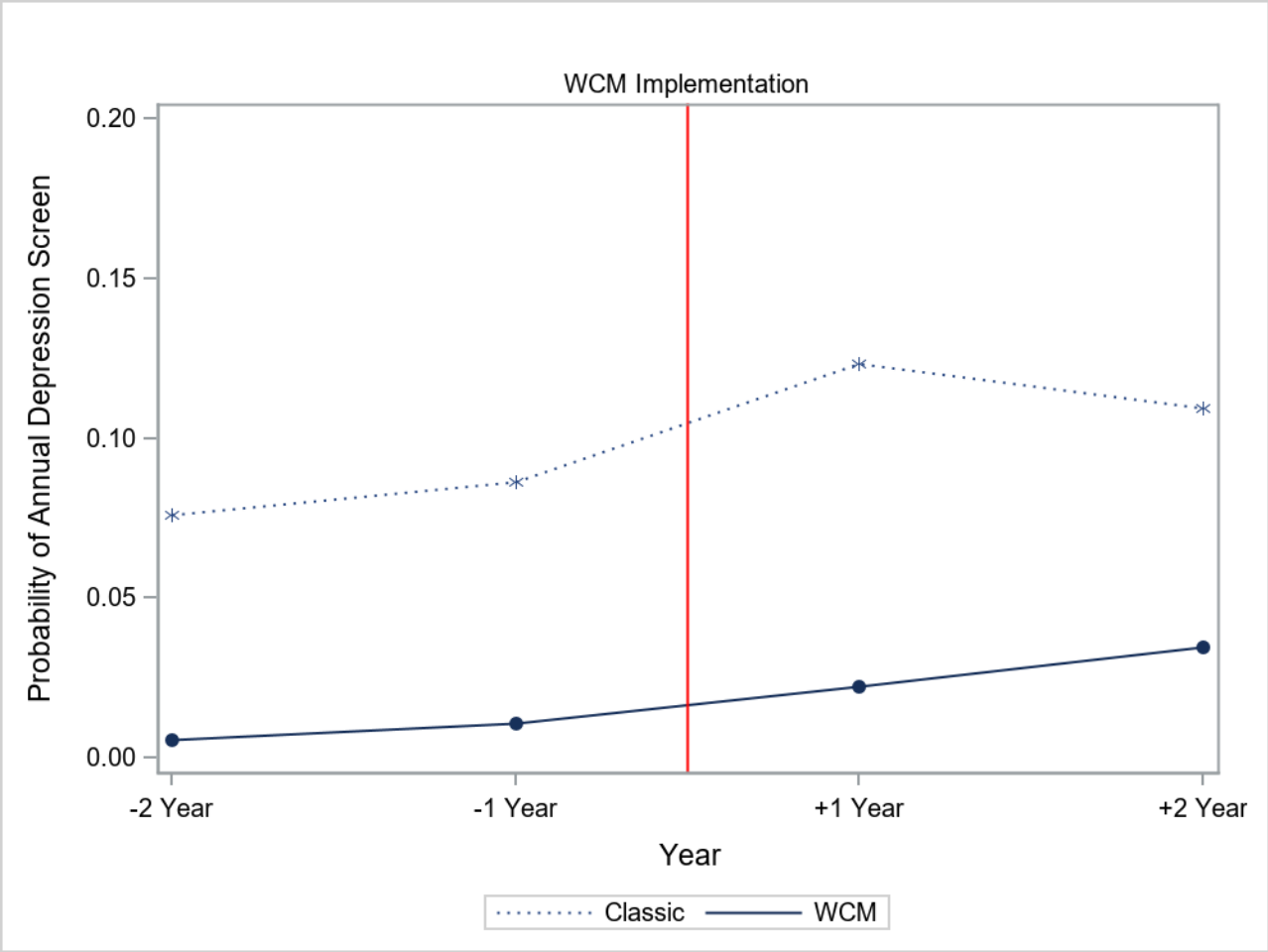


Table 124. Regression Model for Phase II Annual Depression Screen

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	-2.4979	0.0925	-2.6815	-2.3189	729.50	<.0001
Post*WCM_Cnty	Post	WCM	1	-4.0135	0.1141	-4.2410	-3.7937	1237.54	<.0001
Post*WCM_Cnty	Pre	Classic	1	-2.8748	0.0977	-3.0686	-2.6857	866.60	<.0001
Post*WCM_Cnty	Pre	WCM	1	-5.2570	0.1756	-5.6155	-4.9257	896.48	<.0001
cwda	0		1	0.0526	0.0649	-0.0744	0.1801	0.66	0.4176
cwda	1		0	0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			1	0.0659	0.0146	0.0374	0.0947	20.33	<.0001
Ethnic4	Black		1	0.1559	0.1376	-0.1188	0.4214	1.28	0.2573
Ethnic4	Latinx		1	0.4690	0.1051	0.2629	0.6752	19.90	<.0001
Ethnic4	Other/ Unknown		1	0.2754	0.0995	0.0806	0.4710	7.66	0.0057
Ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		1	0.3970	0.0886	0.2241	0.5716	20.07	<.0001
Lang3	Other/ Unknown		1	-0.3761	0.1921	-0.7707	-0.0151	3.83	0.0503
Lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	0.2431	0.0639	0.1181	0.3684	14.50	0.0001
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 68. Probability for Phase III Annual Depression Screen

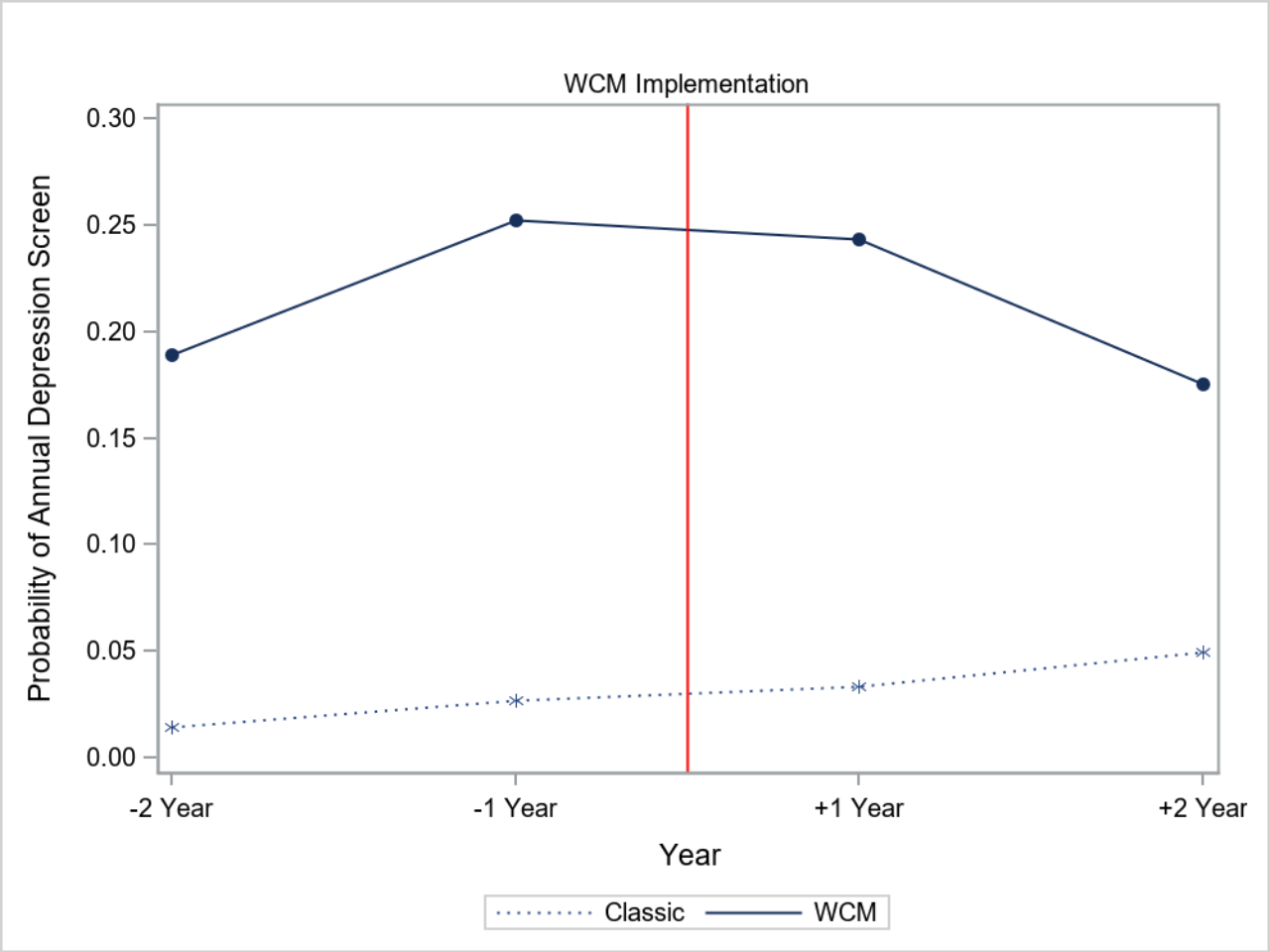


Table 125. Regression Model for Phase III Annual Depression Screen

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	-3.2070	0.0721	-3.3496	-3.0669	1977.57	<.0001
Post*WCM_Cnty	Post	WCM	1	-1.3881	0.0529	-1.4926	-1.2851	688.32	<.0001
Post*WCM_Cnty	Pre	Classic	1	-3.9662	0.0931	-4.1519	-3.7866	1813.35	<.0001
Post*WCM_Cnty	Pre	WCM	1	-1.3101	0.0524	-1.4135	-1.2081	625.47	<.0001
CDPS_Log2			1	0.1647	0.0081	0.1490	0.1806	416.62	<.0001
Ethnic4	Black		1	-0.0259	0.1273	-0.2812	0.2185	0.04	0.8386
Ethnic4	Latinx		1	0.1095	0.0587	-0.0051	0.2249	3.49	0.0619
Ethnic4	Other/ Unknown		1	0.0756	0.0609	-0.0435	0.1953	1.54	0.2142
Ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
Lang3	Spanish		1	0.2260	0.0419	0.1439	0.3084	29.03	<.0001
Lang3	Other/ Unknown		1	0.2422	0.0765	0.0912	0.3910	10.03	0.0015
Lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	0.0683	0.0341	0.0015	0.1351	4.02	0.0450
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Immunization (Childhood) per 100 2 years old

Figure 69. Probability for HPSM WCM Childhood Immunizations

There were insufficient observations in the pre-period for childhood immunizations to generate stable estimates for the DiD analysis. Instead, we report the proportion of childhood immunizations.

Figures 69 – 72 and Tables 126 – 129 are withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Immunization (Adolescent) per 100 13 year old's

There were insufficient observations in the pre-period for adolescent immunizations for HPSM group to generate stable estimates for the DiD analysis or regression models. Instead, we report the proportion of adolescent immunizations.

Figures 73 – 76 and Tables 130 – 133 are withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Well-Child Visits (WCV) 0-15 months (No time variant model to test trend)

There were insufficient observations in the pre-period for well child visits to generate stable estimates for the DiD or regression analysis. Instead, we report the proportion of well child visits.

Figures 77 – 80 and Tables 134 – 136 are withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Well-Child Visits 0- 30 months (No time variant model to test trend)

There were insufficient observations in the pre-period for well child visits to generate stable estimates for the DiD or regression analysis. Instead, we report the proportion of well child visits.

Figures 81 – 84 and Tables 137 – 139 are withheld to satisfy the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy Rule's de-identification standard.

Well-Child Visits Age 3-6 years (No time variant model to test trend)

There were insufficient observations in the pre-period for well child visits to generate stable estimates for the DiD or regression analysis. Instead, we report the proportion of well child visits.

Figure 85. Probability of HPSM WCM WCV 3-6 Years

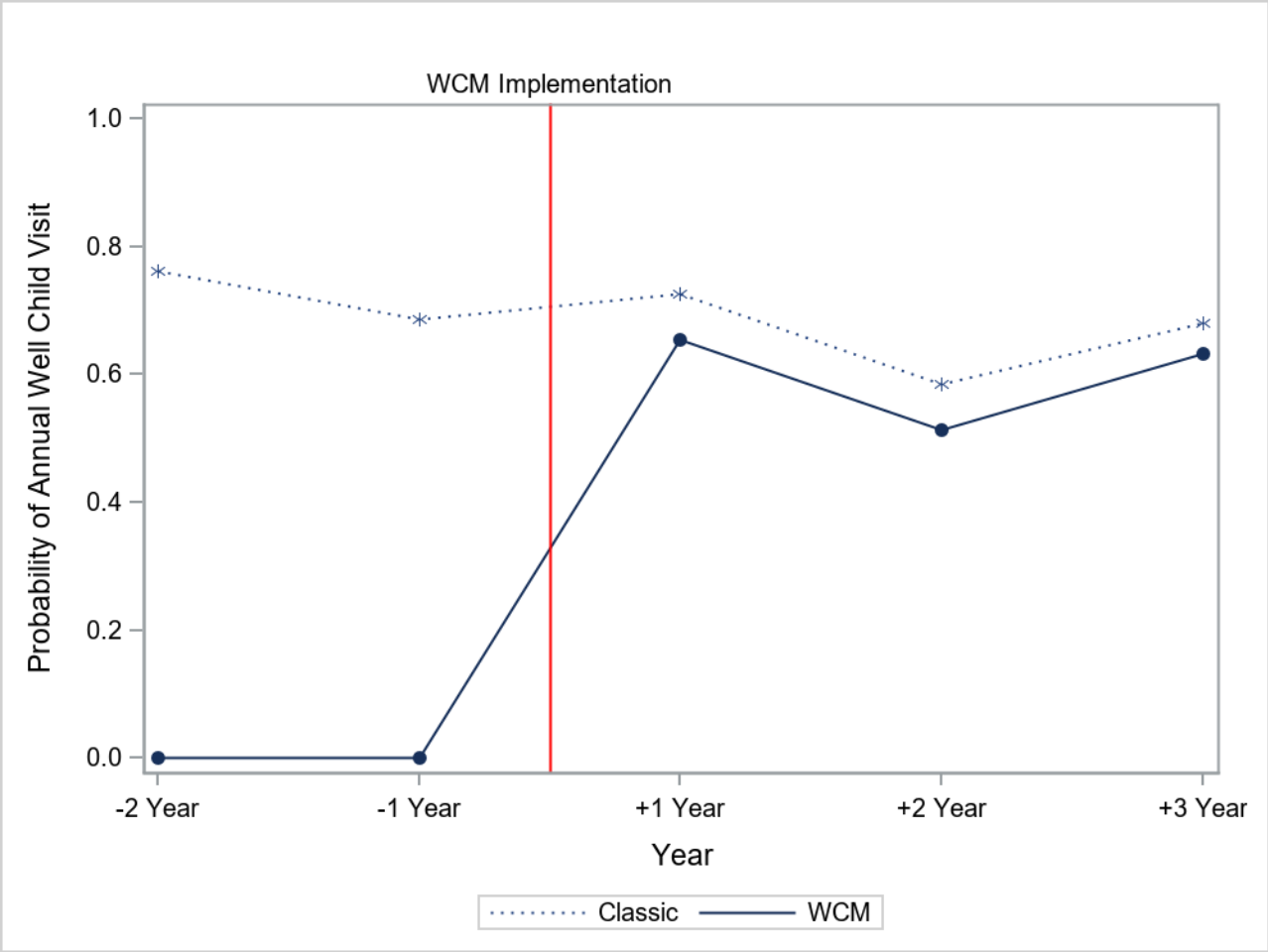


Table 140. Regression Model for HPSM WCM WCV 3-6 Years

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	0.2845	0.1944	0.2845	0.2845	2.14	0.1433
Post*WCM_Cnty	Post	WCM	1	0.0075	0.2423	0.0075	0.0075	0.00	0.9754
Post*WCM_Cnty	Pre	Classic	1	0.5527	0.2033	0.5527	0.5527	7.39	0.0066
Post*WCM_Cnty	Pre	WCM	1	-22.4488	35883.54	-22.4488	-22.4488	0.00	0.9995
cwda	1		1	-0.2249	0.1267	-0.2249	-0.2249	3.15	0.0757
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			1	0.0112	0.0225	0.0112	0.0112	0.25	0.6189
Ethnic4	Black		1	0.1855	0.3711	0.1855	0.1855	0.25	0.6171
Ethnic4	Latinx		1	0.6052	0.1972	0.6052	0.6052	9.42	0.0021
Ethnic4	Other/ Unknown		1	0.2590	0.1989	0.2590	0.2590	1.70	0.1928
Ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
LANG3	Spanish		1	0.3515	0.1483	0.3515	0.3515	5.62	0.0178
LANG3	Other/ Unknown		1	0.3694	0.2296	0.3694	0.3694	2.59	0.1076
LANG3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 86. Probability of Phase I WCV 3-6 Years

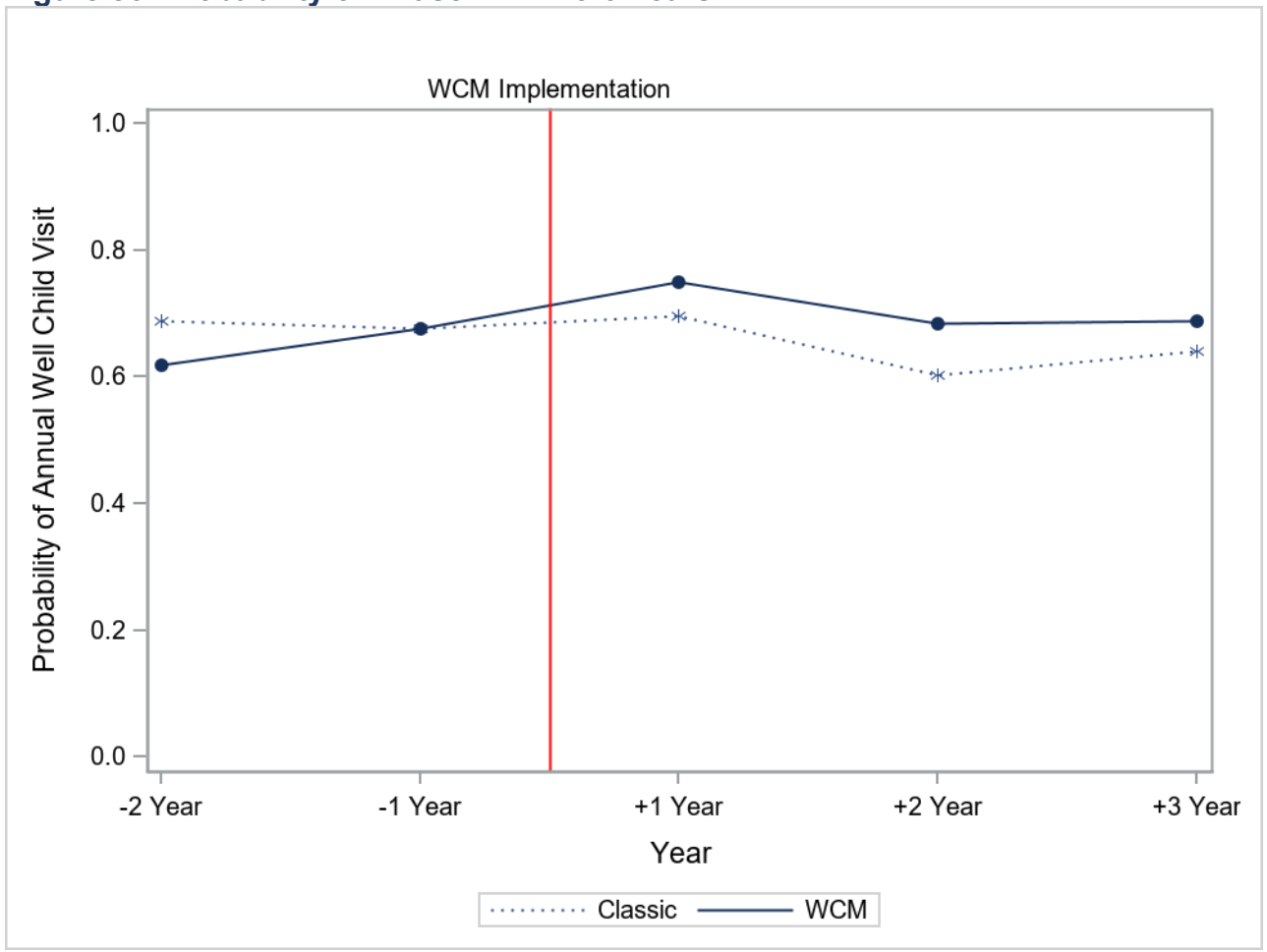


Table 141. Regression Model for Phase I WCV 3-6 Years

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	0.3660	0.0493	0.2694	0.4628	55.05	<.0001
Post*WCM_Cnty	Post	WCM	1	0.5690	0.0485	0.4741	0.6642	137.61	<.0001
Post*WCM_Cnty	Pre	Classic	1	0.4976	0.0533	0.3934	0.6022	87.32	<.0001
Post*WCM_Cnty	Pre	WCM	1	0.2730	0.0506	0.1740	0.3723	29.12	<.0001
cwda	1		1	0.1513	0.0343	0.0841	0.2185	19.46	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			1	0.0463	0.0060	0.0345	0.0580	59.70	<.0001
Ethnic4	Black		1	0.1306	0.1162	-0.0955	0.3603	1.26	0.2610
Ethnic4	Latinx		1	0.1268	0.0422	0.0440	0.2093	9.03	0.0027
Ethnic4	Other/ Unknown		1	0.0857	0.0538	-0.0197	0.1912	2.54	0.1112
Ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
LANG3	Spanish		1	0.6584	0.0374	0.5853	0.7318	310.31	<.0001
LANG3	Other/ Unknown		1	0.4164	0.1527	0.1219	0.7216	7.43	0.0064
LANG3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 87. Probability of Phase II WCV 3-6 Years

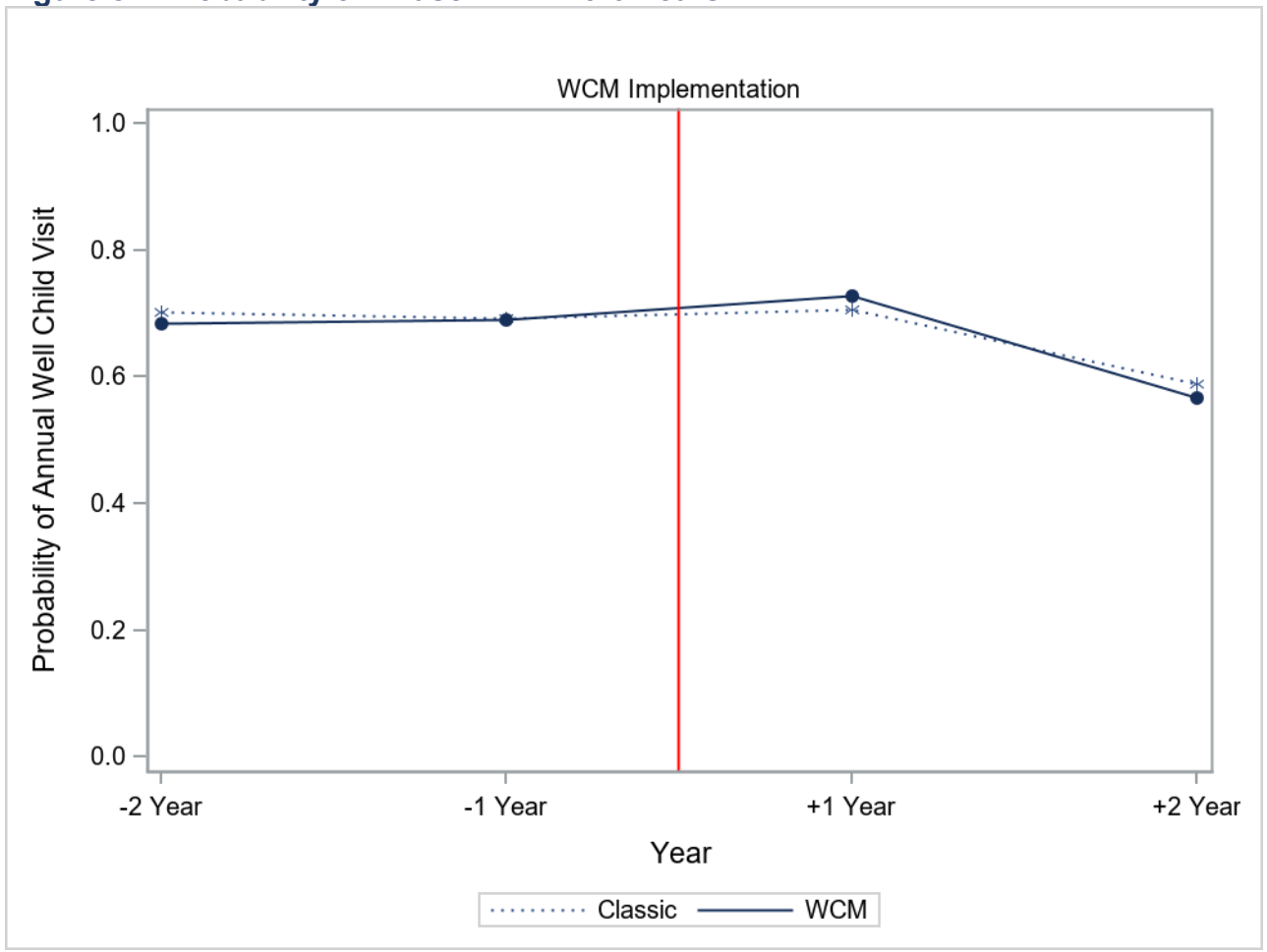


Table 142. Regression Model for Phase II WCV 3-6 Years

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	0.3997	0.0598	0.2828	0.5170	44.75	<.0001
Post*WCM_Cnty	Post	WCM	1	0.4196	0.0569	0.3083	0.5314	54.36	<.0001
Post*WCM_Cnty	Pre	Classic	1	0.6151	0.0603	0.4972	0.7335	104.11	<.0001
Post*WCM_Cnty	Pre	WCM	1	0.5871	0.0565	0.4766	0.6980	108.14	<.0001
cwda	1		1	0.1500	0.0409	0.0699	0.2301	13.46	0.0002
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			1	0.0586	0.0073	0.0442	0.0729	64.19	<.0001
Ethnic4	Black		1	0.0409	0.0845	-0.1241	0.2074	0.23	0.6285
Ethnic4	Latinx		1	0.1950	0.0582	0.0812	0.3092	11.24	0.0008
Ethnic4	Other/ Unknown		1	0.2040	0.0520	0.1021	0.3060	15.38	<.0001
Ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
LANG3	Spanish		1	0.4601	0.0606	0.3416	0.5791	57.67	<.0001
LANG3	Other/ Unknown		1	0.4836	0.1362	0.2215	0.7562	12.60	0.0004
LANG3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	0.0130	0.0399	-0.0651	0.0912	0.11	0.7444
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 88. Probability of Phase III WCV 3-6 Years

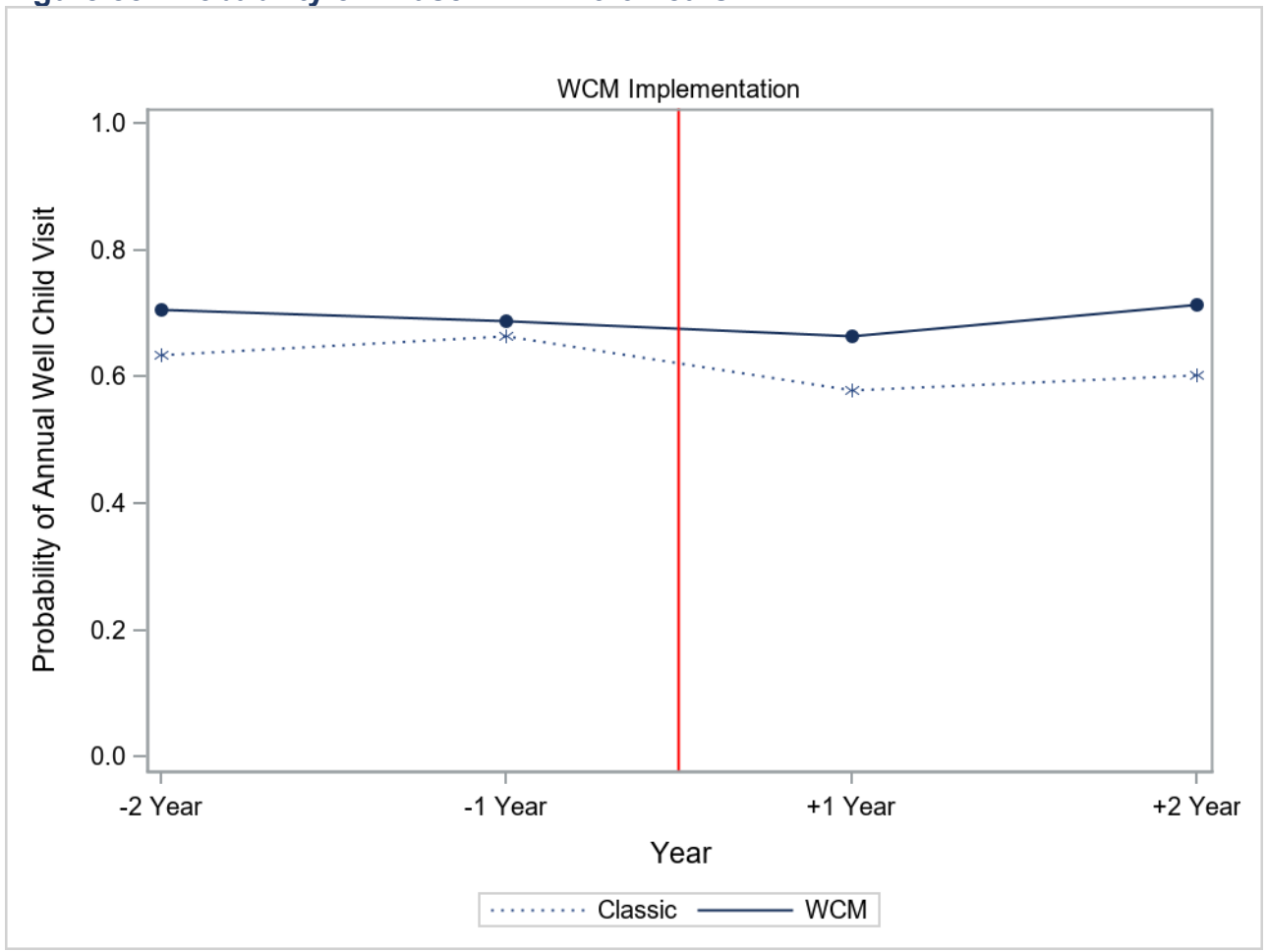


Table 143. Regression Model for Phase III WCV 3-6 Years

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	-0.0256	0.0621	-0.1472	0.0963	0.17	0.6806
Post*WCM_Cnty	Post	WCM	1	0.3749	0.0600	0.2575	0.4927	39.04	<.0001
Post*WCM_Cnty	Pre	Classic	1	0.1823	0.0632	0.0586	0.3065	8.31	0.0039
Post*WCM_Cnty	Pre	WCM	1	0.3778	0.0594	0.2616	0.4944	40.48	<.0001
cwda	1		1	0.3585	0.0348	0.2903	0.4267	106.14	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
CDPS_Log2			1	0.0472	0.0059	0.0357	0.0588	64.32	<.0001
Ethnic4	Black		1	0.0074	0.0902	-0.1693	0.1844	0.01	0.9350
Ethnic4	Latinx		1	0.2997	0.0565	0.1888	0.4103	28.16	<.0001
Ethnic4	Other/ Unknown		1	0.1948	0.0617	0.0739	0.3156	9.98	0.0016
Ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
LANG3	Spanish		1	0.3452	0.0398	0.2674	0.4233	75.34	<.0001
LANG3	Other/ Unknown		1	0.4911	0.0829	0.3298	0.6549	35.09	<.0001
LANG3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Well-Child Visits Age 12-20 years (No time variant model to test trend)

There were insufficient observations in the pre-period for well child visits to generate stable estimates for the DiD analysis. Instead, we report the proportion of well child visits and the regression model for predicting well-child visits.

Figure 89. Probability of HPSM WCM WCV 12-20 Years

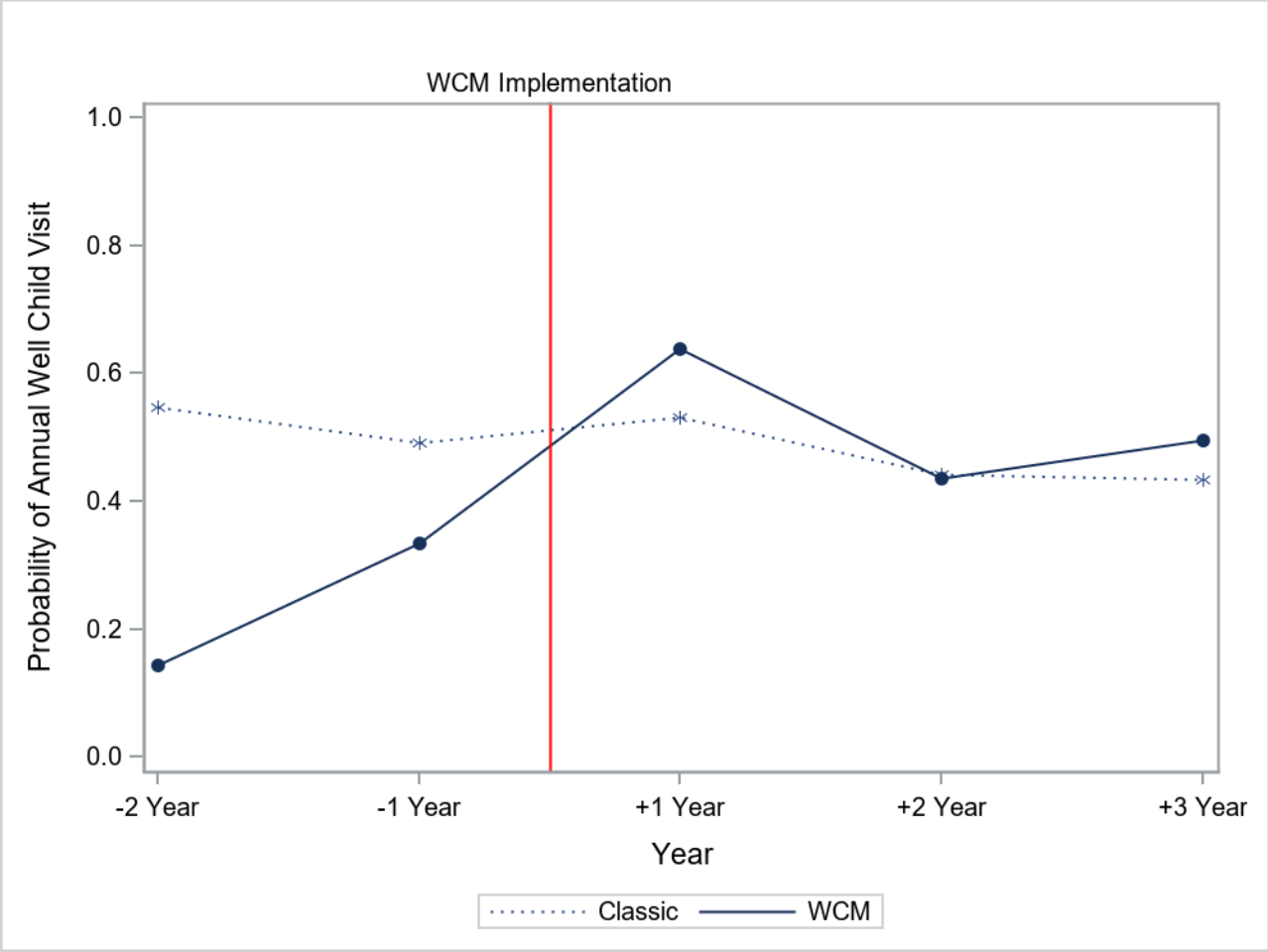


Table 144. Regression Model for HPSM WCM WCV 12-20 Years

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	-0.1002	0.0597	-0.2173	0.0167	2.82	0.0932
Post*WCM_Cnty	Post	WCM	1	0.0648	0.1002	-0.1315	0.2613	0.42	0.5176
Post*WCM_Cnty	Pre	Classic	1	0.0834	0.0660	-0.0460	0.2129	1.59	0.2068
Post*WCM_Cnty	Pre	WCM	1	-1.3045	0.7923	-3.1976	0.0838	2.71	0.0997
CDPS_Log2			1	0.0409	0.0133	0.0148	0.0670	9.39	0.0022
cwda	1		1	0.1177	0.0653	-0.0103	0.2457	3.25	0.0715
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 90. Probability of Phase I WCV 12-20 Years

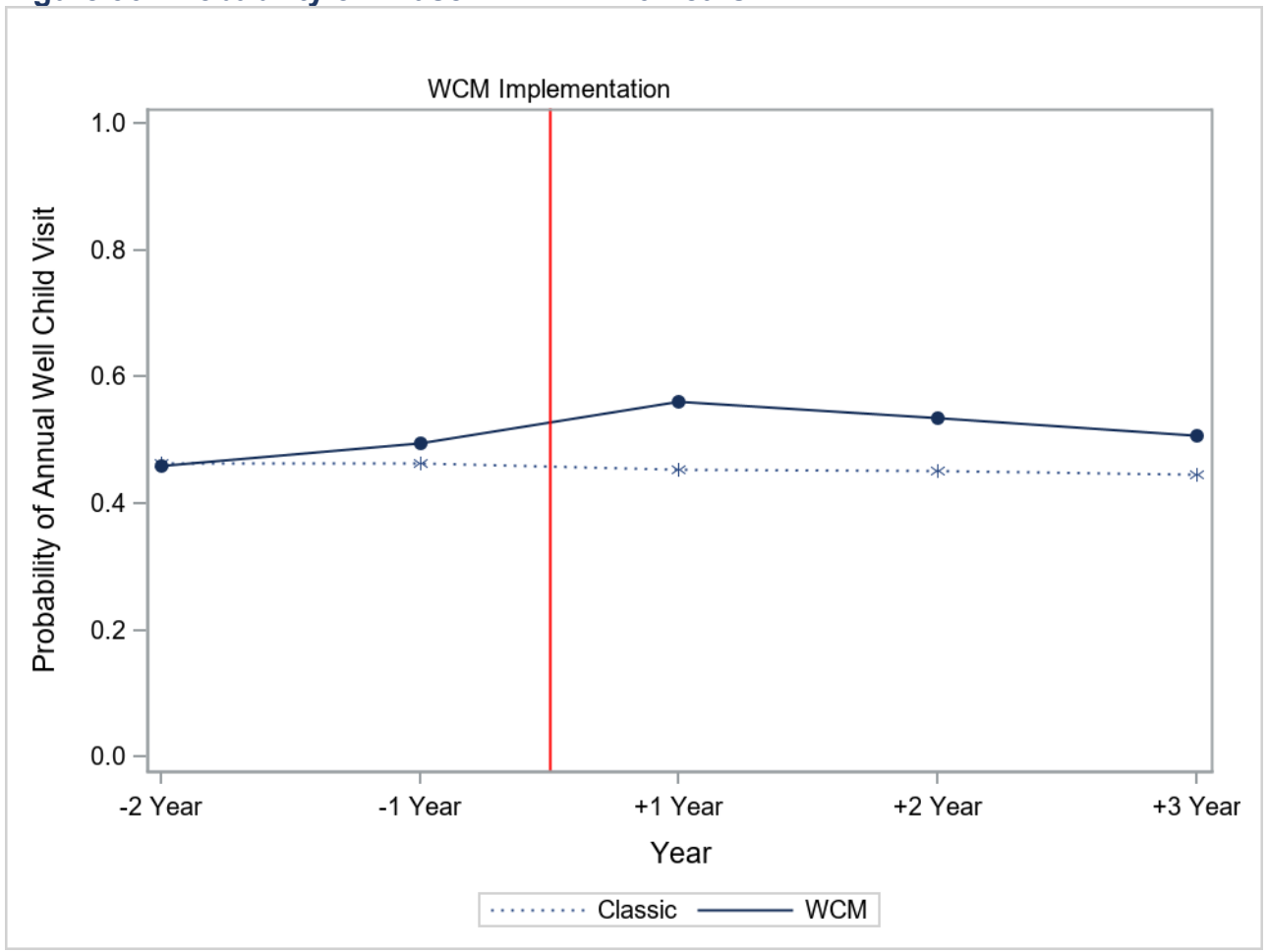


Table 145. Regression Model for Phase I WCV 12-20 Years

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	-0.4789	0.0288	-0.5354	-0.4225	276.63	<.0001
Post*WCM_Cnty	Post	WCM	1	-0.1704	0.0282	-0.2256	-0.1153	36.65	<.0001
Post*WCM_Cnty	Pre	Classic	1	-0.4027	0.0312	-0.4639	-0.3417	166.73	<.0001
Post*WCM_Cnty	Pre	WCM	1	-0.3716	0.0303	-0.4309	-0.3123	150.77	<.0001
CDPS_Log2			1	0.0559	0.0041	0.0479	0.0640	184.54	<.0001
Ethnic4	Black		1	0.1503	0.0600	0.0325	0.2678	6.27	0.0123
Ethnic4	Latinx		1	0.0332	0.0256	-0.0169	0.0833	1.69	0.1942
Ethnic4	Other/ Unknown		1	-0.0092	0.0321	-0.0722	0.0538	0.08	0.7743
Ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
LANG3	Spanish		1	0.4711	0.0209	0.4301	0.5121	507.75	<.0001
LANG3	Other/ Unknown		1	0.3441	0.0715	0.2039	0.4844	23.15	<.0001
LANG3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
cwda	1		1	0.2593	0.0195	0.2211	0.2975	176.81	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	0.1297	0.0186	0.0932	0.1662	48.54	<.0001
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 91. Probability of Phase II WCV 12-20 Years

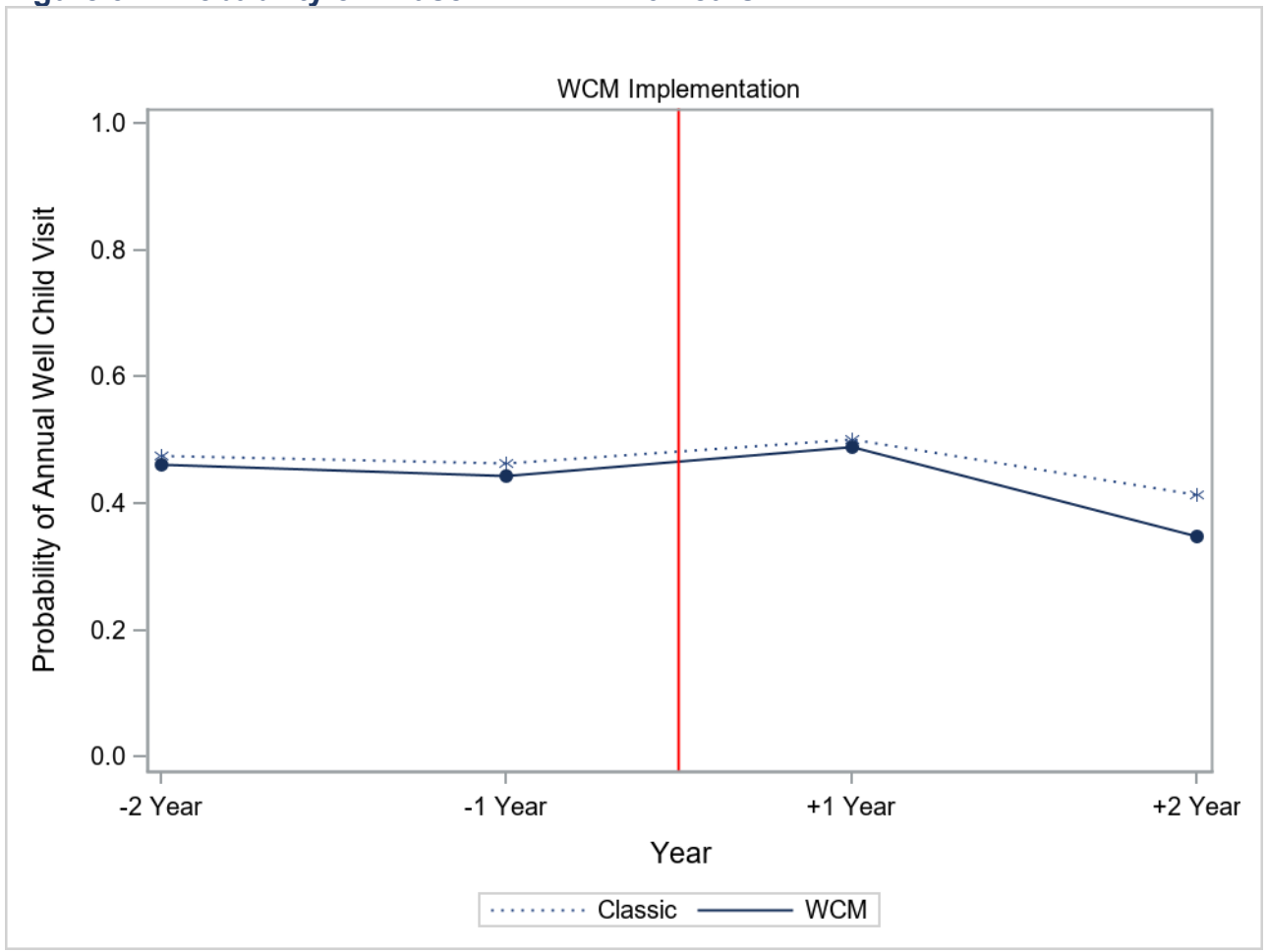


Table 146. Regression Model for Phase II WCV 12-20 Years

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	-0.4479	0.0342	-0.5151	-0.3808	171.02	<.0001
Post*WCM_Cnty	Post	WCM	1	-0.5999	0.0334	-0.6654	-0.5346	323.47	<.0001
Post*WCM_Cnty	Pre	Classic	1	-0.3824	0.0342	-0.4494	-0.3154	125.12	<.0001
Post*WCM_Cnty	Pre	WCM	1	-0.4415	0.0323	-0.5049	-0.3782	186.44	<.0001
CDPS_Log2			1	0.0558	0.0051	0.0458	0.0659	117.99	<.0001
cwda	1		1	0.2267	0.0239	0.1798	0.2735	89.77	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
Ethnic4	Black		1	0.1094	0.0469	0.0174	0.2013	5.44	0.0197
Ethnic4	Latinx		1	0.1707	0.0358	0.1006	0.2409	22.75	<.0001
Ethnic4	Other/ Unknown		1	0.0823	0.0326	0.0183	0.1463	6.36	0.0117
Ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
LANG3	Spanish		1	0.3633	0.0354	0.2940	0.4326	105.57	<.0001
LANG3	Other/ Unknown		1	0.5064	0.0661	0.3771	0.6362	58.74	<.0001
LANG3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	0.1182	0.0233	0.0725	0.1638	25.74	<.0001
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Figure 92. Probability of Phase III WCV 12-20 Years

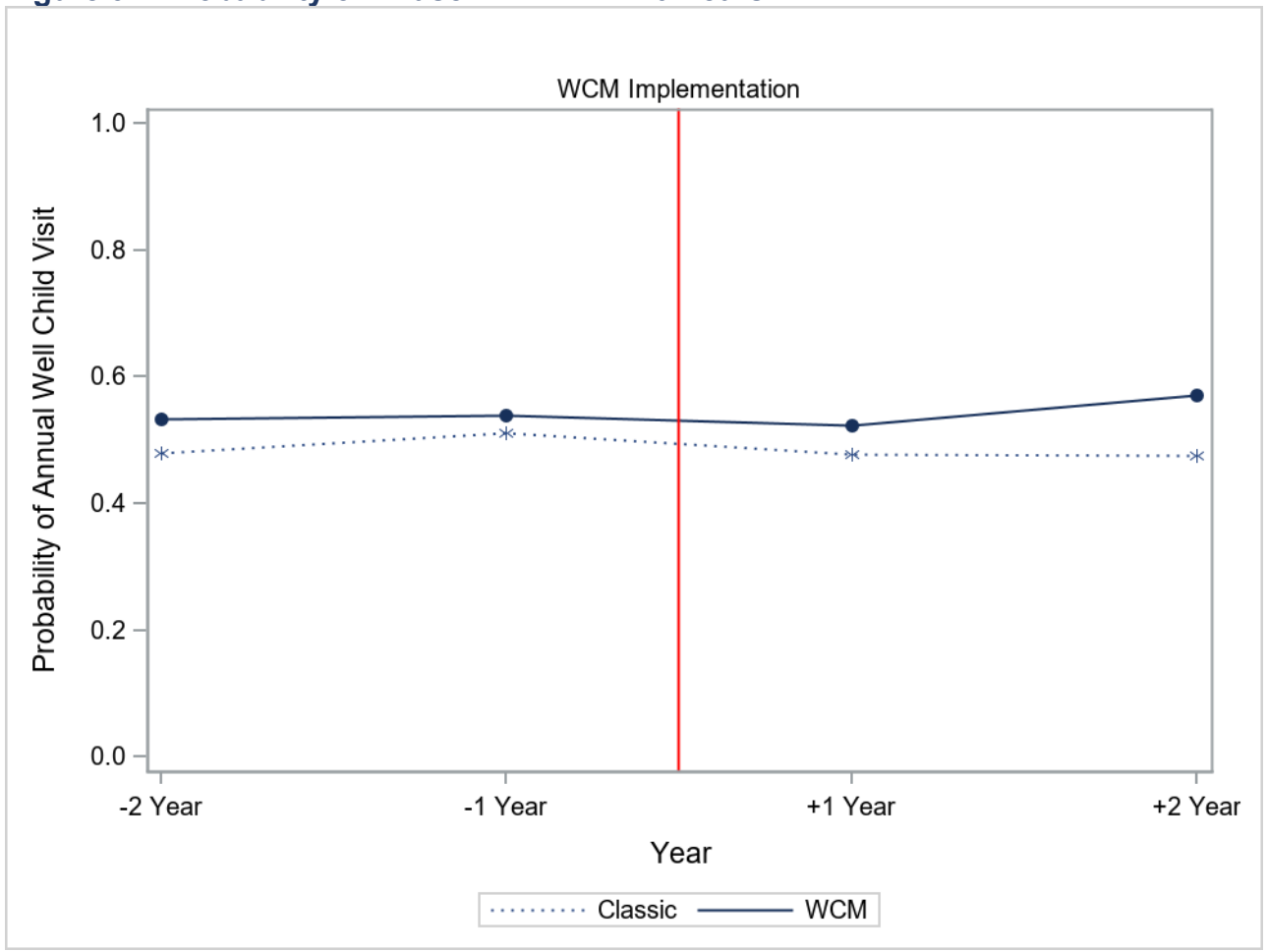


Table 147. Regression Model for Phase III WCV 12-20 Years

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	Post	Classic	1	-0.5983	0.0338	-0.6647	-0.5320	312.53	<.0001
Post*WCM_Cnty	Post	WCM	1	-0.3131	0.0323	-0.3765	-0.2498	93.85	<.0001
Post*WCM_Cnty	Pre	Classic	1	-0.5247	0.0341	-0.5916	-0.4579	236.88	<.0001
Post*WCM_Cnty	Pre	WCM	1	-0.3458	0.0320	-0.4085	-0.2832	116.92	<.0001
CDPS_Log2			1	0.0702	0.0039	0.0626	0.0778	328.53	<.0001
Ethnic4	Black		1	0.1559	0.0488	0.0602	0.2515	10.22	0.0014
Ethnic4	Latinx		1	0.2754	0.0312	0.2143	0.3366	77.84	<.0001
Ethnic4	Other/ Unknown		1	0.2850	0.0334	0.2197	0.3505	72.94	<.0001
Ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
LANG3	Spanish		1	0.3748	0.0212	0.3332	0.4164	311.67	<.0001
LANG3	Other/ Unknown		1	0.5640	0.0438	0.4783	0.6499	166.08	<.0001
LANG3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
cwda	1		1	0.2748	0.0183	0.2389	0.3107	225.18	<.0001
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		1	0.1302	0.0179	0.0950	0.1653	52.68	<.0001
GENDER_CD	M		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			0	1.0000	0.0000	1.0000	1.0000		

Miles traveled to provider (non-time variant)

Miles Traveled to Outpatient Provider (all)

Table 148. HPSM WCM Mean Median Range and Max Travel Distance to Outpatient Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	268	68.9	48.7	89.0	8.0	380.4
Post-WCM	18,673	26.9	25.9	28.0	12.0	464.5
Classic Pre-WCM	30,400	15.6	15.0	16.2	6.3	449.6
Classic Post-WCM	56,960	16.3	15.9	16.7	6.1	465.3

Table 149. Regression Model for HPSM DID Travel Distance to Outpatient Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	22.4997	3.8106	9.9607	35.0388	5.90	<.0001
Post*WCM_Cnty	0	WCM	47.6161	20.9219	-21.2281	116.4603	2.28	0.0229
Post*WCM_Cnty	1	Classic	23.7102	3.5473	12.0377	35.3827	6.68	<.0001
Post*WCM_Cnty	1	WCM	32.2971	5.0625	15.6387	48.9555	6.38	<.0001
cdps_log2			0.5504	0.2386	-0.2346	1.3354	2.31	0.0210
cwda	1		1.1909	1.6507	-4.2408	6.6226	0.72	0.4706
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		4.6861	10.9217	-31.2521	40.6243	0.43	0.6679
Ethnic6	Asian/ PI		-7.6580	3.2721	-18.4248	3.1088	-2.34	0.0193

Ethnic6	Black		-1.5731	4.1495	-15.2273	12.0811	-0.38	0.7046
Ethnic6	Latinx		0.6672	2.8788	-8.8056	10.1399	0.23	0.8167
Ethnic6	Other/ Unknown		2.3053	3.4770	-9.1360	13.7465	0.66	0.5073
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-0.4211	4.4973	-15.2196	14.3773	-0.09	0.9254
Lang4	Spanish		-7.5291	1.3779	-12.0632	-2.9950	-5.46	<.0001
Lang4	Other/ Unknown		-1.4250	5.8898	-20.8056	17.9556	-0.24	0.8088
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		2.7305	1.5825	-2.4768	7.9378	1.73	0.0845
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-6.4883	1.9375	-12.8636	-0.1131	-3.35	0.0008
AgeCat	2-6		-8.7919	3.0216	-18.7346	1.1507	-2.91	0.0036
AgeCat	7-11		-8.9266	2.9169	-18.5249	0.6716	-3.06	0.0022
AgeCat	12-20		-8.6439	2.7349	-17.6432	0.3554	-3.16	0.0016
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 150. Phase I Mean Median Range and Max Travel Distance to Outpatient Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	215,869	42.4	42.1	42.7	29.5	501.1
Post-WCM	342,430	40.9	40.6	41.1	14.3	611.3
Classic Pre-WCM	203,999	52.0	51.6	52.4	17.2	529.8
Classic Post-WCM	327,084	39.4	39.1	39.6	10.2	646.1

Table 151. Regression Model for Phase I DID Outpatient Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	51.5117	1.1711	47.6582	55.3653	43.99	<.0001
Post*WCM_Cnty	0	WCM	42.6795	1.0844	39.1112	46.2478	39.36	<.0001
Post*WCM_Cnty	1	Classic	41.7603	1.1025	38.1326	45.3880	37.88	<.0001
Post*WCM_Cnty	1	WCM	42.8190	1.0876	39.2403	46.3978	39.37	<.0001
cdps_log2			3.2765	0.1348	2.8331	3.7200	24.31	<.0001
cwda	1		-4.7657	0.6391	-6.8686	-2.6627	-7.46	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		-7.5953	4.3679	-21.9679	6.7772	-1.74	0.0820
Ethnic6	Asian/ PI		3.9031	4.5520	-11.0755	18.8817	0.86	0.3912
Ethnic6	Black		4.2073	2.1570	-2.8903	11.3049	1.95	0.0511
Ethnic6	Latinx		2.0675	0.9104	-0.9282	5.0632	2.27	0.0231
Ethnic6	Other/ Unknown		0.5957	1.0837	-2.9701	4.1616	0.55	0.5825
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-17.6250	2.4831	-25.7956	-9.4543	-7.10	<.0001
Lang4	Spanish		-2.1643	0.7154	-4.5182	0.1897	-3.03	0.0025
Lang4	Other/ Unknown		-8.1402	4.5287	-23.0418	6.7615	-1.80	0.0723
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		2.8289	0.6479	0.6970	4.9609	4.37	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-2.6906	0.8085	-5.3509	-0.0303	-3.33	0.0009
AgeCat	2-6		1.1260	1.0661	-2.3820	4.6340	1.06	0.2909
AgeCat	7-11		-2.2739	1.1030	-5.9034	1.3555	-2.06	0.0392
AgeCat	12-20		-0.7362	1.0151	-4.0764	2.6041	-0.73	0.4683

AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 152. Phase II Mean Median Range and Max Travel Distance to Outpatient Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	177,461	57.2	56.6	57.8	20.6	682.1
Post-WCM	173,060	51.8	51.3	52.3	19.2	695.0
Classic Pre-WCM	165,984	31.3	30.9	31.7	12.2	672.5
Classic Post-WCM	173,691	24.5	24.2	24.8	10.4	675.6

Table 153. Regression Model for Phase II DID Outpatient visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	48.7509	1.5033	43.8042	53.6976	32.43	<.0001
Post*WCM_Cnty	0	WCM	71.8788	1.6893	66.3201	77.4375	42.55	<.0001
Post*WCM_Cnty	1	Classic	43.2976	1.4819	38.4214	48.1739	29.22	<.0001
Post*WCM_Cnty	1	WCM	68.3778	1.7346	62.6700	74.0855	39.42	<.0001
cdps_log2			2.0146	0.1699	1.4557	2.5735	11.86	<.0001
cwda	1		-5.4882	0.9235	-8.5271	-2.4494	-5.94	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		28.2933	7.2076	4.5765	52.0101	3.93	<.0001
Ethnic6	Asian/PI		-1.4102	7.5637	-26.2987	23.4783	-0.19	0.8521
Ethnic6	Black		-22.2602	1.4966	-27.1848	-17.3356	-14.87	<.0001
Ethnic6	Latinx		-12.2996	1.3697	-16.8068	-7.7925	-8.98	<.0001
Ethnic6	Other/ Unknown		-8.2947	1.3750	-12.8192	-3.7701	-6.03	<.0001

Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-13.5422	2.2236	-20.8590	-6.2254	-6.09	<.0001
Lang4	Spanish		-8.8196	1.1763	-12.6904	-4.9489	-7.50	<.0001
Lang4	Other/ Unknown		-14.9247	2.9972	-24.7869	-5.0625	-4.98	<.0001
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.3137	0.9063	-2.6687	3.2960	0.35	0.7293
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-6.9579	1.2227	-10.9813	-2.9345	-5.69	<.0001
AgeCat	2-6		-5.7796	1.4731	-10.6268	-0.9324	-3.92	<.0001
AgeCat	7-11		-6.9036	1.6109	-12.2044	-1.6028	-4.29	<.0001
AgeCat	12-20		-1.7843	1.5435	-6.8634	3.2947	-1.16	0.2477
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 154. Phase III Mean Median Range and Max Travel Distance to Outpatient Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	389,563	11.6	11.5	11.7	5.6	597.5
Post-WCM	311,051	11.6	11.5	11.7	5.1	616.2
Classic Pre-WCM	297,057	14.9	14.8	15.0	10.2	579.5
Classic Post-WCM	277,185	14.0	13.9	14.1	9.5	472.0

Table 155. Regression Model for Phase III DID Outpatient visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	21.4744	0.7504	19.0054	23.9435	28.62	<.0001
Post*WCM_Cnty	0	WCM	18.5189	0.7414	16.0793	20.9585	24.98	<.0001
Post*WCM_Cnty	1	Classic	20.6016	0.7335	18.1879	23.0152	28.09	<.0001
Post*WCM_Cnty	1	WCM	18.8814	0.7412	16.4425	21.3204	25.47	<.0001
cdps_log2			0.4512	0.0445	0.3049	0.5975	10.15	<.0001
cwda	1		-2.5182	0.2583	-3.3682	-1.6683	-9.75	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		3.2488	3.1566	-7.1380	13.6356	1.03	0.3034
Ethnic6	Asian/PI		-2.3752	0.8073	-5.0315	0.2812	-2.94	0.0033
Ethnic6	Black		1.1701	0.8420	-1.6006	3.9407	1.39	0.1647
Ethnic6	Latinx		-1.7122	0.5269	-3.4460	0.0215	-3.25	0.0012
Ethnic6	Other/ Unknown		-1.2688	0.4971	-2.9045	0.3669	-2.55	0.0107
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-2.7020	0.5265	-4.4346	-0.9694	-5.13	<.0001
Lang4	Spanish		-1.7128	0.3272	-2.7893	-0.6363	-5.24	<.0001
Lang4	Other/ Unknown		-2.1887	0.6429	-4.3041	-0.0734	-3.40	0.0007
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.0250	0.2537	-0.8100	0.8599	0.10	0.9216
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-2.7564	0.5842	-4.6789	-0.8340	-4.72	<.0001
AgeCat	2-6		-4.1302	0.6683	-6.3294	-1.9311	-6.18	<.0001
AgeCat	7-11		-4.6615	0.6531	-6.8106	-2.5124	-7.14	<.0001
AgeCat	12-20		-2.4680	0.6364	-4.5622	-0.3738	-3.88	0.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 156. HPSM WCM Mean Median Range and Max Travel Distance to Specialist Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	467	72.9	56.7	89.1	8.0	380.6
Post-WCM	11,741	32.0	30.6	33.4	13.2	464.5
Classic Pre-WCM	15,198	19.8	18.8	20.8	8.0	424.1
Classic Post-WCM	27,330	22.1	21.4	22.9	7.7	428.1

Table 157. Regression Model for HPSM WCM DID Specialist Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	24.8362	4.6584	9.5075	40.1649	5.33	<.0001
Post*WCM_Cnty	0	WCM	66.9710	19.7830	1.8744	132.0676	3.39	0.0007
Post*WCM_Cnty	1	Classic	27.3261	4.3395	13.0467	41.6055	6.30	<.0001
Post*WCM_Cnty	1	WCM	36.4464	5.8728	17.1220	55.7709	6.21	<.0001
cdps_log2			0.3702	0.2806	-0.5529	1.2934	1.32	0.1869
cwda	1		2.3037	2.1043	-4.6206	9.2280	1.09	0.2736
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		16.8258	19.5168	-47.3948	81.0463	0.86	0.3886
Ethnic6	Asian/PI		-10.9331	4.5134	-25.7846	3.9183	-2.42	0.0154
Ethnic6	Black		-3.2349	5.2719	-20.5823	14.1125	-0.61	0.5395
Ethnic6	Latinx		0.3552	4.0000	-12.8070	13.5173	0.09	0.9292
Ethnic6	Other/ Unknown		1.1881	4.5659	-13.8362	16.2125	0.26	0.7947
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang4	Asian Language		2.2192	5.8077	-16.8912	21.3297	0.38	0.7024
Lang4	Spanish		-8.7239	1.9913	-15.2762	-2.1717	-4.38	<.0001
Lang4	Other/ Unknown		-2.3031	6.7692	-24.5773	19.9711	-0.34	0.7337
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		2.6251	2.0963	-4.2728	9.5229	1.25	0.2105
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-5.9020	1.9367	-12.2746	0.4707	-3.05	0.0023
AgeCat	2-6		-7.1688	3.2513	-17.8674	3.5298	-2.20	0.0275
AgeCat	7-11		-7.5509	3.0245	-17.5030	2.4012	-2.50	0.0125
AgeCat	12-20		-7.3340	2.9081	-16.9032	2.2353	-2.52	0.0117
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 158. Phase I Mean Median Range and Max Travel Distance to Specialist Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	127,265	56.9	56.5	57.2	51.1	501.1
Post-WCM	169,228	56.1	55.8	56.5	45.7	563.6
Classic Pre-WCM	111,553	62.7	62.2	63.2	37.5	529.8
Classic Post-WCM	163,245	55.1	54.7	55.5	30.3	462.8

Table 159. Regression Model for Phase I DID Specialist Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	60.3262	1.3195	55.9843	64.6682	45.72	<.0001
Post*WCM_Cnty	0	WCM	55.9842	1.2702	51.8045	60.1639	44.07	<.0001
Post*WCM_Cnty	1	Classic	56.3364	1.2913	52.0874	60.5854	43.63	<.0001
Post*WCM_Cnty	1	WCM	56.7479	1.3155	52.4194	61.0764	43.14	<.0001
cdps_log2			2.5181	0.1488	2.0285	3.0077	16.92	<.0001
cwda	1		-0.6851	0.8057	-3.3364	1.9661	-0.85	0.3951
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		-9.2691	5.4820	-27.3076	8.7695	-1.69	0.0909
Ethnic6	Asian/PI		-5.7941	5.5826	-24.1637	12.5755	-1.04	0.2993
Ethnic6	Black		0.3424	2.6998	-8.5414	9.2262	0.13	0.8991
Ethnic6	Latinx		0.3794	1.1293	-3.3366	4.0953	0.34	0.7369
Ethnic6	Other/ Unknown		-1.2611	1.3619	-5.7425	3.2202	-0.93	0.3544
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-24.8567	2.7207	-33.8091	-15.9043	-9.14	<.0001
Lang4	Spanish		-0.6079	0.8930	-3.5463	2.3305	-0.68	0.4960
Lang4	Other/ Unknown		-12.9373	4.5544	-27.9237	2.0491	-2.84	0.0045
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		3.0632	0.7941	0.4503	5.6760	3.86	0.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-2.1176	0.7967	-4.7392	0.5040	-2.66	0.0079
AgeCat	2-6		0.6674	1.1193	-3.0157	4.3506	0.60	0.5510
AgeCat	7-11		-2.2586	1.2046	-6.2223	1.7051	-1.88	0.0608
AgeCat	12-20		-3.8492	1.1243	-7.5487	-0.1497	-3.42	0.0006
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 160. Phase II Mean Median Range and Max Travel Distance to Specialist Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	111,440	70.9	70.2	71.6	38.8	682.1
Post-WCM	103,987	67.5	66.8	68.2	39.0	678.6
Classic Pre-WCM	104,998	36.8	36.3	37.3	15.7	672.5
Classic Post-WCM	103,812	31.0	30.6	31.4	15.2	616.3

Table 161. Regression Model for Phase II DID Specialist Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	53.8696	1.7936	47.9676	59.7716	30.03	<.0001
Post*WCM_Cnty	0	WCM	84.1806	1.9436	77.7852	90.5761	43.31	<.0001
Post*WCM_Cnty	1	Classic	49.9133	1.7665	44.1007	55.7260	28.26	<.0001
Post*WCM_Cnty	1	WCM	82.5746	2.0368	75.8725	89.2767	40.54	<.0001
cdps_log2			1.8406	0.2038	1.1699	2.5112	9.03	<.0001
cwda	1		-1.9221	1.1315	-5.6455	1.8012	-1.70	0.0894
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		36.9131	8.5910	8.6440	65.1821	4.30	<.0001
Ethnic6	Asian/PI		1.8081	10.1379	-31.5509	35.1671	0.18	0.8584
Ethnic6	Black		-27.4259	1.7791	-33.2801	-21.5717	-15.42	<.0001
Ethnic6	Latinx		-15.1393	1.6382	-20.5298	-9.7488	-9.24	<.0001
Ethnic6	Other/ Unknown		-11.4068	1.6484	-16.8310	-5.9827	-6.92	<.0001
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang4	Asian Language		-13.7435	2.9902	-23.5829	-3.9041	-4.60	<.0001
Lang4	Spanish		-7.9355	1.5373	-12.9940	-2.8769	-5.16	<.0001
Lang4	Other/ Unknown		-22.4879	3.2694	-33.2459	-11.7299	-6.88	<.0001
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.6122	1.1188	-3.0691	4.2936	0.55	0.5842
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-6.2063	1.3501	-10.6488	-1.7638	-4.60	<.0001
AgeCat	2-6		-4.6417	1.7070	-10.2585	0.9751	-2.72	0.0065
AgeCat	7-11		-6.0765	1.8835	-12.2740	0.1211	-3.23	0.0013
AgeCat	12-20		-4.2181	1.7633	-10.0203	1.5841	-2.39	0.0167
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 162. Phase III Mean Median Range and Max Travel Distance to Specialist Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	218,202	13.2	13.0	13.4	6.3	593.9
Post-WCM	170,537	13.0	12.8	13.2	5.9	596.2
Classic Pre-WCM	181,556	15.9	15.8	16.1	11.4	578.7
Classic Post-WCM	174,290	15.3	15.2	15.5	11.1	472.0

Table 163. Regression Model for Phase III DID Specialist Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	19.5283	0.5759	17.6331	21.4234	33.91	<.0001
Post*WCM_Cnty	0	WCM	16.5230	0.5842	14.6007	18.4452	28.28	<.0001
Post*WCM_Cnty	1	Classic	19.0056	0.5963	17.0435	20.9676	31.87	<.0001
Post*WCM_Cnty	1	WCM	17.0461	0.5730	15.1605	18.9316	29.75	<.0001
Ethnic6	Alaskan Natv. or Am. Indian		1.9635	3.6633	-10.0907	14.0177	0.54	0.5920
Ethnic6	Asian/PI		-3.9867	1.1503	-7.7718	-0.2016	-3.47	0.0005
Ethnic6	Black		0.1072	1.1125	-3.5536	3.7680	0.10	0.9232
Ethnic6	Latinx		-4.4884	0.5765	-6.3856	-2.5913	-7.79	<.0001
Ethnic6	Other/Unknown		-3.0719	0.6307	-5.1472	-0.9967	-4.87	<.0001
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.

Table 164. HPSM WCM Mean Median Range and Max Travel Distance to CCS Paneled Provider Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	214	85.0	60.5	109.4	12.6	380.4
Post-WCM	14,596	30.7	29.4	32.0	12.4	464.5
Classic Pre-WCM	18,704	18.1	17.2	19.0	7.0	424.1
Classic Post-WCM	41,266	18.3	17.8	18.9	6.2	431.8

Table 165. Regression Model for HPSM WCM DID CCS Paneled Provider Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	24.4968	4.2933	10.3697	38.6240	5.71	<.0001
Post*WCM_Cnty	0	WCM	49.3795	24.2746	-30.4966	129.2556	2.03	0.0419
Post*WCM_Cnty	1	Classic	25.3680	4.0218	12.1341	38.6018	6.31	<.0001
Post*WCM_Cnty	1	WCM	35.9644	5.6877	17.2490	54.6799	6.32	<.0001
cdps_log2			0.7113	0.2274	-0.0369	1.4594	3.13	0.0018
cwda	1		0.4609	1.9289	-5.8861	6.8079	0.24	0.8111
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		10.9845	14.8612	-37.9165	59.8855	0.74	0.4598
Ethnic6	Asian/PI		-9.9425	4.2800	-24.0259	4.1409	-2.32	0.0202
Ethnic6	Black		-2.1231	5.4786	-20.1504	15.9042	-0.39	0.6984
Ethnic6	Latinx		-0.2744	3.5969	-12.1101	11.5614	-0.08	0.9392
Ethnic6	Other/Unknown		1.5374	4.2175	-12.3406	15.4153	0.36	0.7155
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang4	Asian Language		-0.1202	4.8256	-15.9989	15.7584	-0.02	0.9801
Lang4	Spanish		-7.7064	1.6030	-12.9812	-2.4316	-4.81	<.0001
Lang4	Other/Unknown		-1.4476	7.4730	-26.0378	23.1426	-0.19	0.8464
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		3.8681	1.9129	-2.4264	10.1626	2.02	0.0432
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-6.3091	1.7263	-11.9896	-0.6286	-3.65	0.0003
AgeCat	2-6		-8.4925	2.9500	-18.1995	1.2145	-2.88	0.0040
AgeCat	7-11		-8.2088	3.0011	-18.0840	1.6663	-2.74	0.0062
AgeCat	12-20		-7.8552	2.8631	-17.2764	1.5660	-2.74	0.0061
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 166. Phase I Mean Median Range and Max Travel Distance to CCS Paneled Provider Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	154,803	49.1	48.7	49.4	40.9	501.1
Post-WCM	235,027	47.9	47.6	48.2	28.6	611.3
Classic Pre-WCM	133,875	62.6	62.2	63.1	29.5	529.8
Classic Post-WCM	224,575	45.4	45.0	45.7	13.5	646.1

Table 167. Regression Model for Phase I DID CCS Paneled Provider Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	60.4432	1.3032	56.1549	64.7316	46.38	<.0001
Post*WCM_Cnty	0	WCM	48.8739	1.2302	44.8258	52.9221	39.73	<.0001
Post*WCM_Cnty	1	Classic	48.9393	1.2429	44.8496	53.0291	39.38	<.0001
Post*WCM_Cnty	1	WCM	49.9407	1.2401	45.8602	54.0212	40.27	<.0001
cdps_log2			3.0495	0.1487	2.5601	3.5390	20.50	<.0001
cwda	1		-5.6043	0.7686	-8.1333	-3.0753	-7.29	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		-8.3403	5.5163	-26.4918	9.8111	-1.51	0.1305
Ethnic6	Asian/PI		0.0897	4.4604	-14.5875	14.7669	0.02	0.9840
Ethnic6	Black		3.4643	2.5823	-5.0329	11.9614	1.34	0.1797
Ethnic6	Latinx		1.8429	1.0940	-1.7568	5.4426	1.68	0.0921
Ethnic6	Other/Unknown		-0.3456	1.2957	-4.6091	3.9180	-0.27	0.7897
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-22.3712	2.9307	-32.0148	-12.7276	-7.63	<.0001
Lang4	Spanish		-3.2797	0.8754	-6.1601	-0.3993	-3.75	0.0002
Lang4	Other/Unknown		-12.4974	4.6027	-27.6426	2.6478	-2.72	0.0066
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		3.2477	0.7852	0.6639	5.8315	4.14	<.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-4.8932	0.7960	-7.5126	-2.2738	-6.15	<.0001
AgeCat	2-6		-0.2958	1.1370	-4.0371	3.4455	-0.26	0.7947
AgeCat	7-11		-1.5844	1.2075	-5.5577	2.3888	-1.31	0.1895
AgeCat	12-20		0.8130	1.1341	-2.9188	4.5447	0.72	0.4735
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 168. Phase II Mean Median Range and Max Travel Distance to CCS Paneled Provider Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	94,603	76.0	75.2	76.9	36.9	682.1
Post-WCM	107,649	63.3	62.6	64.0	29.5	676.1
Classic Pre-WCM	106,780	35.9	35.3	36.4	14.0	672.5
Classic Post-WCM	117,365	26.3	26.0	26.7	11.7	638.1

Table 169. Regression Model for Phase II DID CCS Paneled Provider Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	58.0050	1.8217	52.0108	63.9993	31.84	<.0001
Post*WCM_Cnty	0	WCM	92.9998	2.0756	86.1701	99.8295	44.81	<.0001
Post*WCM_Cnty	1	Classic	52.3280	1.7919	46.4318	58.2242	29.20	<.0001
Post*WCM_Cnty	1	WCM	86.4168	2.0883	79.5452	93.2883	41.38	<.0001
cdps_log2			1.7707	0.1935	1.1340	2.4074	9.15	<.0001
cwda	1		-7.3711	1.1660	-11.2077	-3.5344	-6.32	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		35.3089	8.7001	6.6810	63.9368	4.06	<.0001
Ethnic6	Asian/PI		-3.4573	9.0220	-33.1445	26.2299	-0.38	0.7016
Ethnic6	Black		-29.4777	1.8828	-35.6730	-23.2824	-15.66	<.0001
Ethnic6	Latinx		-17.2529	1.7651	-23.0611	-11.4446	-9.77	<.0001
Ethnic6	Other/Unknown		-11.8896	1.7628	-17.6903	-6.0889	-6.74	<.0001
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-16.3290	2.7320	-25.3188	-7.3391	-5.98	<.0001
Lang4	Spanish		-11.4236	1.4658	-16.2468	-6.6004	-7.79	<.0001

Lang4	Other/Unknown		-19.9685	4.2258	-33.8736	-6.0634	-4.73	<.0001
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.8667	1.1522	-2.9247	4.6582	0.75	0.4519
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-7.6703	1.2756	-11.8677	-3.4730	-6.01	<.0001
AgeCat	2-6		-8.6696	1.6192	-13.9976	-3.3416	-5.35	<.0001
AgeCat	7-11		-8.1244	1.8177	-14.1057	-2.1432	-4.47	<.0001
AgeCat	12-20		-2.4273	1.8076	-8.3753	3.5207	-1.34	0.1793
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 170. Phase III Mean Median Range and Max Travel Distance to CCS Paneled Provider Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	217,880	13.7	13.5	13.9	6.3	593.9
Post-WCM	98,066	13.8	13.5	14.1	4.2	596.2
Classic Pre-WCM	198,416	16.0	15.9	16.1	11.1	578.7
Classic Post-WCM	190,741	14.7	14.5	14.8	10.4	472.0

Table 171. Regression Model for Phase III DID CCS Paneled Provider Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	24.6478	1.0484	21.1981	28.0975	23.51	<.0001
Post*WCM_Cnty	0	WCM	22.3756	1.0605	18.8860	25.8651	21.10	<.0001
Post*WCM_Cnty	1	Classic	23.4848	1.0299	20.0961	26.8736	22.80	<.0001
Post*WCM_Cnty	1	WCM	23.9654	1.0165	20.6205	27.3104	23.58	<.0001
cdps_log2			0.5399	0.0543	0.3612	0.7185	9.94	<.0001
cwda	1		-3.1267	0.3464	-4.2665	-1.9869	-9.03	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		5.2014	4.5358	-9.7238	20.1266	1.15	0.2515
Ethnic6	Asian/PI		-3.6886	1.1417	-7.4455	0.0683	-3.23	0.0012
Ethnic6	Black		1.1713	1.1404	-2.5811	4.9238	1.03	0.3044
Ethnic6	Latinx		-1.8616	0.7076	-4.1899	0.4667	-2.63	0.0085
Ethnic6	Other/Unknown		-1.3868	0.7438	-3.8342	1.0606	-1.86	0.0622
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-2.2776	0.8706	-5.1423	0.5871	-2.62	0.0089
Lang4	Spanish		-2.0852	0.3657	-3.2887	-0.8818	-5.70	<.0001
Lang4	Other/Unknown		-2.9201	0.8823	-5.8235	-0.0168	-3.31	0.0009
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		-0.0949	0.3280	-1.1742	0.9844	-0.29	0.7723
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-4.8016	0.7294	-7.2018	-2.4013	-6.58	<.0001
AgeCat	2-6		-5.6935	0.8849	-8.6054	-2.7817	-6.43	<.0001
AgeCat	7-11		-6.5185	0.8636	-9.3604	-3.6767	-7.55	<.0001
AgeCat	12-20		-4.4107	0.8462	-7.1951	-1.6264	-5.21	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 172. HPSM WCM Mean Median Range and Max Travel Distance to CCS Specialty Care Center Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	21	10.9	5.1	16.7	5.9	28.4
Post-WCM	4,971	12.0	11.2	12.9	9.4	459.2
Classic Pre-WCM	9,129	11.9	11.4	12.5	6.5	384.3
Classic Post-WCM	15,541	12.1	11.8	12.5	6.9	428.1

Table 173. Regression Model for HPSM WCM DID CCS Specialty Care Center Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	11.4066	1.6306	6.0409	16.7723	7.00	<.0001
Post*WCM_Cnty	0	WCM	10.7444	2.6350	2.0738	19.4150	4.08	<.0001
Post*WCM_Cnty	1	Classic	11.8743	1.6079	6.5836	17.1651	7.39	<.0001
Post*WCM_Cnty	1	WCM	13.5682	2.2677	6.1062	21.0303	5.98	<.0001
cdps_log2			0.1668	0.1061	-0.1824	0.5161	1.57	0.1159
cwda	1		0.4814	0.9121	-2.5200	3.4829	0.53	0.5976
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		-5.0610	2.9534	-14.7792	4.6571	-1.71	0.0866
Ethnic6	Asian/PI		-2.4566	2.1991	-9.6928	4.7796	-1.12	0.2640
Ethnic6	Black		-3.0576	2.3363	-10.7454	4.6301	-1.31	0.1906
Ethnic6	Latinx		1.7847	2.1603	-5.3239	8.8933	0.83	0.4087
Ethnic6	Other/Unknown		-1.1553	1.8993	-7.4051	5.0944	-0.61	0.5430
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang4	Asian Language		-0.1766	1.6161	-5.4944	5.1412	-0.11	0.9130
Lang4	Spanish		-4.9747	1.3859	-9.5350	-0.4145	-3.59	0.0003
Lang4	Other/Unknown		2.0563	2.0951	-4.8378	8.9503	0.98	0.3264
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.4113	0.9693	-2.7782	3.6009	0.42	0.6713
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.0933	0.2711	-0.7986	0.9853	0.34	0.7306
AgeCat	2-6		1.4674	0.5107	-0.2129	3.1477	2.87	0.0041
AgeCat	7-11		1.7999	0.7062	-0.5238	4.1236	2.55	0.0108
AgeCat	12-20		1.4813	0.9171	-1.5365	4.4991	1.62	0.1063
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 174. Phase I Mean Median Range and Max Travel Distance to CCS Specialty Care Center Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	40,695	52.5	52.0	53.1	48.7	399.7
Post-WCM	64,722	58.4	58.0	58.9	54.7	438.6
Classic Pre-WCM	57,254	30.7	30.3	31.1	11.3	494.4
Classic Post-WCM	88,484	34.1	33.8	34.5	16.2	428.1

Table 175. Regression Model for Phase I DID CCS Specialty Care Center Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	32.6214	0.9064	29.6388	35.6040	35.99	<.0001
Post*WCM_Cnty	0	WCM	51.4330	0.9113	48.4342	54.4317	56.44	<.0001
Post*WCM_Cnty	1	Classic	34.2642	0.9223	31.2295	37.2989	37.15	<.0001
Post*WCM_Cnty	1	WCM	54.0311	0.9176	51.0118	57.0504	58.88	<.0001
cdps_log2			0.6258	0.0829	0.3529	0.8988	7.55	<.0001
cwda	1		2.3027	0.5800	0.3943	4.2112	3.97	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		-9.3137	4.3988	-23.7880	5.1606	-2.12	0.0342
Ethnic6	Asian/PI		-10.2444	2.5851	-18.7508	-1.7379	-3.96	<.0001
Ethnic6	Black		-2.8478	2.1383	-9.8838	4.1882	-1.33	0.1829
Ethnic6	Latinx		-2.0126	0.8148	-4.6937	0.6684	-2.47	0.0135
Ethnic6	Other/Unknown		-2.5915	0.9705	-5.7849	0.6019	-2.67	0.0076
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-16.1978	1.7139	-21.8376	-10.5581	-9.45	<.0001
Lang4	Spanish		-2.3445	0.5864	-4.2743	-0.4148	-4.00	<.0001
Lang4	Other/Unknown		-11.1265	3.5507	-22.8103	0.5572	-3.13	0.0017
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.7376	0.5431	-1.0494	2.5245	1.36	0.1744
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.6937	0.4937	-0.9309	2.3182	1.41	0.1600
AgeCat	2-6		4.0586	0.6127	2.0423	6.0749	6.62	<.0001
AgeCat	7-11		4.3174	0.6882	2.0530	6.5819	6.27	<.0001
AgeCat	12-20		2.0663	0.6800	-0.1713	4.3039	3.04	0.0024
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 176. Phase II Mean Median Range and Max Travel Distance to CCS Specialty Care Center Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	30,176	61.4	60.2	62.5	31.4	681.4
Post-WCM	25,809	65.3	64.0	66.6	32.5	630.2
Classic Pre-WCM	45,928	22.8	22.4	23.2	13.0	500.8
Classic Post-WCM	46,575	24.7	24.3	25.1	13.7	487.5

Table 177. Regression Model for Phase II DID CCS Specialty Care Center Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	40.2938	1.2859	36.0627	44.5249	31.34	<.0001
Post*WCM_Cnty	0	WCM	77.2190	1.5220	72.2107	82.2273	50.73	<.0001
Post*WCM_Cnty	1	Classic	40.9430	1.3064	36.6442	45.2417	31.34	<.0001
Post*WCM_Cnty	1	WCM	80.1148	1.5875	74.8911	85.3385	50.47	<.0001
cdps_log2			0.0232	0.1448	-0.4532	0.4995	0.16	0.8729
cwda	1		6.5140	0.8987	3.5569	9.4711	7.25	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		38.0538	7.6390	12.9176	63.1900	4.98	<.0001
Ethnic6	Asian/PI		-14.9133	3.2543	-25.6216	-4.2050	-4.58	<.0001
Ethnic6	Black		-36.1521	1.3017	-40.4353	-31.8689	-27.77	<.0001
Ethnic6	Latinx		-21.1573	1.4172	-25.8204	-16.4941	-14.93	<.0001
Ethnic6	Other/Unknown		-19.1173	1.3570	-23.5826	-14.6520	-14.09	<.0001
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-14.8546	1.6484	-20.2787	-9.4305	-9.01	<.0001

Lang4	Spanish		-8.3734	1.1332	-12.1021	-4.6446	-7.39	<.0001
Lang4	Other/Unknown		-22.5436	1.9190	-28.8580	-16.2292	-11.75	<.0001
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1066	0.8643	-2.7375	2.9506	0.12	0.9019
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		0.5202	0.7395	-1.9130	2.9534	0.70	0.4818
AgeCat	2-6		1.2782	0.9692	-1.9110	4.4674	1.32	0.1872
AgeCat	7-11		1.7531	1.0798	-1.7998	5.3061	1.62	0.1045
AgeCat	12-20		1.1645	1.0673	-2.3476	4.6766	1.09	0.2753
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 178. Phase III Mean Median Range and Max Travel Distance to CCS Specialty Care Center Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	116,294	9.1	8.9	9.2	6.0	423.2
Post-WCM	77,324	9.1	9.0	9.3	6.6	525.2
Classic Pre-WCM	86,280	13.0	12.9	13.1	10.2	560.7
Classic Post-WCM	80,854	13.6	13.5	13.8	10.6	456.5

Table 179. Regression Model for Phase III DID CCS Specialty Care Center Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	16.3969	0.5190	14.6892	18.1046	31.60	<.0001
Post*WCM_Cnty	0	WCM	12.6101	0.4748	11.0476	14.1726	26.56	<.0001
Post*WCM_Cnty	1	Classic	16.8824	0.5238	15.1587	18.6061	32.23	<.0001
Post*WCM_Cnty	1	WCM	12.5493	0.4738	10.9901	14.1084	26.49	<.0001
cdps_log2			0.1383	0.0331	0.0294	0.2471	4.18	<.0001
cwda	1		0.6115	0.1951	-0.0306	1.2536	3.13	0.0017
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		2.5984	5.0333	-13.9639	19.1607	0.52	0.6057
Ethnic6	Asian/PI		-2.3273	0.8797	-5.2219	0.5674	-2.65	0.0082
Ethnic6	Black		-0.9748	0.6591	-3.1437	1.1941	-1.48	0.1392
Ethnic6	Latinx		-2.8480	0.3389	-3.9631	-1.7328	-8.40	<.0001
Ethnic6	Other/Unknown		-1.9715	0.3818	-3.2279	-0.7152	-5.16	<.0001
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-1.6773	0.3883	-2.9551	-0.3994	-4.32	<.0001
Lang4	Spanish		-1.4487	0.2593	-2.3020	-0.5954	-5.59	<.0001
Lang4	Other/Unknown		-3.1815	0.6658	-5.3723	-0.9906	-4.78	<.0001
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.0305	0.2095	-0.6590	0.7199	0.15	0.8844
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-0.6816	0.3228	-1.7439	0.3807	-2.11	0.0348
AgeCat	2-6		-0.7240	0.4145	-2.0878	0.6397	-1.75	0.0806
AgeCat	7-11		-0.5656	0.3744	-1.7977	0.6664	-1.51	0.1309
AgeCat	12-20		-0.2643	0.3766	-1.5034	0.9748	-0.70	0.4828
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 180. HPSM WCM Mean Median Range and Max Travel Distance to Primary Care Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	104	35.2	11.7	58.7	4.6	380.4
Post-WCM	7,222	19.3	17.9	20.7	7.7	461.9
Classic Pre-WCM	10,696	12.5	11.7	13.4	4.7	449.6
Classic Post-WCM	23,319	11.8	11.3	12.3	4.8	465.3

Table 181. Regression Model for HPSM WCM DID Primary Care Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	17.0733	3.3729	5.9746	28.1720	5.06	<.0001
Post*WCM_Cnty	0	WCM	34.8847	14.5212	-12.8976	82.6669	2.40	0.0163
Post*WCM_Cnty	1	Classic	16.4854	2.9830	6.6698	26.3010	5.53	<.0001
Post*WCM_Cnty	1	WCM	23.3254	4.0330	10.0547	36.5960	5.78	<.0001
cdps_log2			0.4359	0.2121	-0.2621	1.1339	2.05	0.0399
cwda	1		0.5842	1.2471	-3.5195	4.6879	0.47	0.6395
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		-9.5896	2.8095	-18.8342	-0.3449	-3.41	0.0006
Ethnic6	Asian/PI		-6.3246	3.5588	-18.0349	5.3857	-1.78	0.0755
Ethnic6	Black		-2.4289	3.7656	-14.8198	9.9621	-0.65	0.5189
Ethnic6	Latinx		-1.3208	2.4626	-9.4241	6.7826	-0.54	0.5917
Ethnic6	Other/Unknown		0.1609	3.2446	-10.5155	10.8372	0.05	0.9605
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.

Lang4	Asian Language		-4.5665	2.3827	-12.4069	3.2739	-1.92	0.0553
Lang4	Spanish		-5.0129	0.9544	-8.1534	-1.8723	-5.25	<.0001
Lang4	Other/Unknown		-1.7975	4.3516	-16.1167	12.5216	-0.41	0.6796
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		2.8893	1.3965	-1.7058	7.4844	2.07	0.0385
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		-3.4202	1.6717	-8.9209	2.0806	-2.05	0.0408
AgeCat	2-6		-4.7306	2.0538	-11.4885	2.0274	-2.30	0.0213
AgeCat	7-11		-2.8111	2.9220	-12.4260	6.8038	-0.96	0.3360
AgeCat	12-20		-3.8160	2.0598	-10.5939	2.9620	-1.85	0.0639
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 182. Phase I Mean Median Range and Max Travel Distance to Primary Care Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	94,686	24.0	23.6	24.4	3.6	499.7
Post-WCM	172,616	25.0	24.7	25.4	3.1	456.9
Classic Pre-WCM	86,077	44.9	44.3	45.5	8.1	529.8
Classic Post-WCM	152,065	26.4	26.1	26.7	6.3	462.8

Table 183. Regression Model for Phase I DID Primary Care Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	37.6416	1.1340	33.9102	41.3730	33.19	<.0001
Post*WCM_Cnty	0	WCM	19.0924	1.0271	15.7127	22.4721	18.59	<.0001
Post*WCM_Cnty	1	Classic	23.0415	1.0697	19.5217	26.5613	21.54	<.0001
Post*WCM_Cnty	1	WCM	22.0379	1.0226	18.6729	25.4029	21.55	<.0001
cdps_log2			2.0662	0.1150	1.6879	2.4444	17.97	<.0001
cwda	1		-4.2261	0.6012	-6.2044	-2.2478	-7.03	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		-3.1040	4.4315	-17.6859	11.4779	-0.70	0.4837
Ethnic6	Asian/PI		12.1647	4.3207	-2.0527	26.3821	2.82	0.0049
Ethnic6	Black		9.7203	1.9166	3.4137	16.0270	5.07	<.0001
Ethnic6	Latinx		4.0854	0.8628	1.2462	6.9246	4.73	<.0001
Ethnic6	Other/Unknown		2.5404	1.0003	-0.7513	5.8321	2.54	0.0111
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-11.1729	2.9147	-20.7637	-1.5820	-3.83	0.0001
Lang4	Spanish		-4.2091	0.6343	-6.2962	-2.1219	-6.64	<.0001
Lang4	Other/Unknown		-4.7802	4.3166	-18.9840	9.4236	-1.11	0.2681
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		2.3665	0.6201	0.3261	4.4069	3.82	0.0001
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		3.8506	0.7128	1.5052	6.1961	5.40	<.0001
AgeCat	2-6		7.0982	0.9667	3.9171	10.2792	7.34	<.0001
AgeCat	7-11		3.3281	1.0065	0.0162	6.6399	3.31	0.0009
AgeCat	12-20		4.5906	0.8902	1.6612	7.5199	5.16	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 184. Phase II Mean Median Range and Max Travel Distance to Primary Care Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	61,191	35.7	34.8	36.7	4.9	681.7
Post-WCM	62,184	24.2	23.4	25.0	3.4	695.0
Classic Pre-WCM	57,580	21.6	21.0	22.2	6.9	623.9
Classic Post-WCM	66,766	14.5	14.1	14.9	5.5	675.6

Table 185. Regression Model for Phase II DID Primary Care Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	27.5607	1.3286	23.1889	31.9325	20.74	<.0001
Post*WCM_Cnty	0	WCM	40.7646	1.6360	35.3813	46.1479	24.92	<.0001
Post*WCM_Cnty	1	Classic	22.8439	1.3161	18.5133	27.1744	17.36	<.0001
Post*WCM_Cnty	1	WCM	33.0367	1.5942	27.7908	38.2825	20.72	<.0001
cdps_log2			0.9785	0.1435	0.5063	1.4507	6.82	<.0001
cwda	1		-4.5776	0.8966	-7.5279	-1.6272	-5.11	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		9.0043	5.5538	-9.2706	27.2792	1.62	0.1050
Ethnic6	Asian/PI		-5.0997	2.9837	-14.9175	4.7182	-1.71	0.0874
Ethnic6	Black		-12.6931	1.5616	-17.8316	-7.5547	-8.13	<.0001
Ethnic6	Latinx		-7.2076	1.4665	-12.0331	-2.3821	-4.91	<.0001
Ethnic6	Other/Unknown		-3.4275	1.4574	-8.2232	1.3682	-2.35	0.0187
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-9.9747	1.5512	-15.0789	-4.8704	-6.43	<.0001
Lang4	Spanish		-7.0667	1.0151	-10.4069	-3.7265	-6.96	<.0001

Lang4	Other/Unknown		-4.7456	2.5120	-13.0113	3.5202	-1.89	0.0589
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		-0.0714	0.9170	-3.0887	2.9458	-0.08	0.9379
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		2.7637	0.9776	-0.4530	5.9804	2.83	0.0047
AgeCat	2-6		1.2179	1.0941	-2.3824	4.8181	1.11	0.2657
AgeCat	7-11		0.9359	1.1760	-2.9338	4.8057	0.80	0.4261
AgeCat	12-20		6.6315	1.3139	2.3082	10.9549	5.05	<.0001
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Table 186. Phase III Mean Median Range and Max Travel Distance to Primary Care Visits

		Miles Traveled				
Study Group	Nbr. Visits	Average	Lower Bound	Upper Bound	Median	Maximum
Pre-WCM	131,607	9.5	9.4	9.7	4.5	597.5
Post-WCM	109,178	9.8	9.5	10.0	3.7	616.2
Classic Pre-WCM	115,594	13.0	12.8	13.2	7.8	579.5
Classic Post-WCM	105,648	11.5	11.3	11.6	6.4	456.5

Table 187. Regression Model for Phase III DID Primary Care Visits

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	99.9% Confidence Limits		Z	Pr > |Z|
Intercept			0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	14.1942	0.6499	12.0558	16.3326	21.84	<.0001
Post*WCM_Cnty	0	WCM	11.2186	0.6780	8.9878	13.4494	16.55	<.0001
Post*WCM_Cnty	1	Classic	12.7144	0.6461	10.5886	14.8403	19.68	<.0001
Post*WCM_Cnty	1	WCM	11.9295	0.7004	9.6248	14.2341	17.03	<.0001
cdps_log2			0.3112	0.0606	0.1119	0.5105	5.14	<.0001
cwda	1		-2.3639	0.3343	-3.4641	-1.2638	-7.07	<.0001
cwda	0		0.0000	0.0000	0.0000	0.0000	.	.
Ethnic6	Alaskan Natv. or Am. Indian		5.7308	4.9077	-10.4182	21.8798	1.17	0.2429
Ethnic6	Asian/PI		-0.6482	0.9673	-3.8311	2.5348	-0.67	0.5028
Ethnic6	Black		3.3442	0.9704	0.1510	6.5373	3.45	0.0006
Ethnic6	Latinx		0.2477	0.7227	-2.1304	2.6258	0.34	0.7318
Ethnic6	Other/Unknown		0.1090	0.5538	-1.7132	1.9312	0.20	0.8440
Ethnic6	White		0.0000	0.0000	0.0000	0.0000	.	.
Lang4	Asian Language		-3.4215	0.5255	-5.1506	-1.6923	-6.51	<.0001
Lang4	Spanish		-1.5973	0.4563	-3.0989	-0.0958	-3.50	0.0005
Lang4	Other/Unknown		-0.3030	0.7667	-2.8257	2.2197	-0.40	0.6927
Lang4	English		0.0000	0.0000	0.0000	0.0000	.	.
GENDER_CD	F		0.1557	0.3364	-0.9513	1.2628	0.46	0.6434
GENDER_CD	M		0.0000	0.0000	0.0000	0.0000	.	.
AgeCat	1 year		1.8219	0.6547	-0.3324	3.9763	2.78	0.0054
AgeCat	2-6		0.2621	0.5028	-1.3925	1.9167	0.52	0.6022
AgeCat	7-11		-0.7006	0.5193	-2.4096	1.0083	-1.35	0.1773
AgeCat	12-20		1.6384	0.4961	0.0061	3.2707	3.30	0.0010
AgeCat	<12 Mo.		0.0000	0.0000	0.0000	0.0000	.	.

Transition to Adult Care Outcomes

Due to lack of sufficient observations, regression analysis was not performed in the HPSM-WCM group

Primary Care Visits Among Persons Discharged from CCS After Age 21

Phase I Independent variable associations to Primary Care Visits: Regression analysis shows that higher illness severity is significantly associated with having lower primary care visits among persons discharged from CCS after age 21, after adjusting for CDPS, disability, race and language.

Table 188. Regression Model for Phase I Adult Primary Care Visits

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	-0.6976	0.4786	-1.6361	0.2409	2.12	0.1450
Post*WCM_Cnty	0	WCM	1	-0.8187	0.4742	-1.7484	0.1111	2.98	0.0843
Post*WCM_Cnty	1	Classic	1	-1.1687	0.4633	-2.0772	-0.2602	6.36	0.0117
Post*WCM_Cnty	1	WCM	1	-0.3430	0.4577	-1.2404	0.5543	0.56	0.4535
CDPS_Log2			1	-0.3436	0.0827	-0.5057	-0.1816	17.28	<.0001
cwda	1		1	0.5708	0.3368	-0.0895	1.2312	2.87	0.0901
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-1.1861	0.9617	-3.0717	0.6994	1.52	0.2174
ethnic4	Latinx		1	-0.3653	0.4254	-1.1994	0.4688	0.74	0.3905
ethnic4	Other/Unknown		1	0.0505	0.5046	-0.9389	1.0399	0.01	0.9203
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	-0.0917	0.3773	-0.8315	0.6481	0.06	0.8081
lang3	Other/Unknown		1	-0.8698	1.0264	-2.8823	1.1427	0.72	0.3968
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	7.9043	0.1105	7.6927	8.1259		

Phase II Independent variable associations to Primary Care Visits: Regression analysis did not show any significant association of the covariates with having lower primary care visits among persons discharged from CCS after age 21, after adjusting for CDPS, disability, race, and language.

Table 189. Regression Model for Phase II Adult Primary Care Visits

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	0.0440	0.3303	-0.6037	0.6918	0.02	0.8940
Post*WCM_Cnty	0	WCM	1	0.4776	0.3039	-0.1185	1.0738	2.47	0.1161
Post*WCM_Cnty	1	Classic	1	-0.2492	0.2574	-0.7540	0.2556	0.94	0.3329
Post*WCM_Cnty	1	WCM	1	-0.3330	0.2436	-0.8107	0.1448	1.87	0.1717
CDPS_Log2			1	-0.0833	0.0534	-0.1881	0.0214	2.43	0.1187
cwda	1		1	-0.2063	0.2148	-0.6275	0.2150	0.92	0.3369
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	0.2557	0.4058	-0.5402	1.0516	0.40	0.5286
ethnic4	Latinx		1	-0.1721	0.2934	-0.7476	0.4034	0.34	0.5575
ethnic4	Other/Unknown		1	0.0093	0.2719	-0.5239	0.5426	0.00	0.9726
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	0.5667	0.3340	-0.0883	1.2216	2.88	0.0897
lang3	Other/Unknown		1	0.4070	0.6004	-0.7705	1.5845	0.46	0.4978
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	3.9177	0.0717	3.7813	4.0625		

Phase III Independent variable associations to Primary Care Visits: Regression analysis shows that higher illness severity is significantly associated with having higher primary care visits among person discharged from CCS after age 21, after adjusting for CDPS, disability, race and language.

Table 190. Regression Model for Phase III Adult Primary Care Visits

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	0.0532	0.4511	-0.8313	0.9377	0.01	0.9061
Post*WCM_Cnty	0	WCM	1	0.4603	0.4219	-0.3671	1.2876	1.19	0.2754
Post*WCM_Cnty	1	Classic	1	0.8327	0.4253	-0.0012	1.6666	3.83	0.0502
Post*WCM_Cnty	1	WCM	1	-0.0327	0.3871	-0.7916	0.7263	0.01	0.9328
CDPS_Log2			1	0.1169	0.0554	0.0083	0.2255	4.45	0.0348
cwda	1		1	-0.0370	0.2383	-0.5042	0.4303	0.02	0.8767
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-0.1675	0.6149	-1.3731	1.0382	0.07	0.7853
ethnic4	Latinx		1	0.4280	0.3969	-0.3502	1.2062	1.16	0.2809
ethnic4	Other/Unknown		1	0.7630	0.4187	-0.0580	1.5840	3.32	0.0684
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	-0.0774	0.2756	-0.6178	0.4629	0.08	0.7788
lang3	Other/Unknown		1	-0.3413	0.5639	-1.4469	0.7642	0.37	0.5449
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	5.7937	0.0814	5.6378	5.9570		

Phase I Independent variable associations to Specialist Visits: Regression analysis shows that higher illness severity and speaking Spanish language as compared to English is significantly associated with having lower specialist visits among person discharged from CCS after age 21 while having a disability is associated with higher visits, after adjusting for CDPS, disability, race and language.

Table 191. Regression Model for Phase I Specialist Visits

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	-0.2191	0.3694	-0.9434	0.5051	0.35	0.5530
Post*WCM_Cnty	0	WCM	1	-0.2887	0.3659	-1.0061	0.4288	0.62	0.4302
Post*WCM_Cnty	1	Classic	1	-0.6016	0.3576	-1.3026	0.0995	2.83	0.0925
Post*WCM_Cnty	1	WCM	1	-0.5387	0.3532	-1.2312	0.1538	2.33	0.1272
CDPS_Log2			1	-0.1379	0.0638	-0.2630	-0.0129	4.68	0.0306
cwda	1		1	0.8815	0.2599	0.3719	1.3911	11.50	0.0007
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	0.1339	0.7421	-1.3212	1.5890	0.03	0.8568
ethnic4	Latinx		1	0.0483	0.3283	-0.5954	0.6920	0.02	0.8829
ethnic4	Other/Unknown		1	-0.0391	0.3894	-0.8026	0.7245	0.01	0.9201
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	-0.6917	0.2912	-1.2626	-0.1208	5.64	0.0175
lang3	Other/Unknown		1	1.0715	0.7921	-0.4816	2.6246	1.83	0.1761
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	6.0999	0.0852	5.9366	6.2709		

Phase II Independent variable associations to Specialist Visits: Regression analysis shows that higher illness severity is significantly associated with having lower specialist visits among person discharged from CCS after age 21, after adjusting for CDPS, disability, race and language.

Table 192. Regression Model for Phase II Specialist Visits

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	-1.0083	0.8207	-2.6180	0.6013	1.51	0.2192
Post*WCM_Cnty	0	WCM	1	-1.3748	0.7553	-2.8562	0.1066	3.31	0.0687
Post*WCM_Cnty	1	Classic	1	-0.8167	0.6396	-2.0711	0.4378	1.63	0.2017
Post*WCM_Cnty	1	WCM	1	-0.7581	0.6054	-1.9453	0.4292	1.57	0.2105
CDPS_Log2			1	-0.4764	0.1327	-0.7367	-0.2161	12.88	0.0003
cwda	1		1	1.0510	0.5338	0.0041	2.0978	3.88	0.0490
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-0.8249	1.0084	-2.8027	1.1529	0.67	0.4134
ethnic4	Latinx		1	-1.2385	0.7292	-2.6687	0.1916	2.88	0.0894
ethnic4	Other/Unknown		1	-1.0730	0.6757	-2.3983	0.2523	2.52	0.1123
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	-0.1293	0.8299	-1.7570	1.4983	0.02	0.8762
lang3	Other/Unknown		1	1.0584	1.4920	-1.8678	3.9846	0.50	0.4781
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	9.7358	0.1781	9.3968	10.0956		

Phase III Independent variable associations to Specialist Visits: Regression analysis shows that higher illness severity is significantly associated with having lower specialist visits among person discharged from CCS after age 21, after adjusting for CDPS, disability, race and language.

Table 193. Regression Model for Phase III Specialist Visits

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	-1.2732	0.8058	-2.8532	0.3067	2.50	0.1141
Post*WCM_Cnty	0	WCM	1	-2.2085	0.7537	-3.6864	-0.7307	8.59	0.0034
Post*WCM_Cnty	1	Classic	1	-1.4203	0.7597	-2.9099	0.0693	3.50	0.0616
Post*WCM_Cnty	1	WCM	1	-1.3476	0.6915	-2.7033	0.0081	3.80	0.0513
CDPS_Log2			1	-0.6020	0.0989	-0.7960	-0.4080	37.01	<.0001
cwda	1		1	0.6219	0.4257	-0.2127	1.4566	2.13	0.1440
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-0.6546	1.0984	-2.8083	1.4990	0.36	0.5512
ethnic4	Latinx		1	-0.5205	0.7089	-1.9106	0.8695	0.54	0.4628
ethnic4	Other/Unknown		1	-0.6556	0.7480	-2.1221	0.8110	0.77	0.3808
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	-0.1867	0.4923	-1.1519	0.7786	0.14	0.7046
lang3	Other/Unknown		1	-1.2620	1.0072	-3.2369	0.7129	1.57	0.2102
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	10.3494	0.1454	10.0708	10.6410		

Phase I Independent variable associations to ED Visits: Regression analysis shows that having a disability is significantly associated with having higher ED visits among person discharged from CCS after age 21, after adjusting for CDPS, disability, race and language.

Table 194. Regression Model for Phase I ED Visits

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	-0.2330	0.1369	-0.5015	0.0355	2.90	0.0888
Post*WCM_Cnty	0	WCM	1	-0.1561	0.1357	-0.4221	0.1099	1.32	0.2499
Post*WCM_Cnty	1	Classic	1	-0.0707	0.1326	-0.3306	0.1893	0.28	0.5940
Post*WCM_Cnty	1	WCM	1	-0.1021	0.1309	-0.3589	0.1546	0.61	0.4354
CDPS_Log2			1	-0.0438	0.0236	-0.0901	0.0026	3.42	0.0643
cwda	1		1	0.2668	0.0964	0.0779	0.4558	7.67	0.0056
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	0.1182	0.2751	-0.4212	0.6577	0.18	0.6675
ethnic4	Latinx		1	-0.0053	0.1217	-0.2440	0.2333	0.00	0.9652
ethnic4	Other/Unknown		1	0.0028	0.1444	-0.2802	0.2859	0.00	0.9843
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	-0.1189	0.1079	-0.3306	0.0927	1.21	0.2706
lang3	Other/Unknown		1	0.1336	0.2937	-0.4422	0.7094	0.21	0.6491
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	2.2614	0.0316	2.2009	2.3248		

Phase II Independent variable associations to ED Visits: Regression analysis shows that higher illness severity is significantly associated with having lower ED visits among person discharged from CCS after age 21, after adjusting for CDPS, disability, race and language.

Table 195. Regression Model for Phase II ED Visits

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	-0.0374	0.2299	-0.4883	0.4134	0.03	0.8706
Post*WCM_Cnty	0	WCM	1	0.0363	0.2115	-0.3786	0.4511	0.03	0.8639
Post*WCM_Cnty	1	Classic	1	0.1269	0.1791	-0.2245	0.4782	0.50	0.4789
Post*WCM_Cnty	1	WCM	1	-0.0357	0.1695	-0.3682	0.2968	0.04	0.8331
CDPS_Log2			1	-0.1093	0.0372	-0.1822	-0.0364	8.64	0.0033
cwda	1		1	0.1106	0.1495	-0.1826	0.4038	0.55	0.4593
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-0.3502	0.2824	-0.9041	0.2038	1.54	0.2151
ethnic4	Latinx		1	-0.1178	0.2042	-0.5184	0.2827	0.33	0.5640
ethnic4	Other/Unknown		1	0.0819	0.1893	-0.2892	0.4531	0.19	0.6650
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	-0.0259	0.2324	-0.4817	0.4300	0.01	0.9113
lang3	Other/Unknown		1	-0.2414	0.4179	-1.0609	0.5781	0.33	0.5635
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	2.7267	0.0499	2.6318	2.8275		

Phase III Independent variable associations to Primary Care Visits: Regression analysis shows that higher illness severity is significantly associated with having lower primary care visits among person discharged from CCS after age 21, after adjusting for CDPS, disability, race, and language.

Table 196. Regression Model for Phase III ED Visits

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	-0.2797	0.2013	-0.6744	0.1150	1.93	0.1647
Post*WCM_Cnty	0	WCM	1	-0.1424	0.1883	-0.5115	0.2268	0.57	0.4496
Post*WCM_Cnty	1	Classic	1	0.0948	0.1898	-0.2773	0.4669	0.25	0.6173
Post*WCM_Cnty	1	WCM	1	0.1780	0.1727	-0.1607	0.5167	1.06	0.3028
CDPS_Log2			1	-0.0597	0.0247	-0.1082	-0.0113	5.84	0.0157
cwda	1		1	0.1615	0.1063	-0.0470	0.3700	2.31	0.1288
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	0.3190	0.2744	-0.2190	0.8570	1.35	0.2450
ethnic4	Latinx		1	-0.2085	0.1771	-0.5558	0.1387	1.39	0.2390
ethnic4	Other/Unknown		1	0.0696	0.1869	-0.2968	0.4360	0.14	0.7095
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	0.0952	0.1230	-0.1459	0.3364	0.60	0.4387
lang3	Other/Unknown		1	-0.4264	0.2516	-0.9198	0.0669	2.87	0.0901
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	2.5854	0.0363	2.5158	2.6582		

Phase I Independent variable associations to Hospitalizations: Regression analysis shows that having a disability is significantly associated with having higher hospitalizations among person discharged from CCS after age 21, after adjusting for disability, race, and language.

Table 197. Regression Model for Phase I Hospitalizations

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	-0.1863	0.1128	-0.4076	0.0350	2.73	0.0988
Post*WCM_Cnty	0	WCM	1	-0.1230	0.1108	-0.3402	0.0943	1.23	0.2671
Post*WCM_Cnty	1	Classic	1	-0.3292	0.1082	-0.5413	-0.1172	9.27	0.0023
Post*WCM_Cnty	1	WCM	1	0.0132	0.1066	-0.1958	0.2222	0.02	0.9012
cwda	1		1	0.1926	0.0790	0.0378	0.3474	5.95	0.0147
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-0.0015	0.2329	-0.4582	0.4553	0.00	0.9950
ethnic4	Latinx		1	0.0706	0.1031	-0.1315	0.2726	0.47	0.4933
ethnic4	Other/Unknown		1	0.1188	0.1222	-0.1208	0.3584	0.95	0.3310
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	-0.1283	0.0914	-0.3075	0.0509	1.97	0.1603
lang3	Other/Unknown		1	-0.0080	0.2481	-0.4945	0.4785	0.00	0.9743
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	1.9148	0.0268	1.8635	1.9685		

Phase II Independent variable associations to Hospitalizations: Regression analysis shows that Other/Unknown race as compared to White is significantly associated with having lower hospitalizations among person discharged from CCS after age 21 while speaking Other/Unknown language as compared to English is significantly associated with having higher hospitalizations, after adjusting for disability, race, and language.

Table 198. Regression Model for Phase II Hospitalizations

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	0.0560	0.1106	-0.1610	0.2729	0.26	0.6130
Post*WCM_Cnty	0	WCM	1	0.0572	0.1022	-0.1433	0.2577	0.31	0.5758
Post*WCM_Cnty	1	Classic	1	-0.0397	0.0855	-0.2074	0.1281	0.22	0.6429
Post*WCM_Cnty	1	WCM	1	-0.0389	0.0809	-0.1976	0.1198	0.23	0.6307
cwda	1		1	-0.0118	0.0716	-0.1521	0.1285	0.03	0.8688
cwda	0		0	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	Black		1	-0.0121	0.1399	-0.2864	0.2622	0.01	0.9310
ethnic4	Latinx		1	-0.1219	0.1012	-0.3204	0.0766	1.45	0.2283
ethnic4	Other/Unknown		1	-0.1961	0.0937	-0.3799	-0.0122	4.38	0.0364
ethnic4	White		0	0.0000	0.0000	0.0000	0.0000	.	.
lang3	Spanish		1	0.0187	0.1151	-0.2069	0.2444	0.03	0.8706
lang3	Other/Unknown		1	0.4882	0.2065	0.0832	0.8932	5.59	0.0181
lang3	English		0	0.0000	0.0000	0.0000	0.0000	.	.
Scale			1	1.3514	0.0247	1.3043	1.4013		

Phase III Independent variable associations to Hospitalizations: Regression analysis shows that no covariates were significantly associated with having hospitalizations among person discharged from CCS after age 21, after adjusting for CDPS, disability, race, and language.

Table 199. Regression Model for Phase III Hospitalizations

Analysis Of Maximum Likelihood Parameter Estimates									
Parameter			DF	Estimate	Standard Error	Likelihood Ratio 95% Confidence Limits		Wald Chi-Square	Pr > ChiSq
Intercept			0	0.0000	0.0000	0.0000	0.0000	.	.
Post*WCM_Cnty	0	Classic	1	-0.1404	0.1580	-0.4502	0.1695	0.79	0.3744
Post*WCM_Cnty	0	WCM	1	-0.1951	0.1478	-0.4848	0.0947	1.74	0.1869
Post*WCM_Cnty	1	Classic	1	-0.1136	0.1492	-0.4062	0.1789	0.58	0.4464
Post*WCM_Cnty	1	WCM	1	-0.2750	0.1352	-0.5401	-0.0098	4.14	0.0420
CDPS_Log2			1	-0.0100	0.0827	-0.1722	0.1522	0.01	0.9035
cwda	1		1	0.0000	0.0000	0.0000	0.0000	.	.
cwda	0		0	0.1954	0.2187	-0.2333	0.6242	0.80	0.3715
ethnic4	Black		1	-0.0132	0.1411	-0.2899	0.2635	0.01	0.9253
ethnic4	Latinx		1	-0.0942	0.1488	-0.3859	0.1975	0.40	0.5266
ethnic4	Other/Unknown		1	0.0000	0.0000	0.0000	0.0000	.	.
ethnic4	White		0	0.0679	0.0980	-0.1242	0.2600	0.48	0.4883
lang3	Spanish		1	0.0837	0.2003	-0.3091	0.4765	0.17	0.6762
lang3	Other/Unknown		1	0.0000	0.0000	0.0000	0.0000	.	.
lang3	English		0	2.0603	0.0289	2.0048	2.1183		
Scale			1	0.0000	0.0000	0.0000	0.0000	.	.

Appendix J: Propensity Score Matching

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Propensity Score Matching Overview

To reduce the effects of confounding inherent to observational studies such as this evaluation, propensity score matched controls were selected from the comparison groups.[1] The creation of a matched control group relies upon exact matching on relevant characteristics in combination with matching on propensity score. The score reflects the probability that that individual will enter the Whole Child Model (WCM). This probability is a consequence of an individual's demographic and clinical features.

Control clients were drawn from Classic CCS comparison counties as shown in Table 1. Comparison counties were chosen based on proximity to the WCM counties and CCS dependent (County population <200,000)/independent (County population >200,000) status.

[1] Austin PC. An Introduction to Propensity Score Methods for Reducing the Effects of Confounding in Observational Studies. Multivariate Behav Res. 2011 May;46(3):399-424. doi: 10.1080/00273171.2011.568786. Epub 2011 Jun 8. PMID: 21818162; PMCID: PMC3144483.

Table 1. WCM Counties and CCS Classic Comparison Counties

Phase	WCM Counties	Classic CCS Counties
Phase I*	Merced, Monterey, San Luis Obispo, Santa Barbara, & Santa Cruz	Fresno, Kern, Santa Clara, Tulare, & Ventura
Phase II	*Independent Counties:* Humboldt, Marin, Mendocino, Napa, Solano, Sonoma, & Tulare *Dependent Counties:* Del Norte, Lake, Lassen, Modoc, Shasta, Siskiyou, & Trinity	*Independent Counties:* Alameda, Butte, Contra Costa, Sacramento, San Francisco, & San Joaquin *Dependent Counties:* Amador, Colusa, El Dorado, Glenn, Plumas, Sutter, & Tehama
Phase III*	Orange County	Los Angeles
HPSM WCM*	San Mateo	Santa Clara, & San Francisco

*All counties in this row are CCS Independent counties

The creation of a matched comparison group can be described in two stages

Stage I: Development of Propensity Scores, and

Stage II: Application of Propensity Scores to create Matched Comparison Group

These steps were repeated for each WCM Phase.

Stage I: Development of Propensity Scores

1. CCS clients from the WCM counties in each given phase were identified.
2. Each client was flagged as either enrolled in the WCM or not during the years post-phase start.
3. A logistic regression was performed upon the WCM enrollment (0/1). The independent variables that were predictive of WCM enrollment were selected from the set below:
    a. Age
    b. Gender
    c. Ethnicity
    d. Language
    e. CDPS (Chronic Illness and Disability Payment System) UC San Diego[2] - risk adjustment score for use in disabled children
    f. CWDA (Children with Disabilities Algorithm)[3] -adjustment for functional disability in children
    g. Diagnosis (See Table 2. CCS Qualifying Conditions)

[2] R. Kronick, T. Gilmer, T. Dreyfus, and L. Lee. "Improving Health-Based Payment for Medicaid Beneficiaries: CDPS." Health Care Financing Review, Spring 2000, 21(3):29-64.

[3] Chien AT, Kuhlthau KA, Toomey SL, Quinn JA, Houtrow AJ, Kuo DZ, Okumura MJ, Van Cleave JM, Johnson CK, Mahoney LL, Martin J, Landrum MB, Schuster MA. Development of the Children with Disabilities Algorithm. Pediatrics. 2015 Oct;136(4):e871-8. doi: 10.1542/peds.2015-0228. PMID: 26416938.

4. The variables with the best predictive ability as well as variables that were thought to affect health needs (CDPS, Age) were used in a logistic model to generate parameter estimates for each variable chosen.
5. Clients in the WCM counties who were enrolled in CCS at any point during the entire study period (including pre-WCM and post-WCM) were identified.

Table 2. CCS Qualifying Conditions

ICD 10	ICD 9	Description
A00-B99	001-139	Infectious Diseases
C00-D49	140-239	Neoplasm
E00-E89	240-279	Endocrine, Nutritional and Metabolic Diseases and Immune Disorders
D50-D89	280-289	Diseases of Blood and Blood-Forming Organs
F01-F99	290-319	Mental Disorders and Mental Retardation
G00-G99	320-359	Diseases of the Nervous System
H00-H59	360-379	Diseases of the Eye
H60-H95	380-389	Diseases of the Ear and Mastoid
I00-I99	390-459	Diseases of the Circulatory System
J00-J99	460-519	Diseases of the Respiratory System
K00-K95	520-579	Diseases of the Digestive System
N00-N99	580-629	Diseases of the Genitourinary System
O00-O99	630-679	Pregnancy
L00-L99	680-709	Diseases of the Skin and Subcutaneous Tissues
M00-M99	710-739	Diseases of the Musculoskeletal System and Connective Tissue
Q00-Q99	740-759	Congenital Anomalies
S00-T88	800-899, 900-999	Accidents, Poisonings, Violence and Immunization Reactions
P00-P96	760-779	Perinatal Morbidity and Mortality (NICU)

Stage II: Application of Propensity Scores to create Matched Comparison Group

6. Using the independent variables identified in step 4 and their associated parameter estimates, a propensity score was generated for each client identified in step 5 as well as clients in the Classic CCS comparison counties. For each client the vector of parameter estimates as well as the regression's intercept were summed. This sum was exponentiated to calculate log odds. The log odds divided by (1 + log odds) produces a propensity score for each client.
7. Clients in the Classic CCS comparison counties served as the sample frame from which the control clients were selected. This selection was an iterative process.
    a. First clients in the Classic counties were selected that match a client in the WCM counties exactly on as many of the independent variables as possible. Clients whose enrollment was after the start of the WCM phase were matched to classic CCS clients in the same enrollment period.

b. If exact matches could not be obtained for every WCM client, then variables were removed one-by-one from the exact-match list until all clients find a match.

8. For each CCS client in the WCM counties for which exact-matches were identified, a client in the CCS classic comparison counties was selected whose propensity score most closely matched a client in the WCM county. The CCS classic comparison group was comprised of these matches.

Propensity Score Matching Specifics for Each WCM Phase

Phase I Propensity Score Matching

Stage I.

1. All CCS clients in WCM counties were identified in post WCM period.
2. Each client was flagged as either enrolled in the WCM or not during the two years post-phase start.
3. A logistic regression was performed upon the WCM enrollment (0/1) using the full set of independent variables. The most predictive variables remained in the regression:

- Age
- Ethnicity White & Asian/PI
- CDPS
- CWDA
- Diagnosis related to:
    - Accidents
    - Circulatory System
    - Endocrine, Nutritional, and Metabolic Diseases, Immune Disorders
    - Genitourinary System
    - Musculoskeletal System
    - Ophthalmologic System
    - Otolaryngologic System
    - Perinatal Morbidity and Mortality (NICU)

4. A vector of parameter estimates and the regression's intercept from step 3 was created for each client.
5. Clients in the WCM counties who were enrolled in CCS at any point during the entire study period (including pre-WCM and post-WCM) were identified.

Stage II. Propensity Score Matching

6. Using the independent variables identified in stage I, a propensity score was calculated for each person in the WCM and Classic comparison counties.
7. Clients in Classic comparison counties who match exactly on the follow variables were identified.
    - Diagnoses involving:
        - Endocrine, Nutritional, & Metabolic Diseases and Immune Disorders

    - Circulatory System
    - Neoplasm
    - Perinatal Morbidity and Mortality (NICU)
    - Respiratory System.
- Post-WCM enrollment

8. For each client in a WCM, a match was obtained from clients in comparison classic CCS counties by exact variable matches and closest propensity score.

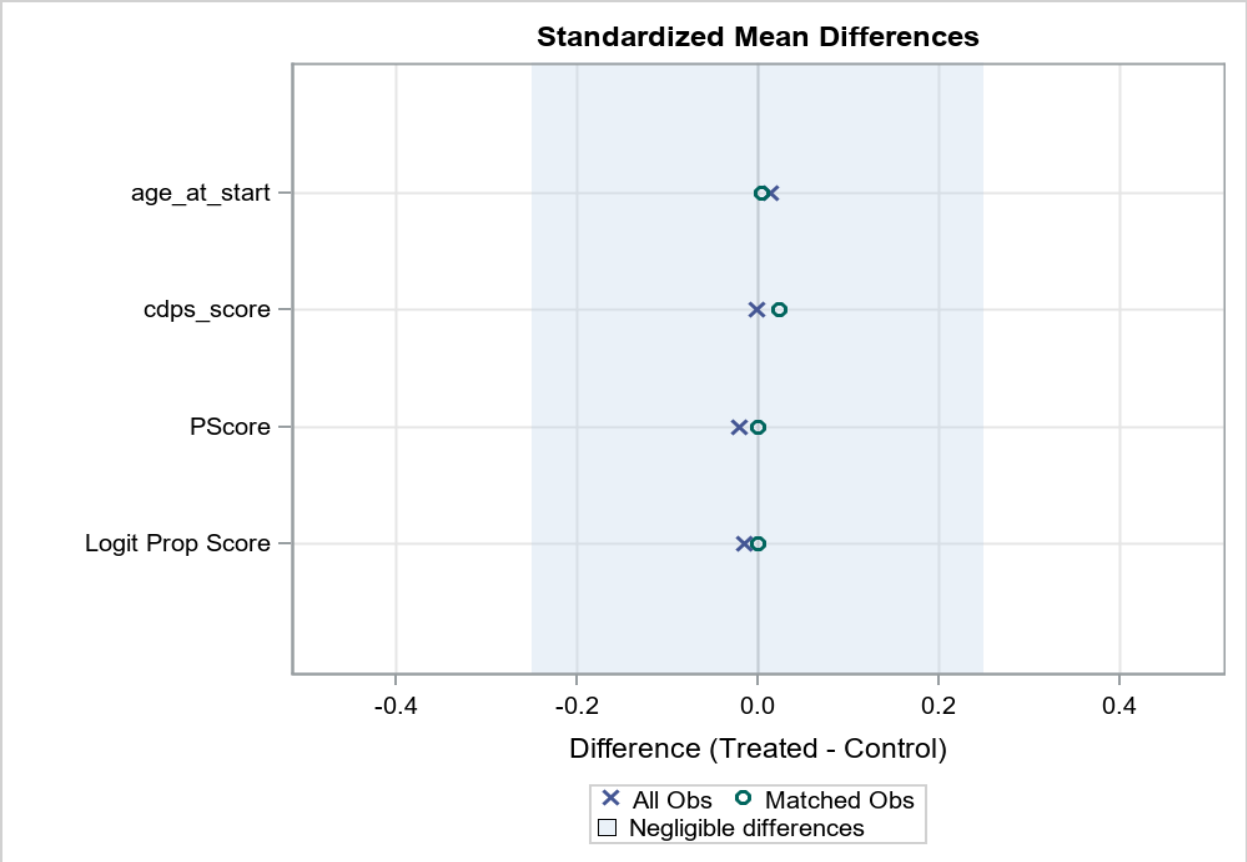
Phase I Matching Results

Table 3 shows comparisons of the matching statistics of all the CCS clients in the classic counties vs. those selected in the matching process. Figure 1 provides a graphical representation of the standardized mean differences of these variables. The improvements gained in the matching process were negligible, however the process provides evidence that the populations are similar on these criteria.

Table 3. Assessment of Propensity Score Matching Phase I CCS to Classic CCS Counties

		Phase I Counties			Classic CCS			
Variable	Observa-tions	N	Mean	Std Dev.	N	Mean.	Std. Dev.	Diff
Age	All	25,057	8.223	7.154	75,220	8.120	7.101	0.103
	Matched	25,057	8.223	7.154	25,057	8.188	7.186	0.035
Propensity Score	All	25,057	0.869	0.074	75,220	0.871	0.072	-0.001
	Matched	25,057	0.869	0.074	25,057	0.869	0.074	0.000
CDPS	All	25,057	1.331	1.369	75,220	1.333	1.325	-0.002
	Matched	25,057	1.331	1.369	25,057	1.299	1.324	0.032

Figure 1. Phase I Standardized Mean Differences from Propensity Score Matching



Phase II Propensity Score Matching

Stage I.

1. All CCS clients in WCM counties were identified in post WCM period.
2. Each client was flagged as either enrolled in the WCM or not during the two years post-phase start.
3. A logistic regression was performed upon the WCM enrollment (0/1) using the full set of independent variables. The most predictive variables remained in the regression:

- Age
- Ethnicity White & Asian/PI
- CDPS
- CWDA
- Diagnosis related to:
    - Accidents
    - Circulatory System
    - Congenital Anomaly
    - Endocrine, Nutritional, and Metabolic Diseases, Immune Disorders
    - Genitourinary System
    - Mental Health

    - Musculoskeletal System
    - Ophthalmologic System
    - Otolaryngologic System
    - Perinatal Morbidity and Mortality (NICU)
4. A vector the intercept and odds is created from the regression.
5. Clients in the WCM counties who were enrolled in CCS at any point during the entire study period (including pre-WCM and post-WCM) were identified.

Stage II. Propensity Score Matching

6. Using the independent variables identified in stage I a propensity score was calculated for each person in the WCM and Classic comparison counties.

7. Clients in Classic comparison counties who match exactly on the follow variables were identified.
    - Diagnoses involving:
        - Circulatory System
        - Congenital Anomaly
        - Neoplasm
        - Perinatal Morbidity and Mortality (NICU)
    - Post-WCM enrollment

8. For each client in a WCM, a match was obtained from clients in comparison classic CCS counties by exact variable matches and closest propensity score.

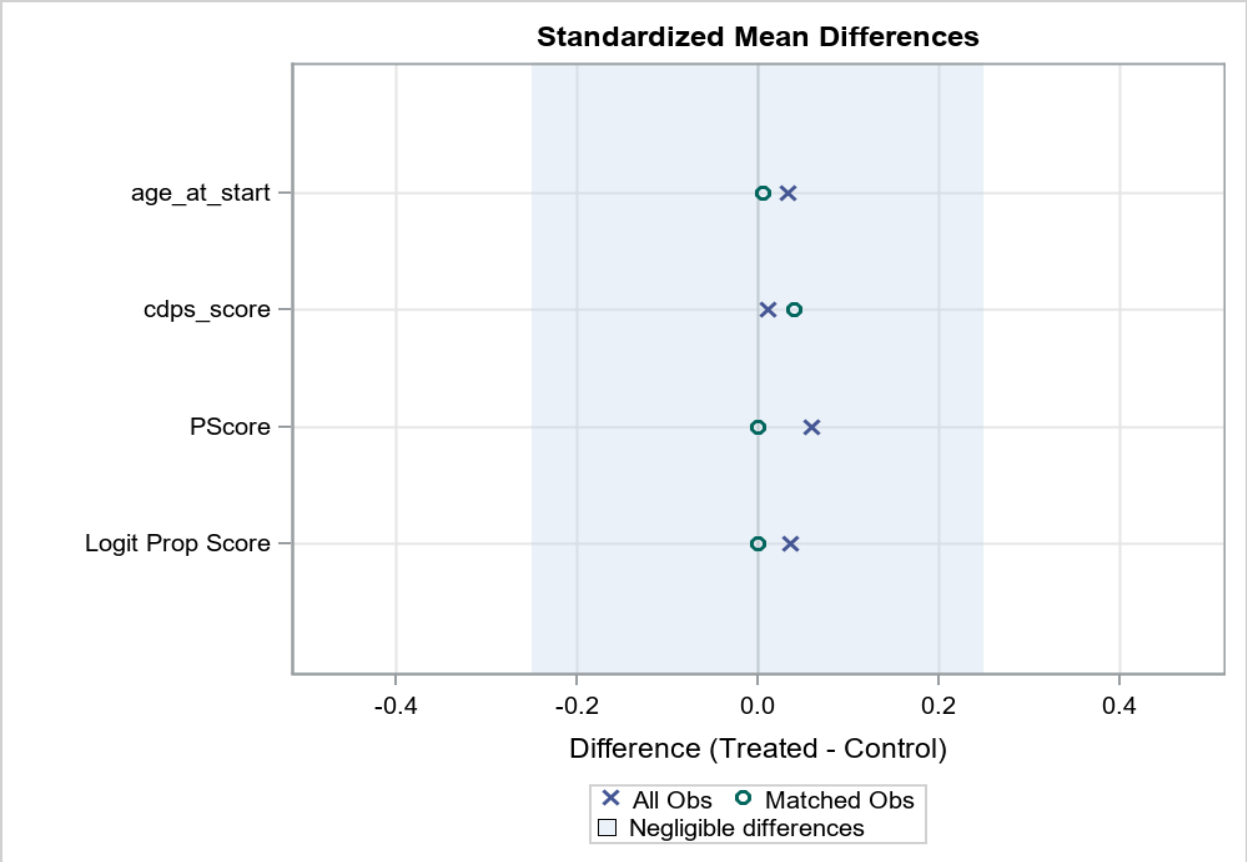
Phase II Matching Results

Table 4 compares the matching statistics of all the CCS clients in the classic counties vs. those selected in the matching process. Figure 2 provides a graphical representation of the standardized mean differences of these variables. The improvements gained in the matching process were negligible, however the process provides evidence that the populations are similar on these criteria.

Table 4. Assessment of Propensity Score Matching Phase II CCS to Classic CCS Counties

		Phase II Counties			Classic CCS			
Variable	Observa-tions	N	Mean	Std Dev.	N	Mean.	Std. Dev.	Diff
Age	All	17,183	9.013	6.923	57,227	8.777	7.031	0.236
	Matched	17,183	9.013	6.923	17,183	8.977	6.935	0.036
Propensity Score	All	17,183	0.862	0.048	57,227	0.859	0.053	0.003
	Matched	17,183	0.862	0.048	17,183	0.862	0.048	0.000
CDPS	All	17,183	1.352	1.430	57,227	1.337	1.366	0.015
	Matched	17,183	1.352	1.430	17,183	1.297	1.398	0.056

Figure 2. Phase II Standardized Mean Differences from Propensity Score Matching



Phase III Propensity Score Matching

Stage I.

1. All CCS clients in WCM counties were identified in post WCM.
2. Each client was flagged as either enrolled in the WCM or not during the two years post-phase start.
3. A logistic regression was performed upon the WCM enrollment (0/1) using the full set of independent variables. The most predictive variables remained in the regression:

- Age
- Ethnicity-Asian/PI
- CDPS
- CWDA
- Diagnosis related to:
    - Accidents
    - Endocrine, Nutritional, and Metabolic Diseases, Immune Disorders
    - Genitourinary System

    - Musculoskeletal System
    - Ophthalmologic System
    - Perinatal Morbidity and Mortality (NICU)
4. A vector the intercept and odds is created from the regression.
5. Clients in the WCM counties who were enrolled in CCS at any point during the entire study period (including pre-WCM and post-WCM) were identified.

Stage II. Propensity Score Matching

6. Using the independent variables identified in stage I a propensity score was calculated for each person in the WCM and Classic comparison counties.

7. Clients in Classic comparison counties who match exactly on the follow variables were identified.
    - Diagnoses involving:
        - Endocrine, Nutritional, & Metabolic Diseases and Immune Disorders
        - Circulatory System
        - Perinatal Morbidity and Mortality (NICU)
        - Respiratory System.
    - Post-WCM enrollment

8. For each client in a WCM, a match was obtained from clients in comparison classic CCS counties by exact variable matches and closest propensity score.

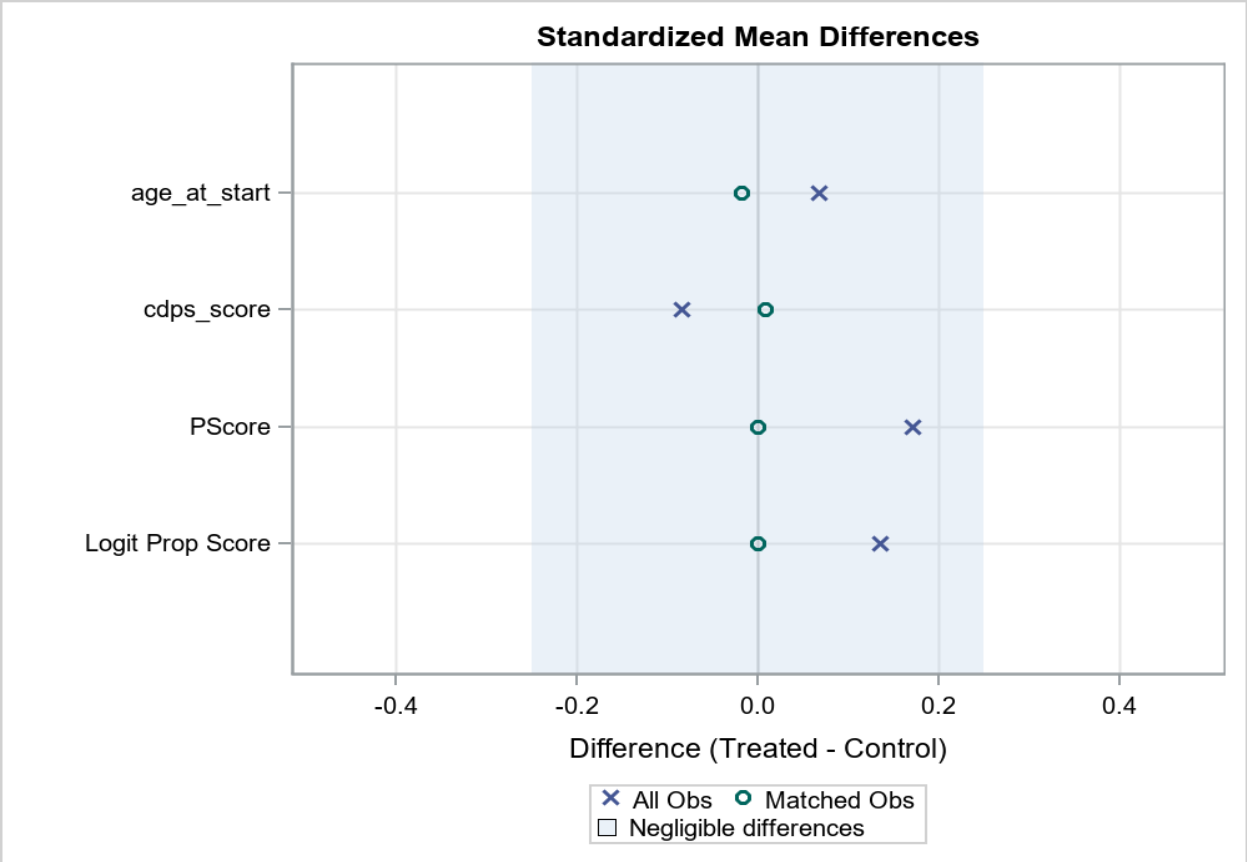
Phase III Matching Results

Table 5 compares the matching statistics of all the CCS clients in the classic counties vs. those selected in the matching process. Figure 3 provides a graphical representation of the standardized mean differences of these variables. The improvements gained in the matching process were negligible, however the process provides evidence that the WCM CCS clients and their controls are similar on these criteria.

Table 5. Assessment of Propensity Score Matching Phase III CCS to Classic CCS Counties

		Phase III Counties			Classic CCS			
Variable	Observa-tions	N	Mean	Std Dev.	N	Mean.	Std. Dev.	Diff
Age	All	25,582	9.777	6.953	95,537	9.288	7.318	0.489
	Matched	25,582	9.777	6.953	25,582	9.899	7.019	-0.123
Propensity Score	All	25,582	0.867	0.066	95,537	0.854	0.080	0.013
	Matched	25,582	0.867	0.066	25,582	0.867	0.066	0.000
CDPS	All	25,582	1.088	1.757	95,537	1.236	1.745	-0.148
	Matched	25,582	1.088	1.757	25,582	1.074	1.776	0.014

Figure 3. Phase III Standardized Mean Differences from Propensity Score Matching



HPSM WCM Propensity Score Matching

Stage I.

1. All CCS clients in San Mateo counties were identified in post WCM.
2. Each client was flagged as either enrolled in the WCM or not during the two years post-phase start.
3. A logistic regression was performed upon the WCM enrollment (0/1) using the full set of independent variables. The most predictive variables remained in the regression:

- Age
- Ethnicity-Asian/PI
- CDPS
- CWDA
- Diagnosis related to:
    - Accidents
    - Endocrine, Nutritional, and Metabolic Diseases, Immune Disorders
    - Genitourinary System

    - Musculoskeletal System
    - Ophthalmologic System
    - Perinatal Morbidity and Mortality (NICU)
4. A vector the intercept and odds is created from the regression.
5. Clients in the WCM counties who were enrolled in CCS at any point during the entire study period (including pre-WCM and post-WCM) were identified.

Stage II. Propensity Score Matching

6. Using the independent variables identified in stage I a propensity score was calculated for each person in the WCM and Classic comparison counties.
7. Clients in Classic comparison counties who match exactly on the follow variables were identified.
    - Diagnoses involving:
        - Endocrine, Nutritional, & Metabolic Diseases and Immune Disorders
        - Circulatory System
        - Perinatal Morbidity and Mortality (NICU)
    - Post-WCM enrollment

8. For each client in a WCM, a match was obtained from clients in comparison classic CCS counties by exact variable matches and closest propensity score.

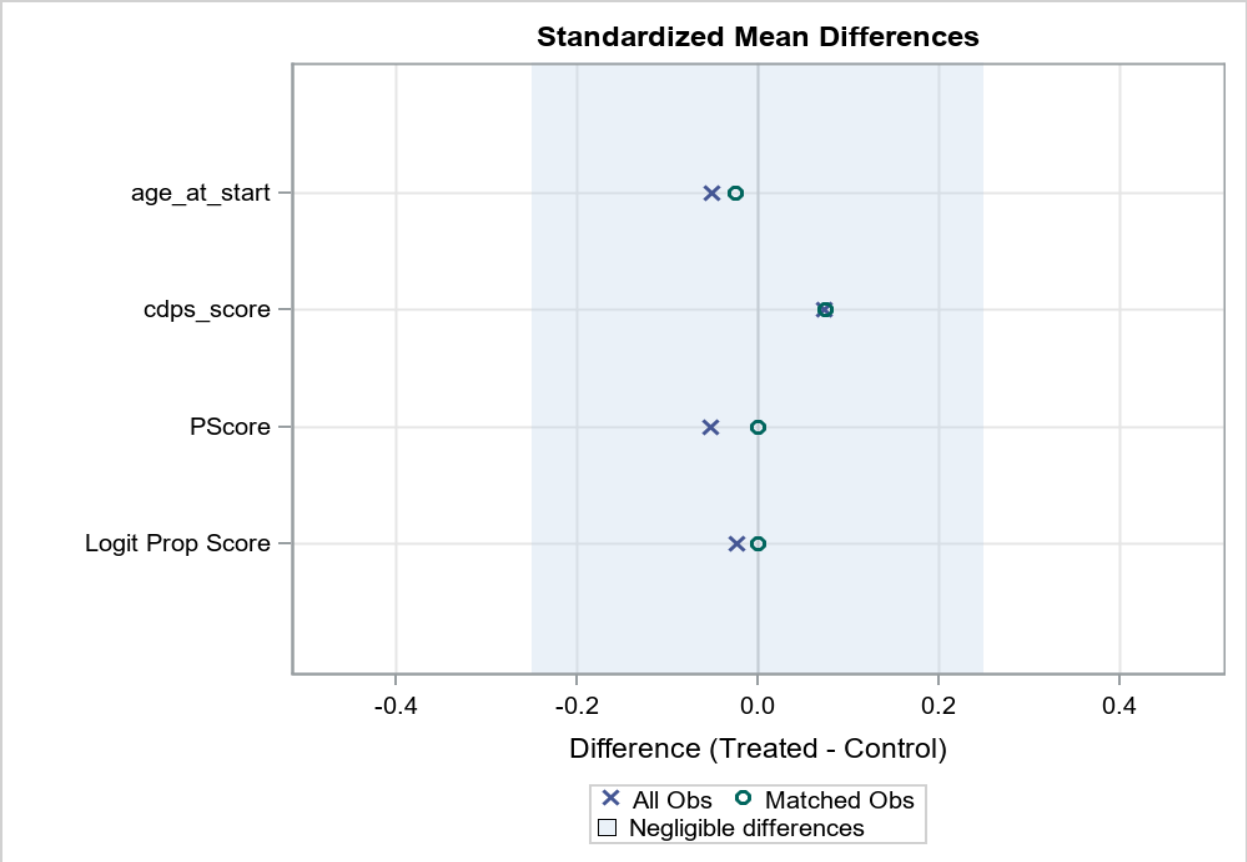
HPSM WCM Matching Results

Table 6 compares the differences in age, CDPSs, and propensity scores among those in San Mateo CCS clients vs. all the clients in the selected classic CCS counties; as well the San Mateo CCS clients vs. as the matched controls selected in the matching process. Figure 4 provides a graphical representation of the standardized mean differences of these variables. The improvements gained in the matching process were substantial and provide evidence that the San Mateo CCS clients and their controls are similar on these criteria.

Table 6. Assessment of Propensity Score Matching HPSM WCM to Classic CCS Counties

		HPSM WCM Counties			Classic CCS			
Variable	Observa-tions	N	Mean	Std Dev.	N	Mean.	Std. Dev.	Diff
Age	All	3,189	8.208	6.950	20,464	8.563	7.017	-0.355
	Matched	3,189	8.208	6.950	3,189	8.385	7.010	-0.177
Propensity Score	All	3,189	0.845	0.086	20,464	0.849	0.078	-0.004
	Matched	3,189	0.845	0.086	3,189	0.845	0.086	0.000
CDPS	All	3,189	1.375	1.421	20,464	1.270	1.426	0.105
	Matched	3,189	1.375	1.421	3,189	1.270	1.357	0.105

Figure 4. HPSM WCM Standardized Mean Differences from Propensity Score Matching



Appendix K: Methodology for CCS Referrals for Eligibility and Services in CMSNet

CMSNet Data

Children's Medical Services Net (CMSNet) is a case management system for California Children's Services (CCS). CMSNet is a web-based tool that enables CCS providers and Medi-Cal Managed Care Plans to electronically access the status of Requests for Services/Authorizations. Providers and plans have access to view service Authorizations, Denials and Notices of Action letters. DHCS provided select data extracts from CMSNet for years 2011 through 2021 to UCSF. The data extracts include four files:

1. CCS Eligibility contains a record for each existing or potential CCS client's eligibility request. Eligibility is either denied or granted for a specified period. Each record contains the date of the eligibility request, its status, and disposition.

2. CCS Diagnoses contains up to five diagnoses that justify the CCS eligibility.

3. Patient Registration contains one record for each CCS applicant. It shows their current CCS status and provides additional information about their eligibility such as if the annual family income was > $40k and if their eligibility was restricted to services from a Medical Therapy Unit (MTU) only. This file also provides client demographics.

4. Service Authorization Requests (SAR) contain records of each request for service among the CCS population. It contains the date of the referral for service, the type of service (MTU or Medical) and the disposition of the request. However, when a client is enrolled in a WCM, those referrals are not necessarily entered into CMSNet. WCM SARs are automatically authorized. Therefore, UCSF requested SAR data directly from the WCM health plans so that an accounting of the types of services requested may be made. Only HPSM and Cal Optima were able to provide service referral data.

Referrals for CCS Eligibility

A parent or guardian applies for their child's CCS eligibility by applying to their county CCS office. Often when a child is hospitalized a social worker will assist with the application process. Thus, these applications are referred to as eligibility referrals. The information provided is entered into the CMSNet system, reviewed, and adjudicated by qualified personnel. UCSF analyzed these records using the following methodology.

The CMSNet eligibility file contains one record for each eligibility referral. Eligibility was either denied or authorized for a specified period. Analysis was restricted to new applications defined as those having more than 182 days (6 months) without CCS eligibility preceding the referral. Less than one percent of the new referrals were for aid

code 9J (GHPP) and 9M (MTU only) and were excluded from the analysis because these persons are not eligible for all CCS services. New referrals for a period of two years before and up to two years after each WCM phase were counted and examined for disposition.

The Eligibility Status field contains one of three values, *Active, Closed*, or *Denied.* Both *Active* and *Closed* indicate a period of CCS enrollment. The value in the Eligibility Start Date field was considered the date of an approval. When the value in the Eligibility Status field was *Denied* then the value in the Eligibility Denied Date field was considered the date of a denial.

The proportion of referral that were denied during any given year was calculated as follows:

a) Numerator equals the number of new applications where the Eligibility Status is *Denied* within a given year.
b) The denominator equals the number of new referrals within a given year.
c) Proportion denied equals a/b.

Service Authorization Requests

CMSNet service authorization request (SAR) data contains a field titled service_type. The values in this field are either SCC or MED. SCC provides instances of referrals to a specialty care center. MED indicates a referral to a specialist, service or DME. Analysis of SCC referrals was accomplished by querying MIS/DSS claims/encounters for services at a SCC within 90 days of the referral. However, referrals for DME and other services did not provide for a valid way to analyze the success of these referrals. The SAR records did not contain information about the nature of these referrals, thus finding an accompanying claim/encounter in the MIS/DSS was not possible.

Appendix L: Results Section 1 Demographic Characteristics and Additional Results

In this appendix we show additional data tables for Results Section 1 and additional counts from the Administrative Claims analysis as discussed in the main report.

1. Enrollment by health plan per WCM Study groups
2. Total Enrollment by Month
3. Reason for denial into CCS
4. Total enrollment, New enrollment and Deaths by Year by County
5. Demographic profile of New Enrollees
6. Time to transfer to the Whole Child Model from Fee-for-Service by Aid Code
7. Enrollment Tables: Total and New Enrollment by Age
8. Enrollment Tables: New Enrollment by Age
9. New Referrals into CCS by Age
10. Percent of Referrals into CCS that were Denied by Age
11. ED visit reason
    a. By Condition Category
    b. By ICD-10
12. Hospitalization Follow up

Enrollment by Health Plan per WCM Study Group

Table 1. Medi-Cal Enrollment Among CCS Clients by Health Plan, HPSM WCM Pre-/Post-WCM vs. Classic CCS

	HPSM WCM				Classic CCS			
	Pre		Post		Pre		Post	
Health Plan	n	Pct	n	Pct	n	Pct	n	Pct
Anthem Blue Cross Partnership Plan/SC	.	.	.	.	932	12.5	870	12.5
Anthem Blue Cross Partnership Plan/SF	.	.	.	.	221	3.0	171	2.5
Family Mosaic Prj / SF	.	.	.	.	S	S	.	.
Fee for Service Only	11	100.0	.	.	648	8.7	552	7.9
Health Plan of San Mateo	.	.	252	100.0	.	.	.	.
San Francisco Health Plan	.	.	.	.	1,314	17.7	1,224	17.5
Santa Clara Family Health	.	.	.	.	4,326	58.1	4,158	59.6

- Counts represent CCS enrollment for one month that is one year prior (Pre) and one year after (Post) WCM implementation.
- Pre-HPSM WCM clients were in Classic CCS in San Mateo during the month of July 2017 who were never in the San Mateo CCS DP.
- Post-HPSM WCM clients were in the HPSM WCM during the month of July 2019.
- Classic Pre-WCM: CCS clients in classic counties during the month of July 2017.
- Classic Post-WCM: CCS clients in classic counties during the month of July 2019.

Table 2. Medi-Cal Enrollment Among CCS Clients by Health Plan, Phase I Pre-/Post-WCM vs. Classic CCS

	Phase I				Classic CCS			
	Pre		Post		Pre		Post	
Health Plan	n	Pct	n	Pct	n	Pct	n	Pct
Anthem Blue Cross Partnership Plan/Fresno	.	.	.	.	1,647	6.0	1,577	5.7
Anthem Blue Cross Partnership Plan/Fresno	.	.	.	.	1,647	6.0	1,577	5.7
Anthem Blue Cross Partnership Plan/SC	.	.	.	.	932	3.4	870	3.1
Anthem Blue Cross Partnership Plan/Tulare	.	.	.	.	2,215	8.1	2,194	7.9
CENCAL San Luis Obispo	1,012	9.9	894	9.8	.	.	.	.
CENCAL Santa Barbara	2,073	20.3	1,921	21.1	.	.	.	.
CalViva Health Fresno	.	.	.	.	4,504	16.4	4,679	16.8
Central California Alliance for Health Merced	2,638	25.9	2,483	27.3	.	.	.	.
Central California Alliance for Health/Monterey	3,040	29.8	2,866	31.5	.	.	.	.
Central California Alliance for Health/Santa Cruz	1,201	11.8	942	10.3	.	.	.	.
Fee for Service Only	236	2.3	.	.	1,858	6.8	1,778	6.4
Gold Coast Health Plan Ventura	.	.	.	.	3,968	14.4	3,933	14.1

Health Plan	Phase I				Classic CCS			
	Pre		Post		Pre		Post	
	n	Pct	n	Pct	n	Pct	n	Pct
Health Net/Kern	.	.	.	.	1,092	4.0	956	3.4
Health Net/Tulare	.	.	.	.	2,678	9.7	2,720	9.8
Kern Health Systems	.	.	.	.	4,282	15.6	4,949	17.8
Santa Clara Family Health	.	.	.	.	4,326	15.7	4,158	14.9

- Counts represent CCS enrollment for one month that is one year prior (Pre) and one year after (Post) Phase I start.
- Pre-WCM clients were in Classic CCS in Phase I counties during the month of July 2017.
- Post-WCM clients were in the Phase I WCM during the month of July 2019.
- Classic Pre-WCM: CCS clients in classic counties during the month of July 2017.
- Classic Post-WCM: CCS clients in classic counties during the month of July 2019.

Table 3. Medi-Cal Enrollment Among CCS Clients by Health Plan, Phase II Pre-/Post-WCM vs. Classic CCS

Health Plan	Phase II				Classic CCS			
	Pre		Post		Pre		Post	
	n	Pct	n	Pct	n	Pct	n	Pct
Aetna Better Health of California/Sacto	.	.	.	.	S	S	84	0.3
Alameda Alliance for Health	.	.	.	.	4,081	15.9	4,156	16.4
Anthem Blue Cross Partnership Plan/Alameda	.	.	.	.	912	3.6	894	3.5
Anthem Blue Cross Partnership Plan/Amador	.	.	.	.	93	0.4	86	0.3
Anthem Blue Cross Partnership Plan/Butte	.	.	.	.	345	1.3	282	1.1

Health Plan	Phase II				Classic CCS			
	Pre		Post		Pre		Post	
	n	Pct	n	Pct	n	Pct	n	Pct
Anthem Blue Cross Partnership Plan/CC	.	.	.	.	615	2.4	583	2.3
Anthem Blue Cross Partnership Plan/Colusa	.	.	.	.	134	0.5	135	0.5
Anthem Blue Cross Partnership Plan/El Dorado	.	.	.	.	131	0.5	124	0.5
Anthem Blue Cross Partnership Plan/Glenn	.	.	.	.	100	0.4	82	0.3
Anthem Blue Cross Partnership Plan/Plumas	.	.	.	.	27	0.1	34	0.1
Anthem Blue Cross Partnership Plan/SF	.	.	.	.	206	0.8	145	0.6
Anthem Blue Cross Partnership Plan/Sac	.	.	.	.	2,861	11.2	2,952	11.6
Anthem Blue Cross Partnership Plan/Sutter	.	.	.	.	441	1.7	420	1.7
Anthem Blue Cross Partnership Plan/Tehama	.	.	.	.	152	0.6	167	0.7
California Health & Wellness/Amador	.	.	.	.	S	S	15	0.1
California Health & Wellness/Butte	.	.	.	.	475	1.9	493	1.9
California Health & Wellness/Colusa	.	.	.	.	62	0.2	102	0.4

Health Plan	Phase II				Classic CCS			
	Pre		Post		Pre		Post	
	n	Pct	n	Pct	n	Pct	n	Pct
California Health & Wellness/El Dorado	.	.	.	.	345	1.3	323	1.3
California Health & Wellness/Glenn	.	.	.	.	155	0.6	209	0.8
California Health & Wellness/Plumas	.	.	.	.	20	0.1	33	0.1
California Health & Wellness/Sutter	.	.	.	.	167	0.7	197	0.8
California Health & Wellness/Tehama	.	.	.	.	178	0.7	192	0.8
Contra Costa Health Plan	.	.	.	.	2,859	11.1	2,764	10.9
Family Mosaic Prj / SF	.	.	.	.	S	S	.	.
Fee for Service Only	283	3.4	.	.	2,616	10.2	2,353	9.3
Health Net/Sacramento	.	.	.	.	1,676	6.5	1,693	6.7
Health Net/San Joaquin	.	.	.	.	202	0.8	187	0.7
Health Plan of San Joaquin	.	.	.	.	3,313	12.9	3,199	12.6
Kaiser Foundation/Sac	.	.	.	.	1,463	5.7	1,612	6.4
Kaiser/Amador	.	.	.	.	S	S	S	S
Kaiser/El Dorado	.	.	.	.	34	0.1	51	0.2
Molina Med Cntrs/Sacto	.	.	.	.	607	2.4	542	2.1
Partnership HP of CA/Napa	491	5.9	477	6.2	.	.	.	.
Partnership HP of CA/Solano	1,194	14.4	1,250	16.3	.	.	.	.

Health Plan	Phase II				Classic CCS			
	Pre		Post		Pre		Post	
	n	Pct	n	Pct	n	Pct	n	Pct
Partnership HealthPlan of CA/Del Norte	150	1.8	107	1.4	.	.	.	.
Partnership HealthPlan of CA/Humboldt	691	8.4	663	8.6	.	.	.	.
Partnership HealthPlan of CA/Lake	446	5.4	354	4.6	.	.	.	.
Partnership HealthPlan of CA/Lassen	123	1.5	108	1.4	.	.	.	.
Partnership HealthPlan of CA/Marin	647	7.8	706	9.2	.	.	.	.
Partnership HealthPlan of CA/Mendocino	442	5.3	412	5.4	.	.	.	.
Partnership HealthPlan of CA/Modoc	44	0.5	43	0.6	.	.	.	.
Partnership HealthPlan of CA/Shasta	868	10.5	852	11.1	.	.	.	.
Partnership HealthPlan of CA/Siskiyou	272	3.3	225	2.9	.	.	.	.
Partnership HealthPlan of CA/Sonoma	1,753	21.2	1,672	21.8	.	.	.	.
Partnership HealthPlan of CA/Trinity	60	0.7	47	0.6	.	.	.	.
Partnership HealthPlan of CA/Yolo	804	9.7	750	9.8	.	.	.	.
San Francisco Health Plan	.	.	.	.	1,331	5.2	1,236	4.9
United Healthcare Community Plan of California/Sac	.	.	.	.	32	0.1	.	.

Health Plan	Phase II				Classic CCS			
	Pre		Post		Pre		Post	
	n	Pct	n	Pct	n	Pct	n	Pct

- Counts represent CCS enrollment for one month that is one year prior (Pre) and one year after (Post) WCM implementation.
- Pre-WCM clients were in Classic CCS in Phase II counties during the month of July 2017.
- Post-WCM clients were in the Phase II WCM during the month of July 2019.
- Classic Pre-WCM: CCS clients in classic counties during the month of July 2017.
- Classic Post-WCM: CCS clients in classic counties during the month of July 2019.

Table 4. Medi-Cal Enrollment Among CCS Clients by Health Plan, Phase III Pre-/Post-WCM vs. Classic CCS

Health Plan	Phase III				Classic CCS			
	Pre		Post		Pre		Post	
	n	Pct	n	Pct	n	Pct	n	Pct
CalOPTIMA / Orange	12,753	97.0	11,413	100.0	.	.	.	.
Fee for Service Only	394	3.0	.	.	5,955	15.6	4,993	13.2
Health Net / LA	.	.	.	.	9,977	26.1	9,932	26.3
LA CARE	.	.	.	.	22,290	58.3	22,874	60.5

- Counts represent CCS enrollments one year prior (Pre) and one year after (Post) WCM implementation.
- Pre-WCM clients were in Classic CCS in Phase III counties during the month of July 2017.
- Post-WCM clients were in the Phase III WCM during the month of July 2019.
- Classic Pre-WCM: CCS clients in classic counties during the month of July 2017.
- Classic Post-WCM: CCS clients in classic counties during the month of July 2019.

Total Enrollment by Month

Table 5. Total Enrollment by Month, HPSM WCM Pre-/Post-WCM vs. Classic CCS

	San Mateo County		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-HPSM WCM	Post-HPSM WCM
2016_07	26	0	7,268	0
2016_08	23	0	7,338	0
2016_09	27	0	7,416	0
2016_10	24	0	7,464	0
2016_11	22	0	7,511	0
2016_12	23	0	7,508	0
2017_01	22	0	7,484	0
2017_02	21	0	7,480	0
2017_03	17	0	7,496	0
2017_04	14	0	7,444	0
2017_05	12	0	7,452	0
2017_06	11	0	7,492	0
2017_07	11	0	7,442	0
2017_08	17	0	7,421	0
2017_09	11	0	7,418	0
2017_10	16	0	7,416	0
2017_11	17	0	7,430	0
2017_12	20	0	7,400	0
2018_01	19	0	7,397	0
2018_02	23	0	7,371	0
2018_03	24	0	7,380	0
2018_04	24	0	7,403	0

	San Mateo County		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-HPSM WCM	Post-HPSM WCM
2018_05	28	0	7,415	0
2018_06	35	0	7,401	0
2018_07	33	24	0	7,436
2018_08	38	46	0	7,426
2018_09	44	76	0	7,388
2018_10	39	97	0	7,400
2018_11	33	125	0	7,365
2018_12	36	151	0	7,331
2019_01	35	172	0	7,303
2019_02	31	190	0	7,230
2019_03	32	206	0	7,172
2019_04	27	213	0	7,116
2019_05	23	231	0	7,057
2019_06	23	243	0	7,001
2019_07	30	252	0	6,975
2019_08	31	270	0	6,962
2019_09	26	295	0	6,939
2019_10	32	313	0	6,961
2019_11	32	317	0	6,874
2019_12	28	330	0	6,854
2020_01	32	332	0	6,857
2020_02	29	347	0	6,835

	San Mateo County		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-HPSM WCM	Post-HPSM WCM
2020_03	30	354	0	6,818
2020_04	27	361	0	6,701
2020_05	19	375	0	6,712
2020_06	24	380	0	6,751
2020_07	26	394	0	6,805
2020_08	23	416	0	6,830
2020_09	18	450	0	6,853
2020_10	21	473	0	6,879
2020_11	17	481	0	6,895
2020_12	21	487	0	6,956
2021_01	20	492	0	6,971
2021_02	27	499	0	6,951
2021_03	26	519	0	7,018
2021_04	30	534	0	7,083
2021_05	33	554	0	7,150
2021_06	29	566	0	7,237

- Pre-WCM: Fee-for-Service CCS clients in San Mateo County who were never in the San Mateo CCS DP.
- Post-WCM: HPSM WCM clients between July 2018 - June 2021.
- Classic Pre-WCM: CCS clients in classic counties between July 2016 - June 2018.
- Classic Post-WCM: CCS clients in classic counties between July 2018 - June 2021.
- 60% of the 362 San Mateo CCS clients in FFS post-WCM start eventually entered the WCM.
- Those that eventually entered the WCM spent an average of 2.1 months in FFS.

Table 6. Total Enrollment by Month, Phase I Pre-/Post-WCM vs. Classic CCS

	Phase I Counties		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-Phase I WCM	Post-Phase I WCM
2016_07	9,778	0	26,362	0
2016_08	9,868	0	26,485	0
2016_09	9,893	0	26,654	0
2016_10	9,908	0	26,780	0
2016_11	10,005	0	26,842	0
2016_12	10,052	0	26,857	0
2017_01	10,111	0	26,977	0
2017_02	10,111	0	27,086	0
2017_03	10,215	0	27,350	0
2017_04	10,173	0	27,358	0
2017_05	10,248	0	27,472	0
2017_06	10,245	0	27,559	0
2017_07	10,200	0	27,502	0
2017_08	10,214	0	27,587	0
2017_09	10,171	0	27,627	0
2017_10	10,144	0	27,648	0
2017_11	10,126	0	27,611	0
2017_12	10,123	0	27,536	0
2018_01	10,125	0	27,589	0
2018_02	10,136	0	27,628	0
2018_03	10,211	0	27,764	0

	Phase I Counties		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-Phase I WCM	Post-Phase I WCM
2018_04	10,170	0	27,870	0
2018_05	10,198	0	27,981	0
2018_06	10,120	0	28,034	0
2018_07	211	9,808	0	28,100
2018_08	217	9,840	0	28,162
2018_09	197	9,792	0	28,157
2018_10	217	9,756	0	28,177
2018_11	204	9,673	0	28,043
2018_12	189	9,565	0	27,937
2019_01	193	9,426	0	28,014
2019_02	213	9,303	0	27,985
2019_03	196	9,221	0	28,063
2019_04	181	9,155	0	27,989
2019_05	184	9,121	0	27,924
2019_06	185	9,116	0	27,889
2019_07	204	9,106	0	27,814
2019_08	213	9,037	0	27,798
2019_09	195	9,034	0	27,771
2019_10	183	9,013	0	27,911
2019_11	195	9,059	0	27,787
2019_12	192	9,102	0	27,761
2020_01	199	9,142	0	27,892

	Phase I Counties		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-Phase I WCM	Post-Phase I WCM
2020_02	198	9,174	0	27,924
2020_03	187	9,169	0	27,956
2020_04	170	9,155	0	27,666
2020_05	177	9,142	0	27,679
2020_06	164	9,226	0	27,755
2020_07	166	9,296	0	27,845
2020_08	176	9,414	0	27,954
2020_09	161	9,532	0	28,046
2020_10	144	9,596	0	28,045
2020_11	151	9,635	0	28,108
2020_12	154	9,678	0	28,274
2021_01	163	9,764	0	28,396
2021_02	157	9,874	0	28,504
2021_03	170	9,989	0	28,852
2021_04	172	10,085	0	29,122
2021_05	180	10,181	0	29,363
2021_06	201	10,257	0	29,626

- Phase I Pre-WCM: CCS clients in Phase I counties who were not in WCM.
- Phase I Post-WCM CCS clients in WCM between July 2018 - June 2021.
- Classic Pre-WCM: CCS clients in classic counties between July 2016 - June 2018.
- Classic Post-WCM: CCS clients in classic counties between July 2018 - June 2021.
- 67% of the 2,255 Phase I county CCS clients in FFS post-WCM start eventually entered the WCM.
- Those that eventually entered the WCM spent an average of 2.5 months in FFS.

Table 7. Total Enrollment by Month, Phase II Pre-/Post-WCM vs. Classic CCS

	Phase II Counties		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-Phase II WCM	Post-Phase II WCM
2017_01	8,162	0	25,686	0
2017_02	8,140	0	25,557	0
2017_03	8,203	0	25,667	0
2017_04	8,211	0	25,578	0
2017_05	8,231	0	25,666	0
2017_06	8,251	0	25,634	0
2017_07	8,209	0	25,476	0
2017_08	8,270	0	25,523	0
2017_09	8,202	0	25,461	0
2017_10	8,220	0	25,575	0
2017_11	8,249	0	25,565	0
2017_12	8,251	0	25,549	0
2018_01	8,268	0	25,647	0
2018_02	8,231	0	25,600	0
2018_03	8,247	0	25,702	0
2018_04	8,227	0	25,697	0
2018_05	8,242	0	25,795	0
2018_06	8,211	0	25,724	0
2018_07	8,215	0	25,796	0
2018_08	8,269	0	25,865	0

	Phase II Counties		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-Phase II WCM	Post-Phase II WCM
2018_09	8,250	0	25,885	0
2018_10	8,193	0	25,884	0
2018_11	8,143	0	25,838	0
2018_12	8,083	0	25,787	0
2019_01	251	7,679	0	25,826
2019_02	243	7,618	0	25,734
2019_03	243	7,633	0	25,757
2019_04	221	7,663	0	25,730
2019_05	226	7,665	0	25,742
2019_06	225	7,635	0	25,612
2019_07	227	7,674	0	25,609
2019_08	242	7,686	0	25,568
2019_09	225	7,693	0	25,512
2019_10	228	7,698	0	25,457
2019_11	237	7,660	0	25,331
2019_12	230	7,647	0	25,330
2020_01	227	7,666	0	25,348
2020_02	211	7,624	0	25,168
2020_03	216	7,575	0	24,998
2020_04	192	7,566	0	24,852
2020_05	204	7,595	0	24,819
2020_06	205	7,609	0	24,871

	Phase II Counties		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-Phase II WCM	Post-Phase II WCM
2020_07	220	7,659	0	25,030
2020_08	211	7,710	0	25,157
2020_09	198	7,726	0	25,363
2020_10	174	7,812	0	25,457
2020_11	189	7,862	0	25,505
2020_12	182	7,902	0	25,585

- Phase II Pre-WCM: CCS clients in Phase II counties who were not in WCM between January 2019 - December 2020.
- Phase II Post-WCM CCS clients in WCM between Janurary 2019 - December 2020.
- Classic Pre-WCM: CCS clients in classic counties between January 2017 - December 2020.
- Classic Post-WCM: CCS clients in classic counties between January 2019 - December 2020.
- 71% of the 1,372 Phase II county CCS clients in FFS post-WCM start eventually entered the WCM.
- Those that eventually entered the WCM spent an average of 2.9 months in FFS.

Table 8. Total Enrollment by Month, Phase III Pre-/Post-WCM vs. Classic CCS

	Phase III		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-Phase III WCM	Post-Phase III WCM
2017_07	13,338	0	38,521	0
2017_08	13,420	0	38,455	0
2017_09	13,402	0	38,418	0
2017_10	13,419	0	38,415	0
2017_11	13,386	0	38,268	0
2017_12	13,344	0	38,162	0

	Phase III		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-Phase III WCM	Post-Phase III WCM
2018_01	13,341	0	38,195	0
2018_02	13,357	0	38,130	0
2018_03	13,400	0	38,314	0
2018_04	13,312	0	38,333	0
2018_05	13,268	0	38,401	0
2018_06	13,166	0	38,224	0
2018_07	13,148	0	38,222	0
2018_08	13,117	0	38,188	0
2018_09	13,021	0	37,970	0
2018_10	13,038	0	37,799	0
2018_11	12,901	0	37,604	0
2018_12	12,849	0	37,488	0
2019_01	12,865	0	37,551	0
2019_02	12,754	0	37,429	0
2019_03	12,774	0	37,480	0
2019_04	12,645	0	37,497	0
2019_05	12,588	0	37,524	0
2019_06	12,530	0	37,612	0
2019_07	292	12,068	0	37,640
2019_08	293	11,968	0	37,691
2019_09	272	11,937	0	37,670
2019_10	266	11,975	0	37,759

	Phase III		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-Phase III WCM	Post-Phase III WCM
2019_11	251	11,860	0	37,664
2019_12	258	11,771	0	37,653
2020_01	264	11,756	0	37,856
2020_02	256	11,695	0	37,839
2020_03	255	11,581	0	37,824
2020_04	249	11,453	0	37,637
2020_05	260	11,419	0	37,558
2020_06	249	11,419	0	37,642
2020_07	235	11,413	0	37,799
2020_08	210	11,394	0	37,856
2020_09	194	11,392	0	37,846
2020_10	201	11,450	0	37,863
2020_11	188	11,489	0	37,727
2020_12	200	11,526	0	37,776
2021_01	191	11,572	0	38,033
2021_02	210	11,579	0	38,350
2021_03	211	11,623	0	38,887
2021_04	198	11,690	0	39,379
2021_05	216	11,707	0	39,808
2021_06	232	11,771	0	40,311

- Phase III Pre-WCM: CCS clients in Orange County who were not in WCM between July 2017 - June 2021.
- Phase III Post-WCM CCS clients in WCM between July 2019 - June 2021.

	Phase III		Classic CCS Counties	
Year_Month	Pre-WCM	Post-WCM	Pre-Phase III WCM	Post-Phase III WCM

- Classic Pre-WCM: CCS clients in classic counties between July 2017 - June 2019.
- Classic Post-WCM: CCS clients in classic counties between July 2019 - June 2021.

Reason for Denial into CCS

Summary of reasons for Denials: In Table 9, the overwhelming reason for denial into the CDCS program was due to medical ineligibility with the second most common reason being not completing the application.

Table 9: Reason for Denials Into the CCS System

Reason for Denial	Frequency	Percent
App not received	2,686	1.5
Client enrolled in a commercial health maintenance organization	5,168	2.8
Client is over 21 years of age	96	0.1
Client no longer a resident of the county	382	0.2
Client/family declines services	1,221	0.7
Death of a patient	40	0.0
Failure to complete Medi-Cal application process	1,247	0.7
Failure to pay fee(s)	31	0.0
Hospital not approved	631	0.3
Income exceeds $40K	747	0.4
Income exceeds $40K – out-of-pocket expense does not exceed	1,871	1.0
Insufficient documentation	3,254	1.8
Medically ineligible	140,832	77.3
Medically ineligible for orthodontic services	355	0.2
MTP paperwork incomplete	61	0.0

Reason for Denial	Frequency	Percent
MTP therapy services only	32	0.0
No application submitted	13	0.0
No current medical reports have been received	2	0.0
No current services requested	6	0.0
No response from last known address	3,263	1.8
Not a program benefit	57	0.0
Not CCS eligible – referred to Denti-Cal	273	0.1
Other (non-standard citation)	5,881	3.2
Parent/Guardian military – Not CA	11	0.0
Program eligibility process incomplete	10,912	6.0
Provider not an approved Medi-Cal or Denti-Cal provider	73	0.0
Provider not CCS paneled	2,440	1.3
Requested service is not to treat the client's CCS eligible	114	0.1
Residential eligibility criteria not met	20	0.0
Service prior to request	528	0.3
SNF placement	1	0.0

Table 10. CCS Enrollment, New Enrollments, and Deaths by Month: HPSM WCM vs. Classic CCS Pre-/Post-WCM

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
Classic FFS CCS Counties	Pre-HPSM WCM	2016_07	7,268	39	0.5	S	S
		2016_08	7,338	38	0.5	S	S
		2016_09	7,416	44	0.6	S	S

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2016_10	7,464	38	0.5	S	S
		2016_11	7,511	33	0.4	S	S
		2016_12	7,508	36	0.5	S	S
		2017_01	7,484	37	0.5	S	S
		2017_02	7,480	31	0.4	S	S
		2017_03	7,496	35	0.5	S	S
		2017_04	7,444	33	0.4	S	S
		2017_05	7,452	47	0.6	S	S
		2017_06	7,492	46	0.6	S	S
		2017_07	7,442	43	0.6	S	S
		2017_08	7,421	52	0.7	S	S
		2017_09	7,418	42	0.6	S	S
		2017_10	7,416	40	0.5	S	S
		2017_11	7,430	41	0.6	S	S
		2017_12	7,400	33	0.4	S	S
		2018_01	7,397	46	0.6	S	S
		2018_02	7,371	35	0.5	S	S
		2018_03	7,380	40	0.5	0	0.00
		2018_04	7,403	38	0.5	0	0.00
		2018_05	7,415	56	0.8	S	S
		2018_06	7,401	44	0.6	S	S
		2018_07	7,436	43	0.6	S	S

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
	Post-HPSM WCM	2018_08	7,426	41	0.6	0	0.00
		2018_09	7,388	35	0.5	S	S
		2018_10	7,400	36	0.5	S	S
		2018_11	7,365	42	0.6	0	0.00
		2018_12	7,331	51	0.7	S	S
		2019_01	7,303	33	0.5	S	S
		2019_02	7,230	36	0.5	S	S
		2019_03	7,172	24	0.3	S	S
		2019_04	7,116	30	0.4	S	S
		2019_05	7,057	43	0.6	S	S
		2019_06	7,001	34	0.5	0	0.00
		2019_07	6,975	34	0.5	S	S
		2019_08	6,962	49	0.7	S	S
		2019_09	6,939	41	0.6	S	S
		2019_10	6,961	40	0.6	S	S
		2019_11	6,874	28	0.4	S	S
		2019_12	6,854	51	0.7	S	S
		2020_01	6,857	35	0.5	S	S
		2020_02	6,835	33	0.5	S	S
		2020_03	6,818	49	0.7	S	S
		2020_04	6,701	35	0.5	S	S
		2020_05	6,712	37	0.6	S	S
		2020_06	6,751	40	0.6	S	S

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2020_07	6,805	36	0.5	S	S
		2020_08	6,830	36	0.5	S	S
		2020_09	6,853	34	0.5	S	S
		2020_10	6,879	49	0.7	S	S
		2020_11	6,895	31	0.4	S	S
		2020_12	6,956	43	0.6	S	S
		2021_01	6,971	42	0.6	0	0.00
		2021_02	6,951	29	0.4	S	S
		2021_03	7,018	37	0.5	S	S
		2021_04	7,083	37	0.5	0	0.00
		2021_05	7,150	46	0.6	0	0.00
		2021_06	7,237	47	0.6	S	S
San Mateo County	Pre-HPSM WCM	2016_07	26	S	S	0	0.00
		2016_08	23	S	S	0	0.00
		2016_09	27	S	S	0	0.00
		2016_10	24	S	S	0	0.00
		2016_11	22	S	S	0	0.00
		2016_12	23	S	S	0	0.00
		2017_01	22	S	S	0	0.00
		2017_02	21	S	S	0	0.00
		2017_03	17	S	S	0	0.00
		2017_04	14	0	0.0	0	0.00
		2017_05	12	S	S	0	0.00

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2017_06	11	S	S	0	0.00
		2017_07	11	S	S	0	0.00
		2017_08	17	S	S	0	0.00
		2017_09	11	0	0.0	0	0.00
		2017_10	16	S	S	0	0.00
		2017_11	17	S	S	0	0.00
		2017_12	20	S	S	0	0.00
		2018_01	19	S	S	0	0.00
		2018_02	23	S	S	0	0.00
		2018_03	24	S	S	0	0.00
		2018_04	24	S	S	0	0.00
		2018_05	28	S	S	0	0.00
		2018_06	35	S	S	0	0.00
	Post-HPSM WCM	2018_07	24	S	S	S	S
		2018_08	46	S	S	0	0.00
		2018_09	76	S	S	0	0.00
		2018_10	97	S	S	0	0.00
		2018_11	125	S	S	0	0.00
		2018_12	151	S	S	0	0.00
		2019_01	172	S	S	0	0.00
		2019_02	190	S	S	0	0.00
		2019_03	206	S	S	0	0.00
		2019_04	213	S	S	0	0.00

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2019_05	231	S	S	1	0.43
		2019_06	243	S	S	0	0.00
		2019_07	252	S	S	0	0.00
		2019_08	270	12	4.4	0	0.00
		2019_09	295	11	3.7	0	0.00
		2019_10	313	S	S	0	0.00
		2019_11	317	S	S	0	0.00
		2019_12	330	S	S	0	0.00
		2020_01	332	S	S	0	0.00
		2020_02	347	S	S	0	0.00
		2020_03	354	S	S	0	0.00
		2020_04	361	S	S	0	0.00
		2020_05	375	S	S	0	0.00
		2020_06	380	S	S	0	0.00
		2020_07	394	S	S	0	0.00
		2020_08	416	S	S	0	0.00
		2020_09	450	S	S	S	S
		2020_10	473	S	S	0	0.00
		2020_11	481	S	S	0	0.00
		2020_12	487	S	S	S	S
		2021_01	492	S	S	0	0.00
		2021_02	499	S	S	0	0.00
		2021_03	519	S	S	0	0.00

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2021_04	534	S	S	0	0.00
		2021_05	554	S	S	0	0.00
		2021_06	566	S	S	0	0.00

- Pre-WCM: Fee-for-Service CCS clients in San Mateo County who were never in the San Mateo CCS DP.
- Post-WCM: HPSM WCM clients between July 2018 - June 2021.
- Classic Pre-WCM: CCS clients in classic counties between July 2016 - June 2018.
- Classic Post-WCM: CCS clients in classic counties between July 2018 - June 2021.

Table 11. CCS Enrollment, New Enrollments, and Deaths by Month: Phase I vs. Classic CCS Pre-/Post-WCM

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
Phase I Counties	Pre-Phase I WCM	2016_07	9,778	89	0.9	6	0.06
		2016_08	9,868	103	1.0	5	0.05
		2016_09	9,893	79	0.8	2	0.02
		2016_10	9,908	77	0.8	1	0.01
		2016_11	10,005	78	0.8	1	0.01
		2016_12	10,052	102	1.0	2	0.02
		2017_01	10,111	77	0.8	1	0.01
		2017_02	10,111	52	0.5	5	0.05
		2017_03	10,215	94	0.9	4	0.04
		2017_04	10,173	79	0.8	4	0.04
		2017_05	10,248	91	0.9	4	0.04

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2017_06	10,245	96	0.9	2	0.02
		2017_07	10,200	90	0.9	3	0.03
		2017_08	10,214	119	1.2	3	0.03
		2017_09	10,171	89	0.9	3	0.03
		2017_10	10,144	93	0.9	4	0.04
		2017_11	10,126	85	0.8	1	0.01
		2017_12	10,123	69	0.7	3	0.03
		2018_01	10,125	77	0.8	5	0.05
		2018_02	10,136	86	0.8	6	0.06
		2018_03	10,211	90	0.9	3	0.03
		2018_04	10,170	70	0.7	2	0.02
		2018_05	10,198	24	0.2	0	0.00
		2018_06	10,120	28	0.3	5	0.05
		2018_07	211	19	9.0	1	0.47
		2018_08	217	20	9.2	1	0.46
		2018_09	197	11	5.6	0	0.00
		2018_10	217	24	11.1	3	1.38
		2018_11	204	22	10.8	0	0.00
		2018_12	189	13	6.9	2	1.06
		2019_01	193	15	7.8	2	1.04
		2019_02	213	20	9.4	2	0.94
		2019_03	196	17	8.7	1	0.51
		2019_04	181	10	5.5	0	0.00

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2019_05	184	20	10.9	0	0.00
		2019_06	185	12	6.5	1	0.54
		2019_07	204	29	14.2	1	0.49
		2019_08	213	16	7.5	0	0.00
		2019_09	195	11	5.6	0	0.00
		2019_10	183	13	7.1	1	0.55
		2019_11	195	18	9.2	0	0.00
		2019_12	192	12	6.3	1	0.52
		2020_01	199	20	10.1	1	0.50
		2020_02	198	19	9.6	0	0.00
		2020_03	187	7	3.7	0	0.00
		2020_04	170	14	8.2	1	0.59
		2020_05	177	16	9.0	0	0.00
		2020_06	164	12	7.3	1	0.61
		2020_07	166	15	9.0	1	0.60
		2020_08	176	13	7.4	0	0.00
		2020_09	161	18	11.2	0	0.00
		2020_10	144	10	6.9	3	2.08
		2020_11	151	19	12.6	0	0.00
		2020_12	154	9	5.8	1	0.65
		2021_01	163	18	11.0	1	0.61
		2021_02	157	11	7.0	0	0.00
		2021_03	170	17	10.0	1	0.59

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2021_04	172	23	13.4	0	0.00
		2021_05	180	23	12.8	0	0.00
		2021_06	201	32	15.9	1	0.50
	Post-Phase I WCM	2018_07	9,808	113	1.2	3	0.03
		2018_08	9,840	47	0.5	2	0.02
		2018_09	9,792	39	0.4	1	0.01
		2018_10	9,756	33	0.3	3	0.03
		2018_11	9,673	44	0.5	1	0.01
		2018_12	9,565	40	0.4	5	0.05
		2019_01	9,426	42	0.4	1	0.01
		2019_02	9,303	42	0.5	5	0.05
		2019_03	9,221	43	0.5	0	0.00
		2019_04	9,155	51	0.6	4	0.04
		2019_05	9,121	53	0.6	4	0.04
		2019_06	9,116	59	0.6	2	0.02
		2019_07	9,106	51	0.6	3	0.03
		2019_08	9,037	41	0.5	1	0.01
		2019_09	9,034	48	0.5	1	0.01
		2019_10	9,013	47	0.5	4	0.04
		2019_11	9,059	46	0.5	1	0.01
		2019_12	9,102	45	0.5	2	0.02
		2020_01	9,142	60	0.7	0	0.00
		2020_02	9,174	49	0.5	2	0.02

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2020_03	9,169	57	0.6	5	0.05
		2020_04	9,155	58	0.6	3	0.03
		2020_05	9,142	57	0.6	0	0.00
		2020_06	9,226	61	0.7	5	0.05
		2020_07	9,296	73	0.8	3	0.03
		2020_08	9,414	56	0.6	1	0.01
		2020_09	9,532	76	0.8	2	0.02
		2020_10	9,596	57	0.6	3	0.03
		2020_11	9,635	48	0.5	0	0.00
		2020_12	9,678	53	0.5	4	0.04
		2021_01	9,764	57	0.6	0	0.00
		2021_02	9,874	62	0.6	0	0.00
		2021_03	9,989	63	0.6	0	0.00
		2021_04	10,085	65	0.6	1	0.01
		2021_05	10,181	65	0.6	0	0.00
		2021_06	10,257	50	0.5	2	0.02
Classic FFS CCS Counties	Pre-Phase I WCM	2016_07	26,362	247	0.9	8	0.03
		2016_08	26,485	241	0.9	16	0.06
		2016_09	26,654	260	1.0	17	0.06
		2016_10	26,780	251	0.9	13	0.05
		2016_11	26,842	214	0.8	10	0.04
		2016_12	26,857	230	0.9	19	0.07
		2017_01	26,977	225	0.8	8	0.03

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2017_02	27,086	196	0.7	4	0.01
		2017_03	27,350	234	0.9	16	0.06
		2017_04	27,358	200	0.7	9	0.03
		2017_05	27,472	226	0.8	11	0.04
		2017_06	27,559	246	0.9	13	0.05
		2017_07	27,502	226	0.8	9	0.03
		2017_08	27,587	254	0.9	8	0.03
		2017_09	27,627	210	0.8	5	0.02
		2017_10	27,648	206	0.7	11	0.04
		2017_11	27,611	207	0.7	8	0.03
		2017_12	27,536	203	0.7	11	0.04
		2018_01	27,589	237	0.9	11	0.04
		2018_02	27,628	195	0.7	7	0.03
		2018_03	27,764	202	0.7	3	0.01
		2018_04	27,870	192	0.7	2	0.01
		2018_05	27,981	245	0.9	7	0.03
		2018_06	28,034	210	0.7	7	0.02
	Post-Phase I WCM	2018_07	28,100	244	0.9	9	0.03
		2018_08	28,162	221	0.8	7	0.02
		2018_09	28,157	221	0.8	9	0.03
		2018_10	28,177	253	0.9	11	0.04
		2018_11	28,043	214	0.8	7	0.02
		2018_12	27,937	216	0.8	10	0.04

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2019_01	28,014	213	0.8	7	0.02
		2019_02	27,985	186	0.7	14	0.05
		2019_03	28,063	191	0.7	4	0.01
		2019_04	27,989	204	0.7	7	0.03
		2019_05	27,924	216	0.8	12	0.04
		2019_06	27,889	210	0.8	10	0.04
		2019_07	27,814	214	0.8	8	0.03
		2019_08	27,798	236	0.8	12	0.04
		2019_09	27,771	220	0.8	11	0.04
		2019_10	27,911	218	0.8	9	0.03
		2019_11	27,787	188	0.7	6	0.02
		2019_12	27,761	200	0.7	10	0.04
		2020_01	27,892	178	0.6	7	0.03
		2020_02	27,924	189	0.7	10	0.04
		2020_03	27,956	225	0.8	9	0.03
		2020_04	27,666	177	0.6	11	0.04
		2020_05	27,679	208	0.8	5	0.02
		2020_06	27,755	209	0.8	11	0.04
		2020_07	27,845	208	0.7	13	0.05
		2020_08	27,954	240	0.9	9	0.03
		2020_09	28,046	224	0.8	7	0.02
		2020_10	28,045	237	0.8	12	0.04
		2020_11	28,108	164	0.6	8	0.03

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2020_12	28,274	231	0.8	11	0.04
		2021_01	28,396	209	0.7	1	0.00
		2021_02	28,504	210	0.7	3	0.01
		2021_03	28,852	211	0.7	1	0.00
		2021_04	29,122	212	0.7	2	0.01
		2021_05	29,363	224	0.8	2	0.01
		2021_06	29,626	249	0.8	3	0.01

- Phase I Pre-WCM: CCS clients in Phase I counties
- Post-WCM: CCS clients in WCM between July 2018 - June 2021.
- Classic Pre-WCM: CCS clients in classic counties between July 2016 - June 2018.
- Classic Post-WCM: CCS clients in classic counties between July 2018 - June 2021.

Table 12. CCS Enrollment, New Enrollments, and Deaths by Month: Phase II vs. Classic CCS Pre-/Post-WCM

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
Phase II Counties	Pre-Phase II WCM	2017_01	8,162	47	0.6	5	0.06
		2017_02	8,140	35	0.4	4	0.05
		2017_03	8,203	53	0.6	1	0.01
		2017_04	8,211	38	0.5	2	0.02
		2017_05	8,231	42	0.5	3	0.04
		2017_06	8,251	36	0.4	2	0.02
		2017_07	8,209	40	0.5	3	0.04

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2017_08	8,270	62	0.7	2	0.02
		2017_09	8,202	53	0.6	4	0.05
		2017_10	8,220	44	0.5	2	0.02
		2017_11	8,249	46	0.6	3	0.04
		2017_12	8,251	48	0.6	4	0.05
		2018_01	8,268	43	0.5	4	0.05
		2018_02	8,231	43	0.5	2	0.02
		2018_03	8,247	47	0.6	2	0.02
		2018_04	8,227	36	0.4	0	0.00
		2018_05	8,242	38	0.5	4	0.05
		2018_06	8,211	33	0.4	2	0.02
		2018_07	8,215	47	0.6	2	0.02
		2018_08	8,269	72	0.9	3	0.04
		2018_09	8,250	53	0.6	6	0.07
		2018_10	8,193	47	0.6	0	0.00
		2018_11	8,143	12	0.1	1	0.01
		2018_12	8,083	13	0.2	2	0.02
	Post-Phase II WCM	2019_01	7,679	72	0.9	3	0.04
		2019_02	7,618	18	0.2	2	0.03
		2019_03	7,633	31	0.4	2	0.03
		2019_04	7,663	26	0.3	1	0.01
		2019_05	7,665	33	0.4	2	0.03
		2019_06	7,635	30	0.4	4	0.05

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2019_07	7,674	38	0.5	2	0.03
		2019_08	7,686	35	0.5	1	0.01
		2019_09	7,693	35	0.5	2	0.03
		2019_10	7,698	36	0.5	4	0.05
		2019_11	7,660	21	0.3	2	0.03
		2019_12	7,647	29	0.4	4	0.05
		2020_01	7,666	42	0.5	4	0.05
		2020_02	7,624	25	0.3	1	0.01
		2020_03	7,575	33	0.4	5	0.07
		2020_04	7,566	30	0.4	0	0.00
		2020_05	7,595	27	0.4	4	0.05
		2020_06	7,609	40	0.5	2	0.03
		2020_07	7,659	40	0.5	4	0.05
		2020_08	7,710	36	0.5	0	0.00
		2020_09	7,726	34	0.4	3	0.04
		2020_10	7,812	37	0.5	4	0.05
		2020_11	7,862	28	0.4	2	0.03
		2020_12	7,902	23	0.3	1	0.01
Classic FFS CCS Counties	Pre-Phase II WCM	2017_01	25,686	169	0.7	5	0.02
		2017_02	25,557	143	0.6	8	0.03
		2017_03	25,667	173	0.7	7	0.03
		2017_04	25,578	150	0.6	4	0.02

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2017_05	25,666	214	0.8	10	0.04
		2017_06	25,634	163	0.6	5	0.02
		2017_07	25,476	195	0.8	6	0.02
		2017_08	25,523	193	0.8	4	0.02
		2017_09	25,461	184	0.7	10	0.04
		2017_10	25,575	179	0.7	4	0.02
		2017_11	25,565	191	0.7	5	0.02
		2017_12	25,549	153	0.6	4	0.02
		2018_01	25,647	174	0.7	10	0.04
		2018_02	25,600	156	0.6	4	0.02
		2018_03	25,702	167	0.6	1	0.00
		2018_04	25,697	138	0.5	3	0.01
		2018_05	25,795	194	0.8	3	0.01
		2018_06	25,724	155	0.6	11	0.04
		2018_07	25,796	163	0.6	7	0.03
		2018_08	25,865	180	0.7	10	0.04
		2018_09	25,885	174	0.7	7	0.03
		2018_10	25,884	156	0.6	9	0.03
		2018_11	25,838	172	0.7	10	0.04
		2018_12	25,787	164	0.6	3	0.01
	Post-Phase II WCM	2019_01	25,826	184	0.7	11	0.04
		2019_02	25,734	152	0.6	19	0.07
		2019_03	25,757	165	0.6	9	0.03

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2019_04	25,730	147	0.6	6	0.02
		2019_05	25,742	191	0.7	4	0.02
		2019_06	25,612	178	0.7	2	0.01
		2019_07	25,609	175	0.7	9	0.04
		2019_08	25,568	193	0.8	5	0.02
		2019_09	25,512	164	0.6	10	0.04
		2019_10	25,457	205	0.8	6	0.02
		2019_11	25,331	161	0.6	4	0.02
		2019_12	25,330	172	0.7	11	0.04
		2020_01	25,348	177	0.7	6	0.02
		2020_02	25,168	130	0.5	5	0.02
		2020_03	24,998	161	0.6	5	0.02
		2020_04	24,852	146	0.6	8	0.03
		2020_05	24,819	150	0.6	7	0.03
		2020_06	24,871	153	0.6	13	0.05
		2020_07	25,030	168	0.7	6	0.02
		2020_08	25,157	150	0.6	9	0.04
		2020_09	25,363	161	0.6	11	0.04
		2020_10	25,457	158	0.6	6	0.02
		2020_11	25,505	144	0.6	5	0.02
		2020_12	25,585	167	0.7	10	0.04

- Phase II Pre-WCM: CCS clients in Phase II counties between January 2017 - December 2020.
- Phase II Post-WCM CCS clients in WCM between January 2019 - December 2020.

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths

- Classic Pre-WCM: CCS clients in classic counties between January 2017 - December 2018.
- Classic Post-WCM: CCS clients in classic counties between January 2019 - December 2020.

Table 13. CCS Enrollment, New Enrollments, and Deaths by Month: Phase III vs. Classic CCS Pre-/Post-WCM

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
Phase III	Pre-Phase III WCM	2017_07	13,338	64	0.5	2	0.01
		2017_08	13,420	69	0.5	3	0.02
		2017_09	13,402	73	0.5	7	0.05
		2017_10	13,419	81	0.6	3	0.02
		2017_11	13,386	75	0.6	6	0.04
		2017_12	13,344	54	0.4	4	0.03
		2018_01	13,341	70	0.5	5	0.04
		2018_02	13,357	62	0.5	4	0.03
		2018_03	13,400	67	0.5	0	0.00
		2018_04	13,312	47	0.4	0	0.00
		2018_05	13,268	56	0.4	0	0.00
		2018_06	13,166	63	0.5	2	0.02
		2018_07	13,148	63	0.5	2	0.02
		2018_08	13,117	73	0.6	0	0.00
		2018_09	13,021	57	0.4	3	0.02
		2018_10	13,038	71	0.5	0	0.00

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2018_11	12,901	63	0.5	1	0.01
		2018_12	12,849	60	0.5	4	0.03
		2019_01	12,865	78	0.6	3	0.02
		2019_02	12,754	51	0.4	4	0.03
		2019_03	12,774	86	0.7	2	0.02
		2019_04	12,645	46	0.4	6	0.05
		2019_05	12,588	24	0.2	4	0.03
		2019_06	12,530	28	0.2	0	0.00
	Post-Phase III WCM	2019_07	12,068	85	0.7	2	0.02
		2019_08	11,968	42	0.4	3	0.03
		2019_09	11,937	50	0.4	2	0.02
		2019_10	11,975	33	0.3	1	0.01
		2019_11	11,860	47	0.4	5	0.04
		2019_12	11,771	45	0.4	4	0.03
		2020_01	11,756	33	0.3	0	0.00
		2020_02	11,695	42	0.4	2	0.02
		2020_03	11,581	42	0.4	2	0.02
		2020_04	11,453	51	0.4	4	0.03
		2020_05	11,419	31	0.3	1	0.01
		2020_06	11,419	23	0.2	1	0.01
		2020_07	11,413	44	0.4	0	0.00
		2020_08	11,394	43	0.4	3	0.03
		2020_09	11,392	32	0.3	4	0.04

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2020_10	11,450	42	0.4	3	0.03
		2020_11	11,489	29	0.3	3	0.03
		2020_12	11,526	42	0.4	4	0.03
		2021_01	11,572	44	0.4	1	0.01
		2021_02	11,579	32	0.3	0	0.00
		2021_03	11,623	31	0.3	0	0.00
		2021_04	11,690	40	0.3	0	0.00
		2021_05	11,707	41	0.4	0	0.00
		2021_06	11,771	45	0.4	0	0.00
Classic FFS CCS Counties	Pre-Phase III WCM	2017_07	38,521	311	0.8	16	0.04
		2017_08	38,455	332	0.9	11	0.03
		2017_09	38,418	280	0.7	18	0.05
		2017_10	38,415	318	0.8	11	0.03
		2017_11	38,268	266	0.7	12	0.03
		2017_12	38,162	281	0.7	20	0.05
		2018_01	38,195	284	0.7	9	0.02
		2018_02	38,130	236	0.6	5	0.01
		2018_03	38,314	318	0.8	8	0.02
		2018_04	38,333	255	0.7	4	0.01
		2018_05	38,401	280	0.7	4	0.01
		2018_06	38,224	258	0.7	13	0.03
		2018_07	38,222	294	0.8	13	0.03
		2018_08	38,188	315	0.8	6	0.02

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2018_09	37,970	301	0.8	5	0.01
		2018_10	37,799	282	0.7	12	0.03
		2018_11	37,604	269	0.7	7	0.02
		2018_12	37,488	250	0.7	17	0.05
		2019_01	37,551	317	0.8	12	0.03
		2019_02	37,429	255	0.7	20	0.05
		2019_03	37,480	257	0.7	15	0.04
		2019_04	37,497	231	0.6	12	0.03
		2019_05	37,524	270	0.7	9	0.02
		2019_06	37,612	255	0.7	11	0.03
	Post-Phase III WCM	2019_07	37,640	280	0.7	10	0.03
		2019_08	37,691	290	0.8	14	0.04
		2019_09	37,670	291	0.8	12	0.03
		2019_10	37,759	247	0.7	25	0.07
		2019_11	37,664	198	0.5	8	0.02
		2019_12	37,653	238	0.6	11	0.03
		2020_01	37,856	221	0.6	5	0.01
		2020_02	37,839	216	0.6	15	0.04
		2020_03	37,824	225	0.6	12	0.03
		2020_04	37,637	214	0.6	11	0.03
		2020_05	37,558	205	0.5	9	0.02
		2020_06	37,642	249	0.7	16	0.04
		2020_07	37,799	261	0.7	8	0.02

Location	Study Group	Year_Month	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		2020_08	37,856	251	0.7	5	0.01
		2020_09	37,846	279	0.7	21	0.06
		2020_10	37,863	262	0.7	15	0.04
		2020_11	37,727	210	0.6	7	0.02
		2020_12	37,776	224	0.6	14	0.04
		2021_01	38,033	210	0.6	1	0.00
		2021_02	38,350	194	0.5	4	0.01
		2021_03	38,887	272	0.7	1	0.00
		2021_04	39,379	287	0.7	1	0.00
		2021_05	39,808	237	0.6	1	0.00
		2021_06	40,311	267	0.7	3	0.01

- Phase III Pre-WCM: CCS clients in Orange County who were not in WCM.
- Phase III Post-WCM Orange County CCS clients in WCM between July 2019 - June 2021.
- Classic Pre-WCM: CCS clients in classic counties between July 2017 - June 2019.
- Classic Post-WCM: CCS clients in classic counties between July 2019 - June 2021.

CCS Enrollment, New Enrollments, and Deaths by Year and by County

Summary of CCS enrollment

Overall, there was a decrease in total clients and new enrollment in most counties post WCM implementation.

CCS Enrollment, New Enrollments, and Deaths by Year and by County: HPSM WCM Pre-/Post-WCM

Not applicable as HPSM WCM comprises only one county. See main table on CCS enrollment in the main report.

Table 14. CCS Enrollment, New Enrollments, and Deaths by Year and by County: Phase I Pre-/Post-WCM

County	Study Group	Pre-/Post-Year	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
Merced	Phase I Pre-WCM	-2 Year	3,391	192	5.7	12	0.35
		-1 Year	3,571	172	4.8	6	0.17
	Post-WCM	+1 Year	3,415	168	4.9	9	0.26
		+2 Year	3,229	152	4.7	13	0.40
Monterey	Phase I Pre-WCM	-2 Year	3,974	280	7.0	13	0.33
		-1 Year	4,142	239	5.8	10	0.24
	Post-WCM	+1 Year	3,751	169	4.5	9	0.24
		+2 Year	3,561	149	4.2	5	0.14
San Luis Obispo	Phase I Pre-WCM	-2 Year	1,536	99	6.4	1	0.07
		-1 Year	1,499	113	7.5	2	0.13
	Post-WCM	+1 Year	1,219	55	4.5	4	0.33
		+2 Year	1,165	67	5.8	1	0.09
Santa Barbara	Phase I Pre-WCM	-2 Year	2,828	300	10.6	8	0.28
		-1 Year	2,878	284	9.9	11	0.38
	Post-WCM	+1 Year	2,548	148	5.8	6	0.24
		+2 Year	2,502	198	7.9	7	0.28
Santa Cruz	Phase I Pre-WCM	-2 Year	1,713	146	8.5	3	0.18
		-1 Year	1,651	112	6.8	9	0.55
	Post-WCM	+1 Year	1,463	66	4.5	3	0.21
		+2 Year	1,205	54	4.5	1	0.08

County	Study Group	Pre-/Post-Year	Clients	New Clients	Pct. New	Deaths	Pct. Deaths

- Phase I Pre-WCM: CCS clients in Phase I counties
- Post-WCM: CCS clients in WCM between July 2018 - June 2021.
- Classic Pre-WCM: CCS clients in classic counties between July 2016 - June 2018.
- Classic Post-WCM: CCS clients in classic counties between July 2018 - June 2021.

Table 15. CCS Enrollment, New Enrollments, and Deaths by Year and by County (Dependent and Independent Counties): Phase II Pre-/Post-WCM

County	CCS Type	Study Group	Pre-Post-Year	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
Del Norte	Dependent	Phase II Pre-WCM	-2 Year	195	S	S	0	0.00
		Phase II Pre-WCM	-1 Year	196	S	S	S	S
		WCM	+1 Year	160	S	S	S	S
		WCM	+2 Year	130	S	S	S	S
Humboldt	Independent	Phase II Pre-WCM	-2 Year	1,014	47	4.6	0	0.00
		Phase II Pre-WCM	-1 Year	934	44	4.7	S	S
		WCM	+1 Year	819	52	6.3	S	S
		WCM	+2 Year	831	51	6.1	S	S
Lake	Dependent	Phase II Pre-WCM	-2 Year	566	25	4.4	S	S
		Phase II Pre-WCM	-1 Year	581	22	3.8	S	S
		WCM	+1 Year	447	18	4.0	S	S

County	CCS Type	Study Group	Pre-Post-Year	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		WCM	+2 Year	456	19	4.2	S	S
Lassen	Dependent	Phase II Pre-WCM	-2 Year	151	11	7.3	0	0.00
		Phase II Pre-WCM	-1 Year	181	S	S	S	S
		WCM	+1 Year	157	S	S	0	0.00
		WCM	+2 Year	125	S	S	S	S
Marin	Independent	Phase II Pre-WCM	-2 Year	833	37	4.4	S	S
		Phase II Pre-WCM	-1 Year	827	27	3.3	0	0.00
		WCM	+1 Year	801	42	5.2	S	S
		WCM	+2 Year	850	47	5.5	S	S
Mendocino	Independent	Phase II Pre-WCM	-2 Year	610	49	8.0	S	S
		Phase II Pre-WCM	-1 Year	589	27	4.6	S	S
		WCM	+1 Year	529	27	5.1	0	0.00
		WCM	+2 Year	504	33	6.5	S	S
Modoc	Dependent	Phase II Pre-WCM	-2 Year	61	S	S	0	0.00
		Phase II Pre-WCM	-1 Year	66	S	S	0	0.00
		WCM	+1 Year	55	S	S	0	0.00
		WCM	+2 Year	60	S	S	0	0.00
Napa	Independent	Phase II Pre-WCM	-2 Year	673	36	5.3	S	S

County	CCS Type	Study Group	Pre-Post-Year	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		Phase II Pre-WCM	-1 Year	662	27	4.1	0	0.00
		WCM	+1 Year	596	25	4.2	S	S
		WCM	+2 Year	586	23	3.9	S	S
Shasta	Dependent	Phase II Pre-WCM	-2 Year	1,280	87	6.8	S	S
		Phase II Pre-WCM	-1 Year	1,197	71	5.9	S	S
		WCM	+1 Year	1,100	57	5.2	S	S
		WCM	+2 Year	1,096	36	3.3	S	S
Siskiyou	Dependent	Phase II Pre-WCM	-2 Year	343	S	S	0	0.00
		Phase II Pre-WCM	-1 Year	352	16	4.5	S	S
		WCM	+1 Year	287	S	S	0	0.00
		WCM	+2 Year	267	S	S	S	S
Solano	Independent	Phase II Pre-WCM	-2 Year	1,730	90	5.2	S	S
		Phase II Pre-WCM	-1 Year	1,769	94	5.3	S	S
		WCM	+1 Year	1,619	62	3.8	S	S
		WCM	+2 Year	1,637	73	4.5	S	S
Sonoma	Independent	Phase II Pre-WCM	-2 Year	2,253	81	3.6	S	S
		Phase II Pre-WCM	-1 Year	2,242	81	3.6	S	S
		WCM	+1 Year	2,095	72	3.4	S	S

County	CCS Type	Study Group	Pre-Post-Year	Clients	New Clients	Pct. New	Deaths	Pct. Deaths
		WCM	+2 Year	1,967	58	2.9	10	0.51
Trinity	Dependent	Phase II Pre-WCM	-2 Year	83	S	S	0	0.00
		Phase II Pre-WCM	-1 Year	87	S	S	0	0.00
		WCM	+1 Year	64	S	S	S	S
		WCM	+2 Year	58	S	S	0	0.00
Yolo	Independent	Phase II Pre-WCM	-2 Year	1,066	61	5.7	S	S
		Phase II Pre-WCM	-1 Year	1,120	51	4.6	0	0.00
		WCM	+1 Year	1,027	29	2.8	S	S
		WCM	+2 Year	953	43	4.5	S	S

- Phase II Pre-WCM: CCS clients in Phase II counties between January 2017 - December 2018.
- Phase II Post-WCM CCS clients in WCM between January 2019 - December 2020.
- Classic Pre-WCM: CCS clients in classic counties between January 2017 - December 2018.
- Classic Post-WCM: CCS clients in classic counties between January 2019 - December 2020.

CCS Enrollment, New Enrollments, and Deaths by Year and by County: Phase III Pre-/Post-WCM

Not applicable as Phase III comprises only one county. See main table on CCS enrollment in the main report.

Demographic Profile of New Enrollees

Summary of New Enrollees

Generally, new enrollees were made up of those aged under 12 months of age. Demographic characteristics otherwise remained relatively stable pre-post WCM implementation across WCM study groups. HPSM had a very different pre-WCM implementation group as compared to the other WCM study groups due to the exclusion of the 1115 waiver population in this analysis.

Table 16. Demographics for New CCS Enrollees, HPSM WCM vs. Classic CCS Pre-/Post-WCM

	Pre-HPSM WCM		Post-HPSM WCM		Classic Pre-WCM		Classic Post-WCM	
Dimension	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**
Nbr Clients	49	.	194	.	967	.	1,387	.
Female	24	49.0	94	48.5	440	45.5	608	43.8
Male	25	51.0	100	51.5	527	54.5	779	56.2
Age	.	.	.	.	.	.	.	.
Average Age	*1.1*	.	*1.0*	.	*0.8*	.	*0.6*	.
<12 Mo.	39	79.6	174	89.7	887	91.7	1,302	93.9
1 year	S	S	S	S	S	S	S	S
2-6	S	S	S	S	20	2.1	21	1.5
7-11	S	S	S	S	S	S	S	S
12-20	S	S	S	S	36	3.7	40	2.9
Ethnicity	.	.	.	.	.	.	.	.
Alaskan Natv. or Am. Indian	.	.	.	.	S	S	S	S
Asian/PI	.	.	S	S	S	S	S	S

	Pre-HPSM WCM		Post-HPSM WCM		Classic Pre-WCM		Classic Post-WCM	
Dimension	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**
Black	.	.	S	S	48	5.0	61	4.4
Latinx	S	S	88	45.4	392	40.5	573	41.3
White	S	S	14	7.2	66	6.8	96	6.9
Other/Unknown	34	69.4	84	43.3	427	44.2	621	44.8
Primary Language	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**
Asian Language	S	S	S	S	62	6.4	92	6.6
English	28	57.1	102	52.6	611	63.2	829	59.8
Spanish	19	38.8	80	41.2	275	28.4	427	30.8
Other/Unknown	S	S	S	S	19	2.0	39	2.8

Table 17. Demographics for New CCS Enrollees, Phase I vs. Classic CCS Pre-/Post-WCM

	Pre-Phase I WCM		Post-Phase I WCM		Classic Pre-WCM		Classic Post-WCM	
Dimension	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**
Nbr Clients	1,937	.	1,951	.	5,357	.	7,670	.
Female	832	43.0	872	44.7	2,407	44.9	3,343	43.6
Male	1,105	57.0	1,079	55.3	2,950	55.1	4,327	56.4
Age	**.**	**.**	**.**	**.**	**.**	**.**	**.**	**.**
Average Age	*0.4*	*.*	*0.3*	*.*	*0.4*	*.*	*0.3*	*.*

	Pre-Phase I WCM		Post-Phase I WCM		Classic Pre-WCM		Classic Post-WCM	
Dimension	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**
<12 Mo.	1,867	96.4	1,884	96.6	5,146	96.1	7,414	96.7
1 year	3	0.2	8	0.4	28	0.5	36	0.5
2-6	15	0.8	16	0.8	48	0.9	59	0.8
7-11	14	0.7	13	0.7	30	0.6	33	0.4
12-20	38	2.0	30	1.5	105	2.0	128	1.7
Ethnicity	.	.	.	.	.	.	.	.
Alaskan Natv. or Am. Indian	.	.	.	.	13	0.2	26	0.3
Asian/PI	10	0.5	10	0.5	58	1.1	60	0.8
Black	22	1.1	31	1.6	260	4.9	389	5.1
Latinx	962	49.7	980	50.2	2,791	52.1	3,765	49.1
White	453	23.4	361	18.5	684	12.8	903	11.8
Other/Unknown	490	25.3	569	29.2	1,551	29.0	2,527	32.9
Primary Language	.	.	.	.	.	.	.	.
Asian Language	7	0.4	3	0.2	51	1.0	69	0.9
English	1,203	62.1	1,194	61.2	4,109	76.7	5,870	76.5
Spanish	723	37.3	747	38.3	1,154	21.5	1,659	21.6
Other/Unknown	4	0.2	7	0.4	43	0.8	72	0.9

Table 18. Demographics for New CCS Enrollees, Phase II vs. Classic CCS Pre-/Post-WCM

	Pre-Phase II WCM		Post-Phase II WCM		Classic Pre-WCM		Classic Post-WCM	
Dimension	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**
Nbr Clients	1,028	.	799	.	4,100	.	3,952	.
Female	433	42.1	346	43.3	1,888	46.0	1,732	43.8
Male	595	57.9	453	56.7	2,212	54.0	2,220	56.2
Age	.	.	.	.	.	.	.	.
Average Age	*0.7*	*.*	*0.8*	*.*	*0.4*	*.*	*0.4*	*.*
<12 Mo.	964	93.8	730	91.4	3,918	95.6	3,794	96.0
1 year	9	0.9	9	1.1	22	0.5	14	0.4
2-6	13	1.3	23	2.9	53	1.3	46	1.2
7-11	9	0.9	9	1.1	26	0.6	35	0.9
12-20	33	3.2	28	3.5	81	2.0	63	1.6
Ethnicity	.	.	.	.	.	.	.	.
Alaskan Natv. or Am. Indian	21	2.0	6	0.8	12	0.3	14	0.4
Asian/PI	8	0.8	2	0.3	92	2.2	66	1.7
Black	54	5.3	36	4.5	463	11.3	393	9.9
Latinx	275	26.8	226	28.3	1,164	28.4	1,054	26.7
White	230	22.4	169	21.2	452	11.0	457	11.6
Other/Unknown	440	42.8	360	45.1	1,917	46.8	1,968	49.8
Primary Language	.	.	.	.	.	.	.	.
Asian Language	6	0.6	3	0.4	101	2.5	80	2.0

	Pre-Phase II WCM		Post-Phase II WCM		Classic Pre-WCM		Classic Post-WCM	
Dimension	n	Col. Pct	n	Col. Pct	n	Col. Pct	n	Col. Pct
English	800	77.8	620	77.6	3,091	75.4	2,990	75.7
Spanish	209	20.3	170	21.3	784	19.1	761	19.3
Other/Unknown	13	1.3	6	0.8	124	3.0	121	3.1

Table 19. Demographics for New CCS Enrollees, Phase III vs. Classic CCS Pre-/Post-WCM

	Pre-Phase III WCM		Post-Phase III WCM		Classic Pre-WCM		Classic Post-WCM	
Dimension	n	Col. Pct	n	Col. Pct	n	Col. Pct	n	Col. Pct
Nbr Clients	1,481	.	989	.	6,715	.	5,828	.
Female	626	42.3	448	45.3	2,988	44.5	2,593	44.5
Male	855	57.7	541	54.7	3,727	55.5	3,235	55.5
Age	.	.	.	.	.	.	.	.
Average Age	*0.9*	*.*	*0.6*	*.*	*0.5*	*.*	*0.5*	*.*
<12 Mo.	1,371	92.6	927	93.7	6,425	95.7	5,595	96.0
1 year	9	0.6	9	0.9	39	0.6	22	0.4
2-6	16	1.1	12	1.2	62	0.9	45	0.8
7-11	26	1.8	10	1.0	43	0.6	38	0.7
12-20	59	4.0	31	3.1	146	2.2	128	2.2
Ethnicity	.	.	.	.	.	.	.	.
Alaskan Natv. or Am. Indian	.	.	1	0.1	7	0.1	2	0.0

	Pre-Phase III WCM		Post-Phase III WCM		Classic Pre-WCM		Classic Post-WCM	
Dimension	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**	**n**	**Col. Pct**
Asian/PI	15	1.0	1	0.1	56	0.8	41	0.7
Black	23	1.6	21	2.1	636	9.5	587	10.1
Latinx	733	49.5	511	51.7	3,675	54.7	3,503	60.1
White	192	13.0	128	12.9	449	6.7	380	6.5
Other/Unknown	518	35.0	327	33.1	1,892	28.2	1,315	22.6
Primary Language	.	.	.	.	.	.	.	.
Asian Language	64	4.3	28	2.8	95	1.4	71	1.2
English	1,011	68.3	685	69.3	4,887	72.8	4,274	73.3
Spanish	390	26.3	262	26.5	1,631	24.3	1,391	23.9
Other/Unknown	16	1.1	14	1.4	102	1.5	92	1.6

Time to Transfer to the WCM from FFS by Aid Code

Summary of time to transfer to the WCM from FFS by Aid Code

Across All WCM groups, 9K had markedly longer time prior to entry into the WCM after entry into CCS as compared to the 9N, 9R or 9U Aid code.

Table 20. San Mateo FFS, Proportion Entering the WCM and Time to Entry by Aid Code

CCS Aid Code	Aid Code Description	Count	Percent Entering WCM	Avg. Nbr. FFS Months before WCM
9K	Eligible for all CCS benefits (such as diagnosis, treatment, therapy and case management)	77	10.4	6.6
9N	Eligible for CCS only if concurrently eligible for full-scope, no SOC Medi-Cal. CCS authorization required	277	73.6	2.0
9U	Enrolled in a HF plan and is eligible for all CCS benefits (such as diagnosis, treatment, therapy, and case management). County has cost sharing for CCS services	8	75.0	1.0
	Total	362	60.2	2.1

- Count of FFS clients is restricted to the study period.
- The percent entering WCM includes those who entered the WCM even after the study period ended.
- The average number of months in FFS before entering the WCM excludes months before the WCM started.
- The average number of months in FFS excludes those who did not enter the WCM at any point.

Table 21. Phase I Counties FFS, Proportion Entering the WCM and Time to Entry by Aid Code

CCS Aid Cd	Aid Code Description	Count	Percent Entering WCM	Avg. Nbr. FFS Months before WCM
9K	Eligible for all CCS benefits (such as diagnosis, treatment, therapy and case management)	521	58.5	3.8
9N	Eligible for CCS only if concurrently eligible for full-scope, no SOC Medi-Cal. CCS authorization required	1,653	68.4	2.1
9R	Enrolled in a HF plan and is eligible for all CCS benefits (such as diagnosis, treatment, therapy, and case management). No county cost sharing for CCS services	26	84.6	2.5
9U	Enrolled in a HF plan and is eligible for all CCS benefits (such as diagnosis, treatment, therapy, and case management). County has cost sharing for CCS services	55	83.6	1.8
	Total	2,255	66.7	2.5

- Count of FFS clients is restricted to the study period.
- The percent entering WCM includes those who entered the WCM even after the study period ended.
- The average number of months in FFS before entering the WCM excludes months before the WCM started.
- The average number of months in FFS excludes those who did not enter the WCM at any point.

Table 22. Phase II Counties FFS, Proportion Entering the WCM and Time to Entry by Aid Code

CCS Aid Cd	Aid Code Description	Count	Percent Entering WCM	Avg. Nbr. FFS Months before WCM
9K	Eligible for all CCS benefits (such as diagnosis, treatment, therapy and case management)	269	47.6	5.1
9N	Eligible for CCS only if concurrently eligible for full-scope, no SOC Medi-Cal. CCS authorization required	1,007	75.8	2.5
9R	Enrolled in a HF plan and is eligible for all CCS benefits (such as diagnosis, treatment, therapy, and case management). No county cost sharing for CCS services	21	100.0	3.2
9U	Enrolled in a HF plan and is eligible for all CCS benefits (such as diagnosis, treatment, therapy, and case management). County has cost sharing for CCS services	75	86.7	2.6
	Total	1,372	71.2	2.9

- Count of FFS clients is restricted to the study period.
- The percent entering WCM includes those who entered the WCM even after the study period ended.
- The average number of months in FFS before entering the WCM excludes months before the WCM started.
- The average number of months in FFS excludes those who did not enter the WCM at any point.

Table 23. Phase III Counties FFS, Proportion Entering the WCM and Time to Entry by Aid Code

CCS Aid Cd	Aid Code Description	Count	Percent Entering WCM	Avg. Nbr. FFS Months before WCM
9K	Eligible for all CCS benefits (such as diagnosis, treatment, therapy and case management)	357	35.6	4.6
9N	Eligible for CCS only if concurrently eligible for full-scope, no SOC Medi-Cal. CCS authorization required	1,393	65.9	2.3
9R	Enrolled in a HF plan and is eligible for all CCS benefits (such as diagnosis, treatment, therapy, and case management). No county cost sharing for CCS services	1	0.0	.
9U	Enrolled in a HF plan and is eligible for all CCS benefits (such as diagnosis, treatment, therapy, and case management). County has cost sharing for CCS services	73	84.9	2.4
	Total	1,824	60.7	2.5

- Count of FFS clients is restricted to the study period.
- The percent entering WCM includes those who entered the WCM even after the study period ended.
- The average number of months in FFS before entering the WCM excludes months before the WCM started.
- The average number of months in FFS excludes those who did not enter the WCM at any point.

Total and New Enrollment by Age

Summary of Total and New Enrollment by Age

Across WCM and Classic comparison groups, new enrollment was predominantly comprised of those aged 12 months and under. Over time, all study groups had decreases in the proportion of new enrollees.

Table 24. HPSM WCM CCS Enrollment by Age, Pre-/Post- HPSM WCM

Dimension	Age	Years Pre-/Post- HPSM WCM				
		-2	-1	+1	+2	+3
Nbr. of Clients	<12 Mo.	45	36	106	182	166
	1 year	S	19	39	122	188
	2-6	S	S	57	97	201
	7-11	S	S	49	73	80
	12-20	S	S	87	162	226
	All	71	75	338	636	861
Percent of Clients	<12 Mo.	63.4	48.0	31.4	28.6	19.3
	1 year	S	25.3	11.5	19.2	21.8
	2-6	S	S	16.9	15.3	23.3
	7-11	S	S	14.5	11.5	9.3
	12-20	S	S	25.7	25.5	26.2
	All	100.0	100.0	100.0	100.0	100.0
Nbr. of New Clients	<12 Mo.	22	17	60	62	52
	1 year	0	S	S	0	S
	2-6	S	S	S	0	S
	7-11	0	S	S	S	S
	12-20	S	S	S	S	S

Dimension	Age	Years Pre-/Post- HPSM WCM				
		-2	-1	+1	+2	+3
	All	25	24	71	66	57
Pct. of New Clients	<12 Mo.	88.0	70.8	84.5	93.9	91.2
	1 year	0.0	S	S	0.0	S
	2-6	S	S	S	0.0	S
	7-11	0.0	S	S	S	S
	12-20	S	S	S	S	S
	All	100.0	100.0	100.0	100.0	100.0
Pct. of Total Clients who were New	<12 Mo.	31.0	22.7	17.8	9.7	6.0
	1 year	0.0	S	S	0.0	S
	2-6	S	S	S	0.0	S
	7-11	0.0	S	S	S	S
	12-20	S	S	S	S	S
	All	35.2	32.0	21.0	10.4	6.6

- Pre-WCM: Fee-for-Service CCS clients in San Mateo County between July 2016 - June 2018.
- Post-WCM: HPSM WCM clients between July 2018 - June 2021.

Table 25. Classic CCS Enrollment by Age, Pre-/Post- HPSM WCM

Dimension	Age	Years Pre-/Post- HPSM WCM				
		-2	-1	+1	+2	+3
Nbr. of Clients	<12 Mo.	1,281	1,298	1,203	1,153	1,196
	1 year	1,060	1,037	1,028	904	853
	2-6	2,541	2,517	2,456	2,204	2,065

Dimension	Age	Years Pre-/Post- HPSM WCM				
		-2	-1	+1	+2	+3
	7-11	2,359	2,351	2,270	2,099	1,971
	12-20	4,320	4,420	4,445	4,291	4,453
	All	11,561	11,623	11,402	10,651	10,538
Percent of Clients	<12 Mo.	11.1	11.2	10.6	10.8	11.3
	1 year	9.2	8.9	9.0	8.5	8.1
	2-6	22.0	21.7	21.5	20.7	19.6
	7-11	20.4	20.2	19.9	19.7	18.7
	12-20	37.4	38.0	39.0	40.3	42.3
	All	100.0	100.0	100.0	100.0	100.0
Nbr. of New Clients	<12 Mo.	421	466	420	441	441
	1 year	S	S	S	S	S
	2-6	S	S	S	S	S
	7-11	S	S	S	S	S
	12-20	16	20	S	13	18
	All	457	510	448	472	467
Pct. of New Clients	<12 Mo.	92.1	91.4	93.8	93.4	94.4
	1 year	S	S	S	S	S
	2-6	S	S	S	S	S
	7-11	S	S	S	S	S
	12-20	3.5	3.9	S	2.8	3.9
	All	100.0	100.0	100.0	100.0	100.0
Pct. of Total Clients who were New	<12 Mo.	3.6	4.0	3.7	4.1	4.2
	1 year	S	S			

Dimension	Age	Years Pre-/Post- HPSM WCM				
		-2	-1	+1	+2	+3
	2-6	S	S	S	S	
	7-11		S	S	S	
	12-20	0.1	0.2	S	0.1	0.2
	All	4.0	4.4	3.9	4.4	4.4

- Classic Pre-WCM: CCS clients in classic counties between July 2016 - June 2018.
- Classic Post-WCM: CCS clients in classic counties between July 2018 - June 2021.

Table 26. Phase I CCS Enrollment by Age, Pre-/Post- Phase I WCM

Dimension	Age	Years Pre-/Post- Phase I WCM				
		-2	-1	+1	+2	+3
Nbr. of Clients	<12 Mo.	2,062	2,071	1,540	1,560	1,622
	1 year	1,447	1,430	1,358	1,335	1,375
	2-6	3,287	3,239	3,004	2,804	2,950
	7-11	3,105	3,178	2,897	2,675	2,618
	12-20	5,450	5,650	5,392	5,038	5,295
	All	15,351	15,568	14,191	13,412	13,860
Percent of Clients	<12 Mo.	13.4	13.3	10.9	11.6	11.7
	1 year	9.4	9.2	9.6	10.0	9.9
	2-6	21.4	20.8	21.2	20.9	21.3
	7-11	20.2	20.4	20.4	19.9	18.9
	12-20	35.5	36.3	38.0	37.6	38.2
	All	100.0	100.0	100.0	100.0	100.0
Nbr. of New Clients	<12 Mo.	986	881	582	598	704

Dimension	Age	Years Pre-/Post- Phase I WCM				
		-2	-1	+1	+2	+3
	1 year	0	3	2	3	3
	2-6	3	12	6	7	3
	7-11	6	8	4	5	4
	12-20	22	16	12	7	11
	All	1,017	920	606	620	725
Pct. of New Clients	<12 Mo.	97.0	95.8	96.0	96.5	97.1
	1 year	0.0	0.3	0.3	0.5	0.4
	2-6	0.3	1.3	1.0	1.1	0.4
	7-11	0.6	0.9	0.7	0.8	0.6
	12-20	2.2	1.7	2.0	1.1	1.5
	All	100.0	100.0	100.0	100.0	100.0
Pct. of Total Clients who were New	<12 Mo.	6.4	5.7	4.1	4.5	5.1
	1 year	0.0	0.0	0.0	0.0	0.0
	2-6	0.0	0.1	0.0	0.1	0.0
	7-11	0.0	0.1	0.0	0.0	0.0
	12-20	0.1	0.1	0.1	0.1	0.1
	All	6.6	5.9	4.3	4.6	5.2

- Pre-WCM: Phase I County CCS clients between July 2016 - June 2018.
- Post-WCM: CCS clients in WCM between July 2018 - June 2021.

Table 27. Classic CCS Enrollment by Age, Pre-/Post- Phase I WCM

Dimension	Age	Years Pre-/Post- Phase I WCM				
		-2	-1	+1	+2	+3
Nbr. of Clients	<12 Mo.	5,622	5,512	5,411	5,091	5,203
	1 year	3,828	3,795	3,793	3,564	3,565
	2-6	9,119	9,125	9,097	8,675	8,470
	7-11	8,530	8,699	8,700	8,260	8,038
	12-20	15,023	15,688	16,204	16,224	16,837
	All	42,122	42,819	43,205	41,814	42,113
Percent of Clients	<12 Mo.	13.3	12.9	12.5	12.2	12.4
	1 year	9.1	8.9	8.8	8.5	8.5
	2-6	21.6	21.3	21.1	20.7	20.1
	7-11	20.3	20.3	20.1	19.8	19.1
	12-20	35.7	36.6	37.5	38.8	40.0
	All	100.0	100.0	100.0	100.0	100.0
Nbr. of New Clients	<12 Mo.	2,674	2,472	2,489	2,387	2,538
	1 year	12	16	10	8	18
	2-6	21	27	24	18	17
	7-11	14	16	13	14	6
	12-20	49	56	53	35	40
	All	2,770	2,587	2,589	2,462	2,619
Pct. of New Clients	<12 Mo.	96.5	95.6	96.1	97.0	96.9
	1 year	0.4	0.6	0.4	0.3	0.7
	2-6	0.8	1.0	0.9	0.7	0.6

Dimension	Age	Years Pre-/Post- Phase I WCM				
		-2	-1	+1	+2	+3
	7-11	0.5	0.6	0.5	0.6	0.2
	12-20	1.8	2.2	2.0	1.4	1.5
	All	100.0	100.0	100.0	100.0	100.0
Pct. of Total Clients who were New	<12 Mo.	6.3	5.8	5.8	5.7	6.0
	1 year	0.0	0.0	0.0	0.0	0.0
	2-6	0.0	0.1	0.1	0.0	0.0
	7-11	0.0	0.0	0.0	0.0	0.0
	12-20	0.1	0.1	0.1	0.1	0.1
	All	6.6	6.0	6.0	5.9	6.2

- Classic Pre-WCM: CCS clients in classic counties between July 2016 - June 2018.
- Classic Post-WCM: CCS clients in classic counties between July 2018 - June 2021.

Table 28. Phase II CCS Enrollment by Age, Pre-/Post- Phase II WCM

Dimension	Age	Years Pre-/Post- Phase II WCM			
		-2	-1	+1	+2
Nbr. of Clients	<12 Mo.	1,463	1,375	993	963
	1 year	1,201	1,158	1,003	913
	2-6	2,828	2,740	2,529	2,434
	7-11	2,524	2,489	2,391	2,285
	12-20	4,352	4,469	4,185	4,181
	All	12,368	12,231	11,101	10,776
Percent of Clients	<12 Mo.	11.8	11.2	8.9	8.9
	1 year	9.7	9.5	9.0	8.5

Dimension	Age	Years Pre-/Post- Phase II WCM			
		-2	-1	+1	+2
	2-6	22.9	22.4	22.8	22.6
	7-11	20.4	20.3	21.5	21.2
	12-20	35.2	36.5	37.7	38.8
	All	100.0	100.0	100.0	100.0
Nbr. of New Clients	<12 Mo.	515	449	363	367
	1 year	5	4	7	2
	2-6	6	7	13	10
	7-11	3	6	5	4
	12-20	15	18	16	12
	All	544	484	404	395
Pct. of New Clients	<12 Mo.	94.7	92.8	89.9	92.9
	1 year	0.9	0.8	1.7	0.5
	2-6	1.1	1.4	3.2	2.5
	7-11	0.6	1.2	1.2	1.0
	12-20	2.8	3.7	4.0	3.0
	All	100.0	100.0	100.0	100.0
Pct. of Total Clients who were New	<12 Mo.	4.2	3.7	3.3	3.4
	1 year	0.0	0.0	0.1	0.0
	2-6	0.0	0.1	0.1	0.1
	7-11	0.0	0.0	0.0	0.0
	12-20	0.1	0.1	0.1	0.1
	All	4.4	4.0	3.6	3.7

● Pre-WCM: Phase II County CCS clients between January 2017 - December 2018.

Dimension	Age	Years Pre-/Post- Phase II WCM -2	-1	+1	+2

● Post-WCM: CCS clients in WCM between January 2019 - December 2020.

Table 29. Classic CCS Enrollment by Age, Pre-/Post- Phase II WCM

Dimension	Age	Years Pre-/Post- Phase II WCM -2	-1	+1	+2
Nbr. of Clients	<12 Mo.	4,879	4,667	4,489	4,129
	1 year	3,513	3,660	3,427	3,122
	2-6	8,474	8,336	8,318	7,803
	7-11	7,941	7,784	7,569	7,157
	12-20	14,092	14,221	14,447	14,488
	All	38,899	38,668	38,250	36,699
Percent of Clients	<12 Mo.	12.5	12.1	11.7	11.3
	1 year	9.0	9.5	9.0	8.5
	2-6	21.8	21.6	21.7	21.3
	7-11	20.4	20.1	19.8	19.5
	12-20	36.2	36.8	37.8	39.5
	All	100.0	100.0	100.0	100.0
Nbr. of New Clients	<12 Mo.	2,011	1,907	1,988	1,806
	1 year	10	12	11	3
	2-6	31	22	25	21
	7-11	12	14	25	10
	12-20	43	38	38	25
	All	2,107	1,993	2,087	1,865

Dimension	Age	Years Pre-/Post- Phase II WCM			
		-2	-1	+1	+2
Pct. of New Clients	<12 Mo.	95.4	95.7	95.3	96.8
	1 year	0.5	0.6	0.5	0.2
	2-6	1.5	1.1	1.2	1.1
	7-11	0.6	0.7	1.2	0.5
	12-20	2.0	1.9	1.8	1.3
	All	100.0	100.0	100.0	100.0
Pct. of Total Clients who were New	<12 Mo.	5.2	4.9	5.2	4.9
	1 year	0.0	0.0	0.0	0.0
	2-6	0.1	0.1	0.1	0.1
	7-11	0.0	0.0	0.1	0.0
	12-20	0.1	0.1	0.1	0.1
	All	5.4	5.2	5.5	5.1

- Classic Pre-WCM: CCS clients in classic counties between January 2017 - December 2018.
- Classic Post-WCM: CCS clients in classic counties between January 2019 - December 2020.

Table 30. Phase III CCS Enrollment by Age, Pre-/Post- Phase III WCM

Dimension	Age	Years Pre-/Post- Phase III WCM			
		-2	-1	+1	+2
Nbr. of Clients	<12 Mo.	1,874	1,767	1,276	1,180
	1 year	1,538	1,376	1,268	1,260
	2-6	3,928	3,807	3,360	3,192
	7-11	4,049	3,904	3,445	3,187
	12-20	7,739	7,750	7,158	7,115

Dimension	Age	Years Pre-/Post- Phase III WCM			
		-2	-1	+1	+2
	All	19,128	18,604	16,507	15,934
Percent of Clients	<12 Mo.	9.8	9.5	7.7	7.4
	1 year	8.0	7.4	7.7	7.9
	2-6	20.5	20.5	20.4	20.0
	7-11	21.2	21.0	20.9	20.0
	12-20	40.5	41.7	43.4	44.7
	All	100.0	100.0	100.0	100.0
Nbr. of New Clients	<12 Mo.	724	647	486	441
	1 year	7	2	7	2
	2-6	10	6	10	2
	7-11	13	13	7	3
	12-20	27	32	14	17
	All	781	700	524	465
Pct. of New Clients	<12 Mo.	92.7	92.4	92.7	94.8
	1 year	0.9	0.3	1.3	0.4
	2-6	1.3	0.9	1.9	0.4
	7-11	1.7	1.9	1.3	0.6
	12-20	3.5	4.6	2.7	3.7
	All	100.0	100.0	100.0	100.0
Pct. of Total Clients who were New	<12 Mo.	3.8	3.5	2.9	2.8
	1 year	0.0	0.0	0.0	0.0
	2-6	0.1	0.0	0.1	0.0
	7-11	0.1	0.1	0.0	0.0

Dimension	Age	Years Pre-/Post- Phase III WCM			
		-2	-1	+1	+2
	12-20	0.1	0.2	0.1	0.1
	All	4.1	3.8	3.2	2.9

- Phase III Pre-WCM: Orange County CCS clients between July 2017 - June 2019.
- Post-WCM: CCS clients in WCM between July 2019 - June 2021.

Table 31. Classic CCS Enrollment by Age, Pre-/Post- Phase III WCM

Dimension	Age	Years Pre-/Post- Phase III WCM			
		-2	-1	+1	+2
Nbr. of Clients	<12 Mo.	7,797	7,611	6,989	6,833
	1 year	5,173	5,103	5,010	5,001
	2-6	11,487	11,256	10,890	10,687
	7-11	11,220	10,800	10,194	9,764
	12-20	21,835	21,865	21,866	22,514
	All	57,512	56,635	54,949	54,799
Percent of Clients	<12 Mo.	13.6	13.4	12.7	12.5
	1 year	9.0	9.0	9.1	9.1
	2-6	20.0	19.9	19.8	19.5
	7-11	19.5	19.1	18.6	17.8
	12-20	38.0	38.6	39.8	41.1
	All	100.0	100.0	100.0	100.0
Nbr. of New Clients	<12 Mo.	3,285	3,140	2,757	2,838
	1 year	16	23	9	13

Dimension	Age	Years Pre-/Post- Phase III WCM			
		-2	-1	+1	+2
	2-6	31	31	31	14
	7-11	17	26	18	20
	12-20	70	76	59	69
	All	3,419	3,296	2,874	2,954
Pct. of New Clients	<12 Mo.	96.1	95.3	95.9	96.1
	1 year	0.5	0.7	0.3	0.4
	2-6	0.9	0.9	1.1	0.5
	7-11	0.5	0.8	0.6	0.7
	12-20	2.0	2.3	2.1	2.3
	All	100.0	100.0	100.0	100.0
Pct. of Total Clients who were New	<12 Mo.	5.7	5.5	5.0	5.2
	1 year	0.0	0.0	0.0	0.0
	2-6	0.1	0.1	0.1	0.0
	7-11	0.0	0.0	0.0	0.0
	12-20	0.1	0.1	0.1	0.1
	All	5.9	5.8	5.2	5.4

- Classic Pre-WCM: CCS clients in classic counties between July 2017 - June 2019.
- Classic Post-WCM: CCS clients in classic counties between July 2019 - June 2021.

New Referrals by Age and by Year

Summary of New Referrals by Age and by Year:

Overall, the largest group of children being referred into CCS was in those who were under age 1, followed by a relatively even distribution across the other age groups, until age 18 where there was the lowest number of new referrals from that

age group. Over time, the numbers of new referrals has decreased across all age groups in both WCM and Classic CCS counties.

Table 32. HPSM WCM and Classic CCS Referrals by Age, Pre-/Post WCM Implementation

		Number of Referrals by Age				
Study Group	Years Pre-Post-WCM	<12 Months	1-4	5-11	12-17	18+
HPSM WCM	-2 Year	191	57	66	72	18
	-1 Year	174	81	53	75	23
	+1 Year	158	52	49	62	12
	+2 Year	143	55	39	62	12
	+3 Year	122	48	47	85	12
Classic CCS Counties	-2 Year	890	564	659	607	184
	-1 Year	930	529	691	606	213
	+1 Year	851	576	692	612	183
	+2 Year	871	488	612	536	186
	+3 Year	864	437	607	611	244

Table 33. Phase I and Classic CCS Referrals by Age, Pre-/Post WCM Implementation

		Number of Referrals by Age				
Study Group	Years Pre-Post-WCM	<12 Months	1-4	5-11	12-17	18+
Phase I	-2 Year	1,397	518	601	618	215
	-1 Year	1,360	434	605	602	208
	+1 Year	1,056	357	461	455	152
	+2 Year	1,150	351	440	449	139

		Number of Referrals by Age				
Study Group	Years Pre-Post-WCM	<12 Months	1-4	5-11	12-17	18+
	+3 Year	1,192	322	466	506	192
Classic CCS Counties	-2 Year	4,270	1,795	2,155	2,036	707
	-1 Year	4,089	1,543	2,176	2,086	700
	+1 Year	4,031	1,633	2,254	2,042	650
	+2 Year	3,918	1,395	1,912	1,914	628
	+3 Year	3,933	1,294	1,836	1,989	714

Table 34. Phase II and Classic CCS Referrals by Age, Pre-/Post WCM Implementation

		Number of Referrals by Age				
Study Group	Years Pre- Post-WCM	<12 Months	1-4	5-11	12-17	18+
Phase II	-2 Year	958	408	438	468	149
	-1 Year	869	376	448	407	153
	+1 Year	718	326	424	379	116
	+2 Year	683	227	342	367	136
Classic CCS Counties	-2 Year	3,589	1,361	1,635	1,720	574
	-1 Year	3,365	1,351	1,555	1,640	497
	+1 Year	3,357	1,287	1,537	1,565	489
	+2 Year	3,041	993	1,327	1,404	485

Table 35. Phase III and Classic CCS Referrals by Age, Pre-/Post WCM Implementation

		Number of Referrals by Age				
Study Group	Years Pre- Post-WCM	<12 Months	1-4	5-11	12-17	18+
Phase III	-2 Year	1,272	443	653	824	213
	-1 Year	1,228	427	678	705	205
	+1 Year	930	322	476	585	223
	+2 Year	939	347	524	654	227
Classic CCS Counties	-2 Year	5,194	1,500	2,044	2,330	838
	-1 Year	5,028	1,406	1,937	2,369	784
	+1 Year	4,695	1,211	1,719	2,242	742
	+2 Year	4,435	1,027	1,673	2,405	838

Percent of Referrals Denied by Age and by Year

Summary of Percent of Referrals Denied by Age:

Overall rates of denials were low, with the largest proportion of being denied falling within the 1-11 year age groups.

Table 36. HPSM WCM and Classic CCS Percent Denials by Age, Pre-/Post-WCM Implementation

		Percent Denials by Age				
Study Group	Years Pre- Post-WCM	<12 Months	1-4	5-11	12-17	18+
HPSM WCM	-2 Year	10.5	10.5	6.1	6.9	5.6
	-1 Year	4.0	16.0	5.7	2.7	0.0

		Percent Denials by Age				
Study Group	Years Pre- Post- WCM	<12 Months	1-4	5-11	12-17	18+
	+1 Year	5.1	3.8	8.2	6.5	8.3
	+2 Year	4.9	9.1	10.3	1.6	0.0
	+3 Year	3.3	6.3	6.4	1.2	0.0
Classic CCS Counties	-2 Year	12.8	17.7	13.4	10.7	8.2
	-1 Year	11.6	16.1	16.2	10.6	10.8
	+1 Year	12.0	16.3	17.9	15.2	14.8
	+2 Year	11.7	24.2	20.3	20.1	16.7
	+3 Year	10.6	24.0	20.8	11.8	14.8

Table 37. Phase I and Classic CCS Percent Denials by Age, Pre-/Post-WCM Implementation

		Percent Denials by Age				
Study Group	Years Pre- Post- WCM	<12 Months	1-4	5-11	12-17	18+
Phase I	-2 Year	3.0	5.2	3.5	2.6	0.9
	-1 Year	2.0	7.4	4.8	3.0	5.3
	+1 Year	4.3	3.9	3.0	1.5	2.6
	+2 Year	2.5	4.0	3.2	1.8	2.9
	+3 Year	0.9	3.4	1.9	1.2	1.0
Classic CCS Counties	-2 Year	4.8	15.5	11.0	8.4	6.2
	-1 Year	5.5	15.5	11.4	8.6	8.4
	+1 Year	5.5	16.5	14.0	10.5	8.3

		Percent Denials by Age				
Study Group	Years Pre- Post-WCM	<12 Months	1-4	5-11	12-17	18+
	+2 Year	5.9	17.9	16.4	11.7	10.8
	+3 Year	4.1	14.9	14.4	7.0	9.0

Table 38. Phase II and Classic CCS Percent Denials by Age, Pre-/Post-WCM Implementation

		Percent Denials by Age				
Study Group	Years Pre- Post-WCM	<12 Months	1-4	5-11	12-17	18+
Phase II	-2 Year	5.5	7.4	10.0	4.3	5.4
	-1 Year	5.1	12.5	10.3	5.9	7.2
	+1 Year	4.3	7.1	6.4	4.0	6.0
	+2 Year	3.5	4.8	4.1	4.9	2.9
Classic CCS Counties	-2 Year	5.1	16.5	11.9	8.0	7.0
	-1 Year	5.3	12.7	10.2	7.4	6.2
	+1 Year	5.0	11.7	12.2	6.4	7.2
	+2 Year	3.1	9.8	9.4	4.8	4.7

Table 39. Phase III and Classic CCS Percent Denials by Age, Pre-/Post-WCM Implementation

		Percent Denials by Age				
Study Group	Years Pre- Post-WCM	<12 Months	1-4	5-11	12-17	18+
Phase III	-2 Year	2.1	4.5	5.1	2.2	3.3
	-1 Year	2.8	4.9	5.9	3.3	2.9
	+1 Year	4.2	9.9	7.6	4.6	4.0

		Percent Denials by Age				
Study Group	Years Pre- Post- WCM	<12 Months	1-4	5-11	12-17	18+
	+2 Year	3.5	6.1	5.9	4.9	4.4
Classic CCS Counties	-2 Year	2.2	3.5	2.8	1.8	2.9
	-1 Year	2.4	4.6	2.9	1.6	2.7
	+1 Year	2.4	3.4	2.7	1.5	3.1
	+2 Year	1.4	2.6	1.9	0.9	0.8

Reasons for ED Visits

Reason for ED Visit by CCS Condition Category

Summary of reason for ED visit by condition category

The primary reason for ED visits were undiagnosed, which included "symptoms" and poisonings. The majority of reasons for ED fall under "symptoms" (see tables 48-55 below which describe individual diagnoses). The most frequent CCS condition category represented as a primary diagnosis was accidents then respiratory, musculoskeletal and gastrointestinal issues. Again, many of these conditions are acute in nature and common in the general pediatric population. The proportions were stable across implementation periods and WCM study groups.

Table 40. HPSM WCM ED Visit by Condition Category Pre-/Post-WCM

Reason For ED Visits in HPSM WCM by Disease Condition Category						
	Pre-WCM			Post-WCM		
Rank	Disease Category	n	% of top 20	Disease Category	n	% of top 20
1	Accidents	13	33.0%	Undiagnosed	897	35%
2	Undiagnosed	8	20.0%	ACCIDENTS	445	17%
3	Infectious Disease	6	15.0%	Respiratory	246	9.5%

Reason For ED Visits in HPSM WCM by Disease Condition Category						
	Pre-WCM			Post-WCM		
Rank	Disease Category	n	% of top 20	Disease Category	n	% of top 20
4	Respiratory	4	10.0%	OTHER	218	8.4%
5	Other	3	7.5%	Gastrointestinal	141	5.4%
6	Musculoskeletal	3	7.5%	Endocrine/ Metabolism/ Immune	123	4.7%
7	Gastrointestinal	2	5.0%	Infectious Disease	87	3.4%
8	Newborn	S	S	Genitourinary	82	3.2%
9				Neurological	62	2.4%
10				Cardiovascular	51	2.0%
11				Musculoskeletal	50	1.9%
12				Hematological	46	1.8%
13				Dermatological	43	1.7%
14				Otolaryngology	38	1.5%
15				Ophthalmological	27	1.0%
16				NEOPLASM	14	0.5%
17				Mental/Behavioral	8	0.3%
18				CONGENITAL	S	S
19				Pregnancy	S	S
20				Newborn	S	S

Table 41. Classic CCS Comparison Group for HPSM WCM ED Visit by Condition Category Pre-/Post-WCM

Reason For ED Visits in Classic CCS Comparison Group (HPSM WCM) by Disease Condition Category						
	Pre-WCM			Post-WCM		
Rank	Disease Category	n	% of top 20	Disease Category	n	% of top 20
1	Undiagnosed	1218	30.0%	Undiagnosed	1921	32.0%
2	Accidents	688	17.0%	Accidents	1186	20.0%
3	Respiratory	551	14.0%	Respiratory	590	9.8%
4	Musculoskeletal	204	5.1%	Musculoskeletal	330	5.5%
5	Gastrointestinal	178	4.4%	Gastrointestinal	306	5.1%
6	Genitourinary	171	4.2%	OTHER	273	4.5%
7	Otolaryngology	158	3.9%	Genitourinary	214	3.5%
8	Infectious Disease	158	3.9%	Infectious Disease	199	3.3%
9	Neurological	122	3.0%	Neurological	182	3.0%
10	Hematological	111	2.8%	Endocrine/ Metabolism/ Immune	177	2.9%
11	Dermatological	108	2.7%	Dermatological	139	2.3%
12	Endocrine/ Metabolism/ Immune	97	2.4%	Hematological	138	2.3%
13	Other	90	2.2%	Otolaryngology	110	1.8%
14	Ophthalmological	64	1.6%	Mental/Behavioral	108	1.8%
15	Mental/Behavioral	34	0.8%	Ophthalmological	69	1.1%
16	Cardiovascular	31	0.8%	Cardiovascular	44	0.7%
17	Pregnancy	20	0.5%	Pregnancy	17	0.3%
18	Congenital	S	S	Neoplasm	16	0.3%
19	Neoplasm	8	0.2%	Congenital	S	S
20	Newborn	S	S	Newborn	S	S

Table 42. Phase I ED Visit by Condition Category Pre-/Post-WCM

Reason For ED Visits in Phase I by Disease Condition Category						
	Pre-WCM			Post-WCM		
Rank	Disease Category	n	% of top 20	Disease Category	n	% of top 20
1	Undiagnosed	12408	28.0%	Undiagnosed	14752	30.0%
2	Accidents	8198	19.0%	Accidents	9241	19.0%
3	Respiratory	7357	17.0%	Respiratory	6398	13.0%
4	Gastrointestinal	2176	4.9%	Gastrointestinal	2500	5.1%
5	Musculoskeletal	1826	4.1%	Musculoskeletal	2140	4.3%
6	Genitourinary	1590	3.6%	OTHER	2087	4.2%
7	Infectious Disease	1544	3.5%	Endocrine/ Metabolism/Immune	1719	3.5%
8	Otolaryngology	1482	3.4%	Genitourinary	1716	3.5%
9	Neurological	1360	3.1%	Infectious Disease	1688	3.4%
10	Endocrine/ Metabolism/ Immune	1204	2.7%	Neurological	1496	3.0%
11	Dermatological	1080	2.5%	Otolaryngology	1261	2.6%
12	Other	1022	2.3%	Dermatological	1197	2.4%
13	Mental/Behavioral	551	1.3%	Mental/Behavioral	786	1.6%
14	Hematological	467	1.1%	Hematological	559	1.1%
15	Cardiovascular	452	1.0%	Cardiovascular	486	1.0%
16	Ophthalmological	417	0.9%	Ophthalmological	420	0.9%
17	Pregnancy	359	0.8%	Pregnancy	369	0.7%
18	Neoplasm	263	0.6%	Congenital	244	0.5%
19	Congenital	169	0.4%	Neoplasm	195	0.4%
20	Newborn	92	0.2%	Newborn	111	0.2%

Table 43. Classic CCS Comparison Group for Phase I ED Visit Diagnoses by Condition Category Pre-/Post-WCM

Reason For ED Visits in Classic CCS Comparison Group (Phase I) by Disease Condition Category						
	Pre-WCM			Post-WCM		
Rank	Disease Category	n	% of top 20	Disease Category	n	% of top 20
1	Undiagnosed	11352	28.0%	Undiagnosed	15350	31.0%
2	Accidents	7481	19.0%	Accidents	9558	19.0%
3	Respiratory	6100	15.0%	Respiratory	5683	11.0%
4	Gastrointestinal	1868	4.6%	Musculoskeletal	2335	4.7%
5	Musculoskeletal	1747	4.3%	Gastrointestinal	2326	4.6%
6	Genitourinary	1538	3.8%	OTHER	2149	4.3%
7	Infectious Disease	1412	3.5%	Genitourinary	1999	4.0%
8	Other	1320	3.3%	Neurological	1668	3.3%
9	Otolaryngology	1261	3.1%	Endocrine/ Metabolism/ Immune	1653	3.3%
10	Neurological	1258	3.1%	Infectious Disease	1484	3.0%
11	Endocrine/ Metabolism/ Immune	1204	3.0%	Dermatological	1200	2.4%
12	Dermatological	1019	2.5%	Otolaryngology	1048	2.1%
13	Hematological	551	1.4%	Mental/Behavioral	743	1.5%
14	Mental/Behavioral	434	1.1%	Hematological	652	1.3%
15	Cardiovascular	422	1.0%	Cardiovascular	556	1.1%
16	Ophthalmological	375	0.9%	PREGNANCY	542	1.1%
17	Pregnancy	262	0.7%	Ophthalmological	421	0.8%
18	Neoplasm	260	0.6%	Neoplasm	290	0.6%
19	Newborn	171	0.4%	CONGENITAL	272	0.5%
20	Congenital	171	0.4%	Newborn	161	0.3%

Table 44. Phase II ED Visit by Condition Category Pre-/Post-WCM

Reason For ED Visits in Phase II by Disease Condition Category						
	Pre-WCM			Post-WCM		
Rank	Disease Category	n	% of top 20	Disease Category	n	% of top 20
1	Undiagnosed	11576	28.0%	Undiagnosed	11166	28.0%
2	Accidents	8185	20.0%	Accidents	8377	21.0%
3	Respiratory	5510	13.0%	Respiratory	4370	11.0%
4	Gastrointestinal	2158	5.2%	Gastrointestinal	2199	5.4%
5	Musculoskeletal	1632	4.0%	OTHER	2162	5.3%
6	Endocrine/ Metabolism/ Immune	1501	3.6%	Musculoskeletal	1667	4.1%
7	Other	1457	3.5%	Endocrine/ Metabolism/ Immune	1479	3.7%
8	Neurological	1430	3.5%	Genitourinary	1357	3.4%
9	Genitourinary	1413	3.4%	Neurological	1299	3.2%
10	Otolaryngology	1340	3.2%	Infectious Disease	1146	2.8%
11	Infectious Disease	1234	3.0%	Otolaryngology	1114	2.8%
12	Dermatological	1042	2.5%	Dermatological	992	2.5%
13	Hematological	610	1.5%	Mental/Behavioral	629	1.6%
14	Mental/Behavioral	578	1.4%	Ophthalmological	527	1.3%
15	Ophthalmological	417	1.0%	Hematological	520	1.3%
16	Cardiovascular	395	1.0%	CONGENITAL	496	1.2%
17	Congenital	366	0.9%	Cardiovascular	421	1.0%
18	Neoplasm	206	0.5%	Neoplasm	368	0.9%
19	Pregnancy	192	0.5%	Pregnancy	149	0.4%
20	Newborn	64	0.2%	Newborn	30	0.1%

Table 45. Classic CCS Comparison Group for Phase II ED Visit Diagnoses by Condition Category Pre-/Post-WCM

Reason For ED Visits in Classic CCS Comparison Group (Phase II) by Disease Condition Category						
	Pre-WCM			Post-WCM		
Rank	Disease Category	n	% of top 20	Disease Category	n	% of top 20
1	Undiagnosed	9942	26.0%	Undiagnosed	9265	29.0%
2	Accidents	7222	19.0%	Accidents	6528	20.0%
3	Respiratory	4887	13.0%	Respiratory	3560	11.0%
4	Other	2173	5.7%	Musculoskeletal	1626	5.1%
5	Musculoskeletal	1874	4.9%	OTHER	1568	4.9%
6	Gastrointestinal	1787	4.7%	Gastrointestinal	1476	4.6%
7	Endocrine/ Metabolism/ Immune	1479	3.9%	Endocrine/ Metabolism/ Immune	1416	4.4%
8	Genitourinary	1399	3.7%	Genitourinary	1225	3.8%
9	Infectious Disease	1172	3.1%	Infectious Disease	962	3.0%
10	Dermatological	1113	2.9%	Neurological	900	2.8%
11	Neurological	1091	2.9%	Dermatological	839	2.6%
12	Otolaryngology	1089	2.8%	Otolaryngology	748	2.3%
13	Mental/Behavioral	758	2.0%	Hematological	530	1.7%
14	Hematological	627	1.6%	Mental/Behavioral	396	1.2%
15	Cardiovascular	451	1.2%	Cardiovascular	322	1.0%
16	Ophthalmological	435	1.1%	Ophthalmological	272	0.8%
17	Pregnancy	247	0.6%	Pregnancy	200	0.6%
18	Congenital	239	0.6%	Congenital	104	0.3%
19	Neoplasm	198	0.5%	Neoplasm	82	0.3%
20	Newborn	97	0.3%	Newborn	50	0.2%

Table 46. Phase III ED Visit by Condition Category Pre-/Post-WCM

Reason For ED Visits in Phase III by Disease Condition Category						
	Pre-WCM			Post-WCM		
Rank	Disease Category	n	% of top 20	Disease Category	n	% of top 20
1	Undiagnosed	17935	31.0%	Undiagnosed	12211	34.0%
2	Accidents	10731	18.0%	Accidents	6602	18.0%
3	Respiratory	8090	14.0%	Respiratory	3452	9.5%
4	Gastrointestinal	2896	5.0%	Gastrointestinal	1969	5.4%
5	Genitourinary	2552	4.4%	Musculoskeletal	1694	4.7%
6	Musculoskeletal	2339	4.0%	Genitourinary	1616	4.4%
7	Neurological	1891	3.3%	OTHER	1602	4.4%
8	Infectious Disease	1874	3.2%	Neurological	1181	3.3%
9	Otolaryngology	1668	2.9%	Infectious Disease	921	2.5%
10	Other	1643	2.8%	Dermatological	915	2.5%
11	Dermatological	1408	2.4%	Endocrine/ Metabolism/ Immune	859	2.4%
12	Endocrine/ Metabolism/ Immune	1210	2.1%	Otolaryngology	744	2.0%
13	Mental/Behavioral	776	1.3%	Mental/Behavioral	656	1.8%
14	Cardiovascular	754	1.3%	Cardiovascular	525	1.4%
15	Hematological	667	1.1%	Hematological	413	1.1%
16	Ophthalmological	553	1.0%	Ophthalmological	323	0.9%
17	Congenital	369	0.6%	Pregnancy	238	0.7%
18	Neoplasm	326	0.6%	Congenital	221	0.6%
19	Pregnancy	273	0.5%	Neoplasm	144	0.4%
20	Newborn	117	0.2%	Newborn	44	0.1%

Table 47. Classic CCS Comparison Group for Phase III ED Visit Diagnoses by Condition Category Pre-/Post-WCM

Reason For ED Visits in Classic CCS Comparison Group (Phase III) by Disease Condition Category						
	Pre-WCM			Post-WCM		
Rank	Disease Category	n	% of top 20	Disease Category	n	% of top 20
1	Undiagnosed	14752	29.0%	Undiagnosed	11913	29.0%
2	Accidents	8261	16.0%	Accidents	6930	17.0%
3	Respiratory	6578	13.0%	Respiratory	3858	9.5%
4	Gastrointestinal	2550	5.0%	OTHER	2584	6.4%
5	Musculoskeletal	2426	4.8%	Musculoskeletal	2085	5.2%
6	Infectious Disease	2070	4.1%	Gastrointestinal	2061	5.1%
7	Other	2015	4.0%	Genitourinary	1688	4.2%
8	Genitourinary	1980	3.9%	Neurological	1447	3.6%
9	Neurological	1943	3.8%	Infectious Disease	1440	3.6%
10	Otolaryngology	1551	3.0%	Endocrine/ Metabolism/Immune	1266	3.1%
11	Endocrine/ Metabolism/Immune	1482	2.9%	Dermatological	1000	2.5%
12	Dermatological	1431	2.8%	Otolaryngology	931	2.3%
13	Hematological	1071	2.1%	Hematological	820	2.0%
14	Ophthalmological	626	1.2%	Cardiovascular	589	1.5%
15	Mental/Behavioral	578	1.1%	Ophthalmological	509	1.3%
16	Cardiovascular	575	1.1%	Mental/Behavioral	450	1.1%
17	Congenital	373	0.7%	Congenital	318	0.8%
18	Neoplasm	313	0.6%	Neoplasm	266	0.7%
19	Pregnancy	265	0.5%	Pregnancy	197	0.5%
20	Newborn	80	0.2%	Newborn	57	0.1%

Reason for ED Visit by Individual Diagnosis (ICD-10-CM)

Summary of Findings for ICD-10

Overall, the primary reasons for ED visits were for acute infectious disease issues (upper respiratory tract infections, gastrointestinal issues). Type I diabetes, Sickle Cell disease exacerbation, gastrostomy tube issues and Epilepsy were a specific chronic disease exacerbations that were represented in the top 20 reasons for ED visit in some of the WCM plans and classic CCS comparison groups, and they were a minority to the typical childhood illnesses that usually bring children to the emergency department. HPSM WCM differed the most post-implementation but their pre and post study groups also were the most different (see main report description in the methods about the unique details of the HPSM WCM study groups).

Table 48. HPSM WCM Top 20 ED Visit Diagnoses Pre-/Post-WCM by ICD-10

Reason For ED Visits in HPSM WCM by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
1	B349	Viral infection, unspecified	4	12%	R509	Fever, unspecified	179	20%
2	J069	Acute upper respiratory infection, unspecified	3	9%	J069	Acute upper respiratory infection, unspecified	88	10%
3	R4182	Altered mental status, unspecified	3	9%	R05	Cough	76	8%
4	S42412	Displaced simple supracondylar fracture without intercondylar fracture of left humerus, initial	3	9%	Z4659	Encounter for fitting and adjustment of other gastrointestinal appliance and device	58	6%

Reason For ED Visits in HPSM WCM by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
		encounter for closed fracture						
5	B085	Enteroviral vesicular pharyngitis	2	6%	R1110	Vomiting, unspecified	56	6%
6	R140	Abdominal distension (gaseous)	2	6%	R112	Nausea with vomiting, unspecified	53	6%
7	R509	Fever, unspecified	2	6%	E1065	Type 1 diabetes mellitus with hyperglycemia	39	4%
8	S0990X	Unspecified injury of head, initial encounter	2	6%	R109	Unspecified abdominal pain	38	4%
9	T7612X	Child physical abuse, suspected, initial encounter	2	6%	B349	Viral infection, unspecified	36	4%
10	J9601	Acute respiratory failure with hypoxia	1	3%	N390	Urinary tract infection, site not specified	36	4%
11	K219	Gastro-esophageal reflux disease without esophagitis	1	3%	R569	Unspecified convulsions	36	4%
12	K8590	Acute pancreatitis without necrosis or infection, unspecified	1	3%	R918	Other nonspecific abnormal finding of lung field	29	3%

Reason For ED Visits in HPSM WCM by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
13	M25871	Other specified joint disorders, right ankle and foot	1	3%	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	28	3%
14	M436	Torticollis	1	3%	S0990X	Unspecified injury of head, initial encounter	24	3%
15	M79604	Pain in right leg	1	3%	U071	COVID-19	24	3%
16	P2889	Other specified respiratory conditions of newborn	1	3%	K5900	Constipation, unspecified	23	3%
17	R05	Cough	1	3%	R0603	Acute respiratory distress	23	3%
18	S022XX	Fracture of nasal bones, initial encounter for closed fracture	1	3%	R0602	Shortness of breath	22	2%
19	S066X0	Traumatic subarachnoid hemorrhage without loss of consciousness, initial encounter	1	3%	J219	Acute bronchiolitis, unspecified	21	2%
20	S1090X	Unspecified superficial injury of unspecified part of	1	3%	Z431	Encounter for attention to gastrostomy	21	2%

Reason For ED Visits in HPSM WCM by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
		neck, initial encounter						

Table 49. Classic CCS Comparison Group for HPSM WCM Top 20 ED Visit Diagnoses Pre-/Post-WCM by ICD-10

Reason For ED Visits in Classic CCS Comparison Group (HPSM WCM) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
1	R509	Fever, unspecified	183	14%	R509	Fever, unspecified	231	13%
2	J069	Acute upper respiratory infection, unspecified	169	13%	J069	Acute upper respiratory infection, unspecified	192	11%
3	B349	Viral infection, unspecified	88	7%	R109	Unspecified abdominal pain	127	7%
4	R109	Unspecified abdominal pain	76	6%	R079	Chest pain, unspecified	116	7%
5	R05	Cough	75	6%	B349	Viral infection, unspecified	115	6%
6	R1110	Vomiting, unspecified	69	5%	R05	Cough	112	6%
7	N390	Urinary tract infection, site not specified	66	5%	R569	Unspecified convulsions	97	5%
8	R569	Unspecified convulsions	63	5%	R1110	Vomiting, unspecified	87	5%

Reason For ED Visits in Classic CCS Comparison Group (HPSM WCM) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
9	D5700	Hb-SS disease with crisis, unspecified	54	4%	R112	Nausea with vomiting, unspecified	86	5%
10	R079	Chest pain, unspecified	54	4%	R51	Headache	76	4%
11	R51	Headache	51	4%	N390	Urinary tract infection, site not specified	72	4%
12	J189	Pneumonia, unspecified organism	49	4%	J189	Pneumonia, unspecified organism	63	4%
13	R112	Nausea with vomiting, unspecified	47	4%	R0602	Shortness of breath	63	4%
14	J029	Acute pharyngitis, unspecified	45	3%	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	55	3%
15	H6691	Otitis media, unspecified, right ear	42	3%	R0789	Other chest pain	52	3%
16	R197	Diarrhea, unspecified	41	3%	R21	Rash and other nonspecific skin eruption	51	3%
17	G40909	Epilepsy, unspecified, not	40	3%	S0990X	Unspecified injury of head, initial encounter	51	3%

Reason For ED Visits in Classic CCS Comparison Group (HPSM WCM) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
		intractable, without status epilepticus						
18	R21	Rash and other nonspecific skin eruption	40	3%	K5900	Constipation, unspecified	46	3%
19	R0602	Shortness of breath	39	3%	R55	Syncope and collapse	46	3%
20	S0990X	Unspecified injury of head, initial encounter	38	3%	J029	Acute pharyngitis, unspecified	45	3%

Table 50. Phase I Top 20 ED Visit Diagnoses Pre-/Post-WCM by ICD-10

Reason For ED Visits in Phase I by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
1	J069	Acute upper respiratory infection, unspecified	2790	20%	J069	Acute upper respiratory infection, unspecified	2148	14%
2	R509	Fever, unspecified	1545	11%	R509	Fever, unspecified	1980	13%
3	R05	Cough	988	7%	R05	Cough	1174	8%
4	R109	Unspecified abdominal pain	839	6%	R109	Unspecified abdominal pain	930	6%

Reason For ED Visits in Phase I by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
5	R1110	Vomiting, unspecified	775	5%	R1110	Vomiting, unspecified	797	5%
6	B349	Viral infection, unspecified	716	5%	B349	Viral infection, unspecified	758	5%
7	J189	Pneumonia, unspecified organism	660	5%	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	622	4%
8	R51	Headache	637	4%	R112	Nausea with vomiting, unspecified	620	4%
9	N390	Urinary tract infection, site not specified	610	4%	R569	Unspecified convulsions	613	4%
10	R079	Chest pain, unspecified	516	4%	R079	Chest pain, unspecified	608	4%
11	R112	Nausea with vomiting, unspecified	512	4%	R51	Headache	550	4%
12	R569	Unspecified convulsions	498	3%	N390	Urinary tract infection, site not specified	538	4%
13	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	467	3%	K5900	Constipation, unspecified	536	4%
14	J029	Acute pharyngitis, unspecified	430	3%	J189	Pneumonia, unspecified organism	528	4%

Reason For ED Visits in Phase I by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
15	S0990X	Unspecified injury of head, initial encounter	426	3%	S0990X	Unspecified injury of head, initial encounter	498	3%
16	J219	Acute bronchiolitis, unspecified	418	3%	R0789	Other chest pain	455	3%
17	K5900	Constipation, unspecified	395	3%	R0602	Shortness of breath	431	3%
18	R0602	Shortness of breath	358	3%	R1031	Right lower quadrant pain	393	3%
19	R1013	Epigastric pain	341	2%	J219	Acute bronchiolitis, unspecified	392	3%
20	R197	Diarrhea, unspecified	329	2%	R918	Other nonspecific abnormal finding of lung field	389	3%

Table 51. Classic CCS Comparison Group for Phase I Top 20 ED Visit Diagnoses Pre-/Post-WCM by ICD-10

Reason For ED Visits in Classic CCS Comparison Group (Phase I) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
1	J069	Acute upper respiratory infection, unspecified	2790	20%	R509	Fever, unspecified	1958	13%

Reason For ED Visits in Classic CCS Comparison Group (Phase I) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
2	R509	Fever, unspecified	1545	11%	J069	Acute upper respiratory infection, unspecified	1690	11%
3	R05	Cough	988	7%	R079	Chest pain, unspecified	1090	7%
4	R109	Unspecified abdominal pain	839	6%	R109	Unspecified abdominal pain	1000	7%
5	R1110	Vomiting, unspecified	775	5%	R05	Cough	959	6%
6	B349	Viral infection, unspecified	716	5%	R1110	Vomiting, unspecified	796	5%
7	J189	Pneumonia, unspecified organism	660	5%	N390	Urinary tract infection, site not specified	712	5%
8	R51	Headache	637	4%	R51	Headache	669	5%
9	N390	Urinary tract infection, site not specified	610	4%	R569	Unspecified convulsions	634	4%
10	R079	Chest pain, unspecified	516	4%	B349	Viral infection, unspecified	633	4%
11	R112	Nausea with vomiting, unspecified	512	4%	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	617	4%
12	R569	Unspecified convulsions	498	3%	R0789	Other chest pain	615	4%

Reason For ED Visits in Classic CCS Comparison Group (Phase I) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
13	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	467	3%	S0990X	Unspecified injury of head, initial encounter	573	4%
14	J029	Acute pharyngitis, unspecified	430	3%	R112	Nausea with vomiting, unspecified	523	4%
15	S0990X	Unspecified injury of head, initial encounter	426	3%	K5900	Constipation, unspecified	443	3%
16	J219	Acute bronchiolitis, unspecified	418	3%	J029	Acute pharyngitis, unspecified	432	3%
17	K5900	Constipation, unspecified	395	3%	J189	Pneumonia, unspecified organism	416	3%
18	R0602	Shortness of breath	358	3%	R0602	Shortness of breath	413	3%
19	R1013	Epigastric pain	341	2%	R918	Other nonspecific abnormal finding of lung field	353	2%
20	R197	Diarrhea, unspecified	329	2%	R1031	Right lower quadrant pain	329	2%

Table 52. Phase II Top 20 ED Visit Diagnoses Pre-/Post-WCM by ICD-10

Reason For ED Visits in Phase II by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
1	R509	Fever, unspecified	1785	15%	R509	Fever, unspecified	1578	15%
2	J069	Acute upper respiratory infection, unspecified	1434	12%	J069	Acute upper respiratory infection, unspecified	1075	10%
3	R05	Cough	877	7%	R109	Unspecified abdominal pain	724	7%
4	R109	Unspecified abdominal pain	791	7%	R05	Cough	717	7%
5	J189	Pneumonia, unspecified organism	756	6%	J189	Pneumonia, unspecified organism	532	5%
6	R112	Nausea with vomiting, unspecified	615	5%	R1110	Vomiting, unspecified	490	5%
7	R1110	Vomiting, unspecified	588	5%	R112	Nausea with vomiting, unspecified	483	5%
8	B349	Viral infection, unspecified	529	4%	R569	Unspecified convulsions	467	4%
9	R51	Headache	465	4%	B349	Viral infection, unspecified	456	4%
10	N390	Urinary tract infection, site not specified	449	4%	R918	Other nonspecific abnormal finding of lung field	453	4%
11	R569	Unspecified convulsions	436	4%	S0990X	Unspecified injury of head, initial encounter	418	4%

Reason For ED Visits in Phase II by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
12	S0990X	Unspecified injury of head, initial encounter	435	4%	R51	Headache	406	4%
13	R079	Chest pain, unspecified	428	4%	R079	Chest pain, unspecified	401	4%
14	R0602	Shortness of breath	403	3%	N390	Urinary tract infection, site not specified	370	4%
15	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	395	3%	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	369	4%
16	J029	Acute pharyngitis, unspecified	362	3%	E1010	Type 1 diabetes mellitus with ketoacidosis without coma	352	3%
17	R918	Other nonspecific abnormal finding of lung field	362	3%	R0602	Shortness of breath	340	3%
18	E1010	Type 1 diabetes mellitus with ketoacidosis without coma	330	3%	K5900	Constipation, unspecified	320	3%
19	J050	Acute obstructive laryngitis [croup]	310	3%	J029	Acute pharyngitis, unspecified	281	3%
20	K5900	Constipation, unspecified	310	3%	E1065	Type 1 diabetes mellitus with hyperglycemia	256	2%

Table 53. Classic CCS Comparison Group for Phase II Top 20 ED Visit Diagnoses Pre-/Post-WCM by ICD-10

Reason For ED Visits in Classic CCS Comparison Group (Phase II) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
1	J069	Acute upper respiratory infection, unspecified	1552	14%	R509	Fever, unspecified	1299	14%
2	R509	Fever, unspecified	1272	12%	J069	Acute upper respiratory infection, unspecified	1024	11%
3	R05	Cough	738	7%	R109	Unspecified abdominal pain	648	7%
4	R109	Unspecified abdominal pain	659	6%	R05	Cough	614	7%
5	R079	Chest pain, unspecified	507	5%	R079	Chest pain, unspecified	577	6%
6	B349	Viral infection, unspecified	503	5%	R569	Unspecified convulsions	459	5%
7	R569	Unspecified convulsions	499	5%	E1010	Type 1 diabetes mellitus with ketoacidosis without coma	440	5%
8	R112	Nausea with vomiting, unspecified	493	5%	B349	Viral infection, unspecified	432	5%
9	N390	Urinary tract infection, site not specified	482	4%	R112	Nausea with vomiting, unspecified	402	4%

Reason For ED Visits in Classic CCS Comparison Group (Phase II) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
10	R51	Headache	462	4%	N390	Urinary tract infection, site not specified	386	4%
11	J189	Pneumonia, unspecified organism	450	4%	R1110	Vomiting, unspecified	352	4%
12	R1110	Vomiting, unspecified	428	4%	S0990X	Unspecified injury of head, initial encounter	314	3%
13	Z00129	Encounter for routine child health examination without abnormal findings	378	4%	K5900	Constipation, unspecified	309	3%
14	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	359	3%	R0602	Shortness of breath	307	3%
15	S0990X	Unspecified injury of head, initial encounter	356	3%	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	303	3%
16	J029	Acute pharyngitis, unspecified	352	3%	J189	Pneumonia, unspecified organism	293	3%
17	K529	Noninfective gastroenteritis and colitis, unspecified	332	3%	R51	Headache	292	3%

Reason For ED Visits in Classic CCS Comparison Group (Phase II) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
18	K5900	Constipation, unspecified	323	3%	R0789	Other chest pain	273	3%
19	E1010	Type 1 diabetes mellitus with ketoacidosis without coma	306	3%	R918	Other nonspecific abnormal finding of lung field	259	3%
20	R0602	Shortness of breath	296	3%	E1065	Type 1 diabetes mellitus with hyperglycemia	244	3%

Table 54. Phase III Top 20 ED Visit Diagnoses Pre-/Post-WCM by ICD-10

Reason For ED Visits in Phase III by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
1	R509	Fever, unspecified	2690	14%	R509	Fever, unspecified	1821	16%
2	J069	Acute upper respiratory infection, unspecified	1758	9%	R109	Unspecified abdominal pain	1035	9%
3	R109	Unspecified abdominal pain	1549	8%	R1110	Vomiting, unspecified	898	8%

Reason For ED Visits in Phase III by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
4	R05	Cough	1299	7%	R079	Chest pain, unspecified	856	8%
5	R1110	Vomiting, unspecified	1279	7%	J069	Acute upper respiratory infection, unspecified	795	7%
6	N390	Urinary tract infection, site not specified	1098	6%	R05	Cough	717	6%
7	J189	Pneumonia, unspecified organism	1091	6%	N390	Urinary tract infection, site not specified	587	5%
8	R079	Chest pain, unspecified	1048	5%	R569	Unspecified convulsions	493	4%
9	B349	Viral infection, unspecified	986	5%	R0603	Acute respiratory distress	461	4%
10	R51	Headache	899	5%	J189	Pneumonia, unspecified organism	449	4%
11	R569	Unspecified convulsions	723	4%	K5900	Constipation, unspecified	445	4%
12	K5900	Constipation, unspecified	721	4%	S0990X	Unspecified injury of head, initial encounter	419	4%
13	J029	Acute pharyngitis, unspecified	713	4%	R51	Headache	391	3%

Reason For ED Visits in Phase III by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
14	S0990X	Unspecified injury of head, initial encounter	665	3%	B349	Viral infection, unspecified	344	3%
15	J101	Influenza due to other identified influenza virus with other respiratory manifestations	512	3%	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	316	3%
16	R0603	Acute respiratory distress	508	3%	R1031	Right lower quadrant pain	292	3%
17	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	485	3%	R0789	Other chest pain	282	2%
18	R197	Diarrhea, unspecified	422	2%	J029	Acute pharyngitis, unspecified	262	2%
19	R918	Other nonspecific abnormal finding of lung field	422	2%	J101	Influenza due to other identified influenza virus with other respiratory manifestations	242	2%
20	H6691	Otitis media, unspecified, right ear	418	2%	R112	Nausea with vomiting, unspecified	221	2%

Table 55. Classic CCS Comparison Group for Phase III Top 20 ED Visit Diagnoses Pre-/Post-WCM by ICD-10

Reason For ED Visits in Classic CCS Comparison Group (Phase III) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
1	R509	Fever, unspecified	2283	13%	R509	Fever, unspecified	1671	14%
2	J069	Acute upper respiratory infection, unspecified	2179	13%	J069	Acute upper respiratory infection, unspecified	1185	10%
3	R109	Unspecified abdominal pain	995	6%	R109	Unspecified abdominal pain	885	7%
4	B349	Viral infection, unspecified	978	6%	R079	Chest pain, unspecified	820	7%
5	R05	Cough	972	6%	B349	Viral infection, unspecified	712	6%
6	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	904	5%	N390	Urinary tract infection, site not specified	627	5%
7	N390	Urinary tract infection, site not specified	865	5%	R1110	Vomiting, unspecified	615	5%
8	R51	Headache	863	5%	R05	Cough	594	5%
9	R079	Chest pain, unspecified	858	5%	G40909	Epilepsy, unspecified, not intractable, without status epilepticus	591	5%

Reason For ED Visits in Classic CCS Comparison Group (Phase III) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
10	J189	Pneumonia, unspecified organism	804	5%	R569	Unspecified convulsions	588	5%
11	R569	Unspecified convulsions	788	5%	S0990X	Unspecified injury of head, initial encounter	480	4%
12	R1110	Vomiting, unspecified	754	4%	J189	Pneumonia, unspecified organism	448	4%
13	Z01812	Encounter for preprocedural laboratory examination	640	4%	K5900	Constipation, unspecified	423	3%
14	S0990X	Unspecified injury of head, initial encounter	608	4%	R51	Headache	414	3%
15	K5900	Constipation, unspecified	578	3%	Z00129	Encounter for routine child health examination without abnormal findings	411	3%
16	R918	Other nonspecific abnormal finding of lung field	472	3%	R918	Other nonspecific abnormal finding of lung field	408	3%

Reason For ED Visits in Classic CCS Comparison Group (Phase III) by ICD-10								
	Pre-WCM				Post-WCM			
Rank	ICD-10	Pre-WCM Diagnosis	n	% of top 20	ICD-10	Post-WCM Diagnosis	n	% of top 20
17	R0602	Shortness of breath	467	3%	R0602	Shortness of breath	407	3%
18	J029	Acute pharyngitis, unspecified	459	3%	D5700	Hb-SS disease with crisis, unspecified	352	3%
19	D5700	Hb-SS disease with crisis, unspecified	440	3%	J029	Acute pharyngitis, unspecified	301	2%
20	H6691	Otitis media, unspecified, right ear	397	2%	R0789	Other chest pain	301	2%

Hospitalization Follow-up Rates by Phase and by Year

Summary of Hospital Follow-up Visit Rates

The tables below (Tables 56-58) show the year (either pre or post WCM implementation), number of discharges, the number that had a 28 day outpatient visit and calculated follow up rate per WCM study group. Overall Follow up rates were generally very high, and over 90% across WCM and Classic counties.

Table 56. HPSM WCM Follow-up to Hospital Discharge

Study Group	Year Pre-/Post-HPSM WCM	Discharges	28-Day Follow-ups	Follow-up/Rate
Pre-WCM Implementation	-2 Year	10	9	0.90
	-1 Year	11	5	0.45

Study Group	Year Pre-/Post-HPSM WCM	Discharges	28-Day Follow-ups	Follow-up/Rate
Post-WCM implementation	+1 Year	102	97	0.95
	+2 Year	225	213	0.95
	+3 Year	159	157	0.99
Classic Post-WCM implementation	-2 Year	317	305	0.96
	-1 Year	317	299	0.94
Classic Post-WCM implementation	+1 Year	292	276	0.95
	+2 Year	282	267	0.95
	+3 Year	301	277	0.92

Table 57. Phase I Follow-up to Hospital Discharge

Study Group	Year Pre-/Post-Phase I WCM	Discharges	28-Day Follow-ups	Follow-up/Rate
Pre-WCM Implementation	-2 Year	2,767	2,560	0.93
	-1 Year	2,736	2,508	0.92
Post-WCM implementation	+1 Year	1,708	1,633	0.96
	+2 Year	2,134	2,042	0.96
	+3 Year	1,834	1,770	0.97
Classic Post-WCM implementation	-2 Year	2,996	2,790	0.93
	-1 Year	2,837	2,653	0.94
Classic Post-WCM implementation	+1 Year	2,495	2,326	0.93
	+2 Year	2,315	2,139	0.92
	+3 Year	2,114	2,002	0.95

Table 58. Phase II Follow-up to Hospital Discharge

Study Group	Year Pre-/Post-Phase II WCM	Discharges	28-Day Follow-ups	Follow-up/Rate
Pre-WCM Implementation	-2 Year	2,882	2,691	0.93
	-1 Year	2,758	2,586	0.94
Post-WCM implementation	+1 Year	2,336	2,244	0.96
	+2 Year	1,842	1,774	0.96
Classic Pre-DP	-2 Year	2,882	2,708	0.94
Classic Post-WCM implementation	-1 Year	2,428	2,238	0.92
Classic Post-DP	+1 Year	2,216	2,053	0.93
	+2 Year	2,018	1,894	0.94

Table 59. Phase III Follow-up to Hospital Discharge

Study Group	Year Pre-/Post-Phase III WCM	Discharges	28-Day Follow-ups	Follow-up/Rate
Pre-WCM Implementation	-2 Year	4,481	4,180	0.93
	-1 Year	4,182	3,904	0.93
Post-WCM implementation	+1 Year	3,001	2,875	0.96
Classic Pre-DP	-2 Year	3,668	3,332	0.91
	-1 Year	3,565	3,271	0.92

Study Group	Year Pre-/Post-Phase III WCM	Discharges	28-Day Follow-ups	Follow-up/Rate
Classic Post-WCM implementation	+1 Year	3,228	3,002	0.93

Appendix M: Description and Operationalization of Utilization Measures Report

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Claims and Encounters

DHCS provided the UCSF evaluation team with claims and encounters from the state's Management Information System/Decision Support System (MIS/DSS) between April 2009 and June 2021 for every CCS client in California in the evaluation period (April 2011 - June 2021). The claims/encounters from 2009 - 2010 were used for assessing provisions of immunizations and well-child visits that occurred prior to the study period. These records allowed for the determination that established benchmarks of services were met when a client achieves defined ages within the study period.

HACI Patient Discharge Data and Emergency Department Records

California's Department of Health Care Access and Information (HCAI) provides nonpublic datasets of inpatient hospitalizations from the Patient Discharge Data (PDD) and emergency department data (ED) collected from California-licensed hospitals in California from 2011- 2020. If the ED encounter resulted in a same-hospital inpatient admission, the ED encounter would be combined with the inpatient record. In such cases, a separate ED record would not be reported.

DHCS provided PDD and ED records from 2011 - 2020 to UCSF. The records provided were those that matched upon social security number (SSN) to the Medi-Cal eligibility records of the clients in this evaluation. Since both hospital and Medi-Cal eligibility records may not always have accurate information (especially for newborns who may be listed under their mother's SSN), it is assumed that some proportion of the HACI records will not be linked to a CCS client and thus not included in the data provided.

HACI Records Combined with MIS/DSS Claims/Encounters

MIS/DSS claims/encounters were combined with the HCAI PDD and ED records to create an analytic data file having the most complete records of inpatient stays and ED visits. The following describes the contributions of each source.

Infants comprise more HCAI inpatient records than any other age category linked to CCS clients. We can assume that this result is muted because infants are least likely to have an SSN. This is borne out by the fact that a little over 50% of the infant HCAI inpatient records find a match in claims while nearly 80% of the other ages find a match.

From the perspective of claims/encounters, more than 25% of the inpatient claims are for infants. However, a little over 10% of the infant inpatient claims find a HCAI inpatient match. The percent matching increases monotonically as age increases. Those aged 20 find nearly an 80% match.

In contrast to inpatient records, infants and those age 8 - 12 comprise the smallest proportions of HCAI ED records among clients linked to the evaluation's CCS population on SSN. However, infants have the largest proportion ED records among claims. This also reflects the assumption that infant records are more difficult to link by

SSN. However, among clients that link on SSN, infants have the highest proportion of their HCAI ED records matching ED claims. Similar to inpatient claims, almost 20% of the infant ED claims find a HCAI ED match. Matching increases monotonically as age increases. Those age 20 find more than a 75% match to HCAI ED records.

Overall, HCAI inpatient records find nearly an 80% match in inpatient claims across years. Inpatient claims find about a 40% match to HCAI records. Between 2011 – 2013, approximately 30% of HCAI ED records found a matching claim, 20% in 2014, and 10% between 2015 - 2019. Across all years, approximately 40% of ED claims find a matching HCAI ED record.

In summary, a failure for HCAI records to match with claims/encounter is due to four sources of error: 1) failure for records to have an SSN that can be matched, 2) failure for hospitals to fully report services to HCAI, 3) failure of health plans to include services in encounters reported to DHCS, and 4) inpatient and ED visits may be paid by sources other than CCS or Medi-Cal. The error occurs most often among infants and for ED visits in the later years. Overall, the HCAI records add an additional 7% to the inpatient stays and 44% to the ED visits.

Descriptions and Operationalization of Utilization Measures

Measures extracted from Medi-Cal Claims/Encounters and HCAI Records

Table A-1 contains descriptions and operationalizations for each utilization measure presented in this report that are derived from the claims/encounter data. Where appropriate, portions of the SAS code associated with these definitions are included.

Table A-1 Descriptions of Service Measures Extracted from Medi-Cal Claims/Encounters and HCAI Records

Measure	Description	Operationalization (SAS code)
Outpatient	Non-Emergency Department services provided at outpatient institutional facilities, such as outpatient departments, rural health clinics, and chronic dialysis services.	claim_type_cd='1' and not ED
ED	Emergency Department claim/encounter or HCAI ED record	if claim_type_cd in('1' '4') and (orig_pos_cd in('23', 'B') or proc_cd in ('99281' '99282' '99283' '99284' '99285' 'Z7502') or REVENUE_CD in('0450' '0451' '0452' '0453' '0454' '0455' '0456' '0457' '0458' '0459' '0981')) then ED=1;

Measure	Description	Operationalization (SAS code)
Newborn Intensive Care Unit (NICU)		if claim_type_cd='2' and Vendor_cd in('50', '60', ' ') and yrdif(birth_dt, svc_from_dt, 'AGE') < 0.0834 /* Inpat 1 month old */ then do; If REVENUE_CD in('173' '174') then NICU=1; else if proc_cd in('Z0100' 'Z0102' 'Z0104' 'Z0106' '99468' '99469' '99477' '99478' '99479' '99480' '99291') then NICU=1; else if MSDRG in('789' '790' '791') then NICU=1; else do i = 1 to 2; if put(substr(Diag10_{i},1,3),$CCS_Cond.) ='NICU' then NICU=1; else if put(substr(Diag9_{i},1,3),$CCS_Cond.) ='NICU' then NICU=1; end; end;
Inpatient	Inpatient hospital accommodations (for example, medical/surgical intensive care, burn care and coronary care) and ancillary charges (for example, labor and delivery, anesthesiology and central services and supplies). Excludes outpatient, rehab, skilled nursing facility, and hospital mental health services.	If claim_type_cd='2' and Vendor_cd in('50', '60', ' ') then Inpat=1
Physician	Services provided by an individual licensed under state law to practice medicine or osteopathy. Physician services given while in the hospital that appear on the hospital bill are not included.	claim_type_cd='4
Pharmacy	Pharmacy	claim_type_cd ='3' or Vendor_cd='26

Measure	Description	Operationalization (SAS code)
Well-Child Care Visit	Emergency Department claim or encounter	claim_type_cd in ('1' /* Outpatient */ , '4' /* Medical/Physician */ , '6') /* EPSDT/CHDP */ then do; Do i=**1** to **2**; if Diag9_{i} in ('V202') then Well_Child_Visit =**1**; if Diag10_{i} in (‘Z000’ 'Z001' 'Z00110' 'Z00111' 'Z00121' 'Z00129' 'Z008' 'Z022' 'Z0271' 'Z0279' 'Z0281' 'Z0282' 'Z0289' 'Z029' 'G0438' 'G0439' 'Z761' 'Z762') then Well_Child_Visit =**1**; end; if proc_cd in ('99461' '99381' '99382' '99383' '99384' '99385' '99391' '99392' '99393' '99394' '99395') then Well_Child_Visit=**1**; end;
Rehabilitation	Rehabilitation Facility	Vendor_cd in('59' '69')
EPSDT	Early and Periodic Screening, Diagnostic and Treatment	claim_type_cd='6'
MH Low	The Chronic Illness and Disability Payment System (CDPS) for disabled Medicaid beneficiaries was used to identify the severity of mental health conditions through analysis of diagnosis codes and national drug codes.	MH_Low=1;
MH High		MH Medium low, Medium, and high
IHSS	In-Home Supportive Services	pgm_cd ='01'
Case Management	Case management billing codes or services provided through a case manager provider type.	proc_cd in('99366' '99367' '99368') or Taxonomy in('163WC0400X', '171M00000X' , '1744P3200X', '251B00000X')
Specialty Care Center		Not inpatient, ED or NICU and NPI in list of SCCs https://cmsprovider.cahwnet.gov/prv/scc.pdf
CCS Paneled Provider		Not inpatient, ED, NICU, or SCC and NPI in list of CCS Paneled Providers https://www.dhcs.ca.gov/services/ccs/Pages/CCSProviders.aspx

Measure	Description	Operationalization (SAS code)
Primary Care	Medical, physician, EPSDT, CDPH, and outpatient services provided by a primary care provider.	Well-Child Care Visit or claim_type_cd in ('1', '4', '6') and Taxonomy in(“133VN1401X”, “152WP0200X”, “163WG0000X”, “163WP0200X”, “163WP0218X”, “207Q00000X”, “207QA0000X”, “207QA0401X”, “207QA0505X”, “207QG0300X”, “207R00000X”, “207RA0000X”, “208000000X”, “2080A0000X”, “208D00000X”, “261QA0005X”, “261QF0050X”, “261QP2300X”, “3140N1450X”, “363LF0000X”, “363LP0200X”, “363LP0222X”, “363LP2300X”, “364SF0001X”, “364SP0200X”, “364SX0204X”, “405300000X”)
DME	Durable Medical Equipment	if vendor_cd not in('19' '23' '24') then do; if svctype{s} = '172' or proc_cd in("A4206 - A4215","A4220 - A4236","A4244 - A4250", "A4252 - A4259","A4262 - A4264","A4270", "A4280 - A4286","A4290", "A4300 -A4301","A4305 - A4306", "A4310 - A4358","A4360 - A4435", "A4458-A4459","A4461-A4463", "A4465 - A4467","A4470", "A4480","A4481","A4483","A4490 -A4510", "A4520","A4550","A4553 - A4559", "A4561 - A4563","A4565-A4566", "A4570","A4575","A4580 - A4590", "A4595","A4600-A4602","A4604-A4606", "A4608","A4611 - A4640", "A4651 - A4932","A5051 - A5093", "A5102 - A5200","A5500 - A5514", "A6000","A6010-A6025","A6154 - A6413", "A6441 - A6457","A6460-A6461", "A6501-A6513","A6530 - A6550", "A7000 - A7041","A7044 - A7048", "A7501-A7527","A8000-A8004", "A9272- A9286","A9300", "A9900","A9901","A9999", "B4034 - B9999","E0100 - E0105", "E0110 - E0118","E0130 - E0159", "E0160 - E0175","E0181 - E0199", "E0200 - E0239","E0240 - E0248", "E0249","E0250 - E0304", "E0305 - E0326","E0328 - E0329", "E0350 - E0352","E0370", "E0371 - E0373","E0424 - E0484", "E0485 - E0486","E0487", "E0500","E0550 - E0585","E0600","E0601", "E0602 - E0604","E0605", "E0606","E0607","E0610 - E0615", "E0616","E0617","E0618 - E0619", "E0620","E0621 - E0636", "E0637 - E0642","E0650 - E0676", "E0691 - E0694",”E0700","E0705", "E0710","E0720 - E0745", "E0746","E0747 - E0748",

Measure	Description	Operationalization (SAS code)
		"E0749","E0755- E0770", "E0776","E0779 - E0780", "E0781","E0782 - E0783", "E0784","E0785 - E0786", "E0791","E0830","E0840 - E0900", "E0910 - E0930","E0935 - E0936", "E0940","E0941","E0942 - E0945", "E0946 - E0948","E0950 - E1298", "E1300 - E1310","E1352 - E1392", "E1399","E1405 - E1406", "E1500 - E1699","E1700 - E1702", "E1800 - E1841","E1902","E2000", "E2100 - E2101","E2120", "E2201 - E2398","E2402", "E2500 - E2599","E2601 - E2633", "E8000 - E8002","J7401","J7402", "K0001 - K0108","K0195","K0455", "K0462","K0552 - K0605", "K0606 - K0609","K0669", "K0672","K0730","K0733","K0738", "K0739","K0740","K0743 - K0746", "K0800 - K0899","K0900", "K1001-K1004","K1005", "K1006-K1012","K1013-K1020", "L0112 - L4631","L5000 - L5999", "L6000 - L7499","L7510 - L7520", "L7600 - L8485","L8499", "L8500 - L8501","L8505","L8507", "L8509","L8510","L8511 - L8515", "L8600 - L8699","L8701-L8702", "L9900","Q0477 - Q0509", "Q4001 - Q4051","V2020 - V2025", "V2100 - V2513","V2520 - V2523", "V2524","V2530 - V2531","V2599", "V2600 - V2615","V2623 - V2629", "V2630 - V2632","V2781", "V2782 - V2784","V2786", "V2787 - V2788","V2797","V2799", "V5008 - V5299","V5336"

Measure	Description	Operationalization (SAS code)
Specialist	Services provided by a medical specialist	Provider Taxonomy in("174400000X", "193200000X", "193400000X", "202K00000X", "204C00000X", "204D00000X", "204E00000X", "204F00000X", "204R00000X", "207KA0200X", "207KI0005X" , "207L00000X", "207LA0401X", "207LC0200X", "207LH0002X", "207LP2900X", "207LP3000X", "207N00000X", "207ND0101X, "207ND0900X, "207NI0002X" , "207NP0225X", "207NS0135X", "207QB0002X", "207QH0002X, "207QS0010X", "207QS1201X", "207RA0001X", "207RA0002X", "207RA0201X", "207RA0401X", "207RB0002X", "207RC0000X", "207RC0001X", "207RC0200X", "207RE0101X", "207RG0100X", "207RG0300X", "207RH0000X", "207RH0002X", "207RH0003X", "207RH0005X", "207RI0001X" , "207RI0008X" , "207RI0011X" , "207RI0200X" , "207RM1200X, "207RN0300X", "207RP1001X", "207RR0500X", "207RS0010X", "207RS0012X", "207RT0003X", "207RX0202X", "207SC0300X", "207SG0201X", "207SG0202X", "207SG0203X", "207SG0205X", "207SM0001X, "207T00000X", "207U00000X", "207UN0901X, "207UN0902X, "207UN0903X, "207VB0002X", "207VC0200X", "207VE0102X", "207VF0040X", "207VG0400X", "207VH0002X", "207VM0101X, "207VX0000X", "207VX0201X", "207W00000X, "207WX0009X, "207WX0107X, "207WX0108X, "207WX0109X, "207WX0110X, "207WX0120X, "207WX0200X, "207X00000X", "207XP3100X", "207XS0106X", "207XS0114X", "207XS0117X", "207XX0004X", "207XX0005X", "207XX0801X", "207Y00000X", "207YP0228X", "207YS0012X", "207YS0123X", "207YX0007X", "207YX0602X", "207YX0901X", "207YX0905X", "207ZB0001X", "207ZC0006X", "207ZC0008X", "207ZC0500X", "207ZD0900X", "207ZF0201X", "207ZH0000X", "207ZI0100X" , "207ZM0300X, "207ZN0500X", "207ZP0007X", "207ZP0101X", "207ZP0102X", "207ZP0104X", "207ZP0105X", "207ZP0213X", "2080B0002X", "2080C0008X", "2080H0002X", "2080I0007X" , "2080N0001X", "2080P0006X", "2080P0008X", "2080P0201X", "2080P0202X", "2080P0203X", "2080P0204X", "2080P0205X", "2080P0206X", "2080P0207X", "2080P0208X", "2080P0210X", "2080P0214X", "2080P0216X", "2080S0010X",

Measure	Description	Operationalization (SAS code)
		"2080S0012X", "2080T0002X", "2080T0004X", "208100000X", "2081H0002X", "2081N0008X", "2081P0004X", "2081P0010X", "2081P0301X", "2081P2900X", "2081S0010X", "208200000X", "2082S0099X", "2082S0105X", "2083A0100X", "2083A0300X", "2083B0002X", "2083C0008X", "2083P0011X", "2083P0500X", "2083P0901X", "2083S0010X", "2083T0002X", "2083X0100X", "2084A0401X", "2084A2900X", "2084B0002X", "2084B0040X", "2084D0003X", "2084F0202X", "2084H0002X", "2084N0008X", "2084N0400X", "2084N0402X", "2084N0600X", "2084P0005X", "2084P0015X", "2084P0301X", "2084P0800X", "2084P0802X", "2084P0804X", "2084P0805X", "2084P2900X", "2084S0010X", "2084S0012X", "2084V0102X", "2085B0100X", "2085D0003X", "2085H0002X", "2085N0700X", "2085N0904X", "2085P0229X", "2085R0001X", "2085R0202X", "2085R0203X", "2085R0204X", "2085R0205X", "2085U0001X", "208600000X", "2086H0002X", "2086S0102X", "2086S0105X", "2086S0122X", "2086S0127X", "2086S0129X", "2086X0206X", "208800000X", "2088F0040X", "2088P0231X", "208C00000X", "208G00000X", "208M00000X, "208U00000X", "208VP0000X", "208VP0014X", "209800000X", "213EP0504X", "213ER0200X", "213ES0000X", "213ES0103X", "213ES0131X")

Portions of these descriptions of Medi-Cal services are copied from the Medi-Cal Provider Manual http://files.medi-cal.ca.gov/pubsdoco/manuals_menu.asp

All-Cause Hospital 30-Day Readmission Rates

The all-cause readmission rates were calculated using a methodology developed by U.S. Agency for Healthcare Research and Quality.[1] The methodology was adapted for use on Medi-Cal claims/encounter administrative data. The denominator of the admission rate calculation is the number of hospital discharges for living persons, excluding hospital transfers. These are known as index discharges. The numerator is the number of persons readmitted to any hospital within 30-days of index discharge. Each index discharge can have only one readmission, thus the discharge of the readmission become a new index discharge. Index discharges are identified claims/ encounter containing an inpatient claim type code excluding psychiatric hospitalizations and long-term care facilities.

[1] Barrett M, Raetzman S, Andrews R. *Overview of Key Readmission Measures and Methods.* 2012. HCUP Methods Series Report #2012-04. ONLINE December 20, 2012. U.S. Agency for Healthcare Research and Quality. Available: http://www.hcup-us.ahrq.gov/reports/methods/methods.jsp.

Mental Health Services: Categorization of Low and High Severity

To generate categories of low and high severity mental health use, the UCSF evaluation team utilized the Chronic Illness and Disability Payment System (CDPS) classification system. This system, developed at the University of California, San Diego,[2] was created for Medicaid plans to use to develop risk-adjusted capitation rates based on levels of chronic illness burden based on ICD-9, ICD-10 codes, and pharmacy provision. Mental health condition codes were used to generate indicated levels of increased expenditures from Low (e.g., bulimia nervosa), Medium-Low (e.g., attention deficit disorder with hyperactivity), Medium (e.g., bipolar disorder, current episode hypomanic), and High (e.g., schizophrenia.) Due to the rarity of High severity claims Medium-Low, Medium and High mental health severity was combined and labeled High

Hospital Discharges and Emergency Department Visits with 28-Day Follow-up

These measures are the calculation of the percentage of CCS clients discharged from a hospital or had an emergency department (ED) visit who had at least one follow-up contact or visit within 28 days after discharge.

The index discharges were the same as those identified for the all-cause hospital 30-day readmissions. The index ED visits were identified using the criteria described in table A-1. Visits that qualified as a follow-up are visits with PCP, specialist, or select medical professional. MIS/DSS claims/encounters were queried for follow-ups visits. These follow-up claims/encounters are identified where the claim type code is equal to

(1) Outpatient,
(4) Medical/Physician, or
(6) EPSDT,

and the claim/encounter is not an inpatient or ED as described in Table A-1
and the vendor code is either missing or one of those listed in Table A-2.

Table A-2. Vendor Codes Indicating a Hospital Follow-up Visit

Vendor Code	Description
02	Medicare Crossover Provider Only
03	CCS / GHPP
07	Certified Pediatric NP
08	Certified Family NP
14	Expanded Access to Primary Care
20	Physicians (MD or DO)
21	Ophthalmologist
22	Physicians Group
31	Psychologist
40	Other Provider (non-prof. prov svcs)
51	County Hosp - Extended Care
52	County Hosp - Outpatient
53	Breast Cancer Early Detection Program

[2] http://cdps.ucsd.edu/cdps_hcfr.pdf

Vendor Code	Description
55	Local Education Agency
61	Comm Hosp - Extended Care
62	Comm Hosp - Outpatient
74	Short Doyle Comm MH Clinic Svcs
75	Organized Outpatient Clinic
77	Rural Health Clinics/FQHCs/Indian Health Clinics
82	EPSDT Supplemental Services
83	Pediatric Subacute Rehab/Weaning
94	CHDP Provider

If a follow-up visit was identified within 28 days post hospital discharge, then it is no longer eligible to be considered a follow for an additional discharge that falls within that 28-day window.

Well-Child Care Visit HEDIS Measures

Given that the Well-Child Care measures used only MIS/DSS claims/encounters and did not include a chart reviews, thus modified HEDIS measures for Well-Child Care were used. The codes to identify the visits are in table A-1. Four well-child care measures were performed:

- 6 or more Well-Child visits by age 15 months
- 2 or more Well-Child visits between 15 and 30 months
- 1 annual Well-Child visit between 3 to 6 years of age
- 1 annual Well-Child visit between 12 to 20 years of age

Clients who have a claim/encounter for hospice care were excluded from these Well-Child measures (proc_cd = ‘G9702’ or revenue cd in 0650, 0652, 0656, 0657, 0659 or Primary or secondary diagnosis =V667).

The Well-Child measures at age 15 months and between 16 and 30 months were attributed to the study group in which they were enrolled as of the after their 15-month and 30-month birthdays respectively. Those who reached these milestone ages within the first six months of the implementation of a given phase were excluded so that the WCM health plans had ample opportunity to bring clients up-to-date on the Well-Child visits. Also excluded were clients with less than 15 months CCS enrollment prior to the month after their birthday. Claims/encounters were queried to determine if the desired number of Well-Child visits occurred.

The Well-Child measure for clients between age 3 to 6 and 12-20 were attributed to the study group in which they were enrolled on the month of their birthday. Claims and encounter were queried to determine whether at least one Well-Child visit occurred in the following 12 month. Clienst with less than 12 months of CCS enrollment during the year under examination were excluded.

Immunizations

Childhood and adolescent immunizations schedules were analyzed using modified HEDIS methodology. Administrative data rather than chart reviews were employed.

Immunizations Data Sources

Immunization records were obtained from multiple sources:

1) HPSM provided the UCSF evaluation team with the immunization records for their clients.
2) DHCS provided records from the California Immunization Registry (CAIR2). These records were extracted from the registry data where there was an exact match on first name, last name, and date of birth. Where exact matches could not be obtained do to incomplete or inaccurate data entry, a record was not extracted. Thus, some unknown number of immunizations that were administered were not reflected in the data.
3) MIS/DSS claims/encounters were queried for procedure codes and NDC codes indicating an immunization occurred.

Vaccine Identification

National Drug Codes (NDC) and Current Procedural Terminology codes (CPT) and CVX codes for vaccines used in the study were identified through the databases and crosswalks provided by the Centers for Disease Control (https://www.cdc.gov/vaccines/programs/iis/code-sets.html). The codes were then used to query the immunization data sources to identify administration of childhood vaccines. If either an CPT, CVX or NDC for a given vaccination was found on a given date of service, then the UCSF evaluation team counted that vaccine as being administered on that date. An administration on another date of service was counted as an additional dose of the vaccine.

Clients who are counter indicated for a vaccine are excluded from the analysis. The diagnoses that are counter indicated were taken from the Childhood Immunization Codesets at https://www.medicaid.gov/license/form/7421/137551 where the Value Set Name includes:

- Anaphylactic Reaction due to Vaccination
- Disorders of the Immune System
- Encephalopathy due to Vaccination
- HIV
- HIV Type 2
- Hospice Encounter
- Intussusception
- Malignant Neoplasm of Lymphatic Tissue
- Severe Combined Immunodeficiency
- Vaccine Causing Adverse Effect
- Severe Combined Immunodeficiency
- Vaccine Causing Adverse Effect

Immunization Schedules

Tables A-3 and A-4 provide the parameters for the childhood and adolescent measures. Clients who received the full schedule of immunization were deemed to have met the recommend schedule.

Table A-3. Childhood Immunization Measure

Childhood Immunization	Measure
Children who turn 2 years old during the measurement year. Vaccines must be completed **on or before the 2nd birthday**.	• 4 DTaP (do not count any before 42 days of age) • 3 IPV (do not count any before 42 days of age) • 1 MMR • 3 HiB (do not count any before 42 days of age) • 3 Hepatitis B • 1 VZV, positive serology, or documented chicken pox disease • 4 pneumococcal conjugate • 1 Hepatitis A • 2 or 3 Rotavirus vaccines-depends on the vaccine administered (do not count any before 42 days of age) • 2 Influenza with different dates of service (do not count any vaccine given prior to 6 months after birth) **Exclusion:** Contraindication for a specific vaccine (e.g., anaphylactic reaction to the vaccine or its components)

Table A-4. Adolescent Immunization Measure

Adolescent Immunization	Measure
Adolescents who turn age 13 during the measurement year. Vaccines must be completed **on or before the 13th birthday**.	• 1 TdaP (Tetanus, Diphtheria, Pertussis) • 3 Meningococcal Vaccines • 1 HPV (human papillomavirus) **Exclusion:** Contraindication for a specific vaccine (e.g., anaphylactic reaction to the vaccine or its components)

Transportation to Specialty Care Centers

Using the procedure codes in table X, UCSF queried claims/encounters for transportation codes occurring on the same date of service as a claims/encounter for a Specialty Care Center (SCC) visit. Among the Phase I WCM and the Classic CCS comparison group only one SCC visit had an accompanying transportation claim. In Phase II only about 0.05% of the SCC visits had atransportation claim. HPSM WCM and Phase III had zero transportation claims. Given that we found almost no transportation claims to SCC centers UCSF saw no benefit in further analyses.

Table A-5. Transportation Codes

Transportation Codes	Description
A0080	Non-emergency transportation, per mile - vehicle provided by volunteer (individual or organization), with no vested interest
A0090	Non-emergency transportation, per mile - vehicle provided by individual (family member, self, neighbor) with vested interest
A0100	Non-emergency transportation; taxi
A0110	Non-emergency transportation and bus, intra or inter-state carrier
A0120	Non-emergency transportation: mini-bus, mountain area transports, or other transportation systems
A0130	Non-emergency transportation: wheelchair van
A0426	Ambulance service, advanced life support, non-emergency transport, level 1 (als 1)
A0428	Ambulance service, basic life support, non-emergency transport, (bls)
A0433	Advanced life support, level 2 (als 2)
A0434	Specialty care transport (sct)
A0999	Unlisted ambulance service
S0209	Wheelchair van, mileage, per mile
S0215	Non-emergency transportation; mileage, per mile
T2001	Non-emergency transportation; patient attendant/escort
T2002	Non-emergency transportation; per diem
T2003	Non-emergency transportation; per diem
T2004	Non-emergency transport; commercial carrier, multi-pass
T2005	Non-emergency transportation: stretcher van

Transportation Codes	Description
T2007	Transportation waiting time, air ambulance, and non-emergency vehicle, one-half (1/2) hour increments

Client-to-Provider Distance

Provider locations were obtained from the latitudes and longitudes of the addresses recorded in multiple sources.

- PROV_MSTR_SERVICE_DEMOGRAPHICS
  This file has the latitude and longitude of the billing providers recorded in the encounters from fee-for-service providers and participating managed care plans.
- MC_PROV_MSTR_HISTORY
  This file contains the historical locations of the managed care providers.
- PROV_ADDRESS
  This file contains the locations of the Medi-Cal fee-for-service providers.

Claims for Primary Care, Specialist, CCS Paneled Provider, and Specialty Care Center outpatient visits were appended with the location of the provider. First the location found in the PROV_MSTR_SERVICE_DEMOGRAPHICS file was appended. If no location was identified, then the location from the MC_PROV__MSTR_HISTORY file was appended. The remaining records without a location identified was appended with the location from the PROV_ADDRESS file. This process provided the locations for more than 99% of the providers of interest.

The client locations were obtained from the latitude and longitudes recorded in the monthly eligibility file. The Euclidian distances between the clients and providers were calculated using the SAS distance function. Since a client may visit several providers on a given day, the greatest client-to-provider distance in any given day was used for this analysis.

Conditions Indicating an Annual Specialty Care Center Visit

This analysis identified clients who had at least one of four conditions recorded in the CMSNet diagnosis file. These are the conditions that were used to justify enrollment into CCS. Note that approximately one-third of the CCS clients did not have a diagnosis recorded in this file, therefore the counts are unrepresentative of the actual disease prevalence within the CCS population. The counts are further reduced by excluding those without 12 months of enrollment in any given study period. However, displaying the distribution of these diseases is not the primary objective of these tables, but rather the percent of these clients who had a visit to at least one specialty care center visit in the year before or the year after the WCM implementation date.

Table A-6. Conditions Indicating an Annual SCC Visit

Condition	ICD10 code
Sickle Cell Disease	D57

Condition	ICD10 code
Cystic Fibrosis	E84
Diabetes (type 1):	E!0
Complex congenital heart disease	Q200-205, Q212, Q113, Q220, Q229, Q234, Q226, Q251, Q262, Q263

Referrals for Services

The CMSNet service authorization request (SAR) file provides records for service referrals. However, referrals made by WCM health plans may not have their referral records in CMSNet. Therefore, records of service referrals were requested from the WCM health plans. All health plans provided these records except for the Phase II health plans.

Specialty Care Center Referrals

Among plan-provided referral records, referrals to SCCs were identified by the NPI of the referral provider. Referrals to SCC among CMSNet SAR records were identified where SARType=SCC. CMSNet and the health plans records were combined to identify all SCC referrals.

Durable Medical Equipment Referrals

Instances of durable medical equipment (DME) referrals are recorded in CMSNet. However, the information on the records made no distinction between DME and other medical services. Furthermore, the service authorization number on the referral did not link to any treatment authorization numbers on the MIS/DSS claims. Having no way to link DME referrals to a claim/encounter, UCSF could not determine if or when DME provision occured with respect to the referral. The time for DME referral to authorization was calculated using the health plan-provided data.

Specialty Care Center Referrals with 90-Day Visit

Special Care Centers (SCC) provide comprehensive, coordinated health care to California Children's Services (CCS) clients with specific medical conditions. SCCs are organized around a specific condition or system. SCCs are comprised of multi-disciplinary, multi-specialty providers who evaluate the client's medical condition and develop a family-centered health care plan to facilitate the provision of timely, coordinated treatment.

Referrals to SCCs were identified in the CMSNet Service Authorization Request (SAR) file. A list of the NPIs of California SCCs was obtained from https://cmsprovider.cahwnet.gov/prv/scc.pdf. The UCSF evaluation team queried the MIS/DSS claims/encounters to determine whether or not a client received a service at an SCC within 90 days of the referral.

Evaluation of Medi-Cal Eligibility and Services for Individuals Discharged from CCS at Age 21

To evaluate a change in eligibility for services among those who transition out of CCS at age 21, UCSF examined the Medi-Cal/CCS eligibility and claims/encounter records. Three analyses were done for each phase:

1. the proportion of those who transition into Medi-Cal,
2. among those who transitioned into Medi-Cal, what proportion remained enrolled in the same health plan, and
3. a comparison of services provided in the year before and after turning 21.

Individuals who were enrolled in CCS the month before they aged-out were identified. Those who showed at least one month of eligibility for full-scope Medi-Cal in the year following turning 21 were deemed to have successfully transitioned. Study group, year and county assignment for aging-out individuals was determined by their study group assignment at the time aging-out occurred. The proportion of the CCS enrollees that were also Medi-Cal eligible in the year post-age-out was calculated. Then the proportion of those who successfully transitioned to Medi-Cal that retained the same health plan was calculated.

Services provided in the year before and year after transitioning to Medi-Cal were identified in MIS/DSS claims/encounters and HCAI PDD and ED records. Primary care, specialist, ED visits and hospital stays were counted separately. To be included a client must have been enrolled in CCS at least 12 months before and Medi-Cal 12 months after turning 21.

The differences in service provision between one year before and one year after being discharged from CCS was calculated for each study group. Then the differences in differences among the WCM counties and the Classic CCS comparison counties were compared using a general linear model controlling for ethnicity, language, and disease burden.

Appendix N: Crosswalk Categorization of Grievance Type Between Old and New DHCS Systems

Grievance Type	Old System Grievance Categorization	New System Grievance Categorization
Accessibility	Excessive long wait time/appointment schedule time	Continuity of Care
	Lack of primary care provider availability	Driver Punctuality
	Lack of specialist availability	Geographic Access
	Lack of telephone accessibility	Language Access
	Lack of language accessibility	Out-of-Network
	Lack of facility physical access	Physical Access
		Provider Availability
		Technology / Telephone
		Timely Access
		Timely Response to Auth / Appeal Request
		Transportation
		Vehicle
Quality of Care	Inadequate facilities, non-access related	Case Management / Care Coordination
	Inappropriate ancillary care	Disability Discrimination
	Inappropriate hospital care	Discrimination
	Inappropriate provider care	Inappropriate care
	Plan denial of treatment	Provider / Staff Attitude
	Provider denial of Treatment	Quality of care
	Poor provider/staff attitude	
Benefits Coverage	Dispute over covered services	Billing

Grievance Type	Old System Grievance Categorization	New System Grievance Categorization
		Eligibility
		Enrollment
Referral	Plan refusal to refer	Authorization
	Provider refusal to refer	Referral
	Delay in referral	
Other	Balance billing	Fraud / Waste / Abuse
	Claims issues	Member Informing Materials
	General billing practices	PHI / Confidentiality / HIPAA
	Marketing	
	Membership issues	
	Administrative issues – Health Plan	
	Privacy issues	
	Fraud waste abuse	
	Continuity/coordination of care	

Appendix O: Eligibility File and Study Group Construction for Enrollment and Utilization Analyses (Methodology)

Contents

Study Group Selection for Analysis of CCS Eligibility and Services

The CCS eligibility file provided by DHCS contains records for each CCS eligible individual for each month in which they are eligible for Medi-Cal or CCS services. The file also contains each individual's demographics. Many have more than one record per month. One record may show that a person is eligible for fee-for-service while another may show that capitation was paid to a managed care plan for potential provision of medical services. There may also be additional records showing eligibility under multiple aid codes for varied scopes of service. Eligibility records for dental plans were excluded.

The file was reduced to one record per member per month for each CCS-eligible enrollee (see Table A-1 for eligible aid codes). When multiple records occurred in a given month, the records with the highest value of health plan code was selected. This hierarchy provides selection preference to the managed care health plans over fee-for-service.

As was requested by UCSF, if an individual was CCS eligible for any month between July 2014 and June 2021 then all that individual's eligibility records are included in the DHCS provided file. For some analyses a file containing only records for months in which a person is CCS eligible records was created by UCSF. Only records meeting the following conditions were included:

a) The CCS Aid CD field was populated with a CCS Aid code (9D, 9J, 9K, 9N ,9R, 9U, 9V, & 9W). Aid Code 9M, MTU only was excluded.
b) The person is under 21.

Counts of CCS member months were created from the file containing only the months in which individuals met the above conditions.

Table A-1. CCS Eligible Aid Codes

Aid Code	Definition
9D	California Children's Services (CCS)-only. Children who meet CCS eligibility requirements but are not Medi-Cal recipients. Assigned only to CCS enrollees of specified CCS 1115 Waiver Demonstration Projects.
9K	CCS-eligible. Eligible for all CCS benefits (such as diagnosis, treatment, therapy and case management).
9N	Eligible for CCS only if concurrently eligible for full-scope, no SOC (Share of Cost) Medi-Cal. CCS authorization required.
9R	CCS-eligible Healthy Families (HF) child. A child in this program is enrolled in a HF plan and is eligible for all CCS benefits (such as diagnosis, treatment, therapy and case management). The child's county of residence has no cost sharing for the child's CCS services.
9U	CCS-eligible HF child. A child in this program is enrolled in a HF plan and is eligible for all CCS benefits (such as diagnosis, treatment, therapy and case management). The child's county of residence has county cost sharing for the child's CCS services.
9V	CCS-eligible Partners for Children/Pediatric Palliative Care Waiver (PFC/PPCW) program participant. A child assigned this aid code has met the requirements for and is enrolled in the PFC/PPCW program. Loss of Medi-Cal eligibility will result in the discontinuance of state-funded services and waiver benefits.
9W	CCS-eligible PFC/PPCW program participant. A child assigned this aid code has met the requirements for and is enrolled in both CCS and the PFC/PPCW program. Loss of Medi-Cal eligibility will result in the discontinuance of waiver benefits and reassignment to an appropriate non-waiver based CCS aid code for the child by the responsible CCS county program.

Source: Medi-Cal Provider Manual: Aid Codes Master Chart January 2019

1. Individuals were assigned to one of four study groups for four each WCM phase, Phase I, Phase II, Phase III and HPSM WCM. Table A-2 A-2 through A-5 provide the selection criteria for these groups.

Table A-2. Study Group Selection Criteria for Health Plan of San Mateo CCS WCM Evaluation

	Study Group	Definition
HPSM WCM Group San Mateo County	Pre-CCS WCM	CCS enrollees in San Mateo County prior to the implementation of the WCM from July 2016 through June 2018
	Post-WCM	CCS enrollees in plan code 503 between July 2018 and June 2021

	Study Group	Definition
Comparison Group San Francisco and Santa Clara counties	Classic CCS Pre-WCM	CCS enrollees in comparison counties from July 2016 through June 2018
	Classic CCS Post-WCM	CCS enrollees in comparison counties from July 2018 through June 2021

Table A-3. Study Group Selection Criteria for Phase I WCM Evaluation

	Study Group	Definition
Phase I Merced, Monterey, Santa Cruz, San Luis Obispo, and Santa Barbara counties	Pre-WCM	CCS enrollees in Phase I counties between July 2016 through June 2018 (prior to the WCM implementation)
	Post-WCM	CCS enrollees in plan codes 501, 502, 505, 508, & 514 from July 2018 through June 2021
Comparison Group Fresno, Kern, Santa Clara, Tulare, & Ventura counties	Classic CCS Pre-WCM	CCS enrollees in comparison counties from July 2016 through June 2018
	Classic CCS Post-WCM	CCS enrollees in comparison counties from July 2018 through June 2021

Table A-4. Study Group Selection Criteria for Phase II WCM Evaluation

	Study Group	Definition
Phase II Humboldt, Marin, Mendocino, Napa, Solano, Sonoma, Tulare, Del Norte, Lake, Lassen, Modoc, Shasta, Siskiyou, & Trinity counties	Pre-WCM	CCS enrollees in Phase I counties between January 2017 and December 2018 (prior to the WCM implementation)
	Post-WCM	CCS enrollees in plan codes 504, 507, 509, 510, 511, 512, 513, 517, 518, 519, 520, 521, 522, & 523 between January 2019 and December 2020
Comparison Group Alameda, Butte, Contra Costa, Sacramento,	Classic CCS Pre-WCM	CCS enrollees in comparison counties from January 2017 through December 2018
	Classic CCS Post-WCM	CCS enrollees in comparison counties between January 2019 and December 2020

	Study Group	Definition
San Francisco, San Joaquin, Amador, Colusa, El Dorado, Glenn, Plumas, Sutter, & Tehama counties		

Table A-5. Study Group Selection Criteria for Phase III WCM Evaluation

	Study Group	Definition
Phase III Orange County	Pre-WCM	CCS enrollees in Orange County between July 2017 through June 2019 (prior to the WCM implementation)
	Post-WCM	CCS enrollees in plan code 506 from July 2019 through June 2021
Comparison Group Los Angeles County	Classic CCS Pre-WCM	CCS enrollees in comparison counties from July 2017 through June 2019
	Classic CCS Post-WCM	CCS enrollees in comparison counties from July 2019 through June 2021

New Enrollments

Enrollment records from June 2016 going forward were examined. For clients not enrolled in June 2016, the first instance of CCS eligibility is deemed a new enrollment. It is common for a child to be enrolled in fee-for-service CCS for 1-3 months before being enrolled in a WCM plan. Therefore, analysis of new enrollees gives the WCM plan credit for a new enrollment if the client entered the CCS-WCM within three months of entry into CCS.

Date of Death

The eligibility records are routinely populated with dates of death from the California State Registrar (the California Department of Public Health). These dates are used to identify deaths within the CCS population.

Demographics

Pre- and post- demographics for study groups were taken from the eligibility records that were exactly 12 months prior and 12 months after the WCM implementation. Age was calculated was calculated at these temporal points. County was taken from the county in which the health plan operates. For clients in fee-for-service CCS, the county

in which the individual is enrolled is used. If the enrollment county was missing from the record, then the county of residence was used.

CMSNet Eligibility and Referral Records

Children's Medical Services Net (CMSNet) is a case management system for California Children's Services (CCS). CMSNet is a web-based tool that enables CCS providers and Medi-Cal Managed Care Plans to electronically access the status of Requests for Services/Authorizations. Providers and plans have access to view service Authorizations, Denials and Notices of Action letters. DHCS provided select data extracts from CMSNet for years 2011 through 2021 to UCSF. The data extracts include three files:

1. CCS Eligibility contains a record for each existing or potential CCS client's eligibility request. Eligibility is either denied or granted for a specified period. Each record contains the date of the eligibility request, its status, and disposition.

2. CCS Diagnoses contains up to five diagnoses that justify the CCS eligibility.

3. Service Authorization Requests (SAR) contain records of each request for service among the CCS population. It contains the date of the referral for service, the type of service (MTU or Medical) and the disposition of the request. However, when a client is enrolled in a WCM, those referrals are not necessarily entered into CMSNet. WCM SARs are automatically authorized. Therefore, UCSF requested and received SAR data directly from the WCM health plans.

Referrals for CCS Eligibility

A parent or guardian applies for their child's CCS eligibility by applying to their county CCS office. Often when a child is hospitalized a social worker will assist with the application process. Thus, these applications are referred to as eligibility referrals. The information provided is entered into the CMSNet system, reviewed, and adjudicated by qualified personnel. UCSF analyzed these records using the following methodology.

The CMSNet eligibility file contains one record for each eligibility referral. Eligibility was either denied or authorized for a specified period. Analysis was restricted to new applications defined as those having more than 182 days (6 months) without CCS eligibility preceding the referral. Less than one percent of the new referrals were for aid code 9J (GHPP) and 9M (MTU only) and were excluded from the analysis because these persons are not eligible for all CCS services. New referrals for a period of two years before and up to three years after each WCM phase were counted and examined for disposition.

The Eligibility Status field contains one of three values, *Active, Closed*, or *Denied.* Both *Active* and *Closed* indicate a period of CCS enrollment. The value in the Eligibility Start Date field was considered the date of an approval. When the value in the Eligibility Status field was *Denied* then the value in the Eligibility Denied Date field was considered the date of a denial.

Tables in this report showing the proportions of referrals that were denied during any given year were calculated as follows:

a) Numerator equals the number of new applications where the Eligibility Status is *Denied* within a given year.
b) The denominator equals the number of new referrals within a given year.
c) Proportion denied equals a/b.

CCS Qualifying Conditions

The CMSNet file of the diagnoses that qualify individuals for CCS services contains all the diagnoses that are recorded in the clients' applications for CCS enrollment. This file was used to assess the distributions of diagnoses among study groups. A limitation of this file is only about 68% of the CCS clients had a record in the diagnoses file. The reason for this could be with errors in the CIN to ENCRYPTED_AKA_CIN crosswalk, yet this could not be substantiated. Table A-6 provides the diagnoses that qualify for CCS.

Table A-6. Diagnosis Codes CCS Qualifying Conditions

ICD 10 Codes	ICD 9 Codes	Description
A00-B99	001-139	Infectious Diseases
C00-D49	140-239	Neoplasm
E00-E89	240-279	Endocrine, Nutritional and Metabolic Diseases and Immune Disorders
D50-D89	280-289	Diseases of Blood and Blood-Forming Organs
F01-F99	290-319	Mental Disorders and Mental Retardation
G00-G99	320-359	Diseases of the Nervous System
H00-H59	360-379	Diseases of the Eye
H60-H95	380-389	Diseases of the Ear and Mastoid
I00-I99	390-459	Diseases of the Circulatory System
J00-J99	460-519	Diseases of the Respiratory System
K00-K95	520-579	Diseases of the Digestive System
N00-N99	580-629	Diseases of the Genitourinary System
O00-O99	630-679	Pregnancy
L00-L99	680-709	Diseases of the Skin and Subcutaneous Tissues
M00-M99	710-739	Diseases of the Musculoskeletal System and Connective Tissue
Q00-Q99	740-759	Congenital Anomalies
S00-T88	800-899, 900-999	Accidents, Poisonings, Violence and Immunization Reactions
P00-P96	760-779	Perinatal Morbidity and Mortality (NICU)

Appendix O: Fee-For-Service CCS Clients in Whole Child Model Counties

Description

As part of the evaluation, the evaluation team was to examine the differences between the WCM study groups and the FFS clients that were within the participating WCM counties and never entered into the WCM. As noted in the main report, the WCM study groups and FFS groups were fundamentally different in demographic characteristics and tended to have significantly shorter length of time in the CCS program. In addition, there were very few clients who were FFS only. Given the small sample size and marked differences in study population, the evaluation team was unable to perform the main regression analyses to compare the two groups. Instead the descriptive counts and narrative describing the differences and similarities between the two groups for services and select primary outcomes are presented below.

This appendix describes the service counts per 1,000 MM for CCS and CCS related services in the Fee-For-Service clients within Whole Child Model (WCM) county/counties as compared to the clients who participated in the WCM by WCM study group. Counts describing the demographic profile and average member months per client can be found in the main WCM evaluation document under Section 1 of the Results section under the subsection titled “Fee-For-Service (FFS) Clients in the WCM counties as compared to the WCM MCP population”.

Overall results

HPSM FFS vs HPSM-WCM
Overall, the FFS-only group had significantly fewer clients and they had shorter numbers of member months compared to the HPSM-WCM. Only approximately a third of the FFS clients actually had a CCS claim in the study period as compared to over 90% of HPSM WCM clients in the post-implementation period. Across all CCS related services measured, the FFS-only group had significantly fewer number of claims as compared to the HPSM-WCM group (almost 50% fewer members had any claim as compared to WCM ccs clients) and much fewer health care utilization claims generally. The pool of FFS clients appear not to need the level of specialty or specialty care center care as compared to the WCM group. (Table 1)

Phase I FFS vs Phase I WCM
Overall, the FFS-only group had significantly fewer clients, they had shorter numbers of member months, and had a lower percentage of clients who used services compared to the Phase I group. Despite lower client numbers, there were a few

visit claims for which the FSS-only group tended to have higher counts. These included Inpatient (not NICU), NICU, Specialist visits, Well-Child visits, and Rehabilitation visits. (Table 2)

Phase II FFS vs Phase II WCM
Overall, the FFS-only group had significantly fewer clients, they had shorter numbers of member months, and had a lower percentage of clients who used services compared to the Phase II group.
Despite lower client numbers, there were some visit claims for which the FSS-only group tended to have higher counts. These included Inpatient (not NICU), NICU, Rehabilitation visits, Specialist visits, Specialty Care Center visits, and CCS Paneled Provider visits. (Table 3)

Phase III FFS vs Phase III WCM
Overall, the FFS-only group had significantly fewer clients, they had shorter numbers of member months, and had a lower percentage of clients who used services compared to the Phase III group.
Despite lower client numbers, there were a few visit claims for which the FSS-only group tended to have higher counts. These included Inpatient (not NICU), NICU, CCS Paneled Provider visits, and rehabilitation visits. (Table 4)

Summary and Conclusions regarding the WCM study groups and the FFS within WCM counties
The FFS and CCS WCM groups were quite different in terms of health care utilization and CCS use. The FFS group within all WCM study group counties had much lower participation in CCS . Overall, the FFS group had less claim per enrollee and significantly lower member months within the CCS program. Given the significant difference in use of services and time spent in CCS with the FFS group, formal comparison studies on the impact of the WCM pre and post implementation between the FFS and WCM group would not be meaningful in evaluating the impact of the WCM to CCS clients within the participating counties.

Table 1. Services Per 1,000 CCS Enrollee Member Months: HPSM WCM vs. Fee-for-Service Only Clients

	HPSM WCM					Fee-for-Service Only Clients				
	Year					Year				
Measure	**-2**	**-1**	**+1**	**+2**	**+3**	**-2**	**-1**	**+1**	**+2**	**+3**
Clients	66	65	309	514	682	64	57	67	39	56
Member Months	242	245	1,774	3,926	5,865	225	230	229	149	182

	HPSM WCM					Fee-for-Service Only Clients				
	Year					Year				
Measure	**-2**	**-1**	**+1**	**+2**	**+3**	**-2**	**-1**	**+1**	**+2**	**+3**
Clients Served	27	29	290	472	639	24	21	18	13	19
Pct. Clients Served	40.9	44.6	93.9	91.8	93.7	37.5	36.8	26.9	33.3	33.9
Service per 1,000 Member Months										
Case Management	17	0	137	103	85	4	0	2	5	54
Durable Medical Equipment	4	0	58	106	79	1	0	1	0	0
Emergency Department	33	29	141	124	62	8	5	3	2	8
EPSDT	8	8	2	0	0	1	2	0	0	0
In Home Support Services	17	61	99	172	146	4	15	31	47	45
Inpatient(Not NICU)	12	16	54	60	27	3	2	4	0	4
NICU	45	45	8	2	1	7	4	4	3	4
Mental Health Low	0	24	103	96	124	0	6	4	2	87
Mental Health High	0	0	0	2	0	0	0	0	0	0
Pharmacy	202	547	1,156	1,522	1,463	49	129	173	185	293
Primary Care	223	204	759	674	554	42	37	25	44	55
Rehabilitation	4	0	3	0	0	1	0	1	0	0
Specialist	496	208	1,381	1,085	884	98	30	38	65	94
Specialty Care Center	25	61	418	461	420	3	14	22	11	88
CCS Paneled Provider	616	265	1,711	1,345	1,081	113	41	39	79	122
Well Child Visit	74	45	172	138	119	16	10	7	9	11

●HPSM WCM Pre-WCM years: Fee-for-Service CCS clients in San Mateo County between July 2016 - June 2018 who were never in the San Mateo CCS DP.

● HPSM WCM Post-WCM years: CCS clients in HPSM WCM between July 2018 - June 2021 who were never in the HPSM DP.

	HPSM WCM					Fee-for-Service Only Clients				
	Year					Year				
Measure	-2	-1	+1	+2	+3	-2	-1	+1	+2	+3

● Fee-for-Service Only Pre-WCM years: San Mateo CCS clients between July 2016 - June 2018 who were never in the San Mateo DP or WCM.
● Fee-for-Service Only Post-WCM years: San Mateo CCS clients who were in FFS CCS between July 2018 - June 2021 and never in HPSM DP or WCM.

Table 2. Services Per 1,000 CCS Enrollee Member Months: Phase I WCM vs. Fee-for-Service Only Clients

	Phase I Counties					FFS CCS Phase I Counties				
	Year					Year				
Measure	-2	-1	+1	+2	+3	-2	-1	+1	+2	+3
Clients	13,369	13,646	12,330	11,607	11,920	425	329	257	236	296
Member Months	120,607	121,938	113,776	109,359	117,301	1,056	971	773	702	827
Percent Clients Served	12,551	12,605	11,519	10,866	11,147	292	208	153	131	159
Percent Clients Served	93.9	92.4	93.4	93.6	93.5	68.7	63.2	59.5	55.5	53.7
Service per 1,000 Member Months										
Case Management	13	12	15	17	23	0	0	0	3	0
Durable Medical Equipment	48	50	52	64	66	7	3	4	11	24
Emergency Department	85	80	77	67	47	26	31	40	28	31
EPSDT	12	1	0	0	0	94	12	9	1	0
In Home Support Services	181	183	198	207	192	9	16	17	23	30
Inpatient(Not NICU)	23	23	20	21	17	26	19	27	20	23

	Phase I Counties					FFS CCS Phase I Counties				
	Year					Year				
Measure	-2	-1	+1	+2	+3	-2	-1	+1	+2	+3
NICU	4	4	0	0	0	170	99	92	78	76
Mental Health Low	126	137	164	174	174	190	126	48	111	97
Mental Health High	3	1	1	1	2	0	0	0	3	1
Pharmacy	1,302	1,327	1,316	1,348	1,198	533	568	809	896	895
Primary Care	388	399	531	518	482	401	240	257	231	224
Rehabilitation	47	49	41	4	0	1	2	4	7	12
Specialist	509	546	518	497	486	1,139	595	679	479	618
Specialty Care Ctr.	130	207	195	177	202	79	163	154	114	175
CCS Paneled Provider	640	643	743	698	642	1,321	595	734	533	674
Well Child Visit	92	85	91	88	86	153	112	131	98	93

- Phase I Pre-WCM years: CCS clients in Phase I counties between July 2016 - June 2018.
- Phase I Post-WCM years: CCS clients enrolled in WCM between July 2018 - June 2021.
- Fee-for-Service Only Pre-WCM years: CCS clients in Phase I counties between July 2016 - June 2018 who were never in the Phase I WCM.
- Fee-for-Service Only Post-WCM years: CCS clients in Phase I counties between July 2018 - June 2021 who were never in the Phase I WCM.

Table 3. Services Per 1,000 CCS Enrollee Member Month: Phase II WCM vs. Fee-for-Service Only Clients

	Phase II Counties				FFS CCS Phase II Counties			
	Year				Year			
Measure	-2	-1	+1	+2	-2	-1	+1	+2
Clients	10,710	10,655	9,641	9,409	277	252	207	160
Member Months	98,599	98,579	91,951	92,306	1,184	1,022	878	753
Clients Served	9,925	9,859	9,114	8,796	117	113	103	76

	Phase II Counties				FFS CCS Phase II Counties			
	Year				Year			
Measure	**-2**	**-1**	**+1**	**+2**	**-2**	**-1**	**+1**	**+2**
Percent Clients Served	92.7	92.5	94.5	93.5	42.2	44.8	49.8	47.5
Service Counts								
Case Management	60	56	55	50	0	3	27	9
Durable Medical Equipment	64	62	83	100	3	52	38	98
Emergency Department	98	90	98	69	28	56	55	50
EPSDT	60	7	1	0	12	6	5	0
In Home Support Services	281	289	310	307	39	36	99	169
Inpatient(Not NICU)	31	29	28	23	25	28	27	32
NICU	3	2	0	1	24	14	16	17
Mental Health Low	164	173	197	194	94	72	118	62
Mental Health High	5	2	4	2	0	1	0	0
Pharmacy	1,369	1,344	1,309	1,339	573	911	1,186	1,888
Primary Care	295	331	396	285	163	177	277	271
Rehabilitation	6	5	3	0	8	18	10	7
Specialist	572	570	605	535	443	498	679	559
Specialty Care Ctr.	154	155	150	134	98	202	237	219
CCS Paneled Provider	447	522	619	559	446	455	729	595
Well Child Visit	85	81	82	65	60	53	51	54

- Phase II Pre-WCM years: CCS clients in Phase II counties between January 2017 - December 2018.
- Phase II Post-WCM years: CCS clients enrolled in WCM between January 2019 - December 2020.
- Fee-for-Service Only Pre-WCM years: CCS clients in Phase II counties between January 2017 - December 2018 who were never in the Phase II WCM.

	Phase II Counties				FFS CCS Phase II Counties			
	Year				Year			
Measure	**-2**	**-1**	**+1**	**+2**	**-2**	**-1**	**+1**	**+2**
● Fee-for-Service Only Post-WCM years: CCS clients in Phase II counties between January 2019 - December 2020 who were never in the Phase II WCM.								

Table 4. Services Per 1,000 CCS Enrollee Member Months: Phase III WCM vs. Fee-for-Service Only Clients

	Phase III County				FFS CCS Phase III			
	Year				Year			
Measure	**-2**	**-1**	**+1**	**+2**	**-2**	**-1**	**+1**	**+2**
Clients	16,811	16,375	14,481	13,969	529	476	266	418
Member Months	160,153	154,230	140,902	138,606	2,052	1,577	816	1,099
Clients Served	15,571	15,070	13,574	13,101	242	215	130	209
Percent Clients Served	92.6	92.0	93.7	93.8	45.7	45.2	48.9	50.0
Service per 1,000 Member Months								
Case Management	82	92	125	138	2	3	7	0
Durable Medical Equipment	74	79	84	88	14	5	27	57
Emergency Department	77	75	66	50	34	32	59	65
EPSDT	57	0	0	0	4	1	0	0
In Home Support Services	237	251	263	268	8	10	2	25
Inpatient(Not NICU)	28	28	22	23	24	25	47	50
NICU	2	1	1	0	11	19	18	24
Mental Health Low	163	218	265	313	21	49	162	238
Mental Health High	2	2	1	1	0	0	0	0

	Phase III County				FFS CCS Phase III			
	Year				Year			
Measure	**-2**	**-1**	**+1**	**+2**	**-2**	**-1**	**+1**	**+2**
Pharmacy	1,580	1,646	1,568	1,629	353	318	434	1,062
Primary Care	382	473	372	417	123	186	201	249
Rehabilitation	1	2	0	0	1	0	1	2
Specialist	592	807	640	593	341	398	580	771
Specialty Care Ctr.	358	384	315	239	123	128	174	197
CCS Paneled Provider	590	806	388	317	375	511	652	818
Well Child Visit	95	96	92	98	61	74	85	134

- Phase III Pre-WCM years: CCS clients in Phase III counties between July 2017 - June 2019.
- Phase III Post-WCM years: CCS clients enrolled in WCM between July 2019 - June 2021.
- Fee-for-Service Only Pre-WCM years: CCS clients in Phase III counties between July 2017 - June 2019 who were never in the Phase III WCM.
- Fee-for-Service Only Post-WCM years: CCS clients in Phase III counties between July 2019 - June 2021 who were never in the Phase III WCM.

Appendix P: Fee-For-Service CCS Clients in Whole Child Model Counties

Description

As part of the evaluation, the evaluation team was to examine the differences between the WCM study groups and the FFS clients that were within the participating WCM counties and never entered into the WCM. As noted in the main report, the WCM study groups and FFS groups were fundamentally different in demographic characteristics and tended to have significantly shorter length of time in the CCS program. In addition, there were very few clients who were FFS only. Given the small sample size and marked differences in study population, the evaluation team was unable to perform the main regression analyses to compare the two groups. Instead the descriptive counts and narrative describing the differences and similarities between the two groups for services and select primary outcomes are presented below.

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Overall results

HPSM FFS vs HPSM-WCM
Overall, the FFS-only group had significantly fewer clients and they had shorter numbers of member months compared to the HPSM-WCM. Only approximately a third of the FFS clients actually had a CCS claim in the study period as compared to over 90% of HPSM WCM clients in the post-implementation period. Across all CCS related services measured, the FFS-only group had significantly fewer number of claims as compared to the HPSM-WCM group (almost 50% fewer members had any claim as compared to WCM ccs clients) and much fewer health care utilization claims generally. The pool of FFS clients appear not to need the level of specialty or specialty care center care as compared to the WCM group. (Table 1)

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Summary and Conclusions regarding the WCM study groups and the FFS within WCM counties
The FFS and CCS WCM groups were quite different in terms of health care utilization and CCS use. The FFS group within all WCM study group counties had much lower participation in CCS . Overall, the FFS group had less claim per enrollee and significantly lower member months within the CCS program. Given the significant difference in use of services and time spent in CCS with the FFS group, formal comparison studies on the impact of the WCM pre and post implementation between the FFS and WCM group would not be meaningful in evaluating the impact of the WCM to CCS clients within the participating counties.

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	Year					Year				
Measure	**-2**	**-1**	**+1**	**+2**	**+3**	**-2**	**-1**	**+1**	**+2**	**+3**
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Pct. Clients Served	40.9	44.6	93.9	91.8	93.7	37.5	36.8	26.9	33.3	33.9
Service per 1,000 Member Months										
Case Management	17	0	137	103	85	4	0	2	5	54
Durable Medical Equipment	4	0	58	106	79	1	0	1	0	0
Emergency Department	33	29	141	124	62	8	5	3	2	8
EPSDT	8	8	2	0	0	1	2	0	0	0
In Home Support Services	17	61	99	172	146	4	15	31	47	45
Inpatient(Not NICU)	12	16	54	60	27	3	2	4	0	4
NICU	45	45	S	S	S	S	S	S	S	S
Mental Health Low	0	24	103	96	124	0	6	4	2	87
Mental Health High	0	0	0	2	0	0	0	0	0	0
Pharmacy	202	547	1,156	1,522	1,463	49	129	173	185	293
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CCS Paneled Provider	616	265	1,711	1,345	1,081	113	41	39	79	122
Well Child Visit	74	45	172	138	119	16	S	S	S	11

●HPSM WCM Pre-WCM years: Fee-for-Service CCS clients in San Mateo County between July 2016 - June 2018 who were never in the San Mateo CCS DP.

● HPSM WCM Post-WCM years: CCS clients in HPSM WCM between July 2018 - June 2021 who were never in the HPSM DP.

	HPSM WCM					Fee-for-Service Only Clients				
	Year					Year				
Measure	-2	-1	+1	+2	+3	-2	-1	+1	+2	+3

● Fee-for-Service Only Pre-WCM years: San Mateo CCS clients between July 2016 - June 2018 who were never in the San Mateo DP or WCM.
● Fee-for-Service Only Post-WCM years: San Mateo CCS clients who were in FFS CCS between July 2018 - June 2021 and never in HPSM DP or WCM.

Table 2. Services Per 1,000 CCS Enrollee Member Months: Phase I WCM vs. Fee-for-Service Only Clients

	Phase I Counties					FFS CCS Phase I Counties				
	Year					Year				
Measure	-2	-1	+1	+2	+3	-2	-1	+1	+2	+3
Clients	13,369	13,646	12,330	11,607	11,920	425	329	257	236	296
Member Months	120,607	121,938	113,776	109,359	117,301	1,056	971	773	702	827
Percent Clients Served	12,551	12,605	11,519	10,866	11,147	292	208	153	131	159
Percent Clients Served	93.9	92.4	93.4	93.6	93.5	68.7	63.2	59.5	55.5	53.7
Service per 1,000 Member Months										
Case Management	13	12	15	17	23	0	0	0	3	0
Durable Medical Equipment	48	50	52	64	66	7	3	4	11	24
Emergency Department	85	80	77	67	47	26	31	40	28	31
EPSDT	12	1	0	0	0	94	12	9	1	0
In Home Support Services	181	183	198	207	192	9	16	17	23	30
Inpatient(Not NICU)	23	23	20	21	17	26	19	27	20	23

	Phase I Counties					FFS CCS Phase I Counties				
	Year					Year				
Measure	-2	-1	+1	+2	+3	-2	-1	+1	+2	+3
NICU	4	4	0	0	0	170	99	92	78	76
Mental Health Low	126	137	164	174	174	190	126	48	111	97
Mental Health High	3	1	1	1	2	0	0	0	3	1
Pharmacy	1,302	1,327	1,316	1,348	1,198	533	568	809	896	895
Primary Care	388	399	531	518	482	401	240	257	231	224
Rehabilitation	47	49	41	4	0	1	2	4	7	12
Specialist	509	546	518	497	486	1,139	595	679	479	618
Specialty Care Ctr.	130	207	195	177	202	79	163	154	114	175
CCS Paneled Provider	640	643	743	698	642	1,321	595	734	533	674
Well Child Visit	92	85	91	88	86	153	112	131	98	93

- Phase I Pre-WCM years: CCS clients in Phase I counties between July 2016 - June 2018.
- Phase I Post-WCM years: CCS clients enrolled in WCM between July 2018 - June 2021.
- Fee-for-Service Only Pre-WCM years: CCS clients in Phase I counties between July 2016 - June 2018 who were never in the Phase I WCM.
- Fee-for-Service Only Post-WCM years: CCS clients in Phase I counties between July 2018 - June 2021 who were never in the Phase I WCM.

Table 3. Services Per 1,000 CCS Enrollee Member Month: Phase II WCM vs. Fee-for-Service Only Clients

	Phase II Counties				FFS CCS Phase II Counties			
	Year				Year			
Measure	-2	-1	+1	+2	-2	-1	+1	+2
Clients	10,710	10,655	9,641	9,409	277	252	207	160
Member Months	98,599	98,579	91,951	92,306	1,184	1,022	878	753

	Phase II Counties				FFS CCS Phase II Counties			
	Year				Year			
Measure	**-2**	**-1**	**+1**	**+2**	**-2**	**-1**	**+1**	**+2**
Clients Served	9,925	9,859	9,114	8,796	117	113	103	76
Percent Clients Served	92.7	92.5	94.5	93.5	42.2	44.8	49.8	47.5
Service Counts								
Case Management	60	56	55	50	0	3	27	9
Durable Medical Equipment	64	62	83	100	3	52	38	98
Emergency Department	98	90	98	69	28	56	55	50
EPSDT	60	7	1	0	12	6	5	0
In Home Support Services	281	289	310	307	39	36	99	169
Inpatient(Not NICU)	31	29	28	23	25	28	27	32
NICU	3	2	0	1	24	14	16	17
Mental Health Low	164	173	197	194	94	72	118	62
Mental Health High	5	2	4	2	0	1	0	0
Pharmacy	1,369	1,344	1,309	1,339	573	911	1,186	1,888
Primary Care	295	331	396	285	163	177	277	271
Rehabilitation	6	5	3	0	8	18	10	7
Specialist	572	570	605	535	443	498	679	559
Specialty Care Ctr.	154	155	150	134	98	202	237	219
CCS Paneled Provider	447	522	619	559	446	455	729	595
Well Child Visit	85	81	82	65	60	53	51	54

- Phase II Pre-WCM years: CCS clients in Phase II counties between January 2017 - December 2018.
- Phase II Post-WCM years: CCS clients enrolled in WCM between January 2019 - December 2020.
- Fee-for-Service Only Pre-WCM years: CCS clients in Phase II counties between January 2017 - December 2018 who were never in the Phase II WCM.

	Phase II Counties				FFS CCS Phase II Counties			
	Year				Year			
Measure	**-2**	**-1**	**+1**	**+2**	**-2**	**-1**	**+1**	**+2**
● Fee-for-Service Only Post-WCM years: CCS clients in Phase II counties between January 2019 - December 2020 who were never in the Phase II WCM.								

Table 4. Services Per 1,000 CCS Enrollee Member Months: Phase III WCM vs. Fee-for-Service Only Clients

	Phase III County				FFS CCS Phase III			
	Year				Year			
Measure	**-2**	**-1**	**+1**	**+2**	**-2**	**-1**	**+1**	**+2**
Clients	16,811	16,375	14,481	13,969	529	476	266	418
Member Months	160,153	154,230	140,902	138,606	2,052	1,577	816	1,099
Clients Served	15,571	15,070	13,574	13,101	242	215	130	209
Percent Clients Served	92.6	92.0	93.7	93.8	45.7	45.2	48.9	50.0
Service per 1,000 Member Months								
Case Management	82	92	125	138	2	3	7	0
Durable Medical Equipment	74	79	84	88	14	5	27	57
Emergency Department	77	75	66	50	34	32	59	65
EPSDT	57	0	0	0	4	1	0	0
In Home Support Services	237	251	263	268	8	10	2	25
Inpatient(Not NICU)	28	28	22	23	24	25	47	50
NICU	2	1	1	0	11	19	18	24
Mental Health Low	163	218	265	313	21	49	162	238
Mental Health High	2	2	1	1	0	0	0	0

	Phase III County				FFS CCS Phase III			
	Year				Year			
Measure	**-2**	**-1**	**+1**	**+2**	**-2**	**-1**	**+1**	**+2**
Pharmacy	1,580	1,646	1,568	1,629	353	318	434	1,062
Primary Care	382	473	372	417	123	186	201	249
Rehabilitation	1	2	0	0	1	0	1	2
Specialist	592	807	640	593	341	398	580	771
Specialty Care Ctr.	358	384	315	239	123	128	174	197
CCS Paneled Provider	590	806	388	317	375	511	652	818
Well Child Visit	95	96	92	98	61	74	85	134

- Phase III Pre-WCM years: CCS clients in Phase III counties between July 2017 - June 2019.
- Phase III Post-WCM years: CCS clients enrolled in WCM between July 2019 - June 2021.
- Fee-for-Service Only Pre-WCM years: CCS clients in Phase III counties between July 2017 - June 2019 who were never in the Phase III WCM.
- Fee-for-Service Only Post-WCM years: CCS clients in Phase III counties between July 2019 - June 2021 who were never in the Phase III WCM.

Appendix Q: Grievances Difference in Difference (DiD) Subgroup Analysis

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Grievances (sub-group analysis)

Overall, throughout all Phases of WCM implementation, infants in WCM counties had a smaller increase in grievances per 100,000 member months compared to traditional CCS counties; this finding was potentially related to parallel smaller increases in grievances per 100,000 member months for congenital diagnoses and for NICU diagnoses. differences-in-differences analyses generally showed an improvement in grievances per 100,000 member months. Other differences in the increase of grievances pre-/post-WCM implementation were noted for important subgroups including Latinx, Spanish-language speaking and Asian-language speaking families, but these differences varied by phase of implementation. Below, detailed results for each Phase are presented by Phase, with each Phase prefaced by a Phase summary.

Summary of Results from HPSM Analyses

During the HPSM DP, total grievances per 100,000 member months increased both within the HPSM and for traditional CCS counties. This increase in reporting of grievances pre/post WCM implementation was higher for the HPSM than for the traditional CCS counties, but the difference was not statistically significant. Differences-in-differences analyses of HPSM grievances per 100,000 members months compared to traditional CCS counties is presented in Tables 1-3 by demographic variable including age, ethnicity and language, but these analyses should be interpreted with caution due to low overall counts in HPSM both pre- and post-WCM implementation. Differences-in-differences analyses of HPSM grievances per 100,000 members months compared to traditional CCS counties is presented in Tables 4-7 by type of grievance including benefits, referrals and other grievances, but these analyses should also be interpreted with caution due to low overall counts in HPSM both pre- and post-WCM implementation.

Differences between HPSM and traditional CCS counties with respect to change in total grievances per 100,000 member months pre/post HPSM implementation varied by child age (Table 1) but are difficult to interpret due to low total counts in the HPSM pre-WCM implementation.

Table 1. HPSM Grievances, By Age and Group

Age	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
<12 Mo.	Pre-WCM	S	S	316	735	S
	Post-WCM	S	S	308	2,681	S
					WCM Change:	S

Age	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implementation	13	46.2	2,126	12,323	105
	Classic CCS Post-WCM Implementation	49	44.9	2,763	19,469	252
					Classic Change:	146
					Diff-in-Diff:	S
1 year	Pre-WCM	0	.	61	286	0
	Post-WCM	S	S	290	2,383	S
					WCM Change:	S
	Classic CCS Pre-WCM Implementation	S	S	1,683	11,285	S
	Classic CCS Post-WCM Implementation	42	71.4	2,324	17,191	244
					Classic Change:	S
					Diff-in-Diff:	S
2-6	Pre-WCM	0	.	62	329	0
	Post-WCM	12	58.3	300	3,596	334
					WCM Change:	334
	Classic CCS Pre-WCM Implementation	34	58.8	3,458	38,719	88
	Classic CCS Post-WCM Implementation	141	48.2	4,154	60,432	233
					Classic Change:	146

Age	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					Diff-in-Diff:	188
7-11	Pre-WCM	0	.	12	76	0
	Post-WCM	S	S	140	1,675	S
					WCM Change:	S
	Classic CCS Pre-WCM Implementation	36	58.3	3,120	39,002	92
	Classic CCS Post-WCM Implementation	94	42.6	3,651	60,160	156
					Classic Change:	64
					Diff-in-Diff:	S
12-20	Pre-WCM	0	.	50	260	0
	Post-WCM	17	52.9	312	4,610	369
					WCM Change:	369
	Classic CCS Pre-WCM Implementation	68	50.0	5,571	76,918	88
	Classic CCS Post-WCM Implementation	220	40.5	6,973	138,674	159
					Classic Change:	70
					Diff-in-Diff:	299

Differences between HPSM and traditional CCS counties with respect to change in total grievances per 100,000 member months pre/post HPSM implementation varied by ethnicity and group (Table 2) but are difficult to interpret due to low total counts in the HPSM both pre-WCM implementation and post-WCM implementation.

Table 2. HPSM Grievances, By Ethnicity and Group

Ethnicity	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Asian/PI	Pre-WCM	0	.	12	88	0
	Post-WCM	1	100.0	14	258	388
					WCM Change:	388
	Classic CCS Pre-WCM Implementation	2	50.0	220	2,958	68
	Classic CCS Post-WCM Implementation	5	40.0	212	4,078	123
					Classic Change:	55
					Diff-in-Diff:	333
Black	Pre-WCM	0	.	8	36	0
	Post-WCM	7	57.1	29	306	2,288
					WCM Change:	2288
	Classic CCS Pre-WCM Implementation	7	42.9	664	8,060	87
	Classic CCS Post-WCM Implementation	16	43.8	711	12,506	128
					Classic Change:	41
					Diff-in-Diff:	2246
Latinx	Pre-WCM	1	0.0	154	483	207
	Post-WCM	23	52.2	422	7,644	301
					WCM Change:	94
	Classic CCS Pre-WCM Implementation	59	59.3	6,643	90,891	65

Ethnicity	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	237	49.4	7,769	154,515	153
					Classic Change:	88
					Diff-in-Diff:	5
White	Pre-WCM	0	.	41	218	0
	Post-WCM	2	0.0	82	1,327	151
					WCM Change:	151
	Classic CCS Pre-WCM Implementation	22	50.0	1,147	16,130	136
	Classic CCS Post-WCM Implementation	98	37.8	1,283	26,713	367
					Classic Change:	230
					Diff-in-Diff:	-80
Other/ Unknown	Pre-WCM	1	100.0	236	861	116
	Post-WCM	17	47.1	342	5,410	314
					WCM Change:	198
	Classic CCS Pre-WCM Implementation	70	52.9	4,301	59,804	117
	Classic CCS Post-WCM Implementation	188	45.7	4,946	97,297	193
					Classic Change:	76
					Diff-in-Diff:	122

Differences between HPSM and traditional CCS counties with respect to change in total grievances per 100,000 member months pre/post HPSM implementation varied by family's language (Table 3) but are difficult to interpret due to low total counts in the HPSM pre-WCM implementation.

Table 3. HPSM Grievances, by Language and Group

Language	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Asian Language	Pre-WCM	0	.	S	S	0
	Post-WCM	S	S	26	423	S
					WCM Change:	S
	Classic CCS Pre-WCM Implementation	17	70.6	1,329	20,514	83
	Classic CCS Post-WCM Implementation	52	40.4	1,388	32,634	159
					Classic Change:	76
					Diff-in-Diff:	S
English	Pre-WCM	S	S	281	1,304	S
	Post-WCM	29	37.9	491	7,420	391
					WCM Change:	S
	Classic CCS Pre-WCM Implementation	77	50.6	7,136	94,160	82
	Classic CCS Post-WCM Implementation	330	45.2	8,017	148,755	222
					Classic Change:	140
					Diff-in-Diff:	S
	Pre-WCM	0	.	152	331	0

Language	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Spanish	Post-WCM	19	63.2	344	6,587	288
					WCM Change:	288
	Classic CCS Pre-WCM Implementation	64	56.3	4,341	61,035	105
	Classic CCS Post-WCM Implementation	160	48.1	5,292	109,496	146
					Classic Change:	41
					Diff-in-Diff:	247
Other/ Unknown	Pre-WCM	0	.	13	34	0
	Post-WCM	S	S	28	515	S
					WCM Change:	S
	Classic CCS Pre-WCM Implementation	S	S	199	2,538	S
	Classic CCS Post-WCM Implementation	S	S	268	5,041	S
					Classic Change:	S
					Diff-in-Diff:	S

Differences between HPSM and traditional CCS counties with respect to change in total grievances per 100,000 member months pre/post HPSM implementation varied by diagnosis (Table 4) but are difficult to interpret due to low total counts in the HPSM pre-WCM implementation.

Table 4. HPSM Grievances, by Diagnosis

CCS Diagnosis	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Accident	Pre-WCM	0	.	12	44	0
	Post-WCM	0	.	103	992	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	10	100.0	990	7,833	128
	Classic CCS Post-WCM Implementation	14	57.1	1,331	13,976	100
					Classic Change:	-27
					Diff-in-Diff:	27
Circulatory	Pre-WCM	0	.	13	36	0
	Post-WCM	0	.	39	697	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	3	33.3	537	7,284	41
	Classic CCS Post-WCM Implementation	25	56.0	615	13,282	188
					Classic Change:	147
					Diff-in-Diff:	-147
Congenital	Pre-WCM	S	0.0	87	251	S
	Post-WCM	13	38.5	152	2,939	442

CCS Diagnosis	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					WCM Change:	S
	Classic CCS Pre-WCM Implementation	22	54.5	2,141	30,111	73
	Classic CCS Post-WCM Implementation	152	53.9	2,597	56,374	270
					Classic Change:	197
					Diff-in-Diff:	S
Derma-tology	Pre-WCM	0	.	.	0	.
	Post-WCM	0	.	4	20	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	2	0.0	85	1,075	186
	Classic CCS Post-WCM Implementation	15	20.0	128	2,476	606
					Classic Change:	420
					Diff-in-Diff:	0
Endocrine, Nutritional, Metabolic Diseases, and Immune	Pre-WCM	0	.	28	52	0
	Post-WCM	7	42.9	149	2,386	293
					WCM Change:	293

CCS Diagnosis	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implementation	10	40.0	847	12,628	79
	Classic CCS Post-WCM Implementation	29	65.5	1,133	26,686	109
					Classic Change:	29
					Diff-in-Diff:	264
Gastro-enterologic	Pre-WCM	0	.	7	15	0
	Post-WCM	4	25.0	17	350	1,143
					WCM Change:	1143
	Classic CCS Pre-WCM Implementation	7	42.9	233	2,940	238
	Classic CCS Post-WCM Implementation	27	63.0	341	6,573	411
					Classic Change:	173
					Diff-in-Diff:	970
Genito-urinary	Pre-WCM	0	.	8	26	0
	Post-WCM	2	50.0	19	269	743
					WCM Change:	743
	Classic CCS Pre-WCM Implementation	3	100.0	295	3,620	83

CCS Diagnosis	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	6	0.0	387	6,429	93
					Classic Change:	10
					Diff-in-Diff:	733
Hema-tologic	Pre-WCM	0	.	8	117	0
	Post-WCM	0	.	12	211	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	0	.	197	2,560	0
	Classic CCS Post-WCM Implementation	13	7.7	252	4,940	263
					Classic Change:	263
					Diff-in-Diff:	-263
Infectious Disease	Pre-WCM	0	.	8	36	0
	Post-WCM	0	.	7	142	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	0	.	58	701	0
	Classic CCS Post-WCM Implementation	8	25.0	126	2,142	373

CCS Diagnosis	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					Classic Change:	373
					Diff-in-Diff:	-373
Mental Disorders	Pre-WCM	0	.	2	8	0
	Post-WCM	2	100.0	7	61	3,279
					WCM Change:	3279
	Classic CCS Pre-WCM Implementation	9	77.8	141	1,449	621
	Classic CCS Post-WCM Implementation	21	47.6	235	3,645	576
					Classic Change:	-45
					Diff-in-Diff:	3324
Musculatory	Pre-WCM	0	.	10	31	0
	Post-WCM	2	0.0	42	773	259
					WCM Change:	259
	Classic CCS Pre-WCM Implementation	14	42.9	584	6,996	200
	Classic CCS Post-WCM Implementation	26	26.9	738	14,213	183
					Classic Change:	-17
					Diff-in-Diff:	276

CCS Diagnosis	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
NICU	Pre-WCM	S	S	141	441	S
	Post-WCM	S	S	94	1,699	S
					WCM Change:	S
	Classic CCS Pre-WCM Implementation	S	S	670	5,516	S
	Classic CCS Post-WCM Implementation	S	S	844	8,237	S
					Classic Change:	S
					Diff-in-Diff:	S
Neoplasm	Pre-WCM	0	.	10	24	0
	Post-WCM	4	50.0	34	723	553
					WCM Change:	553
	Classic CCS Pre-WCM Implementation	0	.	256	3,714	0
	Classic CCS Post-WCM Implementation	11	27.3	278	5,783	190
					Classic Change:	190
					Diff-in-Diff:	363
Nervous System	Pre-WCM	0	.	20	81	0
	Post-WCM	1	100.0	43	825	121
					WCM Change:	121

CCS Diagnosis	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implementation	7	71.4	404	5,908	118
	Classic CCS Post-WCM Implementation	32	25.0	502	12,134	264
					Classic Change:	145
					Diff-in-Diff:	-24
Ophthal-mologic	Pre-WCM	0	.	10	53	0
	Post-WCM	0	.	21	440	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	6	50.0	557	6,633	90
	Classic CCS Post-WCM Implementation	16	25.0	636	10,678	150
					Classic Change:	59
					Diff-in-Diff:	-59
Other	Pre-WCM	0	.	31	208	0
	Post-WCM	1	100.0	10	153	654
					WCM Change:	654
	Classic CCS Pre-WCM Implementation	0	.	233	1,333	0

CCS Diagnosis	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	1	100.0	215	1,718	58
					Classic Change:	58
					Diff-in-Diff:	595
Otolaryn-gologic	Pre-WCM	0	.	17	70	0
	Post-WCM	0	.	65	1,172	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	3	33.3	719	8,737	34
	Classic CCS Post-WCM Implementation	26	34.6	953	18,641	139
					Classic Change:	105
					Diff-in-Diff:	-105
Pregnancy	Pre-WCM	0	.	S	S	0
	Post-WCM	0	.	.	0	.
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	0	.	12	161	0
	Classic CCS Post-WCM Implementation	0	.	19	138	0

CCS Diagnosis	HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					Classic Change:	0
					Diff-in-Diff:	0
Respiratory	Pre-WCM	0	.	17	28	0
	Post-WCM	1	100.0	14	181	552
					WCM Change:	552
	Classic CCS Pre-WCM Implementation	6	0.0	112	915	656
	Classic CCS Post-WCM Implementation	2	100.0	163	1,894	106
					Classic Change:	-550
					Diff-in-Diff:	1103
Un-diagnosed	Pre-WCM	0	.	20	150	0
	Post-WCM	11	54.5	57	912	1,206
					WCM Change:	1206
	Classic CCS Pre-WCM Implementation	56	53.6	3,934	68,133	82
	Classic CCS Post-WCM Implementation	117	46.2	3,472	85,967	136
					Classic Change:	54
					Diff-in-Diff:	1152

When looking at HPSM benefits grievances (Table 5), children in HPSM experienced a similar increase in benefits grievances per 100,000 member months pre-/post WCM implementation than did its traditional CCS counterparts, but low total counts in HPSM both pre- and post-WCM implementation limit the interpretability of this finding.

Table 5. HPSM Benefits Grievances, by Group

HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	0	.	451	1,686	0
Post-WCM	1	100.0	889	14,945	7
				WCM Change:	7
Classic CCS Pre-WCM Implementation	51	45.1	13,005	178,247	29
Classic CCS Post-WCM Implementation	95	22.1	14,965	295,926	32
				Classic Change:	3
				Diff-in-Diff:	3

Regarding referral grievances, HPSM had zero referral grievances both pre- and post-WCM implementation, limiting interpretability of findings from comparison with traditional CCS counties. Because of this, results from differences-in-differences analysis of referral grievances shown in Table 6 should be interpreted with caution.

Table 6. HPSM Referral Grievances, by Group

HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	0	.	451	1,686	0
Post-WCM	0	.	889	14,945	0
				WCM Change:	0
Classic CCS Pre-WCM Implementation	6	33.3	13,005	178,247	3

HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Classic CCS Post-WCM Implementation	24	62.5	14,965	295,926	8
				Classic Change:	5
				Diff-in-Diff:	-5

HPSM grievances categorized as "Other" (Table 7) reveal that pre-/post-WCM implementation, children in the HPSM reported a larger increase in this type of grievances per 100,000 member months than did children in traditional CCS counties.

Table 7. HPSM Other Grievances, by Group

HPSM WCM	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	0	.	451	1,686	0
Post-WCM	18	55.6	889	14,945	120
				WCM Change:	120
Classic CCS Pre-WCM Implementation	21	81.0	13,005	178,247	12
Classic CCS Post-WCM Implementation	173	50.3	14,965	295,926	58
				Classic Change:	47
				Diff-in-Diff:	74

Summary of Results from Phase I Analyses

Phase I differences-in-differences grievances by demographic variables including age, ethnicity, and language for pre-/post-WCM implementation for both WCM and traditional CCS are presented in Tables 8-10. Tables 11-14 present Phase I difference-in-difference grievances by type of grievance including access, benefits, quality of care, referrals and other grievances, pre-/post-WCM implementation for both WCM and traditional CCS. Overall in Phase I, WCM counties had a larger increase in grievances per 100,000 member months pre-/post-WCM implementation than did traditional CCS counties, although this

difference was not statistically significant. This larger increase in grievances per 100,000 member months pre-/post-WCM implementation was especially pronounced for children with neurological diagnoses, whereas the reverse was noted for infants, who experienced a markedly smaller increase in grievances per 100,000 member months pre-/post-WCM implementation in WCM counties compared to in traditional CCS counties.

Infants in the WCM counties had a markedly smaller increase in total grievances per 100,000 member months pre-/post WCM implementation than their traditional CCS counterparts did (Table 8); differences between WCM counties and traditional CCS counties for other age groups were small and varied in directionality of effect.

Table 8. Phase I Grievances, By Age and Group

Age	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
<12 Mo.	Pre-WCM	21	85.7	6,904	37,687	56
	Post-WCM	42	90.5	3,505	27,572	152
					WCM Change:	97
	Classic CCS Pre-WCM Implementation	53	54.7	14,769	86,405	61
	Classic CCS Post-WCM Implementation	166	75.3	12,414	78,828	211
					Classic Change:	149
					Diff-in-Diff:	-53
1 year	Pre-WCM	11	72.7	3,660	28,365	39
	Post-WCM	52	84.6	3,269	26,887	193
					WCM Change:	155
	Classic CCS Pre-WCM Implementation	36	66.7	9,258	73,259	49
	Classic CCS Post-WCM Implementation	139	66.9	8,834	71,042	196

Age	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					Classic Change:	147
					Diff-in-Diff:	8
2-6	Pre-WCM	39	64.1	6,246	94,593	41
	Post-WCM	148	73.6	5,207	88,265	168
					WCM Change:	126
	Classic CCS Pre-WCM Implementation	129	65.1	17,510	255,264	51
	Classic CCS Post-WCM Implementation	402	62.2	15,584	252,319	159
					Classic Change:	109
					Diff-in-Diff:	18
7-11	Pre-WCM	38	78.9	5,385	93,177	41
	Post-WCM	93	73.1	4,470	84,631	110
					WCM Change:	69
	Classic CCS Pre-WCM Implementation	127	64.6	15,018	249,127	51
	Classic CCS Post-WCM Implementation	328	56.1	13,933	251,555	130
					Classic Change:	79
					Diff-in-Diff:	-10
12-20	Pre-WCM	45	82.2	9,018	168,711	27
	Post-WCM	212	70.8	8,173	173,872	122
					WCM Change:	95

Age	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implementation	238	62.6	24,999	461,346	52
	Classic CCS Post-WCM Implementation	723	60.2	25,343	534,127	135
					Classic Change:	84
					Diff-in-Diff:	11

When looking at Phase I grievances by ethnicity (Table 9), most ethnic groups in the WCM reported a smaller increase in the number of grievances reported per 100,000 member months pre-/post-WCM implementation than did their traditional CCS counterparts. Of note, in WCM counties no grievances were reported for those who were Asian/PI either pre- or post-WCM. There were also very few CCS clients with Asian/PI backgrounds in Phase I.

Table 9. Phase I Grievances, By Ethnicity and Group

Ethnicity	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Asian/PI	Pre-WCM	0	.	168	2,613	0
	Post-WCM	0	.	93	2,157	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	6	50.0	643	9,671	62
	Classic CCS Post-WCM Implementation	8	50.0	371	7,676	104
					Classic Change:	42
					Diff-in-Diff:	-42
Black	Pre-WCM	2	100.0	382	6,260	32

Ethnicity	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Post-WCM	7	42.9	276	4,989	140
					WCM Change:	108
	Classic CCS Pre-WCM Implementation	16	62.5	2,719	45,132	35
	Classic CCS Post-WCM Implementation	76	63.2	2,351	44,794	170
					Classic Change:	134
					Diff-in-Diff:	-26
Latinx	Pre-WCM	65	80.0	13,715	251,690	26
	Post-WCM	277	76.9	10,272	241,575	115
					WCM Change:	89
	Classic CCS Pre-WCM Implementation	305	65.2	38,012	704,316	43
	Classic CCS Post-WCM Implementation	940	62.4	34,216	748,396	126
					Classic Change:	82
					Diff-in-Diff:	7
White	Pre-WCM	65	78.5	5,670	100,918	64
	Post-WCM	186	73.1	3,940	89,238	208
					WCM Change:	144
	Classic CCS Pre-WCM Implementation	89	59.6	8,791	154,562	58

Ethnicity	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	310	59.7	7,386	152,807	203
					Classic Change:	145
					Diff-in-Diff:	-1
Other/ Unknown	Pre-WCM	22	59.1	3,724	60,565	36
	Post-WCM	77	74.0	2,917	62,857	123
					WCM Change:	86
	Classic CCS Pre-WCM Implementation	165	61.8	11,630	208,385	79
	Classic CCS Post-WCM Implementation	418	62.2	11,708	231,127	181
					Classic Change:	102
					Diff-in-Diff:	-15

Analysis of Phase I grievances by language (Table 10) shows that among children from Spanish-language families and from families with other/unknown language, WCM counties had a larger increase in grievances per 100,000 member months pre-/post WCM implementation than did traditional CCS counties. Among children from Asian-language families, WCM counties had a markedly smaller increase in grievances per 100,000 member months pre/post WCM implementation than did traditional CCS counties, although as noted above with Asian/PI ethnicity, in WCM counties those who spoke an Asian language reported no grievances pre-/post-WCM.

Table 10. Phase I Grievances, by Language and Group

Language	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Asian Language	Pre-WCM	0	.	129	2,686	0
	Post-WCM	0	.	88	2,144	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	20	60.0	1,184	24,229	83
	Classic CCS Post-WCM Implementation	54	37.0	952	21,581	250
					Classic Change:	168
					Diff-in-Diff:	-168
English	Pre-WCM	103	79.6	13,988	238,577	43
	Post-WCM	336	72.6	9,962	213,627	157
					WCM Change:	114
	Classic CCS Pre-WCM Implementation	382	62.3	41,599	720,389	53
	Classic CCS Post-WCM Implementation	1,232	61.9	37,008	746,153	165
					Classic Change:	112
					Diff-in-Diff:	2
Spanish	Pre-WCM	51	70.6	9,519	180,382	28
	Post-WCM	211	78.2	7,444	184,856	114
					WCM Change:	86
	Classic CCS Pre-WCM Implementation	173	65.9	18,783	373,531	46

Language	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	463	64.8	17,779	411,267	113
					Classic Change:	66
					Diff-in-Diff:	20
Other/ Unknown	Pre-WCM	0	.	53	888	0
	Post-WCM	0	.	29	600	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	8	50.0	428	7,252	110
	Classic CCS Post-WCM Implementation	9	55.6	455	8,870	101
					Classic Change:	-9
					Diff-in-Diff:	9

Analysis of Phase I grievances by type of diagnosis (Table 11) shows that differences between WCM counties and traditional CCS counties with respect to the number of grievances per 100,000 member months pre-/post WCM implementation vary widely by type of diagnosis. Notably, for neurological diagnoses, WCM counties had a much larger increase in grievances per 100,000 member months pre-/post WCM implementation than did traditional CCS counties.

Table 11: Phase I Grievances, by Type of Diagnosis

CCS Diagnosis	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Accident	Pre-WCM	3	100.0	1,923	18,814	16
	Post-WCM	12	91.7	1,417	17,183	70

CCS Diagnosis	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					WCM Change:	54
	Classic CCS Pre-WCM Implementation	30	76.7	7,048	65,996	45
	Classic CCS Post-WCM Implementation	46	50.0	5,341	57,709	80
					Classic Change:	34
					Diff-in-Diff:	20
Circulatory	Pre-WCM	16	93.8	836	15,018	107
	Post-WCM	31	71.0	623	14,406	215
					WCM Change:	109
	Classic CCS Pre-WCM Implementation	38	63.2	2,370	42,656	89
	Classic CCS Post-WCM Implementation	128	64.8	2,679	62,476	205
					Classic Change:	116
					Diff-in-Diff:	-7
Congenital	Pre-WCM	30	60.0	4,008	72,403	41
	Post-WCM	133	73.7	3,326	81,872	162
					WCM Change:	121

CCS Diagnosis	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implementation	97	61.9	9,026	176,169	55
	Classic CCS Post-WCM Implementation	496	65.5	9,864	244,191	203
					Classic Change:	148
					Diff-in-Diff:	-27
Derma-tology	Pre-WCM	0	.	104	2,030	0
	Post-WCM	2	100.0	89	2,022	99
					WCM Change:	99
	Classic CCS Pre-WCM Implementation	9	66.7	363	6,514	138
	Classic CCS Post-WCM Implementation	19	31.6	389	8,749	217
					Classic Change:	79
					Diff-in-Diff:	20
Endocrine, Nutritional, Metabolic Diseases, and Immune	Pre-WCM	24	70.8	1,499	30,254	79
	Post-WCM	59	64.4	1,422	36,418	162
					WCM Change:	83

CCS Diagnosis	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implementation	38	63.2	3,763	80,447	47
	Classic CCS Post-WCM Implementation	115	64.3	4,436	111,534	103
					Classic Change:	56
					Diff-in-Diff:	27
Gastroenter-ologic	Pre-WCM	5	100.0	489	7,501	67
	Post-WCM	9	77.8	338	7,416	121
					WCM Change:	55
	Classic CCS Pre-WCM Implementation	20	60.0	1,162	19,013	105
	Classic CCS Post-WCM Implementation	62	54.8	1,133	23,682	262
					Classic Change:	157
					Diff-in-Diff:	-102
Genito-urinary	Pre-WCM	3	33.3	383	6,839	44
	Post-WCM	5	80.0	359	8,091	62
					WCM Change:	18
	Classic CCS Pre-WCM Implementation	16	87.5	1,275	20,239	79

CCS Diagnosis	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	34	55.9	1,264	25,456	134
					Classic Change:	55
					Diff-in-Diff:	-37
Hema-tologic	Pre-WCM	2	100.0	262	5,157	39
	Post-WCM	10	80.0	257	6,314	158
					WCM Change:	120
	Classic CCS Pre-WCM Implementation	1	100.0	751	14,226	7
	Classic CCS Post-WCM Implementation	28	46.4	900	20,383	137
					Classic Change:	130
					Diff-in-Diff:	-11
Infectious Disease	Pre-WCM	0	.	130	1,951	0
	Post-WCM	1	100.0	115	2,033	49
					WCM Change:	49
	Classic CCS Pre-WCM Implementation	5	20.0	628	7,822	64
	Classic CCS Post-WCM Implementation	27	48.1	727	10,860	249

CCS Diagnosis	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					Classic Change:	185
					Diff-in-Diff:	-136
Mental Disorders	Pre-WCM	1	100.0	93	1,870	53
	Post-WCM	1	100.0	68	1,520	66
					WCM Change:	12
	Classic CCS Pre-WCM Implementation	16	50.0	351	6,157	260
	Classic CCS Post-WCM Implementation	51	51.0	540	11,529	442
					Classic Change:	182
					Diff-in-Diff:	-170
Muscular	Pre-WCM	2	100.0	926	15,410	13
	Post-WCM	22	86.4	859	17,989	122
					WCM Change:	109
	Classic CCS Pre-WCM Implementation	35	54.3	2,741	47,125	74
	Classic CCS Post-WCM Implementation	70	52.9	2,846	59,081	118
					Classic Change:	44
					Diff-in-Diff:	65

CCS Diagnosis	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
NICU	Pre-WCM	8	87.5	2,898	16,586	48
	Post-WCM	12	91.7	1,313	18,359	65
					WCM Change:	17
	Classic CCS Pre-WCM Implementation	17	70.6	5,683	41,224	41
	Classic CCS Post-WCM Implementation	33	84.8	4,389	33,553	98
					Classic Change:	57
					Diff-in-Diff:	-40
Neoplasm	Pre-WCM	3	66.7	514	10,288	29
	Post-WCM	22	86.4	481	11,076	199
					WCM Change:	169
	Classic CCS Pre-WCM Implementation	4	75.0	1,015	20,163	20
	Classic CCS Post-WCM Implementation	34	61.8	1,039	24,683	138
					Classic Change:	118
					Diff-in-Diff:	52
Nervous System	Pre-WCM	9	77.8	673	12,446	72
	Post-WCM	51	72.5	634	16,071	317
					WCM Change:	245

CCS Diagnosis	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implementation	20	75.0	1,413	25,625	78
	Classic CCS Post-WCM Implementation	72	55.6	1,590	37,777	191
					Classic Change:	113
					Diff-in-Diff:	132
Ophthal-mologic	Pre-WCM	7	57.1	879	14,213	49
	Post-WCM	27	70.4	719	13,866	195
					WCM Change:	145
	Classic CCS Pre-WCM Implementation	11	54.5	2,088	35,349	31
	Classic CCS Post-WCM Implementation	54	68.5	2,103	44,235	122
					Classic Change:	91
					Diff-in-Diff:	55
Other	Pre-WCM	0	.	237	1,824	0
	Post-WCM	3	100.0	347	6,571	46
					WCM Change:	46
	Classic CCS Pre-WCM Implementation	6	83.3	1,346	8,197	73

CCS Diagnosis	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	6	83.3	1,474	9,540	63
					Classic Change:	-10
					Diff-in-Diff:	56
Otolaryn-gologic	Pre-WCM	4	50.0	928	16,999	24
	Post-WCM	11	81.8	828	21,858	50
					WCM Change:	27
	Classic CCS Pre-WCM Implementation	15	73.3	2,256	39,511	38
	Classic CCS Post-WCM Implementation	46	45.7	2,393	56,752	81
					Classic Change:	43
					Diff-in-Diff:	-16
Pregnancy	Pre-WCM	0	.	7	56	0
	Post-WCM	0	.	5	118	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	0	.	25	234	0
	Classic CCS Post-WCM Implementation	0	.	25	281	0

CCS Diagnosis	Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					Classic Change:	0
					Diff-in-Diff:	0
Respiratory	Pre-WCM	3	66.7	326	3,057	98
	Post-WCM	2	100.0	196	2,731	73
					WCM Change:	-25
	Classic CCS Pre-WCM Implementation	10	20.0	890	9,161	109
	Classic CCS Post-WCM Implementation	15	93.3	779	9,043	166
					Classic Change:	57
					Diff-in-Diff:	-82
Un-diagnosed	Pre-WCM	34	88.2	6,574	169,817	20
	Post-WCM	134	73.1	4,127	115,313	116
					WCM Change:	96
	Classic CCS Pre-WCM Implementation	195	62.6	17,800	459,573	42
	Classic CCS Post-WCM Implementation	422	63.5	12,283	336,357	125
					Classic Change:	83
					Diff-in-Diff:	13

Benefits coverage grievances filed during Phase I (Table 12) reveal that, as with other types of grievances, children in WCM counties experienced a smaller increase in benefits grievances per 100,000 member months pre-/post WCM implementation than did their traditional CCS counterparts.

Table 12. Phase I Benefits Grievances, by Group

Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	1	100.0	23,689	422,533	0
Post-WCM	12	33.3	17,523	401,227	3
				WCM Change:	3
Classic CCS Pre-WCM Implementation	138	48.6	61,994	1,125,401	12
Classic CCS Post-WCM Implementation	247	38.9	56,194	1,187,871	21
				Classic Change:	9
				Diff-in-Diff:	-6

Referral grievances filed in Phase I (Table 13) show that the WCM counties reported a smaller increase in referral grievances per 100,000 member months pre-/post WCM implementation than did their traditional CCS counterparts.

Table 13. Phase I Referral Grievances, by Group

Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	9	100.0	23,689	422,533	2
Post-WCM	11	63.6	17,523	401,227	3
				WCM Change:	1
Classic CCS Pre-WCM Implementation	48	52.1	61,994	1,125,401	4

Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Classic CCS Post-WCM Implementation	161	60.2	56,194	1,187,871	14
				Classic Change:	9
				Diff-in-Diff:	-9

Phase I grievances categorized as "Other" (Table 14) reveal that pre-/post-WCM implementation, children in the WCM counties reported a larger increase in this type of grievances per 100,000 member months than did their traditional CCS counterparts.

Table 14. Phase I Other Grievances, by Group

Phase I	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	36	75.0	23,689	422,533	9
Post-WCM	283	85.9	17,523	401,227	71
				WCM Change:	62
Classic CCS Pre-WCM Implementation	145	89.0	61,994	1,125,401	13
Classic CCS Post-WCM Implementation	476	61.3	56,194	1,187,871	40
				Classic Change:	27
				Diff-in-Diff:	35

Summary of Results from Phase II Analyses:

Phase II differences-in-differences grievances by demographic variables including age, ethnicity, and language for pre-/post-WCM implementation for both WCM and traditional CCS are presented in Tables 15-17. Tables 18-21 present Phase II difference-in-difference grievances by type of grievance including access, benefits, quality of care, referrals and other grievances, pre-/post-WCM implementation for both WCM and traditional CCS. The increase in reporting of Phase II grievances per 100,000 member months was generally higher for the WCM counties than for the traditional CCS counties. This more pronounced increase in grievance reporting for WCM counties during Phase II was both large in magnitude and highly statistically significant. However, some Phase II subgroups such as infants, Latinx and Spanish-language experienced a smaller increase in grievances than traditional CCS counties. Similarly, Phase II grievances per 100,000 member months by type of grievance were generally higher for the WCM counties than for traditional CCS counterparts. However, some types of Phase II grievances such as such as NICU and congenital diagnoses experienced a smaller increase in grievances per 100,000 member months than did traditional CCS counties.

Differences between WCM counties and traditional CCS counties with respect to change in total grievances per 100,000 member months pre/post WCM implementation varied dramatically by child age. For children 2-6 and 7-11, WCM counties had a larger increase in total grievances per 100,000 member months pre-/post WCM implementation than their traditional CCS counterparts (Table 15). For 1 year old children and for children 12-20, WCM counties had a slightly smaller increase in total grievances per 100,000 member months pre-/post WCM implementation than their traditional CCS counterparts. For infants, WCM counties had a much smaller increase in total grievances per 100,000 member months pre/post WCM implementation than their traditional CCS counterparts.

Table 15. Phase II Grievances, By Age and Group

Age	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
<12 Mo.	Pre-WCM	19	73.7	4,935	31,682	60
	Post-WCM	28	60.7	1,908	15,108	185
					WCM Change:	125
	Classic CCS Pre-WCM Implementation	70	60.0	14,085	88,498	79
	Classic CCS Post-WCM Implementation	191	70.2	8,613	56,779	336

Age	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					Classic Change:	257
					Diff-in-Diff:	-132
1 year	Pre-WCM	22	59.1	3,303	26,285	84
	Post-WCM	45	37.8	2,028	16,192	278
					WCM Change:	194
	Classic CCS Pre-WCM Implementation	61	63.9	9,950	80,496	76
	Classic CCS Post-WCM Implementation	151	43.7	6,848	54,809	276
					Classic Change:	200
					Diff-in-Diff:	-6
2-6	Pre-WCM	67	34.3	5,710	92,630	72
	Post-WCM	179	36.9	3,793	64,517	277
					WCM Change:	205
	Classic CCS Pre-WCM Implementation	252	55.2	17,258	274,473	92
	Classic CCS Post-WCM Implementation	479	49.7	12,782	202,432	237
					Classic Change:	145
					Diff-in-Diff:	60
7-11	Pre-WCM	72	51.4	4,635	86,885	83
	Post-WCM	154	40.9	3,434	63,127	244
					WCM Change:	161

Age	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implementation	182	44.5	14,153	270,957	67
	Classic CCS Post-WCM Implementation	417	49.9	11,027	193,629	215
					Classic Change:	148
					Diff-in-Diff:	13
12-20	Pre-WCM	139	61.2	7,552	156,252	89
	Post-WCM	286	44.4	5,845	121,671	235
					WCM Change:	146
	Classic CCS Pre-WCM Implementation	411	52.6	23,887	499,728	82
	Classic CCS Post-WCM Implementation	976	48.9	20,357	417,712	234
					Classic Change:	151
					Diff-in-Diff:	-5

When looking at Phase II grievances by ethnicity (Table 16), differences between WCM counties and traditional CCS counties with respect to change in grievances per 100,000 member months pre/post WCM implementation varied dramatically by ethnicity and group. Asian/PI, Black and White children had a larger increase in grievances per 100,000 member months pre-post WCM implementation than did traditional CCS counties, while Latinx and Other/Unknown had a smaller increase in grievances per 100,000 member months pre-post WCM implementation than did traditional CCS counties. Of note, relatively few Asian/PI children were enrolled in WCM counties in Phase II which might reduce the precision of estimates.

Table 16. Phase II Grievances, By Ethnicity and Group

Ethnicity	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Asian/PI	Pre-WCM	4	50.0	213	4,626	86
	Post-WCM	8	0.0	116	2,652	302
					WCM Change:	215
	Classic CCS Pre-WCM Implementation	18	50.0	1,389	28,005	64
	Classic CCS Post-WCM Implementation	52	57.7	912	19,583	266
					Classic Change:	201
					Diff-in-Diff:	14
Black	Pre-WCM	29	69.0	1,088	18,828	154
	Post-WCM	45	46.7	667	13,499	333
					WCM Change:	179
	Classic CCS Pre-WCM Implementation	118	55.9	7,593	152,587	77
	Classic CCS Post-WCM Implementation	256	55.5	5,321	107,940	237
					Classic Change:	160
					Diff-in-Diff:	19
Latinx	Pre-WCM	57	47.4	6,385	145,995	39
	Post-WCM	195	38.5	4,415	106,490	183
					WCM Change:	144
	Classic CCS Pre-WCM Implementation	286	53.8	20,100	440,030	65

Ethnicity	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	761	53.9	15,564	340,197	224
					Classic Change:	159
					Diff-in-Diff:	-15
White	Pre-WCM	146	58.2	6,616	143,287	102
	Post-WCM	303	44.2	4,074	93,083	326
					WCM Change:	224
	Classic CCS Pre-WCM Implementation	256	48.8	10,477	224,294	114
	Classic CCS Post-WCM Implementation	453	42.2	7,483	156,479	289
					Classic Change:	175
					Diff-in-Diff:	48
Other/ Unknown	Pre-WCM	81	46.9	4,265	72,122	112
	Post-WCM	125	44.8	2,895	58,835	212
					WCM Change:	100
	Classic CCS Pre-WCM Implementation	297	54.5	17,986	364,150	82
	Classic CCS Post-WCM Implementation	687	50.7	14,962	297,149	231
					Classic Change:	150
					Diff-in-Diff:	-49

Analysis of Phase II grievances by language (Table 17) shows that among children from Spanish-language families, WCM counties had a smaller increase in grievances per 100,000 member months pre-/post WCM implementation than did traditional CCS counties, while among children from English-language families, WCM counties had a larger increase in grievances per 100,000 member months pre/post WCM implementation than did traditional CCS counties. Among Asian-language families in WCM counties, only one grievance was reported pre-WCM and only one post-WCM; thus, estimation of change pre/post WCM lacked precision in this group. Among families who spoke a language categorized as unknown or other than English, Spanish or Asian, WCM counties had a much larger increase in grievances per 100,000 member months pre-post WCM implementation than did traditional CCS counties.

Table 17. Phase II Grievances, by Language and Group

Language	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Asian Language	Pre-WCM	1	0.0	99	1,727	58
	Post-WCM	1	100.0	73	1,510	66
					WCM Change:	8
	Classic CCS Pre-WCM Implementation	21	42.9	2,313	55,271	38
	Classic CCS Post-WCM Implementation	78	51.3	1,693	40,359	193
					Classic Change:	155
					Diff-in-Diff:	-147
English	Pre-WCM	282	55.3	14,750	292,501	96
	Post-WCM	558	43.5	9,326	202,426	276
					WCM Change:	179
	Classic CCS Pre-WCM Implementation	745	52.8	41,870	847,659	88

Language	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	1,502	49.2	31,230	625,113	240
					Classic Change:	152
					Diff-in-Diff:	27
Spanish	Pre-WCM	35	42.9	3,990	96,213	36
	Post-WCM	116	36.2	2,947	74,240	156
					WCM Change:	120
	Classic CCS Pre-WCM Implementation	160	54.4	11,970	276,587	58
	Classic CCS Post-WCM Implementation	494	53.6	9,958	225,843	219
					Classic Change:	161
					Diff-in-Diff:	-41
Other/ Unknown	Pre-WCM	1	100.0	159	3,293	30
	Post-WCM	17	23.5	102	2,439	697
					WCM Change:	667
	Classic CCS Pre-WCM Implementation	50	56.0	1,638	34,635	144
	Classic CCS Post-WCM Implementation	140	56.4	1,540	34,046	411
					Classic Change:	267
					Diff-in-Diff:	400

When looking at Phase II grievances per 100,000 member months pre-/post WCM implementation by diagnosis (Table 18), children in WCM counties experienced a much

smaller increase than their traditional CCS counterparts for accident, circulatory, NICU, gastroenterologic and congenital diagnoses, and a much larger increase than their traditional CCS counterparts for endocrine, nutritional, metabolic diseases, and immune disease diagnoses, nervous system diagnoses, infectious disease diagnoses and muscular diagnoses.

Table 18. Phase II Grievances, by Diagnosis

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Accident	Pre-WCM	5	60.0	1,658	17,556	28
	Post-WCM	17	41.2	1,072	14,444	118
					WCM Change:	89
	Classic CCS Pre-WCM Implementation	24	41.7	5,054	53,888	45
	Classic CCS Post-WCM Implementation	116	39.7	3,062	37,410	310
					Classic Change:	266
					Diff-in-Diff:	-176
Circulatory	Pre-WCM	10	40.0	610	10,734	93
	Post-WCM	16	56.3	408	9,247	173
					WCM Change:	80
	Classic CCS Pre-WCM Implementation	38	57.9	1,837	37,857	100

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implement ation	113	50.4	1,708	37,620	300
					Classic Change:	200
					Diff-in-Diff:	-120
Congenital	Pre-WCM	91	46.2	3,075	64,992	140
	Post-WCM	120	39.2	2,192	53,535	224
					WCM Change:	84
	Classic CCS Pre-WCM Implement ation	150	50.0	8,680	196,042	77
	Classic CCS Post-WCM Implement ation	439	53.5	7,912	187,666	234
					Classic Change:	157
					Diff-in-Diff:	-73
Derma-tology	Pre-WCM	1	100.0	71	1,471	68
	Post-WCM	1	100.0	49	1,022	98
					WCM Change:	30
	Classic CCS Pre-WCM Implement ation	11	63.6	292	6,218	177

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implement ation	24	66.7	281	6,413	374
					Classic Change:	197
					Diff-in-Diff:	-167
Endocrine, Nutritional, Metabolic Diseases, and Immune	Pre-WCM	18	55.6	1,288	28,999	62
	Post-WCM	100	41.0	1,179	28,403	352
					WCM Change:	290
	Classic CCS Pre-WCM Implement ation	91	42.9	4,342	103,134	88
	Classic CCS Post-WCM Implement ation	264	56.1	4,519	107,310	246
					Classic Change:	158
					Diff-in-Diff:	132
Gastro-enterologic	Pre-WCM	10	50.0	395	7,555	132
	Post-WCM	20	40.0	259	5,813	344
					WCM Change:	212

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implement ation	17	58.8	1,095	21,025	81
	Classic CCS Post-WCM Implement ation	106	48.1	1,046	22,215	477
					Classic Change:	396
					Diff-in-Diff:	-185
Genito-urinary	Pre-WCM	2	50.0	365	6,193	32
	Post-WCM	8	50.0	264	5,476	146
					WCM Change:	114
	Classic CCS Pre-WCM Implement ation	37	54.1	1,121	22,573	164
	Classic CCS Post-WCM Implement ation	53	43.4	870	17,292	307
					Classic Change:	143
					Diff-in-Diff:	-29
Hema-tologic	Pre-WCM	8	37.5	288	5,464	146
	Post-WCM	15	53.3	242	5,400	278
					WCM Change:	131

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implement ation	16	62.5	1,027	22,149	72
	Classic CCS Post-WCM Implement ation	53	60.4	936	21,529	246
					Classic Change:	174
					Diff-in-Diff:	-43
Infectious Disease	Pre-WCM	0	.	100	1,226	0
	Post-WCM	2	50.0	64	1,243	161
					WCM Change:	161
	Classic CCS Pre-WCM Implement ation	2	0.0	269	4,063	49
	Classic CCS Post-WCM Implement ation	4	50.0	299	4,798	83
					Classic Change:	34
					Diff-in-Diff:	127
Mental Disorders	Pre-WCM	3	0.0	138	2,651	113
	Post-WCM	7	57.1	81	2,042	343
					WCM Change:	230

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implement ation	25	64.0	659	9,983	250
	Classic CCS Post-WCM Implement ation	29	62.1	700	13,219	219
					Classic Change:	-31
					Diff-in-Diff:	261
Musculatory	Pre-WCM	5	60.0	775	14,802	34
	Post-WCM	53	35.8	574	11,774	450
					WCM Change:	416
	Classic CCS Pre-WCM Implement ation	42	54.8	2,574	50,986	82
	Classic CCS Post-WCM Implement ation	128	50.0	2,213	45,100	284
					Classic Change:	201
					Diff-in-Diff:	215
NICU	Pre-WCM	14	42.9	1,644	15,569	90
	Post-WCM	8	37.5	675	10,198	78
					WCM Change:	-11

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implement ation	31	61.3	6,118	52,212	59
	Classic CCS Post-WCM Implement ation	80	47.5	3,961	36,030	222
					Classic Change:	163
					Diff-in-Diff:	-174
Neoplasm	Pre-WCM	5	80.0	399	8,812	57
	Post-WCM	20	55.0	302	7,298	274
					WCM Change:	217
	Classic CCS Pre-WCM Implement ation	17	82.4	1,112	25,634	66
	Classic CCS Post-WCM Implement ation	43	32.6	893	20,658	208
					Classic Change:	142
					Diff-in-Diff:	75
Nervous System	Pre-WCM	13	69.2	761	16,547	79
	Post-WCM	69	40.6	635	15,798	437
					WCM Change:	358

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implement ation	73	57.5	1,827	40,109	182
	Classic CCS Post-WCM Implement ation	93	39.8	1,728	39,774	234
					Classic Change:	52
					Diff-in-Diff:	306
Ophthal-mologic	Pre-WCM	8	75.0	600	10,635	75
	Post-WCM	5	60.0	490	10,053	50
					WCM Change:	-25
	Classic CCS Pre-WCM Implement ation	20	65.0	1,764	32,195	62
	Classic CCS Post-WCM Implement ation	74	52.7	1,502	29,055	255
					Classic Change:	193
					Diff-in-Diff:	-218
Other	Pre-WCM	6	50.0	423	3,783	159
	Post-WCM	1	0.0	227	3,355	30
					WCM Change:	-129

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implement ation	17	64.7	1,138	11,856	143
	Classic CCS Post-WCM Implement ation	9	77.8	737	8,621	104
					Classic Change:	-39
					Diff-in-Diff:	-90
Otolaryn-gologic	Pre-WCM	9	22.2	782	17,558	51
	Post-WCM	14	57.1	582	15,130	93
					WCM Change:	41
	Classic CCS Pre-WCM Implement ation	36	69.4	2,757	58,382	62
	Classic CCS Post-WCM Implement ation	71	49.3	2,408	53,729	132
					Classic Change:	70
					Diff-in-Diff:	-29
Pregnancy	Pre-WCM	0	.	12	129	0
	Post-WCM	0	.	6	56	0
					WCM Change:	0

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implement ation	0	.	59	706	0
	Classic CCS Post-WCM Implement ation	6	33.3	57	370	1,622
					Classic Change:	1622
					Diff-in-Diff:	-1622
Respiratory	Pre-WCM	9	88.9	296	2,806	321
	Post-WCM	4	50.0	136	2,116	189
					WCM Change:	-132
	Classic CCS Pre-WCM Implement ation	4	25.0	740	8,073	50
	Classic CCS Post-WCM Implement ation	17	35.3	564	7,244	235
					Classic Change:	185
					Diff-in-Diff:	-317
Un-diagnosed	Pre-WCM	102	60.8	5,318	156,252	65
	Post-WCM	212	40.6	3,011	78,212	271
					WCM Change:	206

CCS Diagnosis	Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implement ation	325	49.2	15,326	457,067	71
	Classic CCS Post-WCM Implement ation	492	51.4	9,025	229,308	215
					Classic Change:	143
					Diff-in-Diff:	62

Benefits coverage grievances filed during Phase II (Table 19) reveal that children in WCM counties experienced a smaller increase in benefits grievances per 100,000 member months pre-/post WCM implementation than did their traditional CCS counterparts.

Table 19. Phase I Benefits Grievances, by Group

Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	73	41.1	18,998	393,734	19
Post-WCM	100	43.0	12,448	280,615	36
				WCM Change:	17
Classic CCS Pre-WCM Implementation	119	63.0	57,791	1,214,152	10
Classic CCS Post-WCM Implementation	465	50.1	44,421	925,361	50
				Classic Change:	40
				Diff-in-Diff:	-23

Referral grievances filed in Phase II (Table 20) show that the WCM counties had an increase in referral grievances per 100,000 member months pre-/post WCM implementation that was similar to traditional CCS counties.

Table 20. Phase I Referral Grievances, by Group

Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	14	85.7	18,998	393,734	4
Post-WCM	18	11.1	12,448	280,615	6
				WCM Change:	3
Classic CCS Pre-WCM Implementation	69	73.9	57,791	1,214,152	6
Classic CCS Post-WCM Implementation	98	66.3	44,421	925,361	11
				Classic Change:	5
				Diff-in-Diff:	-2

Phase II grievances categorized as "Other" (Table 21) reveal that pre-/post-WCM implementation, children in the WCM counties reported a larger increase in this type of grievances per 100,000 member months than did their traditional CCS counterparts.

Table 21. Phase II Other Grievances, by Group

Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	169	58.0	18,998	393,734	43
Post-WCM	371	41.0	12,448	280,615	132
				WCM Change:	89
Classic CCS Pre-WCM Implementation	269	63.2	57,791	1,214,152	22

Phase II	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Classic CCS Post-WCM Implementation	591	61.6	44,421	925,361	64
				Classic Change:	42
				Diff-in-Diff:	48

Summary of Results from Phase III Analyses

Phase III differences-in-differences grievances by demographic variables including age, ethnicity, and language for pre-/post-WCM implementation for both WCM and traditional CCS are presented in Tables 22-24. Tables 25-28 present Phase III difference-in-difference grievances by type of grievance including access, benefits, quality of care, referrals and other grievances, pre-/post-WCM implementation for both WCM and traditional CCS. Like the other Phases, the increase in reporting of Phase III grievances per 100,000 member months was higher for the WCM counties than for the traditional CCS counties, although this difference was not statistically significant. Of note, however, some Phase III subgroups such as infants, 1-year-olds, Latinx and Spanish-language experienced a smaller increase in grievances than traditional CCS counties, and some types of Phase III grievances such as gastroenterological, genitourinary, NICU and congenital diagnoses also experienced a smaller increase in grievances per 100,000 member months than traditional CCS counties.

Differences between WCM counties and traditional CCS counties with respect to change in total grievances per 100,000 member months pre/post Phase III WCM implementation varied dramatically by child age. For children 2-6, 7-11, and 12-20, WCM counties had a larger increase in total grievances per 100,000 member months pre-/post WCM implementation than their traditional CCS counterparts (Table 22). However, for infants <12 months old and for 1 year old children, WCM counties had a much smaller increase in total grievances per 100,000 member months pre-/post WCM implementation than their traditional CCS counterparts.

Table 22. Phase III Grievances, By Age and Group

Age	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
<12 Mo.	Pre-WCM	69	88.4	7,257	44,014	157
	Post-WCM	32	65.6	1,938	14,146	226

Age	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					WCM Change:	69
	Classic CCS Pre-WCM Implementation	247	71.7	25,106	173,301	143
	Classic CCS Post-WCM Implementation	359	57.1	11,202	84,924	423
					Classic Change:	280
					Diff-in-Diff:	-211
1 year	Pre-WCM	79	89.9	4,704	39,057	202
	Post-WCM	66	53.0	2,179	17,485	377
					WCM Change:	175
	Classic CCS Pre-WCM Implementation	172	65.1	16,663	130,842	131
	Classic CCS Post-WCM Implementation	279	47.3	9,306	72,041	387
					Classic Change:	256
					Diff-in-Diff:	-81
2-6	Pre-WCM	232	86.6	8,582	150,130	155
	Post-WCM	268	57.1	4,658	70,216	382
					WCM Change:	227
	Classic CCS Pre-WCM Implementation	491	59.7	25,803	431,747	114
	Classic CCS Post-WCM Implementation	549	44.8	15,503	234,087	235
					Classic Change:	121

Age	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					Diff-in-Diff:	106
7-11	Pre-WCM	187	77.5	7,720	160,037	117
	Post-WCM	249	43.0	4,500	73,097	341
					WCM Change:	224
	Classic CCS Pre-WCM Implementation	316	65.8	21,928	441,804	72
	Classic CCS Post-WCM Implementation	565	49.0	13,527	221,920	255
					Classic Change:	183
					Diff-in-Diff:	41
12-20	Pre-WCM	494	81.6	13,732	320,287	154
	Post-WCM	547	48.3	9,006	174,128	314
					WCM Change:	160
	Classic CCS Pre-WCM Implementation	982	65.8	39,766	900,473	109
	Classic CCS Post-WCM Implementation	1,329	41.7	27,968	539,701	246
					Classic Change:	137
					Diff-in-Diff:	23

When looking at Phase III grievances by ethnicity (Table 23), differences between WCM counties and traditional CCS counties with respect to change in grievances per 100,000 member months pre/post WCM implementation varied dramatically by ethnicity and group. Similar to Phase II results, Asian/PI, Black and White children had a much larger increase in grievances per 100,000 member months pre-post WCM implementation than did traditional CCS counties, while Latinx and Other/Unknown had a smaller increase in grievances per 100,000 member months pre-post WCM implementation than did traditional CCS counties.

Table 23. Phase III Grievances, By Ethnicity and Group

Ethnicity	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Asian/PI	Pre-WCM	9	66.7	426	7,689	117
	Post-WCM	17	17.6	117	2,360	720
					WCM Change:	603
	Classic CCS Pre-WCM Implementation	83	95.2	644	13,476	616
	Classic CCS Post-WCM Implementation	51	47.1	412	7,862	649
					Classic Change:	33
					Diff-in-Diff:	571
Black	Pre-WCM	19	78.9	567	12,531	152
	Post-WCM	44	52.3	321	5,815	757
					WCM Change:	605
	Classic CCS Pre-WCM Implementation	202	59.9	8,819	184,318	110
	Classic CCS Post-WCM Implementation	258	50.4	5,421	100,564	257
					Classic Change:	147
					Diff-in-Diff:	458
Latinx	Pre-WCM	486	85.6	17,076	421,049	115
	Post-WCM	465	51.6	9,878	205,292	227
					WCM Change:	111
	Classic CCS Pre-WCM Implementation	1,281	64.7	59,756	1,400,640	91

Ethnicity	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	1,823	48.0	38,649	777,861	234
					Classic Change:	143
					Diff-in-Diff:	-32
White	Pre-WCM	295	81.7	4,681	106,286	278
	Post-WCM	353	49.0	2,615	51,816	681
					WCM Change:	404
	Classic CCS Pre-WCM Implementation	309	63.1	7,740	167,886	184
	Classic CCS Post-WCM Implementation	438	31.7	4,823	93,000	471
					Classic Change:	287
					Diff-in-Diff:	117
Other/ Unknown	Pre-WCM	248	80.2	7,683	165,034	150
	Post-WCM	281	49.5	4,116	83,284	337
					WCM Change:	187
	Classic CCS Pre-WCM Implementation	332	63.9	15,961	309,489	107
	Classic CCS Post-WCM Implementation	510	48.0	9,043	172,098	296
					Classic Change:	189
					Diff-in-Diff:	-2

Analysis of Phase III grievances by language (Table 24) shows that among children from Spanish-language, Asian-language and Other/Unknown language families, WCM counties had a smaller increase in grievances per 100,000 member months pre-/post WCM implementation than did traditional CCS counties, while among children from English-language families, WCM counties had a larger increase in grievances per 100,000 member months pre/post WCM implementation than did traditional CCS counties.

Table 24. Phase III Grievances, by Language and Group

Language	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Asian Language	Pre-WCM	31	67.7	1,335	33,015	94
	Post-WCM	21	57.1	784	17,365	121
					WCM Change:	27
	Classic CCS Pre-WCM Implementation	26	61.5	1,734	39,885	65
	Classic CCS Post-WCM Implementation	48	29.2	1,042	21,090	228
					Classic Change:	162
					Diff-in-Diff:	-135
English	Pre-WCM	742	80.9	18,452	394,966	188
	Post-WCM	828	48.3	9,741	188,708	439
					WCM Change:	251
	Classic CCS Pre-WCM Implementation	1,496	66.8	58,890	1,216,560	123
	Classic CCS Post-WCM Implementation	1,944	44.2	36,078	679,680	286
					Classic Change:	163
					Diff-in-Diff:	88

Language	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Spanish	Pre-WCM	275	89.8	10,376	279,454	98
	Post-WCM	285	56.1	6,340	138,803	205
					WCM Change:	107
	Classic CCS Pre-WCM Implementation	615	62.0	30,955	790,063	78
	Classic CCS Post-WCM Implementation	947	49.9	20,334	432,629	219
					Classic Change:	141
					Diff-in-Diff:	-34
Other/ Unknown	Pre-WCM	13	100.0	310	6,090	213
	Post-WCM	28	28.6	205	4,196	667
					WCM Change:	454
	Classic CCS Pre-WCM Implementation	71	56.3	1,448	31,659	224
	Classic CCS Post-WCM Implementation	142	47.2	954	19,274	737
					Classic Change:	512
					Diff-in-Diff:	-59

When looking at Phase III grievances per 100,000 member months pre-/post WCM implementation by diagnosis (Table 25), children in WCM counties experienced a much smaller increase than their traditional CCS counterparts for gastroenterological, genitourinary, nervous system, opthalmological and NICU diagnoses, and a much larger increase than their traditional CCS counterparts for endocrine, nutritional, metabolic diseases, and immune disease diagnoses, accident diagnoses, and neoplasm diagnoses.

Table 25. Phase III Grievances, by Diagnosis

CCS Diagnosis	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Accident	Pre-WCM	42	90.5	3,431	38,917	108
	Post-WCM	38	78.9	1,346	16,118	236
					WCM Change:	128
	Classic CCS Pre-WCM Implementation	137	56.2	7,879	86,884	158
	Classic CCS Post-WCM Implementation	84	42.9	3,968	52,786	159
					Classic Change:	1
					Diff-in-Diff:	126
Circulatory	Pre-WCM	42	81.0	923	22,634	186
	Post-WCM	69	49.3	630	12,778	540
					WCM Change:	354
	Classic CCS Pre-WCM Implementation	150	62.7	3,996	90,457	166
	Classic CCS Post-WCM Implementation	351	56.4	3,211	66,707	526
					Classic Change:	360
					Diff-in-Diff:	-6
Congenital	Pre-WCM	166	87.3	4,249	106,757	155
	Post-WCM	197	53.3	2,824	63,144	312

CCS Diagnosis	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					WCM Change:	156
	Classic CCS Pre-WCM Implementation	392	63.5	13,344	314,865	124
	Classic CCS Post-WCM Implementation	684	43.6	10,257	221,199	309
					Classic Change:	185
					Diff-in-Diff:	-28
Derma-tology	Pre-WCM	3	33.3	65	1,427	210
	Post-WCM	0	.	37	783	0
					WCM Change:	-210
	Classic CCS Pre-WCM Implementation	19	68.4	479	11,311	168
	Classic CCS Post-WCM Implementation	46	45.7	399	8,847	520
					Classic Change:	352
					Diff-in-Diff:	-562
Endocrine, Nutritional, Metabolic Diseases, and Immune	Pre-WCM	56	83.9	1,757	48,965	114
	Post-WCM	110	41.8	1,464	32,249	341
					WCM Change:	227

CCS Diagnosis	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implementation	225	66.2	7,427	191,957	117
	Classic CCS Post-WCM Implementation	324	43.2	6,499	137,799	235
					Classic Change:	118
					Diff-in-Diff:	109
Gastro-enterologic	Pre-WCM	25	88.0	462	9,100	275
	Post-WCM	19	57.9	267	4,909	387
					WCM Change:	112
	Classic CCS Pre-WCM Implementation	55	56.4	1,551	32,506	169
	Classic CCS Post-WCM Implementation	111	40.5	1,053	21,279	522
					Classic Change:	352
					Diff-in-Diff:	-240
Genito-urinary	Pre-WCM	29	86.2	611	14,806	196
	Post-WCM	8	25.0	365	7,210	111
					WCM Change:	-85
	Classic CCS Pre-WCM Implementation	45	62.2	1,628	34,468	131

CCS Diagnosis	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	62	46.8	987	20,213	307
					Classic Change:	176
					Diff-in-Diff:	-261
Hema-tologic	Pre-WCM	19	89.5	437	9,835	193
	Post-WCM	13	76.9	307	6,256	208
					WCM Change:	15
	Classic CCS Pre-WCM Implementation	33	63.6	1,301	30,813	107
	Classic CCS Post-WCM Implementation	52	48.1	1,061	22,795	228
					Classic Change:	121
					Diff-in-Diff:	-106
Infectious Disease	Pre-WCM	1	100.0	96	1,542	65
	Post-WCM	2	50.0	68	1,124	178
					WCM Change:	113
	Classic CCS Pre-WCM Implementation	8	87.5	554	8,353	96
	Classic CCS Post-WCM Implementation	9	33.3	422	6,713	134

CCS Diagnosis	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					Classic Change:	38
					Diff-in-Diff:	75
Mental Disorders	Pre-WCM	4	50.0	54	1,496	267
	Post-WCM	7	28.6	42	890	787
					WCM Change:	519
	Classic CCS Pre-WCM Implementation	33	66.7	372	8,583	384
	Classic CCS Post-WCM Implementation	64	34.4	348	7,516	852
					Classic Change:	467
					Diff-in-Diff:	52
Musculatory	Pre-WCM	44	90.9	1,407	32,458	136
	Post-WCM	57	38.6	983	18,262	312
					WCM Change:	177
	Classic CCS Pre-WCM Implementation	118	62.7	4,445	87,631	135
	Classic CCS Post-WCM Implementation	160	50.0	2,870	53,856	297
					Classic Change:	162
					Diff-in-Diff:	14

CCS Diagnosis	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
NICU	Pre-WCM	15	60.0	1,693	13,177	114
	Post-WCM	20	55.0	750	10,340	193
					WCM Change:	80
	Classic CCS Pre-WCM Implementation	73	72.6	10,959	99,296	74
	Classic CCS Post-WCM Implementation	130	60.8	5,223	60,339	215
					Classic Change:	142
					Diff-in-Diff:	-62
Neoplasm	Pre-WCM	32	81.3	824	20,985	152
	Post-WCM	50	54.0	601	12,968	386
					WCM Change:	233
	Classic CCS Pre-WCM Implementation	52	51.9	1,825	47,912	109
	Classic CCS Post-WCM Implementation	58	48.3	1,246	27,219	213
					Classic Change:	105
					Diff-in-Diff:	129
Nervous System	Pre-WCM	94	85.1	1,044	26,395	356
	Post-WCM	94	41.5	821	17,761	529
					WCM Change:	173

CCS Diagnosis	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Pre-WCM Implementation	142	55.6	3,104	72,977	195
	Classic CCS Post-WCM Implementation	222	41.0	2,401	51,441	432
					Classic Change:	237
					Diff-in-Diff:	-64
Ophthal-mologic	Pre-WCM	34	82.4	1,554	31,489	108
	Post-WCM	38	47.4	904	16,005	237
					WCM Change:	129
	Classic CCS Pre-WCM Implementation	81	60.5	3,998	66,038	123
	Classic CCS Post-WCM Implementation	141	30.5	2,502	42,763	330
					Classic Change:	207
					Diff-in-Diff:	-78
Other	Pre-WCM	6	100.0	1,940	15,110	40
	Post-WCM	11	63.6	306	4,599	239
					WCM Change:	199
	Classic CCS Pre-WCM Implementation	10	60.0	1,114	9,216	109

CCS Diagnosis	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
	Classic CCS Post-WCM Implementation	12	75.0	548	5,605	214
					Classic Change:	106
					Diff-in-Diff:	94
Otolaryn-gologic	Pre-WCM	40	82.5	1,431	35,639	112
	Post-WCM	53	69.8	1,034	23,637	224
					WCM Change:	112
	Classic CCS Pre-WCM Implementation	66	56.1	3,622	77,839	85
	Classic CCS Post-WCM Implementation	81	44.4	2,590	52,335	155
					Classic Change:	70
					Diff-in-Diff:	42
Pregnancy	Pre-WCM	0	.	13	96	0
	Post-WCM	0	.	5	40	0
					WCM Change:	0
	Classic CCS Pre-WCM Implementation	0	.	63	753	0
	Classic CCS Post-WCM Implementation	1	0.0	33	486	206

CCS Diagnosis	Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
					Classic Change:	206
					Diff-in-Diff:	-206
Respiratory	Pre-WCM	6	100.0	300	2,831	212
	Post-WCM	9	77.8	119	1,922	468
					WCM Change:	256
	Classic CCS Pre-WCM Implementation	37	73.0	1,368	17,077	217
	Classic CCS Post-WCM Implementation	25	60.0	672	9,002	278
					Classic Change:	61
					Diff-in-Diff:	195
Un-diagnosed	Pre-WCM	403	79.7	8,182	279,866	144
	Post-WCM	367	46.6	4,197	98,077	374
					WCM Change:	230
	Classic CCS Pre-WCM Implementation	532	73.9	23,998	789,231	67
	Classic CCS Post-WCM Implementation	464	46.6	12,118	283,773	164
					Classic Change:	96
					Diff-in-Diff:	134

Benefits coverage grievances filed during Phase II (Table 26) reveal that children in WCM counties experienced a larger increase in benefits grievances per 100,000 member months pre-/post WCM implementation than did their traditional CCS counterparts.

Table 26. Phase IIII Benefits Grievances, by Group

Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	221	44.8	30,473	713,525	31
Post-WCM	299	20.4	17,070	349,072	86
				WCM Change:	55
Classic CCS Pre-WCM Implementation	425	56.7	93,027	2,078,167	20
Classic CCS Post-WCM Implementation	437	36.8	58,408	1,152,673	38
				Classic Change:	17
				Diff-in-Diff:	37

Referral grievances filed in Phase III (Table 27) show that the WCM counties had an increase in referral grievances per 100,000 member months pre-/post WCM implementation that was similar to traditional CCS counties.

Table 27. Phase III Referral Grievances, by Group

Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	30	96.7	30,473	713,525	4
Post-WCM	56	37.5	17,070	349,072	16
				WCM Change:	12
Classic CCS Pre-WCM Implementation	277	68.2	93,027	2,078,167	13

Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Classic CCS Post-WCM Implementation	255	40.4	58,408	1,152,673	22
				Classic Change:	9
				Diff-in-Diff:	3

Phase III grievances categorized as "Other" (Table 28) reveal that pre-/post-WCM implementation, children in the WCM counties reported a smaller increase in this type of grievances per 100,000 member months than did their traditional CCS counterparts.

Table 28. Phase III Other Grievances, by Group

Phase III	Grievances	Pct. Resolved Favor Member	CCS Enrollees	Enrolled Member Months (MM)	Grievances per 100k MM
Pre-WCM	327	97.6	30,473	713,525	46
Post-WCM	166	96.4	17,070	349,072	48
				WCM Change:	2
Classic CCS Pre-WCM Implementation	631	72.9	93,027	2,078,167	30
Classic CCS Post-WCM Implementation	1,055	55.6	58,408	1,152,673	92
				Classic Change:	61
				Diff-in-Diff:	-59

Appendix R: Results of Key Informant Interviews

California Children's Services
Whole Child Model

Key Informant Report

Executive Summary

California Children's Services: California Children's Services (CCS) is a statewide health coverage program that provides services to over 180,000 children and young adults with certain qualifying disabilities or chronic health conditions.[1] It is administered as a partnership among local county health departments and the California Department of Health Care Services. Of the 185,000 children served in CCS, approximately ninety percent of them are Medi-Cal eligible, meaning they are enrolled in a Medi-Cal managed care plan (MCP).[2]

Care delivery and payments that are related to CCS-qualifying conditions are carved-out of most of the Medi-Cal MCPs, which means that the MCPs do not have financial responsibility for payment of the CCS-covered services.[3] Instead, these CCS-eligible services are reimbursed on a fee-for-service (FFS) basis by the state of California. Because of this structure, most CCS clients have two separate payer systems: FFS for CCS-related medical care, and managed care for all other primary care and specialty care unrelated to the CCS-qualifying condition. These separate payer systems have the potential to lead to inefficiencies and fragmented services.

The Whole Child Model: The Whole Child Model (WCM) was established with the passage of California Senate Bill 586 in 2016. The WCM began on July 1, 2018, and was implemented in 21 California counties, via three staggered phases. The purpose of the WCM was to transition the CCS program from a FFS-based healthcare delivery model to a Medi-Cal MCP delivery model with capitated payment. In essence, this would consolidate all pediatric care services for CCS clients by combining CCS-related medical care *and* primary care, as well as specialty care unrelated to the CCS-qualifying condition, under one accountable entity. The goal of the WCM was to improve access to care, coordination of care, satisfaction with care, health outcomes, and cost-effectiveness of care.

Qualitative Evaluation of the WCM: The UCSF evaluation team conducted a total of 63 semi-structured interviews with 94 key informants (KIs) between October 2019 and May 2022. The goals of these interviews were two-fold: 1) To help develop questions for a telephone survey of CCS parents or guardians throughout the state, and 2) To gain a more in-depth understanding of the WCM implementation process and experience from a variety of stakeholder perspectives. Questions in the interview guide covered:

- Perceived impacts on access to care, satisfaction with care, and service delivery for CCS clients;
- Perceived impacts on reimbursement, quality of care, case management/care coordination, and costs of care;
- CCS and MCP processes and procedures when planning for, transitioning to, and implementing the WCM; and
- Any additional topics that KIs deemed relevant.

[1] https://www.dhcs.ca.gov/services/ccs/Pages/ProgramOverview.aspx
[2] https://files.medi-cal.ca.gov/pubsdoco/publications/masters-mtp/part2/calchild.pdf
[3] https://files.medi-cal.ca.gov/pubsdoco/publications/masters-mtp/part2/calchild.pdf

These KI interviews were completed with staff at county Public Health Departments, CCS offices, Medical Therapy Programs, Special Care Centers, MCPs, durable medical equipment (DME) vendors, advocacy groups, and other representatives.

Results and Themes: During these interviews, KIs noted their perspectives on and experiences with the WCM implementation. Some of the major themes that arose from these interviews include the following:

Perspectives on the WCM: The KIs identified a variety of facilitators and barriers to the WCM implementation.

Facilitators included:

- Establishing and maintaining relationships before, during, and after the transition to the WCM;
- Engaging in ongoing and transparent communication with partners;
- Involving and incorporating input from the Family Advisory Committee;
- Having the MCPs hire CCS staff; and,
- Initiating new policies or procedures to ensure continuity of care for CCS clients.

Barriers included:

- Inadequate notification and sharing of and information about the WCM with families and providers;
- The perception that MCPs didn't fully understand CCS and the needs of CCS clients; and,
- The limitations and inefficiencies of data sharing through CMS Net (the online CCS case management system).

Access to care: Key informants noted that the CCS program experienced a decrease in referrals into the program after the implementation of the WCM. Key informants also noted that the WCM increased access to care due to changes in the authorization process that resulted in more streamlined access to providers and DME. Other key informants also noted that the WCM decreased access to care due to changes in the referral process that led to inefficiencies and delayed access to specialty care and MTU services.

Satisfaction: Key informants reported their dissatisfaction with both the Medi-Cal enrollment and re-enrollment process as well as the increased CCS staff workload after the WCM implementation. The DME vendors spoke about their satisfaction with a more efficient authorization process in the WCM.

Care delivery and reimbursement: The WCM had an impact on billing, as KIs reported that billing was more streamlined in the WCM. Transportation reimbursement was also impacted as KIs reported that families faced challenges with more onerous transportation requirements and reimbursement procedures required by WCM MCPs.

Quality of care: Key informants reported that the WCM had an impact on both provider and DME quality, whereby CCS clients in the WCM had increased access to an expanded MCP network of providers and DME vendors, but some of these providers and vendors were less qualified to work with CCS clients because they were not specialized or experienced in working with children complex chronic conditions.

Care coordination: Case management responsibilities were transitioned from county CCS programs to the county MCPs in the WCM. This had an impact on:

- Medical Therapy Units: Due to the fact that a CCS case manager was no longer attending Medical Therapy Conferences (MTC), any needed DME or specialty services recommended during the MTC were not authorized or accessed as quickly.
- Transportation: CCS clients no longer had the assistance of CCS case managers who knew their transportation needs and helped coordinate scheduling and reimbursement.
- Adult Transition Services: The MCP case management staff was well prepared to help CCS clients when they turned 21, aged out of the CCS program, and transitioned to adult care and providers because these CCS clients were already working with case managers within the same MCP who had access to their history of adolescent care and services.

Key Informant Recommendations: The KIs made various policy and process recommendations based on the lessons learned from the implementation of the WCM. KIs provided recommendations as a way to give guidance and feedback on future implementations of the WCM. Recommendations included:

Transition to the WCM

- Any future redesigns of the CCS program should prioritize the needs of the CCS clients above everything else.
- A successful transition to the WCM should include collaborative relationships between the county CCS program and the MCP.
- The MCPs should continue to engage with their Family Advisory Committees to help address ways to overcome challenges and barriers to care.
- The MCPs should hire CCS staff to help both the MCP itself and the county CCS program transition to the WCM.
- The MCPs should take proactive steps to help ease the CCS clients' transition to the WCM by implementing a limited-time open formulary for medications or identifying the medications a client was on before their transition to the WCM.
- The state should share all guidance and information on the WCM implementation with all involved MCPs and county CCS programs. This information must be detailed, specific, and clear and leave no room for subjective interpretation by any of the entities involved.
- The state should ensure that all WCM notifications and letters that are sent to CCS clients and their families are written at appropriate reading, linguistic, and health literacy levels.

- The state should ensure that all WCM notifications and letters are disseminated to all CCS-paneled providers and SCCs.
- The state should provide healthcare providers in the WCM with clear guidelines on the different processes for providing care and services to CCS clients in the WCM and those in Classic CCS counties.
- The state should provide WCM MCPs with full access to CMS Net, or centralize the data systems used for case management so that there is one consolidated system that can be used by both MCP case managers and CCS case managers.

Access to Care

- The state should clarify its guidance on who is responsible for NICU eligibility determinations in the WCM, for both dependent and independent counties, and subsequently provide oversight on this process.
- The MCPs should honor active service authorization requests for those CCS clients who transition to the WCM.
- Medi-Cal and the MCPs should remove prior authorization requirements for those CCS services or DME repairs that are repeatedly and continually required throughout a CCS client's lifetime – or automatically authorize these CCS services or DME repairs – to streamline access to these services and repairs.
- As the provision of DME is key to a CCS client's independence, safety, and health, it is imperative to have an adequate and skilled network of DME vendors throughout California.
- Classic CCS counties should reduce the DME vendor documentation requirements for DME authorizations.
- The MCPs or the transportation vendors should provide CCS clients assistance in arranging covered transportation services to/from appointments.

Satisfaction

- Future implementations of the WCM should plan for and provide the appropriate funding to address the potential increased workload of CCS staff, e.g., staff time related to addressing questions about the WCM and obtaining appropriate documentation from the MCPs for AMRs.

Reimbursement

- The reimbursement rates should be simplified by having one rate, and that rate should ensure that all participating centers are adequately reimbursed.
- The MCPs should revisit the quantities of some of the medical supplies that are allowed as reimbursable items for CCS clients.

Quality

- The DHCS and MCPs in the WCM should reinforce or require that CCS clients see CCS-paneled providers who have more training and expertise in treating CCS-qualifying conditions.

Case Management

- The MCPs should ensure that there is a case manager at the MTC to help expedite authorizations and coordinate with the MTU to ensure receipt of DME or other services that CCS clients may need.

Introduction and Background

California Children's Services

California Children's Services (CCS) is a statewide health coverage program.[1] It provides diagnostic, treatment, and medical case management services to approximately 185,000 children and young adults (under age 21) with certain CCS-eligible disabilities or chronic health conditions.[2] To be eligible for CCS, children and young adults must meet specific medical condition, financial, and residential criteria. Examples of CCS-eligible medical conditions include, but are not limited to, cystic fibrosis, hemophilia, cerebral palsy, heart disease, and cancer. The CCS program is administered as a partnership between local county health departments and the California Department of Health Care Services (DHCS).[3]

Case management is a key aspect of the CCS program; every CCS client receives case management from CCS case managers. A CCS case manager coordinates all of the client's medical care that is related to their CCS-eligible condition. The CCS case management responsibilities may include an initial determination of medical eligibility for the program and subsequent identification of appropriate providers based on the client's medical needs. The CCS case managers also authorize medically necessary services and are responsible for coordinating the CCS client's medical care and referrals to other agencies or services in the community, including those provided by county public health departments, schools, or regional centers.[4,5]

California Children's Services also provides direct physical and occupational therapy rehabilitative services through the CCS Medical Therapy Program (MTP).[6] Medical Therapy Program services are delivered to CCS clients with MTP-eligible conditions at public schools throughout the state.[7] Although a program within CCS, MTP services are excluded from the Whole Child Model Demonstration Pilot (as described below) and continue to be administered by the local county public health departments.

Of the approximately 185,000 children served in CCS, approximately ninety percent of them are Medi-Cal eligible,[8] meaning they are enrolled in a Medi-Cal managed care plan (MCP) that reimburses authorized CCS services, as well those services not related to the CCS medically-eligible condition. The remaining ten percent of children in CCS are ineligible for Medi-Cal; their families may pay for some healthcare costs on their own or have local health plan or commercial coverage as their primary insurance.

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[1] Health and Safety Code, Section 123800 et seq. is the enabling statute for the CCS Program. The explicit legislative intent of the CCS Program is to provide medically necessary services for children with CCS-eligible conditions. The statute also requires that DHCS and the county CCS Programs seek eligible children by cooperating with local public or private agencies and providers of medical care to enroll eligible children.

[2] https://files.medi-cal.ca.gov/pubsdoco/publications/masters-mtp/part2/calchild.pdf

[3] https://www.dhcs.ca.gov/services/ccs/Pages/ProgramOverview.aspx

[4] https://www.dhcs.ca.gov/services/ccs/Documents/CCSAdminCaseManManual.pdf

[5] https://www.dhcs.ca.gov/formsandpubs/publications/Documents/CMS/pub387.pdf

[6] https://www.dhcs.ca.gov/services/ccs/Pages/MTP.aspx

[7] https://www.dhcs.ca.gov/services/ccs/Pages/ProgramOverview.aspx

[8] https://files.medi-cal.ca.gov/pubsdoco/publications/masters-mtp/part2/calchild.pdf

Medi-Cal is the California state Medicaid healthcare program, serving children and adults with limited income and resources. It is funded jointly by the state and federal government. A MCP contracts with established networks of providers or systems of care and accepts capitated payments (a set amount paid for every enrolled member, regardless of the services they obtain) for the services they provide.[9] A Medi-Cal MCP provides care to low-income children and adults through a managed care delivery system, with an emphasis on primary and preventive care. Therefore, a child or young adult who qualifies for CCS and is Medi-Cal eligible has two public payers for their overall medical care: CCS and their Medi-Cal MCP.

A combination of federal (Title V), state, and county funds finances CCS.[10] Currently, there are some CCS programs that are carved-into their county's Medi-Cal MCP whereby the plan has assumed full fiscal responsibility for payment of CCS-eligible services. In most counties, though, CCS care delivery and payments are currently carved out the Medi-Cal MCPs[11] which means that the MCPs do not have financial responsibility for payment of CCS services in those counties. Instead, these CCS-eligible services are reimbursed by a combination of county and state funds on a fee-for-service (FFS) basis (whereby healthcare providers are paid for each specific service performed). Through this FFS structure, children in CCS have two separate payer systems: one for care related to their CCS-eligible condition, and another one for their primary care and care not related to their CCS-eligible condition. These separate payer systems have the potential to lead to inefficiencies and fragmented services.

CCS programmatic and administrative functions may be carried out on a state or county level.[12] Counties with populations less than 200,000 are known as CCS "dependent" counties whereby the state Independent County Operations Section, Dependent County Operations Section (DCOS) shares administrative and medical case management tasks with local county health department staff.[13] The DCOS staff at regional offices located in Sacramento and Los Angeles also work with staff of dependent counties to determine financial and residential eligibility and benefits determination, but the DCOS alone determines medical eligibility for all dependent counties. In counties with populations greater than 200,000, CCS local county health department staff perform all CCS programmatic, administrative, and case management functions; these counties are known as CCS "independent" counties.[14]

Demonstration Pilot

The 1115 "Bridge to Reform" Waiver (Waiver) renewal of November 2010 was intended to identify and test alternative healthcare delivery models for the CCS program. A CCS Demonstration Pilot (DP) was pursued to test the efficacy of transitioning the CCS

[9] https://www.medicaid.gov/medicaid/managed-care/index.html
[10] https://www.dhcs.ca.gov/services/ccs/Pages/ProgramOverview.aspx
[11] https://files.medi-cal.ca.gov/pubsdoco/publications/masters-mtp/part2/calchild.pdf
[12] https://www.dhcs.ca.gov/services/ccs/Pages/ProgramOverview.aspx
[13] https://files.medi-cal.ca.gov/pubsdoco/publications/masters-mtp/part2/calchild.pdf
[14] https://files.medi-cal.ca.gov/pubsdoco/publications/masters-mtp/part2/calchild.pdf

program from a FFS-based healthcare delivery model to an organized healthcare delivery model with capitated payment. The purpose of this change was to consolidate all pediatric care services under one umbrella of services that combined specialty/CCS care and primary care with the goal of improving access to care, coordination of care, satisfaction with care, health outcomes, utilization, and cost-effectiveness. Ultimately, it focuses on ensuring that families receive appropriate healthcare services for their child, effectively integrating care for the "whole child" under one accountable entity.

In 2011, a call for proposals[15] was initiated across California to solicit potential pilot initiatives. The DHCS subsequently chose to evaluate two different models of healthcare delivery for the DPs: the first DP would be implemented with an existing Medi-Cal MCP in a County Organized Health System (COHS); the second DP would establish a new Medi-Cal population-specific health plan (PSP) as part of an Accountable Care Organization (ACO) at a large, non-profit, pediatric hospital and integrated delivery system. While the Classic (non-WCM) CCS model provides complex case management for CCS conditions, it was thought that coordination between primary and specialty care could be streamlined, improve access to care, and decrease potential inefficiencies under one, unified healthcare delivery system.

The DHCS selected Health Plan of San Mateo (HPSM) to participate as the first CCS DP under a full-risk, Medi-Cal MCP model. On April 1, 2013, HPSM, in partnership with San Mateo County Health Services, became the first operational CCS DP under the Waiver. The second CCS DP implemented a new Medi-Cal PSP established as part of an ACO at Rady Children's Hospital – San Diego (RCHSD). This DP began more than five years later, on July 1, 2018.

California Senate Bill (SB) 586: Whole Child Model Program

California Senate Bill 586 was approved in 2016. This approval slated implementation of the WCM into 21 specified counties in California, with three phased-in implementation periods.[16] These implementations periods were to begin no sooner than July 2018.

The goals of the WCM were improved care coordination for primary, specialty, and behavioral health services for CCS *and* non-CCS conditions within MCPs. The benefits were to be consistent with CCS program standards, CCS paneled providers, Special Care Centers (SCC),[17] and the pediatric acute care hospitals providing healthcare. The intent of this approach was to meet the six goals for CCS redesign:

1. Implement Patient and Family Centered Approach;

[15] https://www.dhcs.ca.gov/services/ccs/Pages/CCSDPProjectPilots.aspx#:~:text=CCS DP Request for Proposal

[16] https://www.dhcs.ca.gov/formsandpubs/Documents/MMCDAPLsandPolicyLetters/APL2018/APL18-011.pdf

[17] Special Care Centers (SCC) provide comprehensive, coordinated health care to CCS and Genetically Handicapped Persons Program (GHPP) clients with specific medical conditions. SCCs are organized around a specific condition or system. SCCs are comprised of multi-disciplinary, multi-specialty providers who evaluate the client's medical condition and develop a family-centered health care plan to facilitate the provision of timely, coordinated treatment.

2. Improve Care Coordination through an Organized Delivery System;
3. Maintain Quality;
4. Streamline Care Delivery;
5. Build on Lessons Learned; and,
6. Be Cost-Effective.

With the transition to the WCM, CCS client case management and care coordination became the sole responsibility of the MCP.[18] As part of their new care coordination responsibilities, MCPs in the WCM are required to assess their CCS clients' risk to help determine and coordinate the healthcare services they need. The MCP health risk assessment (HRA) identifies high-risk and low-risk clients, the former of whom have more complex healthcare needs. With this information the MCPs establish an Individual Care Plan (ICP), with a focus on coordinated specialty care, for each high-risk CCS client in partnership with the CCS client, their family, and their care team.[19]

Medi-Cal Managed Care Plans

The WCM was implemented in 21 COHS counties and five separate MCPs: CenCal Health, Central California Alliance for Health, Health Plan of San Mateo, Partnership HealthPlan, and CalOptima (see Table 1). In a COHS, only one MCP operates in that county as the local Medi-Cal plan and serves nearly all members who are enrolled in that MCP.[20] Every COHS is a public entity, created by a county board of supervisors, and governed by an independent commission.

Table 1. Whole Child Model Managed Care Plan and County Information by Phase

Managed Care Plan	County	Independent/ Dependent County	CCS Services Carved-In vs. Carved-Out
Phase I: July 1, 2018			
CenCal Health	Santa Barbara	Independent	Carved-In
	San Luis Obispo	Independent	Carved-Out
Central California Alliance for Health	Merced	Independent	Carved-Out
	Monterey	Independent	Carved-Out
	Santa Cruz	Independent	Carved-Out
Health Plan of San Mateo	San Mateo	Independent	Carved-In
Phase II: January 1, 2019			
	Del Norte	Dependent	Carved-Out
	Humboldt	Independent	Carved-Out

[18] https://www.dhcs.ca.gov/formsandpubs/Documents/MMCDAPLsandPolicyLetters/APL2021/APL21-005.pdf
[19] https://www.dhcs.ca.gov/formsandpubs/Documents/MMCDAPLsandPolicyLetters/APL2021/APL21-005.pdf
[20] https://healthconsumer.org/wp/wp-content/uploads/2016/10/County-Organized-Health-System-Medi-Cal-Plans.pdf

Managed Care Plan	County	Independent/ Dependent County	CCS Services Carved-In vs. Carved-Out
Partnership HealthPlan of California	Lake	Dependent	Carved-Out
	Lassen	Dependent	Carved-Out
	Marin	Independent	Carved-In
	Mendocino	Independent	Carved-Out
	Modoc	Dependent	Carved-Out
	Napa	Independent	Carved-In
	Shasta	Dependent	Carved-Out
	Siskiyou	Dependent	Carved-Out
	Solano	Independent	Carved-In
	Sonoma	Independent	Carved-Out
	Trinity	Dependent	Carved-Out
	Yolo	Independent	Carved-In
Phase III: July 1, 2019			
CalOptima	Orange	Independent	Carved-Out

Following is a summary of every WCM MCP, including the approximate number of CCS clients in each county who transitioned to the WCM. In addition, details gleaned from the qualitative interviews help to describe how each MCP prepared for the WCM implementation, including any promising practices or new procedures they may have established in preparation for or as a result of the WCM.

CenCal Health

CenCal Health provides care to Medi-Cal beneficiaries in Santa Barbara and San Luis Obispo counties, serving one of four people in Santa Barbara County and one in five people in San Luis Obispo County. It was established in 1983 as a COHS and is known to be the oldest Medicaid-only MCP of its kind in the country.[21] Both counties are independent CCS counties; in Santa Barbara County the CCS services are carved-in to CenCal Health whereas in San Luis Obispo County, CCS services are carved-out of CenCal Health.[22] On July 1, 2018, CenCal Health began the transition to the WCM as part of the Phase I implementation. At that time approximately 1,950 and 970 CCS clients in Santa Barbara and San Luis Obispo counties, respectively, transitioned to the WCM.[22]

As with every other WCM MCP, CenCal Health prepared for implementation by holding regular meetings with the participating county's CCS program staff, including CCS administrative and Medical Therapy Unit (MTU) staff. Monthly meetings with CCS staff have been maintained well past the initial implementation period and still continue to this day.

[21] https://www.cencalhealth.org/explore-cencal-health/
[22] https://www.dhcs.ca.gov/services/ccs/Documents/Phase-In-Methodology-11.2018.pdf

CenCal Health also hired some county CCS staff to work for them in preparation for WCM implementation. In particular, one CCS staff was recruited in part to help train CenCal Health nurses involved with the WCM. As part of the nurse training, "cheat sheets" were created in the format of checklists that concisely summarized some of the DHCS Numbered Letters (CCS and other Numbered Letters) that provided guidance on various CCS policies. For example, a checklist was created so that CenCal Health nurses could more efficiently ascertain NICU acuity and whether or not the newborn would quality for a referral to CCS. In addition, CenCal Health hired five pediatric social workers for the WCM. In the absence of a CCS nurse case manager at the CCS Medical Therapy Conference (MTC), CenCal Health sent their pediatric social workers to the MTC to serve as a liaison for the CCS families.

In addition, during the first two months of the WCM implementation, CenCal Health tracked incoming phone calls from CCS clients to the CenCal Health Member Services department. Certain CenCal Health staff were designated as CCS "health navigators" and were responsible for all of the incoming calls related to CCS. If the CCS health navigators were unable to answer a CCS-related question, the call was then forwarded to CenCal Health's Pediatric Department.

In the late spring of 2019, both Santa Barbara County and San Luis Obispo County CCS staff were provided read-only access to CenCal Health's internal system for authorizations, Caradigm. This allowed CCS staff in both counties to access CenCal Health's authorization requests, determinations, and accompanying clinical information regarding CCS clients. Both counties were again provided read-only access when CenCal Health transitioned to Oracle for authorization documentation at the end of 2020.

Central California Alliance for Health

Central California Alliance for Health (the Alliance) is a regional, non-profit managed care plan established in 1996. Under the COHS model, the Alliance serves over 390,000 Medi-Cal beneficiaries who represent 40% of the population of Santa Cruz, Monterey, and Merced counties.[23] All three counties are independent CCS counties and each respective county's CCS services are carved-out of the Alliance.[24] On July 1, 2018, the Alliance began the transition to the WCM as part of the Phase I implementation. At that time, approximately 2,380 CCS clients in Merced County; 2,910 in Monterey County; and 1,120 in Santa Cruz County transitioned to the WCM.[25]

In preparation for the WCM implementation, Alliance staff met with CCS staff from the tri-county area they served in order to better understand the CCS program and administrative processes, such as pharmacy and DME authorizations. Meetings were initially held quarterly and then monthly or on an ad-hoc basis as the Phase I implementation date approached. These tri-county meetings continued after the WCM implementation date and additional, separate meetings were also held with the CCS

[23] https://thealliance.health/about-the-alliance/fact-sheet/
[24] https://www.dhcs.ca.gov/services/ccs/Documents/Phase-In-Methodology-11.2018.pdf
[25] https://www.dhcs.ca.gov/services/ccs/Documents/Phase-In-Methodology-11.2018.pdf

Medical Therapy Program to better understand and coordinate DME provision and therapy.

The Alliance also worked with CCS programs in each county to conduct targeted outreach to healthcare providers and their health plan members. Together, the Alliance and CCS held joint presentations on the WCM and provided information to help the providers better understand the changes related to the WCM, specifically noting a more streamlined billing and authorization process. They also held public information sessions for their plan members, which provided members the opportunity to ask questions and connect with Alliance case management staff.

In the early stages of the WCM implementation, the Alliance adopted some practices learned from the HPSM DP. For example, for a short period of time, the Alliance contracted with one county's CCS public health nurses to maintain the responsibility for continued case management of the CCS clients in the WCM. During this brief time, the county CCS staff were also co-located with Alliance staff.

The Alliance also worked with their tri-county CCS offices to fund administrative positions to help CCS clients who had questions about the WCM and to help ensure their smooth transition to the WCM. In addition, as part of their WCM implementation process, the Alliance also had a dedicated pediatric case management phone line to help CCS clients with case management and care coordination issues.

Health Plan of San Mateo

The Health Plan of San Mateo started operations in 1987 as a COHS in San Mateo County. They currently serve one in five county residents, or more than 130,000 members. San Mateo County is an independent CCS county and CCS services were already carved-in to the HPSM when HPSM implemented Phase I of the WCM on July 1, 2018. The HPSM also participated in the 1115 waiver DP to test the WCM. Their DP was implemented on April 1, 2013 so the majority of HPSM members (approximately 1,500) were already enrolled in the WCM when Phase I was implemented on July 1, 2018. When Phase I of the WCM was implemented, approximately 80 remaining HPSM FFS CCS clients transitioned to the WCM.[26]

The HPSM DP was scheduled to end their three-year pilot on March 31, 2016, but received two one-year extensions from CMS (Centers for Medicare & Medicaid Services). The HPSM then effectively extended the DP to the launch of the WCM Phase I on July 1, 2018. During that time, it tested a "whole child" approach to care for their CCS clients, with the goals of improving access to care, coordination of care, satisfaction with care, health outcomes, and cost-effectiveness. As a part of the DP, HPSM became responsible for the management and coordination of a full range of health care services for the whole child, including periodic health assessments, immunizations, primary healthcare services unrelated to the CCS eligible medical condition, and specialty healthcare services. County CCS retained responsibility for

[26] https://www.dhcs.ca.gov/services/ccs/Documents/Phase-In-Methodology-11.2018.pdf

CCS eligibility determinations and appeals and the provision of physical and occupational therapy through the CCS Medical Therapy Units. Although HPSM was initially responsible for CCS clients' care coordination and service authorizations in the DP, over the course of the HPSM DP implementation it was decided that it would be in the best interest of the child to sub-contract authorization and care coordination responsibilities back to county CCS staff, a practice that still continues to this day.

At the time of the HPSM DP, approximately 100 CCS clients were also assigned to a delegated health plan. Health Plan of San Mateo contracts with a delegated health plan to provide care for some of their CCS clients. This means that although HPSM is the CCS client's Medi-Cal MCP, there are some members who receive their healthcare through a separate, "delegated" health plan. In other words, those CCS clients who are enrolled with this other, delegated health plan have a primary care provider who is part of that other health plan's network of care. These CCS clients obtain most of their healthcare services through the other plan's provider network, which is to say that the delegated health plan is the CCS client's healthcare provider *through* HPSM. With this arrangement, the client's CCS-eligible services are carved out of the delegated health plan's contract with HPSM. In this arrangement, HPSM is still responsible for those clients' CCS-related claims, utilization management, and care coordination.

Partnership HealthPlan of California

Partnership HealthPlan of California (PHC) is a non-profit, community-based health plan operating in 14 Northern California and Bay Area counties. It was founded in Solano County in 1994 and currently provides healthcare coverage for over 600,000 members. There are PHC regional offices located in Humboldt, Shasta, Sonoma, and Solano counties. Half of the 14 counties are independent CCS counties and the other half are dependent CCS counties; the majority (10) of the 14 counties have CCS services that are carved-out of PHC.[27] Partnership HealthPlan of California implemented the WCM as part of Phase II on January 1, 2019, at which time approximately 7,350 CCS clients from all 14 counties combined transitioned to the WCM.[28]

Four counties (Napa, Marin, Solano, and Yolo) had CCS programs that were carved-in to PHC before the WCM was implemented. This meant that in those four counties, PHC had already assumed full financial responsibility for CCS clients and were already paying the claims for their CCS-eligible care and services. During the transition to the WCM, PHC worked closely with these four carved-in CCS counties to help translate and explain some of the nuances and semantics of CCS terms. These four counties also helped to alleviate some of the WCM fears and concerns that some of the other Phase II counties had, since these carved-in counties were already working closely with PHC.

To prepare for the WCM implementation, PHC had monthly meetings with each of the CCS programs in the 14 counties that were transitioning in Phase II. Together with CCS staff (including Medical Therapy Unit staff) and healthcare providers, PHC discussed how to create a more cohesive process in regard to data sharing. As a result, a secure

[27] https://www.dhcs.ca.gov/services/ccs/Documents/Phase-In-Methodology-11.2018.pdf
[28] https://www.dhcs.ca.gov/services/ccs/Documents/Phase-In-Methodology-11.2018.pdf

file transfer site was created for each participating county so they could share pertinent CCS client information with PHC without having to worry about secure email protocols.

Prior to WCM implementation, PHC staff were also trained via a comprehensive, multi-year approach that included up to 40 hours of continuing education and training on complex case management provided by Care Excellence. Partnership HealthPlan of California also met with CCS public health nurses in the participating Phase II counties to prepare for some of the high-risk and "high-touch" CCS clients who might need more complex case management after their transition to the WCM. Working with the CCS programs, PHC was able to identify these clients and obtain a synopsis of their case management file in an effort to make the transition for these clients as seamless as possible.

In addition, PHC (like all of the other WCM MCPs) hired some CCS staff, including case managers and social workers, to work at their plan.

CalOptima

CalOptima is a COHS that was created in 1993 to serve Orange County Medi-Cal enrollees. CalOptima is the largest health insurer in the Orange County, serving more than 847,000 members. It is also the largest COHS in the state and has a network of 9,300 primary care doctors and specialists and 42 acute and rehabilitation hospitals. Orange County is an independent CCS county and the CCS program is carved-out of CalOptima.[29] CalOptima was the only MCP to implement the WCM in Phase III, which began on July 1, 2019. At the time of implementation approximately 11,960 CCS clients transitioned to the WCM.[30]

CalOptima, like HPSM, also subcontracts with delegated health plans to provide care for some of their CCS clients. These CalOptima members receive their healthcare through separate, "delegated" health plans and have a primary care provider who is part of that delegated health plan's network of care. With this arrangement, the client's CCS-eligible services are carved out of the delegated health plan's subcontract with CalOptima and CalOptima is still responsible for those clients' CCS-related claims, utilization management, and care coordination. In addition, Cal Optima also has health networks that are delegated for the provision of case management and utilization management. These health networks manage the entirety of the CCS client's care, including specialty care related to their CCS-eligible condition and their primary/preventive care unrelated to their CCS-eligible condition.

As with every other WCM MCP, CalOptima held planning meetings in preparation for the WCM. Meetings were held quarterly with both County CCS and Regional Center staff and increased in frequency as the Phase III implementation date approached. Meetings were separated and categorized by functional responsibilities: clinical operations, project management, care coordination, information services, infrastructure support, and business operations. CalOptima also held similar meetings with their

[29] https://www.dhcs.ca.gov/services/ccs/Documents/Phase-In-Methodology-11.2018.pdf
[30] https://www.dhcs.ca.gov/services/ccs/Documents/Phase-In-Methodology-11.2018.pdf

numerous delegated health networks to convey standardized CCS processes and procedures to them. CalOptima acted as a liaison between their health networks and CCS, whereby all CCS communication went through CalOptima and they disseminated it to their delegated health networks.

CalOptima also held stakeholder meetings and WCM informational sessions with both providers and families. Family-oriented sessions were held at various times of the day and various days of the week to provide increased opportunities for families to attend. During these sessions, CalOptima staff shared information about how the WCM would impact families and their care. Particular attention was given to the role that the delegated health networks would have in coordinating care for all of the child's healthcare services. Information on the transition to the WCM was disseminated through CalOptima newsletters, notices, and links to websites.

In preparation for the WCM implementation, CalOptima also hired a former CCS medical director and more pediatric nurses with experience treating children and youth with complex health conditions. CalOptima also provided training to their case managers and those in their delegated health networks as well. These trainings were more clinically focused on some of the CCS conditions and considerations when caring for CCS clients. CalOptima also enabled an encrypted file transfer protocol with county CCS so that documents could be securely shared between them before, during, and after the transition to the WCM.

Key Informant Interview Methodology

For the qualitative evaluation of the WCM, 55 interviews were conducted with a total of 83 key informants (KIs) between October 2019 and May 2022. The KI interviews were completed with staff at county Public Health Departments, CCS offices, Medical Therapy Programs (MTP), SCCs, MCPs, durable medical equipment (DME) vendors, advocacy groups, and other representatives (see Table 2).

Table 2. Whole Child Model Key Informant Interviews

	MCP		County CCS		Statewide/ Regional	
	# of Interviews	# of KIs	# of Interviews	# of KIs	# of Interviews	# of KIs
Phase I						
San Luis Obispo			1	1		
Santa Barbara			2	2		
Santa Cruz			3	6		
San Mateo			7	7		
HPSM	3	3				
CenCal Health	2	2				
CCAH	1	2				
Phase I Total	6	7	13	16		

	MCP		County CCS		Statewide/ Regional	
	# of Interviews	# of KIs	# of Interviews	# of KIs	# of Interviews	# of KIs
Phase II						
Del Norte			1	1		
Humboldt			1	1		
Lake			1	2		
Lassen			1	1		
Marin			2	2		
Mendocino			1	1		
Modoc			1	4		
Napa			1	2		
Shasta			1	2		
Siskiyou			1	2		
Solano			2	3		
Sonoma			1	1		
Trinity			1	3		
Yolo			2	5		
Partnership Health Plan	1	4				
Phase II Total	1	4	17	30		
Phase III						
Orange			1	2		
CalOptima	2	3				
Phase III Total	2	3	1	2		
DME Vendor					5	7
SCC Provider					5	6
Other*					5	8
Statewide Total					15	21
TOTAL**	9	14	31	48	15	21

*Other includes advocates and consultants
**Total number of WCM interviews: 55; Total KIs: 83

The KIs were identified and purposively sampled through contact lists that the DHCS CCS Advisory Group provided and through professional connections from members of the UCSF evaluation team. In addition, at the end of each interview, KIs were asked to provide contact information for any colleagues who would be able to provide additional insight about the WCM.

All KIs verbally consented to participate before their interview. Interviews were one hour long and conducted via Zoom. The recorded interviews were subsequently transcribed by vendors who met UCSF standards for HIPAA compliance and data security. If a KI

did not wish to be recorded but still wanted to participate in the interview, detailed notes were taken by the interviewer or another member of the UCSF evaluation team. All transcripts and notes were then analyzed using the qualitative software Dedoose, which allowed two researchers on the UCSF evaluation team to independently code the interviews for salient themes.

The UCSF evaluation team developed a KI interview guide to address the following six research questions outlined in the UCSF evaluation's scope of work:

1. What is the impact of the WCM on children's access to CCS services?
2. What is the impact of the WCM on the patient's and family's satisfaction?
3. What is the impact of the WCM on providers' satisfaction with the delivery of services and reimbursement?
4. What is the impact of the WCM on the quality of care received?
5. What is the impact of the WCM on care coordination?
6. What is the impact of the WCM on costs of care?

Therefore, questions in the interview guide covered:

- Perceived impacts on access to care, satisfaction with care, and service delivery for CCS clients;
- Perceived impacts on reimbursement, quality of care, case management/care coordination, and costs of care;
- CCS and MCP processes and procedures when planning for, transitioning to, and implementing the WCM; and
- Any additional topics that KIs deemed relevant.

The interview guide was sent to the DHCS CCS Advisory Group for feedback. The State of California, Health and Human Services Agency, Committee for the Protection of Human Subjects approved the interview guide.

Results

The KIs reported on their experiences with the WCM implementation. Below are KI perspectives on the transition to the WCM followed by results, organized by research question. Findings on the impact of the WCM on costs of care (Research Question 6) are included with the findings on reimbursement for services and transportation.

Within this report, some policy and process recommendations[31] are also gleaned from the KIs' experiences in the WCM. These recommendations are organized in such a way so that they immediately follow the specific findings to which they were related, and will also be listed again at the end of this report.

[31] It is important to remember that the recommendations shared in this report represent each individual KI's personal perceptions and opinions. In addition, while the findings are not generalizable to all KIs or stakeholders in the WCM, they can provide insight into individual experiences and help to inform current and future policy, process, and procedures.

The Transition to WCM

The KIs were asked about the implementation of the WCM and revealed some of their overall perspectives on the transition to the WCM. In addition, KIs also identified both facilitators and barriers to the transition to the WCM.

Overall Perspectives on the Transition to the WCM

The KIs described their perspectives on the many different aspects of the WCM, including the potential for streamlined care and payment, as well as the fundamental differences between the CCS program and a MCP. All KIs, including those who were not fully supportive of the WCM, agreed that any new CCS model of care must first and foremost prioritize the health and care needs of the CCS clients above anything else.

The KIs recognized that the WCM was the state's effort to align the "whole child's" care under one payer by ending the CCS carve-out of MCPs in WCM counties. This would centralize the payer for a CCS client's specialty care *and* their primary and preventive care to the participating MCP. As a result, this had the potential to not just streamline the payment process but also help the state save money and control costs. As one KI explained, "*I think that what has worked well is… just removing that middle-man as far as the payments…"* (County KI).

As noted previously, CCS is a county-based public health program that was specifically created to address the care of certain children with complex chronic medical needs. In contrast, MCPs emphasize primary and preventive care and have a case-mix of plan members who are children and adults with varied health conditions and needs. Some KIs noted that although this reasoning behind implementation of the WCM made sense, it also represented a fundamental shift in the focus and guiding principles of CCS.

> *"We don't look at ourselves within each county as a health insurance company. It's [CCS] a public health program for kids with special needs. That's a very different mindset than the insurance company."* (County KI)

They KIs from all entities (i.e., county staff, health plan staff, advocates) noted that regardless of the model of care, any changes to CCS should be in the best interests of the CCS clients and their families. Some KIs identified this as the original intention of the CCS program, and therefore said that this guiding principle should continue to be the impetus behind any future iterations or financial realignment of the program. As one KI noted, *"[T]hat was sort of the mantra most of us at CCS were indoctrinated into… always act in the best interest of the patient."* (County KI)

> → **KI Recommendation:** Any future redesigns of the CCS program should prioritize the needs of the CCS clients above everything else.

Facilitators to the Transition to the WCM

The KIs were asked to identify anything that helped to facilitate the transition to the WCM for the stakeholders involved. KIs noted the importance of forming and maintaining relationships before, during, and after the transition to the WCM, as well as

the importance of engaging in ongoing and transparent communication with partners. Other facilitators included the involvement of Family Advisory Committee, MCPs hiring CCS staff, and initiating new policies or procedures to ensure continuity of care for CCS clients.

Establishing Relationships between CCS and MCPs

Many KIs noted that establishing and maintaining a relationship between county CCS and the MCP before, during, and after the transition to the WCM helped to ease the process.

> "*I think the development of that relationship with the counties is crucial to any success and any smooth transition... The counties and the health plans need to be on the same page, and they need to be in sync so that the CCS county is supportive of this transition*." (MCP KI)

> → **KI Recommendation:** A successful transition to the WCM should include collaborative relationships between the county CCS program and the MCP.

Transparent Communication

It was also noted that the relationship between CCS and the MCP needed to include transparent information sharing and open communication. This would allow partners to benefit from the knowledge and experiences they shared with each other.

> *"I'll say that [a] really collaborative relationship between the CCS staff and nurses, social workers, and the [MCP] staff has been really – I think it's been a really positive thing. There's been a lot of knowledge translation…"* (County KI)

Involvement and Input from the Family Advisory Committee

In addition, the convening of the mandated Family Advisory Committees (FAC) also provided the MCPs with useful perspective and insight from CCS families. Feedback from the FAC helped the MCPs prepare to work with the CCS families by highlighting some of the potential challenges faced by CCS families. The FAC also offered the MCPs practical solutions and ways to overcome these challenges.

> *"One of the first things they [Family Advisory Committee] brought up was not knowing who your nurse case manager is and what they could do for you. And so the MCP and CCS created a letter, with a picture of the nurse case manager in Spanish and English, and it was sent out to every family… So, I think that that was our first success, and I think it made a huge difference for our families."* (Advocate KI)

> → **KI Recommendation:** The MCPs should continue to engage with their Family Advisory Committees to help address ways to overcome challenges and barriers to care.

Managed Care Plans Hired CCS Staff

All of the five WCM MCPs noted that they hired CCS staff to help facilitate the transition to the WCM. When an MCP hired CCS staff, it was often noted as a benefit for both the MCP and the CCS program. This was because KIs agreed that MCPs would have a better understanding and knowledge of CCS clients by virtue of employing former CCS staff. County CCS benefited because they had a person within the MCP who understood the authorization processes and needs of the CCS program.

> *"Another fortunate thing was that… our CCS [staff position]… transitioned to the [MCP]. So, we knew who they were, we already had good working relationships. We were confident in what they understood about the program."* (County KI)

> → **KI Recommendation:** The MCPs should hire CCS staff to help both the MCP itself and the county CCS program transition to the WCM.

Procedures to Ensure Continuity of Care

Some KIs also noted how some procedural changes specifically helped to make clients' transition into the WCM easier; these changes also helped to ensure continuity of needed medications and services. To ensure that CCS clients could still access their medications after they transitioned to the WCM, one MCP established an open medication formulary that CCS clients could use for a limited time.

> *"[MCP] offered a three-month open formulary for all CCS transition members so they wouldn't have any restrictions on any medications."* (MCP KI)

Another MCP pharmacy proactively asked about prescription information to help the MCP better prepare for the clients' transition. One KI recalled that, *"I remember the [MCP] pharmacy asking us to get information on all the medications that our children had so that they could be ready."* (County KI)

> → **KI Recommendation:** The MCPs should take proactive steps to help ease the CCS clients' transition to the WCM by implementing a limited-time open formulary for medications or identifying the medications a client was on before their transition to the WCM.

Barriers to the Transition to the WCM

The KIs were also asked to identify any barriers to the implementation of the WCM. Barriers commonly identified were related to inadequate notification and information shared about the WCM, which sometimes led to confusion for both families and providers. There was also the perception that MCPs didn't fully understand CCS and the needs of CCS clients. Another barrier noted was the limitations and inefficiencies of data sharing through CMS Net, the CCS case management system.

Inadequate WCM Notification and Information

Although all of the KIs were well aware of the implementation of the WCM, some noted that the WCM information that was shared with various stakeholder groups (e.g., county

CCS staff, CCS clients and their families, providers/physicians) did not adequately meet their respective needs. For example, some KIs were concerned that the guidelines received from the state were too general, lacked details and specifics, and did not incorporate the county's earlier feedback about the CCS program.

> *"The state did provide guidance. They definitely told us how it was to look. But … it's very different from doing that, a) informed by knowledgeable people with experience in the program, and b) with the level of detail that we really needed to make this to be a successful transition."* (CCS KI)

Other KIs also noted that the information from the state lacked clarity and was therefore interpreted differently by the counties and the MCPs.

> *"I've read this from the state and this is how I interpret it is, and then the [managed care] plan reads it and that's how they interpret it. And then XX county reads something, and they interpret it one way. So, there were still some things that were not very clear, and probably still are not clear today… there was a lot of room for people to interpret things one way and that caused some confusion."* (CCS KI)

Some KIs revealed that the confusion about WCM guidance could also be attributed to inconsistencies in what information was shared with the MCPs and the counties.

> *"Whatever a county hears, the health plan needs that same information. Whatever the health plan gets in terms of instructions, the county needs the same information. I think different people are transmitting information and it's not always being shared and it's not always the same."* (MCP KI)

In addition, one KI noted that there was never a mechanism for the MCPs, WCM counties, and the state to convene and talk about the WCM implementation and guidelines.

> *"The communication was not well-integrated. The Department [of Health Care Services] held the conversations with the health plans. The Department held conversations with the counties. The counties and the health plans talked. But there wasn't really a forum where all three at a regional level were coming together to talk through kind of how this would work."* (MCP KI)
>
> → **KI Recommendation:** The state should share all guidance and information on the WCM implementation with all involved MCPs and county CCS programs. This information must be detailed, specific, and clear and leave no room for subjective interpretation by any of the entities involved.

Other KIs noted that although WCM information was shared with CCS clients via 90-, 60-, and 30-day notification letters from the state, these letters were written in a reading level that was too high, making it difficult for the families to understand them.

> *"The [MCP] sent out a letter to the families. It was written in health plan language and was pretty confusing. I had a lot of families bring me the letter, and say, 'What does this mean?' It was very high health literacy. It was translated into Spanish, but still way above what most of our Spanish [speaking] families were able to understand."* (Advocate KI)
>
> → **KI Recommendation:** The state should ensure that all WCM notifications and letters that are sent to CCS clients and their families are written at appropriate reading, linguistic, and health literacy levels.

Even though WCM information was initially disseminated at Special Care Centers (SCCs), some KIs surmised that the information may not have actually been shared with the physicians.

> *"[SCC] got the information but it never trickled its way down to the physicians, the specialists… Maybe information got to a certain point in each of these big institutions, but they never completely made their way down… That was something that was really problematic initially."* (CCS KI)

When asked about the kind of information SCC providers received about the WCM, one SCC provider said, *"None. We got no information. The way I got this was from my social worker telling me that, 'Some counties, they're going to this model. And it means this, this, and this.' But I did not get any other information otherwise."* (SCC KI)

> → **KI Recommendation:** The state should ensure that all WCM notifications and letters are disseminated to all CCS-paneled providers and SCCs.

Confusion about the WCM

Even when providers knew about the WCM, they were oftentimes still confused about it. The main issue providers were most confused about was the new WCM process for authorizations and referrals to CCS. As one KI stated, *"There was a lot of confusion with providers in the beginning, even at bigger special care centers. Information wasn't being sent on how referrals were supposed to work under a transition to Whole Child Model."* (County KI)

Providers at SCCs are in a unique position because they serve CCS clients from the entire state; some of their clients might be from a WCM county and others might be from a Classic CCS county. Even if providers knew about the WCM, KIs noted that they were still confused about the different processes required for CCS clients in WCM counties versus those who lived in Classic CCS counties.

> *"There's a lot of misunderstanding, I would say mainly in the provider community, not understanding how to navigate the Whole Child Model, because now they have to do it a certain way for some counties and a different way for other counties."* (CCS KI)

→ **KI Recommendation**: The state should provide healthcare providers in the WCM clear guidelines on the different processes for providing care and services to CCS clients in the WCM and those in Classic CCS counties.

Managed Care Plans Limited Knowledge about CCS

Some KIs described another barrier to the implementation of the WCM as the MCPs' limited knowledge of CCS and experience with CCS-eligible conditions. It was also noted that the MCPs were probably not as familiar with other safety net services (e.g., for food or housing insecurity) and resources that CCS clients might need.

> *"…They [MCPs] don't have the knowledge of CCS to know which ones are CCS-medically eligible… at CCS we know the programs that families could benefit from, and I don't know that the managed care plan knows that. So, again, the families are missing out on that."* (CCS KI)

Inefficient Data Sharing and Inadequate Data Systems

Another barrier identified by many KIs was the issue of inefficient data sharing processes and procedures due to the limitations of CMS Net, which is the CCS case management system. The CCS case managers enter all client notes into CMS Net, including (but not limited to) information needed when conducting annual medical reviews (AMRs) and determining CCS eligibility, which are two responsibilities that county CCS programs are still responsible for in the WCM.

In the WCM, MCPs only have read-only access to the CMS Net information. This means that MCP case managers cannot enter any CCS client case management or utilization information into CMS Net. Instead, the MCPs have their own, different data systems where they enter this information and between these two systems, *"neither one can look at the other"* (County KI) since they're *"two different systems and one [i.e., CMS Net] is very, very tailored for a particular type of population and the other one is not."* (MCP KI)

These inefficiencies in data sharing between the MCP and CCS tend to arise when a CCS case manager is completing an AMR for a client in the WCM. Since each entity uses a different data entry system, CCS case managers have no way of accessing the client's MCP medical records, including details or information about any MCP services their clients received. Even though MCPs are responsible for providing all medical utilization and other clinical data when requested by CCS to complete the AMRs, county KIs often reported that this was a laborious and inefficient process.

> *"They [MCPs] are not able to add information to CMS Net that county CCS could previously. So, CMS Net does not paint a complete picture for annual reviews… there's still a level of coordination in the sharing of patient information that it's not as easy or as efficient as it could be."* (County KI)

→ **KI Recommendation:** The state should provide WCM MCPs with full access to CMS Net, or centralize the data systems used for case management so that there is one consolidated system that can be used by both MCP case managers and CCS case managers.

County KIs also noted that MCP staff did not understand the information needed to process AMRs and that *"they don't really know what to look for."* (MTP KI) The MCPs would either send CCS too much or too little information. In other words, some MCPs simply send all of a client's files without taking any time to sort through them for the pertinent information that was needed by CCS. Other MCPs sent records that were inadequate or not needed for completing an AMR.

> *"They upload the records, but they're not necessarily the most recent records or all of the records. Or, they upload all of the records, and then we have to slog through all of the records."* (County KI)

The KIs reported that both CCS and MCP staff spent significant amounts of *"time just doing this busy work"* (MCP KI) of combing through the records for the pertinent information or communicating with each other to identify the appropriate records CCS needed to complete the AMRs.

In addition, the inability of MCPs to have full access to CMS Net presented challenges when a CCS client transitioned from one county to another, which is known as an inter-county transfer (ICT). This was especially true when a CCS client transferred from a WCM to Classic CCS county, or vice versa. As noted above, CCS has full access to CMS Net and WCM MCPs have read-only access. This means that when there is an ICT from a Classic CCS county to a WCM county, the MCP will be able to view the entirety of that CCS client's files in CMS Net. Yet when there is an ICT of a CCS client from a WCM county to a Classic CCS county, CCS will be unable to view any of the client's MCP history because it was entered into the MCP data system and not in CMS Net; this includes their MCP authorization history and any case management or utilization notes, which can have subsequent implications for continuity of care and service provision.

> *"When we [WCM county] receive a client from a [Classic CCS] county, we still see everything that they did because they're still in CMS Net. But when it's the other way around from… the Whole Child [county] to a [Classic CCS] county – they don't have that benefit of the history anymore."* (CCS KI)

Research Question 1: What is the impact of the WCM on children's access to CCS services?

The transition to the WCM impacted access to care because some KIs noted that CCS experienced a decrease in referrals into the program. The KIs also described a change in the authorization process for service authorization requests (SARs) and DME authorizations. The WCM also had an impact on referrals to specialists and Medical Therapy Units (MTU), which in turn impacted access to providers and DME.

Although the implementation of the WCM affected access to care in a number of ways, it is first important to note that that there were some differences in access that existed before the WCM was introduced. This difference was mainly due to geography and physical proximity to needed services and supports.

Differences in Rural versus Urban Access

Although not specifically related to the WCM, some KIs recognized these inherent differences in access to and availability of transportation and providers (including hospitals, doctors, and therapists) in rural versus urban counties, with urban counties having a distinct advantage.

> *"We've been very lucky, here in [county], in that resources are really plentiful compared to much of the state. We have good infrastructure; there's transportation available; there's several large hospitals close by… there's no shortage of major treatment centers… Our families don't have to travel a long way to get treated, so they have lots of choice even locally here in [county]."* (County KI)

Rural counties, by contrast, tended to have less access to all types of providers, regardless of the implementation of the WCM.

> *"[County], even though we're a very small county within the [region], people don't understand that we don't have the same resources and providers as our neighboring counties. And so we had to be creative in getting the same access for our children."* (MTP KI)

Differences in Dependent versus Independent County Access

In addition, some DME vendors spoke about differences between smaller, dependent CCS counties and the larger, independent counties where the local county health department staff perform all CCS programmatic, administrative, and case management functions. One KI surmised that *"the bigger the county, the less resources they have, or maybe the more work."* (DME Vendor KI)

Decreased Referrals to CCS

After the transition to the WCM, some county CCS programs experienced decreased referrals into the program, mainly for neonatal intensive care unit (NICU) and High-Risk Infant Follow-Up (HRIF). In many WCM counties, this led to an overall decrease in their CCS program's total caseload after the transition to the WCM.

In the WCM, the MCPs became responsible for assessing for NICU acuity and HRIF and as needed, were supposed to make referrals to CCS for eligibility determinations. Even so, many county KIs noted that after the transition to the WCM neither the MCPs nor the providers were making these referrals to the CCS program. These KIs noted decreased numbers of these types of referrals to CCS after the WCM was implemented.

> *"We had a 22% drop in referrals in [year] compared to [year]. And part of that is that we are not getting notifications of NICU acuity eligible babies from the health plan, because that's one of those ones where the health plan is now responsible for determining eligibility for NICU acuity. And then, they're supposed to notify us, so that we can enter the child into CMS Net. But that's not happening. We're not getting those notifications."* (CCS KI)

Some KIs surmised that providers also may not have been actively making referrals to CCS because they were unclear about their roles and responsibilities in the WCM, or even confused about the WCM in general.

> *"One of the issues that we're dealing with is a significant reduction in our referrals because providers either think the [CCS] program's gone, they don't know how to get the referrals, or they're just disappearing into a black hole."* (CCS KI)

The KIs also expressed a lack of clarity and guidance from the state on who was responsible for NICU and HRIF referrals. It was unclear if the county or the MCP was supposed to make the referrals to CCS, and once guidance was released there was no state oversight on the process.

> *"We have been doing NICUs for this whole year, which we shouldn't be according to the [Senate] Bill [586]… Because according to the law, and what the state has set forth, the managed care plan is supposed to be taking care of the NICUs. But the reality of it is that's not happening. And [there] doesn't seem to be any oversight on the part of the state in terms of who is doing the next NICU eligibility."* (CCS KI)

For dependent CCS counties, there was an additional layer of confusion around who was responsible for the NICU and HRIF referrals since the state was responsible for eligibility determinations in those counties.

> *"The state needs to send out a numbered letter on exactly how the NICU referrals are supposed to work for dependent counties and high-risk infant. We don't determine medical eligibility… And if the state's not going to review them and we're not going to get them from [MCP], they're just going to sit in the system unapproved."* (CCS KI)

> → **KI Recommendation**: The state should clarify its guidance on who is responsible for NICU eligibility determinations in the WCM, for both dependent and independent counties, and subsequently provide oversight on this process.

In addition, in the WCM there were certain services that no longer required prior authorization and could therefore be directly billed to the MCP for payment. When this happened, KIs noted that referrals were not made to CCS since the claim was just sent directly to the MCP for payment.

"Another issue with the health plans is that they auto-authorize and auto-pay a lot of their services… Our health plan, all emergency room visits are automatically authorized and paid, so nobody looks at any emergency room activity any longer for any referrals to CCS. That's a chunk of the [CCS] caseload that has just vanished." (CCS KI)

Service Authorizations

In the WCM, service authorization requests (SARs) – which are the CCS equivalent of Medi-Cal Treatment Authorization Requests – were no longer the responsibility of CCS, but instead became the responsibility of the WCM MCP. To help ensure continued access to care during the transition to the WCM, some MCPs honored (and subsequently paid the claims for) active SARs that had not yet expired.

"What we decided that we would do is for any CCS-eligible child… that made the transition [to the WCM], if their SAR with the county was still active… we said go ahead and continue your clinic visits, continue your treatments, etc., and we will pay the claims according to the fact that you have an active SAR still in place while we're in this transition process for up to six months..." (MCP KI)

→ **KI Recommendation:** The MCPs should honor active SARS for those CCS clients who transition to the WCM.

Some KIs also talked about changing what services needed a prior authorization or even removing the prior authorization requirement from certain services, both of which improved access to care. As one KI noted:

"We changed what requires a prior authorization and what could be provided without a prior authorization process… so we actually were able to streamline what services require prior authorization...." (County KI)

Other KIs spoke about automatically authorizing certain services, which also helped to streamline the authorization process and ensure continued access to care for CCS clients.

"I think that the one thing that they did was when the kids transferred over, they had the authorizations on auto-approval, which was good because all of the services that the families were receiving at that time would continue." (County KI)

Another KI also noted that MCPs had specific guidelines that required them to approve authorizations within a certain timeframe. Similar CCS guidelines were not enforced as strictly as they were at the MCP, meaning that CCS authorizations may not have been processed as quickly in Classic CCS as they were by WCM MCPs.

"Because the WCM health plan has to follow health-plan guidelines in terms of turnaround time, if an urgent request comes in, we have to act on it within 72 hours… whereas at CCS… we were not meeting timelines. Things would sit

there for a while. And we would get to it when we got to it… because there's really no... negative feedback (at least that I was aware of) to CCS." (MCP KI)

One MCP KI said that the authorization process was easier and more efficient for providers in the WCM because neither the county nor the state (in the case of dependent counties) were involved – it was just the MCP.

> *"…what I think would have happened two years ago… [an authorization] would have taken more time, because you would have to wait for the denial coming from the county and then the request going to the health plan and then the health plan proceeding with its review. I think because we can now do it all kind of in a one-stop shop, it's more efficient."* (MCP KI)

Authorizations no longer had to be processed by the state in WCM dependent counties, as that was now the MCP's responsibility. Not having to rely on the state for this task meant that authorizations were approved more quickly in some of the WCM dependent counties.

> *"I don't think the clients have the backlog with approvals for their treatment like they used to because the state's not reviewing them for dependent counties. I think it's just a dependent county issue. The state doesn't have to review the SARS like they did. We used to have… a thousand SARS pending."* (CCS KI)

Durable Medical Equipment Authorizations

The process for authorizing DME also changed in the WCM: the Medical Therapy Units (MTU) could no longer authorize any DME, but could only recommend it as MCPs now had the responsibility for DME authorizations as well. Knowing that the MTU authorization process would change, some MTU staff developed a process to help MCPs with the DME authorization process.

> *"For the medical therapy program, we did this DME and orthotic approval/denial packet, [and] it's been good. They [MCP] have accepted our expertise on our kids and they've accepted that if we approve it, then they authorize it… for the most part, it's been very successful."* (MTP KI)

One DME vendor also suggested that Medi-Cal have more flexible authorization requirements for DME repairs, especially for those CCS clients with chronic conditions who would need certain DME and repeated repairs for their entire life:

> *"[Medi-Cal should] consider establishing a higher threshold for repairs that wouldn't require prior authorization, particularly when the equipment has already been approved and the medical need has already been established – it doesn't make sense that we have to gather medical documentation or ask for a prescription and then submit for prior authorization for replacement batteries that a kid with cerebral palsy has a lifetime need… [Medi-Cal needs to] consider*

removing that prior authorization requirement so people can get the repairs done faster." (DME Vendor KI)

→ **KI Recommendation:** Medi-Cal and the MCPs should remove prior authorization requirements for those CCS services or DME repairs that are repeatedly and continually required throughout a CCS client's lifetime – or automatically authorize these CCS services or DME repairs – to streamline access to these services and repairs.

Referrals for Specialists and MTU Services

Some KIs noted that in the WCM, the MCP referrals for specialist care or MTU services was not as streamlined as it was through CCS and that referrals, *"take a little longer [in the WCM]."* (SCC KI) To obtain specialist services in a WCM MCP, a referral had to originate with the primary care provider (PCP), which could delay access to care. In Classic CCS, services with a specialist could be approved immediately, expediting access to care.

> *"The other thing that's a little bit different about CCS versus the [MCP] is that CCS, when there was a referral to a specialist, we could make that happen instantaneously. Whereas at the [MCP]… everybody was referred back to their [primary care] doctor's office, and the doctor's office would have to generate the referral, and that's not really the way that we did it here in CCS."* (County KI)

Even so, one KI expressed hope that CCS clients in the WCM would be getting more timely access to the specialty care they needed since their primary care and specialty care were now going to be covered by one entity, and not two.

> *"I'm more hopeful that kids can access specialty care better, because they're going through the [MCP] for all their other healthcare, too… It is my hope that that is going to be to the benefit of the child."* (County KI)

Another KI noted how communication about referrals in the MTU were seamless in Classic CCS, whereas in the WCM there were new rules that the MTU had to follow.

> *"Authorizing of MTU services used to be really easy. The pediatrician, or the orthopedist, would schedule a surgery during the MTC (medical therapy conference) and then our MTU staff would communicate with administrative staff, and everything would be processed. So, that communication was seamless. Now there were new rules for the [Medical Therapy] Unit to follow for [MCP] referrals..."* (County KI)

A subsequent section of this report will address the impact that the WCM had on referrals to CCS. This section will include a discussion of how the implementation of the WCM resulted in decreased referrals to CCS from high-risk infant follow up (HRIF) and the neo-natal intensive care unit (NICU).

Access to CCS-Paneled Providers in MCP Provider Networks

The WCM offered CCS clients access to an expanded network of MCP providers. Although CCS clients now had access to more providers, this larger pool of providers also increased CCS client's access to more specialists who were *not* CCS-paneled providers.

Additionally, the constraints and limitations of MCP networks also impacted CCS clients' access to CCS-paneled providers and specialists. This was especially true if the client's specialist or CCS-paneled provider was not in the MCP network of care. One SCC KI described how when this happened, it could lead to delays in care and disrupt a client's continuity of care.

> *"…Because of the Whole Child program [sic], because we're not in-network with that specific IPA [independent physician association] group, it's making it difficult for these patients to come and see us… there's a possibility that the patient might not be seen..."* (SCC KI)

If a provider or SCC was not in the MCP network, then the MCP would have to execute a Letter of Agreement (LOA) before the client could be seen, which could also lead to delays in accessing care.

> *"I think there may have been times where that may have led to a delay in an appointment or possibly having to cancel and reschedule an appointment because they hadn't reached an agreement for this kind of letter of agreement that has to happen every single time a kid is going to one of those [Special Care] Centers."* (MCP KI)

Conversely, if an SCC or provider was in the WCM MCP network, then access was not impacted. As one KI noted, *"…the WCM health plan is contracted with many of the major centers around. So, access to care has not been an issue."* (MTP KI)

Access to DME

There have been recent reports about the challenges CCS clients face when trying to obtain needed DME and supplies[32,33] due to the complexities of the CCS program, numerous state and federal laws and regulations, and multiple payers. In addition, CCS currently has no requirements in place to ensure timely delivery of DME, meaning some children can wait many months for equipment.

The shortage of DME vendors and resources throughout the state has also been noted, with one DME vendor commenting that there are *"several counties that had one or less DME [vendors] in their entire county."* (DME Vendor KI) In any county, WCM or not, access to DME could be delayed due to the limited number of DME vendors who had

[32] https://healthlaw.org/resource/helping-families-obtain-durable-medical-equipment-and-supplies-through-the-california-childrens-services-ccs-program/
[33] https://www.lpfch.org/publication/threading-labyrinth-why-children-california-special-health-care-needs-endure-delays

the qualifications, skills, and experience in fitting DME for children with complex chronic conditions. The demand for qualified vendors sometimes necessitated using a waiting list, further delaying a CCS client's receipt of needed DME.

> *"We have a limited number of vendors that can do the work, so just by that, even if we wanted to approve it, certain vendors are on a waiting list. Like, 'We'll get to that wheelchair as soon as we get this one done.'"* (CCS KI)

> → **KI Recommendation**: As the provision of DME is key to a CCS client's independence, safety, and health, it is imperative to have an adequate and skilled network of DME vendors throughout California.

Key Informants Who Were Not DME Vendors Reported Mixed Results on Access to DME

Those KIs who were not DME vendors reported mixed results when describing the WCM impact on access to DME – some spoke of more streamlined access to DME in the WCM and others described better access in Classic CCS. For example, one KI noted that, *"The MTU folks [are] working with the [MCP] to try to streamline the DME provision… that's improved since the Whole Child Model came in."* (CCS KI)

Several KIs also noted that in the WCM there was more flexibility to approve DME because they had multiple approval criteria which they could use, including CCS, state Medi-Cal, or MCP criteria. In Classic CCS, the approval criteria would be limited to only using the CCS numbered letter criteria or Medi-Cal state guidelines. The WCM increased the opportunities for a client's DME to be authorized, potentially giving them access to a piece of DME that might otherwise be denied.

> *"So, we start out with the CCS criteria: 'Can we… authorize based on CCS?' Yes? Great, we're done. No? If I were at the county, then that would be denied and sent to the health plan… at the health plan: 'Can I authorize your continuous glucose monitor using Medi-Cal criteria, or whatever the request is?' Yes? No? Great. [Then] if it doesn't work that way… I go to [criteria] the health plan uses..."* (MCP KI)

In addition, some dependent county KIs noted that the process for obtaining DME under the WCM was more streamlined since the authorizations were now being sent directly to the WCM MCP and not the state. This meant that CCS clients were getting their DME more quickly than before the implementation of the WCM.

> *"With the change to the Whole Child Model — the durable medical equipment— and some of the things that we used to have to send to the state now go directly to the [managed care] plan. And I think that has been a positive thing for our children because the plan processes these things much more quickly. And the children get the durable medical equipment much more quickly."* (CCS KI)

On the other hand, there were a few KIs who reported that DME authorizations were done more quickly in Classic CCS. One MTP KI noted that when they had control over

the DME authorization process in Classic CCS, it allowed for more streamlined provision of DME.

> *"I liked [it] prior… equipment-wise, I thought it was great that we had such control in terms of where you could really streamline [receipt of] DME through doing authorizations at the county level."* (MTP KI)

DME Vendors Agreed Access to DME Improved in the WCM

All KIs who were DME vendors described a more expeditious process when obtaining DME authorizations in the WCM. In Classic CCS, it could take 45 - 60 days for a DME authorization to be approved by CCS. This process was much quicker in the WCM now that the MCPs were responsible for DME authorizations. As one DME vendor noted, *"we usually have the authorization [from the MCP] in five days or less"* and that *"the MCPs seem to help streamline the process."* (DME Vendor KI) Another KI described the authorization process as being *"two steps [with MCP], [but] when CCS is involved we're doing about 14 steps."* (DME Vendor KI)

The faster MCP authorization process resulted in CCS clients obtaining needed DME much quicker in the WCM.

> *"A regular [Classic] CCS SAR could take 45 to 60 days. Whole Child Model is definitely a lot quicker than that – definitely quicker... which then allowed us to be able to provide the equipment sooner [when] we waited for authorization from the Whole Child Model."* (DME Vendor KI)

Many DME vendors attributed the quicker process to the fact that the MCPs in the WCM required less documentation for DME authorizations. When submitting a DME authorization in Classic CCS, one DME vendor described how they *"are spending so much time and effort into obtaining the documentation to submit to CCS."* (DME Vendor KI)

> → **KI Recommendation**: Classic CCS counties should reduce the DME vendor documentation requirements for DME authorizations.

Not only did Classic CCS require substantial documentation to approve authorizations, but a few of the DME vendors also noted that CCS denied many of the DME authorizations sent to them.

> *"A lot of times [Classic] CCS tends to deny, defer, deny, defer, deny, defer multiple times. We're not seeing that a lot with the Whole Child Model."* (DME Vendor KI)

One DME vendor estimated that their CCS *"denial rate is about 70% denial."* (DME Vendor KI) This high denial rate combined with the longer authorization process in Classic CCS made it challenging for some DME vendors to provide needed services. This KI described the impact as follows:

> *"If we don't get an authorization up front, it's very difficult for us to provide service for these patients… and by the time CCS denies us… here we are out three months. In some of the cases… we can't provide service."* (DME Vendor KI)

Access to Transportation

Classic CCS counties provide a Maintenance and Transportation (M&T) benefit[34] for their clients to cover transportation to medical services related to the CCS-eligible condition. This reimbursement is authorized by CCS when the transportation costs are a barrier for a client to access eligible care.

After the implementation of the WCM, the MCPs became responsible for the M&T benefit and used a broker/vendor model to provide transportation benefits. Similar to the M&T benefit covered by Classic CCS, these MCP transportation vendors provided a range of options including scheduled van services, travel/mileage reimbursement, and ridesharing services. In addition, the MCP also brought the advantage of an expanded network of transportation vendors who provided the aforementioned services.

This expanded transportation network increased a CCS client's options since instead of having a limited number of transportation vendors to choose from in Classic CCS, the MCPs had transportation *"providers throughout the state."* (MCP KI) Another KI agreed, noting that the MCP transportation network increased access to transportation that could provide services to more locations.

> *"The theory is that transportation is more readily available, and I think that it is in most cases. They [MCP] have transportation available both locally and long distance."* (County KI)

Although the transition of the M&T benefit to the MCP may have increased access to more transportation providers, in some instances it resulted in decreased access to care. This is because in Classic CCS the case managers also helped their clients arrange transportation to appointments. In the WCM, it wasn't as common for the MCP case managers or the transportation vendors to help coordinate transportation for CCS clients. This meant that in the WCM some CCS families struggled with arranging transportation on their own and as a result, would just cancel an appointment instead.

> *"Some families just are canceling their appointments because they can't seem to get the assistance that they need [with transportation] when they call [the transportation vendor]."* (CCS KI)

> → **KI Recommendation**: The MCPs or the transportation vendors should provide CCS clients assistance in arranging covered transportation services to/from appointments.

[34] https://www.dhcs.ca.gov/services/ccs/Documents/ccsnl030810.pdf

Research Question 2: What is the impact of the WCM on the patient's and family's satisfaction?

The KIs reported on patient and family dissatisfaction with the new MCP transportation vendors and the ensuing challenges they had with transportation scheduling and reimbursement. This is discussed in the section on Maintenance and Transportation Coordination.

Other KIs reported their own experiences, dissatisfaction, and frustration regarding the process of re-enrolling CCS clients into Medi-Cal and the increased workload of CCS staff immediately after the transition to the WCM. As a group, all DME vendor KIs expressed satisfaction with the expedited authorization process in the WCM, which in turn was beneficial for both the CCS clients as well as the DME vendor staff.

Medi-Cal Re-Enrollment Process

Many KIs spoke of CCS clients in the WCM who lost their Medi-Cal eligibility, which could sometimes occur if there were delays or mistakes in processing annual renewal documentation.

Without Medi-Cal coverage, the CCS client was no longer in the WCM or covered by the MCP. This also meant that during this time, the authorization and case management responsibility for the CCS client would revert back to county CCS. In the meantime, *"the county is hustling to get them connected to Medi-Cal. So the county's on the hook for paying the bills if it's not picked up by Medi-Cal"* (County KI) since CCS is responsible for the client until they are re-enrolled in Medi-Cal.

Sometimes this re-enrollment process stretched over many months, as CCS waited for the MCP coverage to start again at the beginning of the subsequent month. Other times, CCS would start case management activities only to have them halted at the end of the month because the CCS client's Medi-Cal re-enrollment had been approved and the client was back with the WCM MCP.

> *"We've also had trouble with children who churn on and off Medi-Cal. They're on one month; they're off the next. Or, they're on [MCP] one month, the next month they're not capitated to [MCP] and so they are our [CCS] responsibility to case manage, which we attempt to do. Then, when we get started, the next month they're back on [MCP]."* (CCS KI)

Not only is the Medi-Cal re-enrollment process impacted, but this movement between the MCP and CCS case management also has the potential to disrupt the continuity of care for the CCS client. In addition, due to the limitations of CMS Net discussed previously, CCS does not have access to the case management notes of the CCS client while they are in the MCP, making it more difficult for CCS to case manage these clients while they are waiting to be re-enrolled in Medi-Cal.

CCS Staff Workload

In the WCM, the MCPs were responsible for the care coordination and authorizations that CCS public health nurses used to do. As a result, the CCS program budgets and staff decreased accordingly in the absence of these tasks. Even so, there was still other program work for which the counties were responsible, which was frustrating for the CCS staff that remained. As one CCS KI explained:

> *"When we went [to the] Whole Child Model, there was a significant reduction in the FTEs and the staffing permitted because a majority of our workload moved to the health plan... And I do think the State does not understand how much work remains at the county level... we've tried consistently to help the state understand is that there's a lot more work left for the counties than they anticipated or planned or budgeted for."* (CCS KI).

Even though the reduction in CCS program funding was anticipated after the WCM, the increased workload that followed was not. One KI commented that, *"we're constantly doing things outside of our… new scope [of work]"* (CCS KI) while another noted that, *"we're doing more work than what we're being compensated for."* (County KI)

The CCS KIs reported the initial, unforeseen increase in work after the transition to the WCM was related to the time and effort they were spending on mainly two tasks: answering CCS client questions about the transition to the WCM and obtaining the appropriate paperwork from the MCPs for AMRs.

The CCS KIs specifically mentioned the influx of telephone calls they received during the initial transition to the WCM. Many of these calls were from parents of CCS clients who were confused about their transition to the WCM; because of the close relationship families had with their CCS case managers, they often called them before reaching out to the MCP for explanation or further understanding.

> *"I feel really bad not taking care of [the families], especially in this transition [to the WCM]. I end up answering most of their questions, even though case management is not ours anymore."* (CCS KI)

The CCS KIs also had to spend a lot of their time obtaining the appropriate documentation from the MCPs to complete the AMRs, as was discussed in a previous section of this report on data sharing through CMS Net.

> *"It takes a lot of effort because [MCP] doesn't always get those reports [for AMRs] and it isn't part of their practice or need to get them. For us to do ongoing eligibility redeterminations, we need those reports in. So, that's a level of time that we spend that isn't accounted for in the staffing design…. But we have to make it work."* (CCS KI)
>
> → **KI Recommendation:** Future implementations of the WCM should plan for, and provide the appropriate funding to address the potential increased workload

of CCS staff, e.g., staff time related to addressing questions about the WCM and obtaining appropriate documentation from the MCPs for AMRs.

Durable Medical Equipment Vendor Satisfaction with WCM Authorization Process

The DME vendors were very supportive of the WCM in general, noting that, *"it's working very well."* (DME Vendor KI) More specifically, DME vendors were very satisfied with the quicker authorization process in the WCM. Expedited authorizations allowed DME vendors to deliver timely services and DME, noting that *"we would deliver on the spot with the Whole Child Model [and] we know exactly what to expect."* (DME Vendor KI) In addition, one DME vendor summed up their satisfaction working with MCP in the WCM quite succinctly: In the WCM, there was *"quicker payment and less denials."* (DME Vendor KI)

The DME vendors also said that parents were more satisfied when obtaining DME in the WCM because their access to DME improved.

> *"The patients – I think their services are much quicker if it is just the Whole Child Model. They will be serviced faster."* (DME Vendor KI)

Another KI described parents in the WCM as having *"peace of mind"* because *"the Whole Child Model was a lot quicker, so [she] knew as a mom that [her] child's needs were being met and covered and [she wouldn't] have to worry."* (DME Vendor KI)

As noted previously, the DME authorization process in Classic CCS also required a lot of documentation, which was "*always a challenge. It's inundated us [DME vendor] with a tremendous amount of work."* (DME Vendor KI) Conversely, DME vendor staff were much happier with their workload after the WCM was implemented.

> *"The quicker turnaround time has made a huge difference with our team. You're not following up with 60 cases, right? It just makes a huge impact. I would say definitely our entire organization is definitely happier with the Whole Child Model."* (DME Vendor KI)

Research Question 3: What is the impact of the WCM on providers' satisfaction with the delivery of services and reimbursement?

The KIs were also asked about any impact the WCM had on reimbursement rates, processes, or timeliness. Aside from DME vendors, few KIs had experience with billing or reimbursement rates. Those KIs who were DME vendors spoke about the reimbursement rates for DME and a much quicker reimbursement and payment processes in the WCM. Many other KIs spoke about reimbursement as it related to new MCP transportation reimbursement procedures for CCS clients in the WCM.

Billing and Reimbursement

When asked about the impact that the WCM had on billing and reimbursement, KIs had a variety of responses. Some KIs noted that they were too far removed from the billing

process to notice any impact from the WCM. As one KI reported, *"I don't work with billing so I'm not sure what the outcome is."* (SCC KI)

Some KIs noted that billing in the WCM was more streamlined since it was just one entity, the MCP, that was responsible for covering all of the CCS clients' healthcare needs:

> *"The [MCP] handles the non-CCS, it handles CCS. That on its face is worth something. Whether this child is fitting into the CCS bucket or fits into the Medi-Cal bucket… we're not shuttling the provider, or whoever is doing the billing for their provider, back and forth."* (SCC KI)

In other words, providers, *"didn't have to follow two different processes communicating with two different entities in order to get the care authorized and then get the care paid for."* (MCP KI)

Another KI commented that providers felt the reimbursement process was too slow through CCS, leading some to not want to work with CCS clients.

> *"There was a reluctance of many providers in the community hospitals to participate in CCS. There was [sic] complaints that they weren't getting paid quickly… providers expressed a lot of frustration about… the payments."* (MCP KI)

This same KI went on to explain how their MCP was going to pay providers the same rate for their non-CCS Medi-Cal only members as they would for CCS clients in the WCM, and would do so expeditiously, compared to Classic CCS.

> *"We were going to pay for Medi-Cal and CCS the same amount to providers... And then, the reimbursement… we've bumped it up to a Medicare rate, so the providers are less stressed about, 'Is it a Medi-Cal [member] or a CCS [client] and is it [the reimbursement rate] going to change?' And then we pay within about 45 days – I think 90 percent of our claims are paid. So, we have a good record with providers for rapid reimbursement and fairly good reimbursement."* (MCP KI)

Another KI noted contracting and rate issues with some tertiary care centers that were not satisfied with the WCM MCP reimbursement rates. Because of this, they did not want to contract with the MCP after the WCM was implemented.

> *"After WCM, not all, but some tertiary centers, suddenly rejected that rate that they had been perfectly happy to accept on June 30th of 2018 – [it] wasn't good enough come July 1st. And so, they have been basically demanding very high rates in order to continue treating our patients and are refusing to actually contract with the [MCP], and so they're still not network providers."* (MCP KI)

→ **KI Recommendation**: The reimbursement rates should be simplified by having one rate, and that rate should ensure that all participating centers are adequately reimbursed.

Durable Medical Equipment Vendor Reimbursement

A number of KIs spoke about their dissatisfaction with MCP reimbursement rates for some DME and supplies, as *"it's [the MCP rate] well below what Medi-Cal reimburses for the same item."* (DME Vendor KI) Another DME vendor KI also acknowledged the lower MCP reimbursement rate, but when taking into account the more streamlined DME processes when working with WCM MCP, they would still *"rather get paid less from a managed care [plan] than go through CCS."* (DME Vendor KI)

One DME vendor noted that the MCPs rates were *"fair"* (DME Vendor KI), but it would be helpful if the MCPs could be more flexible with the quantity of CCS supplies that they reimbursed. This KI noted that MCPs could, *"be a little bit more understanding with quantities and limits [reimbursed] because not every child is stamped out of the same stamp. There are exceptions that need to get made."* (DME Vendor KI)

→ **KI Recommendation**: The MCPs should revisit the quantities of some of the medical supplies that are allowed as reimbursable items for CCS clients.

Some DME vendors also spoke of supply chain issues related to COVID-19 that had an impact on the cost of business. Often, DME vendors were responsible for surcharges added on to the costs of DME being shipping from overseas. These shipping surcharges were exorbitantly high and sometimes more than the actual amount that the vendor was reimbursed for the DME.

> *"So, the rates that we're getting right now…are inadequate. The problem is everyone is passing prices onto us. We have a fixed amount that we're able to bill that is based on something that was years ago before any of this [COVID-19] happened, and we're getting squeezed in the middle."* (DME Vendor KI)

This KI went on to say that what was needed was "*getting reimbursement in place that is really functional"* and that as DME vendors they aren't *"asking necessarily even for an increase in rates. We're saying, 'Give us the best you can do in the parameters you've got.'"* (DME Vendor KI)

Even though the MCP reimbursement rates were low, some DME vendors noted that in the WCM *"the claims are getting paid quicker"* (DME Vendor KI) compared to Classic CCS. Another DME vendor also noted, *"we're paid within ten days"* by the MCP and with Classic CCS, *"it's a while [to get paid]."* (DME Vendor KI)

Transportation Reimbursement

Several KIs noted that around the same time the WCM was implemented, transportation also became a Medi-Cal covered benefit for all Medi-Cal members. This occurrence may have complicated some of the transportation issues related to the WCM, as *"a lot*

of the transportation issues, people might be attributing it to Whole Child Model when it has nothing to do with Whole Child Model." (MCP KI) Regardless, the timing of this Medi-Cal benefit may have also led to some challenges for the MCP contracts.

> *"Actually, transportation became a Medi-Cal benefit not only for the Whole Child [Model] members but for all Medi-Cal members, and I believe that's been a difficult transition for the [MCP] with their contract."* (CCS KI)

Many KIs reported that families faced challenges with the MCP transportation requirements and reimbursement procedures in the WCM. Whereas Classic CCS was immediately *"responsive to the [transportation] needs of the families"* and *"would reimburse them or get them the voucher"* (County KI), some MCP vendors required pre-authorization (ranging from five days to two weeks ahead of a scheduled appointment) in order for transportation to be reimbursed. In some cases, if pre-authorization was not obtained, the CCS client might not be reimbursed:

> *"Their child was flown out of town. They called [transportation vendor] as they were driving out of town requesting assistance and [transportation vendor] told them, 'No, because you didn't give us that five-day notice.' And they've had to work with [MCP] and try to get this reimbursement... And some families, I'm not sure that they ever got the reimbursement."* (CCS KI)

In addition, the MCP reimbursement process was more onerous and required more documentation than was required in Classic CCS:

> *"We [CCS] would reimburse with no question asked… as long as we could confirm the appointment was made and met, we would reimburse. The [managed care] plan system, I think they have to have proof of insurance. They have to have… their driver's license. They have to show registration. Some folks can't afford to register their vehicle and some folks can't afford insurance, but we didn't ask for that. We would reimburse them and [now] they would not get reimbursed unless they could prove those things with the [transportation] vendor."* (CCS KI)

Some KIs also noted that some families who experienced difficulty obtaining their transportation reimbursement would just resign themselves to not getting reimbursed because it was such a stressful process.

> *"I've had some parents say, 'It is a strenuous process and I don't end up getting my money and it's not worth it anymore.' I think that they're dealing with enough, as it is, with their child – with their medical needs – that it's just one more stress that is creating…"* (CCS KI)

Research Question 4: What is the impact of the WCM on the quality of care received?

The KIs were asked about their perceptions of quality in the WCM, but some initially noted that it would be difficult to measure because the WCM did not include strong quality metrics. Even standardized performance metrics (i.e., HEDIS measures) that

were included would take a long time to measure, with one KI noting that, *"holding them to general HEDIS measures or certain things, what's going to happen is it's going to take years for the outcome ... the decline in outcomes to really surface, right?"* (SCC KI)

Some CCS KIs said they were unable to comment on quality since they were no longer involved in the case management of their clients. When KIs did share their perceptions of quality, it related mostly to providers and DME, although some spoke of the quality of care provided to CCS clients.

Quality of Care

When CCS had the case management responsibility for their clients, they were aware of all of the CCS-eligible services that their clients were receiving, were better able to determine if the services were both appropriate and timely, and had a sense of the quality of care provided. After the transition to the WCM, CCS was no longer doing case management for their clients and therefore they no longer had an adequate sense of the care their clients were receiving. Because of this, several CCS KIs said they were unable to comment on the quality of care in the WCM.

> *"…I do not have any way to measure what exactly is happening… because we aren't doing case management. We don't really know what's happening as far as that goes."* (CCS KI)

For those CCS KIs who did comment on quality, many of them said that it probably wasn't as good as it was before the transition to the WCM.

> *"I don't see anything that says the quality is better… I don't know what the checks and balances are to make sure… I can tell you my feeling is that the quality is not as good."* (CCS KI)

In contrast, there were some MCP KIs who reported that both access to care and quality of care in the WCM did improve. For example, one MCP KI said that *"we're probably not saving a lot of money, but we're getting people better access for sure. I can say that for a fact. So, quality and access improved, I think, with the transition."* (MCP KI)

Quality of Providers

Many KIs noted that the implementation of the WCM had an impact on the quality of providers available to CCS clients. This is because, as noted previously, in the WCM CCS clients now had access to an expanded network of MCP providers, but many of those providers were not CCS-paneled providers or qualified to treat children with complex chronic medical conditions. In Classic CCS, clients mainly received care through a more limited, yet highly qualified network of CCS-paneled providers. This is an important distinction because paneled providers are deemed qualified to treat various CCS-eligible conditions and have more experience and training in treating these conditions than non-paneled providers.

Some KIs said that the MCPs were not requiring CCS clients to see a qualified paneled provider, and instead sent them to non-paneled, in-network providers, which could ultimately *"affect the quality of care for these children."* (CCS KI) In addition, by referring CCS clients to non-paneled providers, one KI noted that it effectively lowered the standard of care received.

> *"Well, I would say the main issue that I'm also seeing with [MCP] is that they do not reinforce that the children need to be seen by CCS-paneled physicians. They can go to whoever they want to regardless and, therefore, that decreases the standard of care for our kids. We have a standard that they have to see certain specialists that are paneled, and they're paneled for a reason – they have higher training, et cetera. And that is no longer the case."* (CCS KI)
>
> → **KI Recommendation**: The DHCS and MCPs in the WCM should reinforce or require that CCS clients see CCS-paneled providers who have more training and expertise in treating CCS-qualifying conditions.

In addition, MCPs also allowed CCS clients to self-refer to a provider of their choosing. This meant that a family could choose to see any in-network specialist, without needing a referral. This was a concern for some KIs because they were concerned that the families might self-refer to a less qualified, non-paneled provider because they would have no way of knowing who is best qualified to treat their child's condition.

> *"… they now maybe have more choices because they can self-refer. I think that can be a good thing, but it can also have its drawbacks if they aren't being guided to the person who is the most qualified specialist."* (MTP KI)

Quality of DME

The KIs reported similar concerns with the quality of DME vendors in the MCP network. In the WCM, the MCP had an expanded network of DME vendors, but as noted previously, some KIs thought they were not qualified to provide the appropriate DME that some CCS clients required. In Classic CCS, the MTU worked closely with DME vendors who had experience providing equipment for children with complex chronic medical needs.

> *"They don't have the same level of expertise and they don't have the certification or the staff at the rehab companies that most CCS departments use… They have to be state-tested and certified in seating and positioning. And so these [MCP] vendors—many vendors don't have them."* (County KI)

The KIs from MTUs also said that they were more experienced in and knowledgeable about making DME recommendations than the MCP staff. The MTU KIs knew their CCS client's entire case history and their DME history and could anticipate what their client's DME needs might be over time. This was something that the MCP would not be able to do when recommending or approving DME for a CCS client.

> *"We would look at a case before we authorized something... They [MCP] authorized it based on diagnosis only, and it was not medically necessary… it's a perfect illustration of that lack of really looking at the caseload and looking at the individuals in the caseload and what they need. They can't do it – they're too big. I don't even see how they could possibly manage to look at every single request that comes in."* (MTP KI)

Sometimes the MTU and MCP KIs questioned each other over what DME each entity deemed was medically necessary and appropriate for the CCS client. In turn, this could potentially have an impact on the quality of DME that was authorized.

> *"... the MTUs may order things that we don't think are necessary, or we may be looking long-term at the patient and say, 'You know, rather than spend $2,000 fixing this wheelchair [that] the kid is going to outgrow it in a year, why don't we get them a new wheelchair instead?'"* (MCP KI)

One DME vendor did notice a difference in some of the DME quality when it was approved by Classic CCS versus WCM MCPs. This KI reported that Classic CCS had a tendency to approve DME that was more standard, whereas the MCPs approved DME that was more specialized. This KI stated that,

> *"They [CCS] just want to go with the most reasonable route, but in the case of Medi-Cal managed care [plans], they do pay extra attention to what is best for the patient, child or adult… They listen to the discharge planners. They listen to what is best for the patient, and they authorize accordingly."* (DME Vendor KI)

When DME vendors were asked about the quality of DME in the WCM, one KI noted that regardless of payer, *"the quality stays the same."* (DME Vendor KI) This KI explains further:

> *"We're going to buy from one vendor, and regardless of your payer, this is what we have, this is what we have to offer. It doesn't matter what your insurance is. As long as we have an authorization, this is what we have to offer, this is what you get."* (DME Vendor KI)

Other DME vendors agreed that quality and appropriateness of equipment for their CCS clients were their top priorities. One commented that in the WCM there were no changes in the quality of the DME they provided. This vendor was committed to *"maintain[ing] the integrity of our quality and the integrity of being able to get the equipment out to the patients."* (DME Vendor KI) Another said *"We don't take price into account when we're looking to provide the equipment. It's really more clinical and what's most appropriate and what the end user is most comfortable using, what works the best for them."* (DME Vendor KI)

Research Question 5: What is the impact of the WCM on care coordination?

Recent state efforts have recognized that care coordination efforts for children and youth with special health care needs (CYSHCN) have the potential to improve health outcomes, reduce caregiver and patient burden, and decrease healthcare costs and utilization and thus, many states have begun to prioritize more integrated, coordinated care for CYSHCN.[35] Care coordination efforts can be especially important for CCS clients as they navigate the myriad of services, care, or supplies they may need from DME vendors,[36,37] community agencies, transportation vendors, and their healthcare providers.

As noted previously, in the WCM the MCPs were now responsible for the case management of CCS clients, including coordinating covered M&T services. One of the themes heard most frequently from a variety of KIs was that CCS case management was much different from MCP case management. Even the very definition of what case management meant was quite different between the two entities, which had implications for how they each operationalized case management.

> *"What does case management mean? Our [CCS] nurses case manage from a proactive viewpoint, where they follow these kids on a regular basis and they're continually following up with the families and with us as therapists so they get a whole picture of the child. The health plans, they follow by claims data and they're more reactive, and the families have to call them with a problem. That's been a huge shift for our families, trying to get used to that."* (MTP KI)

Classic CCS Case Management

This shift in case management responsibilities in the WCM had a tremendous impact on the CCS clients, many of whom were accustomed to a more personalized and intimate relationship with their CCS case manager. County KIs emphasized that the case management provided through CCS was in-depth and personalized to each client's individual needs. The CCS clients were typically assigned to one case manager who helped coordinate all their services including authorizations, processing AMRs, ensuring any needed follow-up, and helping with transportation and associated reimbursements. Many KIs spoke of CCS case managers who worked with the same clients for many years, developing both an intense relationship and a deep understanding of their needs.

> *"I'm sure it's taken some adjusting to get used to going to the [MCP] versus their county [CCS] worker who works with the family until the child ages out of the [CCS] program, and they develop a really intense relationship… I'm sure [losing] that was also hard."* (Consultant KI)

The CCS case managers knew their clients on a personal and intimate level and made themselves readily available to them. One CCS KI described *"knowing the families not*

[35] https://www.lpfch.org/sites/default/files/field/publications/national_care_coordination_standards_for_cyshcn.pdf
[36] https://www.lpfch.org/sites/default/files/field/publications/2021_ccs_dme_issue_brief_updated.pdf
[37] https://www.lpfch.org/sites/default/files/field/publications/threading_the_labyrinth_1.pdf

just medically but personally [so] we were much more able to help them on a more personal level to access the care they need." (County KI) Other CCS KIs also took pride in how they carried out their case management responsibilities and many said that the kind of case management they provided could not be replicated by the MCPs.

> *"We did a lot of hand-holding. I know this family is not very good about getting their child to their doctor. So, I am going to have extra eyes on that family. And I'm going to be calling them extra because I know that. And I don't have any sense that [MCP] does that."* (CCS KI)

The CCS clients and their families could also call their CCS case manager directly and speak to them when needed. That simple process of calling a CCS case manager directly and getting an actual person to speak with was quite different from how MCP case managers could be reached.

> *"I know a lot of those parents… don't have time to be making 30 phone calls [to MCP]. They just want to make a phone call to an office that would answer the phone with a live person, which we [CCS] do, all the time."* (CCS KI)

Managed Care Plan Case Management

In contrast, many KIs noted that MCP case managers were not as easily accessible to the CCS clients. To reach an MCP case manager the family had to call a general number and oftentimes navigate a phone tree to speak with someone. Unlike with CCS case managers, families were not assigned a dedicated case manager and did not have a direct number that they could call.

> *"Families are used to having one person help them with everything [in CCS] and they don't have that now… [In the MCP] they have to jump through all these different hoops and go through these phone trees and go through all this stuff just to get to a person that they can talk to."* (CCS KI)

County KIs also noted that in contrast to CCS case management, MCP case management was neither centralized nor coordinated by one person, but instead went through a triage system. This meant that when someone at the MCP was finally reached, the families often felt they were not as knowledgeable as their CCS case managers.

> *"I had a family call in and for some reason she couldn't get a cream for the G-tube. And the [MCP] staff was like, "What's a G-tube?" So, it makes it more difficult… when that staff does not have the medical knowledge because they're basically talking to this triage person who does not know any of it."* (CCS KI)

The KIs also reported that CCS families felt that MCP case management was more fragmented and less centralized than CCS case management.

> *"We heard multiple times for different families, 'Gosh, it used to be when I called CCS, I would make one phone call and get all of my questions answered. And now, when I call [MCP], if I even get a person or don't have to call back, I have to go to four different departments to get what I need.' And so, the fragmentation that's been built into the Whole Child Model system has been a real problem for families."* (CCS KI)

Unlike CCS case management, the level of case management provided in MCPs could vary. In the WCM, shortly after a CCS client transitioned to the MCP, a health risk assessment (HRA) was administered to help identify the level of care coordination that was needed. After assessment, certain members were assigned to higher levels of care coordination or more intensive case management.

> *"All of the HRA responses [are]… reviewed by a registered nurse here at [MCP] and then they assign a case management level, which could be Basic, Care Coordination, or Complex Case Management."* (MCP KI)

The MCPs also exercised less flexibility than CCS in regard to outreach to the CCS clients. Whereas CCS case managers only stopped contacting a client if they left the program (e.g., aged out of CCS; changed CCS eligibility status), the MCPs closed a case to case management if the client was unable to be contacted after three attempts.

> *"They [MCP] have their own procedures for what they consider continuity of care and case management. One of them being if it's open to care coordination and they try and reach the family twice by phone, and they send out a letter and they don't get a response, their continuity stops."* (CCS KI)

Medical Therapy Unit Case Management

As noted previously, the implementation of the WCM also affected case management related to the MTU, even though the transition to the WCM was not supposed to have an impact on the CCS Medical Therapy Program (MTP).[38] Since CCS was no longer responsible for case management in the WCM, they stopped sending a public health nurse (PHN) to the MTC (medical therapy conference). This meant that any needed DME or specialty services that were recommended during the MTC were not authorized or accessed as quickly.

> *"…In the past, when a child was referred to a Specialty Care Center, a nurse [case manager] from CCS would just do the authorization on the spot at our medical therapy conference. Now that is not done because we don't have a nurse there..."* (MTP KI)

In the absence of a CCS PHN, the "*health plan doesn't necessarily send a nurse to the clinic*." (County KI) Without a CCS or MCP case manager at the MTC, the MTU staff (i.e., therapists) had to increasingly take on nurse case management roles and responsibilities to ensure that the CCS clients received their recommended therapies

[38] https://www.dhcs.ca.gov/formsandpubs/Documents/MMCDAPLsandPolicyLetters/APL2018/APL18-023.pdf

and DME. As one KI noted, *"there's been a lot of case management that used to be done by CCS [nurses] that's now being done by the therapy staff in the MTP."* (CCS KI) In turn, this decreased the time that MTU staff were able to spend on actual treatment hours with their CCS clients.

> *"They [MTU staff] have seen a shift in the amount of direct treatment hours versus administrative hours, or indirect treatment hours, that they're logging after Whole Child Model."* (CCS KI)

One MCP did recognize the importance of having a case manager at the MTC and created a pediatric social work team to work closely with the MTP. The goal was to send an MCP social worker to the MTC to fulfill the vacant case management role.

> *"We made sure that we include a social work team within the Pediatric Program... sort of like a liaison between the Medical Therapy Program and MCP, the parent at those clinics… our social workers… [they] come back after [medical therapy] clinics and tell us what needs to be done, what this family is needing… what durable medical equipment is needed… We always have that constant coordination and collaboration."* (MCP KI)

> → **KI Recommendation**: The MCPs should ensure that there is a case manager at the MTC to help expedite authorizations and coordinate with the MTU to ensure receipt of DME or other services that CCS clients may need.

Maintenance & Transportation Coordination

In Classic CCS, the M&T benefit was coordinated by the CCS case manager and included assisting clients with reimbursement after travel, pre-paid gas cards, taxi vouchers, or on-demand rideshare. By virtue of CCS being a county-based program, each CCS staff person had a great deal of knowledge about the county in which they worked. This knowledge of the county, including its transportation infrastructure and options, helped CCS case managers efficiently coordinate and navigate the complexities of arranging transportation for their clients. As one KI noted, *"providing travel assistance in-house worked well because [CCS client travel] involved some complex logistics in planning."* (County KI)

The CCS KIs once again noted the personal relationship that CCS case managers had with their clients, many of whom frequently used transportation services. CCS case managers understood the transportation needs of their clients and helped coordinate both scheduling and reimbursements.

> *"…it [transportation] was an enormous problem [in the WCM], and I don't think is as easy for the families to navigate as it was when… we [CCS] were working directly with the family to make sure they had everything that they needed. And that was done by our [CCS] case manager and by our patient service representative."* (CCS KI)

With the loss of CCS case management responsibilities and their help with transportation, county KIs reported that families *"…really struggle to do that [coordinate transportation] on their own without some extra assistance."* (CCS KI) Although many KIs reported that when compared to Classic CCS, MCPs in the WCM provided less transportation assistance to their CCS clients, there was one WCM MCP that attempted to address this need for help with transportation. They did this by establishing *"a special [transportation] liaison in the case management area… who coordinates with the transportation vendor."* (MCP KI)

Case Management and Adult Transition Services

Some KIs reported one notable, positive impact that MCP case management had on CCS clients: Now that the MCPs were coordinating the care of CCS clients, they were better prepared to help those clients when they turned 21 and aged out of the CCS program. At that time, they would then transition to adults services, but their care and services would still be coordinated and obtained through the same MCP care team that coordinated their CCS care as an adolescent.

> *"Because we're just in one health plan, once the child ages out of CCS, we do a warm handoff to our adult team. It is a great, great benefit because we do case huddles and we have a process in place… it's a lot easier now because we can talk to our adult case managers, and say 'here's what you need to watch out for; here's what didn't happen in CCS, so make sure that we follow up on these items.'"* (MCP KI)

If case management was still needed for an adult, then it would be a seamless transition of case management responsibilities within the same MCP.

> *"…Because [MCP] has that child, once that child transitions out of CCS, the case management – if case management needs to continue – it's seamless… So, an issue before the transition was we hand them off and we try to transition plan. But we [CCS] are out of the loop once the child turns 21. So, that was a shortcoming of the program before the Whole Child Model. And that was remedied in large part by the [WCM] implementation."* (County KI)

Conclusion

The KIs identified both facilitators and barriers to implementation of the WCM, as well as overall perspectives on the WCM. The KIs also revealed the many different ways that the WCM impacted access to care, including, but not limited to, decreased referrals into CCS, changes in the authorization and referrals process, and increased MCP provider and transportation networks. Some KIs expressed dissatisfaction with some aspects of the WCM, such as transportation scheduling and reimbursement, whereas all DME vendors expressed satisfaction with the MCP's expedited authorization process in the WCM. Some KI also described what they thought about WCM quality of care, providers, and DME noting that expanded MCP networks don't necessarily translate into more qualified MCP providers and DME staff. The WCM implementation also had an

impact on case management as those responsibilities were transitioned from CCS to the MCPs.

KI Recommendations

During the interviews, KIs made various policy and process recommendations based on some of the lessons they learned from the implementation of the WCM. The KIs provided these recommendations as a way to give guidance and feedback on future implementations of the WCM. Within this report, these recommendations were organized in such a way so that they immediately followed the specific findings to which they were related.

All of the KI recommendations from this report are again repeated here, with applicable headings, so as to consolidate them in one dedicated section.

Transition to the WCM

- Any future redesigns of the CCS program should prioritize the needs of the CCS clients above everything else.
- A successful transition to the WCM should include collaborative relationships between the county CCS program and the MCP.
- The MCPs should continue to engage with their Family Advisory Committees to help address ways to overcome challenges and barriers to care.
- The MCPs should hire CCS staff to help both the MCP itself and the county CCS program transition to the WCM.
- The MCPs should take proactive steps to help ease the CCS clients' transition to the WCM by implementing a limited-time open formulary for medications or identifying the medications a client was on before their transition to the WCM.
- The state should share all guidance and information on the WCM implementation with all involved MCPs and county CCS programs. This information must be detailed, specific, and clear and leave no room for subjective interpretation by any of the entities involved.
- The state must ensure that all WCM notifications and letters that are sent to CCS clients and their families are written at appropriate reading, linguistic, and health literacy levels.
- The state should ensure that all WCM notifications and letters are disseminated to all CCS-paneled providers and SCCs.
- The state should provide healthcare providers in the WCM clear guidelines on the different processes for providing care and services to CCS clients in the WCM and those in Classic CCS counties.
- The state should provide WCM MCPs with full access to CMS Net, or centralize the data systems used for case management so that there is one consolidated system that can be used by both MCP case managers and CCS case managers.

Access to Care

- The state should clarify its guidance on who is responsible for NICU eligibility determinations in the WCM, for both dependent and independent counties, and subsequently provide oversight on this process.

- The MCPs should honor active SARS for those CCS clients who transition to the WCM.
- Medi-Cal and the MCPs should remove prior authorization requirements for those CCS services or DME repairs that are repeatedly and continually required throughout a CCS client's lifetime – or automatically authorize these CCS services or DME repairs – to streamline access to these services and repairs.
- As the provision of DME is key to a CCS client's independence, safety, and health, it is imperative to have an adequate and skilled network of DME vendors throughout California.
- Classic CCS counties should reduce the DME vendor documentation requirements for DME authorizations.
- The MCPs or the transportation vendors should provide CCS clients assistance in arranging covered transportation services to/from appointments.

Satisfaction

- Future implementations of the WCM should plan for and provide the appropriate funding to address the potential increased workload of CCS staff, e.g., staff time related to addressing questions about the WCM and obtaining appropriate documentation from the MCPs for AMRs.

Reimbursement

- The reimbursement rates should be simplified by having one rate, and that rate should ensure that all participating centers are adequately reimbursed.
- The MCPs should revisit the quantities of some of the medical supplies that are allowed as reimbursable items for CCS clients.

Quality

- The DHCS and MCPs in the WCM should reinforce or require that CCS clients see CCS-paneled providers who have more training and expertise in treating CCS-qualifying conditions.

Case Management

- The MCPs should ensure that there is a case manager at the MTC to help expedite authorizations and coordinate with the MTU to ensure receipt of DME or other services that CCS clients may need.

Appendix S: WCM Telephone Survey Report

Table of Contents

OVERVIEW

A thorough discussion of the Telephone Survey and methods is presented in the main body of this report. The telephone survey of parents/guardians of children in WCM was completed between March - June 2020. When evaluating the WCM, it should be kept in mind that HPSM WCM began six years prior to the administration of the survey.

This appendix provides a complete analysis of all items from the quantitative telephone survey that was administered, in English or Spanish, to a random sample of parents/guardians of children who transitioned to the WCM - HPSM WCM, Phase I, Phase II, or Phase III - or were in Classic CCS. Comparisons across models assessed the impact of the WCM on parents/guardians' satisfaction and perceived changes in access to care, quality of care, and coordination of care.

The telephone survey items inquired about the following domains:

- Demographics/Characteristics of Clients
- Demographics/Characteristics of Respondents
- WCM Enrollment Procedures
- Overall Quality of Care
- Medical Home/Primary Care
- Specialty Care
- Therapy Services
- Prescription and Pharmacy Services
- Behavioral Healthcare
- Medical Equipment and Supplies
- Provider Communication
- Transportation
- Care Coordination/Case Management
- Transition to Adult Services

The full survey instrument can be found in Appendix Y and survey questions by domain in Appendix E.

Methods and Analyses

Briefly, the following analytic plan was used for all research questions:

- Frequency tables were created for each variable by healthcare delivery model.
- Chi-squared or appropriate bivariate analysis was performed to identify differences among each of the WCM study groups and the Classic CCS counties.
- Logistic regression was conducted for count data and to assess which healthcare delivery model (HPSM WCM vs. Classic CCS, Phase I vs. Classic CCS, Phase II vs. Classic CCS, Phase III vs. Classic CCS) predicts better access to care, quality of care, or care coordination. The logistic models controlled for the client's race/ethnicity and the language of survey administration.
- Population-based constructed survey weights for all analyses testing significance were utilized.

All analyses were conducted in SAS 9.4 (SAS Institute, Cary NC) using the appropriate survey weights constructed. The description of the creation of the sample weights can be found in Appendix F.

DESCRIPTION OF PARTICIPANTS

Demographics of Clients

Living Arrangement of Client: The majority of clients (99%) across all WCM study groups live with the survey respondent. Significantly fewer HPSM WCM clients (97%) lived with the survey respondent than Classic CCS clients (99%). Although statistically significant, the difference between HPSM WCM clients and Classic CCS clients is relatively small. The differences between the other WCM study groups and Classic CCS were not meaningful. See Table 1.

Table 1. Living Arrangement of Client

Does [CHILD'S NAME] live with you? (Q83) [1]						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	8	5	4	7	11	35
	2.56	0.64	0.89	2.21	1.11	1.23
Yes	304	773	444	310	984	2815
	97.44	99.36	99.11	97.79	98.89	98.77
Total	312	778	448	317	995	2850
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	8.21					
P-value	0.08					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

[1] The items indicated in parenthesis refers to the Telephone Survey item.

Table 2 provides information of where the client lives, if not with the respondent.

Table 2. Where Client Lives, if Not with Respondent

If Q83=No (Q83: Does [CHILD'S NAME] live with you?), with whom does [CHILD'S NAME] live? (Q84)	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
With another parent (biological or adoptive parent)	2	1	1	3	1	8
	25.00	20.00	25.00	42.86	11.11	24.24
With another relative (grandparent / aunt / uncle / cousin)	1	0	2	1	2	6
	12.50	0.00	50.00	14.29	22.22	18.18
With a legal guardian who is not related	0	1	0	1	0	2
	0.00	20.00	0.00	14.29	0.00	6.06
With a friend	0	0	0	1	0	1
	0.00	0.00	0.00	14.29	0.00	3.03
College/University	1	1	0	0	0	2
	12.50	20.00	0.00	0.00	0.00	6.06
His/Her own/rent a home / apartment	1	1	1	0	3	6
	12.50	20.00	25.00	0.00	33.33	18.18
Other	3	1	0	1	3	8
	37.50	20.00	0.00	14.29	33.33	24.24
Total	8	5	4	7	9	33
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
P-value						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Number of Adults Living in the Home with the Client: Although the average number of adults living with the client differed significantly between the Phase II (mean=2.10) and

Classic CCS (mean=2.28), these differences are probably not clinically meaningful. See Table 3.

Table 3. Number of Adults Living in Home with Client

MEANS: Including you, how many adults (age 18 and over) live with [CHILD'S NAME]? (Q85)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	302	14	2.50	1.17	1.00	8.00
Phase I	751	39	2.26	1.09	1.00	10.00
Phase II	434	17	2.10	0.99	1.00	10.00
Phase III	308	13	2.45	1.22	1.00	8.00
Classic CCS	960	45	2.28	1.07	1.00	10.00

• Values are raw, non-weighted, survey results.

Table 4. Linear Regression: Number of Adults Living in Home with Client

Linear regression: Including you, how many adults (age 18 and over) live with [CHILD'S NAME]? (Q85)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Significance
HPSM WCM	0.14	0.07	1.95	0.052	0.00	0.29	ns
Phase I	-0.08	0.06	-1.33	0.183	-0.19	0.04	ns
Phase II	-0.19	0.06	-2.96	0.003	-0.31	-0.06	**
Phase III	0.09	0.08	1.12	0.265	-0.07	0.25	ns
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	2.28	0.07	34.70	<.0001	2.15	2.41	
Weighted Mean dependent var		2.32					
R-squared		0.019	Number of observations		2678		
F-test		5.16	Prob > F		<.0001		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-value: *<.05, **<.01, ***<.001, ns=not significant

Table 5. Linear Regression – Analysis of WCM Group Comparisons: Number of Adults Living in Home with Client

Linear regression - Analysis of WCM Group Comparisons: Including you, how many adults (age 18 and over) live with [CHILD'S NAME]? (Q85)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	3.79	0.052	ns
Phase I vs. Classic CCS	1.77	0.183	ns
Phase II vs. Classic CCS	8.79	0.003	**
Phase III vs. Classic CCS	1.24	0.265	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-value: *<.05, **<.01, ***<.001, ns=not significant

Other Children Living with the Client: The mean number of other children living in the home did not significantly differ between the WCM health plans and the Classic CCS group. See Table 6.

Table 6. Mean Number of Other Children Living in Home with Client Among WCM Study Groups

MEANS: How many other children (Probe: under the age of 18) live with [CHILD'S NAME]? (Q86)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	302	14	1.31	1.16	0.00	9.00
Phase I	757	33	1.51	1.21	0.00	6.00
Phase II	434	17	1.36	1.24	0.00	6.00
Phase III	303	18	1.53	1.42	0.00	7.00
Classic CCS	956	49	1.42	1.31	0.00	14.00

• Values are raw, non-weighted, survey results.

Table 7. Linear Regression: Number of Other Children Living in Home with Client Among WCM Study Groups

Linear regression: How many other children (Probe: under the age of 18) live with [CHILD'S NAME]? (Q86)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Significance
HPSM WCM	-0.05	0.08	-0.72	0.47	-0.20	0.09	ns
Phase I	0.09	0.07	1.40	0.16	-0.04	0.22	ns
Phase II	-0.03	0.08	-0.44	0.66	-0.19	0.12	ns

Linear regression: How many other children (Probe: under the age of 18) live with [CHILD'S NAME]? (Q86)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Significance
Phase III	0.12	0.09	1.24	0.22	-0.07	0.30	ns
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	1.53	0.08	19.72	<.0001	1.38	1.68	
Weighted Mean dependent var		1.44					
R-squared		0.017	Number of observations		2679		
F-test		3.65	Prob > F		<.0001		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-value: *<.05, **<.01, ***<.001, ns=not significant

Table 8. Linear Regression – Analysis of WCM Group Comparisons: Mean Number of Other Children Living in Home with Client Among WCM Study Groups

Linear regression - Analysis of WCM Group Comparisons: How many other children (Probe: under the age of 18) live with [CHILD'S NAME]? (Q86)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	0.51	0.47	ns
Phase I vs. Classic CCS	1.97	0.16	ns
Phase II vs. Classic CCS	0.19	0.66	ns
Phase III vs. Classic CCS	1.53	0.22	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-value: *<.05, **<.01, ***<.001, ns=not significant

Client's Race/Ethnicity: There was a statistical difference in the race/ethnicity diversity of Phase I and Phase II clients compared to Classic CCS. Phase I clients were likely to be Latinx (75%) and less likely to be White (17%) than Classic CCS clients (Latinx=61%, White=22%). Phase II clients were more likely to be Caucasian (35%) or multi-race/ethnicity (11%), and less likely to be Latinx (46%) than Classic CCS clients (Caucasian=22%, multi-race/ethnicity=6%, Latinx=61%). The differences between the other WCM study groups and Classic CCS were not meaningful. See Table 9.

Table 9. Client's Race/Ethnicity

Client's race/ethnicity (Q87 & Q88)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
White, non-Hispanic	49	133	151	51	214	598
	15.96	17.48	34.95	16.24	21.97	21.45
Latinx	168	568	198	206	590	1730
	54.72	74.64	45.83	65.61	60.57	62.05
Black/African American	6	8	16	5	49	84
	1.95	1.05	3.70	1.59	5.03	3.01
Asian or Pacific Islander	51	23	12	39	48	173
	16.14	2.91	2.66	12.15	4.78	6.00
Multi-race/ethnicity	21	19	46	12	54	152
	6.84	2.50	10.65	3.82	5.54	5.45
Other	12	10	9	1	19	51
	3.91	1.31	2.08	0.32	1.95	1.83
Total	316	790	451	321	1005	2883
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	213.65					
P-value	<.0001					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Client's Age: Clients in Phase I (10.28 years) and Phase II (10.09 years) were significantly older than clients in Classic CCS (9.42 years). The client's ages did not significantly differ between HPSM WCM, Phase II and Classic CCS. See Table 10.

Table 10. Mean Client Age

MEANS: Client Age						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	316	0	9.36	6.09	0.00	20.00
Phase I	790	0	10.28	5.46	0.00	21.00
Phase II	451	0	10.09	5.61	1.00	20.00
Phase III	321	0	10.01	5.96	0.00	20.00
Classic CCS	1005	0	9.42	5.75	0.00	21.00

MEANS: Client Age						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max

• Values are raw, non-weighted, survey results.

Table 11. Linear Regression: Client Age

Linear regression: Client Age							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Significance
HPSM WCM	-0.06	0.37	-0.17	0.8643	-0.80	0.67	
Phase I	1.10	0.28	3.87	0.0001	0.54	1.65	***
Phase II	1.04	0.34	3.06	0.0023	0.37	1.71	**
Phase III	0.61	0.39	1.55	0.1220	-0.16	1.38	
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	8.56	0.31	27.30	<.0001	7.95	9.18	
Weighted Mean dependent var		9.46					
R-squared		0.03	Number of observations		2788		
F-test		4.09	Prob > F		<.0001		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-value: *<.05, **<.01, ***<.001, ns=not significant

Table 12. Linear Regression – Analysis of WCM Group Comparisons: Client Age

Linear regression - Analysis of WCM Group Comparisons: Client Age			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	0.03	0.8643	ns
Phase I vs. Classic CCS	15.01	0.0001	***
Phase II vs. Classic CCS	9.34	0.0023	**
Phase III vs. Classic CCS	2.39	0.1220	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-value: *<.05, **<.01, ***<.001, ns=not significant

Health and Disability Status

Overall Health Status: The difference in overall health status between each WCM study group and Classic CCS clients was not significant. The majority of respondents in all

WCM study groups (62%) indicated the client's overall health to be "good "or "excellent." See Table 13.

Table 13. Overall Health Status

Would you say that, in general, [CHILD'S NAME]'s health is…. (Q1)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Excellent	107	206	131	100	323	855
	34.08	26.65	29.11	31.75	32.43	30.02
Good	135	370	225	138	434	908
	42.99	47.87	50.00	43.81	43.57	31.88
Fair	57	170	76	57	198	403
	18.15	21.99	16.89	18.10	19.88	14.15
Poor	15	27	18	20	41	635
	4.78	3.49	4.00	6.35	4.12	22.30
Total	314	773	450	315	996	2848
	100.00	100	100	100	100	100
Rao-Scott Chi2	17.39					
P-value	0.14					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Ability to Engage in Age Level Activities: During the past six months the differences in the client's conditions(s) affecting their ability to do things other children do was not statistically significant between WCM study groups and Classic CCS. See Table 14.

Table 14. Ability to Engage in Activities

During the past 6 months, how often has [CHILD'S NAME]'s condition(s) affected his/her ability to do things other children the same age do? (Q2)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never	87	62	216	110	325	855
	28.16	50.00	28.31	24.89	33.44	30.52
Sometimes	103	40	251	151	308	908
	33.33	32.26	32.90	34.16	31.69	32.42
Moderately (Usually)	43	12	117	69	133	403

During the past 6 months, how often has [CHILD'S NAME]'s condition(s) affected his/her ability to do things other children the same age do? (Q2)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	13.92	9.68	15.33	15.61	13.68	14.39
Consistently (Always)	76	10	179	112	206	635
	24.60	8.06	23.46	25.34	21.19	22.67
Total	309	124	763	442	972	2801
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	17.01					
P-value	0.15					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.

Limitations Due to Health Conditions: Table 15 provides a description of limitations a client experiences because of their health conditions. Regardless of WCM study groups, a little more than a third of clients experience multiple limitations (36%). The differences between WCM study groups and Classic CCS were not statistically significant. See Table 16.

Table 15. Limitations Due to Health Conditions

What types of things does [CHILD'S NAME] have limitations doing because of his/her condition(s)? [Check all that apply] (Q3)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Bodily function	30	94	49	40	135	348
	9.49	11.90	10.86	12.46	13.43	12.07
Participation in activities	77	163	89	75	191	595
	24.37	20.63	19.73	23.36	19.00	20.64
Emotional or behavioral	23	57	30	32	86	228
	7.28	7.22	6.65	9.97	8.56	7.91
Multiple Limitations	115	307	191	101	333	1047
	36.39	38.86	42.35	31.46	33.13	36.32
Don't know	40	90	54	39	142	365
	12.66	11.39	11.97	12.15	14.13	12.66
Decline	26	65	27	28	93	239
	8.23	8.23	5.99	8.72	9.25	8.29

What types of things does [CHILD'S NAME] have limitations doing because of his/her condition(s)? [Check all that apply] (Q3)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Missing	5	14	11	6	25	61
	1.58	1.77	2.44	1.87	2.49	2.12
Total	316	790	451	321	1005	2883
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	29.08					
P-value	0.22					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.

Based on respondent answers to survey question 3 presented in Table 15, Table 16 indicates the mean number of limitations a client experiences because of their health conditions. For Phase II respondents, their children experienced significantly more limitations than the clients in Classic CCS (Phase II mean= 1.40 versus Classic CCS mean= 1.21). The difference between the other WCM study groups and Classic CCS respondents was not significant. See Table 17 and Table 18.

Table 16. Mean Number of Limitations Due to Health Conditions

What types of things does [CHILD'S NAME] have limitations doing because of his/her condition(s)? [Check all that apply] - Count of limitations (Q3)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	311	5	1.30	0.96	0.00	3.00
Phase I	776	14	1.34	0.96	0.00	3.00
Phase II	440	11	1.40	0.95	0.00	3.00
Phase III	315	6	1.19	0.87	0.00	3.00
Classic CCS	980	25	1.21	0.92	0.00	3.00

• Values are raw, non-weighted, survey results.

Table 17. Linear Regression: Number of Limitations Due to Health Conditions

Linear regression: What types of things does [CHILD'S NAME] have limitations doing because of his/her condition(s)? [Check all that apply] - Count of limitations (Q3)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Signifi-cance
HPSM WCM	0.08	0.06	1.40	0.16	-0.03	0.20	ns
Phase I	0.08	0.05	1.74	0.08	-0.01	0.18	ns
Phase II	0.12	0.06	2.10	0.04	0.01	0.23	*
Phase III	-0.01	0.06	-0.11	0.91	-0.12	0.11	ns
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	1.23	0.05	22.46	<.0001	1.12	1.34	
Weighted Mean dependent var		1.24					
R-squared		0.019	Number of observations		2731		
F-test		3.55	Prob > F		0.0001		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-values: *<.05, **<.01, ***<.001

Table 18. Linear Regression – Analysis of WCM Group Comparisons: Number of Limitations Due to Health Conditions

Linear regression - Analysis of WCM Group Comparisons: What types of things does [CHILD'S NAME] have limitations doing because of his/her condition(s)? [Check all that apply] - Count of limitations (Q3)		
WCM Group Comparison	F Value	Pr > F
HPSM WCM vs. Classic CCS	1.97	0.160
Phase I vs. Classic CCS	3.02	0.083
Phase II vs. Classic CCS	4.42	0.036
Phase III vs. Classic CCS	0.01	0.912

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-value: *<.05, **<.01, ***<.001, ns=not significant

School Days Missed: The number of school days missed because of illness by HPSM WCM clients significantly differed from missed school days by Classic CCS clients. While fewer HPSM WCM clients (49%) missed "0-3 days" compared to Classic CCS clients (59%), more HPSM WCM clients (51%) missed more than four days of school due to illness than Classic CCS clients (41%). The difference between the other WCM study groups and Classic CCS respondents was not significant. See Table 19.

Table 19. School Days Missed

[IF AGE 5+] During the past 6 months, how many days of school did [CHILD'S NAME] miss because of illness? (Q4)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
0-3 days	111	341	204	143	438	1237
	48.90	55.27	57.63	60.85	59.27	56.95
4-6 days	45	108	64	38	119	374
	19.82	17.50	18.08	16.17	16.10	17.22
7-15 days	41	82	51	30	108	312
	18.06	13.29	14.41	12.77	14.61	14.36
16-30 days	8	45	16	9	34	112
	3.52	7.29	4.52	3.83	4.60	5.16
31-60 days	11	24	10	6	19	70
	4.85	3.89	2.82	2.55	2.57	3.22
61 or more days	11	17	9	9	21	67
	4.85	2.76	2.54	3.83	2.84	3.08
Total	227	617	354	235	739	2172
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	14.95					
P-value	0.78					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Characteristics of Caregiver/Respondent

Relationship to Client: For a majority (87%) of respondents in all WCM study groups the survey respondent was the child's mother. The difference between the WCM study groups and Classic CCS respondents was not significant. See Table 20.

Table 20. Respondent Relationship to Client

How are you related to [CHILD'S NAME]? (Q89)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Mother	271	676	379	279	863	2468
	87.14	87.11	85.36	88.01	86.73	86.81
Father	30	69	41	21	81	242

How are you related to [CHILD'S NAME]? (Q89)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	9.65	8.89	9.23	6.62	8.14	8.51
Aunt or uncle	2	0	2	2	3	9
	0.64	0.00	0.45	0.63	0.30	0.32
Brother or sister	0	3	1	2	8	14
	0.00	0.39	0.23	0.63	0.80	0.49
Grandmother or grandfather	6	17	15	7	22	67
	1.93	2.19	3.38	2.21	2.21	2.36
Guardian	1	8	5	4	13	31
	0.32	1.03	1.13	1.26	1.31	1.09
Other relative	1	3	1	2	5	12
	0.32	0.39	0.23	0.63	0.50	0.42
Total	311	776	444	317	995	2843
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
Prob.						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Respondent Age: The mean age of the respondents among WCM study groups did not differ. The average age of respondents was approximately 40. See Table 21.

Table 21. Mean Respondent Age

MEANS: What is your age? (Q90)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	291	25	40.46	9.87	19.00	70.00
Phase I	731	59	39.81	9.54	18.00	78.00
Phase II	422	29	40.33	9.99	18.00	81.00
Phase III	304	17	40.27	10.57	19.00	75.00
Classic CCS	941	64	39.76	9.58	19.00	81.00

• Values are raw, non-weighted, survey results.

Table 22. Linear Regression: Respondent Age

Linear regression: What is your age? (Q90)							
WCM Group	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
HPSM WCM	0.17	0.62	0.27	0.79	-1.05	1.39	ns
Phase I	0.08	0.48	0.17	0.86	-0.86	1.03	ns
Phase II	-0.09	0.63	-0.14	0.89	-1.33	1.16	ns
Phase III	0.24	0.68	0.35	0.72	-1.10	1.58	ns
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	39.91	0.36	112.01	<.0001	39.22	40.61	
Weighted Mean dependent var			40.06				
R-squared			0.05	Number of observations		2626	
F-test			5.38	Prob > F		<.0001	

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-values: *<.05, **<.01, ***<.001, ns=not significant

Table 23. Linear Regression – Analysis of WCM Group Comparisons: Respondent Age

Linear regression - Analysis of WCM Group Comparisons: What is your age? (Q90)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	0.07	0.79	ns
Phase I vs. Classic CCS	0.03	0.86	ns
Phase II vs. Classic CCS	0.02	0.89	ns
Phase III vs. Classic CCS	0.12	0.72	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-values: *<.05, **<.01, ***<.001, ns=not significant

Respondent Race/Ethnicity: The race/ethnicity diversity of Phase I, Phase II, and Phase III respondents significantly differed from the race/ethnicity diversity of Classic CCS respondents. The percentage of Latinx respondents in Phase I (71%) was higher than Classic CCS respondents (56%). Phase I (1%) had fewer Black/African American respondents compared to Classic CCS respondents (6%). The percentage of Latinx respondents in Phase II (40%) was less than Classic CCS respondents (56%). Phase II (45%) had more White respondents compared to Classic CCS respondents (28%). The percentage of Latinx and Asian respondents in Phase III (Latinx=62%, Asian=13%) was higher than Classic CCS respondents (Latinx=56%, Asian=5%). Phase III also had fewer respondents that were Black/African American (2%) and White (19%) than Classic CCS (Black/African American=6%, White=28%). See Table 24.

Table 24. Respondent Race/Ethnicity

Caregiver/Respondent race (Q91 & Q92)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
White, non-Hispanic	60	164	191	60	268	743
	19.67	21.75	44.52	19.17	27.54	26.78
Latinx	156	532	171	195	542	1596
	51.15	70.56	39.86	62.30	55.70	57.53
Black/African American	8	7	19	6	55	95
	2.62	0.93	4.43	1.92	5.65	3.42
Asian or Pacific Islander	62	24	17	42	53	198
	20.33	3.18	3.96	13.42	5.45	7.14
Multi-race/ethnicity	11	15	25	5	31	87
	3.61	1.99	5.83	1.60	3.19	3.14
Other	8	12	6	5	24	55
	2.62	1.59	1.40	1.60	2.47	1.98
Total	305	754	429	313	973	2774
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	225.67					
p-value	<.0001					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Respondent Gender: For a majority (90%) of respondents in all WCM study groups the survey respondent was female. See Table 25.

Table 25. Respondent Gender

What is your gender? (Q93)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Female	278	707	398	293	895	2571
	88.82	89.95	89.04	91.28	89.77	89.77
Male	34	73	44	27	94	272

What is your gender? (Q93)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	10.86	9.29	9.84	8.41	9.43	9.50
Other (transgender, gender nonconforming)	1	6	5	1	8	21
	0.32	0.76	1.12	0.31	0.80	0.73
Total	313	786	447	321	997	2864
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	3.34					
Prob.	0.91					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Respondent Marital Status: The marital status of the respondents among WCM study groups did not differ. The majority of the respondents were “married” (54%), “single” (21%), or living with partner (11%). See Table 26.

Table 26. Respondent Marital Status

What is your marital status? (Q94)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Married	177	404	243	158	564	1546
	56.19	51.86	54.48	49.69	56.63	54.17
Single	70	170	99	74	185	598
	22.22	21.82	22.20	23.27	18.57	20.95
Divorced	23	69	53	23	66	234
	7.30	8.86	11.88	7.23	6.63	8.20
Separated	10	40	14	23	45	132
	3.17	5.13	3.14	7.23	4.52	4.63
Widowed	5	8	7	4	20	44
	1.59	1.03	1.57	1.26	2.01	1.54
Living with partner	30	88	30	36	116	300
	9.52	11.30	6.73	11.32	11.65	10.51
Total	315	779	446	318	996	2854
	100.00	100.00	100.00	100.00	100.00	100.00

What is your marital status? (Q94)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Rao-Scott Chi2	41.38					
Prob.	0.003					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Respondent Educational Level: The HPSM WCM respondents (56%) tended to have completed more schooling, some college or more education, than Classic CCS respondents (44%). There was no difference in educational attainment between the other WCM study groups and Classic CCS respondents. See Table 27.

Table 27. Respondent Educational Level

What is the highest grade or year of school you have completed? (Q95)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Less than high school	57	160	46	57	184	504
	18.57	20.70	10.60	18.45	18.87	18.01
High school graduate or GED completed	65	236	118	97	281	797
	21.17	30.53	27.19	31.39	28.82	28.48
Completed a vocational, trade, or business school program	13	51	30	21	82	197
	4.23	6.60	6.91	6.80	8.41	7.04
Some college credit but no degree or Associate's degree (AA, AS)	72	204	152	65	267	760
	23.45	26.39	35.02	21.04	27.38	27.16
Bachelor's degree (BA, BS, AB)	60	85	67	50	115	377
	19.54	11.00	15.44	16.18	11.79	13.47
Doctorate, professional, or Master's degree	40	37	21	19	46	163
	13.03	4.79	4.84	6.15	4.72	5.83
Total	307	773	434	309	975	2798
	100.00	100.00	100.00	100.00	100.00	100.00

What is the highest grade or year of school you have completed? (Q95)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Rao-Scott Chi2	60.04					
Prob.	<.0001					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Survey Language Administration: The weighted logistic regression analysis that controlled for client race showed a significant difference in survey language administration between Phase I and Phase II respondents, and Classic CCS respondents. A greater percentage of Phase II respondents (82%) answered the survey in English compared to Classic CCS respondents (69%). See Table 28.

Table 28. Survey Language Administration

Survey Language						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
English	233	550	370	222	698	2073
	73.73	69.62	82.04	69.16	69.45	71.90
Spanish	83	240	81	99	307	810
	26.27	30.38	17.96	30.84	30.55	28.10
Total	316	790	451	321	1005	2883
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	25.02					
P-value	<.0001					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Respondent Work Status: Across all WCM study groups, 39% of respondents indicated "working for pay full-time or part-time." There were no significant differences in work status between the WCM study groups and Classic CCS. See Table 29.

Table 29. Respondent Work Status

Which of the following best describes your current work status? (check all that apply) (Q96)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Working for pay full or part time (either outside the home or at a home-based business)	119	316	172	112	374	1093
	38.51	40.51	39.00	35.44	37.82	38.55
Working as an In-Home Supportive Services provider	28	90	69	29	117	333
	9.06	11.54	15.65	9.18	11.83	11.75
Not working for pay due to my child's health	15	47	20	26	63	171
	4.85	6.03	4.54	8.23	6.37	6.03
Not working for pay for other reasons/full time homemaker	57	127	51	55	187	477
	18.45	16.28	11.56	17.41	18.91	16.83
Retired	2	11	10	6	16	45
	0.65	1.41	2.27	1.90	1.62	1.59
Looking for paid work outside the home	6	14	13	6	17	56
	1.94	1.79	2.95	1.90	1.72	1.98
Multiple responses	65	128	81	59	163	496
	21.04	16.41	18.37	18.67	16.48	17.50
Don't know	1	13	7	3	9	33
	0.32	4.21	2.27	0.97	2.91	10.68
Decline to answer	16	34	18	20	43	131
	5.18	11.00	5.83	6.47	13.92	42.39
Total	309	780	441	316	989	2835
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	36.82					
Prob.	0.26					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Other Income Earners in the Household: There was a significant difference in other income earners in the household between Phase II respondents and Classic CCS respondents. Fewer Phase II households (50%) had 1 other income earner" compared to Classic CCS households (54%). Across all WCM study groups the majority of households across all WCM study groups have "1 other income earner" (55%) in addition to the respondent. Also, for approximately one-third of households, the respondent is the only income earner (35%). See Table 30.

Table 30. Other Household Income Earners

How many other income earners currently contribute to your household income? (Q97)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
I'm the only income earner	101	246	167	97	313	924
	34.24	33.70	39.57	33.56	33.62	34.65
There are no income earners	8	26	24	11	37	106
	2.71	3.56	5.69	3.81	3.97	3.97
1 other income earner	173	413	210	163	506	1465
	58.64	56.58	49.76	56.40	54.35	54.93
2 or more other income earners	13	45	21	18	75	172
	4.41	6.16	4.98	6.23	8.06	6.45
Total	295	730	422	289	931	2667
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	13.70					
Prob.	0.32					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Respondent Hours of Work Missed: There were no significant differences in the number of hours missed per month for the respondent in the household between respondents in the WCM study groups and Classic CCS respondents. See Table 31, Table 32, and Table 33.

Table 31. Mean Number of Respondent Work Hours Missed per Month

MEANS: (Only if R is an income earner) In a typical month over the last six months, how many hours of work for pay per month did you miss due to your child's health condition? (Q98)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	104	212	8.23	12.40	0.00	60.00
Phase I	269	521	7.31	16.71	0.00	200.00
Phase II	152	299	7.49	13.06	0.00	75.00
Phase III	106	215	6.69	12.68	0.00	80.00
Classic CCS	317	688	6.53	11.31	0.00	80.00

• Values are raw, non-weighted, survey results.

Table 32. Linear Regression: Number of Respondent Work Hours Missed Per Month

Linear regression: (Only if R is an income earner) In a typical month over the last six months, how many hours of work for pay per month did you miss due to your child's health condition? (Q98)						
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval	
HPSM WCM	0.70	1.35	0.52	0.60	-1.94	3.35
Phase I	0.67	1.15	0.58	0.56	-1.60	2.94
Phase II	-0.28	1.42	-0.19	0.85	-3.06	2.51
Phase III	-0.65	1.50	-0.43	0.67	-3.59	2.30
Classic CCS	0.00	0.00	.	.	0.00	0.00
Constant	7.87	1.17	6.72	<.0001	5.57	10.17
Weighted Mean dependent var			6.95			
R-squared			0.049	Number of observations	928	
F-test			3.55	Prob > F	0.0001	

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-values: *<.05, **<.01, ***<.001, ns=not significant

Table 33. Linear Regression – Analysis of WCM Group Comparisons: Number of Respondent Work Hours Missed Per Month

Linear regression - Analysis of WCM Group Comparisons: (Only if R is an income earner) In a typical month over the last six months, how many hours of work for pay per month did you miss due to your child's health condition? (Q98)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	0.27	0.60	ns
Phase I vs. Classic CCS	0.34	0.56	ns
Phase II vs. Classic CCS	0.04	0.85	ns
Phase III vs. Classic CCS	0.19	0.67	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-values: *<.05, **<.01, ***<.001, ns=not significant

Other Income Earners Hours of Work Missed: There were no significant differences in the number of hours missed per month for other income earners in the household among the WCM study groups and Classic CCS respondents. The mean number of hours of work missed due to the client's health condition ranged between 6 hours to 9 hours. See Table 34, Table 35, and Table 36.

Table 34. Mean Number of Household Work Hours Missed per Month

MEANS: (Only if there are other income earners) How many hours of work for pay per month did all other income earners in your family lose due to your child's health condition? (Q99)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	117	199	9.21	22.60	0.00	190.00
Phase I	326	464	9.18	26.19	0.00	240.00
Phase II	155	296	7.90	17.56	0.00	120.00
Phase III	122	199	5.76	15.76	0.00	120.00
Classic CCS	400	605	7.36	17.64	0.00	135.00

• Values are raw, non-weighted, survey results.

Table 35. Linear Regression: Number of Household Work Hours Missed per Month

Linear regression: (Only if there are other income earners) How many hours of work for pay per month did all other income earners in your family lose due to your child's health condition? (Q99)						
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval	
HPSM WCM	0.10	2.24	0.05	0.96	-4.30	4.51

Linear regression: (Only if there are other income earners) How many hours of work for pay per month did all other income earners in your family lose due to your child's health condition? (Q99)						
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval	
Phase I	0.40	1.83	0.22	0.83	-3.19	3.99
Phase II	-0.90	1.82	-0.49	0.62	-4.48	2.68
Phase III	-2.34	1.86	-1.25	0.21	-6.00	1.32
Classic CCS	0.00	0.00	.	.	0.00	0.00
Constant	7.44	1.36	5.47	<.0001	4.77	10.11
Weighted Mean dependent var		8.11				
R-squared		0.009	Number of observations		1100	
F-test		3.31	Prob > F		0.0003	

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Table 36. Linear Regression – Analysis of WCM Group Comparisons: Number of Household Work Hours Missed per Month

Linear regression - Analysis of WCM Group Comparisons: (Only if there are other income earners) How many hours of work for pay per month did all other income earners in your family lose due to your child's health condition? (Q99)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
Phase I vs. Classic CCS	0.05	0.83	ns
Phase II vs. Classic CCS	0.24	0.62	ns
Phase III vs. Classic CCS	1.57	0.21	ns
HPSM WCM vs. Classic CCS	0.00	0.96	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Hours Spent Arranging Healthcare: There were no significant differences in the number of hours the respondent spent per month arranging healthcare among the WCM study groups and Classic CCS respondents. The majority of respondents (58%) reported spending "5 or fewer [hours] per month" on activities to arrange their client's health care. Approximately one-fifth of respondents spent "6-10 [hours] per month" arranging the client's health care. See Table 37.

Table 37. Hours Spent Arranging Healthcare

Over the past 6 months, about how many hours per month do you spend on activities to arrange your child's healthcare, such as making appointments, paying bills, making calls, filling out forms, getting information, etc? Don't include driving to appointments. (Q100)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
5 or fewer per month	148	400	217	154	502	1421
	53.43	59.97	56.36	57.89	57.31	57.51
6-10 per month	60	142	85	47	194	528
	21.66	21.29	22.08	17.67	22.15	21.37
11-20 per month	34	52	39	27	78	230
	12.27	7.80	10.13	10.15	8.90	9.31
21-30 per month	6	34	15	12	33	100
	2.17	5.10	3.90	4.51	3.77	4.05
31-40 per month	13	10	10	8	28	69
	4.69	1.50	2.60	3.01	3.20	2.79
More than 40 per month	16	29	19	18	41	123
	5.78	4.35	4.94	6.77	4.68	4.98
Total	277	667	385	266	876	2471
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	17.14					
Prob.	0.64					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Income Level: A significantly larger percentage of HPSM WCM ($75,000+=18%), Phase I ($75,000+=11%), and Phase II ($75,000+=13%), respondents indicated having a higher income than Classic CCS ($75,000+=8%). See Table 38.

Table 38. Respondent Household Income

Which of the following income categories best describes your total 2019 household income before taxes? (Q101)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Less than $15,000	42	108	54	51	154	409
	17.07	16.12	14.75	20.32	18.36	17.24
$15,000 to $24,999	39	138	71	57	210	515

Which of the following income categories best describes your total 2019 household income before taxes? (Q101)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	15.85	20.60	19.40	22.71	25.03	21.71
$25,000 to $34,999	44	141	63	50	161	459
	17.89	21.04	17.21	19.92	19.19	19.35
$35,000 to $49,999	44	134	73	39	131	421
	17.89	20.00	19.95	15.54	15.61	17.75
$50,000 to $74,999	33	73	57	25	112	300
	13.41	10.90	15.57	9.96	13.35	12.65
$75,000 to $99,999	8	34	26	13	29	110
	3.25	5.07	7.10	5.18	3.46	4.64
$100,000 to $149,999	16	26	17	7	24	90
	6.50	3.88	4.64	2.79	2.86	3.79
$150,000 or more	20	16	5	9	18	68
	8.13	2.39	1.37	3.59	2.15	2.87
Total	246	670	366	251	839	2372
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	78.80					
Prob.	<.0001					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

WCM ENROLLMENT

This section provides information about how respondents learned about the WCM program.

How did you learn about WCM?: Overall, in all WCM study groups, the most frequent methods for learning about WCM was through a letter in the mail (38%) and multiple methods (20%). A large percentage of HPSM WCM respondents indicated “I haven’t received any information about the Whole Child Model” (22%) or “don’t know” (16%) about WCM. The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of not recalling having received information and “don't know" responses. See Table 39.

Table 39. How Learned About WCM

How did you learn about the Whole Child Model? Did you….(Mark all that apply.) (Q5)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Receive a letter in the mail	74	293	196	135	698
	23.49	37.42	44.04	42.72	37.55
Attend an in-person information session	1	7	1	3	12
	0.32	0.89	0.22	0.95	0.65
Learn about it from doctors, care managers, or doctor's office staff	59	95	44	33	231
	18.73	12.13	9.89	10.44	12.43
Learn about it from friends or support group	1	2	2	1	6
	0.32	0.26	0.45	0.32	0.32
Multiple methods	50	167	87	69	373
	15.87	21.33	19.55	21.84	20.06
Other	8	22	17	15	62
	2.54	2.81	3.82	4.75	3.34
I haven't received any information about the Whole client Model	69	100	62	33	264
	21.90	12.77	13.93	10.44	14.20
Decline to answer	4	7	1	3	15
	1.27	0.89	0.22	0.95	0.81
Don't know	49	90	35	24	198
	15.56	11.49	7.87	7.59	10.65
Total	315	783	445	316	1859
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	54.68				
Prob.	0.0003				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Table 40 shows the average number of modalities that respondents in the WCM study groups learned about the WCM program. On average the WCM study groups learned

about the WCM with one method. HPSM WCM and Phase II respondents learned about the WCM by significantly fewer methods compared to Phase III. See Table 41.

Table 40. Mean Number of Ways Respondents Learned about the WCM

MEANS: How did you learn about the Whole Child Model? - A count of the different methods (Q5)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	262	54	1.00	0.85	0.00	4.00
Phase I	686	104	1.16	0.77	0.00	4.00
Phase II	409	42	1.09	0.67	0.00	3.00
Phase III	289	32	1.18	0.72	0.00	5.00

• Values are raw, non-weighted, survey results.

Table 41. Linear Regression: Number of Ways Respondents Learned about the WCM

Linear regression: How did you learn about the Whole Child Model? - A count of the different methods (Q5)						
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval	
Phase I	0.15	0.06	2.70	0.007	0.04	0.27
Phase II	0.10	0.06	1.61	0.108	-0.02	0.22
Phase III	0.17	0.06	2.65	0.008	0.04	0.30
HPSM WCM	0.000	0.000	.	.	0.000	0.000
Constant	0.96	0.06	16.28	<.0001	0.84	1.07
Weighted Mean dependent var		1.16				
R-squared		0.018	Number of observations		1592	
F-test		3.33	Prob > F		<.0005	

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Unmet Need for Information: Overall, 64% of those in all WCM study groups said they got all the information they needed about the WCM, while 37% said they could have used more information. There were no significant differences between the WCM study groups. See Table 42.

Table 42. Unmet Need for WCM Information

Did you get all the information you needed about the Whole client Model/[NAME OF HEALTH PLAN], or could you have used more information? (Q6)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
I got all the information I needed	158	379	228	182	947
	64.23	62.23	61.29	70.00	63.69
I could have used more information/I have unanswered questions	88	230	144	78	540
	35.77	37.77	38.71	30.00	36.31
Total	246	609	372	260	1487
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	10.66				
Prob.	0.01				

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Summary – WCM Enrollment

In general, all WCM study groups learned about WCM through a letter in the mail or by multiple methods. Of significance is that large percentage of HPSM WCM respondents indicated they did not remember getting any information about WCM. The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of not recalling having received information and “don't know" responses. While a majority of WCM respondents felt they obtained all the information they needed about WCM, over a third of respondents felt they could have used additional information or had unanswered question. It might be helpful to review the program outreach and how that might be improved to facilitate enrollment and knowledge of the program.

OVERALL QUALITY OF CARE

The survey asked respondents about the impact WCM had on the quality of care received. This section focuses on those items assessing the broader WCM. Subsequent sections will include quality of care items that are specific to the type of care/service provided (e.g., primary care, specialty care, therapy services, etc.).

Overall Quality of Health Services: Since transitioning into WCM, the majority of Phase I (62%), Phase II (67%) and Phase III (61%) respondents indicated that the quality of health services were “about the same.” A large percentage of HPSM WCM respondents (39%) indicated “don’t know.” The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of

"don't know" responses. The HPSM WCM respondents (39%) also indicated that the quality of health services were “about the same.” Phase I respondents (86%) were significantly more likely to indicate that the quality of health services were “about the same” and “better since the transition compared to Phase II respondents (81%). See Table 43.

Table 43. Quality of Health Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	62	184	63	68	377
	19.87	23.71	14.16	21.52	20.39
About the same	121	483	298	194	1096
	38.78	62.24	66.97	61.39	59.28
Worse since the transition	8	37	43	31	119
	2.56	4.77	9.66	9.81	6.44
Don't know	121	72	41	23	257
	38.78	9.28	9.21	7.28	13.90
Total	312	776	445	316	1849
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	136.39				
Prob.	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Global Satisfaction with the Healthcare Delivery Model: Respondents in WCM were asked about their overall satisfaction with care since the transition and whether they filed an appeal, grievance, or complaint about the child's healthcare.

Since transitioning into the WCM, significantly fewer Phase II respondents (81%) indicated they were “satisfied” and “very satisfied” with their health plan compared to Classic CCS respondents (83%). Although fewer Phase II respondents (8%) were “dissatisfied” and “very dissatisfied” compared to Classic CCS respondents (9%), more Phase II respondents (11%) were more likely to be “neither satisfied nor dissatisfied” with their health plan compared to Classic CCS respondents (8%). The HPSM WCM, Phase I, and Phase III respondents did not significantly differ from Classic CCS in the satisfaction with their healthcare plan. See Table 44.

Table 44. Overall Satisfaction with Health Services

Overall, how satisfied are you with [NAME OF HEALTH PLAN/COUNTY CCS]? (Q80)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	13	26	20	18	56	133
	4.21	3.48	4.58	5.77	5.77	4.79
Dissatisfied	3	16	16	5	32	72
	0.97	2.14	3.66	1.60	3.30	2.59
Neither satisfied nor dissatisfied	26	64	47	25	74	236
	8.41	8.57	10.76	8.01	7.62	8.50
Satisfied	147	385	212	150	396	1290
	47.57	51.54	48.51	48.08	40.78	46.47
Very satisfied	120	256	142	114	413	1045
	38.83	34.27	32.49	36.54	42.53	37.64
Total	309	747	437	312	971	2776
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	49.60					
P-value	<.0001					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Grievances and Appeals: The majority of respondents (97%) did not file an appeal, grievance, or complaint about their child's healthcare. The differences between the WCM study groups and Classic CCS were not statistically significant. See Table 45.

Table 45. Filed an Appeal, Grievance, or Complaint About Child's Healthcare

In the last six months, did you file an appeal, grievance, or complaint about [CHILD'S NAME]'s healthcare? (Q81)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	298	760	434	310	963	2765
	96.44	98.19	97.09	97.79	97.27	97.46
Yes	11	14	13	7	27	72
	3.56	1.81	2.91	2.21	2.73	2.54
Total	309	774	447	317	990	2837
	100.00	100.00	100.00	100.00	100.00	100.00

In the last six months, did you file an appeal, grievance, or complaint about [CHILD'S NAME]'s healthcare? (Q81)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Rao-Scott Chi2	3.16					
P-value	0.53					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Overall Quality of Care

Since transitioning into WCM, approximately two-thirds of Phase I, Phase II and Phase III respondents indicated that the quality of health services were "about the same." Phase I respondents were more likely to indicate that the quality of health services were "about the same" and "better since the transition compared to Phase II respondents.

The HPSM WCM, Phase I, Phase III respondents did not significantly differ from Classic CCS in the satisfaction with their healthcare plan. Phase II respondents (81%) satisfaction with their health plan significantly differed from Classic CCS respondents (83%) satisfaction. Compared to Classic CCS, more Phase II respondents were "neither satisfied nor dissatisfied" or "satisfied," while fewer respondents were "very satisfied."

MEDICAL HOME/PRIMARY CARE

This section of the survey asked respondents about the client's primary medical healthcare, such access to a personal physician, utilization, and satisfaction.

Advice About Health: A high percentage of respondents (87%) for all WCM study groups reported having a place to go if their client is sick or needs healthcare advice. Compared to Classic CCS respondents, a significantly greater percentage of Phase II respondents indicated having a place to go if their client is sick or needs healthcare advice (Phase II=91% vs Classic CCS=86%). See Table 46.

Table 46. Obtaining Healthcare Advice

Is there a place that [CHILD'S NAME] USUALLY goes when he or she is sick or when you or another caregiver needs advice about his or her health? (Q8)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	40	96	39	52	138	365
	13.11	12.57	9.07	16.83	14.33	13.17
Yes	265	668	391	257	825	2406
	86.89	87.43	90.93	83.17	85.67	86.83

Is there a place that [CHILD'S NAME] USUALLY goes when he or she is sick or when you or another caregiver needs advice about his or her health? (Q8)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Total	305	764	430	309	963	2771
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	11.65					
Prob.	0.02					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Initial Location for Medical Care: Across all WCM study groups, when needing medical care, the majority of clients go to the doctor's office (64%); the next most frequented place is a clinic or health center (22%); and the third most frequent place is a hospital emergency room (8%). The HPSM WCM respondents (25%) tended to more frequently use a clinic or health center compared to Classic CCS respondents (18%). Phase III respondents (12%) tended to use the hospital emergency room more often than Classic CCS respondents (8%). See Table 47.

Table 47. Initial Location for Medical Care

Where does [CHILD'S NAME] USUALLY go first? (Q9)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Doctor's Office	188	481	289	215	655	1828
	60.26	61.75	64.37	66.98	65.83	64.01
Hospital Emergency Room	33	53	31	37	81	235
	10.58	6.80	6.90	11.53	8.14	8.23
Urgent Care clinic	2	22	4	14	25	67
	0.64	2.82	0.89	4.36	2.51	2.35
Hospital Outpatient Department	8	8	7	8	33	64
	2.56	1.03	1.56	2.49	3.32	2.24
Clinic or Health Center	79	208	114	45	184	630
	25.32	26.70	25.39	14.02	18.49	22.06
Retail Store Clinic or "Minute Clinic"	0	3	1	0	2	6
	0.00	0.39	0.22	0.00	0.20	0.21

Where does [CHILD'S NAME] USUALLY go first? (Q9)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
School (Nurse's Office, Athletic Trainer's Office)	1	3	2	2	8	16
	0.32	0.39	0.45	0.62	0.80	0.56
Some other place:	1	1	1	0	7	10
	0.32	0.13	0.22	0.00	0.70	0.35
Total	312	779	449	321	995	2856
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
Prob.						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Access to Personal Doctor: A majority of respondents in all WCM study groups (87%) reported "yes" to having a personal doctor or nurse. A significantly greater percentage of Phase II respondents (92%) indicated having a personal doctor or nurse than Classic CCS respondents (86%). See Table 48.

Table 48. Access to a Personal Doctor

Do you have one or more people you think of as [CHILD'S NAME] personal doctor or nurse? (Q10)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	39	117	37	38	142	373
	12.54	15.19	8.28	12.03	14.43	13.19
Yes	272	653	410	278	842	2455
	87.46	84.81	91.72	87.97	85.57	86.81
Total	311	770	447	316	984	2828
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	13.18					
p-value	0.01					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Personal Doctor: Table 49 shows who the respondents consider to be their personal doctor. A large percentage of respondents (86%) for all WCM study groups either had a primary care provider (44%) or multiple providers (42%) they considered to be a personal doctor or nurse. There were no significant differences between the WCM study groups and Classic CCS.

Table 49. Who is Considered to be Their Personal Doctor or Nurse

If yes *[Q10=Yes:* Do you have one or more people you think of as [CHILD'S NAME] personal doctor or nurse?*]*, is your personal doctor (check all that apply): (Q11)						
	HPSM WCM	**Phase I**	**Phase II**	**Phase III**	**Classic CCS**	**Total**
Primary Care Provider	119	299	188	115	343	1064
	44.74	46.43	46.88	42.12	41.58	44.17
Specialist or Specialist	41	76	44	45	113	319
	15.19	11.80	10.86	16.25	13.60	13.14
Multiple Providers	104	263	165	113	362	1007
	39.10	40.84	41.15	41.39	43.88	41.80
Other	2	6	4	0	7	19
	0.74	0.93	0.99	0.00	0.84	0.78
Total	270	644	405	277	831	2427
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
Prob.						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Access to the Same Primary Care Provider: The majority of respondents in all WCM study groups (90%) were able to continue seeing their same primary care provider. The differences between WCM study groups were not statistically significant. See Table 50.

Table 50. Access to Same Primary Care Provider

[Asked only of respondents enrolled in WCM] Since you switched to [NAME OF HEALTH PLAN], does [CHILD'S NAME] have the same primary care provider or did you have to switch to a new primary care provider? (Q12)					
	HPSM WCM	**Phase I**	**Phase II**	**Phase III**	**Total**
Changed primary care providers	22	50	32	23	127

[Asked only of respondents enrolled in WCM] Since you switched to [NAME OF HEALTH PLAN], does [CHILD'S NAME] have the same primary care provider or did you have to switch to a new primary care provider? (Q12)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
	13.84	9.23	9.33	10.27	10.02
Kept same primary care provider	137	492	311	201	1141
	86.16	90.77	90.67	89.73	89.98
Total	159	542	343	224	1268
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	1.09				
P-value	0.78				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Knowledge of Continuity Care: For individuals who switched primary care providers, the majority of respondents (75%) did not know they could file a continuity of care request. Of note is that 91% of Phase I respondents did not know they could file a continuity of care request. See Table 51.

Table 51. Knowledge about Continuity of Care Request

[if Q12=Changed primary care providers] Did you know that you/[CHILD'S NAME] could file a continuity of care request? (Q13)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
No	12	39	17	12	80
	66.67	90.70	62.96	66.67	75.47
Yes	6	4	10	6	26
	33.33	9.30	37.04	33.33	24.53
Total	18	43	27	18	106
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	7.39				
Prob.	0.06				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Primary Care Doctor Visits: On average, across the WCM study groups and Classic CCS, respondents reported seeing their primary care provider just under twice in the past six months (mean range=1.65 to 1.94). The WCM study groups did not significantly differ from the Classic CCS group in the reported frequency of primary care doctor visits. See Table 52.

Table 52. Mean Number of Visits to Primary Care Doctor

MEANS: [Ask all whose personal doctor is a primary care doctor.] In the past 6 months, how many times did your client visit their primary care provider or nurse? (Q14)						
WCM Group	**N**	**Missing N**	**Mean**	**Standard Deviation**	**Min**	**Max**
HPSM WCM	193	1.99	1.80	0.00	13.00	193
Phase I	506	2.22	1.79	0.00	12.00	506
Phase II	313	2.00	1.81	0.00	20.00	313
Phase III	199	1.89	1.65	0.00	10.00	199
Classic CCS	641	1.98	1.94	0.00	30.00	641

• Values are raw, non-weighted, survey results.

Table 53. Linear Regression: Number of Visits to Primary Care Doctor

Linear regression: [Ask all whose personal doctor is a primary care doctor.] In the past 6 months, how many times did your client visit their primary care provider or nurse? (Q14)							
WCM Group	**Co-efficient**	**Standard Error**	**t-value**	**p-value**	**95% Confidence Interval**		**Significance**
HPSM WCM	-0.04	0.15	-0.30	0.77	-0.34	0.25	ns
Phase I	0.10	0.14	0.74	0.46	-0.17	0.37	ns
Phase II	-0.13	0.14	-0.94	0.35	-0.41	0.14	ns
Phase III	-0.19	0.15	-1.22	0.22	-0.49	0.11	ns
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	2.09	0.09	22.53	<.0001	1.90	2.27	
Weighted Mean dependent var		2.07					
R-squared		0.01	Number of observations		1809		
F-test		1.68	Prob > F		0.08		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Table 54. Linear Regression – Analysis of WCM Group Comparisons: Number of Visits to Primary Care Doctor

Linear regression - Analysis of WCM Group Comparisons: [Ask all whose personal doctor is a primary care doctor.] In the past 6 months, how many times did your client visit their primary care provider or nurse? (Q14)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	0.09	0.77	ns
Phase I vs. Classic CCS	0.55	0.46	ns
Phase II vs. Classic CCS	0.88	0.35	ns
Phase III vs. Classic CCS	1.49	0.22	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Quality of Primary Care Services: Since transitioning into the WCM, the majority of Phase I (74%), Phase II (81%) and Phase III (74%) respondents indicated that primary care services were “about the same.” A large percentage of HPSM WCM respondents (36%) indicated “don’t know.” The HPSM WCM was implemented more than six years prior to administration of the survey; this likely contributed to the high percentage of "don't know" responses. HPSM WCM respondents (41%) also indicated that primary care services were “about the same.” The HPSM WCM responses account for the significant difference between the other WCM study groups. The differences between Phase I Phase II, and Phase III WCM study groups were not significant. See Table 55.

Table 55. Quality of Primary Care Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN,] have the primary care services that [CHILD’S NAME] receives been better, the same, or worse? (Q15)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	57	121	49	46	273
	21.11	18.11	12.10	16.43	16.82
About the same	113	496	328	207	1144
	41.85	74.25	80.99	73.93	70.49
Worse since the transition	4	13	13	12	42
	1.48	1.95	3.21	4.29	2.59
Don't know	96	38	15	15	164
	35.56	5.69	3.70	5.36	10.10
Total	270	668	405	280	1623

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN,] have the primary care services that [CHILD'S NAME] receives been better, the same, or worse? (Q15)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	151.86				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Emergency Department Visits: Across all WCM study groups the majority of respondents (80%) indicated that the client did not go to the emergency room even if it was not an emergency, because it was too difficult to see another doctor. Compared to Classic CCS clients, fewer Phase II clients went to the emergency room even if it was not an emergency, because it was too difficult to see another doctor (Phase II=17% vs Classic CCS=21%). See Table 56.

Table 56. Emergency Department Visits

In the last 6 months, did [CHILD'S NAME] go to the emergency room, even if it was not an emergency, because it was too difficult to see another doctor? (Q16)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	238	631	365	245	782	2261
	78.81	81.84	83.33	77.04	79.15	80.26
Yes	64	140	73	73	206	556
	21.19	18.16	16.67	22.96	20.85	19.74
Total	302	771	438	318	988	2817
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	6.69					
Prob.	0.15					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Needing a Referral for Services: Across all WCM study groups, 44% of respondents reported needing a referral. Compared to Classic CCS respondents, significantly fewer Phase II respondents reported needing a referral (Phase II: 38% vs Classic CCS: 44%).

The differences between HPSM WCM, Phase I, and Phase III WCM WCM study groups and Classic CCS were not significant. See Table 57.

Table 57. Need for a Referral

Q17. DURING THE PAST 6 MONTHS, did [CHILD'S NAME] need a referral to see any doctors or receive any services? (Q17)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	176	415	272	162	547	1572
	56.59	53.76	61.96	51.59	56.28	55.98
Yes	135	357	167	152	425	1236
	43.41	46.24	38.04	48.41	43.72	44.02
Total	311	772	439	314	972	2808
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	9.31					
P-value	0.05					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Referrals: The majority of respondents in all WCM study groups (67%) did not experience a problem in obtaining a referral. The differences between the WCM study groups and Classic CCS were not statistically significant. See Table 58.

Table 58. Access to Referrals

[if Q17=Yes: DURING THE PAST 6 MONTHS, did [CHILD'S NAME] need a referral to see any doctors or receive any services?] How big of a problem was it to get referrals? (Q18)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Not a problem	97	226	103	94	283	803
	75.19	64.76	63.98	64.83	67.87	66.86
Small problem	19	87	38	33	82	259
	14.73	24.93	23.60	22.76	19.66	21.57
Big problem	13	36	20	18	52	139
	10.08	10.32	12.42	12.41	12.47	11.57
Total	129	349	161	145	417	1201
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	6.87					
P-value	0.55					

[if Q17=Yes: DURING THE PAST 6 MONTHS, did [CHILD'S NAME] need a referral to see any doctors or receive any services?] How big of a problem was it to get referrals? (Q18)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Authorizations: The majority of respondents in all WCM study groups (61%) reported that obtaining an authorization was "about the same." A large percentage of HPSM WCM respondents (38%) stated "don't know" for whether there was a change in their ability to obtain authorizations. The high number of "don't know" responses probably reflects that this survey was administered six years after the WCM was initiated for HPSM WCM. While comparisons between the different WCM WCM study groups are difficult given different systemic healthcare structures, there were some significant differences between the WCM study groups. The ability for obtaining authorizations significantly differed between HPSM WCM and Phase III, Phase I and Phase III, and Phase II and Phase III. Given the high percentage of HPSM WCM respondents reporting "don't know," there should be caution when interpreting comparisons with the HPSM WCM group. Compared to Phase I respondents, more Phase III respondents (Phase III=13% vs Phase I=9%) reported that obtaining authorizations was "worse since the transition." A larger percentage of Phase I respondents (6%) indicated "don't know" for obtaining authorizations compared to Phase III respondents (3%). More Phase III respondents (22%) indicated obtaining authorizations was "better since the transition" compared to Phase II respondents (9%). See Table 59.

Table 59. Quality of Obtaining Authorizations for Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], has [CHILD'S NAME]'s ability to get authorizations for services been better, the same, or worse? (Q19)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	23	80	15	35	153
	16.79	21.62	8.52	22.15	18.19
About the same	58	234	120	97	509
	42.34	63.24	68.18	61.39	60.52
Worse since the transition	4	33	26	21	84
	2.92	8.92	14.77	13.29	9.99
Don't know	52	23	15	5	95
	37.96	6.22	8.52	3.16	11.30
Total	137	370	176	158	841

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], has [CHILD'S NAME]'s ability to get authorizations for services been better, the same, or worse? (Q19)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	101.87				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Medical Home/Primary Care

A majority of respondents in all WCM study groups indicated having a place to go for care when the client is sick or the respondent needs advice. When needing medical care, the majority of clients go to the doctor's office; the next most frequented place is a clinic or health center; and the third most frequent place is a hospital emergency room. The HPSM WCM respondents tended to more frequently use a clinic or health center compared to Classic CCS respondents. Phase III respondents tended to use the hospital emergency room more often than Classic CCS respondents.

Across all WCM study groups the majority of respondents indicated that the client did not go to the emergency room even if it was not an emergency, because it was too difficult to see another doctor. However, fewer Phase II clients went to the emergency room even if it was not an emergency, because it was too difficult to see another doctor compared to Classic CCS clients.

A majority of respondents in all WCM study groups indicated having a primary care doctor. A greater percentage of Phase II respondents indicated having a personal doctor or nurse than Classic CCS respondents.

A majority of respondents in all WCM study groups indicated having continuity with the same primary care doctor. However, three-quarters of individuals who switched primary care providers, did not know they could file a continuity of care request

On average, in all WCM study groups respondents reported seeing their primary care provider just under twice in the past six months. The WCM study groups did not significantly differ from the Classic CCS group in the reported frequency of primary care doctor visits.

Since transitioning into WCM, the majority of Phase I, Phase II, and Phase III respondents indicated that primary care services were "about the same." A large percentage of HPSM WCM respondents indicated "don't know" which probably reflects

that the HPSM WCM was implemented more than six years prior to administration of the survey. Very few respondents indicated primary care services were "worse since the transition."

While across all WCM study groups, 44% of respondents reported needing a referral, Phase II needed significantly fewer referrals compared to Classic CCS respondents. The majority of respondents in all WCM study groups did not experience a problem in obtaining a referral.

SPECIALTY CARE

This section of the survey asked respondents about the client's experience getting care from specialty doctors such as the number of specialists, access to specialists, utilization, and satisfaction.

Types of Specialist Providing Care: Table 60 provides a listing of the type of specialists the respondent indicated the client needs. The majority of respondents in all WCM study groups (59%) reported needing multiple specialists. See Table 61.

Table 60. Specialists Needed by WCM Clients

Please tell us all the different types of specialist [CHILD'S NAME] needs. (Q20)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Allergy/ Immunology	1	3	1	0	3	8
	0.32	0.38	0.22	0.00	0.30	0.28
Audiology	9	32	19	17	31	108
	2.85	4.05	4.21	5.30	3.08	3.75
Cardiology	15	39	18	18	45	135
	4.75	4.94	3.99	5.61	4.48	4.68
Dermatology	1	7	6	0	3	17
	0.32	0.89	1.33	0.00	0.30	0.59
Developmental Medicine	1	4	2	1	5	13
	0.32	0.51	0.44	0.31	0.50	0.45
Endocrinology	9	41	31	17	57	155
	2.85	5.19	6.87	5.30	5.67	5.38
Gastroenterology	3	4	2	5	10	24
	0.95	0.51	0.44	1.56	1.00	0.83
Genetics	1	2	1	1	3	8
	0.32	0.25	0.22	0.31	0.30	0.28
General Surgery	1	1	2	1	2	7
	0.32	0.13	0.44	0.31	0.20	0.24
Gynecology	0	1	0	0	0	1
	0.00	0.13	0.00	0.00	0.00	0.03
Hematology	0	7	2	4	3	16
	0.00	0.89	0.44	1.25	0.30	0.55

Please tell us all the different types of specialist [CHILD'S NAME] needs. (Q20)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Nephrology	1	10	5	2	10	28
	0.32	1.27	1.11	0.62	1.00	0.97
Neurology	7	17	14	7	21	66
	2.22	2.15	3.10	2.18	2.09	2.29
Neurosurgery	4	4	2	0	5	15
	1.27	0.51	0.44	0.00	0.50	0.52
Newborn Medicine	0	2	0	0	2	4
	0.00	0.25	0.00	0.00	0.20	0.14
Nutrition	1	3	2	0	3	9
	0.32	0.38	0.44	0.00	0.30	0.31
Oncology	2	5	6	0	3	16
	0.63	0.63	1.33	0.00	0.30	0.55
Ophthalmology	3	17	11	3	18	52
	0.95	2.15	2.44	0.93	1.79	1.80
Orthopedic Surgeon	5	20	6	7	24	62
	1.58	2.53	1.33	2.18	2.39	2.15
Otolaryngology	1	2	1	0	4	8
	0.32	0.25	0.22	0.00	0.40	0.28
Plastic Surgery	1	5	0	3	6	15
	0.32	0.63	0.00	0.93	0.60	0.52
Psychiatry	1	2	0	0	0	3
	0.32	0.25	0.00	0.00	0.00	0.10
Pulmonology	2	4	2	3	8	19
	0.63	0.51	0.44	0.93	0.80	0.66
Rheumatology	2	6	3	1	7	19
	0.63	0.76	0.67	0.31	0.70	0.66
Rehabilitation/ Physiatry	0	1	0	0	0	1
	0.00	0.13	0.00	0.00	0.00	0.03
Sports Medicine	0	2	1	1	7	11
	0.00	0.25	0.22	0.31	0.70	0.38
Urology	1	8	4	4	11	28
	0.32	1.01	0.89	1.25	1.09	0.97
Other	8	10	10	11	24	63
	2.53	1.27	2.22	3.43	2.39	2.19
Multiple Specialists	202	480	262	186	579	1709
	63.92	60.76	58.09	57.94	57.61	59.28
None	25	35	23	23	89	195
	7.91	4.43	5.10	7.17	8.86	6.76
Missing	9	16	15	6	22	68
	2.85	2.03	3.33	1.87	2.19	2.36
Total	316	790	451	321	1005	2883

Please tell us all the different types of specialist [CHILD'S NAME] needs. (Q20)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
Prob.						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Table 61 shows the mean number of specialists caring for the client by WCM study group. The HPSM WCM respondents indicated having significantly more specialists (mean number of 3.2 specialists) compared to Classic CCS respondents with a mean of 2.5 specialists. The difference in the mean number of specialists among Phase I, Phase II, Phase II and Classic CCS respondents was not significant. See Table 62 and Table 63.

Table 61. Mean Number of Specialists Seen by Client

MEANS: Please tell us all the different types of specialist [CHILD'S NAME] needs. [A count of the number of specialists] (Q20)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	316	0	3.16	2.99	0.00	15.00
Phase I	790	0	2.65	2.35	0.00	14.00
Phase II	451	0	2.68	2.60	0.00	15.00
Phase III	321	0	2.66	2.35	0.00	13.00
Classic CCS	1005	0	2.50	2.34	0.00	14.00

• Values are raw, non-weighted, survey results.

Table 62. Linear Regression: Number of Specialists Seen by Client

Linear regression: Please tell us all the different types of specialist [CHILD'S NAME] needs. [A count of the number of specialists] (Q20)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Significance
HPSM WCM	0.64	0.17	3.74	0.0002	0.31	0.98	***
Phase I	0.05	0.12	0.43	0.67	-0.18	0.28	
Phase II	0.03	0.15	0.21	0.83	-0.27	0.33	
Phase III	0.18	0.16	1.13	0.26	-0.13	0.48	

Linear regression: Please tell us all the different types of specialist [CHILD'S NAME] needs. [A count of the number of specialists] (Q20)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Significance
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	2.60	0.14	18.61	<.0001	2.32	2.87	
Weighted Mean dependent var		2.54					
R-squared		0.02	Number of observations		2788		
F-test		4.37	Prob > F		<.0001		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Table 63. Linear Regression – Analysis of WCM Group Comparisons: Number of Specialists Seen by Client

Linear regression - Analysis of WCM Group Comparisons: Please tell us all the different types of specialist [CHILD'S NAME] needs. [A count of the number of specialists] (Q20)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	14.00	0.0002	***
Phase I vs. Classic CCS	0.18	0.67	
Phase II vs. Classic CCS	0.05	0.83	
Phase III vs. Classic CCS	1.27	0.26	

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Specialists Continuity of Care: The vast majority of respondents (94%) in all WCM study groups reported being able to see the same specialists after transitioning to WCM. The differences among the WCM study groups were not statistically significant. See Table 64.

Table 64. Continuity of Specialist Care

[Asked only of respondents enrolled in WCM] Was [CHILD'S NAME] able to see the same specialists after enrolling in [NAME OF HEALTH PLAN]? (Q21)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
No - Had to change to one or more new specialists	14	37	18	18	87
	7.04	5.33	4.63	6.43	5.57
Yes - Still able to see same specialists	185	657	371	262	1475
	92.96	94.67	95.37	93.57	94.43
Total	199	694	389	280	1562
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	2.05				
P-value	0.56				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

New Specialists: For clients unable to see the same specialist, Table 65 provides a listing of the types of new specialists.

Table 65. New Types of Specialists Seen

[Asked only of respondents enrolled in the WCM] (If No to Q21) Which types of new specialists did [CHILD'S NAME] have to change? (Q22)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Allergy/ Immunology	0	0	0	1	1
	0.00	0.00	0.00	6.67	1.37
Audiology	0	5	0	3	8
	0.00	13.89	0.00	20.00	10.96
Cardiology	1	3	0	1	5
	10.00	8.33	0.00	6.67	6.85
Developmental Medicine	0	0	2	1	3
	0.00	0.00	16.67	6.67	4.11
Endocrinology	0	4	0	1	5
	0.00	11.11	0.00	6.67	6.85
Gastroenterology	0	2	0	0	2
	0.00	5.56	0.00	0.00	2.74
Nephrology	0	1	0	0	1
	0.00	2.78	0.00	0.00	1.37

[Asked only of respondents enrolled in the WCM] (If No to Q21) Which types of new specialists did [CHILD'S NAME] have to change? (Q22)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Neurology	1	1	2	1	5
	10.00	2.78	16.67	6.67	6.85
Neurosurgery	0	2	0	0	2
	0.00	5.56	0.00	0.00	2.74
Oncology	0	1	0	0	1
	0.00	2.78	0.00	0.00	1.37
Ophthalmology	0	3	1	0	4
	0.00	8.33	8.33	0.00	5.48
Otolaryngology	0	1	0	1	2
	0.00	2.78	0.00	6.67	2.74
Pulmonology	0	1	1	1	3
	0.00	2.78	8.33	6.67	4.11
Rheumatology	0	0	1	0	1
	0.00	0.00	8.33	0.00	1.37
Sports Medicine	1	4	1	1	7
	10.00	11.11	8.33	6.67	9.59
Urology	0	2	0	0	2
	0.00	5.56	0.00	0.00	2.74
Dentist/ Orthodontist	1	0	0	0	1
	10.00	0.00	0.00	0.00	1.37
Other	2	0	1	0	3
	20.00	0.00	8.33	0.00	4.11
N/A	4	6	3	4	17
	40.00	16.67	25.00	26.67	23.29
Total	10	36	12	15	73
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†				
Prob.					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Knowledge About Process to Continue to See the Same Specialist: The majority of respondents in all WCM study groups (64%) did not know they could file a continuity of care request after transitioning to WCM. See Table 66.

Table 66. Knowledge About Filing a Continuity of Care Request

(if Q21="No - Had to change to one or more new specialists") Did you know that you/[CHILD'S NAME] could file a continuity of care request? (Q23)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
No	4	18	7	8	37
	66.67	69.23	58.33	57.14	63.79
Yes	2	8	5	6	21
	33.33	30.77	41.67	42.86	36.21
Total	6	26	12	14	58
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	0.37				
Prob.	0.95				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Scheduled Appointments with Specialists: The majority of clients (84%) across all WCM study groups had an appointment with a specialist. There were no significant differences between WCM study groups and Classic CCS. See Table 67.

Table 67. Scheduled Appointments with Specialists

In the last 6 months, how many appointments with specialists did [CHILD'S NAME] have? (Q24)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
None	37	112	57	42	132	380
	15.16	17.15	15.32	16.47	16.58	16.38
Yes	207	541	315	213	664	1940
	84.84	82.85	84.68	83.53	83.42	83.62
Total	244	653	372	255	796	2320
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	2.22					
Prob.	0.70					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Table 68 shows the mean number of appointments with specialists. On average, in the past 6 months respondents indicated having approximately 2.7 to 4 specialist appointments. Phase I (mean=2.8) and Phase II (mean=2.7) respondents indicated

having fewer specialist appointments compare to Classic CCS respondents (mean=3.2). Also see Table 69 and Table 70.

Table 68. Mean Number of Appointments with Specialists

MEANS: In the last 6 months, how many appointments with specialists did [CHILD'S NAME] have? (Q24)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	249	67	3.99	7.76	0.00	96.00
Phase I	667	123	2.76	3.63	0.00	48.00
Phase II	375	76	2.68	4.42	0.00	50.00
Phase III	257	64	2.98	3.88	0.00	32.00
Classic CCS	808	197	3.16	5.80	0.00	100.00

• Values are raw, non-weighted, survey results.

Table 69. Linear Regression: Number of Appointments with Specialists

Linear regression: In the last 6 months, how many appointments with specialists did [CHILD'S NAME] have? (Q24)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Signifi-cance
HPSM WCM	0.69	0.50	1.37	0.17	-0.30	1.67	ns
Phase I	-0.67	0.32	-2.06	0.04	-1.31	-0.03	*
Phase II	-0.85	0.37	-2.32	0.02	-1.57	-0.13	*
Phase III	-0.32	0.35	-0.91	0.37	-1.01	0.37	ns
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	3.89	0.54	7.22	<.0001	2.83	4.94	
Weighted Mean dependent var		3.23					
R-squared		0.01	Number of observations		2298		
F-test		2.41	Prob > F		0.008		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Table 70. Linear Regression – Analysis of WCM Group Comparisons: Number of Appointments with Specialists

Linear regression - Analysis of WCM Group Comparisons: In the last 6 months, how many appointments with specialists did [CHILD'S NAME] have? (Q24)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	1.88	0.17	ns
Phase I vs. Classic CCS	4.26	0.04	*
Phase II vs. Classic CCS	5.40	0.02	*
Phase III vs. Classic CCS	0.82	0.37	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Access to Getting Appointments with Specialists: Since the implementation of WCM, a significant percentage of respondents (78%), across all WCM study groups, reported that it was "usually easy" or "always easy" to get an appointment with specialists. Fewer Phase III respondents (71%) indicated that it was "usually easy" or "always easy" to get an appointment with specialists compared to Classic CCS (79%). The other WCM study groups respondents did not differ from Classic CCS respondents. See Table 71.

Table 71. Access to Specialist Appointments

In the last 6 months, how often was it easy to get appointments for [CHILD'S NAME] with specialists? (Q25)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never Easy	10	25	10	6	34	85
	4.74	4.63	3.18	2.83	5.15	4.39
Sometimes easy	38	98	47	56	106	345
	18.01	18.15	14.97	26.42	16.06	17.81
Usually easy	79	172	120	60	252	683
	37.44	31.85	38.22	28.30	38.18	35.26
Always easy	84	245	137	90	268	824
	39.81	45.37	43.63	42.45	40.61	42.54
Total	211	540	314	212	660	1937
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	42.79					
P-value	<.0001					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Satisfaction with Specialty Services: The majority of respondents in all WCM study groups (88%) indicated they were "satisfied" or "very satisfied" with the specialty services they have been receiving. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 72.

Table 72. Satisfaction with Specialist Services

How satisfied are you with the overall specialist services that [CHILD'S NAME] receives (Q26)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	14	36	17	9	40	116
	6.76	6.68	5.41	4.21	5.99	5.97
Dissatisfied	3	15	7	9	9	43
	1.45	2.78	2.23	4.21	1.35	2.21
Neither satisfied nor dissatisfied	7	15	8	8	27	65
	3.38	2.78	2.55	3.74	4.04	3.35
Satisfied	75	204	102	78	223	682
	36.23	37.85	32.48	36.45	33.38	35.12
Very satisfied	108	269	180	110	369	1036
	52.17	49.91	57.32	51.40	55.24	53.35
Total	207	539	314	214	668	1942
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	22.22					
P-value	0.14					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Unmet Need for Specialty Services: The majority of respondents in all WCM study groups (87%) were able to get all the specialist services they needed. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 73.

Table 73. Unmet Need for Specialty Services

Does [CHILD'S NAME] need any specialist services that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q27)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No, he or she gets all the specialist services he or she needs.	209	561	308	214	629	1921
	87.08	87.66	87.75	89.17	85.35	87.00
Yes, there are specialist services he or she needs but cannot get through current plan	31	79	43	26	108	287
	12.92	12.34	12.25	10.83	14.65	13.00
Total	240	640	351	240	737	2208
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	5.87					
P-value	0.21					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

If a respondent indicated in Q27, Table 73, that the client needs specialty services they cannot get, Table 74 indicates the specialist services mentioned that could not be obtained. A broad range of specialist services are listed.

Table 74. Specialist Services that Could Not be Obtained

[If Q27=yes - There are specialist services he or she needs but cannot get through current plan] What does [CHILD'S NAME] need that he or she can't get? (Q28)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Allergy/ Immunology	0	0	0	0	1	1
	0.00	0.00	0.00	0.00	0.99	0.39
Audiology	1	3	1	1	5	11
	4.55	4.00	2.63	4.76	4.95	4.28
Cardiology	0	3	0	1	1	5

[If Q27=yes - There are specialist services he or she needs but cannot get through current plan] What does [CHILD'S NAME] need that he or she can't get? (Q28)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	0.00	4.00	0.00	4.76	0.99	1.95
Dermatology	0	2	1	0	2	5
	0.00	2.67	2.63	0.00	1.98	1.95
Developmental Medicine	0	5	2	1	5	13
	0.00	6.67	5.26	4.76	4.95	5.06
Endocrinology	1	3	2	0	1	7
	4.55	4.00	5.26	0.00	0.99	2.72
Gastroenterology	0	0	0	0	1	1
	0.00	0.00	0.00	0.00	0.99	0.39
General Surgery	0	0	1	0	0	1
	0.00	0.00	2.63	0.00	0.00	0.39
Genetics	0	2	0	0	1	3
	0.00	2.67	0.00	0.00	0.99	1.17
Infectious Disease	0	1	0	0	0	1
	0.00	1.33	0.00	0.00	0.00	0.39
Nephrology	1	0	0	1	0	2
	4.55	0.00	0.00	4.76	0.00	0.78
Neurology	1	2	4	2	0	9
	4.55	2.67	10.53	9.52	0.00	3.50
Neurosurgery	0	1	0	0	1	2
	0.00	1.33	0.00	0.00	0.99	0.78
Nutrition	1	1	0	1	2	5
	4.55	1.33	0.00	4.76	1.98	1.95
Ophthalmology and optometry	3	4	0	0	7	14
	13.64	5.33	0.00	0.00	6.93	5.45
Otolaryngology (or ENT)	0	1	0	1	1	3
	0.00	1.33	0.00	4.76	0.99	1.17
Pain/ Palliative Care	0	0	1	0	0	1
	0.00	0.00	2.63	0.00	0.00	0.39
Plastic Surgery	0	0	0	0	1	1

[If Q27=yes - There are specialist services he or she needs but cannot get through current plan] What does [CHILD'S NAME] need that he or she can't get? (Q28)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	0.00	0.00	0.00	0.00	0.99	0.39
Psychiatry	0	1	1	0	1	3
	0.00	1.33	2.63	0.00	0.99	1.17
Pulmonology	0	0	1	0	1	2
	0.00	0.00	2.63	0.00	0.99	0.78
Dentist, orthodontist	3	10	5	1	11	30
	13.64	13.33	13.16	4.76	10.89	11.67
Sleep specialist	0	0	0	0	1	1
	0.00	0.00	0.00	0.00	0.99	0.39
Sports medicine/ Orthopedics	0	1	2	1	0	4
	0.00	1.33	5.26	4.76	0.00	1.56
Urology	0	1	0	0	0	1
	0.00	1.33	0.00	0.00	0.00	0.39
Complementary health approaches	0	2	3	0	3	8
	0.00	2.67	7.89	0.00	2.97	3.11
COVID made it difficult to receive services	0	0	0	1	3	4
	0.00	0.00	0.00	4.76	2.97	1.56
Other (e.g., laser surgery, radiology, OB/GYN, podiatry, orthopedic surgeon)	0	5	2	0	2	9
	0.00	6.67	5.26	0.00	1.98	3.50
N/A (answers that did not apply to this question, e.g., therapies (forms of PT, OT, ST),	11	27	12	10	50	110

[If Q27=yes - There are specialist services he or she needs but cannot get through current plan] What does [CHILD'S NAME] need that he or she can't get? (Q28)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
behavioral/mental health therapies or services, medical supplies, pharmacy, psychiatry, equipment, etc.)						
	50.00	36.00	31.58	47.62	49.50	42.80
Total	22	75	38	21	101	257
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
Prob.						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Quality of Specialist Care: Since transitioning into WCM, the majority of Phase I (75%), Phase II (80%) and Phase III (78%) respondents indicated that specialty care services were "about the same." A large percentage of HPSM WCM respondents (36%) indicated "don't know." The HPSM WCM was implemented more than six years prior to administration of the survey; this likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (45%) also indicated that primary care services were "about the same." The HPSM WCM responses account for the significant difference between the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 75.

Table 75. Quality of Specialist Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the specialist services that [CHILD'S NAME] receives been better, the same, or worse? (Q29)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	49	129	46	39	263
	17.13	17.36	11.08	13.36	15.15
About the same	130	556	330	228	1244
	45.45	74.83	79.52	78.08	71.66

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the specialist services that [CHILD'S NAME] receives been better, the same, or worse? (Q29)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Worse since the transition	4	19	13	13	49
	1.40	2.56	3.13	4.45	2.82
Don't know	103	39	26	12	180
	36.01	5.25	6.27	4.11	10.37
Total	286	743	415	292	1736
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	158.51				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Specialty Care

A majority of respondents in all WCM study groups have multiple specialists caring for the client. The HPSM WCM clients have significantly more specialists than Classic CCS. After the WCM implementation, the majority of clients in al WCM study groups are able to continue with the same specialists. There was no difference among the WCM study groups in the number of visits to a specialists. For the relatively small sample of clients that changed specialty care providers, a significant percentage (67%) did not know they could have filed a continuity of care request.

The majority of clients (84%) across all WCM study groups had an appointment with a specialist. Phase I and Phase II respondents indicated having fewer specialist appointments compare to Classic CCS respondents. While a significant percentage of respondents across all WCM study groups reported that it was "usually easy" or "always easy" to get an appointment with specialists, fewer Phase III respondents indicated that it was "usually easy" or "always easy" to get an appointment with specialists compared to Classic CCS. The majority of respondents in all WCM study groups indicated they were "satisfied" or "very satisfied" with the specialty services they have been receiving. Also, the majority of respondents in all WCM study groups did not have unmet needs related to specialty services.

Since transitioning into WCM, the majority of Phase I, Phase II, and Phase III respondents indicated that specialty care services were "about the same." While almost a half of HPSM WCM respondents responded that the quality of specialty services were "about the same," almost one-third of the HPSM WCM respondents were unable to state whether there was a change in the quality of specialist services. The HPSM WCM

was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of "don't know" responses.

THERAPY SERVICES

Respondents in the telephone survey were asked about their children's use, the site, and access to therapy services.

Need for Therapy Services: Approximately half of respondents in all WCM study groups (51%) indicated a need for therapy services. Significantly more HPSM WCM respondents (62%) indicated a need for therapy services compared to Classic CCS respondents (51%). See Table 76.

Table 76. Need for Therapy Services

Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services? (Q30)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	116	382	209	159	476	1342
	38.41	50.40	48.72	51.13	49.33	48.54
Yes	186	376	220	152	489	1423
	61.59	49.60	51.28	48.87	50.67	51.46
Total	302	758	429	311	965	2765
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	4.81					
Prob.	0.31					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Types of Therapies Needed: Across all WCM study groups the majority of respondents (82%) indicated needing multiple therapies. There were no significant differences between the WCM study groups and Classic CCS in the need of therapy services. See Table 77.

Table 77. Types of Therapy Services Needed

(If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) What types of therapy does [CHILD'S NAME] need? (Q31)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Physical therapy	17	37	27	15	53	149
	5.40	4.69	6.01	4.67	5.29	5.18
Occupational therapy	9	12	5	2	14	42
	2.86	1.52	1.11	0.62	1.40	1.46
Speech therapy	35	72	38	30	111	286
	11.11	9.13	8.46	9.35	11.08	9.94
Other	4	14	8	6	11	43
	1.27	1.77	1.78	1.87	1.10	1.50
Multiple therapies	250	654	371	268	813	2356
	79.37	82.89	82.63	83.49	81.14	81.92
Total	315	789	449	321	1002	2876
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	11.52					
Prob.	0.78					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Table 78 shows the average number of therapies the respondent reported that a client is receiving. Across all WCM study groups the average number of therapies is approximately two. There were no significant differences between the WCM study groups and Classic CCS in the average number of therapies a client was receiving. See Table 79 and Table 80.

Table 78. Mean Number of Therapy Services Needed

MEANS: (If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) What types of therapy does [CHILD'S NAME] need? – A count of the number of therapies (Q31)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	185	1	2.19	1.03	1.00	4.00
Phase I	373	3	2.03	0.93	1.00	4.00
Phase II	219	1	2.10	0.99	1.00	4.00

MEANS: (If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) What types of therapy does [CHILD'S NAME] need? – A count of the number of therapies (Q31)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
Phase III	149	3	2.06	0.95	1.00	4.00
Classic CCS	486	3	2.02	0.97	1.00	4.00

• Values are raw, non-weighted, survey results.

Table 79. Linear Regression: Number of Therapy Services Needed

Linear regression: (If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) What types of therapy does [CHILD'S NAME] need? (Q31)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Signifi-cance
HPSM WCM	0.11	0.09	1.24	0.22	-0.07	0.29	ns
Phase I	-0.05	0.07	-0.65	0.52	-0.19	0.10	ns
Phase II	0.01	0.09	0.10	0.92	-0.16	0.18	ns
Phase III	0.01	0.09	0.16	0.87	-0.17	0.20	ns
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	1.99	0.09	22.60	<.0001	1.82	2.17	
Weighted Mean dependent var		2.02					
R-squared		0.02	Number of observations		1371		
F-test		3.02	Prob > F		0.0009		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Table 80. Linear Regression – Analysis of WCM Group Comparisons: Number of Therapy Services Needed

Linear regression - Analysis of WCM Group Comparisons: (If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) What types of therapy does [CHILD'S NAME] need? (Q31)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	1.53	0.22	ns
Phase I vs. Classic CCS	0.42	0.52	ns

Linear regression - Analysis of WCM Group Comparisons: (If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) What types of therapy does [CHILD'S NAME] need? (Q31)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
Phase II vs. Classic CCS	0.01	0.92	ns
Phase III vs. Classic CCS	0.02	0.87	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Location of Therapy Services: Table 81 provides a description of the different location clients are receiving therapies. The distribution of places where the client receives therapy services differed between Phase I and Phase III clients and Classic CCS clients. A greater percentage of Phase I (medical therapy unit=14%, multiple venues=40%) and Phase III (medical therapy unit=17%, multiple venues=42%) clients received therapy from a medical therapy unit or multiple venues than Classic CCS clients (medical therapy unit=10%, multiple venues=38%). Fewer Phase I (26%) and Phase III (22%) clients received therapy through school district programming than Classic CCS clients (33%).

Table 81. Location of Therapy Services

(If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) Please tell me all the types of places where [CHILD'S NAME] gets therapy services (Q32)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
A Medical Therapy Unit	16	51	16	25	48	156
	8.65	14.09	7.34	16.89	10.13	11.25
Through school district programming	35	93	67	33	155	383
	18.92	25.69	30.73	22.30	32.70	27.61
At the office of a rehabilitation doctor or physical therapist	15	29	24	13	32	113
	8.11	8.01	11.01	8.78	6.75	8.15
Hospital-based rehabilitation program	6	17	8	4	15	50
	3.24	4.70	3.67	2.70	3.16	3.60
Other	28	27	12	11	45	123

(If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) Please tell me all the types of places where [CHILD'S NAME] gets therapy services (Q32)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	15.14	7.46	5.50	7.43	9.49	8.87
Multiple locations	85	145	91	62	179	562
	45.95	40.06	41.74	41.89	37.76	40.52
Total	185	362	218	148	474	1387
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	37.01					
Prob.	0.01					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency

Table 82 shows the average number of different locations where clients receive therapy services by WCM study group. The HPSM WCM clients (mean=1.5) receive therapy at significantly more locations than Classic CCS clients (mean=1.4). The mean number of therapy locations for the other WCM study groups did not significantly differ from Classic CCS. See Table 83 and Table 84.

Table 82. Mean Number of Locations of Therapy Services

MEANS: (If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) Please tell me all the types of places where [CHILD'S NAME] gets therapy services (Q32)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	185	1	1.54	0.71	1.00	4.00
Phase I	373	3	1.39	0.58	1.00	4.00
Phase II	217	3	1.44	0.63	1.00	4.00
Phase III	150	2	1.39	0.58	1.00	3.00
Classic CCS	485	4	1.39	0.64	1.00	4.00

• Values are raw, non-weighted, survey results.

Table 83. Linear Regression: Number of Locations of Therapy Services

Linear regression: (If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) Please tell me all the types of places where [CHILD'S NAME] gets therapy services (Q32)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Signifi-cance
HPSM WCM	0.17	0.06	2.83	0.005	0.05	0.29	**

Linear regression: (If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) Please tell me all the types of places where [CHILD'S NAME] gets therapy services (Q32)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Signifi-cance
Phase I	-0.03	0.05	-0.67	0.50	-0.13	0.06	ns
Phase II	0.04	0.06	0.74	0.46	-0.07	0.16	ns
Phase III	0.00	0.06	0.02	0.99	-0.12	0.12	ns
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	1.38	0.04	38.25	<.0001	1.31	1.45	
Weighted Mean dependent var		1.39					
R-squared		0.005	Number of observations		1369		
F-test		2.32	Prob > F		0.01		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Table 84. Linear Regression – Analysis of WCM Group Comparisons: Number of Locations of Therapy Services

Linear regression - Analysis of WCM Group Comparisons: (If Q30=Yes: Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?) Please tell me all the types of places where [CHILD'S NAME] gets therapy services (Q32)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	8.00	0.005	**
Phase I vs. Classic CCS	0.45	0.50	ns
Phase II vs. Classic CCS	0.54	0.46	ns
Phase III vs. Classic CCS	0.00	0.99	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Continuity of Location of Therapy Services: The majority of clients across all WCM study groups (88%) did not experience a change in the location of therapy services. See Table 85.

Table 85. Continuity of Location of Therapy Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] did the site of [CHILD'S NAME] therapy change? (Q33)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
No change	96	303	178	112	689
	84.21	89.91	89.90	85.50	88.33
Yes, used to go to medical therapy unit, now goes to other	6	8	4	5	23
	5.26	2.37	2.02	3.82	2.95
Yes, used to go to other, now goes to Medical Therapy Unit	0	3	3	2	8
	0.00	0.89	1.52	1.53	1.03
Yes, changed some other way	12	23	13	12	60
	10.53	6.82	6.57	9.16	7.69
Total	114	337	198	131	780
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†				
P-value					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access of Getting Therapy Service Appointments: Since the implementation of WCM, a greater number of respondents in the WCM study groups (42%) reported that it was "always easy" to get a medical therapy services appointment for the client compared to Classic CCS respondents (30%). The distribution in the ease of obtaining therapy services for Phase II respondents significantly differed from Classic CCS respondents. A higher percentage of Phase II respondents (76%) indicated it was "usually easy" or "always easy" to obtain a medical therapy appointment than Classic CCS respondents (66%) since the implementation of WCM. See Table 86.

Table 86. Access to Therapy Services

In the last 6 months, how often was it easy to get therapy services for [CHILD'S NAME]? (Q34)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never easy	7	7	3	5	14	36

In the last 6 months, how often was it easy to get therapy services for [CHILD'S NAME]? (Q34)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	10.29	5.00	4.41	9.26	10.14	7.69
Sometimes easy	14	35	13	11	33	106
	20.59	25.00	19.12	20.37	23.91	22.65
Usually easy	20	42	24	13	49	148
	29.41	30.00	35.29	24.07	35.51	31.62
Always easy	27	56	28	25	42	178
	39.71	40.00	41.18	46.30	30.43	38.03
Total	68	140	68	54	138	468
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	16.49					
P-value	0.17					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights & is across all three WCM study groups.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Satisfaction with Therapy Services: The majority of survey respondents in all WCM study groups (74%) were "satisfied" or "very satisfied" with the therapy services they were receiving. There were no statistically significant differences among the WCM study groups and Classic CCS. See Table 87.

Table 87. Satisfaction with Therapy Services

How satisfied are you with the therapy services that [CHILD'S NAME] receives? (Q35)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	10	18	11	8	41	88
	5.78	5.37	5.37	5.88	9.13	6.78
Dissatisfied	16	28	19	9	36	108
	9.25	8.36	9.27	6.62	8.02	8.32
Neither satisfied nor dissatisfied	16	29	24	20	52	141
	9.25	8.66	11.71	14.71	11.58	10.86
Satisfied	84	142	81	57	177	541
	48.55	42.39	39.51	41.91	39.42	41.68

How satisfied are you with the therapy services that [CHILD'S NAME] receives? (Q35)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very satisfied	47	118	70	42	143	420
	27.17	35.22	34.15	30.88	31.85	32.36
Total	173	335	205	136	449	1298
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	12.89					
P-value	0.68					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Unmet Need for Medical Therapy Services: While the majority of respondents in all WCM study groups reported that their medical therapy services needs were met (65%), there was a large percentage of respondents who reported unmet needs (35%). There were no statistically significant differences between the WCM study groups and Classic CCS. See Table 88.

Table 88. Unmet Need for Therapy Services

Does [CHILD'S NAME] need any therapy services that he or she currently cannot get? (Q36)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Needs met	98	210	118	85	254	765
	63.64	67.09	63.44	66.93	62.72	64.56
Has unmet needs	56	103	68	42	151	420
	36.36	32.91	36.56	33.07	37.28	35.44
Total	154	313	186	127	405	1185
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	1.36					
P-value	0.85					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights & is across all three WCM study groups.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

If a respondent indicated in Q36, Table 88, that the client needs medical therapy services they cannot get, Table 89 indicates the medical therapy services mentioned that could not be obtained. A broad range of services are listed. Speech therapy (31%) is the most common therapy clients were unable to get, followed by occupational therapy (24%), physical therapy (18%), and behavioral/mental health therapy (13%).

Table 89. Therapy Services That Were Not Obtained

[If Q36=yes - Yes, has unmet need (therapy services)] What does need that he or she can't get? (Q37)	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Physical therapy	6	17	17	10	20	70
	12.77	17.53	25.76	25.64	13.99	17.86
Speech therapy	19	33	8	13	49	122
	40.43	34.02	12.12	33.33	34.27	31.12
Occupational therapy	9	27	21	6	31	94
	19.15	27.84	31.82	15.38	21.68	23.98
Education-related therapy (for academic help/learning (tutor), life skills training/coaching, adult skills)	0	1	0	1	0	2
	0.00	1.03	0.00	2.56	0.00	0.51
COVID - not getting therapy due to covid - the site is closed or appointments are on hold - getting online appointments due to covid, but prefer in-person	2	5	1	2	12	22
	4.26	5.15	1.52	5.13	8.39	5.61
Special education/ education therapy (includes developmental and child development, ADA; and school/education-related, e.g., learning therapy, concentration/focus, reading)	0	0	2	0	0	2
	0.00	0.00	3.03	0.00	0.00	0.51
Behavioral/mental health therapy	8	10	8	3	20	49
	17.02	10.31	12.12	7.69	13.99	12.50

[If Q36=yes - Yes, has unmet need (therapy services)] What does need that he or she can't get? (Q37)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
N/A (Any DME, chiropractic, indeterminate or vague response)	3	4	9	4	11	31
	6.38	4.12	13.64	10.26	7.69	7.91
Total	47	97	66	39	143	392
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
Prob.						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Quality of Therapy Services: Since transitioning into the WCM, the majority of Phase I (75%), Phase II (83%) and Phase III (71%) respondents indicated that therapy services were "about the same." A large percentage of HPSM WCM respondents (40%) indicated "don't know." The HPSM WCM was implemented more than six years prior to administration of the survey; this likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (41%) also indicated that primary care services were "about the same" since the transition. The HPSM WCM responses account for the significant difference between the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 90.

Table 90. Quality of Therapy Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], have the therapy services that [CHILD'S NAME] receives been better, the same, or worse? (Q38)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	25	50	15	24	114
	13.97	13.48	7.01	16.55	12.54
About the same	74	278	178	103	633
	41.34	74.93	83.18	71.03	69.64
Worse since the transition	9	15	11	11	46
	5.03	4.04	5.14	7.59	5.06

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], have the therapy services that [CHILD'S NAME] receives been better, the same, or worse? (Q38)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Don't know	71	28	10	7	116
	39.66	7.55	4.67	4.83	12.76
Total	179	371	214	145	909
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	107.75				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Therapy Services

Approximately half of respondents in all WCM study groups indicated a need for therapy services and a majority of respondents indicate the client needed multiple therapies. Significantly more HPSM WCM respondents indicated a need for therapy services compared to Classic CCS respondents. Since the implementation of WCM, a greater number of respondents in all WCM study groups (42%) reported that it was "always easy" to get a medical therapy services appointment for the client compared to Classic CCS respondents (30%). A higher percentage of Phase II respondents (76%) indicated it was "usually easy" or "always easy" to obtain a medical therapy appointment compared to Classic CCS respondents (66%).

While for the majority of clients across all WCM study groups did not experience a change in the location of therapy services, there were some significant differences between WCM study groups and Classic CCS in the location therapy services were provided. The distribution of places where the client receives therapy services differed between Phase I and Phase III clients and Classic CCS clients. A greater percentage of Phase I and Phase III clients received therapy from a medical therapy unit or multiple venues than Classic CCS clients. Phase I and Phase III clients were less likely to received therapy through school district programming than Classic CCS clients.

The majority of survey respondents in all WCM study groups were "satisfied" or "very satisfied" with the therapy services they were receiving. Although a majority of respondents in all WCM study groups reported that their medical therapy services needs were met, a little more than one-third reported unmet needs. Speech therapy (31%) is the most common therapy clients were unable to get, followed by occupational therapy (24%), physical therapy (18%), and behavioral/mental health therapy (13%).

Since transitioning into WCM, the majority of Phase I, Phase II, and Phase III respondents indicated that therapy services were “about the same.” While a large percentage of HPSM WCM respondents (41%) indicated that primary care services were “about the same” since the transition, 40% of HPSM WCM respondents were unable to state whether there was a change in the quality of therapy services. Since the HPSM WCM was implemented more than six years prior to administration of the survey, this likely contributed to the high percentage of "don't know" responses from HPSM WCM respondents.

PRESCRIPTION AND PHARMACY SERVICES

Need Prescription Medicines: Across all WCM study groups, approximately 58% needed medicine prescribed by a doctor. The differences between the WCM study groups and Classic CCS clients were not significant. See Table 91.

Table 91. Need for Prescription Medicine

Does [CHILD’S NAME] currently need medicine prescribed by a doctor (other than vitamins)? (Q39)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	118	326	177	150	433	1204
	37.82	41.79	39.86	47.92	43.83	42.44
Yes	194	454	267	163	555	1633
	62.18	58.21	60.14	52.08	56.17	57.56
Total	312	780	444	313	988	2837
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	7.51					
Prob.	0.11					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Ease of Getting Prescription Medications: The majority of respondents in all WCM study groups (78%) indicated that it was “usually easy” or “always easy” to obtain prescription medications. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 92.

Table 92. Access to Prescription Medications

In the last 6 months, how often was it easy to get these prescription medications for [CHILD'S NAME]? (Q40)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never Easy	8	23	11	8	30	80
	4.10	5.20	4.14	4.85	5.42	4.93
Sometimes easy	33	84	54	22	80	273
	16.92	19.00	20.30	13.33	14.44	16.83
Usually easy	59	144	76	49	175	503
	30.26	32.58	28.57	29.70	31.59	31.01
Always easy	95	191	125	86	269	766
	48.72	43.21	46.99	52.12	48.56	47.23
Total	195	442	266	165	554	1622
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	10.69					
P-value	0.56					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Delay Getting Prescription Medications: The majority of respondents in all WCM study groups (76%) indicated in the past six months they did not delay or did not receive a needed prescription medication. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 93.

Table 93. Delays in Obtaining Prescription Medications

In the past 6 months, did you delay or not get a prescription that a doctor prescribed? (Q41)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	150	341	195	125	429	1240
	78.53	76.12	73.03	74.85	78.14	76.45
Yes	41	107	72	42	120	382
	21.47	23.88	26.97	25.15	21.86	23.55
Total	191	448	267	167	549	1622
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	9.07					
P-value	0.06					

In the past 6 months, did you delay or not get a prescription that a doctor prescribed? (Q41)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Prescription out-of-pocket expenses: Across all WCM study groups the majority of respondents (75%) indicated having no out-of-pocket expenses, "$0 per month," for prescription medications. Compared to Classic CCS respondents (72%), Phase I (80%) and Phase II (79%) were more likely not to have "$0 per month" out-of-pocket prescription medication expenses. See Table 94.

Table 94. Prescription Medication Out-of-Pocket Expenses

Over the past 6 months, about how much did you pay out-of-pocket/per month for prescription medication ordered by your doctor? (Q42)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
$0 per month	146	357	211	128	396	1238
	75.65	80.04	79.32	77.11	72.00	76.37
$1-100 per month	36	73	44	31	126	310
	18.65	16.37	16.54	18.67	22.91	19.12
More than $100 per month	11	16	11	7	28	73
	5.70	3.59	4.14	4.22	5.09	4.50
Total	193	446	266	166	550	1621
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	9.39					
P-value	0.31					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Pharmacy Services: The majority of respondents in all WCM study groups (90%) indicated they were able to keep the same pharmacy after the transition to the WCM. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 95.

Table 95. Access to Pharmacy Services

[Asked only of respondents enrolled in WCM] Since switching to [NAME OF HEALTH PLAN], can you go to the same pharmacy or did you have to switch to a different pharmacy? (Q43)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Switched to a different pharmacy	19	45	25	16	105
	12.18	10.07	9.40	9.82	10.17
Kept same pharmacy	137	402	241	147	927
	87.82	89.93	90.60	90.18	89.83
Total	156	447	266	163	1032
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	0.47				
P-value	0.92				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Unmet Needs for Prescribed Medication: The majority of respondents in all WCM study groups (92%) indicated their prescription needs have been met. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 96.

Table 96. Unmet Needs for Prescription Medication

Does [CHILD'S NAME] need any medications prescribed by a doctor that he or she currently cannot get? (Q44)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No, needs met	169	405	240	152	473	1439
	90.86	93.10	93.75	93.25	90.44	92.07
Yes, has unmet need	17	30	16	11	50	124
	9.14	6.90	6.25	6.75	9.56	7.93
Total	186	435	256	163	523	1563
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	5.66					
P-value	0.23					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

If a respondent indicated in Q44, Table 96, that the client needs prescribed medication they cannot get, Table 97 indicates the categories of prescribed medication mentioned that could not be obtained. A broad range of prescription medication categories are listed.

Table 97. Prescription Medications That Could Not be Obtained

[If Q44= Yes, has unmet need (prescription medicine) What prescription medicine does [CHILD'S NAME] need that he or she can't get? (Q45)	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Seizures	3	1	1	1	2	8
	21.43	4.35	7.14	25.00	4.88	8.33
Skin	1	1	1	1	1	5
	7.14	4.35	7.14	25.00	2.44	5.21
Asthma	0	1	0	0	3	4
	0.00	4.35	0.00	0.00	7.32	4.17
Diabetes	0	1	0	0	4	5
	0.00	4.35	0.00	0.00	9.76	5.21
Behavioral health	0	1	2	0	2	5
	0.00	4.35	14.29	0.00	4.88	5.21
Prescribed Other – included medications that were noted less than 3 times (e.g., hair loss, birth control, testosterone management, immune-suppressant, foot odor, hypothyroid, blood clotting, blood thinner, blood without enough antibodies, pulmonary arterial hypertension, high blood pressure, muscle relaxant, stem cell treatment, restless leg, antibiotic, bladder relaxant, eye, cancer, allergy/allergy shots, flu, injection)	3	7	2	1	13	26
	21.43	30.43	14.29	25.00	31.71	27.08
OTC laxative	0	2	2	1	1	6
	0.00	8.70	14.29	25.00	2.44	6.25
OTC allergy	0	1	0	0	0	1

[If Q44= Yes, has unmet need (prescription medicine) What prescription medicine does [CHILD'S NAME] need that he or she can't get? (Q45)	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	0.00	4.35	0.00	0.00	0.00	1.04
OTC vitamins/ nutritional supplements	4	4	0	0	7	15
	28.57	17.39	0.00	0.00	17.07	15.63
Other - included medications that were vague/ indeterminate; could be either prescribed or OTC; or noted less than 3 times	3	4	6	0	8	21
	21.43	17.39	42.86	0.00	19.51	21.88
Total	14	23	14	4	41	96
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
Prob.						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Quality of Pharmacy Services: Since transitioning into the WCM, the majority of Phase I (81%), Phase II (84%) and Phase III (82%) respondents indicated that pharmacy services were "about the same." A large percentage of HPSM WCM respondents (34%) indicated "don't know." The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (47%) also indicated that pharmacy services were "about the same." The HPSM WCM responses account for the significant difference among the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 98.

Table 98. Quality of Pharmacy Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the prescription/pharmacy services that [CHILD'S NAME] receives been better, the same, or worse? (Q46)	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	29	53	18	19	119

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the prescription/pharmacy services that [CHILD'S NAME] receives been better, the same, or worse? (Q46)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
	14.87	11.65	6.69	11.11	10.92
About the same	92	370	227	140	829
	47.18	81.32	84.39	81.87	76.06
Worse since the transition	7	21	19	9	56
	3.59	4.62	7.06	5.26	5.14
Don't know	67	11	5	3	86
	34.36	2.42	1.86	1.75	7.89
Total	195	455	269	171	1090
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	174.43				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Prescription and Pharmacy

The majority of respondents in Phase I, Phase II, and Phase III WCM study groups indicated that pharmacy services were "about the same" since the transition. While HPSM WCM respondents (47%) also indicated that pharmacy services were "about the same," there was large percentage of HPSM WCM respondents (34%) who indicated "don't know." The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of "don't know" responses.

The majority of respondents in all WCM study groups indicated that it was "usually easy" or "always easy" to obtain prescription medications. The were no differences between the WCM study groups and Classic CCS for obtaining prescription medications. Also, the majority of respondents in all WCM study groups indicated that they did not delay or did not get a prescription medication. There were no differences between the WCM study groups and Classic CCS in having to delay or not obtain a prescription medication.

Across all WCM study groups the majority of respondents (75%) indicated having no out-of-pocket expenses, "$0 per month," for prescription medications. Compared to

Classic CCS respondents (72%), Phase I (80%) and Phase II (79%) were more likely not to have prescription medication out-of-pocket expenses, "$0 per month."

The majority of respondents in all WCM study groups (92%) indicated their prescription needs have been met.

BEHAVIORAL HEALTH

Need Behavioral Health Services: The majority of respondents in all WCM study groups (76%) indicated they did not need behavioral health services. The difference between the WCM study groups and Classic CCS respondents was not significant. See Table 99.

Table 99. Need for Behavioral Health Services

In the last 6 months, did [CHILD'S NAME] need treatment or counseling for an emotional, developmental, or behavioral problem? (Q47)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	237	580	324	246	743	2130
	77.20	76.02	72.97	78.34	76.21	75.99
Yes	70	183	120	68	232	673
	22.80	23.98	27.03	21.66	23.79	24.01
Total	307	763	444	314	975	2803
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	3.24					
Prob.	0.52					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Behavioral Health Services: While the majority of respondents in all WCM study groups (58%) indicated that it was "usually easy" or "always easy" to get behavioral health treatment or counseling, a significant proportion (42%) indicated that it was "never easy" or "sometimes easy." The differences between WCM study groups and Classic CCS were not statistically significant. See Table 100.

Table 100. Access to Behavioral Health Services

In the last 6 months, how often was it easy to get this treatment or counseling for [CHILD'S NAME]? (Q48)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never Easy	13	36	14	7	39	109

In the last 6 months, how often was it easy to get this treatment or counseling for [CHILD'S NAME]? (Q48)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	19.70	21.05	12.28	12.07	19.12	17.78
Sometimes easy	10	43	28	14	54	149
	15.15	25.15	24.56	24.14	26.47	24.31
Usually easy	22	55	35	19	66	197
	33.33	32.16	30.70	32.76	32.35	32.14
Always easy	21	37	37	18	45	158
	31.82	21.64	32.46	31.03	22.06	25.77
Total	66	171	114	58	204	613
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	8.36					
P-value	0.76					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Behavioral Health Unmet Needs: The majority of respondents (76%) in all WCM study groups reported that their behavioral or mental health services needs have been met. Compared to Classic CCS (68%), significantly mores respondent in Phase I (78%), Phase II (80%), and Phase III (87%) reported that their mental health services needs were met. See Table 101.

Table 101. Unmet Behavioral Health Needs

Does [CHILD'S NAME] need any behavioral or mental health services that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q49)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Needs met	41	119	78	48	128	414
	78.85	77.78	80.41	87.27	68.09	75.96
Has unmet need	11	34	19	7	60	131
	21.15	22.22	19.59	12.73	31.91	24.04
Total	52	153	97	55	188	545
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	15.75					
P-value	0.003					

Does [CHILD'S NAME] need any behavioral or mental health services that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q49)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

If a respondent indicated in Q49, Table 101, that the client needs behavioral or mental health services they cannot get, Table 102 indicates the behavioral or mental health services mentioned that could not be obtained. Across all WCM study groups, behavioral therapy (46%) is the most common behavioral or mental health therapy clients were unable to get, followed by counseling therapy (28%). Phase I respondents indicated a greater need for counseling therapy (38%) compared to behavioral therapy (25%). The HPSM WCM, Phase II, and Classic CCS respondents indicated a greater need for behavioral therapy versus counseling therapy. Phase III respondents indicated an equal need for behavioral and counseling therapy.

Table 102. Behavioral Health Services That Could Not Be Obtained

Behavioral Health: Q50. (If Q49=YES) What does the client need that he or she can't get? (Q50)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Behavioral Therapy	5	8	11	2	28	54
	50.00	25.00	64.71	40.00	51.85	45.76
Counseling/Therapy	0	12	5	2	14	33
	0.00	37.50	29.41	40.00	25.93	27.97
Psychologist	1	4	1	0	2	8
	10.00	12.50	5.88	0.00	3.70	6.78
Psychiatrist	1	2	0	0	4	7
	10.00	6.25	0.00	0.00	7.41	5.93
Other	2	1	0	0	1	4
	20.00	3.13	0.00	0.00	1.85	3.39
Not Applicable (e.g., non-behavioral or non-mental health service is described (e.g., ST, OT, PT); don't know; vague or indeterminate; doesn't get/need any)	1	5	0	1	5	12

Behavioral Health: Q50. (If Q49=YES) What does the client need that he or she can't get? (Q50)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	10.00	15.63	0.00	20.00	9.26	10.17
Total	10	32	17	5	54	118
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
P-value						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Quality of Behavioral Health Services: Across all WCM study groups, approximately 59% of respondents indicated that behavioral health services were "about the same" since the transition and 10% indicated behavioral services were "better since the transition." A significant number of HPSM WCM respondents (49%) stated "don't know" on whether behavioral health services were "better, the same, or worse" and 36% indicated that services were "about the same" since the transition. The HPSM WCM distribution of responses account for the significant difference when compared to the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 103.

Table 103. Quality of Behavioral Health Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the behavioral or mental health services that [CHILD'S NAME] receives been better, the same, or worse? (Q51)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	8	22	7	12	49
	10.67	11.06	5.60	17.39	10.47
About the same	27	125	85	41	278
	36.00	62.81	68.00	59.42	59.40
Worse since the transition	3	12	6	1	22
	4.00	6.03	4.80	1.45	4.70
Don't know	37	40	27	15	119
	49.33	20.10	21.60	21.74	25.43
Total	75	199	125	69	468
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	24.70				

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the behavioral or mental health services that [CHILD'S NAME] receives been better, the same, or worse? (Q51)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
P-value	0.003				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Behavioral Health Services

Approximately three-quarters of respondents in all WCM study groups indicated they did not need behavioral health services. Of those individuals who needed behavioral health services, the majority of respondents (71%) in all WCM study groups reported that their behavioral or mental health services needs have been met. Although the access to behavioral health services did not differ between WCM study groups and Classic CCS, there was a large percentage of respondents, 42%, who indicated that it was "never easy" or "sometimes easy" to obtain behavioral health services. Further examination on possible obstacles to accessing behavioral health services should be considered.

Regarding quality of services, across all WCM study groups, more than half of respondents indicated that behavioral health services were "about the same" since the transition and 11% indicated behavioral services were "better since the transition." Although almost half of HPSM WCM respondents stated "don't know" on whether behavioral health services were "better, the same, or worse," a little more than one-third indicated that services were "about the same" since the transition.

MEDICAL EQUIPMENT AND SUPPLIES

Need for Medical Equipment or Supplies: Approximately two-thirds of respondents in all WCM study groups (65%) indicated they did not need medical equipment or supplies. The difference between the WCM study groups and Classic CCS respondents were not significant. See Table 104.

Table 104. Need for Medical Equipment or Supplies

In the last 6 months, did you need any medical equipment or supplies for [CHILD'S NAME]? (Q52)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	188	525	283	205	631	1832
	60.45	67.74	63.74	64.47	63.93	64.62
Yes	123	250	161	113	356	1003
	39.55	32.26	36.26	35.53	36.07	35.38

In the last 6 months, did you need any medical equipment or supplies for [CHILD'S NAME]? (Q52)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Total	311	775	444	318	987	2835
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	3.07					
Prob.	0.55					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Medical Equipment: Since transitioning into WCM, a significantly greater number of Phase II (34%) and Phase III (39%) respondents reported that it was "always easy" to obtain medical equipment and supplies compared to Classic CCS respondents (23%). The difference between the other WCM WCM study groups and Classic CCS respondents were not significant. See Table 105.

Table 105. Access to Medical Equipment or Supplies

In the last 6 months, how often was it easy to get special medical equipment or supplies (including repairs) for [CHILD'S NAME]? (Q53)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never Easy	17	27	21	14	63	142
	13.71	11.16	12.88	12.84	18.21	14.43
Sometimes easy	33	70	27	24	77	231
	26.61	28.93	16.56	22.02	22.25	23.48
Usually easy	44	75	60	29	128	336
	35.48	30.99	36.81	26.61	36.99	34.15
Always easy	30	70	55	42	78	275
	24.19	28.93	33.74	38.53	22.54	27.95
Total	124	242	163	109	346	984
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	35.88					
P-value	0.0003					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Satisfaction with Medical Equipment: The majority of respondents in all WCM study groups (77%) indicated they were "satisfied" or "very satisfied" with the medical equipment or supplies they have been receiving. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 106.

Table 106. Satisfaction with Medical Equipment or Supplies

Overall, how satisfied are you with the medical equipment or supplies (including repairs) that [CHILD'S NAME] receives? (Q54)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	8	17	7	6	23	61
	6.50	7.05	4.32	5.50	6.57	6.19
Dissatisfied	9	16	9	11	30	75
	7.32	6.64	5.56	10.09	8.57	7.61
Neither satisfied nor dissatisfied	8	19	15	10	40	92
	6.50	7.88	9.26	9.17	11.43	9.34
Satisfied	72	118	76	48	149	463
	58.54	48.96	46.91	44.04	42.57	47.01
Very satisfied	26	71	55	34	108	294
	21.14	29.46	33.95	31.19	30.86	29.85
Total	123	241	162	109	350	985
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	12.86					
P-value	0.68					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Unmet Needs for Medical Equipment: Phase I (19%) and Phase II (19%) respondents were less likely to report having unmet needs for medical equipment and supplies compared to Classic CCS respondents (26%). This difference was statistically significant. The difference between the other WCM study groups and Classic CCS respondents were not significant. See Table 107.

Table 107. Unmet Need for Medical Equipment or Supplies

Does [CHILD'S NAME] need any medical equipment or supplies that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q55)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No, needs met	86	184	118	86	228	702
	79.63	81.42	80.82	80.37	73.55	78.26
Yes, has unmet need	22	42	28	21	82	195
	20.37	18.58	19.18	19.63	26.45	21.74
Total	108	226	146	107	310	897
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	9.05					
P-value	0.06					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

If a respondent indicated in Q55, Table 107, that the client needs medical equipment and supplies they cannot get, Table 108 indicates the categories of medical equipment and supplies mentioned that could not be obtained. A broad range of medical equipment and supplies categories were mentioned.

Table 108. Medical Equipment or Supplies That Could Not Be Obtained

[If Q55= Yes, has unmet need (medical equipment and supplies) What does [CHILD'S NAME] need that he or she can't get? (Q56)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Mobility devices	4	7	2	2	15	30
	22.22	17.50	7.14	10.00	21.13	16.95
Stander	0	2	0	0	0	2
	0.00	5.00	0.00	0.00	0.00	1.13
Adaptive bike	0	2	0	0	1	3
	0.00	5.00	0.00	0.00	1.41	1.69
Seating device	1	1	2	1	2	7
	5.56	2.50	7.14	5.00	2.82	3.95
Braces	2	2	1	0	3	8
	11.11	5.00	3.57	0.00	4.23	4.52
Diabetes devices	0	7	3	1	7	18

[If Q55= Yes, has unmet need (medical equipment and supplies) What does [CHILD'S NAME] need that he or she can't get? (Q56)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	0.00	17.50	10.71	5.00	9.86	10.17
Hearing devices	0	1	0	1	4	6
	0.00	2.50	0.00	5.00	5.63	3.39
Bed	2	1	1	0	3	7
	11.11	2.50	3.57	0.00	4.23	3.95
Respiratory/ asthma devices	1	3	3	3	8	18
	5.56	7.50	10.71	15.00	11.27	10.17
Bathroom/ shower device	0	1	1	3	6	11
	0.00	2.50	3.57	15.00	8.45	6.21
Other device - included lifts or equipment to raise oneself; glasses; communication devices, e.g., machine that speaks from typing, microphone for speaking	0	1	4	1	3	9
	0.00	2.50	14.29	5.00	4.23	5.08
Diabetes supplies	0	1	1	0	1	3
	0.00	2.50	3.57	0.00	1.41	1.69
Respiratory/ asthma supplies	0	0	1	0	3	4
	0.00	0.00	3.57	0.00	4.23	2.26
Feeding supplies	2	0	0	1	0	3
	11.11	0.00	0.00	5.00	0.00	1.69
General medical supplies - Included diapers/pull-ups/briefs; wipes; distilled water; vomit bags; bandages/ dressings; bed mats/pee pads/chux; needles (unspecified); catheters; anal irrigation system; gloves	5	9	7	6	11	38
	27.78	22.50	25.00	30.00	15.49	21.47

[If Q55= Yes, has unmet need (medical equipment and supplies) What does [CHILD'S NAME] need that he or she can't get? (Q56)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Other - included vehicle modifications, braces for teeth, GPS tracker for wandering, back-up processors, generator, leg compression device, restraints, evacuation board, safety gate, padding for wall, differential vacuum delay and separation valve, TENS unit	1	2	2	1	4	10
	5.56	5.00	7.14	5.00	5.63	5.65
Total	18	40	28	20	71	177
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
Prob.						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.

Quality of DME and Supplies: Since transitioning into WCM, the majority of Phase I (74%), Phase II (77%) and Phase III (71%) respondents indicated that the quality of medical equipment and supply services were "about the same." A large percentage of HPSM WCM respondents (40%) indicated "don't know." The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (47%) also indicated that primary care services were "about the same." Across all WCM study groups 11% of respondents indicated primary care services were "better since the transition." The HPSM WCM distribution of responses account for the significant difference among the WCM study groups. The differences among Phase I, Phase II, and Phase III were not significant. See Table 109.

Table 109. Quality of DME and Supplies

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], have the medical equipment and supplies that [CHILD'S NAME] receives been better, the same, or worse? (Q57)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	14	25	13	17	69
	11.29	9.77	7.93	15.04	10.50
About the same	58	190	127	80	455
	46.77	74.22	77.44	70.80	69.25
Worse since the transition	3	14	16	12	45
	2.42	5.47	9.76	10.62	6.85
Don't know	49	27	8	4	88
	39.52	10.55	4.88	3.54	13.39
Total	124	256	164	113	657
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	81.81				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Out of Pocket Expenses for Medical Equipment or Supplies: Across all WCM study groups, 79% of respondents reported having "$0 per month" out of pocket expenses for medical equipment or supplies. While not statistically significant, it is of interest to note that a greater percentage of Classic CCS respondents (13%) reported have "more than $100 per month" out of pocket expenses for medical equipment or supplies than the WCM study groups (range: 5% to 9%). See Table 110.

Table 110. Medical Equipment or Supplies Out-of-Pocket Expenses

Over the past 6 months, about how much did you pay out of pocket/per month for medical equipment or supplies ordered by your doctor? (Q58)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
$0 per month	98	199	129	91	269	786
	80.33	80.57	80.12	83.49	75.99	79.15
$1-100 per month	18	27	20	11	39	115
	14.75	10.93	12.42	10.09	11.02	11.58

Over the past 6 months, about how much did you pay out of pocket/per month for medical equipment or supplies ordered by your doctor? (Q58)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
More than $100 per month	6	21	12	7	46	92
	4.92	8.50	7.45	6.42	12.99	9.26
Total	122	247	161	109	354	993
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	10.53					
P-value	0.23					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Medical Equipment or Supplies

Approximately two-thirds of respondents in all WCM study groups indicated they did not need medical equipment or supplies. Also, the majority of respondents (77%) in all WCM study groups reported being “satisfied” or “very satisfied” with their medical equipment or supplies they receive. The differences between WCM study groups and Classic CCS were not statistically significant.

Since transitioning into the WCM, a significantly greater number of Phase II (34%) and Phase III (39%) respondents reported that it was “always easy” to obtain medical equipment and supplies compared to Classic CCS respondents (23%). The difference in obtaining medical equipment between the other WCM study groups and Classic CCS respondents were not significant. On the question inquiring about unmet needs for medical equipment and supplies, Phase I (19%) and Phase II (19%) respondents were less likely to report having unmet needs for medical equipment and supplies compared to Classic CCS respondents (26%).

Almost three-quarters of Phase I, Phase II, and Phase III respondents indicated that medical equipment and supplies services were “about the same.” While almost half of HPSM WCM respondents (47%) responded that medical equipment and supplies services were “about the same,” a significant percentage of respondents 40% were unable to state whether there was a change in the quality of medical equipment and supplies services or that the services were unchanged.

PROVIDER COMMUNICATION

Satisfaction with Communication with Doctor: Since transitioning into the WCM, fewer Phase I respondents (33%) indicated they are “very satisfied” with the communication they have with their doctors and healthcare providers than Classic CCS respondents

(38%). However, a greater percentage of Phase I respondents (50%) indicated being "satisfied" with the communication they have with their doctors and healthcare providers compared to Classic CCS respondents (43%). The difference between HPSM WCM, Phase II, and Phase III respondents and Classic CCS respondents was not significant. See Table 111.

Table 111. Satisfaction with Communication with Doctor

Overall, how satisfied are you with the communication among [CHILD'S NAME]'s doctors and other healthcare providers? (Q59)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	18	49	20	22	68	177
	5.90	6.48	4.50	7.03	6.91	6.32
Dissatisfied	7	23	14	10	27	81
	2.30	3.04	3.15	3.19	2.74	2.89
Neither satisfied nor dissatisfied	14	63	44	21	70	212
	4.59	8.33	9.91	6.71	7.11	7.57
Satisfied	143	375	198	149	442	1307
	46.89	49.60	44.59	47.60	44.92	46.65
Very satisfied	123	246	168	111	377	1025
	40.33	32.54	37.84	35.46	38.31	36.58
Total	305	756	444	313	984	2802
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	20.90					
P-value	0.18					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care Coordination of Medical Procedures: The majority of respondents in all WCM study groups (96%) reported that their doctors did not order medical tests or procedures that were unnecessary because they had already been done. While Phase I differed significantly from Classic CCS, it is unlikely that this difference would impact the care received. The difference between HPSM WCM, Phase II, and Phase II WCM study groups and Classic CCS was not significant. See Table 112.

Table 112. Doctors Ordered Unnecessary Medical Tests

In the past 6 months, was there ever a time when doctors ordered a medical test or procedure that you felt was unnecessary because the test had already been done? (Q60)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	295	733	428	292	913	2661
	96.72	96.57	96.61	94.81	94.51	95.69
Yes	10	26	15	16	53	120
	3.28	3.43	3.39	5.19	5.49	4.31
Total	305	759	443	308	966	2781
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	7.36					
P-value	0.12					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
The p-value represents he significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Interpreter Services: The majority of respondents in all WCM study groups (80%) reported that, if needed, they were "usually" or "always" able to have a professional interpreter. A greater percentage of Phase I respondents (83%) reported they were "usually" or "always" able to have a professional interpreter compared to Classic CCS (78%). See Table 113.

Table 113. Access to Interpreter Services

[Only if interview is conducted in a language other than English] In the last 6 months, if you or [CHILD'S NAME] needed a professional interpreter to help [CHILD'S NAME] speak with his/her doctor, how often did you get one? (Q61)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never	2	3	2	5	8	20
	2.70	1.49	2.60	5.62	3.00	2.82
Sometimes	14	32	13	12	51	122
	18.92	15.92	16.88	13.48	19.10	17.23
Usually	9	18	16	10	30	83
	12.16	8.96	20.78	11.24	11.24	11.72
Always	49	148	46	62	178	483
	66.22	73.63	59.74	69.66	66.67	68.22
Total	74	201	77	89	267	708
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	19.45					

[Only if interview is conducted in a language other than English] In the last 6 months, if you or [CHILD'S NAME] needed a professional interpreter to help [CHILD'S NAME] speak with his/her doctor, how often did you get one? (Q61)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
P-value	0.08					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Provider Communication

Since implementing WCM, across all WCM study groups the majority of respondents (83%) said they were "satisfied" or "very satisfied" with the communication they have with their doctors and healthcare providers. Although fewer Phase I respondents indicated they were "very satisfied" with the communication they have with their doctors and healthcare providers than Classic CCS respondents, a greater percentage of Phase I respondents indicated being "satisfied" with the communication they have with their doctors and healthcare providers compared to Classic CCS respondents.

The majority of respondents in all WCM study groups reported that their doctors did not order medical tests or procedures that were unnecessary because they had already been done and that professional interpreters were available when needed. A greater percentage of Phase I respondents (83%) reported they were "usually" or "always" able to have a professional interpreter compared to Classic CCS (78%).

TRANSPORTATION

Need for Transportation Assistance: Across all WCM study groups respondents did not indicate a need for transportation assistance to get to medical appointments. After implementation of the WCM, a greater percentage of Phase I (15%) and Phase II (22%) respondents reported needing transportation assistance to get to medical appointments than Classic CCS respondents (10%). See Table 114.

Table 114. Needed Transportation Assistance

In the past 6 months, have you needed any transportation assistance in order to get to [CHILD'S NAME]'s medical appointments? (Q62)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	272	651	345	283	881	2432
	87.74	85.32	77.70	91.00	89.81	86.58

In the past 6 months, have you needed any transportation assistance in order to get to [CHILD'S NAME]'s medical appointments? (Q62)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Yes	38	112	99	28	100	377
	12.26	14.68	22.30	9.00	10.19	13.42
Total	310	763	444	311	981	2809
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	61.28					
Prob.	<.0001					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
The p-value represents he significance of the analysis. A p-value less than 0.05 is considered significant.

Type of Transportation Needed: Table 115 provides a description of the type of transportation needed to get to medical appointments. While a statistical significance could not be computed because some cells had zero frequencies, it is of interest to look at the different distributions for the type of transportation needed to get to medical appointments. Approximately a third of respondents (32%) across all WCM study groups responded using "multiple transportation assistance" to get to appointments. A higher percentage of Phase II respondents (64%) reported using transportation services where they would be reimbursed to get to appointments than Classic CCS respondent (20%). The HPSM WCM respondents (36%) used taxi/rideshares more than Classic CCS respondents (8%). See Table 115.

Table 115. Types of Transportation Needed

What kind of transportation assistance do you need to get to medical appointments? (Check all that apply) (Q63)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Ride in an ambulance	0	0	0	1	0	1
	0.00	0.00	0.00	2.63	0.00	0.23
Ride in a vehicle (such as a special accessible van) that was arranged before the day of the appointment	4	18	2	3	15	42
	9.09	13.43	1.90	7.89	12.40	9.50

What kind of transportation assistance do you need to get to medical appointments? (Check all that apply) (Q63)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Ride in a taxi/rideshare (like Uber or Lyft)	16	15	6	4	10	51
	36.36	11.19	5.71	10.53	8.26	11.54
Reimbursement for mileage for my family's vehicle	3	39	67	4	24	137
	6.82	29.10	63.81	10.53	19.83	31.00
Ride with a friend or family member who does not live with [CHILD'S NAME]	0	7	3	2	13	25
	0.00	5.22	2.86	5.26	10.74	5.66
Air ambulance/ helicopter	1	0	0	0	0	1
	2.27	0.00	0.00	0.00	0.00	0.23
Multiple transportation assistance	14	43	22	13	48	140
	31.82	32.09	20.95	34.21	39.67	31.67
Don't know	3	5	3	5	4	20
	6.82	3.73	2.86	13.16	3.31	4.52
Decline to Answer	3	7	2	6	7	25
	6.82	5.22	1.90	15.79	5.79	5.66
Total	44	134	105	38	121	442
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
Prob.						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Types of Transportation Needed – Count: On average, across all WCM study groups 1.39 types of transportation were used to get to medical appointments. There were no significant differences between the WCM study groups and Classic CCS. See Table 116, Table 117, and Table 118.

Table 116. Mean Number of Types of Transportation Assistance Needed

MEANS: What kind of transportation assistance do you need to get to medical appointments? (Check all that apply) – COUNT (Q63)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	38	278	1.32	0.47	1.00	2.00
Phase I	122	668	1.39	0.69	0.00	4.00
Phase II	100	351	1.24	0.79	0.00	7.00
Phase III	27	294	1.48	0.80	0.00	3.00
Classic CCS	110	895	1.54	0.82	1.00	4.00

• Values are raw, non-weighted, survey results.

Table 117. Linear Regression: Number of Types of Transportation Assistance Needed

Linear regression: What kind of transportation assistance do you need to get to medical appointments? (Check all that apply) (Q63)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Signifi-cance
HPSM WCM	-0.19	0.12	-1.55	0.12	-0.43	0.05	ns
Phase I	-0.22	0.13	-1.70	0.09	-0.48	0.03	ns
Phase II	-0.33	0.19	-1.72	0.09	-0.70	0.05	ns
Phase III	-0.08	0.19	-0.44	0.66	-0.46	0.29	ns
Classic CCS	0.00	0.00	.	.	0.00	0.00	ns
Constant	1.61	0.17	9.63	<.0001	1.28	1.94	
Weighted Mean dependent var		1.52					
R-squared		0.06	Number of observations		384		
F-test		6.09	Prob > F		<.0001		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Table 118. Linear Regression – Analysis of WCM Group Comparisons: Number of Types of Transportation Assistance Needed

Linear regression - Analysis of WCM Group Comparisons: What kind of transportation assistance do you need to get to medical appointments? (Check all that apply) (Q63)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	2.39	0.12	ns
Phase I vs. Classic CCS	2.90	0.09	ns
Phase II vs. Classic CCS	2.96	0.09	ns
Phase III vs. Classic CCS	0.20	0.66	ns

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Access to Transportation Services: The distribution between the WCM study groups and Classic CCS respondents was not significant in how they responded to the ease of getting transportation for their child's healthcare appointments. Although not significant, it is of interest to note the large percentage of Phase III respondents (35%) who indicated it was "never easy" to get transportation for their child's healthcare appointments compared to Classic CCS respondents (13%). See Table 119.

Table 119. Access to Transportation Services

How often is it easy to get transportation to [CHILD'S NAME]'s doctors or other healthcare providers? (Q64)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never easy	3	17	13	9	13	55
	8.11	14.53	13.13	34.62	12.62	14.40
Sometimes easy	14	46	37	6	39	142
	37.84	39.32	37.37	23.08	37.86	37.17
Usually easy	9	16	29	7	29	90
	24.32	13.68	29.29	26.92	28.16	23.56
Always easy	11	38	20	4	22	95
	29.73	32.48	20.20	15.38	21.36	24.87
Total	37	117	99	26	103	382
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	15.26					
P-value	0.23					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.

• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Transportation Services – Missed Appointments: While over two-thirds (69%) of respondents across all WCM study groups did not miss health or therapy appointments because of transportation problems, a little under a third (31%) of respondents reported missing health or therapy appointments because of transportation problems. The difference between WCM study groups and Classic CCS respondents was not significant. See Table 120.

Table 120. Missed Appointments Due to Transportation Problems

In the last six months, did [CHILD'S NAME] miss any scheduled health or therapy appointments because of transportation problems? (Q66)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	25	93	75	17	79	289
	60.98	73.23	72.82	56.67	68.70	69.47
Yes	16	34	28	13	36	127
	39.02	26.77	27.18	43.33	31.30	30.53
Total	41	127	103	30	115	416
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	3.86					
P-value	0.43					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Quality of Transportation Services: Since transitioning into WCM, a little under half to just over half of Phase I (50%), Phase II (43%), and Phase III (59%) respondents indicated that transportation assistance were "about the same." A large percentage of HPSM WCM respondents (48%) as well as Phase III (35%) indicated "don't know." The large percentage of "don't know" from HPSM WCM respondents is probably attributable to the HPSM WCM having been implemented more than six years prior to administration of the survey. It is unclear why Phase III respondents also had a high percentage of "don't know" responses. Phase II had the fewest respondents (10%) indicating that transportation assistance was "better since the transition" and HPSM WCM had the largest percentage of respondents (19%). The HPSM WCM response distribution accounts for the significant difference between the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 121.

Table 121. Quality of Transportation Services

[WCM only] Since the transition to [NAME OF HEALTH PLAN], has the transportation assistance that [CHILD'S NAME] receives (including the process of arranging transportation) been better, the same, or worse? (Q67)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	8	21	10	2	41
	19.05	17.21	10.20	5.88	13.85
About the same	11	61	42	20	134
	26.19	50.00	42.86	58.82	45.27
Worse since the transition	3	13	28	0	44
	7.14	10.66	28.57	0.00	14.86
Don't know	20	27	18	12	77
	47.62	22.13	18.37	35.29	26.01
Total	42	122	98	34	296
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†				
Prob.					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Transportation

Since implementing WCM, a greater percentage of Phase I (15%) and Phase II (22%) respondents reported needing transportation assistance to get to medical appointments than Classic CCS respondents (10%). While the difference between the WCM study groups and Classic CCS in needing transportation services was not significant, a little under a third of respondents across all WCM study groups reported missing health or therapy appointments because of transportation problems. Approximately a third of respondents (32%) across all WCM study groups responded using "multiple transportation assistance" to get to appointments. A higher percentage of Phase II respondents reported using transportation services where they would be reimbursed to get to appointments than Classic CCS respondent. The HPSM WCM respondents used taxi/rideshares more than Classic CCS respondents.

The distribution between the WCM study groups and Classic CCS respondents was not significant in how they responded to the ease of getting transportation for their child's

healthcare appointments. Although not significant, a little over a third of Phase III respondents indicated it was "never easy" to get transportation for their child's healthcare appointments compared to 13% of Classic CCS respondents.

Since transitioning into WCM, a little under half to just over half of Phase I (50%), Phase II (43%), and Phase III (59%) respondents indicated that transportation assistance were "about the same." A large percentage of HPSM WCM respondents (48%) as well as Phase III (35%) indicated "don't know." The large percentage of "don't know" from HPSM WCM respondents is probably attributable to the HPSM WCM having been implemented more than six years prior to administration of the survey. It is unclear why Phase III respondents also had a high percentage of "don't know" responses. Phase II had the fewest respondents (10%) indicating that transportation assistance was "better since the transition" and HPSM WCM had the largest percentage of respondents (19%).

CARE COORDINATION/CASE MANAGEMENT

Needed Help from Coordinator/Case Manager: Since transitioning to WCM, a significantly larger percentage of HPSM WCM (20%) and Phase III (22%) respondents reported needing help from a care coordinator/case manager compared to Classic CCS respondents (16%). The difference between Phase I and Phase II respondent and Classic CCS respondents was not significant. See Table 122.

Table 122. Needed Help from Care Coordinator

During the past 6 months, have you/[CHILD'S NAME]'s needed help from a care coordinator or case manager? (Q68)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	242	628	347	239	809	2265
	79.87	83.40	80.32	78.10	84.36	82.27
Yes	61	125	85	67	150	488
	20.13	16.60	19.68	21.90	15.64	17.73
Total	303	753	432	306	959	2753
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	14.24					
Prob.	0.01					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Types of People Providing Care coordination/Case Management Help: Table 123 provides a description of the type of people providing care coordination/case management help. While a statistical significance could not be computed because some cells had zero frequencies, it is of interest to look at the different distributions for the

types of people providing care coordination/case management help. The most frequent response across all WCM study groups was that respondents are using "multiple" people for providing care coordination/case management help. A higher percentage of HPSM WCM respondents (52%) indicated using "multiple" people for providing care coordination/case management help compared to Classic CCS respondents (35%). The WCM study groups used "Medi-Cal Managed Care Plan," whereas Classic CCS respondents did not use this type of care coordination/case management help. Phase III respondents were more likely to use a "Medi-Cal Managed Care Plan" (18%), "somebody from a specialist office" (18%), and "somebody for a primary care physician office" (15%) compared to Classic CCS respondents ("Medi-Cal Managed Care Plan"=0%, "somebody from a specialist office"=10%, and "somebody for a primary care physician office"=8%). See Table 123.

Table 123. Types of People Providing Care Coordination

Please tell us all the different types of people who helped provide care coordination or case management in the last 6 months (Q69)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
[If WCM] Somebody from [NAME OF HEALTH PLAN]	3	21	11	15	0	50
	4.11	13.21	10.78	18.29	0.00	8.21
Somebody from [COUNTY] CCS	6	15	10	2	29	62
	8.22	9.43	9.80	2.44	15.03	10.18
Somebody from Primary Care office	2	4	6	12	15	39
	2.74	2.52	5.88	14.63	7.77	6.40
Somebody from a specialist's office	4	20	12	15	20	71
	5.48	12.58	11.76	18.29	10.36	11.66
Community organization or group	0	4	4	3	0	11
	0.00	2.52	3.92	3.66	0.00	1.81
Other source	4	8	8	1	19	40
	5.48	5.03	7.84	1.22	9.84	6.57
Multiple sources	38	52	31	18	67	206
	52.05	32.70	30.39	21.95	34.72	33.83
We received no care coordination/ case	4	15	7	6	15	47

Please tell us all the different types of people who helped provide care coordination or case management in the last 6 months (Q69)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
management in the past 6 months						
	5.48	9.43	6.86	7.32	7.77	7.72
Don't know	10	15	10	5	17	57
	13.70	9.43	9.80	6.10	8.81	9.36
Decline to answer	2	5	3	5	11	26
	2.74	3.14	2.94	6.10	5.70	4.27
Total	73	159	102	82	193	609
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
Prob.						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Types of People Providing Care Coordination/Case Management Help - Count: On average, HPSM WCM (mean=2.2) respondents reported receiving significantly more care coordination/case management help from different sources than Classic CCS respondents (mean=1.6). Phase III (mean=1.3) respondents reported receiving significantly fewer care coordination/case management help from different sources than Classic CCS respondents (mean=1.6). See Table 124, Table 125, and Table 126.

Table 124. Mean Number of People Providing Care Coordination

MEANS: Please tell us all the different types of people who helped provide care coordination or case management in the last 6 months (Q69)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	61	255	2.23	1.27	1.00	6.00
Phase I	139	651	1.65	1.06	0.00	6.00
Phase II	89	362	1.65	1.09	0.00	5.00
Phase III	72	249	1.33	0.75	0.00	4.00
Classic CCS	165	840	1.60	0.86	0.00	4.00

• Values are raw, non-weighted, survey results.

Table 125. Linear Regression: Number of People Providing Care Coordination

Linear regression: Please tell us all the different types of people who helped provide care coordination or case management in the last 6 months (Q69)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Signifi-cance
HPSM WCM	0.71	0.18	3.91	0.0001	0.35	1.07	***
Phase I	0.10	0.13	0.72	0.47	-0.17	0.36	ns
Phase II	0.03	0.14	0.24	0.81	-0.25	0.32	ns
Phase III	-0.26	0.12	-2.12	0.03	-0.50	-0.02	*
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	1.59	0.14	11.55	<.0001	1.32	1.86	
Weighted Mean dependent var		1.56					
R-squared		0.036	Number of observations		501		
F-test		18.85	Prob > F		<.0001		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-values: *<.05, **<.01, ***<.001

Table 126. Linear Regression – Analysis of WCM Group Comparisons: Number of People Providing Care Coordination

Linear regression - Please tell us all the different types of people who helped provide care coordination or case management in the last 6 months (Q69)			
	Analysis ofWCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	15.28	0.0001	***
Phase I vs. Classic CCS	0.51	0.47	ns
Phase II vs. Classic CCS	0.06	0.81	ns
Phase III vs. Classic CCS	4.49	0.03	*

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-values: *<.05, **<.01, ***<.001

Care Coordinator/Case Manager Provided Help: The majority of HPSM WCM respondents (64%), Phase I (74%), Phase II (67%), and Phase III respondents (73%) reported receiving help from a case manager. The differences in distributions between the WCM models was not significant. See Table 127.

Table 127. Care Coordinator Provided Help

[WCM only] Do you know if the person who helped you was called a case manager? (Q70)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
No, it was not a case manager/I don't think it was a case manager	9	17	17	11	54
	36.00	25.76	33.33	26.83	29.51
Yes, I got help from a case manager at current plan.	16	49	34	30	129
	64.00	74.24	66.67	73.17	70.49
Total	25	66	51	41	183
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	1.79				
Prob.	0.62				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care coordination Help: The majority of respondents in all WCM study groups (69%) were "usually" or "always" able to get as much help as you wanted with arranging or coordinating health care. The differences between the WCM study groups and Classic CCS were not statistically significant. See Table 128.

Table 128. Obtained Care Coordination Help That was Wanted

DURING THE PAST 6 MONTHS, how often did you get as much help as you wanted with arranging or coordinating [CHILD'S NAME] healthcare? (Q71)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Always	25	53	36	29	74	217
	37.88	39.26	38.30	40.28	42.77	40.19
Usually	25	41	22	22	45	155
	37.88	30.37	23.40	30.56	26.01	28.70
Sometimes	13	25	20	14	28	100
	19.70	18.52	21.28	19.44	16.18	18.52
Never	3	16	16	7	26	68
	4.55	11.85	17.02	9.72	15.03	12.59
Total	66	135	94	72	173	540

DURING THE PAST 6 MONTHS, how often did you get as much help as you wanted with arranging or coordinating [CHILD'S NAME] healthcare? (Q71)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	9.18					
P-value	0.69					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Quality of Care Coordination/Case Management Services: Since transitioning into the WCM, the majority of Phase I (71%), Phase II (67%), and Phase III (84%) respondents indicated that care coordination/case management services were "better since the transition" or "about the same." A large percentage of HPSM WCM respondents (55%) indicated "don't know," unable to state whether there was a change in the quality of care coordination/case management services received. The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (42%) indicated that care coordination/case management services were "better since the transition" or "about the same." The HPSM WCM response distribution accounts for the significant difference when compared to the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 129.

Table 129. Quality of Care Coordination

Q72. [Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the care coordination/case management services that [CHILD'S NAME] receives been better, the same, or worse? (Q72)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	11	34	16	13	74
	15.49	23.13	16.67	17.57	19.07
About the same	19	70	48	49	186
	26.76	47.62	50.00	66.22	47.94
Worse since the transition	2	18	13	5	38
	2.82	12.24	13.54	6.76	9.79
Don't know	39	25	19	7	90
	54.93	17.01	19.79	9.46	23.20
Total	71	147	96	74	388

Q72. [Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the care coordination/case management services that [CHILD'S NAME] receives been better, the same, or worse? (Q72)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	43.29				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care Coordination Assistance with Activities: The survey asked respondents if the care coordinator/case manager assisted on the following type of activities: Arranging appointments with doctors or therapists; arranging transportation and helping with transportation reimbursements; helping obtain authorizations; calling after a hospitalization, emergency department visit, or other health event; or other activities. The statistical significance could not calculated because of zero frequencies in some cells, therefore, this will be a descriptive review of the information. Across all WCM study groups almost a third of respondents (32%) indicated that their care coordinator/case manager helped with multiple activities. The HPSM WCM respondents (4%) were less likely to receive help with appointments compared to Classic CCS respondents (11%). A greater percentage of Phase II respondents (23%) received assistance from a care coordinator/case manager for authorizations than Classic CCS respondents (15%). See Table 130.

Table 130. Care Coordinator Assistance with Activities

In the last 6 months, has your care coordinator/case manager helped you with any of the following things? (Q73)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Arranging appointments with doctors or therapists	3	10	6	8	19	46
	4.29	6.90	6.82	10.67	11.24	8.41
Arranging transportation and helping with reimbursement	0	2	2	0	2	6
	0.00	1.38	2.27	0.00	1.18	1.10

In the last 6 months, has your care coordinator/case manager helped you with any of the following things? (Q73)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Follow-up call	1	6	2	0	5	14
	1.43	4.14	2.27	0.00	2.96	2.56
Helped obtain authorizations	13	19	20	15	26	93
	18.57	13.10	22.73	20.00	15.38	17.00
Multiple	23	49	22	20	61	175
	32.86	33.79	25.00	26.67	36.09	31.99
Other	5	9	4	6	8	32
	7.14	6.21	4.55	8.00	4.73	5.85
Decline	4	12	6	4	23	49
	5.71	8.28	6.82	5.33	13.61	8.96
Don't know	21	38	26	22	25	132
	30.00	26.21	29.55	29.33	14.79	24.13
Total	70	145	88	75	169	547
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†					
P-value						

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care Coordination Assistance with Activities - Count: For Phase III clients care coordinator/case manager assisted on average with the fewest activities (mean=1.6) which was significantly fewer than the mean number of activities a care coordinator/case manager provided to Classic CCS respondents (mean=1.8). The care coordinator/case manager assistance provided to clients in HPSM WCM, Phase I, Phase II did not significantly differ from Classic CCS clients. See Table 131, Table 132, and Table 133.

Table 131. Mean Number of Tasks Care Coordinator Helped With

MEANS: In the last 6 months, has your care coordinator/case manager helped you with any of the following things? (Check all that apply) (Q73)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	45	271	1.91	1.06	1.00	4.00
Phase I	95	695	1.92	1.08	1.00	5.00

MEANS: In the last 6 months, has your care coordinator/case manager helped you with any of the following things? (Check all that apply) (Q73)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
Phase II	56	395	1.70	1.04	1.00	4.00
Phase III	49	272	1.57	0.76	1.00	3.00
Classic CCS	121	884	1.81	0.97	1.00	5.00

• Values are raw, non-weighted, survey results.

Table 132. Linear Regression: Number of Tasks Care Coordinator Helped With

Linear regression: In the last 6 months, has your care coordinator/case manager helped you with any of the following things? (Check all that apply) (Q73)							
WCM Group	Co-efficient	Standard Error	t-value	p-value	95% Confidence Interval		Signifi-cance
HPSM WCM	0.10	0.19	0.53	0.59	-0.27	0.47	ns
Phase I	0.13	0.16	0.77	0.44	-0.19	0.45	ns
Phase II	-0.05	0.18	-0.25	0.80	-0.41	0.32	ns
Phase III	-0.36	0.16	-2.29	0.02	-0.67	-0.05	*
Classic CCS	0.00	0.00	.	.	0.00	0.00	
Constant	1.83	0.19	9.86	<.0001	1.46	2.19	
Weighted Mean dependent var		1.82					
R-squared		0.06	Number of observations		351		
F-test		21.90	Prob > F		<.0001		

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• p-values: *<.05, **<.01, ***<.001, ns=not significant

Table 133. Linear Regression – Analysis of WCM Group Comparisons: Number of Tasks Care Coordinator Helped With

Linear regression - Analysis of WCM Group Comparisons: In the last 6 months, has your care coordinator/case manager helped you with any of the following things? (Check all that apply) (Q73)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
HPSM WCM vs. Classic CCS	0.28	0.59	ns
Phase I vs. Classic CCS	0.59	0.44	ns

Linear regression - Analysis of WCM Group Comparisons: In the last 6 months, has your care coordinator/case manager helped you with any of the following things? (Check all that apply) (Q73)			
	Analysis of WCM Group Comparisons		
WCM Group Comparison	F Value	Pr > F	Significance
Phase II vs. Classic CCS	0.06	0.80	ns
Phase III vs. Classic CCS	5.22	0.02	*

• The linear regression used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.
• P-values: *<.05, **<.01, ***<.001

Know How to Contact Care Coordinator/Case Manager: The majority of respondents in all WCM study groups (72%) reported knowing how to contact their care coordinator/case manager either by having "direct contact information," "a general number," or going "through the phone tree to find someone to talk to." Compared to Classic CCS respondents (78%), Phase III respondents (67%) were significantly less likely to know how to contact their care coordinator/case manager. See Table 134.

Table 134. Know How to Contact Care Coordinator

Do you know how to contact your care coordinator/case manager? (Q74)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Yes, I have direct contact information, including their email address or direct telephone number	31	57	41	29	97	255
	53.45	44.88	46.07	43.28	56.07	49.61
Yes, I contact a general number at current plan and leave a message for them to contact me	5	19	8	11	20	63
	8.62	14.96	8.99	16.42	11.56	12.26
Yes, I contact current plan and go through the phone tree to find someone to talk to	5	15	9	5	18	52
	8.62	11.81	10.11	7.46	10.40	10.12
No, I don't know how to contact them	17	36	31	22	38	144
	29.31	28.35	34.83	32.84	21.97	28.02
Total	58	127	89	67	173	514
	100.00	100.00	100.00	100.00	100.00	100.00

Do you know how to contact your care coordinator/case manager? (Q74)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Rao-Scott Chi2	19.45					
P-value	0.08					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care Coordination Communication: The largest percentage of respondents in all WCM study groups met with their care coordinator/case manager to discuss health care or service needs either “every few months” (39%) or “never” (35%). The differences between WCM study groups and Classic CCS were not statistically significant. See Table 135.

Table 135. Communication with Care Coordinator

In the last 6 months, how often have you talked to or met with [CHILD’S NAME]’s care coordinator/case manager to discuss [CHILD’S NAME]’s healthcare or service needs? (Q75)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
More than once a month	6	11	10	6	18	51
	10.71	9.40	12.35	8.70	10.78	10.41
About once a month	6	21	12	13	26	78
	10.71	17.95	14.81	18.84	15.57	15.92
Every few months	23	44	26	27	69	189
	41.07	37.61	32.10	39.13	41.32	38.57
Never	21	41	33	23	54	172
	37.50	35.04	40.74	33.33	32.34	35.10
Total	56	117	81	69	167	490
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	7.89					
P-value	0.79					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care Coordination Knowledge of Child’s Medical History: A majority of respondents in all WCM study groups (60%) indicated the care coordinator/case manager demonstrated knowledge of important information related to the client’s

medical history “usually” or “always.” The differences between WCM study groups and Classic CCS were not statistically significant. See Table 136.

Table 136. Care Coordinator Demonstrated Knowledge of Child’s Medical History

(Only if Q75= “More than once a month,” “About once a month ,” “Every few months,” or “Never”) In the past 6 months, how often did the care coordinator/case manager demonstrate knowledge of important information related to [CHILD’S NAME]’s medical history? (Q76)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never	6	20	18	7	18	69
	15.00	23.26	32.14	15.91	15.13	20.00
Sometimes	12	9	10	13	22	66
	30.00	10.47	17.86	29.55	18.49	19.13
Usually	8	21	8	7	30	74
	20.00	24.42	14.29	15.91	25.21	21.45
Always	14	36	20	17	49	136
	35.00	41.86	35.71	38.64	41.18	39.42
Total	40	86	56	44	119	345
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	20.24					
P-value	0.06					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care Coordination Satisfaction: A majority of respondents in all WCM study groups (67%) indicated they were “satisfied” or “very satisfied” with the care coordination/case management they have received. Compared to Classic CCS respondents, significantly fewer Phase II respondents indicated they were “satisfied” or “very satisfied” with the care coordination/case management they have received (Classic CCS=72% vs Phase II=51%). Phase II respondents responded “neither satisfied nor dissatisfied” more often than Classic CCS respondents (Phase II=24% versus Classic CCS=11%). Similarly, more Phase II respondents responded they were “dissatisfied” or “very dissatisfied” with the care coordination/case management services compared to Classic CCS (Phase II=26% vs Classic CCS=17%). The HPSM WCM, Phase I, and Phase III responses did not differ from Classic CCS respondents. See Table 137.

Table 137. Satisfaction with Care Coordination

How satisfied are you with the care coordination/case management [CHILD'S NAME] received through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q77)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	6	8	8	3	15	40
	10.53	6.72	9.64	4.48	9.43	8.25
Dissatisfied	3	14	13	2	12	44
	5.26	11.76	15.66	2.99	7.55	9.07
Neither satisfied nor dissatisfied	8	18	20	11	17	74
	14.04	15.13	24.10	16.42	10.69	15.26
Satisfied	27	47	27	36	70	207
	47.37	39.50	32.53	53.73	44.03	42.68
Very satisfied	13	32	15	15	45	120
	22.81	26.89	18.07	22.39	28.30	24.74
Total	57	119	83	67	159	485
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	37.07					
P-value	0.002					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Care Coordination/Case Management

On the majority of items assessing care coordination, there were no significant differences between the WCM health care model and Classic CCS. There were a few exceptions where a WCM study group differed from Classic CCS.

For Phase III clients the mean number of activities that care coordinator/case manager assisted on were significantly fewer than the mean number of activities a care coordinator/case manager provided to Classic CCS respondents.

While the majority of respondents across all WCM study groups knew how to contact their care coordinator/case manager, significantly more Classic CCS respondents indicated that they knew how to contact their coordinator/case manager than Phase III respondents.

Compared to Classic CCS respondents, significantly fewer Phase II respondents indicated they were “satisfied” or “very satisfied” with the care coordination/case management they have received.

Even though many aspects of care coordination/case management services were not significant among WCM study groups and Classic CCS counties, they might benefit from a more in depth look on how to improve them. For example, 48% of respondents in the WCM study groups indicated services were “about the same” while 19% they were “better since the transition” and 23% indicated “don’t know.” A review of satisfaction shows that while 67% of respondents are “satisfied” or “very satisfied,” a large percentage of respondents, 33%, are “neither satisfied nor dissatisfied,” “dissatisfied,” or “very dissatisfied.” Also, a large percentage of respondents, 39%, indicated the care coordinator/case manager “sometimes” or “never” demonstrated knowledge of important information related to the client’s medical history. Care coordination/case management services is a crucial component for the overall care of the client that it might be beneficial to explore how to improve these services.

TRANSITION TO ADULT SERVICES

Discussed Adult Transition: The transition to healthcare providers who care for adults rather than children is important for many families as their children get close to aging out of WCM or Classic CCS when they turn 21. Among those with a client 12 years and older, almost two thirds of respondents (62%) across WCM study groups indicated that they “did not discuss and it would have been helpful” to discuss the shift to adult care with their provider. There were no significant differences between the WCM study groups and Classic CCS. See Table 138.

Table 138. Discussed Transition to Adult Services

[Asked Only if client’s age 12+] Did providers talk with you and/or [CHILD’S NAME] about the shift to adult healthcare providers? (Q78)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Discussed this	25	70	48	33	80	256
	35.21	36.27	46.15	38.82	37.56	38.44
Did not discuss and it would have been helpful	46	123	56	52	133	410
	64.79	63.73	53.85	61.18	62.44	61.56
Total	71	193	104	85	213	666
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	2.80					
P-value	0.59					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.

[Asked Only if client's age 12+] Did providers talk with you and/or [CHILD'S NAME] about the shift to adult healthcare providers? (Q78)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total

• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary – Transition to Adult Services

The transition to healthcare providers who take care of adults rather than children is important for many families as their children get close to aging out of CCS when they turn 21. It is notable that almost two thirds of respondents across WCM study groups indicated that they "did not discuss and it would have been helpful" to discuss the shift to adult care with their provider.

CONCLUSION

The telephone survey of parents/guardians of children in WCM was completed between March - June 2020. When evaluating the WCM, it should be kept in mind that the HPSM WCM began six years prior to the administration of the survey as the HPSM Demonstration Pilot. The telephone survey items inquired about the following domains:

- Demographics/Characteristics of Clients
- Demographics/Characteristics of Respondents
- WCM Enrollment Procedures
- Overall Quality of Care
- Medical Home/Primary Care
- Specialty Care
- Therapy Services
- Prescription and Pharmacy Services
- Behavioral Healthcare
- Medical Equipment and Supplies
- Provider Communication
- Transportation
- Care Coordination/Case Management
- Transition to Adult Services

While there were some differences with individual WCM study groups and Classic CCS, the majority of survey items showed limited significant differences. When there were differences between WCM study groups and Classic CCS, these differences were between a specific WCM study groups and Classic CCS. There were very few instances in which all WCM study groups differed with Classic CCS.

The varied differences make it challenging to provide overall conclusions, especially since the WCM study groups differed systemically in how they provided healthcare. Also, HPSM WCM WCM and Phase I, Phase II, and Phase III WCM were implemented at different time points, it is unknown how the time component impacted this evaluation of WCM.

The following provides a broad summary of the WCM Telephone Survey findings:

Demographics

Clients: There were some differences in demographic characteristics between clients in WCM versus Classic CCS. Clients in Phase I and Phase II were significantly older than clients in Classic CCS. Also, the race/ethnicity diversity of Phase I and Phase II clients differed compared to Classic CCS. Phase I clients were likely to be Latinx and less likely to be White than Classic CCS. Phase II clients were more likely to be Caucasian or multi-race/ethnicity, and less likely to be Latinx than Classic CCS clients.

The majority of clients across all WCM study groups live with the survey respondent and for the majority the respondent was the child's mother.

Respondent: Not surprisingly the majority of respondents were female. The mean age of the respondents was approximately 40. The marital status of the respondents among WCM study groups did not differ with the majority of the respondents reported being "married" (54%), "single" (21%), or living with partner (11%). The race/ethnicity diversity of Phase I, Phase II, and Phase III respondents significantly differed from the race/ethnicity diversity of Classic CCS respondents. The percentage of Latinx respondents in Phase I and Phase III were higher than Classic CCS. Phase II had fewer Latinx respondents but a greater percentage of White respondents. The HPSM WCM respondents tended to have completed more schooling, some college or more education, than Classic CCS respondents.

Work status: Across all WCM study groups more than a third of respondents indicated "working for pay full-time or part-time." Slightly more than half of the households across all WCM study groups had "1 other income earner" in addition to the respondent. For approximately one-third of households, the respondent is the only income earner. A significantly larger percentage of HPSM WCM, Phase I, and Phase II respondents reported incomes $75,000 or more compared to Classic CCS.

Respondents missed, on average, 7-8 hours of work due to the client's health condition. Similarly, the client's healthcare condition impacted the number of hours missed by other income earners in the household which ranged, on average, between 6-9 hours. The majority of respondents reported spending "5 or fewer [hours] per month" on activities to arrange their client's health care, with approximately one-fifth of respondents spending "6-10 [hours] per month."

Client Health and Disability Status

The difference in overall health status between each WCM study group and Classic CCS clients was not significant. The majority of respondents in all WCM study groups indicated the client's overall health to be "good "or "excellent." Also, during the past six months the differences in the client's conditions(s) affecting their ability to do things other children do was not statistically significant between WCM study groups and Classic CCS.

The HPSM WCM clients missed significantly more school days than Classic CCS clients. Fewer HPSM WCM clients missed "0-3 days" and a greater percentage of HPSM WCM clients missed more than four days of school due to illness than Classic CCS clients. The difference between the other WCM study groups and Classic CCS respondents was not significant.

WCM Survey Administration and Enrollment

For almost three-quarters of respondents the survey was administered in English. A greater percentage of Phase II respondents answered the survey in English compared to Classic CCS respondents.

In general, all WCM study groups learned about WCM through a letter in the mail or by multiple methods. While a majority of WCM respondents felt they obtained all the information they needed about WCM, over a third of respondents felt they could have used additional information or had unanswered questions. It might be helpful to review the program outreach and how that might be improved to facilitate enrollment and knowledge of the program.

Overall Quality of Care

The majority of respondents in the WCM study groups and Classic CCS were "satisfied" and "very satisfied" with their health plan.

Medical Home/Primary care

Since transitioning into WCM, the majority of Phase I, Phase II, and Phase III respondents indicated that primary care services were "about the same." A large percentage of HPSM WCM respondents (38%) indicated "don't know," HPSM WCM respondents (42%) also indicated that primary care services were "about the same" since the transition.[2]

[2] For each question where respondents were asked about the quality of services, a large percentage of HPSM WCM respondents indicated "don't know." The HPSM WCM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of "don't know" responses. The next largest response from HPSM WCM respondents were that services were "about the same."

Specialty Care

Since transitioning into WCM, the majority of Phase I, Phase II, and Phase III respondents indicated that specialty care services were “about the same.” A large percentage of HPSM WCM respondents (36%) indicated “don’t know,” HPSM WCM respondents (45%) also indicated that specialty care services were “about the same” since the transition.

Phase I and Phase II respondents indicated having fewer specialist appointments compare to Classic CCS respondents. While a significant percentage of respondents across all WCM study groups reported that it was “usually easy” or “always easy” to get an appointment with specialists, fewer Phase III respondents indicated that it was “usually easy” or “always easy” to get an appointment with specialists compared to Classic CCS.

Therapy Services

The majority of survey respondents in all WCM study groups were “satisfied” or “very satisfied” with the therapy services they were receiving. Although a majority of respondents in all WCM study groups reported that their medical therapy services needs were met, a little more than one-third reported unmet needs. Speech therapy (31%) is the most common therapy clients were unable to get, followed by occupational therapy (24%), physical therapy (18%), and behavioral/mental health therapy (13%).

Since transitioning into WCM, the majority of Phase I, Phase II, and Phase III respondents indicated that therapy services were “about the same.” A large percentage of HPSM WCM respondents (40%) indicated “don’t know,” HPSM WCM respondents (41%) also indicated that therapy services were “about the same” since the transition.

Prescription and Pharmacy Services

The majority of respondents in Phase I, Phase II, and Phase III WCM study groups indicated that pharmacy services were “about the same” since the transition. A large percentage of HPSM WCM respondents (34%) indicated “don’t know,” HPSM WCM respondents (47%) also indicated that pharmacy services were “about the same” since the transition.

Across all WCM study groups the majority of respondents (75%) indicated having no out-of-pocket expenses, “$0 per month,” for prescription medications. Compared to Classic CCS respondents (72%), Phase I (80%) and Phase II (79%) were more likely not to have prescription medication out-of-pocket expenses, “$0 per month.”

The majority of respondents in all WCM study groups (92%) indicated their prescription needs have been met.

Behavioral Health

Approximately three-quarters of respondents in all WCM study groups indicated they did not need behavioral health services. Of those individuals who needed behavioral health services, the majority of respondents (71%) in all WCM study groups reported that their behavioral or mental health services needs have been met. While the majority of respondents in all WCM study groups (58%) indicated that it was "usually easy" or "always easy" to get behavioral health treatment or counseling, a significant proportion (42%) indicated that it was "never easy" or "sometimes easy." The differences between WCM study groups and Classic CCS were not statistically significant.

Regarding quality of services, across all WCM study groups, more than half of respondents indicated that behavioral health services were "about the same" since the transition and 11% indicated behavioral services were "better since the transition."

Medical Equipment and Supplies

Approximately two-thirds of respondents in all WCM study groups indicated they did not need medical equipment or supplies. Also, the majority of respondents (77%) in all WCM study groups reported being "satisfied" or "very satisfied" with their medical equipment or supplies they receive. The differences between WCM study groups and Classic CCS were not statistically significant.

Since transitioning into WCM, a significantly greater number of Phase II (34%) and Phase III (39%) respondents reported that it was "always easy" to obtain medical equipment and supplies compared to Classic CCS respondents (23%).

Almost three-quarters of Phase I, Phase II, and Phase III respondents indicated that medical equipment and supplies services were "about the same." A large percentage of HPSM WCM respondents (40%) indicated "don't know," HPSM WCM respondents (47%) also indicated that primary care services were "about the same" since the transition.

Provider Communication

Since implementing WCM, across all WCM study groups the majority of respondents (83%) said they were "satisfied" or "very satisfied" with the communication they have with their doctors and healthcare providers. Although fewer Phase I respondents indicated they were "very satisfied" with the communication they have with their doctors and healthcare providers than Classic CCS respondents, a greater percentage of Phase I respondents indicated being "satisfied" with the communication they have with their doctors and healthcare providers compared to Classic CCS respondents.

Transportation

The distribution between the WCM study groups and Classic CCS respondents was not significant in how they responded to the ease of getting transportation for their child's healthcare appointments. Although not significant, a little over a third of Phase III

respondents indicated it was “never easy” to get transportation for their child’s healthcare appointments compared to 13% of Classic CCS respondents.

Care Coordination/Case Management

On the majority of items assessing care coordination, there were no significant differences between the WCM health care model and Classic CCS. There were a few exceptions where a WCM study group differed from Classic CCS.
Compared to Classic CCS respondents, significantly fewer Phase II respondents indicated they were “satisfied” or “very satisfied” with the care coordination/case management they have received.

Transition to Adult Services

The transition to healthcare providers who take care of adults rather than children is important for many families as their children get close to aging out of CCS when they turn 21. It is notable that almost two thirds of respondents across WCM study groups indicated that they “did not discuss and it would have been helpful” to discuss the shift to adult care with their provider.

Appendix T: Results, Organized by Research Question

Research Question #1: What is the impact of the WCM on children's access to CCS services?

Telephone Survey[1] Results -- Access to Care
The telephone survey items addressing the first research question, access to CCS services, are drawn from sections of the survey that inquire about:

- Medical Home/Primary Care
- Specialty Care
- Therapy Services
- Prescription Medication
- Behavioral Healthcare
- Medical Equipment and Supplies
- Provider Communication
- Transportation

Medical Home/Primary Care
Access to Personal Doctor: A majority of respondents in all WCM study groups (87%) reported "yes" to having a personal doctor or nurse. A significantly greater percentage of Phase II respondents (92%) indicated having a personal doctor or nurse than Classic CCS respondents (86%). See Table 1.

Table 1. Survey Respondents' Access to a Personal Doctor

Do you have one or more people you think of as [CHILD'S NAME] personal doctor or nurse? (Q10)[2]						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	39	117	37	38	142	373
	12.54	15.19	8.28	12.03	14.43	13.19
Yes	272	653	410	278	842	2455
	87.46	84.81	91.72	87.97	85.57	86.81
Total	311	770	447	316	984	2828
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	13.18					
p-value	0.01					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.

[1] The full telephone survey instrument can be found in Appendix Y.
[2] The items indicated in parenthesis refers to the Telephone Survey item.

Do you have one or more people you think of as [CHILD'S NAME] personal doctor or nurse? (Q10)[2]						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total

• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to the Same Primary Care Provider: The majority of respondents in all WCM study groups (90%) were able to continue seeing their same primary care provider. The differences between WCM study groups were not statistically significant. See Table 2.

Table 2. Survey Respondents' Access to Same Primary Care Provider

[Asked only of respondents enrolled in WCM] Since you switched to [NAME OF HEALTH PLAN], does [CHILD'S NAME] have the same primary care provider or did you have to switch to a new primary care provider? (Q12)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Changed primary care providers	22	50	32	23	127
	13.84	9.23	9.33	10.27	10.02
Kept same primary care provider	137	492	311	201	1141
	86.16	90.77	90.67	89.73	89.98
Total	159	542	343	224	1268
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	1.09				
P-value	0.78				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Primary Care Doctor Visits: On average, across the WCM study groups and Classic CCS, respondents reported seeing their primary care provider just under twice in the past six months (mean range=1.65 to 1.94). The WCM study groups did not significantly differ from the Classic CCS group in the reported frequency of primary care doctor visits. See Table 3.

Table 3. Survey Respondents' Mean Number of Visits to Primary Care Doctor

MEANS: [Ask all whose personal doctor is a primary care doctor.] In the past 6 months, how many times did your client visit their primary care provider or nurse? (Q14)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	193	1.99	1.80	0.00	13.00	193
Phase I	506	2.22	1.79	0.00	12.00	506
Phase II	313	2.00	1.81	0.00	20.00	313
Phase III	199	1.89	1.65	0.00	10.00	199
Classic CCS	641	1.98	1.94	0.00	30.00	641

• Values are raw, non-weighted, survey results.

Emergency Department Visits: Across all WCM study groups the majority of respondents (80%) indicated that the client did not go to the emergency room even if it was not an emergency, because it was too difficult to see another doctor. Compared to Classic CCS clients, fewer Phase II clients went to the emergency room even if it was not an emergency, because it was too difficult to see another doctor (Phase II=17% vs Classic CCS=21%). See Table 4.

Table 4. Survey Respondents' Access to the Emergency Room

In the last 6 months, did [CHILD'S NAME] go to the emergency room, even if it was not an emergency, because it was too difficult to see another doctor? (Q16)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	238	631	365	245	782	2261
	78.81	81.84	83.33	77.04	79.15	80.26
Yes	64	140	73	73	206	556
	21.19	18.16	16.67	22.96	20.85	19.74
Total	302	771	438	318	988	2817
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	6.69					
Prob.	0.15					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Needing a Referral for Services: Across all WCM study groups, 44% of respondents reported needing a referral. Compared to Classic CCS respondents, significantly fewer Phase II respondents reported needing a referral (Phase II: 38% vs Classic CCS: 44%). The differences between HPSM WCM WCM, Phase I, and Phase III WCM study groups and Classic CCS were not significant. See Table 5.

Table 5. Survey Respondents' Need for a Referral

Q17. DURING THE PAST 6 MONTHS, did [CHILD'S NAME] need a referral to see any doctors or receive any services? (Q17)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	176	415	272	162	547	1572
	56.59	53.76	61.96	51.59	56.28	55.98
Yes	135	357	167	152	425	1236
	43.41	46.24	38.04	48.41	43.72	44.02
Total	311	772	439	314	972	2808
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	9.31					
P-value	0.05					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Referrals: The majority of respondents in all WCM study groups (67%) did not experience a problem in obtaining a referral. The differences between the WCM study groups and Classic CCS were not statistically significant. See Table 6.

Table 6. Survey Respondents' Difficulty in Obtaining a Referral

[if Q17=Yes: DURING THE PAST 6 MONTHS, did [CHILD'S NAME] need a referral to see any doctors or receive any services?] How big of a problem was it to get referrals? (Q18)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Not a problem	97	226	103	94	283	803
	75.19	64.76	63.98	64.83	67.87	66.86
Small problem	19	87	38	33	82	259
	14.73	24.93	23.60	22.76	19.66	21.57
Big problem	13	36	20	18	52	139
	10.08	10.32	12.42	12.41	12.47	11.57
Total	129	349	161	145	417	1201
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	6.87					
P-value	0.55					

[if Q17=Yes: DURING THE PAST 6 MONTHS, did [CHILD'S NAME] need a referral to see any doctors or receive any services?] How big of a problem was it to get referrals? (Q18)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Authorizations: The majority of respondents in all WCM study groups (61%) reported that obtaining an authorization was "about the same." A large percentage of HPSM WCM respondents (38%) stated "don't know" for whether there was a change in their ability to obtain authorizations. The high number of "don't know" responses probably reflects that this survey was administered six years after the WCM was initiated for HPSM. While comparisons between the different WCM study groups are difficult given different systemic healthcare structures, there were some significant differences between the WCM study groups. The ability for obtaining authorizations significantly differed between HPSM WCM and Phase III, Phase I and Phase III, and Phase II and Phase III. Given the high percentage of HPSM WCM respondents reporting "don't know," there should be caution when interpreting comparisons with the HPSM WCM study group. Compared to Phase I respondents, more Phase III respondents (Phase III=13% vs Phase I=9%) reported that obtaining authorizations was "worse since the transition." A larger percentage of Phase I respondents (6%) indicated "don't know" for obtaining authorizations compared to Phase III respondents (3%). More Phase III respondents (22%) indicated obtaining authorizations was "better since the transition" compared to Phase II respondents (9%). See Table 7.

Table 7. Survey Respondents' Access to Authorizations

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], has [CHILD'S NAME]'s ability to get authorizations for services been better, the same, or worse? (Q19)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	23	80	15	35	153
	16.79	21.62	8.52	22.15	18.19
About the same	58	234	120	97	509
	42.34	63.24	68.18	61.39	60.52
Worse since the transition	4	33	26	21	84
	2.92	8.92	14.77	13.29	9.99
Don't know	52	23	15	5	95
	37.96	6.22	8.52	3.16	11.30
Total	137	370	176	158	841

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], has [CHILD'S NAME]'s ability to get authorizations for services been better, the same, or worse? (Q19)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	101.87				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Specialty Care

Specialists Continuity of Care: The vast majority of respondents (94%) in all WCM study groups reported being able to see the same specialists after transitioning to WCM. The differences between the WCM study groups were not statistically significant. See Table 8.

Table 8. Survey Respondents' Ability to See Same Specialist

[Asked only of respondents enrolled in WCM] Was [CHILD'S NAME] able to see the same specialists after enrolling in [NAME OF HEALTH PLAN]? (Q21)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
No - Had to change to one or more new specialists	14	37	18	18	87
	7.04	5.33	4.63	6.43	5.57
Yes - Still able to see same specialists	185	657	371	262	1475
	92.96	94.67	95.37	93.57	94.43
Total	199	694	389	280	1562
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	2.05				
P-value	0.56				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Getting Appointments with Specialists: Since the implementation of WCM, a significant percentage of respondents (78%), across all WCM study groups, reported that it was "usually easy" or "always easy" to get an appointment with specialists. Fewer Phase III respondents (71%) indicated that it was "usually easy" or "always easy" to get an appointment with specialists compared to Classic CCS (79%). The other WCM study groups respondents did not differ from Classic CCS respondents. See Table 9.

Table 9. Survey Respondents' Ease of Obtaining Specialist Appointments

In the last 6 months, how often was it easy to get appointments for [CHILD'S NAME] with specialists? (Q25)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never Easy	10	25	10	6	34	85
	4.74	4.63	3.18	2.83	5.15	4.39
Sometimes easy	38	98	47	56	106	345
	18.01	18.15	14.97	26.42	16.06	17.81
Usually easy	79	172	120	60	252	683
	37.44	31.85	38.22	28.30	38.18	35.26
Always easy	84	245	137	90	268	824
	39.81	45.37	43.63	42.45	40.61	42.54
Total	211	540	314	212	660	1937
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	42.79					
P-value	<.0001					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Unmet Need for Specialty Services: The majority of respondents in all WCM study groups (87%) were able to get all the specialist services they needed. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 10.

Table 10. Survey Respondents' Unmet Needs for Specialty Services

Does [CHILD'S NAME] need any specialist services that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q27)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No, he or she gets all the specialist	209	561	308	214	629	1921

Does [CHILD'S NAME] need any specialist services that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q27)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
services he or she needs.						
	87.08	87.66	87.75	89.17	85.35	87.00
Yes, there are specialist services he or she needs but cannot get through current plan	31	79	43	26	108	287
	12.92	12.34	12.25	10.83	14.65	13.00
Total	240	640	351	240	737	2208
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	5.87					
P-value	0.21					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Medical Therapy Services

Continuity of Location of Therapy Services: The majority of clients across all WCM study groups (88%) did not experience a change in the location of therapy services. See Table 11.

Table 11. Survey Respondents' Location of Therapy Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] did the site of [CHILD'S NAME] therapy change? (Q33)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
No change	96	303	178	112	689
	84.21	89.91	89.90	85.50	88.33
Yes, used to go to medical therapy unit, now goes to other	6	8	4	5	23
	5.26	2.37	2.02	3.82	2.95

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] did the site of [CHILD'S NAME] therapy change? (Q33)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Yes, used to go to other, now goes to Medical Therapy Unit	0	3	3	2	8
	0.00	0.89	1.52	1.53	1.03
Yes, changed some other way	12	23	13	12	60
	10.53	6.82	6.57	9.16	7.69
Total	114	337	198	131	780
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†				
P-value					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access of Getting Therapy Service Appointments: Since the implementation of WCM, a greater number of respondents in the WCM study groups (42%) reported that it was "always easy" to get a medical therapy services appointment for the client compared to Classic CCS respondents (30%). The distribution in the ease of obtaining therapy services for Phase II respondents significantly differed from Classic CCS respondents. A higher percentage of Phase II respondents (76%) indicated it was "usually easy" or "always easy" to obtain a medical therapy appointment than Classic CCS respondents (66%) since the implementation of WCM. See Table 12.

Table 12. Survey Respondents' Ease of Obtaining Therapy Services

In the last 6 months, how often was it easy to get therapy services for [CHILD'S NAME]? (Q34)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never easy	7	7	3	5	14	36
	10.29	5.00	4.41	9.26	10.14	7.69
Sometimes easy	14	35	13	11	33	106
	20.59	25.00	19.12	20.37	23.91	22.65
Usually easy	20	42	24	13	49	148
	29.41	30.00	35.29	24.07	35.51	31.62
Always easy	27	56	28	25	42	178

In the last 6 months, how often was it easy to get therapy services for [CHILD'S NAME]? (Q34)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	39.71	40.00	41.18	46.30	30.43	38.03
Total	68	140	68	54	138	468
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	16.49					
P-value	0.17					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights & is across all three healthcare models.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Unmet Need for Medical Therapy Services: While the majority of respondents in all WCM study groups reported that their medical therapy services needs were met (65%), there was a large percentage of respondents who reported unmet needs (35%). There were no statistically significant differences between the WCM study groups and Classic CCS. See Table 13.

Table 13. Survey Respondents' Unmet Needs for Therapy Services

Does [CHILD'S NAME] need any therapy services that he or she currently cannot get? (Q36)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Needs met	98	210	118	85	254	765
	63.64	67.09	63.44	66.93	62.72	64.56
Has unmet needs	56	103	68	42	151	420
	36.36	32.91	36.56	33.07	37.28	35.44
Total	154	313	186	127	405	1185
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	1.36					
P-value	0.85					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights & is across all three healthcare models.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Prescription Medication

Ease of Getting Prescription Medications: The majority of respondents in all WCM study groups (78%) indicated that it was "usually easy" or "always easy" to obtain prescription medications. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 14.

Table 14. Survey Respondents' Ease of Obtaining Prescriptions

In the last 6 months, how often was it easy to get these prescription medications for [CHILD'S NAME]? (Q40)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never Easy	8	23	11	8	30	80
	4.10	5.20	4.14	4.85	5.42	4.93
Sometimes easy	33	84	54	22	80	273
	16.92	19.00	20.30	13.33	14.44	16.83
Usually easy	59	144	76	49	175	503
	30.26	32.58	28.57	29.70	31.59	31.01
Always easy	95	191	125	86	269	766
	48.72	43.21	46.99	52.12	48.56	47.23
Total	195	442	266	165	554	1622
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	10.69					
P-value	0.56					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Delay Getting Prescription Medications: The majority of respondents in all WCM study groups (76%) indicated in the past six months they did not delay or did not receive a needed prescription medication. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 15.

Table 15. Survey Respondents Who Experienced a Delay Obtaining Prescriptions

In the past 6 months, did you delay or not get a prescription that a doctor prescribed? (Q41)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	150	341	195	125	429	1240
	78.53	76.12	73.03	74.85	78.14	76.45
Yes	41	107	72	42	120	382
	21.47	23.88	26.97	25.15	21.86	23.55

In the past 6 months, did you delay or not get a prescription that a doctor prescribed? (Q41)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Total	191	448	267	167	549	1622
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	9.07					
P-value	0.06					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Pharmacy Services: The majority of respondents in all WCM study groups (90%) indicated they were able to keep the same pharmacy after the transition to WCM. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 16.

Table 16. Survey Respondents' Ability to Keep the Same Pharmacy

[Asked only of respondents enrolled in WCM] Since switching to [NAME OF HEALTH PLAN], can you go to the same pharmacy or did you have to switch to a different pharmacy? (Q43)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Switched to a different pharmacy	19	45	25	16	105
	12.18	10.07	9.40	9.82	10.17
Kept same pharmacy	137	402	241	147	927
	87.82	89.93	90.60	90.18	89.83
Total	156	447	266	163	1032
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	0.47				
P-value	0.92				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Unmet Needs for Prescribed Medication: The majority of respondents in all WCM study groups (92%) indicated their prescription needs have been met. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 17.

Table 17. Survey Respondents' Unmet Needs for Prescriptions

Does [CHILD'S NAME] need any medications prescribed by a doctor that he or she currently cannot get? (Q44)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No, needs met	169	405	240	152	473	1439
	90.86	93.10	93.75	93.25	90.44	92.07
Yes, has unmet need	17	30	16	11	50	124
	9.14	6.90	6.25	6.75	9.56	7.93
Total	186	435	256	163	523	1563
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	5.66					
P-value	0.23					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Behavioral Health

Access to Behavioral Health Services: While the majority of respondents in all WCM study groups (58%) indicated that it was "usually easy" or "always easy" to get behavioral health treatment or counseling, a significant proportion (42%) indicated that it was "never easy" or "sometimes easy." The differences between WCM study groups and Classic CCS were not statistically significant. See Table 18.

Table 18. Survey Respondents' Ease of Obtaining Behavioral Health Services

In the last 6 months, how often was it easy to get this treatment or counseling for [CHILD'S NAME]? (Q48)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never Easy	13	36	14	7	39	109
	19.70	21.05	12.28	12.07	19.12	17.78
Sometimes easy	10	43	28	14	54	149
	15.15	25.15	24.56	24.14	26.47	24.31
Usually easy	22	55	35	19	66	197
	33.33	32.16	30.70	32.76	32.35	32.14
Always easy	21	37	37	18	45	158
	31.82	21.64	32.46	31.03	22.06	25.77
Total	66	171	114	58	204	613

In the last 6 months, how often was it easy to get this treatment or counseling for [CHILD'S NAME]? (Q48)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	8.36					
P-value	0.76					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Behavioral Health Unmet Needs: The majority of respondents (76%) in all WCM study groups reported that their behavioral or mental health services needs have been met. Compared to Classic CCS (68%) significantly mores respondent in Phase I (78%), Phase II (80%), and Phase III (87%) reported that their mental health services needs were met. See Table 19.

Table 19. Survey Respondents' Unmet Needs for Behavioral Health Services

Does [CHILD'S NAME] need any behavioral or mental health services that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q49)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Needs met	41	119	78	48	128	414
	78.85	77.78	80.41	87.27	68.09	75.96
Has unmet need	11	34	19	7	60	131
	21.15	22.22	19.59	12.73	31.91	24.04
Total	52	153	97	55	188	545
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	15.75					
P-value	0.003					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Medical Equipment and Supplies

Access to Medical Equipment: Since transitioning into WCM, a significantly greater number of Phase II (34%) and Phase III (39%) respondents reported that it was "always easy" to obtain medical equipment and supplies compared to Classic CCS respondents

(23%). The difference between the other WCM study groups and Classic CCS respondents were not significant. See Table 20.

Table 20. Survey Respondents' Ease of Obtaining Medical Equipment and Supplies

In the last 6 months, how often was it easy to get special medical equipment or supplies (including repairs) for [CHILD'S NAME]? (Q53)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never Easy	17	27	21	14	63	142
	13.71	11.16	12.88	12.84	18.21	14.43
Sometimes easy	33	70	27	24	77	231
	26.61	28.93	16.56	22.02	22.25	23.48
Usually easy	44	75	60	29	128	336
	35.48	30.99	36.81	26.61	36.99	34.15
Always easy	30	70	55	42	78	275
	24.19	28.93	33.74	38.53	22.54	27.95
Total	124	242	163	109	346	984
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	35.88					
P-value	0.0003					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Unmet Needs for Medical Equipment: Phase I (19%) and Phase II (19%) respondents were less likely to report having unmet needs for medical equipment and supplies compared to Classic CCS respondents (26%). This difference was statistically significant. The difference between the other WCM study groups and Classic CCS respondents were not significant. See Table 21.

Table 21. Survey Respondents' Unmet Needs for Medical Equipment and Supplies

Does [CHILD'S NAME] need any medical equipment or supplies that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q55)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No, needs met	86	184	118	86	228	702
	79.63	81.42	80.82	80.37	73.55	78.26
Yes, has unmet need	22	42	28	21	82	195

Does [CHILD'S NAME] need any medical equipment or supplies that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q55)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	20.37	18.58	19.18	19.63	26.45	21.74
Total	108	226	146	107	310	897
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	9.05					
P-value	0.06					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Provider Communication

Access to Interpreter Services: The majority of respondents in all WCM study groups (80%) reported that, if needed, they were "usually" or "always" able to have a professional interpreter. A greater percentage of Phase I respondents (83%) reported they were "usually" or "always" able to have a professional interpreter compared to Classic CCS (78%). See Table 22.

Table 22. Survey Respondents' Access to Interpreter Services

[Only if interview is conducted in a language other than English] In the last 6 months, if you or [CHILD'S NAME] needed a professional interpreter to help [CHILD'S NAME] speak with his/her doctor, how often did you get one? (Q61)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never	2	3	2	5	8	20
	2.70	1.49	2.60	5.62	3.00	2.82
Sometimes	14	32	13	12	51	122
	18.92	15.92	16.88	13.48	19.10	17.23
Usually	9	18	16	10	30	83
	12.16	8.96	20.78	11.24	11.24	11.72
Always	49	148	46	62	178	483
	66.22	73.63	59.74	69.66	66.67	68.22
Total	74	201	77	89	267	708
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	19.45					
P-value	0.08					

[Only if interview is conducted in a language other than English] In the last 6 months, if you or [CHILD'S NAME] needed a professional interpreter to help [CHILD'S NAME] speak with his/her doctor, how often did you get one? (Q61)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Transportation Services

Access to Transportation Services: The distribution between the WCM study groups and Classic CCS respondents was not significant in how they responded to the ease of getting transportation for their child's healthcare appointments. Although not significant, it is of interest to note the large percentage of Phase III respondents (35%) who indicated it was "never easy" to get transportation for their child's healthcare appointments compared to Classic CCS respondents (13%). See Table 23.

Table 23. Survey Respondents' Ease of Obtaining Transportation Services

How often is it easy to get transportation to [CHILD'S NAME]'s doctors or other healthcare providers? (Q64)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never easy	3	17	13	9	13	55
	8.11	14.53	13.13	34.62	12.62	14.40
Sometimes easy	14	46	37	6	39	142
	37.84	39.32	37.37	23.08	37.86	37.17
Usually easy	9	16	29	7	29	90
	24.32	13.68	29.29	26.92	28.16	23.56
Always easy	11	38	20	4	22	95
	29.73	32.48	20.20	15.38	21.36	24.87
Total	37	117	99	26	103	382
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	15.26					
P-value	0.23					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Access to Transportation Services – Missed Appointments: While over two-thirds (69%) of respondents across all WCM study groups did not miss health or therapy appointments because of transportation problems, a little under a third (31%) of respondents reported missing health or therapy appointments because of transportation problems. The difference between WCM study groups and Classic CCS respondents was not significant. See Table 24.

Table 24. Survey Respondents Who Missed Appointments Due to Transportation Problems

In the last six months, did [CHILD'S NAME] miss any scheduled health or therapy appointments because of transportation problems? (Q66)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	25	93	75	17	79	289
	60.98	73.23	72.82	56.67	68.70	69.47
Yes	16	34	28	13	36	127
	39.02	26.77	27.18	43.33	31.30	30.53
Total	41	127	103	30	115	416
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	3.86					
P-value	0.43					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary - Research Question #1: What is the impact of the WCM on children's access to CCS services?

The telephone survey demonstrated that for a number of measures assessing access to care there were significant differences between the some of the WCM study groups and Classic CCS. That is, all groups were able to visit their PCP and the ED, and continue to see the same specialists, obtain prescriptions, receive behavioral health services, and get transportation to health or therapy appointments. This could be viewed positively, that is, the transition to WCM care went relatively smoothly for families.

Although the access to behavioral health services did not differ between WCM study groups and Classic CCS, there was a large percentage of respondents, 42%, who indicated that it was "never easy" or "sometimes easy" to obtain behavioral health services. Further examination on possible obstacles to accessing behavioral health services should be considered.

The following convey the areas of differences between WCM study groups and Classic CCS:

Medical Home/Primary Care: While a majority of respondents in all WCM study groups (87%) reported "yes" to having a personal doctor or nurse, a significantly greater percentage of Phase II respondents (92%) indicated having a personal doctor or nurse than Classic CCS respondents (86%).

For the majority of respondents in all WCM study groups (80%) indicated that the client did not go to the emergency room even if it was not an emergency, because it was too difficult to see another doctor. Phase II respondents reported fewer clients going to the emergency room even if it was not an emergency, because it was too difficult to see another doctor compared to Classic CCS. Significantly fewer Phase II respondents reported needing a referral compared to Classic CCS. Phase III respondents reported that obtaining authorizations since the transition to WCM was worse compared to Phase I. Whereas, compared to Phase II respondents, Phase III respondents ability to obtain an authorization was better.

Specialty Care: Since the implementation of WCM, a significant percentage of respondents (78%), across all WCM study groups, reported that it was “usually easy” or “always easy” to get an appointment with specialists. Fewer Phase III respondents (71%) indicated that it was “usually easy” or “always easy” to get an appointment with specialists compared to Classic CCS (79%).

Medical Therapy Services: Since the implementation of WCM, a greater number of respondents in the WCM study groups (42%) reported that it was “always easy” to get a medical therapy services appointment for the client compared to Classic CCS respondents (30%). Furthermore, a higher percentage of Phase II respondents (76%) indicated it was “usually easy” or “always easy” to obtain a medical therapy appointment than Classic CCS respondents (66%) since the implementation of WCM.

Behavioral Health: The majority of respondents (76%) in all WCM study groups reported that their behavioral or mental health services needs have been met. However, compared to Classic CCS (68%) significantly mores respondent in Phase I (78%), Phase II (80%), and Phase III (87%) reported that their mental health services needs were met.

Medical Equipment and Supplies: Phase I (19%) and Phase II (19%) respondents were less likely to report having unmet needs for medical equipment and supplies compared to Classic CCS respondents (26%).

Provider Communication: The majority of respondents in all WCM study groups (80%) reported that, if needed, they were “usually” or “always” able to have a professional interpreter. However, a greater percentage of Phase I respondents (83%) reported they were “usually” or “always” able to have a professional interpreter compared to Classic CCS (78%).

Research Question #1 – Nonsignificant Telephone Survey items

The telephone survey items that pertained to access to healthcare services which are listed below did not have any significant differences between WCM study groups:

Medical Home/Primary Care:
- Access to the same Primary Care Provider
- Number of visits to the Primary Care Provider
- Access to referrals

Specialty Care:
- Specialists Continuity of Care
- Unmet Need for Specialty Services:

Medical Therapy Services:
- Continuity of Location of Therapy Services
- Unmet Need for Medical Therapy Services

Prescription Medications
- Ease of Getting Prescription Medications
- Delay Getting Prescription Medications:
- Access to Pharmacy Services
- Unmet Needs for Prescribed Medication

Behavioral Health
- Access to Behavioral Health Services

Medical Equipment and Supplies
- Access to Medical Equipment

Transportation Services
- Access to Transportation Services:
- Access to Transportation Services – Missed Appointments

Research Question #2: What is the impact of the WCM on the patient's and family's satisfaction?

Telephone Survey Results - Impact on the Patient's and Family Satisfaction
The telephone survey items addressing the second research question, the impact that the WCM had on the patient's and family's satisfaction, are the satisfaction items found in the following sections:

- Specialty Care
- Therapy Services
- Medical Equipment and Supplies
- Provider Communication
- Global Rating of Healthcare.

Specialty Care
Satisfaction with Specialty Services: The majority of respondents in all WCM study groups (88%) indicated they were "satisfied" or "very satisfied" with the specialty services they have been receiving. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 25.

Table 25. Survey Respondents' Satisfaction with Specialist Services

How satisfied are you with the overall specialist services that [CHILD'S NAME] receives (Q26)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	14	36	17	9	40	116
	6.76	6.68	5.41	4.21	5.99	5.97
Dissatisfied	3	15	7	9	9	43
	1.45	2.78	2.23	4.21	1.35	2.21
Neither satisfied nor dissatisfied	7	15	8	8	27	65
	3.38	2.78	2.55	3.74	4.04	3.35
Satisfied	75	204	102	78	223	682
	36.23	37.85	32.48	36.45	33.38	35.12
Very satisfied	108	269	180	110	369	1036
	52.17	49.91	57.32	51.40	55.24	53.35
Total	207	539	314	214	668	1942
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	22.22					
P-value	0.14					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Therapy Services

Satisfaction with Therapy Services: The majority of survey respondents in all WCM study groups (74%) were "satisfied" or "very satisfied" with the therapy services they were receiving. There were no statistically significant differences between the WCM study groups and Classic CCS. See Table 26.

Table 26. Survey Respondents' Satisfaction with Therapy Services

How satisfied are you with the therapy services that [CHILD'S NAME] receives? (Q35)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	10	18	11	8	41	88
	5.78	5.37	5.37	5.88	9.13	6.78
Dissatisfied	16	28	19	9	36	108
	9.25	8.36	9.27	6.62	8.02	8.32
Neither satisfied nor dissatisfied	16	29	24	20	52	141

How satisfied are you with the therapy services that [CHILD'S NAME] receives? (Q35)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	9.25	8.66	11.71	14.71	11.58	10.86
Satisfied	84	142	81	57	177	541
	48.55	42.39	39.51	41.91	39.42	41.68
Very satisfied	47	118	70	42	143	420
	27.17	35.22	34.15	30.88	31.85	32.36
Total	173	335	205	136	449	1298
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	12.89					
P-value	0.68					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Medical Equipment and Supplies

Satisfaction with Medical Equipment: The majority of respondents in all WCM study groups (77%) indicated they were "satisfied" or "very satisfied" with the medical equipment or supplies they have been receiving. The differences between WCM study groups and Classic CCS were not statistically significant. See Table 27.

Table 27. Survey Respondents' Satisfaction with Medical Equipment and Supplies

Overall, how satisfied are you with the medical equipment or supplies (including repairs) that [CHILD'S NAME] receives? (Q54)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	8	17	7	6	23	61
	6.50	7.05	4.32	5.50	6.57	6.19
Dissatisfied	9	16	9	11	30	75
	7.32	6.64	5.56	10.09	8.57	7.61
Neither satisfied nor dissatisfied	8	19	15	10	40	92
	6.50	7.88	9.26	9.17	11.43	9.34
Satisfied	72	118	76	48	149	463
	58.54	48.96	46.91	44.04	42.57	47.01
Very satisfied	26	71	55	34	108	294
	21.14	29.46	33.95	31.19	30.86	29.85

Overall, how satisfied are you with the medical equipment or supplies (including repairs) that [CHILD'S NAME] receives? (Q54)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Total	123	241	162	109	350	985
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	12.86					
P-value	0.68					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Provider Communication

Satisfaction with Communication with Doctor: Since transitioning into WCM, fewer Phase I respondents (33%) indicated they are "very satisfied" with the communication they have with their doctors and healthcare providers than Classic CCS respondents (38%). However, a greater percentage of Phase I respondents (50%) indicated being "satisfied" with the communication they have with their doctors and healthcare providers compared to Classic CCS respondents (43%). The difference between HPSM WCM, Phase II, and Phase III respondents and Classic CCS respondents was not significant. See Table 28.

Table 28. Survey Respondents' Satisfaction with Communication with Their Doctors

Overall, how satisfied are you with the communication among [CHILD'S NAME]'s doctors and other healthcare providers? (Q59)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	18	49	20	22	68	177
	5.90	6.48	4.50	7.03	6.91	6.32
Dissatisfied	7	23	14	10	27	81
	2.30	3.04	3.15	3.19	2.74	2.89
Neither satisfied nor dissatisfied	14	63	44	21	70	212
	4.59	8.33	9.91	6.71	7.11	7.57
Satisfied	143	375	198	149	442	1307
	46.89	49.60	44.59	47.60	44.92	46.65
Very satisfied	123	246	168	111	377	1025
	40.33	32.54	37.84	35.46	38.31	36.58

Overall, how satisfied are you with the communication among [CHILD'S NAME]'s doctors and other healthcare providers? (Q59)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Total	305	756	444	313	984	2802
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	20.90					
P-value	0.18					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Global Rating of Healthcare

Overall Satisfaction with Healthcare Delivery Model: Since transitioning into the WCM, significantly fewer Phase II respondents (81%) indicated they were "satisfied" and "very satisfied" with their health plan compared to Classic CCS respondents (83%). Although fewer Phase II respondents (8%) were "dissatisfied" and "very dissatisfied" compared to Classic CCS respondents (9%), more Phase II respondents (11%) were more likely to be "neither satisfied nor dissatisfied" with their health plan compared to Classic CCS respondents (8%). The HPSM WCM, Phase I, and Phase III respondents did not significantly differ from Classic CCS in the satisfaction with their healthcare plan. See Table 29.

Table 29. Survey Respondents' Overall Satisfaction with Their Health Plan

Overall, how satisfied are you with [NAME OF HEALTH PLAN/COUNTY CCS]? (Q80)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	13	26	20	18	56	133
	4.21	3.48	4.58	5.77	5.77	4.79
Dissatisfied	3	16	16	5	32	72
	0.97	2.14	3.66	1.60	3.30	2.59
Neither satisfied nor dissatisfied	26	64	47	25	74	236
	8.41	8.57	10.76	8.01	7.62	8.50
Satisfied	147	385	212	150	396	1290
	47.57	51.54	48.51	48.08	40.78	46.47
Very satisfied	120	256	142	114	413	1045
	38.83	34.27	32.49	36.54	42.53	37.64
Total	309	747	437	312	971	2776

Overall, how satisfied are you with [NAME OF HEALTH PLAN/COUNTY CCS]? (Q80)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	49.60					
P-value	<.0001					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Grievances and Appeals: The majority of respondents (97%) did not file an appeal, grievance, or complaint about their child's healthcare. The differences between the WCM study groups and Classic CCS were not statistically significant. See Table 30.

Table 30. Survey Respondents Who Filed an Appeal, Grievance, or Complaint

In the last six months, did you file an appeal, grievance, or complaint about [CHILD'S NAME]'s healthcare? (Q81)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	298	760	434	310	963	2765
	96.44	98.19	97.09	97.79	97.27	97.46
Yes	11	14	13	7	27	72
	3.56	1.81	2.91	2.21	2.73	2.54
Total	309	774	447	317	990	2837
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	3.16					
P-value	0.53					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary - Research Question #2: What is the impact of the WCM on the patient's and family's satisfaction?

Overall, on most measures of satisfaction, the majority of respondents in all WCM study groups indicated they were "satisfied" or "very satisfied" with the services they have been receiving. Two areas where there were differences appeared between a WCM

study groups and Classic CCS concerned Provider Communication and Global Rating of Healthcare.

Provider Communication: Since transitioning into WCM, fewer Phase I respondents (33%) indicated they are “very satisfied” with the communication they have with their doctors and healthcare providers than Classic CCS respondents (38%). However, a greater percentage of Phase I respondents (50%) indicated being “satisfied” with the communication they have with their doctors and healthcare providers compared to Classic CCS respondents (43%).

Global Rating of Healthcare: Since transitioning into the WCM, significantly fewer Phase II respondents (81%) indicated they were “satisfied” and “very satisfied” with their health plan compared to Classic CCS respondents (83%). Although fewer Phase II respondents (8%) were “dissatisfied” and “very dissatisfied” compared to Classic CCS respondents (9%), more Phase II respondents (11%) were more likely to be “neither satisfied nor dissatisfied” with their health plan compared to Classic CCS respondents (8%).

Research Question #4: What is the impact of the WCM on the quality of care received?[3]

Telephone Survey Results - Impact on Quality of Care

The survey items addressing the fourth research question, the impact WCM had on the quality of care received, are drawn from sections of the survey that inquire about:

- Whole Child Model
- Medical Home/Primary Care
- Specialty Care
- Therapy Services
- Prescription Medication
- Behavioral Health
- Medical Equipment and Supplies
- Transportation.

Whole Child Model

Since transitioning into WCM, the majority of Phase I (62%), Phase II (67%) and Phase III (62%) respondents indicated that the quality of health services were “about the same.” A large percentage of HPSM WCM respondents (39%) indicated “don’t know.”

[3] The majority of survey items addressing research question four, “What is the impact of the WCM on the quality of care received?” were asked only of respondents in the WCM study groups (as opposed to also asking those in Classic CCS counties). Approximately 1/5 – 2/3 of HPSM WCM respondents routinely answered "don't know" to questions in this domain, which complicated the interpretation of the results for each question. This is likely due to the fact that the HPSM WCM was implemented more than six years prior to administration of the survey. Because results of the chi-square analyses can be skewed with the high percentage of HPSM WCM respondents indicating “don’t know,” additional analyses were conducted excluding “don’t know” responses. The tables presented in this report retain the “don’t know” responses to help contextualize the results.

The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (39%) also indicated that the quality of health services were "about the same." Phase I respondents (86%) were significantly more likely to indicate that the quality of health services were "about the same" and "better since the transition compared to Phase II respondents (81%). See Table 31.

Table 31. Quality of Survey Respondents' Health Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	62	184	63	68	377
	19.87	23.71	14.16	21.52	20.39
About the same	121	483	298	194	1096
	38.78	62.24	66.97	61.39	59.28
Worse since the transition	8	37	43	31	119
	2.56	4.77	9.66	9.81	6.44
Don't know	121	72	41	23	257
	38.78	9.28	9.21	7.28	13.90
Total	312	776	445	316	1849
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	136.39				
Prob.	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Medical Home/Primary Care

Quality of Primary Care Services: Since transitioning into WCM, the majority of Phase I (74%), Phase II (81%) and Phase III (74%) respondents indicated that primary care services were "about the same." A large percentage of HPSM WCM respondents (36%) indicated "don't know." The HPSM WCM was implemented more than six years prior to administration of the survey; this likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (41%) also indicated that primary care services were "about the same." The HPSM WCM responses account for the significant difference between the other WCM study groups. The differences among Phase I Phase II, and Phase III study groups were not significant. See Table 32.

Table 32. Quality of Survey Respondents' Primary Care Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN,] have the primary care services that [CHILD'S NAME] receives been better, the same, or worse? (Q15)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	57	121	49	46	273
	21.11	18.11	12.10	16.43	16.82
About the same	113	496	328	207	1144
	41.85	74.25	80.99	73.93	70.49
Worse since the transition	4	13	13	12	42
	1.48	1.95	3.21	4.29	2.59
Don't know	96	38	15	15	164
	35.56	5.69	3.70	5.36	10.10
Total	270	668	405	280	1623
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	151.86				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Specialty Care

Quality of Specialty Care: Since transitioning into WCM, the majority of Phase I (75%), Phase II (80%) and Phase III (78%) respondents indicated that specialty care services were "about the same." A large percentage of HPSM WCM respondents (36%) indicated "don't know." The HPSM WCM was implemented more than six years prior to administration of the survey; this likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (45%) also indicated that primary care services were "about the same." The HPSM WCM responses account for the significant difference between the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 33.

Table 33. Quality of Survey Respondents' Specialist Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the specialist services that [CHILD'S NAME] receives been better, the same, or worse? (Q29)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	49	129	46	39	263

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the specialist services that [CHILD'S NAME] receives been better, the same, or worse? (Q29)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
	17.13	17.36	11.08	13.36	15.15
About the same	130	556	330	228	1244
	45.45	74.83	79.52	78.08	71.66
Worse since the transition	4	19	13	13	49
	1.40	2.56	3.13	4.45	2.82
Don't know	103	39	26	12	180
	36.01	5.25	6.27	4.11	10.37
Total	286	743	415	292	1736
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	158.51				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Therapy Services

Quality of Therapy Services: Since transitioning into the WCM, the majority of Phase I (75%), Phase II (83%) and Phase III (71%) respondents indicated that therapy services were "about the same." A large percentage of HPSM WCM respondents (40%) indicated "don't know." The HPSM WCM was implemented more than six years prior to administration of the survey; this likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (41%) also indicated that primary care services were "about the same" since the transition. The HPSM WCM responses account for the significant difference when compared to the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 34.

Table 34. Quality of Survey Respondents' Therapy Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], have the therapy services that [CHILD'S NAME] receives been better, the same, or worse? (Q38)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	25	50	15	24	114
	13.97	13.48	7.01	16.55	12.54

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], have the therapy services that [CHILD'S NAME] receives been better, the same, or worse? (Q38)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
About the same	74	278	178	103	633
	41.34	74.93	83.18	71.03	69.64
Worse since the transition	9	15	11	11	46
	5.03	4.04	5.14	7.59	5.06
Don't know	71	28	10	7	116
	39.66	7.55	4.67	4.83	12.76
Total	179	371	214	145	909
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	107.75				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Prescription Medication

Quality of Pharmacy Services: Since transitioning into WCM, the majority of Phase I (81%), Phase II (84%) and Phase III (82%) respondents indicated that pharmacy services were "about the same." A large percentage of HPSM WCM respondents (34%) indicated "don't know." The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (47%) also indicated that pharmacy services were "about the same." The HPSM WCM responses account for the significant difference when compared with the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 35.

Table 35. Quality of Survey Respondents' Pharmacy Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the prescription/pharmacy services that [CHILD'S NAME] receives been better, the same, or worse? (Q46)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	29	53	18	19	119
	14.87	11.65	6.69	11.11	10.92
About the same	92	370	227	140	829

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the prescription/pharmacy services that [CHILD'S NAME] receives been better, the same, or worse? (Q46)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
	47.18	81.32	84.39	81.87	76.06
Worse since the transition	7	21	19	9	56
	3.59	4.62	7.06	5.26	5.14
Don't know	67	11	5	3	86
	34.36	2.42	1.86	1.75	7.89
Total	195	455	269	171	1090
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	174.43				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Behavioral Health Services

Quality of Behavioral Health Services: Across all WCM study groups, approximately 59% of respondents indicated that behavioral health services were "about the same" since the transition and 11% indicated behavioral services were "better since the transition." A significant number of HPSM WCM respondents (49%) stated "don't know" on whether behavioral health services were "better, the same, or worse" and 36% indicated that services were "about the same" since the transition. The HPSM WCM WCM distribution of responses account for the significant difference between the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 36.

Table 36. Quality of Survey Respondents' Behavioral Health Services

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the behavioral or mental health services that [CHILD'S NAME] receives been better, the same, or worse? (Q51)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	8	22	7	12	49
	10.67	11.06	5.60	17.39	10.47
About the same	27	125	85	41	278
	36.00	62.81	68.00	59.42	59.40

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the behavioral or mental health services that [CHILD'S NAME] receives been better, the same, or worse? (Q51)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Worse since the transition	3	12	6	1	22
	4.00	6.03	4.80	1.45	4.70
Don't know	37	40	27	15	119
	49.33	20.10	21.60	21.74	25.43
Total	75	199	125	69	468
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	24.70				
P-value	0.003				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Medical Equipment and Supplies

Quality of DME and Supplies: Since transitioning into WCM, the majority of Phase I (74%), Phase II (77%) and Phase III (71%) respondents indicated that the quality of medical equipment and supply services were "about the same." A large percentage of HPSM WCM respondents (40%) indicated "don't know." The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (47%) also indicated that DME services were "about the same." Across all WCM study groups, 11% of respondents indicated DME services were "better since the transition." The HPSM WCM distribution of responses account for the significant difference when compared with the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 37.

Table 37. Quality of Survey Respondents' Medical Equipment and Supplies

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], have the medical equipment and supplies that [CHILD'S NAME] receives been better, the same, or worse? (Q57)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	14	25	13	17	69
	11.29	9.77	7.93	15.04	10.50
About the same	58	190	127	80	455
	46.77	74.22	77.44	70.80	69.25

[Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN], have the medical equipment and supplies that [CHILD'S NAME] receives been better, the same, or worse? (Q57)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Worse since the transition	3	14	16	12	45
	2.42	5.47	9.76	10.62	6.85
Don't know	49	27	8	4	88
	39.52	10.55	4.88	3.54	13.39
Total	124	256	164	113	657
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	81.81				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Transportation Services

Quality of Transportation Services: Since transitioning into WCM, a little under half to just over half of Phase I (50%), Phase II (43%) and Phase III (59%) respondents indicated that transportation assistance were "about the same." A large percentage of HPSM WCM respondents (48%) as well as Phase III (35%) indicated "don't know." The large percentage of "don't know" from HPSM WCM respondents is probably attributable to the HPSM WCM having been implemented more than six years prior to administration of the survey. It is unclear why Phase III respondents also had a high percentage of "don't know" responses. Phase II had the fewest respondents (10%) indicating that transportation assistance was "better since the transition" and HPSM WCM had the largest percentage of respondents (19%). The HPSM WCM response distribution accounts for the significant difference between the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 38.

Table 38. Quality of Survey Respondents' Transportation Assistance

[WCM only] Since the transition to [NAME OF HEALTH PLAN], has the transportation assistance that [CHILD'S NAME] receives (including the process of arranging transportation) been better, the same, or worse? (Q67)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	8	21	10	2	41

[WCM only] Since the transition to [NAME OF HEALTH PLAN], has the transportation assistance that [CHILD'S NAME] receives (including the process of arranging transportation) been better, the same, or worse? (Q67)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
	19.05	17.21	10.20	5.88	13.85
About the same	11	61	42	20	134
	26.19	50.00	42.86	58.82	45.27
Worse since the transition	3	13	28	0	44
	7.14	10.66	28.57	0.00	14.86
Don't know	20	27	18	12	77
	47.62	22.13	18.37	35.29	26.01
Total	42	122	98	34	296
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	†				
Prob.					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• †The Rao-Scott Chi-Sq analysis could not be computed because at least one cell had 0 frequency.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary - Research Question #4: What is the impact of the WCM on the quality of care received?

In general, since transitioning to the WCM the majority of respondents indicated that the quality of care received was "about the same." There were no significant differences among the WCM study groups. An exception was the responses regarding the health services a client received. Phase I respondents (86%) were significantly more likely to indicate that the quality of health services were "about the same" and "better since the transition compared to Phase II respondents (81%).

Approximately one-fifth to two-thirds of HPSM WCM respondents routinely answered "don't know" to the items assessing quality of care, which complicated the interpretation of the results for each question. The HPSM WCM was implemented more than six years prior to administration of the survey; this likely contributed to the high percentage of "don't know" responses. Taking this caveat into consideration, HPSM WCM respondents indicated to the majority of items evaluated that the quality of care received was "about the same." The exception to this were responses to quality of specialty services where a majority of HPSM WCM respondents indicated services were "better since the transition."

Research Question #5: What is the impact of the WCM on care coordination?

Telephone Survey Results - Impact on Care Coordination

The telephone survey inquired about care coordination, including items drawn from sections of the survey that inquire about:

- Provider Communication
- Care coordination/case management services
- Transition to adult care

Care Coordination/Case Management

Impact on Care coordination Help: The majority of respondents in all WCM study groups (69%) were "usually" or "always" able to get as much help as you wanted with arranging or coordinating healthcare. The differences between the WCM study groups and Classic CCS were not statistically significant. See Table 39.

Table 39. Survey Respondents' Help with Care Coordination

DURING THE PAST 6 MONTHS, how often did you get as much help as you wanted with arranging or coordinating [CHILD'S NAME] healthcare? (Q71)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Always	25	53	36	29	74	217
	37.88	39.26	38.30	40.28	42.77	40.19
Usually	25	41	22	22	45	155
	37.88	30.37	23.40	30.56	26.01	28.70
Sometimes	13	25	20	14	28	100
	19.70	18.52	21.28	19.44	16.18	18.52
Never	3	16	16	7	26	68
	4.55	11.85	17.02	9.72	15.03	12.59
Total	66	135	94	72	173	540
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	9.18					
P-value	0.69					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Quality of Care Coordination/Case Management Services: Since transitioning into WCM, the majority of Phase I (71%), Phase II (67%) and Phase III (84%) respondents indicated that care coordination/case management services were "better since the transition" or "about the same." A large percentage of HPSM WCM

respondents (55%) indicated “don’t know,” unable to state whether there was a change in the quality of care coordination/case management services received. The HPSM WCM was implemented more than six years prior to administration of the survey which likely contributed to the high percentage of "don't know" responses. The HPSM WCM respondents (42%) indicated that care coordination/case management services were “better since the transition” or “about the same.” The HPSM WCM response distribution accounts for the significant difference when compared with the other WCM study groups. The differences among Phase I, Phase II, and Phase III WCM study groups were not significant. See Table 40.

Table 40. Quality of Survey Respondents’ Care Coordination

Q72. [Asked only of respondents enrolled in WCM] Since the transition to [NAME OF HEALTH PLAN] have the care coordination/case management services that [CHILD’S NAME] receives been better, the same, or worse? (Q72)					
	HPSM WCM	Phase I	Phase II	Phase III	Total
Better since the transition	11	34	16	13	74
	15.49	23.13	16.67	17.57	19.07
About the same	19	70	48	49	186
	26.76	47.62	50.00	66.22	47.94
Worse since the transition	2	18	13	5	38
	2.82	12.24	13.54	6.76	9.79
Don't know	39	25	19	7	90
	54.93	17.01	19.79	9.46	23.20
Total	71	147	96	74	388
	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	43.29				
P-value	<.0001				

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care Coordination Assistance with Activities - Count: For Phase III clients care coordinator/case manager assisted on average with the fewest activities (mean=1.6) which was significantly fewer than the mean number of activities a care coordinator/case manager provided to Classic CCS respondents (mean=1.8). The care coordinator/case manager assistance provided to clients in HPSM WCM, Phase I, and Phase II did not significantly differ from Classic CCS clients. See Table 41, Table 42, and Table 43.

Table 41. Mean Number of Activities Care Coordinator Helped Survey Respondents With

MEANS: In the last 6 months, has your care coordinator/case manager helped you with any of the following things? (Check all that apply) (Q73)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	45	271	1.91	1.06	1.00	4.00
Phase I	95	695	1.92	1.08	1.00	5.00
Phase II	56	395	1.70	1.04	1.00	4.00
Phase III	49	272	1.57	0.76	1.00	3.00
Classic CCS	121	884	1.81	0.97	1.00	5.00

• Values are raw, non-weighted, survey results.

Know How to Contact Care Coordinator/Case Manager: The majority of respondents in all WCM study groups (72%) reported knowing how to contact their care coordinator/case manager either by having "direct contact information," "a general number," or going "through the phone tree to find someone to talk to." Compared to Classic CCS respondents, Phase III respondents were significantly less likely to know how to contact their care coordinator/case manager. See Table 42.

Table 42. Survey Respondents Who Knew How to Contact Care Coordinator

Do you know how to contact your care coordinator/case manager? (Q74)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Yes, I have direct contact information, including their email address or direct telephone number	31	57	41	29	97	255
	53.45	44.88	46.07	43.28	56.07	49.61
Yes, I contact a general number at current plan and leave a message for them to contact me	5	19	8	11	20	63
	8.62	14.96	8.99	16.42	11.56	12.26
Yes, I contact current plan and go through the phone tree to find someone to talk to	5	15	9	5	18	52
	8.62	11.81	10.11	7.46	10.40	10.12
No, I don't know how to contact them	17	36	31	22	38	144
	29.31	28.35	34.83	32.84	21.97	28.02

Do you know how to contact your care coordinator/case manager? (Q74)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Total	58	127	89	67	173	514
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	19.45					
P-value	0.08					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care Coordination Communication: The largest percentage of respondents in all WCM study groups met with their care coordinator/case manager to discuss healthcare or service needs either “every few months” (39%) or “never” (35%). The differences between WCM study groups and Classic CCS were not statistically significant. See Table 43.

Table 43. How Often Survey Respondents Met with Care Coordinator to Discuss Child’s Health

In the last 6 months, how often have you talked to or met with [CHILD’S NAME]’s care coordinator/case manager to discuss [CHILD’S NAME]’s healthcare or service needs? (Q75)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
More than once a month	6	11	10	6	18	51
	10.71	9.40	12.35	8.70	10.78	10.41
About once a month	6	21	12	13	26	78
	10.71	17.95	14.81	18.84	15.57	15.92
Every few months	23	44	26	27	69	189
	41.07	37.61	32.10	39.13	41.32	38.57
Never	21	41	33	23	54	172
	37.50	35.04	40.74	33.33	32.34	35.10
Total	56	117	81	69	167	490
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	7.89					
P-value	0.79					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care Coordination Knowledge of Child's Medical History: A majority of respondents in all WCM study groups (60%) indicated the care coordinator/case manager demonstrated knowledge of important information related to the client's medical history "usually" or "always." The differences between WCM study groups and Classic CCS were not statistically significant. See Table 44.

Table 44. How Often Care Coordinator Demonstrated Knowledge About Child's Medical History

(Only if Q75= "More than once a month," "About once a month ," "Every few months," or "Never") In the past 6 months, how often did the care coordinator/case manager demonstrate knowledge of important information related to [CHILD'S NAME]'s medical history? (Q76)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Never	6	20	18	7	18	69
	15.00	23.26	32.14	15.91	15.13	20.00
Sometimes	12	9	10	13	22	66
	30.00	10.47	17.86	29.55	18.49	19.13
Usually	8	21	8	7	30	74
	20.00	24.42	14.29	15.91	25.21	21.45
Always	14	36	20	17	49	136
	35.00	41.86	35.71	38.64	41.18	39.42
Total	40	86	56	44	119	345
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	20.24					
P-value	0.06					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Impact on Care Coordination Satisfaction: A majority of respondents in all WCM study groups (67%) indicated they were "satisfied" or "very satisfied" with the care coordination/case management they have received. Compared to Classic CCS respondents, significantly fewer Phase II respondents indicated they were "satisfied" or "very satisfied" with the care coordination/case management they have received (Classic CCS=72% vs. Phase II=51%). Phase II respondents responded "neither satisfied nor dissatisfied" more often than Classic CCS respondents (Phase II=24% versus Classic CCS=11%). Similarly, more Phase II respondents responded they were "dissatisfied" or "very dissatisfied" with the care coordination/case management services compared to Classic CCS (Phase II=26% vs. Classic CCS=17%). The HPSM WCM, Phase I, and Phase III responses did not differ from Classic CCS respondents. See Table 45.

Table 45. Quality of Survey Respondents' Care Coordination

How satisfied are you with the care coordination/case management [CHILD'S NAME] received through [NAME OF HEALTH PLAN/COUNTY CCS]? (Q77)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Very dissatisfied	6	8	8	3	15	40
	10.53	6.72	9.64	4.48	9.43	8.25
Dissatisfied	3	14	13	2	12	44
	5.26	11.76	15.66	2.99	7.55	9.07
Neither satisfied nor dissatisfied	8	18	20	11	17	74
	14.04	15.13	24.10	16.42	10.69	15.26
Satisfied	27	47	27	36	70	207
	47.37	39.50	32.53	53.73	44.03	42.68
Very satisfied	13	32	15	15	45	120
	22.81	26.89	18.07	22.39	28.30	24.74
Total	57	119	83	67	159	485
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	37.07					
P-value	0.002					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Provider Communication

Impact on Care Coordination of Medical Procedures: The majority of respondents in all WCM study groups (96%) reported that their doctors did not order medical tests or procedures that were unnecessary because they had already been done. While Phase I differed significantly from Classic CCS. It is unlikely that the difference is meaningful. The differences between HPSM WCM, Phase II, and Phase III WCM study groups and Classic CCS was not significant. See Table 46.

Table 46. Doctors Ordered an Unnecessary Medical Test

In the past 6 months, was there ever a time when doctors ordered a medical test or procedure that you felt was unnecessary because the test had already been done? (Q60)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
No	295	733	428	292	913	2661
	96.72	96.57	96.61	94.81	94.51	95.69
Yes	10	26	15	16	53	120
	3.28	3.43	3.39	5.19	5.49	4.31
Total	305	759	443	308	966	2781
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	7.36					
P-value	0.12					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
The p-value represents he significance of the analysis. A p-value less than 0.05 is considered significant.

Transition to Adult Care

Discussed Adult Transition: The transition to healthcare providers who care for adults rather than children is important for many families as their children get close to aging out of WCM or Classic CCS when they turn 21. Among those with a client 12 years and older, almost two thirds of respondents (62%) across WCM study groups indicated that they "did not discuss and it would have been helpful" to discuss the shift to adult care with their provider. There were no significant differences between the WCM study groups and Classic CCS. See Table 47.

Table 47. Providers Discussed Transition to Adult Services

[Asked Only if client's age 12+] Did providers talk with you and/or [CHILD'S NAME] about the shift to adult healthcare providers? (Q78)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
Discussed this	25	70	48	33	80	256
	35.21	36.27	46.15	38.82	37.56	38.44
Did not discuss and it would have been helpful	46	123	56	52	133	410
	64.79	63.73	53.85	61.18	62.44	61.56
Total	71	193	104	85	213	666
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	2.80					
P-value	0.59					

[Asked Only if client's age 12+] Did providers talk with you and/or [CHILD'S NAME] about the shift to adult healthcare providers? (Q78)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary - Research Question #5: What is the impact of the WCM on care coordination?

For the majority of items evaluating the impact of WCM on care coordination, there were no significant differences between the WCM study groups and Classic CCS.

There were some differences between WCM study groups and Classic CCS and this are listed here:

Care coordination/case management services

- *Know How to Contact Care Coordinator/Case Manager:* While the majority of respondents in all WCM study groups (79%) reported knowing how to contact their care coordinator/case manager either by having "direct contact information," "a general number," or going "through the phone tree to find someone to talk to." Compared to Classic CCS respondents, Phase III respondents were significantly less likely to know how to contact their care coordinator/case manager.

- *Impact on Care Coordination Satisfaction:* A majority of respondents in all WCM study groups (68%) indicated they were "satisfied" or "very satisfied" with the care coordination/case management they have received. However, compared to Classic CCS respondents, significantly fewer Phase II respondents indicated they were "satisfied" or "very satisfied" with the care coordination/case management they have received (Classic CCS=72% vs Phase II=51%). Phase II respondents also responded "neither satisfied nor dissatisfied" more often than Classic CCS respondents (Phase II=24% versus Classic CCS=11%). Similarly, more Phase II respondents responded they were "dissatisfied" or "very dissatisfied" with the care coordination/case management services compared to Classic CCS (Phase II=26% vs Classic CCS=17%).

Provider Communication

- *Impact on Care Coordination of Medical Procedures:* The majority of respondents in all WCM study groups (96%) reported that their doctors did not order medical tests or procedures that were unnecessary because they had already been done. Although Phase I differed significantly from Classic CCS. It is unlikely that this difference would impact the care received..

Even though many aspects of care coordination/case management services were not significant among WCM Phases and Classic CCS counties, they might benefit from a more in depth look on how to improve them. For example, 48% of respondents in the WCM study groups indicated services were "about the same" while 19% they were "better since the transition" and 23% indicated "don't know." A review of satisfaction shows that while 67% of respondents are "satisfied" or "very satisfied," a large percentage of respondents, 33%, are "neither satisfied nor dissatisfied," "dissatisfied," or "very dissatisfied." Also, a large percentage of respondents, 39%, indicated the care coordinator/case manager "sometimes" or "never" demonstrated knowledge of important information related to the client's medical history. Care coordination/case management services is a crucial component for the overall care of the client that it might be beneficial to explore how to improve these services.

Research Question #5 – Nonsignificant Telephone Survey Items
The following survey items that pertained to the impact of the WCM on care coordination did not have any significant differences between WCM study groups:

Care coordination/case management services
- Impact on Care coordination Help
- Impact on Quality of Care Coordination/Case Management Services (WCM only)
- Impact on Care Coordination Assistance with Activities – Count
- Impact on Care Coordination Communication
- Impact on Care Coordination Knowledge of Child's Medical History

Transition to adult care
- Discussed Adult Transition: While there were no significant differences between the healthcare models, it is important to note that almost two thirds of respondents across WCM study groups indicated that they "did not discuss and it would have been helpful" to discuss the shift to adult care with their provider.

Research Question #6: What is the impact of the WCM on dollar amounts expended on healthcare services and total cost of care?

Telephone Survey Results, Regarding Cost of Care
The telephone survey included questions related to the indirect cost burden to families of children in the CCS/WCM programs. The items are drawn from sections of the survey that inquire about:
- The child's lost days at school
- Out-of-pocket expenses for medications, medical equipment, and supplies
- Work status and work loss by caregivers and all others in the household due to child's health status

Child's General Health and Function

School Days Missed: The number of school days missed because of illness by HPSM WCM clients significantly differed from missed school days by Classic CCS clients. While fewer HPSM WCM clients (49%) missed "0-3 days" compared to Classic CCS clients (59%), more HPSM WCM clients (51%) missed more than four days of school due to illness than Classic CCS clients (41%). The differences between the other WCM study groups and Classic CCS respondents were not significant. See Table 48.

Table 48. School Days Missed Due to Illness

[IF AGE 5+] During the past 6 months, how many days of school did [CHILD'S NAME] miss because of illness? (Q4)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
0-3 days	111	341	204	143	438	1237
	48.90	55.27	57.63	60.85	59.27	56.95
4-6 days	45	108	64	38	119	374
	19.82	17.50	18.08	16.17	16.10	17.22
7-15 days	41	82	51	30	108	312
	18.06	13.29	14.41	12.77	14.61	14.36
16-30 days	8	45	16	9	34	112
	3.52	7.29	4.52	3.83	4.60	5.16
31-60 days	11	24	10	6	19	70
	4.85	3.89	2.82	2.55	2.57	3.22
61 or more days	11	17	9	9	21	67
	4.85	2.76	2.54	3.83	2.84	3.08
Total	227	617	354	235	739	2172
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	14.95					
P-value	0.78					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Prescription Medication

Across all WCM study groups the majority of respondents (76%) indicated having no out-of-pocket expenses, "$0 per month," for prescription medications. Compared to Classic CCS respondents (72%), all WCM study groups were more likely to have "$0 per month" out-of-pocket prescription medication expenses. See Table 49.

Table 49. Out-of-Pocket Expenses for Prescription Medications

Over the past 6 months, about how much did you pay out-of-pocket/per month for prescription medication ordered by your doctor? (Q42)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
$0 per month	146	357	211	128	396	1238
	75.65	80.04	79.32	77.11	72.00	76.37
$1-100 per month	36	73	44	31	126	310
	18.65	16.37	16.54	18.67	22.91	19.12
More than $100 per month	11	16	11	7	28	73
	5.70	3.59	4.14	4.22	5.09	4.50
Total	193	446	266	166	550	1621
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	9.39					
P-value	0.31					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Medical Equipment And Supplies

Out of Pocket Expenses for Medical Equipment or Supplies: Across all WCM study groups 79% of respondents reported having "$0 per month" out of pocket expenses for medical equipment or supplies. While not statistically significant, it is of interest to note that a greater percentage of Classic CCS respondents (13%) reported have "more than $100 per month" out of pocket expenses for medical equipment or supplies than the WCM study groups (range: 5% to 9%). See Table 50.

Table 50. Out-of-Pocket Expenses for Medical Equipment or Supplies

Over the past 6 months, about how much did you pay out of pocket/per month for medical equipment or supplies ordered by your doctor? (Q58)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
$0 per month	98	199	129	91	269	786
	80.33	80.57	80.12	83.49	75.99	79.15
$1-100 per month	18	27	20	11	39	115
	14.75	10.93	12.42	10.09	11.02	11.58
More than $100 per month	6	21	12	7	46	92
	4.92	8.50	7.45	6.42	12.99	9.26
Total	122	247	161	109	354	993

Over the past 6 months, about how much did you pay out of pocket/per month for medical equipment or supplies ordered by your doctor? (Q58)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	10.53					
P-value	0.23					

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Work Status and Work Loss

Other Income Earners in the Household: There was a significant difference in other income earners in the household between Phase II respondents and Classic CCS respondents. Fewer Phase II households (50%) had "1 other income earner" compared to Classic CCS households (54%). Across all healthcare models the majority of households across all healthcare models have "1 other income earner" (55%) in addition to the respondent. Also, for approximately one-third of households, the respondent is the only income earner (35%). See Table 51.

Table 51. Other Household Income Earners

How many other income earners currently contribute to your household income? (Q97)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
I'm the only income earner	101	246	167	97	313	924
	34.24	33.70	39.57	33.56	33.62	34.65
There are no income earners	8	26	24	11	37	106
	2.71	3.56	5.69	3.81	3.97	3.97
1 other income earner	173	413	210	163	506	1465
	58.64	56.58	49.76	56.40	54.35	54.93
2 or more other income earners	13	45	21	18	75	172
	4.41	6.16	4.98	6.23	8.06	6.45
Total	295	730	422	289	931	2667
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	13.70					
Prob.	0.32					

How many other income earners currently contribute to your household income? (Q97)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Respondent Hours of Work Missed: There were no significant differences in the number of hours missed per month for the respondent in the household between respondents in the WCM study groups and Classic CCS respondents. See Table 52.

Table 52. Mean Number of Work Hours Missed Due to Child's Health Condition

MEANS: (Only if R is an income earner) In a typical month over the last six months, how many hours of work for pay per month did you miss due to your child's health condition? (Q98)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	104	212	8.23	12.40	0.00	60.00
Phase I	269	521	7.31	16.71	0.00	200.00
Phase II	152	299	7.49	13.06	0.00	75.00
Phase III	106	215	6.69	12.68	0.00	80.00
Classic CCS	317	688	6.53	11.31	0.00	80.00

• Values are raw, non-weighted, survey results.

Other Income Earners Hours of Work Missed: There were no significant differences in the number of hours missed per month for other income earners in the household among the WCM study groups and Classic CCS respondents. The mean number of hours of work missed due to the client's health condition ranged between 6 hours to 9 hours. See Table 53.

Table 53. Mean Number of All Household Income Earners Work Hours Missed Due to Child's Health Condition

MEANS: (Only if there are other income earners) How many hours of work for pay per month did all other income earners in your family lose due to your child's health condition? (Q99)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
HPSM WCM	117	199	9.21	22.60	0.00	190.00
Phase I	326	464	9.18	26.19	0.00	240.00
Phase II	155	296	7.90	17.56	0.00	120.00

MEANS: (Only if there are other income earners) How many hours of work for pay per month did all other income earners in your family lose due to your child's health condition? (Q99)						
WCM Group	N	Missing N	Mean	Standard Deviation	Min	Max
Phase III	122	199	5.76	15.76	0.00	120.00
Classic CCS	400	605	7.36	17.64	0.00	135.00

• Values are raw, non-weighted, survey results.

Hours Spent Arranging Healthcare: There were no significant differences in the number of hours the respondent spent per month arranging healthcare among the WCM study groups and Classic CCS respondents. The majority of respondents (58%) reported spending "5 or fewer [hours] per month" on activities to arrange their client's healthcare. Approximately one-fifth of respondents spent "6-10 [hours] per month" arranging the client's healthcare. See Table 54.

Table 54. Hours Spent Arranging Child's Healthcare

Over the past 6 months, about how many hours per month do you spend on activities to arrange your child's healthcare, such as making appointments, paying bills, making calls, filling out forms, getting information, etc? Don't include driving to appointments. (Q100)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total
5 or fewer per month	148	400	217	154	502	1421
	53.43	59.97	56.36	57.89	57.31	57.51
6-10 per month	60	142	85	47	194	528
	21.66	21.29	22.08	17.67	22.15	21.37
11-20 per month	34	52	39	27	78	230
	12.27	7.80	10.13	10.15	8.90	9.31
21-30 per month	6	34	15	12	33	100
	2.17	5.10	3.90	4.51	3.77	4.05
31-40 per month	13	10	10	8	28	69
	4.69	1.50	2.60	3.01	3.20	2.79
More than 40 per month	16	29	19	18	41	123
	5.78	4.35	4.94	6.77	4.68	4.98
Total	277	667	385	266	876	2471
	100.00	100.00	100.00	100.00	100.00	100.00
Rao-Scott Chi2	17.14					
Prob.	0.64					

Over the past 6 months, about how many hours per month do you spend on activities to arrange your child's healthcare, such as making appointments, paying bills, making calls, filling out forms, getting information, etc? Don't include driving to appointments. (Q100)						
	HPSM WCM	Phase I	Phase II	Phase III	Classic CCS	Total

• First row has frequencies from raw, non-weighted, survey results. The second row has column percentages.
• The Rao-Scott Chi-Sq analysis used appropriate survey sample weights.
• The p-value represents the significance of the analysis. A p-value less than 0.05 is considered significant.

Summary - Research Question #6: *What is the impact of the WCM on dollar amounts expended on healthcare services and total cost of care?*

The impact of WCM on dollar amount expended on healthcare services and impact of cost of care is mixed. The HPSM WCM respondents indicated that their children missed significantly more days of school due to illness compared to children in Classic CCS.

While across all WCM study groups the majority of respondents indicated having no out-of-pocket prescription medication expenses, Phase I and Phase II were more likely not to have out-of-pocket expenses for prescription medication compared to Classic CCS respondents. While the out of pocket expenses for medical equipment or supplies did not differ across healthcare delivery model, Classic CCS respondents reported have "more than $100 per month" out of pocket expenses for medical equipment or supplies than the WCM study groups. With respect to work status and other income earners in the household, fewer Phase II respondents reported having one other income earner compared to Classic CCS households.

Research Question #6 – Nonsignificant Telephone Survey Items
The following survey items did not have any significant differences between WCM study groups that assessed the impact of the WCM on dollar amounts expended on healthcare services and total cost of care:

Work Status and Work Loss
- Respondent Hours of Work Missed
- Other Income Earners Hours of Work Missed
- Hours Spent Arranging Healthcare:

Appendix U: Network Provider Methodology and Network Provider Participation by Specialty

Methodology for Assessment of Provider Network Adequacy

Provider network adequacy was examined from multiple perspectives.

1. The providers that health plans report as being in their network
2. The number of providers serving CCS clients
3. The number of serving providers that are in-network
4. Percent of serving providers that are out-of-network
5. The number of visits per in-network provider
6. The number enrollees per serving provider and
7. Percent of visits in network

The provider network reflects the health plans' reporting in the Provider 274 file as of the month of January 2022. The file contains effective beginning and end dates so that historical networks may be gleaned. A provider was considered to be in-network if they were in the 274 at least one month during a given study period. Network analysis was performed in the WCM counties for both pre- and post-WCM implementation. Although prior to the WCM implementation all CCS services were paid through fee-for-service, the health plans were serving CCS clients enrolled in Medi-Cal. Thus, it may be instructive to see how this network may have changed pre-to-post-WCM implementation. Networks in the classic counties were not examined.

Sub-categories were identified for primary care, specialists, specialty care centers (SCC) and CCS paneled providers. Primary Care, SCC, and Paneled providers were classified as described in Appendix M. Description and Operationalization of Utilization Measures Report. Specialist counts were restricted to pediatric specialists. Table 1 provides the taxonomies that were used. Sub-Analysis were also performed on these specialties and results are discussed below in this appendix.

MIS/DSS claims/encounters were queried to determine which providers were serving CCS clients. Visits were counted as a service per billing provider occurring on a given day for a given client. Both billing and rendering provider NPIs were used to determine provider taxonomies.

Table 1. Taxonomies for Pediatric Specialists

Provider Taxonomy	Specialty
2080N0001X	Neonatal-Perinatal Medicine
2080P0006X	Developmental - Behavioral Pediatrics
2080P0008X	Pediatric Neurodevelopmental Disabilities
2080P0201X	Pediatric Allergy/Immunology
2080P0202X	Pediatric Cardiology
2080P0205X	Pediatric Endocrinology
2080P0206X	Pediatric Gastroenterology
2080P0207X	Pediatric Hematology-Oncology
2080P0208X	Pediatric Infectious Diseases
2080P0210X	Pediatric Nephrology
2080P0214X	Pediatric Pulmonology
2080P0216X	Pediatric Rheumatology
2080S0010X	Orthopedics/Sports Medicine
207XP3100X	Orthopedics/Sports Medicine
2084P0804X	Child & Adolescent Psychiatry
207YP0228X	Pediatric Otolaryngology
2088P0231X	Pediatric Urology
2086S0120X	Pediatric Surgery
2084N0402X	Neurology with Special Qualifications in Child Neurology
207WX0110X	Pediatric Ophthalmology and Strabismus
207NP0225X	Pediatric Dermatology
2081P0010X	Pediatric Rehabilitation Medicine

Results for Network Adequacy by Pediatric Subspecialty

Summary: For the majority of pediatric specialists across all managed care plans participating in the WCM, the provider to CCS client ratio was less than 1200 CCS clients per specialist. Again this does not take into account the total population of children and this report uses the general 1 provider to 1200 client cut off based on general network adequacy measures[1]. There were several specialists that well surpassed 1200 CCS clients per specialists, this included Pediatric Neurodevelopmental Disabilities, Pediatric Allergy/Immunology, Pediatric Dermatology, Pediatric Rehabilitation Medicine, Ortho/Sports Medicine, Pediatric Ophthalmology and Strabismus, Pediatric Urology. Determination of the provider to CCS client versus a ratio of provider to a case mix of CCS clients and the general child population needs to be determined to fully categorize whether or not adequacy is being met by the current physician to client ratio metric. Given that the CCS population is small relative to the general pediatric population, if the general pediatric population was added to the client numbers below, this would likely worsen the provider to client ratios noted in the tables below.

Table 2. HPSM WCM Network Adequacy by Pediatric Subspecialty

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
Pre-WCM (118 Enrollees)	Neonatal-Perinatal Medicine	na	10	na	11.8
	Developmental - Behavioral Pediatrics	na	1	na	118.0
	Pediatric Neurodevelopmental Disabilities	na	0	na	
	Pediatric Allergy/Immunology	na	0	na	
	Pediatric Cardiology	na	4	na	29.5
	Pediatric Dermatology	na	0	na	

[1] November 2021 MEDICAL MANAGED CARE HEALTH PLANS ANNUAL NETWORK CERTIFICATION ASSURANCE OF COMPLIANCE REPORT, https://www.dhcs.ca.gov/Documents/MHP-2021-Annual-Network-Certification-CAP-Report.pdf

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Endocrinology	na	0	na	
	Pediatric Gastroenterology	na	3	na	39.3
	Pediatric Hematology-Oncology	na	4	na	29.5
	Pediatric Infectious Diseases	na	1	na	118.0
	Pediatric Nephrology	na	0	na	
	Pediatric Pulmonology	na	0	na	
	Pediatric Rheumatology	na	0	na	
	Pediatric Rehabilitation Medicine	na	0	na	
	Neurology with Special Qualifications in Child Neurology	na	2	na	59.0
	Child & Adolescent Psychiatry	na	0	na	
	Pediatric Surgery	na	1	na	118.0
	Pediatric Otolaryngology	na	0	na	
	Pediatric Ophthalmology and Strabismus	na	0	na	
	Pediatric Orthopedics/Sports Medicine	na	0	na	
	Pediatric Orthopedics/Sports Medicine	na	0	na	
	Pediatric Urology	na	0	na	
Post-WCM (889 Enrollees)	Neonatal-Perinatal Medicine	107	43	8.3	20.7
	Developmental - Behavioral Pediatrics	18	7	49.4	127.0
	Pediatric Neurodevelopmental Disabilities	5	2	177.8	444.5

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Allergy/Immunology	13	3	68.4	296.3
	Pediatric Cardiology	115	55	7.7	16.2
	Pediatric Dermatology	9	2	98.8	444.5
	Pediatric Endocrinology	42	18	21.2	49.4
	Pediatric Gastroenterology	45	18	19.8	49.4
	Pediatric Hematology-Oncology	95	30	9.4	29.6
	Pediatric Infectious Diseases	30	6	29.6	148.2
	Pediatric Nephrology	21	7	42.3	127.0
	Pediatric Pulmonology	34	17	26.1	52.3
	Pediatric Rheumatology	17	3	52.3	296.3
	Pediatric Rehabilitation Medicine	10	4	88.9	222.3
	Neurology with Special Qualifications in Child Neurology	55	23	16.2	38.7
	Child & Adolescent Psychiatry	102	4	8.7	222.3
	Pediatric Surgery	32	15	27.8	59.3
	Pediatric Otolaryngology	13	5	68.4	177.8
	Pediatric Ophthalmology and Strabismus	0	0		
	Pediatric Orthopedics/Sports Medicine	7	2	127.0	444.5
	Pediatric Orthopedics/Sports Medicine	14	4	63.5	222.3
	Pediatric Urology	5	2	177.8	444.5
	Neonatal-Perinatal Medicine	na	85	na	153.0

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
Classic CCS Pre-WCM Implementation (13,005 Enrollees)	Developmental - Behavioral Pediatrics	na	11	na	1,182.3
	Pediatric Neurodevelopmental Disabilities	na	5	na	2,601.0
	Pediatric Allergy/Immunology	na	6	na	2,167.5
	Pediatric Cardiology	na	92	na	141.4
	Pediatric Dermatology	na	5	na	2,601.0
	Pediatric Endocrinology	na	33	na	394.1
	Pediatric Gastroenterology	na	28	na	464.5
	Pediatric Hematology-Oncology	na	77	na	168.9
	Pediatric Infectious Diseases	na	17	na	765.0
	Pediatric Nephrology	na	16	na	812.8
	Pediatric Pulmonology	na	25	na	520.2
	Pediatric Rheumatology	na	12	na	1,083.8
	Pediatric Rehabilitation Medicine	na	4	na	3,251.3
	Neurology with Special Qualifications in Child Neurology	na	45	na	289.0
	Child & Adolescent Psychiatry	na	13	na	1,000.4
	Pediatric Surgery	na	21	na	619.3
	Pediatric Otolaryngology	na	5	na	2,601.0
	Pediatric Ophthalmology and Strabismus	na	0	na	
	Pediatric Orthopedics/Sports Medicine	na	1	na	13,005.0

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Orthopedics/Sports Medicine	na	10	na	1,300.5
	Pediatric Urology	na	5	na	2,601.0
Classic CCS Post-WCM Implementation (14,965 Enrollees)	Neonatal-Perinatal Medicine	na	95	na	157.5
	Developmental - Behavioral Pediatrics	na	13	na	1,151.2
	Pediatric Neurodevelopmental Disabilities	na	3	na	4,988.3
	Pediatric Allergy/Immunology	na	6	na	2,494.2
	Pediatric Cardiology	na	105	na	142.5
	Pediatric Dermatology	na	7	na	2,137.9
	Pediatric Endocrinology	na	36	na	415.7
	Pediatric Gastroenterology	na	48	na	311.8
	Pediatric Hematology-Oncology	na	67	na	223.4
	Pediatric Infectious Diseases	na	22	na	680.2
	Pediatric Nephrology	na	21	na	712.6
	Pediatric Pulmonology	na	27	na	554.3
	Pediatric Rheumatology	na	12	na	1,247.1
	Pediatric Rehabilitation Medicine	na	5	na	2,993.0
	Neurology with Special Qualifications in Child Neurology	na	54	na	277.1
	Child & Adolescent Psychiatry	na	20	na	748.3
	Pediatric Surgery	na	22	na	680.2
	Pediatric Otolaryngology	na	12	na	1,247.1

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Ophthalmology and Strabismus	na	1	na	14,965.0
	Pediatric Orthopedics/Sports Medicine	na	4	na	3,741.3
	Pediatric Orthopedics/Sports Medicine	na	13	na	1,151.2
	Pediatric Urology	na	4	na	3,741.3

Table 3. Phase I Network Adequacy by Pediatric Subspecialty

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
Pre-WCM (16,919 Enrollees)	Neonatal-Perinatal Medicine	na	129	na	131.2
	Developmental - Behavioral Pediatrics	na	12	na	1,409.9
	Pediatric Neurodevelopmental Disabilities	na	5	na	3,383.8

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Allergy/Immunology	na	10	na	1,691.9
	Pediatric Cardiology	na	109	na	155.2
	Pediatric Dermatology	na	5	na	3,383.8
	Pediatric Endocrinology	na	52	na	325.4
	Pediatric Gastroenterology	na	46	na	367.8
	Pediatric Hematology-Oncology	na	82	na	206.3
	Pediatric Infectious Diseases	na	28	na	604.3
	Pediatric Nephrology	na	23	na	735.6
	Pediatric Pulmonology	na	32	na	528.7
	Pediatric Rheumatology	na	18	na	939.9
	Pediatric Rehabilitation Medicine	na	6	na	2,819.8
	Neurology with Special Qualifications in Child Neurology	na	57	na	296.8
	Child & Adolescent Psychiatry	na	13	na	1,301.5
	Pediatric Surgery	na	35	na	483.4
	Pediatric Otolaryngology	na	17	na	995.2
	Pediatric Ophthalmology and Strabismus	na	2	na	8,459.5
	Pediatric Orthopedics/Sports Medicine	na	2	na	8,459.5
	Pediatric Orthopedics/Sports Medicine		29	na	583.4
	Pediatric Urology	na	11	na	1,538.1

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
Post-WCM (17,523 Enrollees)	Neonatal-Perinatal Medicine	285	147	61.5	119.2
	Developmental - Behavioral Pediatrics	12	17	1,460.3	1,030.8
	Pediatric Neurodevelopmental Disabilities	14	8	1,251.6	2,190.4
	Pediatric Allergy/Immunology	37	11	473.6	1,593.0
	Pediatric Cardiology	226	133	77.5	131.8
	Pediatric Dermatology	22	7	796.5	2,503.3
	Pediatric Endocrinology	91	56	192.6	312.9
	Pediatric Gastroenterology	139	72	126.1	243.4
	Pediatric Hematology-Oncology	210	81	83.4	216.3
	Pediatric Infectious Diseases	85	24	206.2	730.1
	Pediatric Nephrology	52	28	337.0	625.8
	Pediatric Pulmonology	74	48	236.8	365.1
	Pediatric Rheumatology	41	21	427.4	834.4
	Pediatric Rehabilitation Medicine	18	10	973.5	1,752.3
	Neurology with Special Qualifications in Child Neurology	139	62	126.1	282.6
	Child & Adolescent Psychiatry	47	12	372.8	1,460.3
	Pediatric Surgery	93	36	188.4	486.8
	Pediatric Otolaryngology	37	19	473.6	922.3
	Pediatric Ophthalmology and Strabismus	15	3	1,168.2	5,841.0

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Orthopedics/Sports Medicine	4	3	4,380.8	5,841.0
	Pediatric Orthopedics/Sports Medicine	59	30	297.0	584.1
	Pediatric Urology	33	16	531.0	1,095.2
Classic CCS Pre-WCM Implementation (47,325 Enrollees)	Neonatal-Perinatal Medicine	na	177	na	266.9
	Developmental - Behavioral Pediatrics	na	24	na	1,968.1
	Pediatric Neurodevelopmental Disabilities	na	13	na	3,633.5
	Pediatric Allergy/Immunology	na	20	na	2,361.8
	Pediatric Cardiology	na	164	na	288.0
	Pediatric Dermatology	na	10	na	4,723.5
	Pediatric Endocrinology	na	65	na	726.7
	Pediatric Gastroenterology	na	74	na	638.3
	Pediatric Hematology-Oncology	na	135	na	349.9
	Pediatric Infectious Diseases	na	36	na	1,312.1
	Pediatric Nephrology	na	44	na	1,073.5
	Pediatric Pulmonology	na	53	na	891.2
	Pediatric Rheumatology	na	27	na	1,749.4
	Pediatric Rehabilitation Medicine	na	9	na	5,248.3
	Neurology with Special Qualifications in Child Neurology	na	94	na	502.5

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Child & Adolescent Psychiatry	na	26	na	1,816.7
	Pediatric Surgery	na	50	na	944.7
	Pediatric Otolaryngology	na	24	na	1,968.1
	Pediatric Ophthalmology and Strabismus	na	7	na	6,747.9
	Pediatric Orthopedics/Sports Medicine		2	na	23,617.5
	Pediatric Orthopedics/Sports Medicine	na	40	na	1,180.9
	Pediatric Urology	na	20	na	2,361.8
Classic CCS Post-WCM Implementation (56,194 Enrollees)	Neonatal-Perinatal Medicine	na	239	na	235.1
	Developmental - Behavioral Pediatrics	na	26	na	2,161.3
	Pediatric Neurodevelopmental Disabilities	na	12	na	4,682.8
	Pediatric Allergy/Immunology	na	20	na	2,809.7
	Pediatric Cardiology	na	209	na	268.9
	Pediatric Dermatology	na	14	na	4,013.9
	Pediatric Endocrinology	na	73	na	769.8
	Pediatric Gastroenterology	na	99	na	567.6
	Pediatric Hematology-Oncology	na	147	na	382.3
	Pediatric Infectious Diseases	na	44	na	1,277.1
	Pediatric Nephrology	na	54	na	1,040.6

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Pulmonology	na	61	na	921.2
	Pediatric Rheumatology	na	28	na	2,006.9
	Pediatric Rehabilitation Medicine	na	17	na	3,305.5
	Neurology with Special Qualifications in Child Neurology	na	101	na	556.4
	Child & Adolescent Psychiatry	na	43	na	1,306.8
	Pediatric Surgery	na	63	na	892.0
	Pediatric Otolaryngology	na	27	na	2,081.3
	Pediatric Ophthalmology and Strabismus	na	10	na	5,619.4
	Pediatric Orthopedics/Sports Medicine	na	5	na	11,238.8
	Pediatric Orthopedics/Sports Medicine	na	40	na	1,404.9
	Pediatric Urology	na	20	na	2,809.7

Table 4. Phase II Network Adequacy by Pediatric Subspecialty

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Neonatal-Perinatal Medicine	na	95	na	138.9

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
Pre-WCM (13,192 Enrollees)	Developmental - Behavioral Pediatrics	na	12	na	1,099.3
	Pediatric Neurodevelopmental Disabilities	na	8	na	1,649.0
	Pediatric Allergy/Immunology	na	6	na	2,198.7
	Pediatric Cardiology	na	90	na	146.6
	Pediatric Dermatology	na	7	na	1,884.6
	Pediatric Endocrinology	na	38	na	347.2
	Pediatric Gastroenterology	na	31	na	425.5
	Pediatric Hematology-Oncology	na	60	na	219.9
	Pediatric Infectious Diseases	na	19	na	694.3
	Pediatric Nephrology	na	16	na	824.5
	Pediatric Pulmonology	na	20	na	659.6
	Pediatric Rheumatology	na	7	na	1,884.6
	Pediatric Rehabilitation Medicine	na	7	na	1,884.6
	Neurology with Special Qualifications in Child Neurology	na	48	na	274.8
	Child & Adolescent Psychiatry	na	7	na	1,884.6
	Pediatric Surgery	na	24	na	549.7
	Pediatric Otolaryngology	na	7	na	1,884.6
	Pediatric Ophthalmology and Strabismus	na	1	na	13,192.0
	Pediatric Orthopedics/Sports Medicine	na	3	na	4,397.3

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Orthopedics/Sports Medicine		14	na	942.3
	Pediatric Urology	na	3	na	4,397.3
Post-WCM (11,489 Enrollees)	Neonatal-Perinatal Medicine	241	76	47.7	151.2
	Developmental - Behavioral Pediatrics	21	8	547.1	1,436.1
	Pediatric Neurodevelopmental Disabilities	0	6		1,914.8
	Pediatric Allergy/Immunology	5	4	2,297.8	2,872.3
	Pediatric Cardiology	172	90	66.8	127.7
	Pediatric Dermatology	176	5	65.3	2,297.8
	Pediatric Endocrinology	102	41	112.6	280.2
	Pediatric Gastroenterology	130	28	88.4	410.3
	Pediatric Hematology-Oncology	138	46	83.3	249.8
	Pediatric Infectious Diseases	72	17	159.6	675.8
	Pediatric Nephrology	39	18	294.6	638.3
	Pediatric Pulmonology	70	22	164.1	522.2
	Pediatric Rheumatology	40	9	287.2	1,276.6
	Pediatric Rehabilitation Medicine	111	9	103.5	1,276.6
	Neurology with Special Qualifications in Child Neurology	164	44	70.1	261.1
	Child & Adolescent Psychiatry	256	13	44.9	883.8
	Pediatric Surgery	197	17	58.3	675.8
	Pediatric Otolaryngology	170	9	67.6	1,276.6

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Ophthalmology and Strabismus	257	2	44.7	5,744.5
	Pediatric Orthopedics/Sports Medicine	18	3	638.3	3,829.7
	Pediatric Orthopedics/Sports Medicine	209	15	55.0	765.9
	Pediatric Urology	21	4	547.1	2,872.3
Classic CCS Pre-WCM Implementation (42,343 Enrollees)	Neonatal-Perinatal Medicine	na	137	na	309.1
	Developmental - Behavioral Pediatrics	na	16	na	2,646.4
	Pediatric Neurodevelopmental Disabilities	na	14	na	3,024.5
	Pediatric Allergy/Immunology	na	14	na	3,024.5
	Pediatric Cardiology	na	131	na	323.2
	Pediatric Dermatology	na	11	na	3,849.4
	Pediatric Endocrinology	na	52	na	814.3
	Pediatric Gastroenterology	na	64	na	661.6
	Pediatric Hematology-Oncology	na	96	na	441.1
	Pediatric Infectious Diseases	na	32	na	1,323.2
	Pediatric Nephrology	na	24	na	1,764.3
	Pediatric Pulmonology	na	32	na	1,323.2
	Pediatric Rheumatology	na	16	na	2,646.4
	Pediatric Rehabilitation Medicine	na	9	na	4,704.8

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Neurology with Special Qualifications in Child Neurology	na	72	na	588.1
	Child & Adolescent Psychiatry	na	36	na	1,176.2
	Pediatric Surgery	na	36	na	1,176.2
	Pediatric Otolaryngology	na	11	na	3,849.4
	Pediatric Ophthalmology and Strabismus	na	3	na	14,114.3
	Pediatric Orthopedics/Sports Medicine		6	na	7,057.2
	Pediatric Orthopedics/Sports Medicine	na	25	na	1,693.7
	Pediatric Urology	na	5	na	8,468.6
Classic CCS Post-WCM Implementation (40.562)	Neonatal-Perinatal Medicine	na	148	na	274.1
	Developmental - Behavioral Pediatrics	na	19	na	2,134.8
	Pediatric Neurodevelopmental Disabilities	na	10	na	4,056.2
	Pediatric Allergy/Immunology	na	10	na	4,056.2
	Pediatric Cardiology	na	142	na	285.6
	Pediatric Dermatology	na	8	na	5,070.3
	Pediatric Endocrinology	na	55	na	737.5
	Pediatric Gastroenterology	na	62	na	654.2
	Pediatric Hematology-Oncology	na	91	na	445.7
	Pediatric Infectious Diseases	na	35	na	1,158.9

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Nephrology	na	31	na	1,308.5
	Pediatric Pulmonology	na	34	na	1,193.0
	Pediatric Rheumatology	na	14	na	2,897.3
	Pediatric Rehabilitation Medicine	na	12	na	3,380.2
	Neurology with Special Qualifications in Child Neurology	na	71	na	571.3
	Child & Adolescent Psychiatry	na	34	na	1,193.0
	Pediatric Surgery	na	44	na	921.9
	Pediatric Otolaryngology	na	20	na	2,028.1
	Pediatric Ophthalmology and Strabismus	na	4	na	10,140.5
	Pediatric Orthopedics/Sports Medicine	na	5	na	8,112.4
	Pediatric Orthopedics/Sports Medicine	na	30	na	1,352.1
	Pediatric Urology	na	8	na	5,070.3

Table 5. Phase III Network Adequacy by Pediatric Subspecialty

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
Pre-WCM (20,192 Enrollees)	Neonatal-Perinatal Medicine	na	104	na	194.2
	Developmental - Behavioral Pediatrics	na	13	na	1,553.2
	Pediatric Neurodevelopmental Disabilities	na	7	na	2,884.6
	Pediatric Allergy/Immunology	na	7	na	2,884.6
	Pediatric Cardiology	na	99	na	204.0
	Pediatric Dermatology	na	7	na	2,884.6
	Pediatric Endocrinology	na	43	na	469.6
	Pediatric Gastroenterology	na	46	na	439.0
	Pediatric Hematology-Oncology	na	75	na	269.2
	Pediatric Infectious Diseases	na	20	na	1,009.6
	Pediatric Nephrology	na	28	na	721.1
	Pediatric Pulmonology	na	36	na	560.9
	Pediatric Rheumatology	na	9	na	2,243.6
	Pediatric Rehabilitation Medicine	na	9	na	2,243.6
	Neurology with Special Qualifications in Child Neurology	na	41	na	492.5
	Child & Adolescent Psychiatry	na	9	na	2,243.6
	Pediatric Surgery	na	25	na	807.7
	Pediatric Otolaryngology	na	16	na	1,262.0
	Pediatric Ophthalmology and Strabismus	na	7	na	2,884.6

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Orthopedics/Sports Medicine	na	1	na	20,192.0
	Pediatric Orthopedics/Sports Medicine	na	20	na	1,009.6
	Pediatric Urology	na	13	na	1,553.2
Post-WCM (17,070 Enrollees)	Neonatal-Perinatal Medicine	183	90	93.3	189.7
	Developmental - Behavioral Pediatrics	17	11	1,004.1	1,551.8
	Pediatric Neurodevelopmental Disabilities	8	3	2,133.8	5,690.0
	Pediatric Allergy/Immunology	14	11	1,219.3	1,551.8
	Pediatric Cardiology	60	70	284.5	243.9
	Pediatric Dermatology	31	1	550.6	17,070.0
	Pediatric Endocrinology	40	20	426.8	853.5
	Pediatric Gastroenterology	58	25	294.3	682.8
	Pediatric Hematology-Oncology	81	29	210.7	588.6
	Pediatric Infectious Diseases	28	15	609.6	1,138.0
	Pediatric Nephrology	19	16	898.4	1,066.9
	Pediatric Pulmonology	39	23	437.7	742.2
	Pediatric Rheumatology	11	10	1,551.8	1,707.0
	Pediatric Rehabilitation Medicine	14	6	1,219.3	2,845.0
	Neurology with Special Qualifications in Child Neurology	59	26	289.3	656.5
	Child & Adolescent Psychiatry	68	10	251.0	1,707.0

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Surgery	71	17	240.4	1,004.1
	Pediatric Otolaryngology	34	11	502.1	1,551.8
	Pediatric Ophthalmology and Strabismus	32	3	533.4	5,690.0
	Pediatric Orthopedics/Sports Medicine	2	1	8,535.0	17,070.0
	Pediatric Orthopedics/Sports Medicine	34	14	502.1	1,219.3
	Pediatric Urology	16	7	1,066.9	2,438.6
Classic CCS Pre-WCM Implementation (62,041 Enrollees)	Neonatal-Perinatal Medicine	na	244	na	254.3
	Developmental - Behavioral Pediatrics	na	30	na	2,068.0
	Pediatric Neurodevelopmental Disabilities	na	11	na	5,640.1
	Pediatric Allergy/Immunology	na	23	na	2,697.4
	Pediatric Cardiology	na	127	na	488.5
	Pediatric Dermatology	na	7	na	8,863.0
	Pediatric Endocrinology	na	67	na	926.0
	Pediatric Gastroenterology	na	84	na	738.6
	Pediatric Hematology-Oncology	na	109	na	569.2
	Pediatric Infectious Diseases	na	60	na	1,034.0
	Pediatric Nephrology	na	37	na	1,676.8
	Pediatric Pulmonology	na	54	na	1,148.9
	Pediatric Rheumatology	na	17	na	3,649.5

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Rehabilitation Medicine	na	9	na	6,893.4
	Neurology with Special Qualifications in Child Neurology	na	71	na	873.8
	Child & Adolescent Psychiatry	na	41	na	1,513.2
	Pediatric Surgery	na	44	na	1,410.0
	Pediatric Otolaryngology	na	22	na	2,820.0
	Pediatric Ophthalmology and Strabismus	na	9	na	6,893.4
	Pediatric Orthopedics/Sports Medicine	na	6	na	10,340.2
	Pediatric Orthopedics/Sports Medicine	na	31	na	2,001.3
	Pediatric Urology	na	27	na	2,297.8
Classic CCS Post-WCM Implementation (58,408 Entolles)	Neonatal-Perinatal Medicine	na	244	na	239.4
	Developmental - Behavioral Pediatrics	na	30	na	1,946.9
	Pediatric Neurodevelopmental Disabilities	na	11	na	5,309.8
	Pediatric Allergy/Immunology	na	23	na	2,539.5
	Pediatric Cardiology	na	127	na	459.9
	Pediatric Dermatology	na	7	na	8,344.0
	Pediatric Endocrinology	na	67	na	871.8
	Pediatric Gastroenterology	na	84	na	695.3
	Pediatric Hematology-Oncology	na	109	na	535.9
	Pediatric Infectious Diseases	na	60	na	973.5

Study Group	Specialty	Nbr. Providers in Network	Nbr. Serving Providers	Nbr Enrollees per In-Network Provider	Nbr. Enrollees per Serving Provider
	Pediatric Nephrology	na	37	na	1,578.6
	Pediatric Pulmonology	na	54	na	1,081.6
	Pediatric Rheumatology	na	17	na	3,435.8
	Pediatric Rehabilitation Medicine	na	9	na	6,489.8
	Neurology with Special Qualifications in Child Neurology	na	71	na	822.6
	Child & Adolescent Psychiatry	na	41	na	1,424.6
	Pediatric Surgery	na	44	na	1,327.5
	Pediatric Otolaryngology	na	22	na	2,654.9
	Pediatric Ophthalmology and Strabismus	na	9	na	6,489.8
	Pediatric Orthopedics/Sports Medicine	na	6	na	9,734.7
	Pediatric Orthopedics/Sports Medicine	na	31	na	1,884.1
	Pediatric Urology	na	27	na	2,163.3

Appendix V: Report on Qualitative Interviews with WCM Parents

Contents

A. Background

Children who are currently enrolled in the Whole Child Model (WCM) previously received access to medical services through two primary systems: California Children's Services (CCS) and a Medi-Cal Managed Care Plan (MCP). CCS provided access to specialists and therapy services if the service was directly related to a CCS-eligible condition. Additionally, the CCS program provided services such as durable medical equipment (DME) and prescribed medications, as authorized.

However, general and preventive services not related to a CCS-eligible condition, including primary care and behavioral health services, were authorized and paid for through insurance programs, which typically were MCPs.

The goal of the WCM is to integrate these benefits within the MCP to:

- Improve access to care;
- Improve patient and family satisfaction;
- Improve provider satisfaction with the delivery and reimbursement of services;
- Ensure a higher quality of care;
- Improve care coordination by reducing inpatient and emergency department care; and,
- Decrease total costs of care.

For the first year following implementation of WCM, the MCPs were required to offer a continuity of care benefit to allow CCS-eligible children to continue to receive services from healthcare providers they had seen before the transition, even if the provider was not a contracted member of the MCP network.

A foundational component of this evaluation is to assess access to and quality of medical services throughout and after the transition; this report examines that through the lens of parent input.

B. Methodology

1. Data Collection

Between October 2019 and January 2020, the evaluation team at the University of California, San Francisco (UCSF) interviewed 35 parents[1] of children enrolled in California Children's Services (CCS) to better understand their experiences and perspectives on the transition to the WCM. These interviews were conducted to 1) gain the perspectives of families as they transitioned into the WCM, and 2) aid in the

[1] Recruitment was specifically targeted at parents and guardians. However, only parents (no guardians) responded to express interest in being interviews. Therefore, from this point forward, interviewees will be referred to solely as "parents."

development of the telephone survey instrument used in the randomized control trial (RCT) component of this evaluation.[2]

After the UCSF evaluation team created the interview guide, the Department of Health Care Services (DHCS) CCS Redesign Advisory Group reviewed it and provided feedback. The interview guide was then modified and finalized. Because each parent and their child's situation was very unique and because the transition to WCM was broad in scope, it was common for many parents to go in-depth on a minimal amount of topics rather than have insight into every single topic on the interview guide. As such, the analysis in this report is based on input from parents who were impacted by specific topics that were relevant to their lives and situations.

All interviews were conducted over the telephone in English and in Spanish. They were semi-structured and lasted up to one hour. With consent of the parents, the evaluation team audio-recorded the interviews and then had them professionally transcribed. After transcription, the evaluation team coded the transcripts for primary content using Dedoose, a qualitative analysis software. The content of this report is based on thematic analysis of that coding.

2. Description of Participants

The evaluation team used a variety of approaches to recruit parents and guardians for interviews, including:

- Sharing recruitment flyers with Medical Therapy Programs and Units (MTPs and MTUs), Specialty Care Centers (SCCs), and key informants, with a request to distribute them to parents and guardians whose children had transitioned into the WCM at least one year earlier;
- Outreach via family advocacy and policy groups in California, including a newsletter article that was circulated to a large number of CCS families; and,
- Direct referrals from key informants and staff at family advocacy groups.

Interested parents were instructed to contact the evaluation team using a dedicated email address and telephone number; bilingual members of the evaluation team monitored these contact points.

A total of 105 parents expressed interest in participating in qualitative interviews or were contacted to determine if they were interested in participating. Ultimately, 35 parents participated in qualitative interviews or interviews to pilot test the survey instrument to

[2] The UCSF evaluation team simultaneously conducted interviews with parents/guardians of children who had transitioned into the Whole Child Model, who remained in Classic CCS, and who transitioned into the Whole Child Model as part of the Demonstration Project (DP). The UCSF evaluation team is separately reporting on findings of the DP. However, a small number of insights of up to six parents from the DP are included in this report as they were critical in the development of the much larger telephone survey. Demographics and sample size numbers for the DP parents are not included in this report.

be used in the RCT component of the evaluation. The 70 parents who were not interviewed were not eligible, not available, or did not respond to follow-up phone calls or emails.

Table 1 provides a brief overview of the parents whose responses are included in this report. The evaluation team interviewed a range of parents to ensure diverse perspectives. The parents had children in a variety of WCM MCPs with an average age of 11.1 years. A similar number of parents with children who identified as Latinx (N=12) and White (N=15) were interviewed.[3]

Table 1: Interview Details and Demographics of Children of Interviewees (N=41)	
WCM MCP	CalOptima (N=9) CenCal Health (N=2) Central California Alliance for Health (N=6) Health Plan of San Mateo (N=9) Partnership Health Plan (N=6)
FFS	N=3
Child's Age	Average age= 11.1 years Minimum 1= year Maximum =21 years[4]
Child's Gender	Female = 15 Male = 20
Child's Race	Asian (N=1) Black (N=0) Latinx (N=12) Multi-Racial (N=3) White (N=15) Unknown (N=4)
Interview Language	English (N=26) Spanish (N=9)

Parents had varied understandings of the distinctions among CCS, MCPs, and the WCM. Similarly, there was variability in the knowledge that a program called the WCM even existed; some parents were very well-informed about it while other parents did not recall ever hearing of it and had no knowledge that their child had transitioned into it.

[3] Three parents also identified their children as Latinx/Caucasian multiracial.
[4] This client turned 21 just three months before the interview, and therefore still had valuable and recent insight into their WCM experience.

C. Results

1. Overall Satisfaction with the Whole Child Model

Parents who were interviewed had varied feelings about their overall satisfaction with the WCM. Satisfaction depended on whether children received needed services and how straightforward or difficult it was for parents to navigate the processes for doing so. Some parents, for example, did not notice any changes between pre- and post-enrollment into the WCM. These parents were typically satisfied with WCM because their child was still receiving services and did not experience disruptions in care.

Conversely, the parents who were dissatisfied with the WCM typically had encountered challenges regarding one or more specific services that were key to their child's care. For some parents, dissatisfaction was driven by difficulties they experienced in securing transportation to and from appointments for their child. Other parents explicitly noted barriers they had experienced receiving pharmacy, laboratory, and/or therapy services. Parents had been told that nothing would change regarding their child's care and access to services after transitioning into the WCM, but they felt this was not the case.

Though sample size was too low to make significant comparisons by language that the parents spoke, the monolingual Spanish-speaking and monolingual English-speaking sub-groups of parents expressed different overall perspectives on and expectations of CCS processes and programs. The majority of the Spanish-speaking parents who were interviewed discussed how grateful they were for any services that they received through CCS, yet none of the English-speaking parents initiated this type of commentary. Similarly, the Spanish-speaking parents were less open and forthcoming about poor experiences relating to CCS and the transition process than the English-speaking parents were.

2. Notification Process

Parents were to be notified of the transition to the WCM via three notification letters sent by DHCS (at 90, 60, and 30-day intervals prior to the transition) and via a minimum of one phone call. To learn more about this process, researchers asked each parent how they learned about the transition to the WCM. Their responses included:

- A phone call from their Medi-Cal Managed Care Plan (MCP);
- A letter (or letters) from DHCS;
- A letter (or letters) from their MCP;
- A local presentation (e.g., at a regional center);
- A phone call to the member services department of their MCP; or,
- A conversation with their social worker/care coordinator at their County CCS office.

As one parent noted, "*I got a lot of phone calls, a lot of things in the mail. I actually felt like it was more than I needed, so […] that part I have no complaints about whatsoever.*" However, several parents stated that they received no notification at all. And yet other parents did not learn of the transition in ways they had anticipated. For example, at a regional center meeting another parent learned that their MCP would contact them directly via a telephone call – yet they never received such a telephone call.

Recommendations for improvement from parents. One parent suggested that the process could have been improved with more personal communication about the transition, including a direct telephone call from each MCP to each impacted family.

Recommendations for improvement from the evaluation team*.* The CCS population is transient, with changing phone numbers and addresses. Because of this, all possible efforts should be made to ensure that a database of updated CCS client contact information exists, including email addresses. The transition into the WCM has the potential for enormous impact on children's healthcare – both positive and negative – and it is of upmost importance that parents are notified of it.

In addition, because many parents rely on texting and social media as a source of information, DHCS and the MCPs should strongly consider sharing important information with parents via those avenues.

a. Quality of the Notification Information

The majority of the parents were satisfied with the quality of the notification information that they received about the transition. They were aware that the letters contained important information and that they contained phone numbers that they could call with additional questions.

The evaluation team specifically asked all Spanish-speaking parents whether they received the notification letters in Spanish, and they confirmed that they did. As one Spanish-speaking parent said, "*They send me everything in Spanish."*

3. Service Authorization Requests and Treatment Authorization Requests

Within CCS, authorizations and approvals for services are typically managed through Service Authorization Requests (SARs) and Treatment Authorization Requests (TARs). These authorizations, which contain hundreds of procedure codes that are authorized for billing under the SAR/TAR, are valid for one year. Providers rely on these documents to determine whether services for each CCS client is authorized or whether they need to seek separate approvals.

Several parents felt that the process of obtaining authorizations was harder under WCM than had been previously, frequently citing specific examples of a particular item or service that had been difficult to have authorized. Many of these examples concerned DME and/or services from pharmacies (i.e., specific medication or items such as

sanitary wipes). One parent also noted that it was difficult to obtain authorization for Applied Behavior Analysis (ABA) therapy. These parents felt that providers were not as informed about the MCP authorization process as they had been in Classic CCS.

An additional concern was that within the WCM, SARs and TARs for various services do not consistently expire on the same day as had been the case in Classic CCS. This was a hardship for parents who needed to track expiration dates of multiple SARs or TARs for their child rather than just seeking renewals for all SARs and TARs on the same day, once per year.

In addition, one parent expressed concern that their MCP was not reauthorizing SARs and TARs until they had expired. This presented a risk to continuity of care for children who may have a specific SAR or TAR one day, and then be without it shortly thereafter. This parent summed up their concern about expiration dates and continuity of care by saying, "*What happened with CCS is every year on his annual renewal date, he'd get all his authorizations, get all his SARs … they all started and ended on the same date. …[now] my authorizations are staggered all over the year. And I have to constantly keep on top of them in order to make sure they don't expire… And, [MCP] will not allow the provider to request an authorization until the previous one is expired. So you'll have a gap of a week in between there where you won't have an authorization."*

Finally, one additional challenge to having multiple expiration dates for SARs and TARs was that parents did not have one centralized place where they could access them. As one parent said, *"I don't physically need the SAR and the TAR, but I would like to see what I have [for my child]. I have no idea what SARs and TARs [we] have."*

There was indeed some satisfaction with authorizations following the transition to the WCM. As one parent said, *"The communication has just been much better and more effective. When I go to whatever appointments I have [for my child, we] don't get denied and they never tell me that a service I need is not covered."*

Recommendations for improvement from parents. In response to the concerns noted above, parents recommended that the MCPs develop more efficient processes around authorizations, including a more transparent way for parents to see the authorizations that are already in place for their child and to track their expirations. This could prevent gaps in authorization.

4. Case Management

Case management is an important component of the CCS program. Case managers at the county-level work closely with CCS eligible children and their families to ensure that they receive the services they need, maintain eligibility, and have the needed information to navigate the healthcare system. Following the transition into the WCM,

those functions were taken over by the MCPs, which offer both case management and care coordination.

Prior to the WCM, most parents were very happy with their CCS case workers in their counties. They felt that they had strong relationships with their caseworkers and that they could reach out directly to them with questions. Only two parents said that they did not have any relationship with a case worker from their county prior to transitioning into the WCM.

Following the transition to the WCM, most parents noted that it was more difficult to access case management services. They had to contact a general telephone number at their MCP and then navigate a phone tree in order to access the appropriate department, all of which took more time and multiple phone calls. As one parent said, *"I liked before that … I could stop into their office and just walk in and say, 'Hey, is so-and-so available?' …They had a smaller caseload than now [in our MCP]*." Similarly, one parent expressed frustration that a care coordinator at their MCP did not return calls *"unless a message was a week old;"* as a result this parent decided to actively bypass the care coordinator when possible.

Three parents mentioned that they still call their county's CCS office when they are confused or need help, and one of these parents noted that they were interested in finding out whether they could keep their County CCS caseworker even though they had transitioned into the WCM. Parents explained that there are staff members in the County CCS offices who want to help them and often go outside of their work responsibilities to try and procure information that parents request and need.

An additional issue pertaining to care coordination revolves around communication between children's doctors. As one parent noted, coordination between their child's doctors was inferior following the WCM transition. Prior to the transition, this particular parent had care team meetings with their family and all of their child's providers to coordinate care; the parent thought this was very effective, though it ended after the transition. As this parent said, *"…Now they don't have time to communicate. I don't think that my primary care doctor has even had a chance to read any specialty reports. He pretty much relies on us. We've had to help him figure out what's going on."*

One parent expressed an improvement in care coordination following the WCM implementation. As this parent stated, *"that centralized everything for us … [MCP] makes everything really easy. Pharmacy, X-ray, lab—all those other things that we've used, they're all in the same building [as the provider]."* This parent may have been in a unique situation as not all parents have access to a facility that houses all of these services.

5. Impact on Services

a. Specialty Services

The majority of parents reported that access to specialists did not change following the transition to the WCM. However, there were still some concerns, including:

- One parent was frustrated by changes to the scheduling process; this parent reported that their child's specialist now only had appointments available four days per year, which was much more restrictive than prior to the WCM.
- One parent felt that the process of getting services was more difficult than prior to the WCM. This parent stated, "*Yes, [my child] has gotten services…but, I have to beat [the MCP] with a stick to get them."*
- Two parents were concerned that because providers need to contract with each MCP, their MCP may not have enough providers and specialists in their network to meet the demands of CCS clients. This concern was magnified in small, rural counties where there is already a shortage of providers.

b. Primary Care Services

The majority of parents reported that they had not experienced any changes with the primary care services that their child received following transition to WCM.

c. Medical Therapy Programs

Following the transition to the WCM, County CCS still operated the Medical Therapy Programs (MTPs). However, the MCPs were now responsible for authorizing the durable medical equipment (DME) that was often recommended or ordered by MTP staff.

Quality of and Access to Services. The majority of parents did not report any changes in the quality or quantity of services that their child received through the MTP after transitioning into the WCM. One parent said, *"I feel it is the same. Quality has stayed the same with CCS in the medical aspect."* However, another parent recounted an example of arriving for a therapy appointment and being told that the authorization was not yet in place; they had to leave and return a different day, which they felt decreased their quality of care.

One parent who did note restrictions on access to therapy through the Medical Therapy Unit (MTU) wanted their child to use therapy services from a specific MTU due to its geographic convenience. However, the MCP required the child to go an outpatient hospital for their therapy – which was further away for the family. This child had therapy appointments several times per week and therefore had to miss more school than was likely needed to attend these appointments.

Additionally, there were parents who had concerns about quality of services at the MTPs, saying that the quality of services their child received was not high or that the equipment was outdated (e.g., lack of height-adjustable tables). These parents hoped that once their children transitioned into the WCM, they would be able to receive

therapy outside of the MTPs from providers who were in-network with the MCP and who they regarded as providing a higher quality of care; this did not happen.

County Differences. Parents also noted that there were significant differences in the MTPs across counties; parents were aware of this by comparing notes with families in other counties and from previously having lived in and received services in other counties. These differences impacted the types and quality of services that children across California were able to access.

Operational Inefficiencies. Parents noted inefficiencies within the MTPs and the ways they operated. One parent, for example, noted that their child often had case and chart reviews that included more staff than necessary; this was frustrating because the same review had already been done at a Special Care Center (SCC) and the parent felt it wasted time that could have been used for therapy.

d. Laboratory Services

Only one parent discussed challenges with laboratory services. This parent explained that their child needed frequent lab tests, including before every visit with their specialist. Prior to the WCM, there was a lab that was close to the family's house, open convenient hours, and had lab technicians who had built a rapport with the child – which was important due to the child's health condition and the necessity to feel comfortable around providers. After the transition, the child had to change to a new lab because the one they previously used was not in their MCP's network. This was challenging because the new lab was not open as early in the morning as the previous lab, causing anxiety for the parent about finishing the tests early enough to get to appointments on time with the specialist. In addition, the child did not know the technicians at the new lab and had a high level of anxiety each time they had appointments. As this parent said, *"We [had] been going to the same place and same person for years to get her blood work done. So, she knows him and he knows her..."*

e. Pharmacy Services

The majority of parents stated that there had not been any change in terms of pharmacy services and/or the medication that their child received. However, some parents did discuss difficulties understanding the pharmacy benefits under their MCPs. They noted, for example, that under Classic CCS they had been eligible for supplies such as syringes or wipes through their CCS pharmacy benefits. These items, however, were not always authorized under the WCM. Parents also felt that pharmacists were uncertain about which benefits were allowed for their children – and that the pharmacists wanted to see those benefits clarified.

One parent described their problems in getting brand-name medication for their child, which was required over a generic version. This parent described a tremendous challenge in getting their MCP and pharmacy to understand the situation and ultimately needed to involve their child's neurologist.

Another parent reported having to change pharmacies after transitioning into the WCM, yet the new pharmacy they needed to go to often did not have their child's needed medication. This led to frequent delays of up to three days in order to get the medication, and while the parent wasn't sure if this was a problem with the MCP or the pharmacy, it was a barrier to receiving the necessary medication. As one parent said, *"It feels like the rules have changed."*

And finally, one parent described an incident in which they were charged a copayment for medication when they should not have been charged. This parent asked their County CCS office to work with their pharmacy and MCP to help resolve the issue, which they did. The parent later learned that this same problem had also impacted other families.

f. Durable Medical Equipment

The WCM MCPs used different processes for authorizing Durable Medical Equipment (DME) than Classic CCS did, and parents generally felt that the process for obtaining DME took longer after they transitioned into the WCM. Parents also stated that their DME vendors did not always understand the MCP authorization process as clearly as they had in Classic CCS. As one parent explained, *"they were using numbered letters that were outdated, and so they had the wrong quantity of hearing aid batteries."* This parent was concerned that this continued use of reliance on antiquated numbered letters for guidance and authorizations could continually lead to delays in authorizations.

Delays in authorizations for DME led some parents to pay for equipment on their own and/or anticipate doing so in the near future. Additionally, one parent talked about initially not being allowed to pay for their child's DME out-of-pocket and then seek reimbursement. Even though the equipment was eventually approved and ordered, the family experienced an extended authorization process and unnecessary delays in procuring the needed DME.

There were, however, parents who preferred working with the MCP to procure their child's DME and who felt that the process was quicker than it had been before transitioning into the WCM. One parent, for example, noted that they had struggled with their county to order a piece of equipment through CCS; their case manager refused to request the equipment because they felt it would not be approved. As soon as this family transitioned into the WCM, however, this parent was immediately able to request and receive approval for this particular piece of DME. In this case, the parent appreciated the increased flexibility that their child's MCP was able to provide in comparison to their county's CCS program.

An additional concern regarding DME was about repairs to equipment. Several parents mentioned that they needed DME-related repairs and that it was more of a process with their MCP than it had been in Classic CCS. As one parent noted, "[*In classic CCS] they would send me to a place where they would fix my chair. Now, what they say is that I*

have to request a medical certification which leads to another process. I have to talk to a third party so they can fix the chair. Before, I worked directly with CCS… Now, I have to ask for a doctor's certification, then that doctor has to carry out a study… They made the process longer."

g. Transportation

The Classic CCS program provided transportation services to medical appointments; these transportation services were typically utilized for long trips or when the family did not have other means of transportation. The County CCS program arranged appropriate rides or provided funding for mileage, meals, and lodging for overnight trips to providers. Following the transition into the WCM, the MCPs contracted with transportation vendors and brokers to arrange for transportation and/or to reimburse for transportation-related expenses.

The MCPs contracted with a transportation broker that, in addition to offering Classic services such as accessible vans that can be scheduled ahead of time, also offered on-demand options for transportation, such as Lyft and Uber. Three parents were excited to have this option for transportation because they felt that it was more flexible and easier to arrange and obtain than the pre-scheduled trips they had previously arranged in Classic CCS. As one parent said, "*For me, it is beneficial because I have more freedom… I love that because sometimes we take longer at the appointments because they have more questions for me or stuff like that."*

However, one parent cautioned against using on-demand ride services. This parent stated that the on-demand ride services often are not appropriate for CCS children who use mobility equipment and/or need vehicles that are fully accessible. In addition, the drivers of on-demand ride services are not specifically trained to work with the CCS population. As this parent said of using on-demand rides, *"…first of all, scary; second of all, dangerous. And it's kind of painful for him because he can't move around for the two hours that we're driving, when normally [he was] able to do that… This doesn't work for all our kids. You can't just shove 'em in an Uber."* For these reasons, this parent did not want other families to feel forced into this option – or for it to become the only available option.

Additionally, parents reported that the reimbursement process under this new transportation system was a challenge. Most parents also stated that the process to arrange for transportation was more cumbersome and required a significant amount of paperwork compared to the process prior to the transition. One parent reported that the process was so tedious that, "*I actually haven't even done it since we switched over because it's been so hard*." Rather than request reimbursements, this parent chose to pay out of pocket for transportation.

Transportation is a foundational issue of access to providers; two parents shared that their children had missed appointments because of transportation difficulties. As one parent noted, "*The Whole Child Model program has been more difficult because of the way transportation and authorizations [are handled].*"

6. Additional Information Requested by Parents

Over the course of the interviews, parents requested several types of information that they either needed or wanted in order to better facilitate healthcare for their child. Though some of these were mentioned in the previous sections, the list below is a comprehensive and specific list of their requests.

1. Parents expressed a desire to better understand CCS and WCM, and how they intersect with other programs, including Medi-Cal. Although many parents understood that certain services (e.g., dental, IHSS) were covered outside of CCS, several parents wanted a better understanding of all of their benefits and rights. Some parents felt that providers did not always understand the distinctions between these systems and therefore could not consistently provide sufficient guidance.
2. Several parents wanted to know how to directly contact specific staff and/or departments within their MCP rather than going through their MCP's telephone tree.
3. Parents requested information about in-person or virtual support groups so that they could interact with other parents in situations similar to theirs – and in situations that they anticipated facing (i.e., having their children age out of CCS).
4. Parents requested resources on additional programs available to their children in the community. In particular, parents were curious about programs that may be available through schools and/or during the summer.
5. Parents requested information about the process of "aging out" of CCS. This request was based on concern about the lack of a transition process when aging out and fear that services could end abruptly. Some parents had heard of "transition conferences" in other counties and suggested that these be made available in all counties.
6. Parents requested access to all of their children's records, including authorizations, post-visit notes, health records, and more so that they could more efficiently and effectively manage their child's care.

7. Parents' Recommendations for WCM Improvement

At the end of each interview, evaluators asked parents if they had recommendations for how to improve the Whole Child Model. The majority of recommendations focused on

process issues rather than the services received by CCS-eligible children. The specific recommendations included:

1. The MCPs should develop a more efficient way for parents to communicate with appropriate staff at their MCP. Several parents talked about having to spend long amounts of time on the telephone to reach specific staff and/or a department and requested easier ways to communicate, such as email and direct telephone numbers. One parent noted that after trying to call their MCP once, it was so frustrating that they never tried again.
2. The MCPs should view parents as valuable partners in care.
3. The MCPs should develop better processes to ensure that parents are able to access the information that they need about the MCP, how to navigate it, and how to connect with other important services, such as housing and IHSS. Parents expressed challenges in procuring needed information to obtain services for their children.
4. The MCPs should have started their Family Advisory Committees prior to implementing the WCM; this would have allowed the MCPs to draw on the experiences and challenges of CCS families.

D. Conclusion

The results from the qualitative parent interviews were successfully used to inform the content, structure, and wording of the parent/guardian telephone survey instrument. The interview data are not sufficient to address questions of whether families are satisfied with the WCM or how services have been impacted, though trends, experiences, and opinions were highlighted, all of which provided insight into the creation and results of the telephone survey.

Appendix W: Evaluation of the relationship between reported quality of care after WCM start and demographic factors, clinical factors and reported quality of care for specific services.

Background:

As discussed in the main report, approximately 10% of the WCM client families reported that overall quality of care had decreased post implementation. Identifying specific components of WCM that may have contributed to a decrease in overall quality of care would potentially allow modification of these components to restore overall quality of care while achieving the overarching beneficial effects of the WCM. To determine whether there were specific components of the WCM that may have contributed to a decrease in the overall quality of care, subgroup analyses were performed to evaluate if there were any specific demographic or clinical measures that may have been associated with lower quality.

Methods

In order to determine whether or not perceived quality of care delivered to the client in the WCM was disproportionately noted in a specific demographic or clinical subgroup, we conducted subgroup analyses for following subgroups:

1. Age (<12 months, 1 year, 2-6 years, 7-11 years. 12-20 years, 21+)
2. Race
3. Language
4. Health status (health described as excellent/very good/fair/ poor)
5. Client Medical Home type (Doctor's Office, Hospital Emergency Room or Urgent Care, Hospital Outpatient Department or Clinic/Health Center, Other)
6. Whether the client went to the Emergency Room because it was too difficult to see another doctor
7. Number of specialists seen
8. Number of specialty visits
9. Specialty access (Ease of getting appointment with specialists-Never easy, Sometimes easy, Usually easy, Always easy)
10. Pharmacy access (Ease of getting prescriptions-Never easy, Sometimes easy, Usually easy, Always easy)
11. DME Access (Ease of getting DME-Never easy, Sometimes easy, Usually easy, Always easy)
12. Change in Primary care services (better since transition to WCM/same since transition to WCM/worse since transition to WCM)
13. Change in authorization of services (better since transition to WCM/same since transition to WCM/worse since transition to WCM)
14. Change in specialty services(better since transition to WCM/same since transition to WCM/worse since transition to WCM)
15. Change in therapy services (better since transition to WCM/same since transition to WCM/worse since transition to WCM)

16. Change in prescription services (better since transition to WCM/same since transition to WCM/worse since transition to WCM)
17. Change in behavioral health services (better since transition to WCM/same since transition to WCM/worse since transition to WCM)
18. Change in medical equipment and supplies (better since transition to WCM/same since transition to WCM/worse since transition to WCM)
19. Change in transportation services (better since transition to WCM/same since transition to WCM/worse since transition to WCM)
20. Change in care coordination and case management (better since transition to WCM/same since transition to WCM/worse since transition to WCM)

For these subgroups, we present the comparison between categories of each demographic or clinical factor (e.g. specific age group, change in access to a specific service) across the four WCM study groups (HPSM, Phase I, Phase II and Phase III). All data presented and statistics generate are survey weighted

1. The Comparison across the full category

Results:

The subgroups of age examined were <12 months, 1 year, 2-6 years, 7-11 years, 12-20 years, and >21 years. Overall, the large majority of clients of all ages reported that quality of care after WCM start was better than or the same as previously. (Tables 1-4) In the age category 7-11 years, more clients reported that overall quality of care was better after the transition to WCM in HPSM and Phase I as compared to the other study groups. For ages 12-20 years, Phase II had the lowest number stating quality of care was better as compared to the other WCM study groups.

The subgroups of race examined were: White, Latin X, Black, Asian, Multiple and Others. Overall, the large majority of clients in all racial groups reported that quality of care after WCM was better than or the same as previously (Tables 5-8). Worse quality of care post-transition was reported for Black clients (17%), followed by White clients (11%) and multi-race/ethnic clients (11%). The only statistically significant finding was among clients who reported themselves as White as the sample size for Black and multi-racial clients was small.

The subgroups of language that were examined were: English and Spanish. Among English-speaking participants, better quality of care was reported more frequently for the HPSM, and worse quality of care was reported more frequently for Phase II and for Phase III (Tables 9-12)

The subgroups of health status that were examined were: health described as excellent/ health described as good/ health described as fair/ health described as poor). Overall, those with health described as poor were much more likely to report that quality of care was worse after the transition to WCM and were much less likely to report that quality of

care was better after the transition, highlighting the need to protect this vulnerable population during times of transition from classic CCS to WCM. (Tables 13-16) Statistically significant differences between Phases with respect to reported quality of care were noted for those who reported good health; in this subgroup of those with good health, the frequency of report of worse quality of care after the transition to WCM was highest (11.8%) in Phase III and lowest in Phase I (4.3%).

The subgroups of medical home location that were examined were: doctor's office, emergency room or urgent care, and hospital outpatient department or clinic. Worse quality of care was reported more often for Phase III among those who received usual care at a doctor's office, while for HPSM and for Phase I, worse care was reported more often for those who received care at a hospital outpatient department or clinic. (Tables 17-20)

The subgroups of emergency room use that were examined were: the client went to an emergency room in the past 6 months because it was too difficult to see another doctor, or the client did not. Among those who did not, statistically significant differences in quality of care between Phases was noted, with 33% of those in HPSM reporting that quality of care was better while only 21% reported that quality of care was better in Phase III. (Tables 21-24)

In general, the number of specialists seen (Tables 25-28) was higher among those reporting that quality of care was worse since the transition to WCM. While the regression model in the table was significant (Table 32) and there was a trend towards reporting worse care with higher specialty visits (Tables 29-32), the number of specialty visits did not significantly differ if respondents indicated that the quality of health services were "better since the transition" of "about the same," or "worse since the transition." (Individual paired tests not shown). There was little difference between Phases with respect to the relationship between number of specialists and quality of care after transition to WCM. This key finding highlights the possibility that transition from classic CCS to WCM is most risky for children with increased complexity of care needs.

The subgroups of ease of access to specialty care appointments that were examined were: always easy, usually easy, sometimes easy and never easy. There were few differences between these subgroups; for the subgroups reporting that access was usually easy or sometimes easy, quality of care was more likely to be reported to be worse after WCM in Phase III than in Phase II. (Tables 33-36)

The subgroups of ease of access to prescriptions (Tables 37-40) and of ease of access to DME (Tables 41-44) that were examined were: always easy, usually easy, sometimes easy and never easy. Within these subgroups, reported quality of care varied between study groups for those reporting that access to prescriptions was usually easy. Overall, the HPSM differed from every other study group because in Phase I, Phase II and Phase III reported quality of care correlated with reported ease of access, while in HPSM reported quality of care did not correlate with ease of access.

This suggests that there may be characteristics of HPSM clients, such as financial resources, that allow quality to remain high even though barriers to prescription and DME access exist. If client financial resources impact quality of care in the setting of difficulty accessing prescriptions or DME, it is possible that improving ease of access to prescriptions and DME might potentially reduce disparities and improve health equity.

The subgroups of reported quality of care for primary care services (Tables 45-48), reported quality of care for specialty services (Tables 53-56) and reported quality of care for therapy services (Tables 57-60) that were examined were: better after WCM, about the same after WCM, and worse after WCM. In general, within subgroups and overall, report of quality of care for each of these services correlated with report of quality of care overall. Among the subgroup reporting that that quality of care for primary care services was about the same after WCM and among the subgroup reporting that quality of care for specialty care services was about the same after WCM, Phase II overall quality of care was less likely to be reported to be better and more likely to be reported to be worse than other study groups. Among the subgroup reporting that quality of care for therapy services was about the same after WCM, Phase III overall quality of care was less likely to be reported to be better and more likely to be reported to be worse than other study groups.

We also examined the following subgroups of reported quality of care for authorization services (Tables 49-52), prescription services (Tables 61-64), behavioral health services (Tables 65-68), DME services (Tables 68-72), transportation services (Tables 73- 76) and care coordination and case management (Tables 77-80): better after WCM, about the same after WCM, and worse after WCM; no statistically significant differences were found for these subgroups.

Conclusions: Overall, throughout all Phases, the large majority of respondents reported that quality of care remained the same or improved after WCM start. Of note, respondents who described their child as White or Black were more likely to report that care was worse after WCM than respondents in other racial groups, and for Phase III a similar result was noted for English language respondents as compared with Spanish language. Importantly, those reported to have poor health were less likely to report that quality of care was better after WCM than those who did not report poor health and were more likely to report that quality of care was worse after WCM than those who did not report poor health. Additionally, those reporting that quality of care was worse after WCM had a higher number of specialists than those reporting that quality of care was better or the same after WCM start. Taken together, these findings suggest that the process of transitioning from classic CCS to WCM is most difficult for clients in poor health with high specialty visit needs. Any future implementation of WCM should include plans to support this highly vulnerable population at the time of transition to prevent detriment to quality of care.

Overview of Tables:

The tables below describe the change in quality of care stratified by each factor listed in the methods above. Each factor is separated by WCM study group. The p value listed in the Phase III table indicate whether there was a statistically significant difference ACROSS all WCM study groups for variation across the rows. Therefore, the *p* value represents differences in ratios across the WCM for each row found in the table.

Table 1. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Age

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
	Better		Same		Worse	
Age	%	n	%	n	%	n
<12 months	-S	S		S	0.0	0
1 year	-S	S		S	0.0	0
2-6 years	S	S	54.4	25	S	S
7-11 years	S	S	65.1	28	S	S
12-20 years	S	S	68.3	56	S	S
21+	0.0	0	S	S	S	S

Table 2. Phase I Quality of Care Reported Since the Transition to WCM, by Age

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
	Better		Same		Worse	
Age	%	n	%	n	%	n
<12 months	0.0	0	0.0	0	0.0	0
1 year	50.0	1	50.0	1	0.0	0
2-6 years	26.2	50	71.2	136	2.6	5
7-11 years	30.3	60	65.2	129	4.6	9
12-20 years	23.3	72	69.3	214	7.4	23
21+	25.0	1	75.0	3	0.0	0

Table 3. Phase II Quality of Care Reported Since the Transition to WCM, by Age

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
	Better		Same		Worse	
Age	%	n	%	n	%	n
<12 months	0.0	0	0.0	0	0.0	0
1 year	12.5	1	75.0	6	12.5	1
2-6 years	25.7	29	65.5	74	8.9	10
7-11 years	13.4	15	75.0	84	11.6	13
12-20 years	10.8	18	77.7	129	11.5	19
21+	0.0	0	100.0	5	0.0	0

Table 4. Phase III Quality of Care Reported Since the Transition to WCM, by Age and Test Statistic Across WCM Study Groups

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							p-value Across Rows, Comparing WCM Study Groups (Tables 1 -4) by Chi Square
	Phase III						
	Better		Same		Worse		
Age	%	n	%	n	%	n	
<12 months	0.0	0	0.0	0	0.0	0	na*
1 year	43.8	7	43.8	7	12.5	2	na*
2-6 years	23.2	19	67.1	55	9.8	8	0.09
7-11 years	14.1	9	76.6	49	9.4	6	0.0009
12-20 years	25.4	33	63.1	82	11.5	15	0.0012
21+	0.0	0	100.0	1	0.0	0	na*

* means testing could not be performed due to lack of observations

Table 5. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Race

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
	Better		Same		Worse	
Race	%	n	%	n	%	n
White	S	S	62.5	20		
LatinX	S	S	61.1	66		
Black	S	S		S	0.0	0
Asian	S	S	66.7	18		
Multiple	S	S		S	0.0	0
Other	S	S		S		

Table 6. Phase I Quality of Care Reported Since the Transition to WCM, by Race

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
	Better		Same		Worse	
Race	%	n	%	n	%	n
White	14.7	17	77.6	90	7.8	9
LatinX	28.2	146	67.0	347	4.8	25
Black	0	0	85.7	6	14.3	1
Asian	38.9	7	55.6	10	5.6	1
Multiple	43.8	7	56.3	9	0.0	0

Other	11.1	1	88.9	8	0.0	0

Table 7. Phase II Quality of Care Reported Since the Transition to WCM, by Race

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
	Better		Same		Worse	
Race	%	n	%	n	%	n
White	12.7	17	77.6	104	9.7	13
LatinX	21.5	38	68.9	122	9.6	17
Black	7.1	1	78.6	11	14.3	2
Asian	27.3	3	72.7	8	0.0	0
Multiple	2.4	1	83.3	35	14.3	6
Other	11.1	1	77.8	7	11.1	1

Table 8. Phase III Quality of Care Reported Since the Transition to WCM, by Race

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 5-8) by Chi Square
	Phase III						
	Better		Same		Worse		
Race	%	n	%	n	%	n	
White	12.2	6	65.3	32	22.5	11	0.01
LatinX	26.3	49	67.7	126	5.9	11	0.09
Black	20.0	1	40.0	2	40.0	2	na*
Asian	25.7	9	60.0	21	14.3	5	na*
Multiple	27.3	3	54.6	6	18.2	2	na*
Other	0.0	0	100.0	1	0.0	0	na*

* means testing could not be performed due to lack of observations

Table 9. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Language

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
	Better		Same		Worse	
Language	%	n	%	n	%	n
English	30.1	40	65.4	87	4.5	6
Spanish	37.9	22	58.6	34	3.5	2

Table 10. Phase I Quality of Care Reported Since the Transition to WCM, by Language

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
	Better		Same		Worse	
Language	%	n	%	n	%	n
English	20.4	100	73.9	362	5.7	28
Spanish	39.3	84	56.5	121	4.2	9

Table 11. Phase II Quality of Care Reported Since the Transition to WCM, by Language

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
	Better		Same		Worse	
Language	%	n	%	n	%	n
English	12.1	40	76.1	251	11.8	39
Spanish	31.1	23	63.5	47	5.4	4

Table 12. Phase III Quality of Care Reported Since the Transition to WCM, by Language

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 9-12) by Chi Square
	Phase III						
	Better		Same		Worse		
Language	%	n	%	n	%	n	
English	19.5	40	65.9	135	14.6	30	<.0001
Spanish	31.8	28	67.1	59	1.1	1	0.22

Table 13. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Health Status

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Would you say that, in general, the client's health status is… (Q1)	Better		Same		Worse	
	%	n	%	n	%	n
Excellent	40.3	27	58.21	39	1.5	1
Good	31.3	26	63.86	53	4.8	4
Fair	22.2	8	69.44	25	8.3	3
Poor	20.0	1	80.0	4	0.0	0

Table 14. Phase I Quality of Care Reported Since the Transition to WCM, by Health Status

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Would you say that, in general, the client's health status is… (Q1)	Better		Same		Worse	
	%	n	%	n	%	n
Excellent	31.0	58	64.2	120	4.8	9
Good	25.2	82	70.6	230	4.3	14
Fair	23.2	36	72.3	112	4.5	7
Poor	16.0	4	56.0	14	28.0	7

Table 15. Phase II Quality of Care Reported Since the Transition to WCM, by Health Status

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Would you say that, in general, the client's health status is… (Q1)	Better		Same		Worse	
	%	n	%	n	%	n
Excellent	20.8	25	71.7	86	7.5	9
Good	11.6	23	78.8	156	9.6	19
Fair	14.5	10	68.1	47	17.4	12
Poor	25.0	4	56.3	9	18.8	3

Table 16. Phase III Quality of Care Reported Since the Transition to WCM, by Health Status

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 13-16) by Chi Square
	Phase III						
Would you say that, in general, the client's health status is… (Q1)	Better		Same		Worse		
	%	n	%	n	%	n	
Excellent	26.14	23	69.3	61	4.6	88	0.32
Good	19.7	25	68.5	87	11.8	15	0.0002
Fair	20.0	11	67.3	37	12.7	7	0.07
Poor	36.8	7	36.8	7	26.3	5	na*

* means testing could not be performed due to lack of observations

Table 17. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Usual Source of Care

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Where does the client USUALLY go first… (Q9)	Better		Same		Worse	
	%	n	%	n	%	n
Doctor's Office	33.9	37	63.3	69	2.8	3
Hospital Emergency Room or Urgent Care	20.0	3	73.33	11	6.7	1
Hospital Outpatient Department or Clinic/Health Center	33.9	21	59.68	37	6.5	4
Other	0.0	0	100.0	1	0.0	0

Table 18. Phase I Quality of Care Reported Since the Transition to WCM, by Usual Source of Care

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Where does the client USUALLY go first… (Q9)	Better		Same		Worse	
	%	n	%	n	%	n
Doctor's Office	23.0	99	72.8	313	4.2	18
Hospital Emergency Room or Urgent Care	24.6	16	70.8	46	4.6	3
Hospital Outpatient Department or Clinic/Health Center	33.9	66	59.5	116	6.7	13
Other	20.0	1	40.0	2	40.0	2

Table 19. Phase II Quality of Care Reported Since the Transition to WCM, by Usual Source of Care

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Where does the client USUALLY go first… (Q9)	Better		Same		Worse	
	%	n	%	n	%	n
Doctor's Office	14.6	38	74.6	194	10.8	28
Hospital Emergency Room or Urgent Care	21.9	7	65.6	21	12.5	4
Hospital Outpatient Department or Clinic/Health Center	16.7	18	73.2	79	10.2	11
Other	0.0	0	100.0	4	0.0	0

Table 20. Phase III Quality of Care Reported Since the Transition to WCM, by Usual Source of Care

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 17-20) by Chi Square
	Phase III						
Where does the client USUALLY go first… (Q9)	Better		Same		Worse		
	%	n	%	n	%	n	
Doctor's Office	22.4	43	65.1	125	12.5	24	<.0001
Hospital Emergency Room or Urgent Care	26.5	13	65.3	32	8.2	4	0.83

Hospital Outpatient Department or Clinic/Health Center	24.0	12	70.0	35	6.0	3	0.07
Other	0.0	0	100.0	2	0.0	0	na*

* means testing could not be performed due to lack of observations

Table 21. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Emergency Room Use During Last Six Months

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
In the last 6 months – did the client go to the emergency room, even if it was not an emergency, because it was too difficult to see another provider (Q16)?	HPSM WCM					
	Better		Same		Worse	
	%	n	%	n	%	n
Yes	34.2	13	63.16	24	2.6	1
No	32.6	47	63.19	91	4.2	6

Table 22. Phase I Quality of Care Reported Since the Transition to WCM, by Emergency Room Use During Last Six Months

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
In the last 6 months – did the client go to the emergency room, even if it was not an emergency, because it was too difficult to see another provider (Q16)?	Phase I					
	Better		Same		Worse	
	%	n	%	n	%	n
Yes	29.3	36	65.0	80	5.7	7
No	25.2	143	69.5	394	5.3	30

Table 23. Phase II Quality of Care Reported Since the Transition to WCM, by Emergency Room Use During Last Six Months

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
In the last 6 months – did the client go to the emergency room, even if it was not an emergency, because it was too difficult to see another provider (Q16)?	Phase II					
	Better		Same		Worse	
	%	n	%	n	%	n
Yes	22.1	15	66.2	45	11.8	8
No	14.2	46	75.9	246	9.9	32

Table 24. Phase III Quality of Care Reported Since the Transition to WCM, by Emergency Room Use During Last Six Months

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							
In the last 6 months – did the client go to the emergency room, even if it was not an emergency, because it was too difficult to see another provider (Q16)?	Phase III						P-value Across Rows, Comparing WCM Study Groups (Tables 21-24) by Chi Square
	Better		Same		Worse		
	%	n	%	n	%	n	
Yes	30.9	21	54.4	37	14.7	10	0.14
No	21.0	47	69.6	156	9.4	21	0.0002

Table 25. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Number of Specialists Seen

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
	Better		Same		Worse	
	Mean (sd)	n	Mean (sd)	n	Mean (sd)	n
Number of specialists seen (Q20)? [mean (standard deviation), n]	2.5 (2.7)	62	3.2 (3.2)	121	3.9 (3.4)	8

Table 26. Phase I Quality of Care Reported Since the Transition to WCM, by Number of Specialists Seen

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
	Better		Same		Worse	
	Mean (sd)	n	Mean (sd)	n	Mean (sd)	n
Number of specialists seen (Q20)? [mean (standard deviation), n]	2.3 (2.0)	184	2.8 (2.5)	483	3.4 (2.3)	37

Table 27. Phase II Quality of Care Reported Since the Transition to WCM, by Number of Specialists Seen

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
	Better		Same		Worse	
	Mean (sd)	n	Mean (sd)	n	Mean (sd)	n
Number of specialists seen (Q20)? [mean (standard deviation), n]	2.3 (2.4)	63	2.7 (2.7)	298	3.9 (3.0)	43

Table 28. Phase III Quality of Care Reported Since the Transition to WCM, by Number of Specialists Seen

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value of Overall Weighted Logistic Regression Model, Comparing WCM Study Groups (Tables 25-28)
	Phase III						
	Better		Same		Worse		
	Mean (sd)	n	Mean (sd)	n	Mean (sd)	n	
Number of specialists seen (Q20)? [mean (standard deviation), n]	2.4 (2.3)	68	2.6 (2.1)	194	4.3 (3.4)	31	<0.0001

Table 29. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Number of Specialty Visits

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
	Better		Same		Worse	
	Mean (sd)	n	Mean (sd)	n	Mean (sd)	n
Number of specialty visits (Q24)? [mean (standard deviation), n]	4.3 (8.1)	44	3.6 (4.2)	97	5.8 (6.3)	6

Table 30. Phase I Quality of Care Reported Since the Transition to WCM, by Number of Specialty Visits

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
	Better		Same		Worse	
	Mean (sd)	n	Mean (sd)	n	Mean (sd)	n
Number of specialty visits (Q24)? [mean (standard deviation), n]	3.2 (5.7)	155	2.5 (2.5)	412	3.8 (3.8)	37

Table 31. Phase II Quality of Care Reported Since the Transition to WCM, by Number of Specialty Visits

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
	Better		Same		Worse	
	Mean (sd)	n	Mean (sd)	n	Mean (sd)	n
Number of specialty visits (Q24)? [mean (standard deviation), n]	2.6 (2.5)	48	2.5 (3.9)	254	4.0 (4.6)	38

Table 32. Phase III Quality of Care Reported Since the Transition to WCM, by Number of Specialty Visits

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							
	Phase III						P-value of Overall Weighted Logistic Regression Model, Comparing WCM Study Groups (Tables-29 32)
	Better		Same		Worse		
	Mean (sd)	n	Mean (sd)	n	Mean (sd)	n	
Number of specialty visits (Q24)? [mean (standard deviation), n]	3.1 (3.1)	53	2.8 (4.0)	157	4.9 (4.5)	28	0.0003

Table 33. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Ease of Getting Appointments with Specialists

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Ease of getting appointments with specialists (Q25)	Better		Same		Worse	
	%	n	%	n	%	n
Never easy	37.5	3	62.5	5	0.0	0
Sometimes easy	18.2	4	77.27	17	4.6	1
Usually easy	25.5	13	68.63	35	5.9	3
Always easy	40.0	18	60.0	27	0.0	0

Table 34. Phase I Quality of Care Reported Since the Transition to WCM, by Ease of Getting Appointments with Specialists

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Ease of getting appointments with specialists (Q25)	Better		Same		Worse	
	%	n	%	n	%	n
Never easy	19.1	4	61.9	13	19.1	4
Sometimes easy	20.0	19	66.3	63	13.7	13
Usually easy	20.1	31	74.7	115	5.2	8
Always easy	34.8	79	63.0	143	2.2	5

Table 35. Phase II Quality of Care Reported Since the Transition to WCM, by Ease of Getting Appointments with Specialists

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Ease of getting appointments with specialists (Q25)	Better		Same		Worse	
	%	n	%	n	%	n
Never easy	11.1	1	55.6	5	33.3	3
Sometimes easy	15.0	6	62.5	25	22.5	9
Usually easy	10.6	12	78.8	89	10.6	12
Always easy	16.3	21	76.0	98	7.8	10

Table 36. Phase III Quality of Care Reported Since the Transition to WCM, by Ease of Getting Appointments with Specialists

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 33-36) by Chi Square
	Phase III						
Ease of getting appointments with specialists (Q25)	Better		Same		Worse		
	%	n	%	n	%	n	
Never easy	16.7	1	33.3	2	50.0	3	na*
Sometimes easy	15.1	8	56.6	30	28.3	15	0.20
Usually easy	21.1	12	64.9	37	14.0	8	0.03
Always easy	24.4	21	73.3	63	2.3	2	na*

* means testing could not be performed due to lack of observations

Table 37. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Ease of Getting Prescription Medications

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
In the last six months, how often was it easy to get these prescription medications for the client? (Q40)	Better		Same		Worse	
	%	n	%	n	%	n
Never easy	37.5	3	62.5	5	0.0	0
Sometimes easy	16.7	3	77.78	14	5.6	1
Usually easy	36.4	12	57.6	19	6.1	2
Always easy	26.9	14	73.08	38	0.0	0

Table 38. Phase I Quality of Care Reported Since the Transition to WCM, by Ease of Getting Prescription Medications

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
In the last six months, how often was it easy to get these prescription medications for the client? (Q40)	Better		Same		Worse	
	%	n	%	n	%	n
Never easy	10.5	2	57.9	11	31.6	6
Sometimes easy	15.8	12	73.7	56	10.5	8
Usually easy	19.2	24	76.0	95	4.8	6

Always easy	26.4	46	70.1	122	3.5	6

Table 39. Phase II Quality of Care Reported Since the Transition to WCM, by Ease of Getting Prescription Medications

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
In the last six months, how often was it easy to get these prescription medications for the client? (Q40)	Better		Same		Worse	
	%	n	%	n	%	n
Never easy	14.3	1	85.7	6	0.0	0
Sometimes easy	8.3	4	64.6	31	27.1	13
Usually easy	11.4	8	75.7	53	12.9	9
Always easy	16.7	20	75.0	90	8.3	10

Table 40. Phase III Quality of Care Reported Since the Transition to WCM, by Ease of Getting Prescription Medications

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 37-40) by Chi Square
	Phase III						
In the last six months, how often was it easy to get these prescription medications for the client? (Q40)	Better		Same		Worse		
	%	n	%	n	%	n	
Never easy	12.5	1	37.5	3	50.0	4	na*
Sometimes easy	9.1	2	68.2	15	22.7	5	0.26
Usually easy	23.3	10	58.1	25	18.6	8	0.0079
Always easy	24.4	20	67.1	55	8.5	7	na*

* means testing could not be performed due to lack of observations

Table 41. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Ease of Getting Special Medical Equipment or Supplies

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
In the last six months, how often was it easy to get special medical equipment or supplies (including repairs) for the client? (Q53)	Better		Same		Worse	
	%	n	%	n	%	n
Never easy	21.4	3	78.57	11	0.0	0
Sometimes easy	33.3	6	66.67	12	0.0	0

Usually easy	26.1	6	60.87	14	13.0	3
Always easy	40.0	6	60.0	9	0.0	0

Table 42. Phase I Quality of Care Reported Since the Transition to WCM, by Ease of Getting Special Medical Equipment or Supplies

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
In the last six months, how often was it easy to get special medical equipment or supplies (including repairs) for the client? (Q53)	Better		Same		Worse	
	%	n	%	n	%	n
Never easy	0.0	0	79.2	19	20.8	5
Sometimes easy	18.8	13	68.1	47	13.0	9
Usually easy	21.4	15	72.9	51	5.7	4
Always easy	33.3	22	63.6	42	3.0	2

Table 43. Phase II Quality of Care Reported Since the Transition to WCM, by Ease of Getting Special Medical Equipment or Supplies

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
In the last six months, how often was it easy to get special medical equipment or supplies (including repairs) for the client? (Q53)	Better		Same		Worse	
	%	n	%	n	%	n
Never easy	5.3	1	68.4	13	26.3	5
Sometimes easy	12.5	3	70.8	17	16.7	4
Usually easy	13.2	7	75.5	40	11.3	6
Always easy	9.3	5	77.8	42	13.0	7

Table 44. Phase III Quality of Care Reported Since the Transition to WCM, by Ease of Getting Special Medical Equipment or Supplies

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							
	Phase III						
In the last six months, how often was it easy to get special medical equipment or supplies (including repairs) for the client? (Q53)	Better		Same		Worse		P-value Across Rows, Comparing WCM Study Groups (Tables 41-44) by Chi Square
	%	n	%	n	%	n	
Never easy	0.0	0	58.3	7	41.7	5	na*

Sometimes easy	13.0	3	60.9	14	26.1	6	na*
Usually easy	29.6	8	51.9	14	18.5	5	0.07
Always easy	28.6	12	69.1	29	2.4	1	na*

* means testing could not be performed due to lack of observations

Table 45. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Quality of Primary Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Since the transition, have the primary care services that the client receives been better, the same, or worse? (Q15)	Better		Same		Worse	
	%	n	%	n	%	n
Primary care better	80.4	37	19.57	9	0.0	0
Primary care the same	17.0	16	77.66	73	5.3	5
Primary care worse	0.0	0	100.0	3	0.0	0

Table 46. Phase I Quality of Care Reported Since the Transition to WCM, by Quality of Primary Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Since the transition, have the primary care services that the client receives been better, the same, or worse? (Q15)	Better		Same		Worse	
	%	n	%	n	%	n
Primary care better	78.6	92	20.5	24	0.9	1
Primary care the same	13.7	63	81.7	376	4.6	21
Primary care worse	7.7	1	38.5	5	53.9	7

Table 47. Phase II Quality of Care Reported Since the Transition to WCM, by Quality of Primary Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Since the transition, have the primary care services that the client receives been better, the same, or worse? (Q15)	Better		Same		Worse	
	%	n	%	n	%	n
Primary care better	62.5	30	37.5	18	0.0	0
Primary care the same	7.2	22	83.6	255	9.2	28
Primary care worse	0.0	0	36.4	4	63.6	7

Table 48. Phase III Quality of Care Reported Since the Transition to WCM, by Quality of Primary Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 45-48) by Chi Square
	Phase III						
Since the transition, have the primary care services that the client receives been better, the same, or worse? (Q15)	Better		Same		Worse		
	%	n	%	n	%	n	
Primary care better	80.0	36	15.6	7	4.4	2	na*
Primary care the same	11.5	22	80.2	154	8.3	16	0.01
Primary care worse	0.0	0	25.0	3	75.0	9	na*

* means testing could not be performed due to lack of observations

Table 49. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Quality of Authorization Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Since the transition, have the authorization of services that the client receives been better, the same, or worse? (Q19)	Better		Same		Worse	
	%	n	%	n	%	n
Authorizations better	68.4	13	31.58	6	0.0	0
Authorizations the same	12.0	6	82.0	41	6.0	3
Authorizations worse	0.0	0	100.0	2	0.0	0

Table 50. Phase I Quality of Care Reported Since the Transition to WCM, by Quality of Authorization Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Since the transition, have the authorization of services that the client receives been better, the same, or worse? (Q19)	Better		Same		Worse	
	%	n	%	n	%	n
Authorizations better	59.0	46	41.0	32	0.0	0
Authorizations the same	13.7	29	82.1	174	4.3	9
Authorizations worse	13.3	4	43.3	13	43.3	13

Table 51. Phase II Quality of Care Reported Since the Transition to WCM, by Quality of Authorization Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Since the transition, have the authorization of services that the client receives been better, the same, or worse? (Q19)	Better		Same		Worse	
	%	n	%	n	%	n
Authorizations better	60.0	9	33.3	5	6.7	1
Authorizations the same	11.4	13	78.1	89	10.5	12
Authorizations worse	3.9	1	46.2	12	50.0	13

Table 52. Phase III Quality of Care Reported Since the Transition to WCM, by Quality of Authorization Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 49-52) by Chi Square
	Phase III						
Since the transition, have the authorization of services that the client receives been better, the same, or worse? (Q19)	Better		Same		Worse		
	%	n	%	n	%	n	
Authorizations better	57.6	19	42.4	14	0.0	0	na*
Authorizations the same	14.4	13	74.4	67	11.1	10	0.32
Authorizations worse	5.0	1	25.0	5	70.0	14	na*

* means testing could not be performed due to lack of observations

Table 53. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Quality of Specialty Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Since the transition, have the specialty services that the client receives been better, the same, or worse? (Q29)	Better		Same		Worse	
	%	n	%	n	%	n
Specialty services better	73.2	30	26.83	11	0.0	0
Specialty services the same	16.4	17	77.88	81	5.8	6
Specialty services worse	0.0	0	100.0	3	0.0	0

Table 54. Phase I Quality of Care Reported Since the Transition to WCM, by Quality of Specialty Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Since the transition, have the specialty services that the client receives been better, the same, or worse? (Q29)	Better		Same		Worse	
	%	n	%	n	%	n
Specialty services better	71.9	87	27.3	33	0.8	1
Specialty services the same	16.4	84	79.1	405	4.5	23
Specialty services worse	5.3	1	36.8	7	57.9	11

Table 55. Phase II Quality of Care Reported Since the Transition to WCM, by Quality of Specialty Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Since the transition, have the specialty services that the client receives been better, the same, or worse? (Q29)	Better		Same		Worse	
	%	n	%	n	%	n
Specialty services better	54.6	24	43.2	19	2.3	1
Specialty services the same	8.9	27	82.3	251	8.9	27
Specialty services worse	0.0	0	23.1	3	76.9	10

Table 56. Phase III Quality of Care Reported Since the Transition to WCM, by Quality of Specialty Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 53-56) by Chi Square
	Phase III						
Since the transition, have the specialty services that the client receives been better, the same, or worse? (Q29)	Better		Same		Worse		
	%	n	%	n	%	n	
Specialty services better	73.7	28	26.3	10	0.0	0	na*
Specialty services the same	12.9	27	79.5	167	7.6	16	0.02
Specialty services worse	0.0	0	0.0	0	100.0	13	na*

* means testing could not be performed due to lack of observations

Table 57. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Quality of Therapy Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Since the transition, have the therapy services that the client receives been better, the same, or worse? (Q38)	Better		Same		Worse	
	%	n	%	n	%	n
Therapy services better	61.9	13	38.1	8	0.0	0
Therapy services the same	19.7	12	77.05	47	3.3	2
Therapy services worse	0.0	0	80.0	4	20.0	1

Table 58. Phase I Quality of Care Reported Since the Transition to WCM, by Quality of Therapy Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Since the transition, have the therapy services that the client receives been better, the same, or worse? (Q38)	Better		Same		Worse	
	%	n	%	n	%	n
Therapy services better	56.3	27	43.8	21	0.0	0
Therapy services the same	16.7	44	78.0	205	5.3	14
Therapy services worse	15.4	2	53.9	7	30.8	4

Table 59. Phase II Quality of Care Reported Since the Transition to WCM, by Quality of Therapy Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Since the transition, have the therapy services that the client receives been better, the same, or worse? (Q38)	Better		Same		Worse	
	%	n	%	n	%	n
Therapy services better	73.3	11	26.7	4	0.0	0
Therapy services the same	11.4	19	77.8	130	10.8	18
Therapy services worse	10.0	1	30.0	3	60.0	6

Table 60. Phase III Quality of Care Reported Since the Transition to WCM, by Quality of Therapy Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 57-60) by Chi Square
	Phase III						
Since the transition, have the therapy services that the client receives been better, the same, or worse? (Q38)	Better		Same		Worse		
	%	n	%	n	%	n	
Therapy services better	68.2	15	31.8	7	0.0	0	na*
Therapy services the same	10.5	10	74.7	71	14.7	14	0.02
Therapy services worse	10.0	1	30.0	3	60.0	6	na*

* means testing could not be performed due to lack of observations

Table 61. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Quality of Prescription Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Since the transition, have the prescription services that the client receives been better, the same, or worse? (Q46)	Better		Same		Worse	
	%	n	%	n	%	n
Prescription services better	64.0	16	36.0	9	0.0	0
Prescription services the same	16.9	11	83.08	54	0.0	0
Prescription services worse	0.0	0	66.67	4	33.3	2

Table 62. Phase I Quality of Care Reported Since the Transition to WCM, by Quality of Prescription Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Since the transition, have the prescription services that the client receives been better, the same, or worse? (Q46)	Better		Same		Worse	
	%	n	%	n	%	n
Prescription services better	67.4	33	30.6	15	2.0	1
Prescription services the same	16.2	54	77.8	260	6.0	20
Prescription services worse	11.1	2	55.6	10	33.3	6

Table 63. Phase II Quality of Care Reported Since the Transition to WCM, by Quality of Prescription Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Since the transition, have the prescription services that the client receives been better, the same, or worse? (Q46)	Better		Same		Worse	
	%	n	%	n	%	n
Prescription services better	47.1	8	47.1	8	5.9	1
Prescription services the same	11.4	24	78.7	166	10.0	21
Prescription services worse	5.3	1	36.8	7	57.9	11

Table 64. Phase III Quality of Care Reported Since the Transition to WCM, by Quality of Prescription Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							
	Phase III						
Since the transition, have the prescription services that the client receives been better, the same, or worse? (Q46)	Better		Same		Worse		P-value Across Rows, Comparing WCM Study Groups (Tables 61-64) by Chi Square
	%	n	%	n	%	n	
Prescription services better	73.7	14	21.1	4	5.3	1	na*
Prescription services the same	15.5	20	70.5	91	14.0	18	na*

Prescription services worse	0.0	0	44.4	4	55.6	5	na*

* means testing could not be performed due to lack of observations

Table 65. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Quality of Behavioral Health Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Since the transition, have the behavioral health services that the client receives been better, the same, or worse? (Q51)	Better		Same		Worse	
	%	n	%	n	%	n
Behavioral health services better	50.0	4	50.0	4	0.0	0
Behavioral health services the same	19.1	4	61.9	13	19.1	4
Behavioral health services worse	50.0	1	0.0	0	50.0	1

Table 66. Phase I Quality of Care Reported Since the Transition to WCM, by Quality of Behavioral Health Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Since the transition, have the behavioral health services that the client receives been better, the same, or worse? (Q51)	Better		Same		Worse	
	%	n	%	n	%	n
Behavioral health services better	55.0	11	40.0	8	5.0	1
Behavioral health services the same	12.6	14	81.1	90	6.3	7
Behavioral health services worse	0.0	0	81.8	9	18.2	2

Table 67. Phase II Quality of Care Reported Since the Transition to WCM, by Quality of Behavioral Health Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Since the transition, have the behavioral health services that the client receives been better, the same, or worse? (Q51)	Better		Same		Worse	
	%	n	%	n	%	n
Behavioral health services better	42.9	3	57.1	4	0.0	0
Behavioral health services the same	8.9	7	79.8	63	11.4	9

Behavioral health services worse	0.0	0	75.0	3	25.0	1

Table 68. Phase III Quality of Care Reported Since the Transition to WCM, by Quality of Behavioral Health Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 65-68) by Chi Square
	Phase III						
Since the transition, have the behavioral health services that the client receives been better, the same, or worse? (Q51)	Better		Same		Worse		
	%	n	%	n	%	n	
Behavioral health services better	83.3	1	8.3	1	8.3	1	na*
Behavioral health services the same	16.2	6	75.7	28	8.1	3	0.56
Behavioral health services worse	0.0	0	0.0	0	100.0	1	na*

* means testing could not be performed due to lack of observations

Table 69. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Quality of Medical Equipment and Supplies

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Since the transition, have the medical equipment and supplies services that the client receives been better, the same, or worse? (Q57)	Better		Same		Worse	
	%	n	%	n	%	n
Medical equipment and supplies services better	83.3	10	16.67	2	0.0	0
Medical equipment and supplies services the same	15.2	7	82.61	38	2.2	1
Medical equipment and supplies services worse	0.0	0	66.67	2	33.3	1

Table 70. Phase I Quality of Care Reported Since the Transition to WCM, by Quality of Medical Equipment and Supplies

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Since the transition, have the medical equipment and supplies services that the client receives been better, the same, or worse? (Q57)	Better		Same		Worse	
	%	n	%	n	%	n
Medical equipment and supplies services better	70.8	17	29.2	7	0.0	0

Medical equipment and supplies services the same	16.3	30	75.0	138	8.7	16
Medical equipment and supplies services worse	7.1	1	71.4	10	21.4	3

Table 71. Phase II Quality of Care Reported Since the Transition to WCM, by Quality of Medical Equipment and Supplies

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Since the transition, have the medical equipment and supplies services that the client receives been better, the same, or worse? (Q57)	Better		Same		Worse	
	%	n	%	n	%	n
Medical equipment and supplies services better	53.9	7	38.5	5	7.7	1
Medical equipment and supplies services the same	7.5	9	78.3	94	14.2	17
Medical equipment and supplies services worse	7.7	1	69.2	9	23.1	3

Table 72. Phase III Quality of Care Reported Since the Transition to WCM, by Quality of Medical Equipment and Supplies

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							P-value Across Rows, Comparing WCM Study Groups (Tables 69-72) by Chi Square
	Phase III						
Since the transition, have the medical equipment and supplies services that the client receives been better, the same, or worse? (Q57)	Better		Same		Worse		
	%	n	%	n	%	n	
Medical equipment and supplies services better	68.8	11	31.3	5	0.0	0	na*
Medical equipment and supplies services the same	15.4	12	70.5	55	14.1	11	0.09
Medical equipment and supplies services worse	8.3	1	33.3	4	58.3	7	na*

* means testing could not be performed due to lack of observations

Table 73. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Quality of Transportation Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Since the transition, have the transportation services that the client receives been better, the same, or worse? (Q67)	Better		Same		Worse	
	%	n	%	n	%	n
Transportation services better	100.0	4	0.0	0	0.0	0
Transportation services the same	40.0	4	60.0	6	0.0	0
Transportation services worse	0.0	0	100.0	1	0.0	0

Table 74. Phase I Quality of Care Reported Since the Transition to WCM, by Quality of Transportation Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Since the transition, have the transportation services that the client receives been better, the same, or worse? (Q67)	Better		Same		Worse	
	%	n	%	n	%	n
Transportation services better	55.6	10	44.4	8	0.0	0
Transportation services the same	28.3	15	67.9	36	3.8	2
Transportation services worse	15.4	2	30.8	4	53.9	7

Table 75. Phase II Quality of Care Reported Since the Transition to WCM, by Quality of Transportation Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Since the transition, have the transportation services that the client receives been better, the same, or worse? (Q67)	Better		Same		Worse	
	%	n	%	n	%	n
Transportation services better	77.8	7	22.2	2	0.0	0
Transportation services the same	12.2	5	70.7	29	17.1	7
Transportation services worse	4.2	1	66.7	16	29.2	7

Table 76. Phase III Quality of Care Reported Since the Transition to WCM, by Quality of Transportation Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							
	Phase III						
Since the transition, have the transportation services that the client receives been better, the same, or worse? (Q67)	Better		Same		Worse		P-value Across Rows, Comparing WCM Study Groups (Tables 73- 76) by Chi Square
	%	n	%	n	%	n	
Transportation services better	100.0	2	0.0	0	0.0	0	na*
Transportation services the same	25.0	5	65.0	13	10.0	2	na*

Transportation services worse	0.0	0	0.0	0	0.0	0	na*

* means testing could not be performed due to lack of observations

Table 77. HPSM WCM Quality of Care Reported Since the Transition to WCM, by Quality of Care Coordination Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	HPSM WCM					
Since the transition, have the care coordination services that the client receives been better, the same, or worse? (Q72)	Better		Same		Worse	
	%	n	%	n	%	n
Care coordination services better	50.0	4	37.5	3	12.5	1
Care coordination services the same	26.7	4	73.33	11	0.0	0
Care coordination services worse	0.0	0	0.0	0	100.0	1

Table 78. Phase I Quality of Care Reported Since the Transition to WCM, by Quality of Care Coordination Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase I					
Since the transition, have the care coordination services that the client receives been better, the same, or worse? (Q72)	Better		Same		Worse	
	%	n	%	n	%	n
Care coordination services better	53.1	17	43.8	14	3.1	1
Care coordination services the same	21.0	13	71.0	44	8.1	5
Care coordination services worse	0.0	0	56.3	9	43.8	7

Table 79. Phase II Quality of Care Reported Since the Transition to WCM, by Quality of Care Coordination Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)						
	Phase II					
Since the transition, have the care coordination services that the client receives been better, the same, or worse? (Q72)	Better		Same		Worse	
	%	n	%	n	%	n
Care coordination services better	73.3	11	20.0	3	6.7	1

Care coordination services the same	9.1	4	77.3	34	13.6	6
Care coordination services worse	0.0	0	36.4	4	63.6	7

Table 80. Phase III Quality of Care Reported Since the Transition to WCM, by Quality of Care Coordination Services

Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? (Q7)							
	Phase III						
Since the transition, have the care coordination services that the client receives been better, the same, or worse? (Q72)	Better		Same		Worse		P-value Across Rows, Comparing WCM Study Groups (Tables 77-80) by Chi Square
	%	n	%	n	%	n	
Care coordination services better	69.2	9	15.4	2	15.4	2	0.28
Care coordination services the same	23.4	11	57.5	27	19.2	9	na*
Care coordination services worse	20.0	1	0.0	0	80.0	4	na*

* means testing could not be performed due to lack of observations

Appendix X: Supplemental Childhood and Adolescent Immunization Tables

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Overview of the Supplementary Childhood Immunization And Adolescent vaccines.

This appendix describes the counts of those who did and did not receive an immunization by individual vaccine. The description of how each vaccine measure was created can be found in Appendix M. Description and Operationalization of Utilization Measures Report . The tables describe the actual counts of an immunization being met or not for each WCM study group and the comparison group for the following vaccines:

Childhood vaccines

1. Overall composite measure of having met the childhood immunization measure
2. Diptheria-Tetanus-Pertussis (DTaP)
3. Hepatitis A
4. Hepatitis B
5. Haemophilus influenzae type b (Hib)
6. Influenza
7. Measles-Mumps-Rubella (MMR)
8. Pneumococcus (PCV)
9. Polio (Inactivated Polio Vaccine)
10. Rotavirus
11. Varicella.

Adolescent vaccines

1. Tetanus- Diptheria-Pertussis (TDaP)
2. Meningitis
3. Human Papilloma Virus (HPV)

Descriptive counts for each immunization are provided within the tables below. The test statistics can be found at the bottom of each table (Chi square vs Fisher's exact test). Comparison statistics were performed on each separate vaccine type being met or not for:

1. Comparing both WCM and Classic CCS comparison group, pre/post;
2. Comparing pre/post period for the WCM only; and,
3. Comparing pre/post period for the CCS Classic comparison group only.

Please note that the immunization tables below include more individuals in the pre-WCM period than the regression models seen in the main report. This is because for the regression models, clients who were not enrolled in the WCM after the WCM implementation date were excluded. The regression models for the evaluation can be found in the main text and in Appendix I. Statistical Models for Claims Analyses, DiD Trend Testing, and Regression Models.

HPSM WCM Childhood Immunization Tables for Specific Vaccines

Summary of Childhood Immunizations for HPSM

Overall immunizations and general comments about vaccinations:

1. The sample size for childhood vaccination in HPSM was very small. Highest rates of individual vaccine uptake were with Hepatitis A (over 82% of all children immunized), Varicella (over 82% of all children immunized), MMR (over 82% of all children), and Hib (Over 81% of all children immunized). The lowest immunization rates were found with Hepatitis B (only 46% vaccinated in the Classic CCS group in the post period) and PCV (only 59% vaccinated in the Classic CCS group in the post period). Not having the Hepatitis B or PCV vaccine completed was the primary driver of having not met the full childhood immunization criteria.
2. HPSM immunization rates significantly went up in the post- period, while the CCS comparison group rate went down relative to the pre-period for overall immunizations and for Hep A, Hep B, HiB, MMR, PCV, and Varicella immunizations. HPSM immunization rate significantly went down in the post-period, while the CCS comparison group rate went up relative to the pre-period for Flu immunization. HPSM childhood vaccination rate was higher as compared to the CCS comparison group in the post-implementation period for IPV immunization. There were no significant differences between HPSM and the Classic CCS comparison group for DTaP and Rotavirus immunizations.
3. There was no difference when comparing the pre-post period for either the HPSM or the CCS Classic Comparison group except for the following vaccines. For the HPSM group, Hepatitis A immunization significantly increased in the pre-post period from about 67% to 98% (p=0.0183) in post-period, MMR increased from about 67% to 96% in post-period (p=0.0431), and Varicella increased from about 67% to 96% in post-period (p=0.0431).

Table 1. Composite Childhood Immunizations

	HPSM Composite (all 10 vaccine types) Immunization Schedule				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	5	83.3	1	16.7	6
Post- WCM	43	47.3	48	52.7	91
Classic Pre-WCM	43	72.9	16	27.1	59
Classic Post-WCM	90	75.6	29	24.4	119

Fishers exact comparing both groups pre-post: p= 0.0001
Fishers exact test comparing WCM group pre-post p=1115
Fisher's exact test comparing CCS Classic group pre-post p= 0.7164

Table 2. Diphtheria, Tetanus, Pertussis (DTaP)

	HPSM DTaP Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	3	50.0	3	50.0	6
Post-WCM	23	25.3	68	74.7	91
Classic Pre-WCM	23	39.0	36	61.0	59
Classic Post-WCM	47	39.5	72	60.5	119

Fishers exact test comparing both groups pre-post: p = 0.1009
Fishers exact test comparing WCM group pre-post p= 0.3378
Fisher's exact test comparing CCS Classic group pre-post p= 1

Table 3. Hepatitis A Immunization

	HPSM Hepatitis A Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	2	33.3	4	66.7	6
Post-WCM	2	2.2	89	97.8	91
Classic Pre-WCM	6	10.2	53	89.8	59
Classic Post-WCM	21	17.6	98	82.4	119

Fishers exact test comparing both groups pre-post: p= 0.0005
Fishers exact test comparing WCM group pre-post p= 0.0183
Fisher's exact test comparing CCS Classic group pre-post =0.2671

Table 4. Hepatitis B Immunization

	HPSM Hepatitis B Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	2	33.3	4	66.7	6
Post-WCM	26	28.6	65	71.4	91
Classic Pre-WCM	29	49.2	30	50.8	59
Classic Post-WCM	64	53.8	55	46.2	119

Fishers exact test comparing both groups pre-post: p= 0.0016
Fishers exact test comparing WCM group pre-post p= 1
Fisher's exact test comparing CCS Classic group pre-post p=0.6332

Table 5. Haemophilus influenzae type b (Hib)

	HPSM HiB Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	1	16.7	5	83.3	6
Post-WCM	5	5.5	86	94.5	91

Group	HPSM HiB Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Classic Pre-WCM	10	16.9	49	83.1	59
Classic Post-WCM	23	19.3	96	80.7	119

Fishers exact test comparing both groups pre-post: p= 0.0170
Fishers exact test comparing WCM group pre-post p= 0.3255
Fisher's exact test comparing CCS Classic group pre-post p=0.8383

Table 6. Influenza

Group	HPSM Influenza Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	.	.	6	100.0	6
Post-WCM	6	6.6	85	93.4	91
Classic Pre-WCM	19	32.2	40	67.8	59
Classic Post-WCM	36	30.3	83	69.7	119

Fishers exact test comparing both groups pre-post: p<0.0001
Fishers exact test comparing WCM group pre-post p= 1
Fisher's exact test comparing CCS Classic group pre-post p=0.8635

Table 7. Measles, Mumps, Rubella (MMR)

Group	HPSM MMR Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	2	33.3	4	66.7	6
Post-WCM	4	4.4	87	95.6	91
Classic Pre-WCM	4	6.8	55	93.2	59
Classic Post-WCM	21	17.6	98	82.4	119

Fishers exact test comparing both groups pre-post: p= 0.0035
Fishers exact test comparing WCM group pre-post p= 0.0431
Fisher's exact test comparing CCS Classic group pre-post p=0.0657

Table 8. Pneumococcal Vaccine (PCV)

Group	HPSM PCV Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	2	33.3	4	66.7	6
Post-WCM	19	20.9	72	79.1	91
Classic Pre-WCM	24	40.7	35	59.3	59
Classic Post-WCM	49	41.2	70	58.8	119

Fishers exact test comparing both groups pre-post: p= 0.0084
Fishers exact test comparing WCM group pre-post p= 0.6074

Fisher's exact test comparing CCS Classic group pre-post p=1

Table 9. Polio (Inactivated Polio Vaccine-IIPV)

	HPSM IPV Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	1	16.7	5	83.3	6
Post-WCM	11	12.1	80	87.9	91
Classic Pre-WCM	18	30.5	41	69.5	59
Classic Post-WCM	26	21.8	93	78.2	119

Fishers exact test comparing both groups pre-post: p= 0.0399
Fishers exact test comparing WCM group pre-post p= 0.5574
Fisher's exact test comparing CCS Classic group pre-post p=0.2679

Table 10. Rotavirus

	HPSM Rotavirus Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	1	16.7	5	83.3	6
Post-WCM	28	30.8	63	69.2	91
Classic Pre-WCM	23	39.0	36	61.0	59
Classic Post-WCM	48	40.3	71	59.7	119

Fishers exact test comparing both groups pre-post: p= 0.3928
Fishers exact test comparing WCM group pre-post p= 0.6654
Fisher's exact test comparing CCS Classic group pre-post p= 1

Table 11. Varicella

	HPSM Varicella Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	2	33.3	4	66.7	6
Post-WCM	4	4.4	87	95.6	91
Classic Pre-WCM	7	11.9	52	88.1	59
Classic Post-WCM	22	18.5	97	81.5	119

Fishers exact test comparing both groups pre-post: p= 0.0045
Fishers exact test comparing WCM group pre-post p= 0.0431
Fisher's exact test comparing CCS Classic group pre-post p= 0.2899

Summary of Adolescent Immunizations for HPSM

Overall immunizations and general comments about vaccinations:

1. The sample size for adolescent vaccination in HPSM was very small. There were no observations in the pre-period to perform analysis comparing the change in WCM and Classic CCS comparison groups, and in WCM group pre-post.
2. CCS comparison group adolescent immunization rates went down in the post-period relative to the pre-period for overall immunizations and for specific immunizations, this difference was not statistically different.
3. Highest rates of individual vaccine uptake were with TDaP (over 68% of all adolescents immunized) and Meningitis (68% of all adolescent) while the lowest immunization rates were found with HPV (only about a third of adolescent vaccinated in the Classic CCS group in post period). Not having the HPV vaccine completed was the primary driver of having not met the full adolescent immunization criteria.

Table 12. Composite Adolescent Immunizations

	HPSM Composite (all 3 vaccine types) Immunization Schedule				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Post- WCM	11	68.8	5	31.3	16
Classic Pre-WCM	37	68.5	17	31.5	54
Classic Post-WCM	77	62.6	46	37.4	123

Fisher's exact test comparing CCS Classic group pre-post p= 0.4982

Table 13. Tetanus, Diphtheria, Pertussis (TDaP)

	HPSM TDaP Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Post-WCM	5	31.3	11	68.8	16
Classic Pre-WCM	17	31.5	37	68.5	54
Classic Post-WCM	46	37.4	77	62.6	123

Fisher's exact test comparing CCS Classic group pre-post p= 0.4982

Table 14. Meningitis Immunization

	HPSM Meningitis Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Post-WCM	5	31.3	11	68.8	16
Classic Pre-WCM	17	31.5	37	68.5	54
Classic Post-WCM	45	36.6	78	63.4	123

Fisher's exact test comparing CCS Classic group pre-post =0.6084

Table 15. Human Papilloma Virus (HPV) Immunization

	HPSM HPV Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Post-WCM	11	68.8	5	31.3	16
Classic Pre-WCM	33	61.1	21	38.9	54
Classic Post-WCM	74	60.2	49	39.8	123

Fisher's exact test comparing CCS Classic group pre-post =1

Phase I Immunization Tables for Specific Vaccines

Summary of immunizations for the Phase I

Overall immunizations and general comments about vaccinations:

1. Phase I childhood vaccination rate was higher as compared to the CCS comparison group in the post-implementation period. The Phase I had a statistically significant increase in vaccination rates when comparing rates of vaccination pre/post. There was no difference in vaccination rates when comparing the pre- to post-implementation period for the Classic CCS comparison group. Highest rates of individual vaccine uptake were with Hepatitis A (over 84% of all children immunized), Varicella (over 84% of all children immunized), MMR (over 85% of all children), and Hib (Over 82% of all children immunized). The lowest immunization rates were found with Influenza (only 50% vaccinated in the Classic CCS group in the post period) and Rotavirus (where only about 54% of the children had claims/vaccine reporting for this vaccine). Not having the Rotavirus or Influenza vaccine completed was the primary driver of having not met the full childhood immunization criteria.
2. Diptheria-Tetanus-Pertussis (DTaP): Phase I DTaP immunization rate went up in the post- period, while the comparison group rate was flat relative to the pre-period; this difference was statistically significant. Phase I also had a statistically significant increase in DTaP vaccinations when comparing between pre-post periods. There was no statistical difference in the proportion vaccinated with DTaP when comparing between vaccine rates in the pre- vs post- period for the Classic CCS comparison group.
3. Hepatitis A: Phase I Hep A immunization rate went up in the post- period, while the comparison group rate went down relative to the pre-period; this difference was statistically significant. Phase I had a higher proportion of being vaccinated in the post- vs pre-period of the WCM; there was no statistical difference when comparing the proportion of children receiving the Hep A vaccination in the pre- vs post-period for the Classic CCS comparison group.
4. Hepatitis B (Hep B): Phase I Hep B immunization rate went up in the post-period, while the comparison group rate went down relative to the pre-period; this difference was statistically significant. Phase I had a higher proportion of being vaccinated in the post- vs pre-period of the WCM; there was no statistical

difference when comparing the proportion of children receiving the Hep B vaccination in the pre- vs post-period for the Classic CCS comparison group.

5. Haemophilus influenzae type b (HiB): Phase I HiB immunization rate went up in the post- period, while the comparison group rate went down relative to the pre-period; this difference was statistically significant. Phase I had a statistically significant higher proportion of being fully vaccinated in the post- vs pre-period of the WCM. There was no statistical difference in the proportion receiving HiB post- vs pre-period for the Classic CCS comparison group.
6. Influenza (Flu): Phase I Flu immunization rate went up in the post- period, while the comparison group rate went down relative to the pre-period; this difference was statistically significant. Phase I had a statistically significant higher proportion of being fully vaccinated in the post- vs pre-period of the WCM. There was no statistical difference in the proportion receiving Flu post- vs pre-period for the Classic CCS comparison group.
7. Measles-Mumps-Rubella (MMR): Phase I MMR immunization rate went up in the post- period, while the comparison group rate went down relative to the pre-period; this difference was statistically significant. Phase I had a higher proportion of being fully vaccinated in the post- vs pre-period of the WCM, while Classic CCS comparison group had a lower proportion of being fully vaccinated in the post- vs pre-period of the WCM.
8. Pneumococcus (PCV): While Phase I and Classic CCS comparisons both increased rates of PCV vaccination post implementation, Phase I had a statistically higher proportion receiving the PCV post- vs pre- in PCV vaccination as compared to the comparison group. Phase I had a higher proportion of being fully vaccinated in the post-period of the WCM while there was no statistical difference in the post-period for the Classic CCS comparison group.
9. Polio (IPV): While Phase I and Classic CCS comparisons both increased rates of IPV vaccination post implementation, Phase I had a statistically higher proportion receiving the IPV post- vs pre- in IPV vaccination as compared to the comparison group. Phase I had a higher proportion of being fully vaccinated in the post-period of the WCM while there was no statistical difference in the post-period for the Classic CCS comparison group.
10. Rotavirus: While Phase I and Classic CCS comparisons both increased rates of rotavirus vaccination post implementation, Phase I had a statistically higher proportion receiving the Rotavirus post- vs pre- in rotavirus vaccination as compared to the comparison group. Phase I had a higher proportion of being fully vaccinated in the post-period of the WCM. There was no statistical difference in rotavirus vaccine pre vs post period for the Classic CCS comparison group.
11. Varicella: Phase I Varicella immunization rate went up in the post- period, while the comparison group rate went down relative to the pre-period; this difference was statistically significant. Phase I also had a statistically significant increase in proportion receiving the varicella vaccine post- vs pre-implementation period, while the Classic CCS comparison group had a statistically significant decrease in proportion receiving the varicella vaccine post- vs pre-implementation period.

Table 16. Composite Childhood Immunizations

Group	Phase I Composite (all 10 vaccine types) Immunization Schedule				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	819	77.2	242	22.8	1,061
Post-WCM	671	65.1	360	34.9	1,031
Classic Pre-WCM	731	77.1	217	22.9	948
Classic Post-WCM	738	75.8	235	24.2	973

Chi square test comparing both WCM and CCS pre-post p <0.0001
Chi square test comparing WCM group pre-post p <0.0001
Chi square test comparing CCS Classic group pre-post p = 0.5191

Table 17. Diphtheria-Tetanus-Pertussis (DTaP)

Group	Phase I DTaP Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	503	47.4	558	52.6	1,061
Post-WCM	312	30.3	719	69.7	1,031
Classic Pre-WCM	345	36.4	603	63.6	948
Classic Post-WCM	357	36.7	616	63.3	973

Chi square test comparing both WCM and CCS pre-post p <0.0001
Chi square test comparing WCM group pre-post p <0.0001
Chi square test comparing CCS Classic group pre-post p= 0.8920

Table 18. Hepatitis A

Group	Phase I Hepatitis A Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	253	23.8	808	76.2	1,061
Post-WCM	114	11.1	917	88.9	1,031
Classic Pre-WCM	125	13.2	823	86.8	948
Classic Post-WCM	157	16.1	816	83.9	973

Chi square test comparing both WCM and CCS pre-post p <0.0001
Chi square test comparing WCM group pre-post p <0.0001
Chi square test comparing CCS Classic group pre-post p= 0.0678

Table 19. Hepatitis B

Group	Phase I Hepatitis B Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	389	36.7	672	63.3	1,061
Post-WCM	308	29.9	723	70.1	1,031
Classic Pre-WCM	294	31.0	654	69.0	948
Classic Post-WCM	330	33.9	643	66.1	973

Chi square test comparing both WCM and CCS pre-post p= 0.0045
Chi square test comparing WCM group pre-post p= 0.010
Chi square test comparing CCS Classic group pre-post p= 0.1743

Table 20. Haemophilus influenzae type b (Hib)

Group	Phase I HiB Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	300	28.3	761	71.7	1,061
Post-WCM	185	17.9	846	82.1	1,031
Classic Pre-WCM	171	18.0	777	82.0	948
Classic Post-WCM	189	19.4	784	80.6	973

Chi square test comparing both WCM and CCS pre-post p <0.0001
Chi square test comparing WCM group pre-post p <0.0001
Chi square test comparing CCS Classic group pre-post p= 0.4362

Table 21. Influenza

Group	Phase I Influenza Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	511	48.2	550	51.8	1,061
Post-WCM	367	35.6	664	64.4	1,031
Classic Pre-WCM	457	48.2	491	51.8	948
Classic Post-WCM	490	50.4	483	49.6	973

Chi square test comparing both WCM and CCS pre-post p <0.0001
Chi square test comparing WCM group pre-post p <0.0001
Chi square test comparing CCS Classic group pre-post p= 0.3454

Table 22. Measles, Mumps, Rubella (MMR)

Group	Phase I MMR Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	239	22.5	822	77.5	1,061
Post-WCM	90	8.7	941	91.3	1,031
Classic Pre-WCM	110	11.6	838	88.4	948
Classic Post-WCM	151	15.5	822	84.5	973

Chi square test comparing both WCM and CCS pre-post p <0.0001
Chi square test comparing WCM group pre-post p <0.0001
Chi square test comparing CCS Classic group pre-post p= 0.0123

Table 23. Pneumococcal vaccine (PCV)

Group	Phase I PCV Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	501	47.2	560	52.8	1,061
Post-WCM	308	29.9	723	70.1	1,031
Classic Pre-WCM	358	37.8	590	62.2	948
Classic Post-WCM	348	35.8	625	64.2	973

Chi square test comparing both WCM and CCS p<0.0001
Chi square test comparing WCM group pre-post p<0.0001
Chi square test comparing CCS Classic group pre-post p= 0.3638

Table 24. Polio (Inactivated Polio Vaccine-IPV)

Group	Phase I IPV Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	387	36.5	674	63.5	1,061
Post-WCM	219	21.2	812	78.8	1,031
Classic Pre-WCM	235	24.8	713	75.2	948
Classic Post-WCM	223	22.9	750	77.1	973

Chi square test comparing both WCM and CCS pre-post p <.0001
Chi square test comparing WCM group pre-post p<.0001
Chi square test comparing CCS Classic group pre-post p= 0.3362

Table 25. Rotavirus

Group	Phase I Rotavirus Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	572	53.9	489	46.1	1,061
Post-WCM	447	43.4	584	56.6	1,031
Classic Pre-WCM	464	48.9	484	51.1	948
Classic Post-WCM	446	45.8	527	54.2	973

Chi square test comparing both WCM and CCS pre-post p<.0001
Chi square test comparing WCM group pre-post p<.0001
Chi square test comparing CCS Classic group pre-post p= 0.1726

Table 26. Varicella

Group	Phase I Varicella Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	245	23.1	816	76.9	1,061
Post-WCM	93	9.0	938	91.0	1,031
Classic Pre-WCM	114	12.0	834	88.0	948
Classic Post-WCM	156	16.0	817	84.0	973

Chi square test comparing both WCM and CCS pre-post p <0.0001
Chi square test comparing WCM group pre-post p <0.0001
Chi square test comparing CCS Classic group pre-post p= 0.0115

Summary of Adolescent Immunizations for Phase I

Overall immunizations and general comments about vaccinations:

1. Phase I adolescent immunization rate went up in the post- period, while the comparison group rate was flat relative to the pre-period; this difference was not statistically significant. Phase I also had a statistically significant increase in overall vaccinations when comparing between pre-post periods. There was no statistical difference in the proportion vaccinated when comparing between vaccine rates in the pre- vs post- period for the Classic CCS comparison group. Highest rates of individual vaccine uptake were with TDaP (over 55% of all adolescents immunized) and Meningitis (49% of all adolescents) while the lowest immunization rates were found with HPV (only about a third of adolescents vaccinated in the Classic CCS group in post period). Not having the HPV vaccine completed was the primary driver of having not met the full adolescent immunization criteria.
2. Tetanus- Diptheria-Pertussis (TDaP): Phase I and Classic CCS comparison group TDaP immunization rate went up in the post- period; this difference was

statistically significant. Phase I also had a statistically significant increase in TDaP vaccinations when comparing between pre-post periods. There was no statistical difference in the proportion vaccinated with TDaP when comparing between vaccine rates in the pre- vs post- period for the Classic CCS comparison group.

3. Meningitis: Phase I and Classic CCS comparison group Meningitis immunization rate went up in the post- period; this difference was statistically significant. There was no statistical difference in the proportion vaccinated with Meningitis when comparing between vaccine rates in the pre- vs post- period for the Phase I and Classic CCS comparison group.
4. Human Papilloma Virus (HPV): Phase I HPV immunization rate went up in the post- period, while the comparison group rate was flat relative to the pre-period; this difference was not statistically significant. There was no statistical difference in the proportion vaccinated with HPV when comparing between vaccine rates in the pre- vs post- period for the Phase I and Classic CCS comparison group.

Table 27. Composite Adolescent Immunizations

	Phase I Composite (all 3 vaccine types) Immunization Schedule				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	527	74.8	178	25.2	705
Post- WCM	622	69.1	278	30.9	900
Classic Pre-WCM	412	71.8	162	28.2	574
Classic Post-WCM	632	71.1	257	28.9	889

Chi square test comparing both WCM and CCS pre-post p =0.0992
Chi square test comparing WCM group pre-post p =0.0129
Chi square test comparing CCS Classic group pre-post p = 0.7769

Table 28. Tetanus, Diphtheria, Pertussis (TDaP)

	Phase I TDaP Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	380	53.9	325	46.1	705
Post-WCM	406	45.1	494	54.9	900
Classic Pre-WCM	225	39.2	349	60.8	574
Classic Post-WCM	310	34.9	579	65.1	889

Chi square test comparing both WCM and CCS pre-post p <0.0001
Chi square test comparing WCM group pre-post p =0.0005
Chi square test comparing CCS Classic group pre-post p = 0.0933

Table 29. Meningitis Immunization

Group	Phase I Meningitis Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	392	55.6	313	44.4	705
Post-WCM	459	51.0	441	49.0	900
Classic Pre-WCM	244	42.5	330	57.5	574
Classic Post-WCM	335	37.7	554	62.3	889

Chi square test comparing both WCM and CCS pre-post p <0.0001
Chi square test comparing WCM group pre-post p =0.0667
Chi square test comparing CCS Classic group pre-post p = 0.0653

Table 30. Human Papilloma Virus (HPV) Immunization

Group	Phase I HPV Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	493	69.9	212	30.1	705
Post-WCM	597	66.3	303	33.7	900
Classic Pre-WCM	388	67.6	186	32.4	574
Classic Post-WCM	609	68.5	280	31.5	889

Chi square test comparing both WCM and CCS pre-post p =0.4750
Chi square test comparing WCM group pre-post p =0.1256
Chi square test comparing CCS Classic group pre-post p = 0.7158

Phase II Immunization Tables for Specific Vaccines

Summary of immunizations for the Phase II

Overall immunizations and general comments about vaccinations:

1. Phase II childhood vaccination rate was higher as compared to the CCS comparison group in the post-implementation period. The Phase II had a statistically significant increase in vaccination rates when comparing rates of vaccination pre/post. There was no difference in vaccination rates when comparing the pre- to post-implementation period for the Classic CCS comparison group. Highest rates of individual vaccine uptake were with MMR (over 85% of all children), Varicella (over 84% of all children immunized), Hepatitis A (over 79% of all children immunized), and Hib (Over 78% of all children immunized). The lowest immunization rates were found with Influenza (down to 53% vaccinated in the Phase II in the post period) and Rotavirus (where only about 55% of the children had claims/vaccine reporting for this vaccine). Not having the Rotavirus or Influenza vaccine completed was the primary driver of having not met the full childhood immunization criteria.

2. Diptheria-Tetanus-Pertussis (DTaP): Phase II DTaP immunization rate was higher as compared to the CCS comparison group in the post-implementation period. There was no statistical difference in the proportion vaccinated with DTaP when comparing between vaccine rates in the pre- vs post- period for Phase II and for the Classic CCS comparison group.
3. Hepatitis A: Phase II Hep A immunization rate remained relatively flat in the post-period, while the CCS comparison group rate went up relative to the pre-period; this difference was statistically significant. There was no statistical difference when comparing the proportion of children receiving the Hep A vaccination in the pre- vs post-period for Phase II group; Classic CCS comparison group had a higher proportion of being vaccinated in the post- vs pre-period of the WCM.
4. Hepatitis B (Hep B): Phase II Hep B immunization rate went up in the post-period, while the comparison group rate was flat relative to the pre-period; this difference was not statistically significant. There was no statistical difference when comparing the proportion of children receiving the Hep B vaccination in the pre- vs post-period for the Phase II and Classic CCS comparison group.
5. Haemophilus influenzae type b (HiB): Phase II and Classic CCS comparison group HiB immunization rate went up in the post- period; this difference was not statistically significant. There was no statistical difference when comparing the proportion of children receiving the HiB vaccination in the pre- vs post-period for the Phase II and Classic CCS comparison group.
6. Influenza (Flu): Phase II Flu immunization rate remained relatively flat in the post-period, while the comparison group rate went up relative to the pre-period; this difference was not statistically significant. There was no statistical difference when comparing the proportion of children receiving the Flu vaccination in the pre- vs post-period for the Phase II and Classic CCS comparison group.
7. Measles-Mumps-Rubella (MMR): Phase II and Classic CCS comparison group MMR immunization rate went up in the post- period; this difference was not statistically significant. There was no statistical difference when comparing the proportion of children receiving the MMR vaccination in the pre- vs post-period for the Phase II group. Classic CCS comparison group had a significantly higher proportion of being fully vaccinated in the post- vs pre-period of the WCM.
8. Pneumococcus (PCV): While Phase II and Classic CCS comparisons both increased rates of PCV vaccination post implementation, Phase II had a statistically higher proportion receiving the PCV post- vs pre- in PCV vaccination as compared to the comparison group. Likewise, Phase II and Classic CCS comparison group both had a higher proportion of being fully vaccinated in the post-period of the WCM.
9. Polio (IPV): Phase II and Classic CCS comparison group IPV immunization rate went up in the post- period; this difference was not statistically significant. There was no statistical difference when comparing the proportion of children receiving the IPV vaccination in the pre- vs post-period for the Phase II and Classic CCS comparison groups.
10. Rotavirus: While Phase II and Classic CCS comparisons both increased rates of rotavirus vaccination post implementation, Phase II had a statistically higher proportion receiving the Rotavirus post- vs pre- in rotavirus vaccination as

compared to the comparison group. Phase II had a higher proportion of being fully vaccinated in the post-period of the WCM. There was no statistical difference in rotavirus vaccine pre vs post period for the Classic CCS comparison group.

11. Varicella: Phase II Varicella immunization rate was relatively flat while the and the Classic CCS comparison group rate went up in the post- period; this difference was not statistically significant. There was no statistically significant difference in proportion receiving the varicella vaccine post- vs pre-implementation period for Phase II, while the Classic CCS comparison group had a statistically significant increase in proportion receiving the varicella vaccine post- vs pre-implementation period.

Table 31. Composite Childhood Immunizations

	Phase II Composite (all 10 vaccine types) Immunization Schedule				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	640	78.1	179	21.9	819
Post-WCM	394	71.2	159	28.8	553
Classic Pre-WCM	588	75.6	190	24.4	778
Classic Post-WCM	393	73.3	143	26.7	536

Chi square test comparing both WCM and CCS pre-post p =0.0242
Chi square test comparing WCM group pre-post p =0.0036
Chi square test comparing CCS Classic group pre-post p = 0.3552

Table 32. Diphtheria-Tetanus-Pertussis (DTaP)

	Phase II DTaP Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	314	38.3	505	61.7	819
Post-WCM	187	33.8	366	66.2	553
Classic Pre-WCM	322	41.4	456	58.6	778
Classic Post-WCM	193	36.0	343	64.0	536

Chi square test comparing both WCM and CCS pre-post p =0.0317
Chi square test comparing WCM group pre-post p =0.0878
Chi square test comparing CCS Classic group pre-post p= 0.0496

Table 33. Hepatitis A

	Phase II Hepatitis A Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	158	19.3	661	80.7	819
Post-WCM	115	20.8	438	79.2	553

Group	Phase II Hepatitis A Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Classic Pre-WCM	144	18.5	634	81.5	778
Classic Post-WCM	75	14.0	461	86.0	536

Chi square test comparing both WCM and CCS pre-post p =0.0232
Chi square test comparing WCM group pre-post p=0.4937
Chi square test comparing CCS Classic group pre-post p= 0.0309

Table 34. Hepatitis B

Group	Phase II Hepatitis B Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	269	32.8	550	67.2	819
Post-WCM	162	29.3	391	70.7	553
Classic Pre-WCM	280	36.0	498	64.0	778
Classic Post-WCM	191	35.6	345	64.4	536

Chi square test comparing both WCM and CCS pre-post p= 0.0505
Chi square test comparing WCM group pre-post p= 0.1646
Chi square test comparing CCS Classic group pre-post p= 0.8950

Table 35. Haemophilus influenzae type b (Hib)

Group	Phase II HiB Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	186	22.7	633	77.3	819
Post-WCM	118	21.3	435	78.7	553
Classic Pre-WCM	191	24.6	587	75.4	778
Classic Post-WCM	119	22.2	417	77.8	536

Chi square test comparing both WCM and CCS pre-post p =0.5461
Chi square test comparing WCM group pre-post p =0.5482
Chi square test comparing CCS Classic group pre-post p= 0.3244

Table 36. Influenza

Group	Phase II Influenza Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	377	46.0	442	54.0	819
Post-WCM	258	46.7	295	53.3	553
Classic Pre-WCM	370	47.6	408	52.4	778
Classic Post-WCM	237	44.2	299	55.8	536

Chi square test comparing both WCM and CCS pre-post p =0.6871
Chi square test comparing WCM group pre-post p =0.8205

Group	Phase II Influenza Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N

Chi square test comparing CCS Classic group pre-post p= 0.2325

Table 37. Measles, Mumps, Rubella (MMR)

Group	Phase II MMR Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	137	16.7	682	83.3	819
Post-WCM	79	14.3	474	85.7	553
Classic Pre-WCM	146	18.8	632	81.2	778
Classic Post-WCM	73	13.6	463	86.4	536

Chi square test comparing both WCM and CCS pre-post p =0.0447
Chi square test comparing WCM group pre-post p =0.2231
Chi square test comparing CCS Classic group pre-post p= 0.0139

Table 38. Pneumococcal vaccine (PCV)

Group	Phase II PCV Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	323	39.4	496	60.6	819
Post-WCM	183	33.1	370	66.9	553
Classic Pre-WCM	341	43.8	437	56.2	778
Classic Post-WCM	198	36.9	338	63.1	536

Chi square test comparing both WCM and CCS p =0.0008
Chi square test comparing WCM group pre-post p =0.0169
Chi square test comparing CCS Classic group pre-post p= 0.0126

Table 39. Polio (Inactivated Polio Vaccine-IPV)

Group	Phase II IPV Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	208	25.4	611	74.6	819
Post-WCM	131	23.7	422	76.3	553
Classic Pre-WCM	231	29.7	547	70.3	778
Classic Post-WCM	133	24.8	403	75.2	536

Chi square test comparing both WCM and CCS pre-post p =0.0571
Chi square test comparing WCM group pre-post p =0.4719
Chi square test comparing CCS Classic group pre-post p= 0.0522

Table 40. Rotavirus

Group	Phase II Rotavirus Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	436	53.2	383	46.8	819
Post-WCM	244	44.1	309	55.9	553
Classic Pre-WCM	385	49.5	393	50.5	778
Classic Post-WCM	243	45.3	293	54.7	536

Chi square test comparing both WCM and CCS pre-post p=0.0029
Chi square test comparing WCM group pre-post p=0.0009
Chi square test comparing CCS Classic group pre-post p= 0.1389

Table 41. Varicella

Group	Phase II Varicella Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	132	16.1	687	83.9	819
Post-WCM	88	15.9	465	84.1	553
Classic Pre-WCM	148	19.0	630	81.0	778
Classic Post-WCM	77	14.4	459	85.6	536

Chi square test comparing both WCM and CCS pre-post p =0.1348
Chi square test comparing WCM group pre-post p =0.1377
Chi square test comparing CCS Classic group pre-post p= 0.0276

Summary of Adolescent Immunizations for Phase II

Overall immunizations and general comments about vaccinations:

1. Phase II and Classic CCS comparison group adolescent immunization rate went up in the post- period; this difference was not statistically significant. Phase II had a statistically significant increase in overall vaccinations when comparing between pre-post periods. There was no statistical difference in the proportion vaccinated when comparing between vaccine rates in the pre- vs post- period for the Classic CCS comparison group. Highest rates of individual vaccine uptake were with TDaP (over 60% of all adolescents immunized) and Meningitis (54% of all adolescents) while the lowest immunization rates were found with HPV (only about a third of adolescents vaccinated in the Classic CCS group in post period). Not having the HPV vaccine completed was the primary driver of having not met the full adolescent immunization criteria.
2. Tetanus- Diptheria-Pertussis (TDaP): Phase II and Classic CCS comparison group TDaP immunization rate went up in the post- period; this difference was statistically significant. There was no statistical difference in the proportion vaccinated with TDaP when comparing between vaccine rates in the pre- vs post- period for the Phase II and Classic CCS comparison groups.
3. Meningitis: Phase II and Classic CCS comparison group Meningitis immunization rate went up in the post- period; this difference was statistically significant. Phase

II and Classic CCS comparison groups also had higher proportion of being fully vaccinated with Meningitis when comparing between vaccine rates in the pre- vs post- period.

4. Human Papilloma Virus (HPV): Overall rates of HPV was quite low (<30%). Phase II and Classic CCS comparison groups HPV immunization rate went up in the post- period; this difference was statistically significant. Phase II also had higher proportion of being fully vaccinated with HPV when comparing between vaccine rates in the pre- vs post- period. There was no statistical difference in the proportion vaccinated with HPV when comparing between vaccine rates in the pre- vs post- period for the Classic CCS comparison group.

Table 42. Composite Adolescent Immunizations

	Phase II Composite (all 3 vaccine types) Immunization Schedule				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	471	77.3	138	22.7	609
Post- WCM	322	70.6	134	29.4	456
Classic Pre-WCM	412	77.3	121	22.7	533
Classic Post-WCM	338	72.7	127	27.3	465

Chi square test comparing both WCM and CCS pre-post p =0.0269
Chi square test comparing WCM group pre-post p =0.0128
Chi square test comparing CCS Classic group pre-post p = 0.0927

Table 43. Tetanus, Diphtheria, Pertussis (TDaP)

	Phase II TDaP Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	233	38.3	376	61.7	609
Post-WCM	156	34.2	300	65.8	456
Classic Pre-WCM	244	45.8	289	54.2	533
Classic Post-WCM	186	40.0	279	60.0	465

Chi square test comparing both WCM and CCS pre-post p =0.0023
Chi square test comparing WCM group pre-post p =0.1745
Chi square test comparing CCS Classic group pre-post p = 0.0659

Table 44. Meningitis Immunization

	Phase II Meningitis Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	279	45.8	330	54.2	609
Post-WCM	175	38.4	281	61.6	456
Classic Pre-WCM	281	52.7	252	47.3	533

Group	Phase II Meningitis Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Classic Post-WCM	215	46.2	250	53.8	465

Chi square test comparing both WCM and CCS pre-post p =0.0001
Chi square test comparing WCM group pre-post p =0.0152
Chi square test comparing CCS Classic group pre-post p = 0.0410

Table 45. Human Papilloma Virus (HPV) Immunization

Group	Phase II HPV Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	451	74.1	158	25.9	609
Post-WCM	310	68.0	146	32.0	456
Classic Pre-WCM	398	74.7	135	25.3	533
Classic Post-WCM	327	70.3	138	29.7	465

Chi square test comparing both WCM and CCS pre-post p =0.0584
Chi square test comparing WCM group pre-post p =0.0299
Chi square test comparing CCS Classic group pre-post p = 0.1242

Phase III Immunization Tables for Specific Vaccines

Summary of immunizations for the Phase III

Overall immunizations and general comments about vaccinations:

1. Phase III and Classic CCS comparison group childhood immunization rate went up in the post- period; this difference was statistically significant. There was no difference in vaccination rates when comparing the pre- to post-implementation period for the Phase III group. The Classic CCS comparison group had a statistically significant increase in vaccination rates when comparing rates of vaccination pre/post. Highest rates of individual vaccine uptake were with Hepatitis A (over 84% of all children immunized), MMR (over 83% of all children), Varicella (over 83% of all children immunized), and Hib (Over 80% of all children immunized), The lowest immunization rates were found with Influenza (52% vaccinated in the Classic CCS group in the post period) and Rotavirus (where only about 56% of the children had claims/vaccine reporting for this vaccine). Not having the Rotavirus or Influenza vaccine completed was the primary driver of having not met the full childhood immunization criteria.
2. Diptheria-Tetanus-Pertussis (DTaP): Phase III DTaP immunization rate went down while that for the CCS comparison group went up in the post-implementation period; this difference was not statistically significant. There was no statistical difference in the proportion vaccinated with DTaP when comparing between vaccine rates in the pre- vs post- period for Phase III and for the Classic CCS comparison group.

3. Hepatitis A: Phase III and the CCS comparison group Hep A immunization rate in the post-period went up slightly relative to the pre-period; this difference was statistically significant. There was no statistical difference when comparing the proportion of children receiving the Hep A vaccination in the pre- vs post-period for Phase III and Classic CCS comparison groups.
4. Hepatitis B (Hep B): Phase III Hep B immunization rate went down in the post-period, while the comparison group rate was flat relative to the pre-period; this difference was not statistically significant. Phase III had a significantly lower proportion of being fully vaccinated with Hep B in the post- vs pre-period of the WCM. There was no statistical difference in the vaccination rates in the pre- vs post-period for the Classic CCS comparison group.
5. Haemophilus influenzae type b (HiB): Phase III and Classic CCS comparison group HiB immunization rate went up in the post- period; this difference was not statistically significant. There was no statistical difference when comparing the proportion of children receiving the HiB vaccination in the pre- vs post-period for the Phase III and Classic CCS comparison group.
6. Influenza (Flu): Phase III Flu and Classic CCS comparison group immunization rate went up relative to the pre-period; this difference was statistically significant. There was no statistical difference when comparing the proportion of children receiving the Flu vaccination in the pre- vs post-period for the Phase III group. Classic CCS comparison group had a significantly higher proportion of being fully vaccinated in the post- vs pre-period of the WCM.
7. Measles-Mumps-Rubella (MMR): Phase III and Classic CCS comparison group MMR immunization rate were relatively flat in the post- period; this difference was not statistically significant. There was no statistical difference when comparing the proportion of children receiving the MMR vaccination in the pre- vs post-period for the Phase III group and Classic CCS comparison group.
8. Pneumococcus (PCV): While Phase III and Classic CCS comparisons both increased rates of PCV vaccination post implementation, Phase II had a statistically higher proportion receiving the PCV post- vs pre- in PCV vaccination as compared to the comparison group. Likewise, Phase III and Classic CCS comparison groups both had a higher proportion of being fully vaccinated in the post- vs pre-period of the WCM.
9. Polio (IPV): Phase III and Classic CCS comparison group IPV immunization rate went up in the post- period; this difference was not statistically significant. There was no statistical difference when comparing the proportion of children receiving the IPV vaccination in the pre- vs post-period for the Phase III and Classic CCS comparison groups.
10. Rotavirus: Phase II Rotavirus immunization rate was relatively flat while Classic CCS comparison group rate went up post implementation; this difference was not statistically significant. There was no statistical difference when comparing the proportion of children receiving the Rotavirus vaccination in the pre- vs post-period for the Phase III and Classic CCS comparison groups.
11. Varicella: Phase III and the Classic CCS comparison group Varicella immunization rate were relatively flat in the post- period; this difference was not statistically significant. There was no statistically significant difference in

proportion receiving the varicella vaccine post- vs pre-implementation period for both Phase III and Classic CCS comparison groups.

Table 46. Composite Childhood Immunizations

Group	Phase III Composite (all 10 vaccine types) Immunization Schedule				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	806	71.4	323	28.6	1,129
Post-WCM	505	68.3	234	31.7	739
Classic Pre-WCM	701	77.6	202	22.4	903
Classic Post-WCM	469	71.9	183	28.1	652

Chi square test comparing both WCM and CCS pre-post p =0.0003
Chi square test comparing WCM group pre-post p =0.1581
Chi square test comparing CCS Classic group pre-post p = 0.0102

Table 47. Diphtheria-Tetanus-Pertussis (DTaP)

Group	Phase III DTaP Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	419	37.1	710	62.9	1,129
Post-WCM	292	39.5	447	60.5	739
Classic Pre-WCM	353	39.1	550	60.9	903
Classic Post-WCM	236	36.2	416	63.8	652

Chi square test comparing both WCM and CCS pre-post p =0.4839
Chi square test comparing WCM group pre-post p =0.2961
Chi square test comparing CCS Classic group pre-post p= 0.2454

Table 48. Hepatitis A

Group	Phase III Hepatitis A Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	149	13.2	980	86.8	1,129
Post-WCM	95	12.9	644	87.1	739
Classic Pre-WCM	155	17.2	748	82.8	903
Classic Post-WCM	106	16.3	546	83.7	652

Chi square test comparing both WCM and CCS pre-post p =0.0219
Chi square test comparing WCM group pre-post p=0.8300
Chi square test comparing CCS Classic group pre-post p= 0.6366

Table 49. Hepatitis B

Group	Phase III Hepatitis B Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	346	30.6	783	69.4	1,129
Post-WCM	262	35.5	477	64.5	739
Classic Pre-WCM	299	33.1	604	66.9	903
Classic Post-WCM	209	32.1	443	67.9	652

Chi square test comparing both WCM and CCS pre-post p= 0.1797
Chi square test comparing WCM group pre-post p= 0.0302
Chi square test comparing CCS Classic group pre-post p= 0.6611

Table 50. Haemophilus influenzae type b (Hib)

Group	Phase III HiB Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	256	22.7	873	77.3	1,129
Post-WCM	148	20.0	591	80.0	739
Classic Pre-WCM	220	24.4	683	75.6	903
Classic Post-WCM	133	20.4	519	79.6	652

Chi square test comparing both WCM and CCS pre-post p =0.1196
Chi square test comparing WCM group pre-post p =0.1741
Chi square test comparing CCS Classic group pre-post p= 0.0655

Table 51. Influenza

Group	Phase III Influenza Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	460	40.7	669	59.3	1,129
Post-WCM	279	37.8	460	62.2	739
Classic Pre-WCM	499	55.3	404	44.7	903
Classic Post-WCM	311	47.7	341	52.3	652

Chi square test comparing both WCM and CCS pre-post p <0.0001
Chi square test comparing WCM group pre-post p =0.1962
Chi square test comparing CCS Classic group pre-post p= 0.0032

Table 52. Measles, Mumps, Rubella (MMR)

Group	Phase III MMR Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	166	14.7	963	85.3	1,129
Post-WCM	106	14.3	633	85.7	739

Group	Phase III MMR Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Classic Pre-WCM	168	18.6	735	81.4	903
Classic Post-WCM	111	17.0	541	83.0	652

Chi square test comparing both WCM and CCS pre-post p =0.0476
Chi square test comparing WCM group pre-post p =0.8294
Chi square test comparing CCS Classic group pre-post p= 0.4230

Table 53. Pneumococcal vaccine (PCV)

Group	Phase III PCV Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	480	42.5	649	57.5	1,129
Post-WCM	269	36.4	470	63.6	739
Classic Pre-WCM	376	41.6	527	58.4	903
Classic Post-WCM	235	36.0	417	64.0	652

Chi square test comparing both WCM and CCS p =0.0069
Chi square test comparing WCM group pre-post p =0.0084
Chi square test comparing CCS Classic group pre-post p= 0.0258

Table 54. Polio (Inactivated Polio Vaccine-IPV)

Group	Phase III IPV Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	300	26.6	829	73.4	1,129
Post-WCM	178	24.1	561	75.9	739
Classic Pre-WCM	266	29.5	637	70.5	903
Classic Post-WCM	163	25.0	489	75.0	652

Chi square test comparing both WCM and CCS pre-post p =0.0712
Chi square test comparing WCM group pre-post p =0.2287
Chi square test comparing CCS Classic group pre-post p= 0.0523

Table 55. Rotavirus

Group	Phase III Rotavirus Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	501	44.4	628	55.6	1,129
Post-WCM	322	43.6	417	56.4	739
Classic Pre-WCM	430	47.6	473	52.4	903
Classic Post-WCM	288	44.2	364	55.8	652

Group	Phase III Rotavirus Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N

Chi square test comparing both WCM and CCS pre-post p=0.3248
Chi square test comparing WCM group pre-post p=0.7324
Chi square test comparing CCS Classic group pre-post p= 0.1785

Table 56. Varicella

Group	Phase III Varicella Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	166	14.7	963	85.3	1,129
Post-WCM	108	14.6	631	85.4	739
Classic Pre-WCM	168	18.6	735	81.4	903
Classic Post-WCM	113	17.3	539	82.7	652

Chi square test comparing both WCM and CCS pre-post p =0.0529
Chi square test comparing WCM group pre-post p =0.9576
Chi square test comparing CCS Classic group pre-post p= 0.5196

Summary of Adolescent Immunizations for Phase III

Overall immunizations and general comments about vaccinations:

1. Phase III and Classic CCS comparison group adolescent immunization rate remained relatively flat in the post- period; this difference was not statistically significant. There was no statistical difference in the proportion vaccinated when comparing between vaccine rates in the pre- vs post- period for the Phase III and Classic CCS comparison groups. Highest rates of individual vaccine uptake were with TDaP (over 59% of all adolescents immunized) and Meningitis (57% of all adolescent) while the lowest immunization rates were found with HPV (only about a third of adolescent vaccinated in the Classic CCS group in post period). Not having the HPV vaccine completed was the primary driver of having not met the full adolescent immunization criteria.
2. Tetanus- Diptheria-Pertussis (TDaP): Phase III and Classic CCS comparison group TDaP immunization rate went down slightly in the post- period; this difference was statistically significant. There was no statistical difference in the proportion vaccinated with TDaP when comparing between vaccine rates in the pre- vs post- period for the Phase III and Classic CCS comparison groups.
3. Meningitis: Phase III and Classic CCS comparison group Meningitis immunization rate went down slightly in the post- period; this difference was statistically significant. There was no statistical difference in the proportion vaccinated with Meningitis when comparing between vaccine rates in the pre- vs post- period for the Phase III and Classic CCS comparison groups.
4. Human Papilloma Virus (HPV): Phase III and Classic CCS comparison groups HPV immunization rate were relatively flat in the post- period; this difference was not statistically significant. There was no statistical difference in the proportion

vaccinated with HPV when comparing between vaccine rates in the pre- vs post-period for the Phase III and Classic CCS comparison groups.

Table 57. Composite Adolescent Immunizations

	Phase III Composite (all 3 vaccine types) Immunization Schedule				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	716	67.3	348	32.7	1,064
Post- WCM	476	66.5	240	33.5	716
Classic Pre-WCM	632	69.4	279	30.6	911
Classic Post-WCM	515	70.5	215	29.5	730

Chi square test comparing both WCM and CCS pre-post p =0.2864
Chi square test comparing WCM group pre-post p =0.7207
Chi square test comparing CCS Classic group pre-post p = 0.6065

Table 58. Tetanus, Diphtheria, Pertussis (TDaP)

	Phase III TDaP Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	376	35.3	688	64.7	1,064
Post-WCM	264	36.9	452	63.1	716
Classic Pre-WCM	362	39.7	549	60.3	911
Classic Post-WCM	302	41.4	428	58.6	730

Chi square test comparing both WCM and CCS pre-post p =0.0413
Chi square test comparing WCM group pre-post p =0.5086
Chi square test comparing CCS Classic group pre-post p = 0.5029

Table 59. Meningitis Immunization

	Phase III Meningitis Immunization				
	Unmet		Met		
Group	N	Row Pct	N	Row Pct	All N
Pre-WCM	390	36.7	674	63.3	1,064
Post-WCM	270	37.7	446	62.3	716
Classic Pre-WCM	374	41.1	537	58.9	911
Classic Post-WCM	314	43.0	416	57.0	730

Chi square test comparing both WCM and CCS pre-post p =0.0261
Chi square test comparing WCM group pre-post p =0.6513
Chi square test comparing CCS Classic group pre-post p = 0.4239

Table 60. Human Papilloma Virus (HPV) Immunization

Group	Phase III HPV Immunization				
	Unmet		Met		
	N	Row Pct	N	Row Pct	All N
Pre-WCM	682	64.1	382	35.9	1,064
Post-WCM	465	64.9	251	35.1	716
Classic Pre-WCM	602	66.1	309	33.9	911
Classic Post-WCM	496	67.9	234	32.1	730

Chi square test comparing both WCM and CCS pre-post p =0.3805
Chi square test comparing WCM group pre-post p =0.7145
Chi square test comparing CCS Classic group pre-post p = 0.4252

Overall Summary of Immunization Results

HPSM had significantly increased childhood immunization rates for Hepatitis A, MMR, and Varicella immunizations post- vs pre-implementation. There were insufficient observations in the HPSM adolescent vaccination cohort. Phase I had significantly increased immunization rates post- vs pre-implementation for all childhood and adolescent vaccinations except for HPV where pre-post rates were not statistically different. Phase II had significantly increased immunization rates post- vs pre-implementation for the composite, Pneumococcal, and Rotavirus vaccines among childhood vaccinations and all adolescent vaccinations except for TDaP. No significant difference post-implementation was observed for other childhood vaccinations in Phase II. Phase III had significantly increased immunization rate post- vs pre-implementation for Pneumococcal vaccine, decreased rate for Hepatitis B vaccine while no significant difference in the rates observed for other childhood or adolescent immunizations. The deficiencies in Influenza and Rotavirus vaccines were primary drivers for overall low composite scores across the WCM study groups for meeting the childhood vaccine measure. Low HPV uptake (~30%) was the primary driver for low rates of fulfilling the composite adolescent vaccine measure.

Appendix Y: WCM Telephone Survey of Parents/Guardians: Full Survey Instrument

SCREENING AND CONSENT

INITIAL PHONE CONTACT

Hello, my name is [INT NAME]. I'm calling for the University of California, San Francisco. May I please speak to [R NAME]?

A. SPEAKING, OR [R NAME] COMES TO PHONE AND VERIFIES NAME → GO TO INTRO SCRIPT
B. [R NAME] NOT AVAILABLE → **When would be a good time to call back, or is there another number that would be better to reach [R NAME]**?

   DAY(S): _____

   TIME(S): _____

   ALT PHONE: _____

   OK, great. I will try calling back then. Thank you for your time.

C. SPANISH-SPEAKING RESPONDENT, SAY: "**Favor de esperar un momento mientras encuentro a alguien que pueda hablar con usted en español.**" (TRANSLATION: Please wait a moment while I get someone who can speak to you in Spanish.)

INTRO SCRIPTS

[INTRO SCRIPT WCM participant]

Hi, my name is [INT NAME]. I'm calling for the University of California, San Francisco. UC San Francisco is conducting a study about [CHILD'S NAME]'s and your family's experiences with a new program called the Whole Child Model. Starting back in [ENROLLMENT DATE] those receiving California Children's Services [if Rady's say "Starting in July 2018, many children receiving CCS services at Rady Children's Hospital were transitioned into a new program through Rady's] called the Whole Child Model."]. You may remember getting a letter recently in the mail about our study. I'm calling today to see if you'd be interested in participating in it. It will take about 30-minutes, and to thank you for your time, we'll mail you a [INCENTIVE AMOUNT] gift card to Target. (GO TO CONSENT TO BE SCREENED)

[INTRO SCRIPT CCS PARTICIPANT]

Hi, my name is [INT NAME]. I'm calling for the University of California, San Francisco. UC San Francisco is conducting a study about [CHILD'S NAME]'s and your family's experiences with California

Children's Services. You may remember getting a letter recently in the mail about our study. I'm calling today to see if you'd be interested in participating in it. It will take about 30-minutes, and to thank you for your time, we'll mail you a [INCENTIVE AMOUNT] gift card to Target.

A. Do you have time for that right now?

a. Yes → (GO TO CONSENT TO BE SCREENED)

b. No → When would be a good time to call you back? [RECORD THIS INFORMATION]

CONSENT TO BE SCREENED

A. Before we begin, we need to make sure you're old enough to participate. Are you 18 years old or older?

a. Yes → **Thank you, it looks like you're eligible to participate. Before you decide if you want to participate, I need to tell you a little more about the study and the survey.** CONTINUE
b. No, 17 Years or Younger →"SAY: "**I AM SORRY BUT YOU ARE NOT ELIGIBLE TO PARTICIPATE; WE CAN ONLY SURVEY PEOPLE 18 AND OLDER. THANK YOU SO MUCH FOR YOUR TIME TODAY.**
c. Don't Know → DETERMINE IF R IS 18 OR OLDER. SEE ABOVE, AS APPROPRIATE.
d. Refused → DETERMINE IF R IS 18 OR OLDER. SEE ABOVE, AS APPROPRIATE. IF THEY REFUSE, EXPLAIN THAT THEY MUST CONFIRM THEY ARE OVER 18 TO BE ELIGIBLE.

INFORMED CONSENT—STUDY DESCRIPTION

In this study, our team at the University of California, San Francisco is trying to learn what it is like for children who use California Children's Services [IF WCM, "and were switched into the Whole Child Model"].

As I said, we are inviting you to participate in a telephone survey. It should take about 30 minutes. This survey is voluntary, meaning you don't have to participate if you don't want to. You might feel uncomfortable answering questions about [CHILD'S NAME]'s health and health care. You can choose not to participate, or you have the right to skip any questions you don't want to answer or to stop the survey at any time. You'll still get the [INCENTIVE AMOUNT] gift card to Target.

The California Department of Health Care Services is paying for this study. This survey is confidential. Nothing you say in this survey will be shared outside of our research team. The Department of Health Care Services and [CHILD'S NAME]'s health care providers will not know you participated. Your child's health care benefits will not be impacted by your choice to participate or not to participate.

If you agree to participate, your answers will be linked by an ID number. Because an ID number will be used, your name and [CHILD'S NAME] name will never be known by anyone outside of our study team.

As with all research, if you decide to participate, there is some risk to your confidentiality. We will do everything we can to protect your confidential information. The answers you give us in this survey will be kept in a separate computer file from your name and contact information. Each file is protected with a

different password. Only members of the research team have access to these files. We will never use your name or your child's name when talking or writing about the research.

You do not get any direct benefit from being a part of this study. But your answers will help us understand more about what it was like to use [WHOLE CHILD MODEL/CALIFORNIA CHILDREN'S SERVICES]. We hope to use what we learn to improve the program for children and families in the future.

As I said, we will send you a [INCENTIVE AMOUNT] Target gift card as a thank you for participating.

B. Do you have any questions about what we have talked about so far?
   a. Yes → ANSWER QUESTIONS AS APPROPRIATE
   b. No → CONTINUE

If you have any questions about the research at a later time, you can contact the lead investigator, Carrie Graham, at 415-476-0483. If you have questions about your rights as a participant in this study you can contact the UC San Francisco Office for Protection of Human Subjects at 415-476-1814. We will send you both of these phone numbers as well as email addresses in a letter with your gift card after the survey.

C. OK, we are just about ready for the survey. Do you voluntarily agree to participate?
   a. Yes → BEGIN SURVEY
   b. No → ASK: **All right. That's fine. Do you have any questions or concerns you'd like to talk about?**
      i. No → **OK, then that is all for today. Thank you for your time.** (RECORD AS REFUSED TO PARTICIPATE)
      ii. Yes → RESPOND TO QUESTIONS/CONCERNS AS APPROPRIATE. THEN ASK: **Now that we've talked about that are you voluntarily interested in participating?**
         1. VOLUNTARILY AGREES → BEGIN SURVEY
         2. STILL NOT INTERESTED → **OK, then that is all for today. Thank you very much for your time.** [RECORD AS REFUSED TO PARTICIPATE]

CHILD'S GENERAL HEALTH AND FUNCTION

All of the questions that I ask you today are about [CHILD'S NAME]. Please think about him/her as you respond to my questions. The first questions are about [CHILD'S NAME]'s overall health and ability to do daily tasks.

Q1. Would you say that, in general, [CHILD'S NAME]'s health is….

a. **Excellent**
b. **Good**
c. **Fair**
d. **Poor**
e. Don't know
f. Decline to answer

Q2. During the past 6 months, how often has [CHILD'S NAME]'s condition(s) affected his/her ability to do things other children the same age do?

a. **Never**
b. **Sometimes**
c. **Moderately** ***(Probe: Usually)***
d. **Consistently** ***(Probe: Always)***
e. Don't know
f. Decline to answer

Q3. What types of things does [CHILD'S NAME] have limitations doing because of his/her condition(s)? [Check all that apply]

a. **Bodily function** ***(Probe: This can include things like breathing or respiration, swallowing or digestion, blood circulation, chronic physical pain including headaches, seeing even when wearing glasses or contacts, hearing even when using a hearing aid.)***
b. **Participation in activities** ***(Probe: This can include things like self-care, coordination or moving around, using hands, learning, understanding or paying attention, speaking, communicating or being understood.)***
c. **Emotional or behavioral**
d. Don't know
e. Decline to answer

Q4. [IF AGE 5+] **During the past 6 months, how many days of school did [CHILD'S NAME] miss because of illness?**

a. 0-3 days
b. 4-6 days
c. 7-15 days
d. 16-30 days
e. 31-60 days
f. 61 or more days

WHOLE CHILD MODEL (only ask WCM)

[if Rady's say **"Many children who get CCS through Rady's Children's Hospital transitioned into a pilot program as part of the Whole Child Model in July 2018. Under this program, all the primary and specialist healthcare services that [CHILD'S NAME] receives are managed by Rady's rather than from [COUNTY] CCS. The next few questions are about your experiences with the Whole Child Model and its impact, if any, on [CHILD'S NAME] care."]**

[If other WCM Counties say **"In [COUNTY], children receive CCS through [NAME OF HEALTH PLAN]. This arrangement is known as the Whole Child Model. Since [COUNTY] county switched to the Whole Child Model in [DATE OF TRANSITION], all of the primary and specialist healthcare services that [CHILD'S NAME] has received have been managed by [NAME OF HEALTH PLAN] rather than by [COUNTY] county CCS. The next few questions are about your experiences with the Whole Child Model and its impact, if any, on [CHILD'S NAME] care.**

Q5. How did you learn about the Whole Child Model? Did you…. (Mark all that apply.)

a. **Receive a letter in the mail (*Probe: Did you get at least one letter?)***
b. **Attend an in-person information session (*Probe: Did you go to any in person information session?*)**
c. **Learn about it from doctors, care managers, or doctor's office staff**
d. **Learn about it from friends or support group**
e. **Learn about it another way** (Please specify)
f. **(if NOT A-E) I haven't received any information about the Whole Child Model**
g. Don't know
h. Decline to answer

Q6. Did you get all the information you needed about the Whole Child Model/[NAME OF HEALTH PLAN], or could you have used more information?

a. I got all the information I needed
b. I could have used more information/I have unanswered questions
c. Don't know
d. Decline to answer

Q7. Since the transition to [NAME OF HEALTH PLAN] has the quality of the health services that [CHILD'S NAME] receives been better, the same, or worse? *(Probe: Compared to under the County's CCS program)* [if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]

a. Better since the transition
b. About the same
c. Worse since the transition
d. Don't know
e. Decline to answer

MEDICAL HOME/PRIMARY CARE

The next questions are about who you think is most in charge of [CHILD'S NAME] medical care. Often this is the provider who requests authorizations for other services and is the usual source of care when [CHILD'S NAME] is sick.

Q8. Is there a place that [CHILD'S NAME] USUALLY goes when he or she is sick or when you or another caregiver needs advice about his or her health?

a. Yes
b. No
c. Don't know
d. Decline to answer

Q9. Where does [CHILD'S NAME] USUALLY go first? Mark (X) ONE box.

a. **Doctor's Office**
b. **Hospital Emergency Room**
c. **Urgent Care clinic**
d. **Hospital Outpatient Department**
e. **Clinic or Health Center**
f. **Retail Store Clinic or "Minute Clinic"**
g. **School (Nurse's Office, Athletic Trainer's Office)**
h. **Some other place: _____**
i. Don't know
j. Decline to answer

Q10. Do you have one or more people you think of as [CHILD'S NAME] personal doctor or nurse? A personal doctor or nurse is a health professional who knows your child well and is familiar with your child's health history. This can be a general doctor, a pediatrician, a specialist doctor, a nurse practitioner, or a physician's assistant.

a. **Yes** (mark yes if they say one or more)
b. **No** (SKIP TO Q16)
c. Don't know
d. Decline to answer

Q11. If yes, is your personal doctor (check all that apply):

a. A primary care provider (*Probe: this can be a pediatrician, a family doctor, a nurse practitioner, or physician's assistant*)
b. **A specialist doctor (*Probe: A specialist is a doctor that focuses on one procedure [like a surgeon] or one part of the body, like heart or lungs*)** SKIP TO Q15
c. Other
d. Don't know
e. Decline to answer

(Ask next three questions only if personal doctor is a primary care doctor.) **For the next three questions, think about your child's primary care provider. [Note to interviewer: Skip the next three questions if their personal doctor is a specialist.]**

Q12. [WCM only] Since you switched to [NAME OF HEALTH PLAN], does [CHILD'S NAME] have the same primary care provider or did you have to switch to a new primary care provider? [if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]**

a. Same primary care provider
b. Changed primary care providers
c. Don't know
d. Decline to answer

Q13. (if B) **Did you know that you/[CHILD'S NAME] could file a continuity of care request? [***Probe: A continuity of care request allows [CHILD'S NAME] to continue seeing his/her provider for a period even if the provider is not in the [NAME OF HEALTH PLAN] network.***]**

a. Yes
b. No
c. Don't know
d. Decline to answer

Q14. [Ask all whose personal doctor is a primary care doctor.] In the past 6 months, how many times did your child visit their primary care provider or nurse?

a. (Please specify/open-ended)
b. Don't know
c. Decline to answer

Q15. [WCM only] Since the transition to [NAME OF HEALTH PLAN,] have the primary care services that [CHILD'S NAME] receives been better, the same, or worse? *(Probe: Compared to under the County's CCS program.)* [if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]**

a. Better since the transition
b. About the same
c. Worse since the transition
d. Don't know
e. Decline to answer

Q16. In the last 6 months, did [CHILD'S NAME] go to the emergency room, even if it was not an emergency, because it was too difficult to see another doctor?

a. Yes
b. No
c. Don't know
d. Decline to answer

Q17. DURING THE PAST 6 MONTHS, did [CHILD'S NAME] need a referral to see any doctors or receive any services?

a. **Yes**
b. **No (SKIP TO NEXT SECTION)**
c. Don't know
d. Decline to answer

Q18. (if yes) **How big of a problem was it to get referrals?**

a. **Not a problem**
b. **Small problem**
c. **Big problem**
d. Don't know
e. Decline to answer

Q19. (WCM only) **Since the transition to [NAME OF HEALTH PLAN], has [CHILD'S NAME]'s ability to get authorizations for services been better, the same, or worse?** ***(Probe: For instance, an approval for a test or visit to another doctor compared to under the County's CCS program.)*** **[**if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]

a. Better since the transition
b. About the same
c. Worse since the transition
d. Don't know
e. Decline to answer

SPECIALTY CARE

These next questions are about your child's experience getting care from specialty doctors. Specialists are doctors who focus on one procedure (like a surgeon) or one part of the body (like a lung or heart doctor). [*Note: Do not include care from mental health providers (ex. Psychiatrists) here. You will be asked about mental health providers in another section.*]

Q20. Please tell us all the different types of specialist [CHILD'S NAME] needs. (Note to interviewer: leave this open ended and use the list below to mark off specialty services that the respondent mentions. Only prompt them for any of these providers if they mentioned them earlier in the survey. Please mark all that apply. If they say that their child needs a specialist but hasn't been able to see one, still mark it down.)

a. MY CHILD DOES NOT NEED SPECIALTY CARE [SKIP TO NEXT SECTION]
b. Allergy/Immunology (related to allergic conditions and immune system)
c. Audiology (relating to the ears) (e.g. deafness)
d. Cardiology (relating to the heart: e.g. congenital heart disease)
e. Dermatology (relating to skin): (e.g. eczema, hemangioma)
f. Developmental Medicine (relating to behavior and development): e.g autism, ADHD)
g. Endocrinology (relating to growth, hormones, including diabetes, hypothyroidism)
h. Gastroenterology (relating to the digestive system e.g crohn's disease, ulcerative colitis)

i. Genetics (relating to inherited conditions)
j. Gynecology (relating to the female reproductive system)
k. Hematology (relating to blood e.g hemophilia or sickle cell disease, leukemia and cancers)
l. Nephrology (relating to the kidney e.g. chronic kidney disease or need for dialysis)
m. Neurology (relating to seizures, headaches and muscles)
n. Neurosurgery (relating to brain and nerves: spina bifida, brain tumors, spinal disorders)
o. Newborn Medicine (relating to care for newborns with special needs)
p. Nutrition (relating to feeding and growth)
q. Oncology (relating to cancers and tumors)
r. Ophthalmology (relating to the eyes, eg. retinopathy of prematurity)
s. Orthopedic surgeon (relating to surgery on feet or legs)
t. Otolaryngology (or ENT) (relating to ear, nose and throat)
u. Plastic Surgery (relating to surgeries such as cleft lip/cleft palate procedures)
v. Psychiatry (relating to behavior and mental health).
w. Pulmonology (relating to lungs and breathing: for asthma or cystic fibrosis)
x. Rheumatology (relating to joints, immune system e.g. Lupus, juvenile arthritis)
y. Rehabilitation/physiatry
z. Sports Medicine/Orthopedics (relating to musculoskeletal system)
aa. General Surgery (for procedures such as inserting feeding tubes, breathing tubes, other)
bb. Urology (relating to urinary tract, male reproductive system)
cc. Other specify:_____

[Note to interviewer: If they mentioned mental/behavioral health providers say: In the next questions about your child's specialty care, don't include mental healthcare, I will ask you about those doctors specifically in a different section]

Q21. (WCM only) **Was [CHILD'S NAME] able to see the same specialists after enrolling in [NAME OF HEALTH PLAN]? [**if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]

a. Still able to see same specialists
b. Had to change to one or more new specialists
c. Did not have any specialists before
d. Don't know
e. Decline to answer

Q22. (If B) **Which types of new specialists did [CHILD'S NAME] have to change?**
a. (please specify):_____
b. Don't know
c. Decline to answer

[Note to interviewer, don't ask if Q13 was asked in the primary care section]

Q23. (if B to Q21) Did you know that you/[CHILD'S NAME] could file a continuity of care request? [*Probe: A continuity of care request allows [CHILD'S NAME] to continue seeing his/her provider for a period even if the provider is not in the [NAME OF HEALTH PLAN] network.]*

a. Yes
b. No
c. Don't know
d. Decline to answer

Q24. In the last 6 months, how many appointments with specialists did [CHILD'S NAME] have? ***(Probe: your best guess is fine)***

a. (please specify) [IF 0, SKIP TO Q27]
b. Don't know
c. Decline to answer

Q25. In the last 6 months, how often was it easy to get appointments for [CHILD'S NAME] with specialists?

a. Never easy
b. Sometimes easy
c. Usually easy
d. Always easy
e. Don't know
f. Decline to answer

Q26. How satisfied are you with the overall specialist services that [CHILD'S NAME] receives?

a. Very dissatisfied
b. Dissatisfied
c. Neither satisfied nor dissatisfied
d. Satisfied
e. Very satisfied
f. Don't know
g. Decline to answer

Q27. Does [CHILD'S NAME] need any specialist services that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]?

a. **Yes, there are specialist services he or she needs but cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]**
b. **No, he or she gets all the specialist services he or she needs.**
c. **No, he or she doesn't need any specialist services**
d. Don't know
e. Decline to answer

Q28. (If yes) **What does [CHILD'S NAME] need that he or she can't get?**

a. **(Please specify)**
b. Don't know

c. Decline to answer

Q29. [WCM only] Since the transition to [NAME OF HEALTH PLAN] have the specialist services that [CHILD'S NAME] receives been better, the same, or worse? ***(Probe: Compared to under the County's CCS program)*** **[**if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]

a. Better since the transition
b. About the same
c. Worse since the transition
d. Don't know
e. Decline to answer

THERAPY SERVICES

Some children need therapy like physical, occupational, or speech therapy services.

Q30. Does [CHILD'S NAME] need any physical, occupational, speech or other types of therapy services?

a. Yes
b. No [SKIP TO NEXT SECTION]
c. Don't know
d. Decline to answer

Q31. (If Yes) **What types of therapy does [CHILD'S NAME] need?** (check all that apply)

a. Physical therapy
b. Occupational therapy
c. Speech therapy
d. Other: _____
e. Don't know
f. Decline to answer.

Q32. (If Yes) **Please tell me all the types of places where [CHILD'S NAME] gets therapy services:** (check all that apply)

a. A Medical Therapy Unit (sometimes located at a school)
b. Through school district programming
c. At the office of a rehabilitation doctor or physical therapist
d. Hospital-based rehabilitation program
e. Other
f. Don't know
g. Decline to answer.

Q33. [WCM only] Since the transition to [NAME OF HEALTH PLAN] did the site of [CHILD'S NAME] therapy change? ***(Probe: Compared to under the County's CCS program)*** **[**if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care**

now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'.]

a. **No change**
b. **Yes, used to go to medical therapy unit, now goes to other**
c. **Yes, used to go to other, now goes to Medical Therapy Unit**
d. **Yes, changed some other way**
e. Don't know
f. Decline to answer

For those getting therapy at the Medical Therapy Unit, say: **Now think about the therapy your child gets from the Medical Therapy Unit.**
For everyone else, say: **Now think about all the therapy your child gets.**

Q34. In the last 6 months, how often was it easy to get therapy services for [CHILD'S NAME]?

a. Never easy
b. Sometimes easy
c. Usually easy
d. Always easy
e. Don't know
f. Decline to answer

Q35. How satisfied are you with the therapy services that [CHILD'S NAME] receives?

a. Very dissatisfied
b. Dissatisfied
c. Neither satisfied nor dissatisfied
d. Satisfied
e. Very satisfied
f. Don't know
g. Decline to answer

Q36. Does [CHILD'S NAME] need any therapy services that he or she currently cannot get?

a. **Yes, there are therapy services he/she needs but cannot get**
b. **No, he or she gets all the therapy services he or she needs.**
c. Don't know
d. Decline to answer

Q37. (If yes) **What does [CHILD'S NAME] need that he or she can't get?**

a. **(please specify)**
b. Don't know
c. Decline to answer

Q38. [WCM only] Since the transition to [NAME OF HEALTH PLAN], have the therapy services that [CHILD'S NAME] receives been better, the same, or worse? *(Probe: Compared to under the County's CCS program)* [if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]

a. Better since the transition
b. About the same
c. Worse since the transition
d. Don't know
e. Decline to answer

PRESCRIPTION MEDICATION

These next questions are about [CHILD'S NAME]'s prescription medications. This could include any form of medications prescribed by any of your child's doctors such as pills, inhalers, eye drops, injectables, and creams.

Q39. Does [CHILD'S NAME] currently need medicine prescribed by a doctor (other than vitamins)?

a. **Yes**
b. **No** [SKIP TO NEXT SECTION]
c. Don't know
d. Decline to answer

Q40. In the last 6 months, how often was it easy to get these prescription medications for [CHILD'S NAME]?

a. **Never easy**
b. **Sometimes easy**
c. **Usually easy**
d. **Always easy**
e. Don't know
f. Decline to answer

Q41. In the past 6 months, did you delay or not get a prescription that a doctor prescribed?

a. Yes
b. No
c. Don't know
d. Decline to answer

Q42. Over the past 6 months, about how much did you pay out-of-pocket/per month for prescription medication ordered by your doctor? (*Probe: including pills, creams, eyedrops, etc.)* Please do not include costs for medical equipment or supplies, you will be asked about this later.

a. $0 per month
b. $1-100 per month
c. $101- $200 per month
d. $201 -$400 per month

e. $401 -$600 per month
f. $601 - $1,000 per month
g. More than $1,000 per month
h. Don't know
i. Decline to answer

Q43. [WCM only] Since switching to [NAME OF HEALTH PLAN], can you go to the same pharmacy or did you have to switch to a different pharmacy? [if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]**

a. Kept same pharmacy
b. Switched to a different pharmacy
c. Don't know
d. Decline to answer

Q44. Does [CHILD'S NAME] need any medications prescribed by a doctor that he or she currently cannot get?

a. **Yes, there are medications he or she needs but cannot get through [NAME OF HEALTH PLAN].**
b. **No, he or she gets all the medications he or she needs.**
c. Don't know
d. Decline to answer

Q45. (If yes) **What prescription medicine does [CHILD'S NAME] need that he or she can't get?**

a. (please specify)
b. Don't know
c. Decline to answer

Q46. [WCM only] **Since the transition to [NAME OF HEALTH PLAN] have the prescription/pharmacy services that [CHILD'S NAME] receives been better, the same, or worse? *(Probe: Compared to under the County's CCS program)* [**if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]**

a. Better since the transition
b. About the same
c. Worse since the transition
d. Don't know
e. Decline to answer

BEHAVIORAL HEALTH

These next questions are about behavioral and mental health services, Mental health services include treatment and counseling for things like autism, attention deficit (ADHD/ADD), depression, anxiety,

schizophrenia, or alcohol and drug use. It is also sometimes called behavioral health. Mental health services can be provided by a primary care doctor, a psychiatrist, or other professionals like psychologists, counselors, or social workers. These services can be provided one-on-one or in a group. (if needed specify: **including Applied Behavioral Analysis (ABA).)**

Q47. In the last 6 months, did [CHILD'S NAME] need treatment or counseling for an emotional, developmental, or behavioral problem?

a. Yes
b. No [SKIP TO NEXT SECTION]
c. Don't know
d. Decline to answer

Q48. In the last 6 months, how often was it easy to get this treatment or counseling for [CHILD'S NAME]?

a. **Never easy**
b. **Sometimes easy**
c. **Usually easy**
d. **Always easy**
e. Don't know
f. Decline to answer

Q49. Does [CHILD'S NAME] need any behavioral or mental health services that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]?

a. **Yes, there are behavioral or mental health services he or she needs but cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]**
b. **No, he or she gets all the behavioral or mental health services he or she needs.**
c. **No, he or she doesn't need any behavioral or mental health services**
d. Don't know
e. Decline to answer

Q50. (If yes) **What does [CHILD'S NAME] need that he or she can't get?**

a. (please specify)
b. Don't know
c. Decline to answer

Q51. [WCM only] Since the transition to [NAME OF HEALTH PLAN] have the behavioral or mental health services that [CHILD'S NAME] receives been better, the same, or worse? ***(Probe: Compared to under the County's CCS program)*** **[**if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]

a. Better since the transition
b. About the same
c. Worse since the transition
d. Don't know

e. Decline to answer

MEDICAL EQUIPMENT AND SUPPLIES

This section is about special medical equipment and supplies that have to be ordered by a doctor. Equipment can include things like a walker, wheelchair, nebulizer, oxygen equipment, and other devices that you usually have one of. Supplies can include bandages, diapers, diabetes test strips, or other supplies that you throw away and need regular replacements.

Q52. In the last 6 months, did you need any medical equipment or supplies for [CHILD'S NAME]?

a. **Yes**
b. **No [SKIP TO NEXT SECTION]**
c. Don't know
d. Decline to answer

Q53. In the last 6 months, how often was it easy to get special medical equipment or supplies (including repairs) for [CHILD'S NAME]?

a. **Never easy**
b. **Sometimes easy**
c. **Usually easy**
d. **Always easy**
e. Don't know
f. Decline to answer

Q54. Overall, how satisfied are you with the medical equipment or supplies (including repairs) that [CHILD'S NAME] receives?

a. **Very dissatisfied**
b. **Dissatisfied**
c. **Neither satisfied nor dissatisfied**
d. **Satisfied**
e. **Very satisfied**
f. Don't know
g. Decline to answer

Q55. Does [CHILD'S NAME] need any medical equipment or supplies that he or she currently cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]? (*Probe: Include repairs for equipment)*.

a. **Yes, there are equipment or supplies he or she needs but cannot get through [NAME OF HEALTH PLAN/COUNTY CCS]**
b. **No, he or she gets all the equipment and supplies he or she needs**
c. Don't know
d. Decline to answer

Q56. (If yes) **What does [CHILD'S NAME] need that he or she can't get?**

a. (please specify)
b. Don't know

c. Decline to answer

Q57. [WCM only] **Since the transition to [NAME OF HEALTH PLAN], have the medical equipment and supplies that [CHILD'S NAME] receives been better, the same, or worse? (*Probe: Compared to under the County's CCS program*) [**if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]

a. Better since the transition
b. About the same
c. Worse since the transition
d. Don't know
e. Decline to answer

Q58. Over the past 6 months, about how much did you pay out of pocket/per month for medical equipment or supplies ordered by your doctor?

a. $0 per month
b. $1-100 per month
c. $101- $200 per month
d. $201 -$400 per month
e. $401 -$600 per month
f. $601 - $1,000 per month
g. More than $1,000 per month
h. Don't know
i. Decline to answer

PROVIDER COMMUNICATION

The next questions are about how [CHILD'S NAME]'s providers share important information with you, [CHILD'S NAME], and each other.

Q59. Overall, how satisfied are you with the communication among [CHILD'S NAME]'s doctors and other health care providers?

a. **Very dissatisfied**
b. **Dissatisfied**
c. **Neither satisfied nor dissatisfied**
d. **Satisfied**
e. **Very satisfied**
f. Don't know
g. Decline to answer

Q60. In the past 6 months, was there ever a time when doctors ordered a medical test or procedure that you felt was unnecessary because the test had already been done?

a. Yes
b. No
c. Don't know

d. Decline to answer

Q61. [Only if interview is conducted in a language other than English] **An interpreter is someone who repeats what one person says in a language used by another person. In the last 6 months, if you or [CHILD'S NAME] needed a professional interpreter to help [CHILD'S NAME] speak with his/her doctor, how often did you get one?**

a. Never
b. Sometimes
c. Usually
d. Always
e. Didn't need an interpreter
f. Don't know
g. Decline to answer

TRANSPORTATION

The next questions are about how [CHILD'S NAME] travels to and from medical appointments. This includes rides to the doctor's office, lab tests, therapy, or prescription pick up.

Q62. **In the past 6 months, have you needed any transportation assistance in order to get to [CHILD'S NAME]'s medical appointments?** ***(Probe: anything other than your personal/family vehicle, ordinary mass transit or walking/wheelchair. This could also include transportation assistance when there was not a family vehicle available.)***

a. Yes
b. No [SKIP TO NEXT SECTION]
c. Don't know
d. Decline to answer

Q63. What kind of transportation assistance do you need to get to medical appointments? (Check all that apply)

a. **Ride in an ambulance**
b. **Ride in a vehicle (such as a special accessible van) that was arranged before the day of the appointment**
c. **Ride in a taxi/rideshare (like Uber or Lyft)**
d. **Reimbursement for mileage for my family's vehicle**
e. **Ride with a friend or family member who does not live with [CHILD'S NAME]**
f. **Air ambulance/helicopter**
g. **Train or airplane**
h. **Other (please specify)**
i. Don't know
j. Decline to answer

Q64. How often is it easy to get transportation to [CHILD'S NAME]'s doctors or other health care providers?

a. Never easy
b. Sometimes easy

c. Usually easy
d. Always easy
e. Don't know
f. Decline to answer

Q65. (IF d to Q62) **How often is it easy to get transportation to [CHILD'S NAME]'s doctors or other health care providers?**
a. Never easy
b. Sometimes easy
c. Usually easy
d. Always easy
e. Don't know
f. Decline to answer

Q66. In the last six months, did [CHILD'S NAME] miss any scheduled health or therapy appointments because of transportation problems?
a. Yes
b. No
c. Don't know
d. Decline to answer

Q67. [WCM only] Since the transition to [NAME OF HEALTH PLAN], has the transportation assistance that [CHILD'S NAME] receives (including the process of arranging transportation) been better, the same, or worse? ***(Probe: Compared to under the County's CCS program)*** **[**if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]
a. Better since the transition
b. About the same
c. Worse since the transition
d. Don't know
e. Decline to answer

CARE COORDINATION/CASE MANAGEMENT

These next set of questions are about any care coordination or case management [CHILD'S NAME] may be getting. A care coordinator or case manager is someone who helps you schedule appointments and makes sure that [CHILD'S NAME] is getting all of the services that he or she needs.

Q68. During the past 6 months, have you/[CHILD'S NAME]'s needed help from a care coordinator or case manager?
a. **Yes**
b. **No** [SKIP TO NEXT SECTION]
c. Don't know
d. Decline to answer

Q69. Please tell us all the different types of people who helped provide care coordination or case management in the last 6 months:

a. **[If WCM] Somebody from [NAME OF HEALTH PLAN]**
b. **Somebody from [COUNTY] CCS**
c. **Somebody from Primary Care office (*Probe: pediatrician/family doctor*)**
d. **Somebody from a specialist's office (*Probe: repeat definition of specialty if necessary*)**
e. **Community organization or group**
f. **Other source (specify):_____**
g. **(if not a-e) We received no care coordination/case management in the past 6 months.**
h. Don't know
i. Decline to answer

Q70. **[WCM only] Do you know if the person who helped you was called a case manager?** ***(Probe: Case management is something provided by [NAME OF HEALTH PLAN] only for kids who have especially complex care or new emergencies. Typically, a case manager would be the one to call you.)***

a. **Yes, I got help from a case manager at [NAME OF HEALTH PLAN].**
b. **No, it was not a case manager/I don't think it was a case manager (*Probe: when you call the health plan member services line to ask a question, this is typically not case management*)**
c. **I got help from someone at CCS/not case management from health plan**
d. **Don't know (read 'don't know' as a response here)**
e. Decline to answer

Q71. DURING THE PAST 6 MONTHS, how often did you get as much help as you wanted with arranging or coordinating [CHILD'S NAME] health care?

a. **Always**
b. **Usually**
c. **Sometimes**
d. **Never**
e. Don't know
f. Decline to answer

FOR THOSE WHO RECEIVED CARE COORDINATION OR CASE MANAGEMENT SERVICES FROM WCM HEALTH PLAN, SAY**…For the next several questions, please <u>only</u> think about that care coordination/case management services that you received from [NAME OF HEALTH PLAN].]**

FOR EVERYONE ELSE SAY…. **Now think about all the care management/case management you have received in the past 6 months.**

Q72. [WCM only] Since the transition to [NAME OF HEALTH PLAN] have the care coordination/case management services that [CHILD'S NAME] receives been better, the same, or worse? (*Probe: Compared to those you got through the CCS program*) [if Health Plan of San Mateo, say "**we are asking you to compare your experiences with care now, to before April 2013, when San Mateo County controlled California Children's Services. If you were not enrolled before April 2013 or cannot remember back that far, it's okay to say 'don't know'**.]

a. Better since the transition
b. About the same

c. Worse since the transition
d. Don't know
e. Decline to answer

Q73. In the last 6 months, has your care coordinator/case manager helped you with any of the following things? (Check all that apply)

a. **Arranging appointments with doctors or therapists**
b. **Arranging transportation and helping with transportation reimbursements**
c. **Helped obtain authorizations (if needed: this could be authorizations for medical equipment, supplies, specialty care, labs or other services)**
d. **Called you after a hospitalization, emergency department visit, or other health event**
e. **Other** (Please specify):
f. Don't know
g. Decline to answer

Q74. Do you know how to contact your care coordinator/case manager?

a. Yes, I have direct contact information, including their email address or direct telephone number
b. Yes, I contact [NAME OF HEALTH PLAN OR COUNTY CCS] and leave a message for them to contact me
c. Yes, I contact [NAME OF HEALTH PLAN OR COUNTY CCS] and go through the phone tree to find someone to talk to
d. No, I don't know how to contact them
e. Don't know
f. Decline to answer

Q75. In the last 6 months, how often have you talked to or met with [CHILD'S NAME]'s care coordinator/case manager to discuss [CHILD'S NAME]'s health care or service needs?

a. More than once a month
b. About once a month
c. Every few months
d. Never
e. Don't know
f. Decline to answer

Q76. (Only if a-d) **In the past 6 months, how often did the care coordinator/case manager demonstrate knowledge of important information related to [CHILD'S NAME]'s medical history?**

a. N/A, did not contact them
b. Never
c. Sometimes
d. Usually
e. Always
f. Don't know
g. Decline to answer

Q77. How satisfied are you with the care coordination/case management [CHILD'S NAME] received through [NAME OF HEALTH PLAN/COUNTY CCS]?

- **a. Very dissatisfied**
- **b. Dissatisfied**
- **c. Neither satisfied nor dissatisfied**
- **d. Satisfied**
- **e. Very satisfied**
- **f.** Don't know
- g. Decline to answer

TRANSITION TO ADULT SERVICES [12+]

The transition to healthcare providers who take care of adults rather than children is important for many families as their children get close to aging out of CCS when they turn 21. For the few questions, we want to know about whether [CHILD's NAME's] healthcare providers have had these conversations with you and [CHILD'S NAME].

Q78. [Only Children 12+] **Did providers talk with you and/or [CHILD'S NAME] about the shift to adult health care providers?**

- **a. Discussed this**
- **b. Did not discuss and it would have been helpful**
- **c. Discussion not necessary**
- **d.** Don't know
- **e.** Decline to answer

Q79. [Only Children 19+] **Did anyone from [NAME OF HEALTH PLAN/CCS] discuss with you and/or [CHILD'S NAME] in planning how to coordinate care between new service vendors or providers after aging out of CCS?**

- **a. Discussed this**
- **b. Did not discuss and it would have been helpful**
- **c. Discussion not necessary**
- **d.** Don't know
- **e.** Decline to answer

GLOBAL RATING OF HEALTHCARE

Thinking about all the care we have discussed…

Q80. Overall, how satisfied are you with [NAME OF HEALTH PLAN/COUNTY CCS]?

- a. **Very dissatisfied**
- b. **Dissatisfied**
- c. **Neither satisfied nor dissatisfied**
- d. **Satisfied**
- e. **Very satisfied**
- f. Don't know
- g. Decline to answer

Q81. In the last six months, did you file an appeal, grievance, or complaint about [CHILD'S NAME]'s health care?

a. Yes
b. No
c. Don't know
d. Decline to Answer

Q82. I'm going to read you five things that a lot of parents say are important when getting healthcare for their child. When I read them to you, please think about [CHILD's NAME] healthcare. For each one, please tell me on a scale from 1-100 how important that aspect of your child's care is. 1 is the least important and 100 is the most important. The only rule is that you can't give the same number twice.

[Note to interviewer: If the respondent person assigns the same number to two different aspects, say, ***"It looks like you have already used the number XXX, do you want to rate this one slightly higher or lower than E?"***)

a. **Knowing your care coordinator/case manager well** **Rating:___**
b. **Good communication between all [CHILD'S NAME] doctors** **Rating:___**
c. **High quality of care** **Rating:___**
d. **Being personally involved in decisions in [CHILD'S NAME] care** **Rating:___**
e. **Getting easy and fast authorizations for prescription medicines, doctor's appointments, medical equipment/supplies, and more.** **Rating:___**

ABOUT [CHILD'S NAME]

We are almost finished. The next few questions are to get basic information about [CHILD'S NAME].

Q83. Does [CHILD'S NAME] live with you?

a. Yes
b. No
c. Don't know
d. Decline to answer

Q84. If no, with whom does [CHILD'S NAME] live?

a. With another parent (biological or adoptive parent)
b. With another relative (grandparent/aunt/uncle/cousin)
c. With a legal guardian who is not related
d. With a friend
e. College/University
f. His/Her own/rent a home/apartment
g. Other (specify:_____)
h. Don't know
i. Decline to answer

Q85. Including you, how many adults (age 18 and over) live with [CHILD'S NAME]? *(Probe: Do NOT include anyone who is living somewhere else for more than two months, such as a college student living away or someone in the Armed Forces on deployment)*

a. ___ adults (please specify number)
b. Don't know
c. Decline to answer

Q86. How many other children (*Probe: under the age of 18*) live with [CHILD'S NAME]?

a. ___ children/dependents (please specify number)
b. Don't know
c. Decline to answer

Q87. What is [CHILD'S NAME] race? (please select all that apply)

a. White
b. Black/African American
c. Asian or Pacific Islander
d. Native American or Alaska Native
e. Other (please specify):
f. Don't know
g. Decline to answer

Q88. Is [CHILD'S NAME] of Hispanic origin, such as Latin American, Mexican, Puerto Rican, Spanish, or Cuban?

a. Yes
b. No
c. Don't know
d. Decline to answer

Now just a few questions about you.

Q89. How are you related to [CHILD'S NAME]?

a. Mother
b. Father
c. Aunt or uncle
d. Brother or sister
e. Grandmother or grandfather
f. Guardian
g. Other relative
h. Don't know
i. Decline to answer

Q90. What is your age?

a. (Please specify number)
b. Don't know
c. Decline to answer

Q91. What is your race? (please select all that apply)

a. White
b. Black/African American
c. Asian or Pacific Islander
d. Native American or Alaska Native
e. Other (please specify):
f. Don't know
g. Decline to answer

Q92. Are you of Hispanic origin, such as Latin American, Mexican, Puerto Rican, Spanish, or Cuban?

a. Yes
b. No
c. Don't know
d. Decline to answer

Q93. What is your gender?

a. Female
b. Male
c. Other (transgender, gender nonconforming)

Q94. What is your marital status?

a. Married
b. Single
c. Divorced
d. Separated
e. Widowed
f. Living with partner

Q95. What is the highest grade or year of school you have completed?

a. Less than high school
b. High school graduate or GED completed
c. Completed a vocational, trade, or business school program
d. Some college credit but no degree or Associate's degree (AA, AS)
e. Bachelor's degree (BA, BS, AB)
f. Master's degree (MA, MS, MSW, MBA)
g. Doctorate (PhD, EdD) or professional degree (MD, DDS, DVM, JD)
h. Don't know
i. Decline to answer

HOUSEHOLD INCOME AND WORK STATUS

These are the last questions. They are about your work status and household income.

Q96. Which of the following best describes your current work status? (check all that apply)

a. **Working for pay full or part time (either outside the home or at a home-based business)**

b. **Working as an In-Home Supportive Services provider for (CHILD'S NAME)**
c. **Not working for pay due to my child's health**
d. **Not working for pay for other reasons/full time homemaker**
e. **Retired**
f. **Looking for paid work outside the home**
g. Don't know
h. Decline to answer

Q97. How many other income earners currently contribute to your household income?
a. I'm the only income earner
b. There are no income earners
c. 1 other income earner
d. 2 or more other income earners
e. Don't know
f. Decline to answer

[Note to interviewer: If no one in the family works for pay, skip to Q98]

Q98. (Only if R is an income earner) **In a typical month over the last six months, how many days of work for pay <u>per month</u> did you miss due to your child's health condition?**
a. ***(Specify number of days to the nearest half-day)***
b. Don't know
c. Decline to answer

Q99. (Only if there are other income earners) **How many hours of work for pay <u>per month</u> did all other income earners in your family lose due to your child's health condition? (*Probe: Combine all hours missed by all income earners besides yourself.*)**
a. ***(Specify number of days to the nearest half-day)***
b. Don't know
c. Decline to answer

Q100. Over the past 6 months, about how many hours <u>per month</u> do you spend on activities to arrange your child's health care, such as making appointments, paying bills, making calls, filling out forms, getting information, etc? Don't include driving to appointments.
a. 5 or fewer per month
b. 6-10 per month
c. 11-20 per month
d. 21-30 per month
e. 31-40 per month
f. More than 40 per month
g. Don't know
h. Decline to answer

Q101. Which of the following income categories best describes your total 2019 household income before taxes? (*Probe: Include income from all household earners*)

a. Less than $15,000
b. $15,000 to $24,999
c. $25,000 to $34,999
d. $35,000 to $49,999
e. $50,000 to $74,999
f. $75,000 to $99,999
g. $100,000 to $149,999
h. $150,000 or more
i. Don't know
j. Decline to answer

Q102. Is there anything else that we should know about your experiences with [NAME OF HEALTH PLAN/CCS] that was not covered in the questions in this survey?
a. (Open-ended)
b. Don't know
c. Decline to answer

WRAP UP

Thank you for participating in this survey. Your responses have been very helpful and will identify the impact to families that [CCS/changes to WHOLE CHILD MODEL] has on families. Your input will contribute to future improvements to children's health programs run by the state of California.

Q103. We would like to send you a [INCENTIVE AMOUNT] gift card to Target for your participation. I'd like to make sure I have the correct address for you. The name and address that I have is [READ NAME AND ADDRESS FROM FILE]. Is that correct?
a. Yes
b. No
c. Don't know
d. Decline to answer [confirm that they did not want a gift card]

Q104. [IF NO TO ABOVE, PLEASE RECORD CORRECT MAILING ADDRESS BELOW]
a. Name _____
b. Address 1 _____
c. Address 2 _____
d. City _____
e. State _____
f. Zip Code _____

Q105. We may wish to follow up with you about [CHILD'S NAME'S] health care experience. Would you be willing to be contacted again in the future for another survey?
a. Yes
b. No

Q106. (If Yes) What contact information should we use?

a. Phone number_____
b. Email address_____

We have reached the end of the survey. Thank you so much for your time. Your answers will be very helpful to our project. We will be sending you your gift card and information about the study, which includes telephone numbers and email addresses if you have any questions. Should get this within two weeks.

Thanks again. Goodbye.