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Seniors and Persons with Disabilities Final Evaluation Design May 2017

Background

Under the authority of California's Section 1115 Medicaid Waiver, Bridge to Reform, California transitioned its Seniors and Persons with Disabilities (SPDs) population from the Medi-Cal fee-for-service (FFS) delivery system into the managed care delivery system (i.e., enrolled into Medi-Cal managed care health plans (MCPs)) between June 2011 and May 2012. The transition occurred in Two-Plan and Geographic Managed Care (GMC) plan model counties, 16 counties in total, located across California. Mandatory enrollment of SPDs in managed care and the aforementioned requirements were continued under the State's Section 1115 Medicaid Waiver renewal, Medi-Cal 2020.

Demonstration Initiative Goals / Objectives

In order to ensure the successful implementation of the 1115 Medicaid Waiver, Bridge to Reform, the Special Terms and Conditions (STCs) of the Bridge to Reform Waiver require:

- Information and communication strategies that address the unique needs of SPDs,
- Approaches to assignment and opportunities for changes in MCPs,
- Participant rights, safeguards and contractual provisions regarding care coordination and linkages to other service delivery systems,
- Person-centered approaches to service planning and delivery, and
- Physical and geographic accessibility of service providers.

In order to evaluate the success of the Bridge to Reform, the 2020 STCs require the State to provide:

- Ongoing assessment of the impact of mandatory managed care on the SPD population compared to baseline prior to mandatory enrollment through quarterly, annual, and overall summary reports.
- Evaluation of the impact of the initiative on beneficiary experience and the impact of the State's administration of the program overall using measures describing three specific content areas: access to care; quality of care; and costs of coverage (care).
- Focused evaluation on specific health care needs of SPDs and their specific care needs due to diagnosis and the existence of, at times, multiple complex conditions.

Research Questions and Hypotheses

The proposed evaluation of the 1115 Waiver will attempt to address the following questions and related hypotheses:

1. Access to Care

Question: Do SPDs have access to primary and specialty providers and/or other service providers in the network after the transition?

Hypothesis: SPDs will be less likely to see high volume providers in the period directly after the transition; however, they will have timely access to providers within the post-transition period.

Question: Do SPDs have awareness of the plan's services to assist with care coordination and member services?

Hypothesis: SPDs will be more likely to increasingly better navigate the plan after the transition.

2. Quality of Care

Question: Do SPDs receive appropriate care for routine ambulatory medical conditions (diabetes, hypertension, hyperlipidemia, thyroid) as measured by expert consensus processes of care?

Hypothesis: SPDs are more likely to receive appropriate care for routine medical conditions after the transition.

Question: Do SPDs have improved rates of preventable hospitalizations / ambulatory care sensitive conditions after the transition?

Hypothesis: Risk-adjusted rates of preventable hospitalizations will decrease after the SPD transition.

Question: Do SPDs have lower readmission rates after the transition?

Hypothesis: Rates of readmission after acute hospitalization will decrease after the SPD transition.

Question: Do SPDs have lower all-cause and cause-specific mortality rates?

Hypothesis: Risk-adjusted all-cause and cause-specific mortality will be lower after the SPD transition.

Question: Do SPDs have better compliance rates with medication adherence?

Hypothesis: SPDs are more likely to have higher patient compliance rates with medication adherence after the transition.

3. Costs of Care

Question: After accounting for inflation, do overall costs of care to Medi-Cal (as measured by paid claims versus negotiated capitation rates for covered care) decrease after the transition?

Hypothesis: Inflation-adjusted overall costs of care will be lower after the SPD transition.

Evaluation Design and Approach

General Approach

The proposed evaluation will employ comprehensive comparable routinely collected data sources to evaluate care, outcomes, and costs across the pre- and post-transition periods. These data will be consistent and should allow for evaluations that are meaningful and relevant. Routinely collected data for these evaluations will be drawn from multiple sources, will be granular in nature, and will have sufficient number of observations to answer relevant questions with sufficient power. Cross validation of events measured using multiple data sources will allow the team to both directly measure pre- / post-transition changes and to validate ongoing measures that may only be available in the post-transition period, but which may provide ongoing insights into the performance of the Waiver. The evaluation team will identify appropriate comparison groups and employ suitable analytic approaches to isolate the impact of the SPD transition from superimposed secular trends that may blur the overall impact of the 1115 Waiver as well as to case-mix severity differences that obscure the independent impact of the transition. Candidate comparison groups may include, but are not restricted to, SPD populations period and the dual eligible populations in California that did not undergo the transition during this time period.

Identification of the overall baseline populations for comparison will be drawn from the Medi-Cal enrollment files for the two years before the transition and the subsequent period after the transition, drawn from the 16 counties where the transition occurred and from the counties where the transition did not occur (counties with existing mandatory managed care through the County Operated Health System (COHS) model and counties with no managed care).

Prior research suggests that it can take up to two years for beneficiaries to adjust to a change in delivery system. Therefore, the evaluation will assess the experience of SPDs in FFS at least 24 months prior to the transition and throughout the post-transition period for at least two years. Evaluating

trends beyond two years will yield the most stable estimates of the impact of the transition. Furthermore, ongoing assessment of the performance of the SPDs in managed care will require evaluation beyond the initial 24-month period transition.

Using the granular patient-level data, the evaluation team will create metrics (denominator events) for assessing access to care, quality of care, and costs of care. These derived measures for routinely collected data will adapt case definitions drawn from HEDIS, NCQA, AHRQ Quality Clearinghouse, the Dartmouth Atlas, and the UCLA CTSI Community Engagement Research Program. These derived measures will cover structural measures (e.g. travel distance, derived supply of physicians seeing patients), process of care measures (e.g. recommended care based upon expert recommendations on clinical practice), and outcomes of care measures (e.g. risk-adjusted mortality, complications, and readmission). Utilization measures will be created from these data as well and will be paired with cost data either directly (through FFS claims) or indirectly (using relative value metrics).

Post-transition, supplemental data will assess: (1) beneficiary satisfaction through Ombudsman, call center, grievances and appeals, and beneficiary surveys; (2) administrative functions via beneficiary surveys; and (3) plan-level measures of care using HEDIS data. These measures will be assembled by the evaluation team, but the evaluation team will not independently create these particular measures. Many of these measures are available only for the post-transition period and once validated, may provide reliable and valid measures for ongoing assessment of the SPD population in the managed care population in the post-transition period.

In general, the evaluation team will employ multivariate regression models to estimate risk-adjusted outcomes and costs using the granular patient level data accounting for patient case-mix, severity, geographic location, and plan assignment.

The evaluation will meet the standards of leading academic institutions and academic journals. Data will be reported at the beneficiary, provider, health plan, and statewide levels. Significant attention will be given to ensuring use of the best available data. Where possible, evaluations will account for patient-case mix and severity, including use of comparison populations, such as SPD patients who did not undergo a transition either because they were continuously in managed care or remained in fee-for-service Medicaid for the continuity of care period. Data limitations will be identified and evaluations will account for these limitations. Raw and adjusted results will be presented in the final evaluation. In cases of missing data values, methods for replacement (viz. imputation) where appropriate will be employed and noted in the analyses. In all cases, robustness of approaches will be addressed and reported in the final evaluation report. The final evaluation report will also consider how the findings from the evaluation may be generalizable to the experiences of other Medi-Cal populations or to Medicaid populations in other states.

For both pre- and post- transition analyses, socioeconomic and demographic factors will be considered including race/ethnicity, gender, age, geographic area, diagnosis, language, and other factors (as identified through a public comment process). Data from the California Department of Public Health will be utilized to overlay these demographic factors with applicable health disparity considerations such as average income, tobacco utilization, and crime rates. A menu of the same metrics will be used and compared for both the pre- and post-transition populations. Because additional data are available for the post-transition population and only certain assessed requirements exist for the post-transition managed care delivery system, certain metrics and data will only be available for the post-period. All measures will be benchmarked against available state and national standards and benchmarks. For example, NCQA Medicaid benchmarks for performance will be utilized when possible.

State vital statistics databases will be also used to report on the number of deaths by diagnosis. This information will be presented as a comparison across transition counties and non-transition counties.

Data Sources and Types

Data Collection or Data Sources (by Performance Measure)

The primary performance evaluation will be done using data routinely collected by the Medi-Cal program (fee-for-service claims, managed care encounters / claims, mental health claims) supplemented by all-payer patient level data collected by the state and federal government. Patient-level data include all-payer hospital discharge and emergency department encounter data (Office of Statewide Health Planning and Development), mortality (Office of Vital Statistics), use of nursing homes (Minimum Data Set, CMS), and use of home healthcare services (OASIS, CMS), .

Qualitative and quantitative data available to DHCS both from data routinely collected directly or collected in partnership with the State will be utilized. The evaluation will consider: process and outcomes measures (MCP encounter data, FFS claims, vital statistics, all-payer hospital-based care encounters, HEDIS) (pre- and post- transition); beneficiary satisfaction (Ombudsman, call center, grievances and appeals, beneficiary surveys) (post-transition); administrative functions (beneficiary surveys) (post-transition); and structural measures of quality and access (panel composition, disabled access, distance to providers).

Baseline Data and Pre-Transition Evaluation

Baseline data that will be utilized to assess the pre-transition population will include FFS claims data, all-payer hospital-based care encounter data, qualitative interviews with a sample of beneficiaries, and HEDIS metrics. The pre-transition analysis will review the beneficiary's experience at least 24 months prior to the transition to managed care.

The pre-transition evaluation will review access to care metrics, which will provide an indication of the beneficiaries' ability to access primary care providers within a close proximity to their residence while in FFS. In addition, the pre-transition evaluation will utilize HEDIS metrics to determine access to services. They will be calculated administratively using FFS claims data for the pre-transition period. Independent patient-level data unaffected by the SPD transition to managed care include Medicaid enrollment data, all-payer hospital-based care data, California vital statistics database, and the Minimum Data Set of Long Term Care. Where possible, we will use these data to create supplemental measures that can be used alongside FFS claims and MCP encounter data.

HEDIS measures are designed for plan-based evaluations. DHCS and the contractor will design measures analogous to some existing HEDIS measures using existing routinely collected data, including claims, encounters, MDS, and OASIS. These measures will not be necessarily identical to HEDIS measures as the team will not have clinical data (i.e., lab results, radiology reports, etc.) to work with. In addition, it is possible to operationalize a number of expert consensus quality of care measures (e.g. reported to NCQA or reported in the AHRQ quality measurement warehouse), some of which have not been used with routinely collected data. These measures will allow the team to not only assess plan performance, but also patient care and outcomes, accounting for case-mix. These measures will be employed in the pre- and post-transitional periods.

Average annual costs and avoidable costs will be estimated. All of the aforementioned factors will provide a baseline understanding of the SPD beneficiary's overall experience when care was received through the FFS delivery system.

The data measures and sources that will be used to measure the pre-transition experience consist of, but are not limited to:

I. Access to Care

A. Network Access

1. Type of available specialists
2. Type of other service providers
 - a. Durable medical equipment providers
 - b. Pharmacies
 - c. Home healthcare agencies
 - d. Skilled nursing facilities and licensed inpatient rehab facilities

Data Sources: Medicaid provider enrollment data, Medicaid beneficiary enrollment data

B. Beneficiary Satisfaction

1. Plan switching / enrollment patterns (indirect measure)

Data Sources: Medicaid beneficiary enrollment data

II. Quality of Care (for beneficiaries transitioned to managed care)

A. HEDIS/EAS rates stratified measures by SPD/Non-SPD (see attached for NCQA measure specifications)

1. All-Cause Readmissions – NCQA
 - a. Ambulatory Care – NCQA
 - b. Outpatient visits
 - c. Emergency department visits
2. Annual Monitoring for Patients on Persistent Medications - NCQA
3. Comprehensive Diabetes Care (8 indicators) – NCQA
4. Rate of post-discharge follow-up after hospitalization or ED visit – NCQA

B. Additional stratified measures by SPD/Non-SPD

1. Hospitalization
 - a. Cause-specific rates of hospitalization
 - b. Cause-specific readmissions
 - c. Mortality
2. Ambulatory Care
 - a. Outpatient visits
 - (1) Cause-specific rates of visits
 - (2) Visit rates prior to hospitalizations
 - b. Emergency department visits
 - (1) Cause-specific rates of ED visits
 - (2) Hospitalization after discharge from ED
 - (3) Mortality
3. Medication Use
 - a. Adherence
 - b. Changes in medication management

Data Sources: FFS claims (including pharmacy data), all-payer hospital encounter data, California Death Statistical Master File, HEDIS data, Minimum Data Set, MCP encounter data (including pharmacy data)

II. Cost of Coverage (for beneficiaries enrolled in the delivery system for a minimum of ten months and transitioned to managed care)

- A. Average annual cost for Medi-Cal covered health¹ services per beneficiary
 - B. Avoidable institutionalization costs:
 - 1. Ratio per 10,000 beneficiaries of and average cost per beneficiary for length of stays greater than ten days in an acute care hospital
 - 2. Ratio per 10,000 beneficiaries of and average cost per beneficiary stay for length of stays less than 60 days in a Skilled Nursing Facility (SNF)
 - 3. Ratio per 10,000 beneficiaries of and average cost per beneficiary stay for length of stays less than 90 days in an acute hospital stay plus SNF
 - C. Average annual pharmacy costs per beneficiary
 - D. Ratio per 10,000 beneficiaries of and average emergency room costs for non-emergency visits (as defined by NCQA)
 - E. Ratio per 10,000 beneficiaries of and average DME costs broken down by type and setting (emergency and non-emergency; ambulatory and institutional)
- Data Source(s):** FFS claims, all-payer hospital encounter data, pharmacy data, Minimum Data Set, Managed Care Encounter Data, Medicaid beneficiary enrollment data

Post-Transition Evaluation

Different types of data will be used to analyze the post-transition beneficiary experience. The data will support analysis of the same metrics utilized in FFS as described above as well as additional data sets that are accessible through the managed care delivery system and an independent External Quality Review Organization (EQRO). HEDIS rates will be calculated utilizing MCP encounter data for hybrid measures; and audited EQRO data will be utilized for administrative measures. This approach will allow for an equal comparison of the measures across the FFS and managed care delivery systems.

Additionally, data collected by Carrie Graham, University of California at Berkeley, during a qualitative study will be utilized to gauge beneficiary satisfaction including care coordination (see attachment for additional information about the questions and findings from the study).

Lastly, MCP network data, which the State collects monthly, as well as MCP network certifications for the SPD transition, will also be utilized to support analysis of provider data and access. Moreover, other data sources will be utilized, such as calls to the Ombudsman, State Fair Hearing and Independent Medical Review (IMR) information, and grievances and appeals data. The State reports these data in the quarterly progress reports to CMS and serves as indicators regarding beneficiary experience. The combination of all of the aforementioned data sources will allow the State to analyze the beneficiary's experience post-transition in a comprehensive way.

The data and measures that will be used for post-transition evaluation include, but are not limited to, the following:

- I. Access to Care
 - A. Network Access
 - 1. Distance/Travel Time to primary care provider from place of residence
 - 2. Type of available specialists in network
 - 3. Type of other service providers in network
 - a. Durable medical equipment providers
 - b. Pharmacies
 - c. Home healthcare agencies
 - d. Skilled nursing facilities and licensed inpatient rehab facilities
 - 4. Out of network referrals and access

¹ California is in the process of determining whether county mental health and substance use disorder treatment costs will be included for purposes of this analysis.

- a. Frequency of out-of-network referrals per 10,000 beneficiaries
Compared to non-SPD population
- 5. Ease of getting appointments with primary care doctor (beneficiary survey)
- 6. Ease of getting appointments with specialist (beneficiary survey)

Data Sources: MCP network certifications; MCP network provider files; Beneficiary surveys (Dr. Carrie Graham)

B. Beneficiary Satisfaction

- 1. Beneficiary satisfaction with managed care benefits (Likert scale)
- 2. Beneficiary satisfaction with quality of care (Likert scale)
- 3. Benefit differences from FFS to managed care (Likert scale)
 - a. Prescription medications
 - b. Specialty care
 - c. Medical equipment and supplies
 - d. Primary care
- 4. Plan switching / enrollment patterns (indirect measurement)

Data Sources: Beneficiary surveys (Dr. Carrie Graham); Medicaid enrollment, eligibility

C. Care Coordination/Care Transition

- 1. Plan navigation – Do you know how to:
 - a. Get a prescription filled
 - b. Make an appointment with a PCP
 - c. Get tests you need
 - d. Get health advice over the phone
 - e. Find a doctor
 - f. Get medical equipment and supplies
 - g. Make an appointment with a specialist
 - h. Know that you can switch doctors at any time
 - i. Know about the continuity of care policies
- 2. Member services
 - a. Were you called by your plan to discuss your health needs? (Yes/No)
 - b. Experience with member services (Likert scale)
 - c. Help finding doctors and getting the services needed (Likert scale)

Data Sources: Beneficiary surveys (Dr. Carrie Graham)

- 3. SPD Specific Complaints – rate per 10,000 beneficiaries
 - a. Grievances and appeals
 - b. State Fair Hearings
 - c. Independent Medical Reviews
 - d. Calls to Ombudsman

Data Sources: Quarterly MCP grievances and appeals data; State Fair Hearings; Independent Medical Reviews; Quarterly progress report data

II. Quality of Care

A. HEDIS/EAS rates stratified measures by SPD/Non-SPD (see attached for NCQA measure specifications)

- 1. All-Cause Readmissions – NCQA
 - a. Ambulatory Care – NCQA
 - b. Outpatient visits
 - c. Emergency department visits
- 2. Annual Monitoring for Patients on Persistent Medications - NCQA

3. Comprehensive Diabetes Care (8 indicators) – NCQA
 4. Rate of post-discharge follow-up after hospitalization or ED visit – NCQA
- B. Additional stratified measures by SPD/Non-SPD
1. Hospitalization
 - a. Cause-specific rates of hospitalization
 - b. Cause-specific readmissions
 - c. Mortality
 2. Ambulatory Care
 - a. Outpatient visits
 - (1) Cause-specific rates of visits
 - (2) Visit rates prior to hospitalizations
 - b. Emergency department visits
 - (1) Cause-specific rates of ED visits
 - (2) Hospitalization after discharge from ED
 - (3) Mortality
 3. Medication Use
 - a. Adherence
 - b. Changes in medication management

Data Sources: MCP encounter data (including pharmacy data); audited EQRO HEDIS rates, all-payer hospital data, California Death Statistical Master File, Minimum Data Set

- III. Cost of Coverage (for beneficiaries enrolled in the delivery system for a minimum of ten months)
- A. Average annual cost for Medi-Cal covered health services per beneficiary (note: costs will be a combination of FFS and capitation both to MCPs and from MCPs to delegated entities)
 - B. Avoidable institutionalization costs:
 1. Ratio per 10,000 beneficiaries of and average cost per beneficiary for length of stays greater than ten days in an acute care hospital
 2. Ratio per 10,000 beneficiaries of and average cost per beneficiary stay for length of stays less than 60 days in a Skilled Nursing Facility (SNF)
 3. Ratio per 10,000 beneficiaries of and average cost per beneficiary stay for length of stays less than 90 days in an acute hospital stay plus SNF
 - C. Average annual pharmacy costs per beneficiary
 - D. Ratio per 10,000 beneficiaries of and average emergency room costs for non-emergency visits (as defined by NCQA)
 - E. Ratio per 10,000 beneficiaries of and average DME costs broken down by type and setting (emergency and non-emergency; ambulatory and institutional)

Data Sources: MCP encounters; Rate Development Template (RDT/Mercer; FFS claims and encounter; audited EQRO HEDIS, Medicaid beneficiary enrollment data, Minimum Data Set

Data Analysis Strategy, Challenges and Proposed Solutions

Communication of Findings

The evaluation will provide a general analysis and description of the population, including a report of enrollment numbers and analysis by demographic factor. The evaluation will also contain both performance metrics and a narrative description in order to present the full experience of SPDs during the transition.

Upon submission of the draft SPD evaluation design to the Centers for Medicare and Medicaid Services (CMS), it will be shared publically. The document will be distributed via email to the State's stakeholder waiver distribution list and posted on the State's website for public comment. Specifically, the State will request comment on the evaluation approach and questions that the evaluation should

address. It will also be presented and discussed at the State's Waiver Stakeholder Advisory Committee (SAC) and Managed Care Advisory Group (MCAG). DHCS will send the findings out to the Stakeholder listserv owned by Office of Communications. Once shared publicly, DHCS will have open forum discussions with existing stakeholder workgroups (SAC, MCAG). Updates to the design will be made based on stakeholder comment received during these meetings or in writing. The design will be finalized in conjunction with the independent entity and submitted to CMS for final approval.

Based on the methodology used to assess the pre- and post-transition population, the evaluation will provide recommendations for programmatic changes relating to access and quality of care, as well as overall cost implications for the SPD population. The final evaluation report is due December 31, 2021 at the completion of the Medi-Cal 2020 Waiver. The findings from the assessment will allow DHCS to evaluate the experience of SPDs in the managed care delivery system as well as inform DHCS as to best practices and lessons learned.

Timeline

Year 1: Obtain data from DHCS and other agencies for analysis.

Year 2: Development of data measures and analysis.

Year 3: Continuation of development of data measures and analysis for final report.

Year 4: Complete report.

Independent Evaluator

The State will contract with an independent entity and ensure that the entity is free of conflict of interest to conduct an evaluation of the SPD transition to the Medi-Cal managed care delivery system. The State will contract with an entity that does not have a direct relationship to the State of California, Department of Health Care Services (DHCS). A data use agreement will be included in the contract to allow for the sharing of data with and access to data by the independent entity for purposes of conducting the SPD transition evaluation. The State will seek application(s) from interested entities that have been identified based on prior experience and expertise in analyzing the experience of the population and working with the data that would be analyzed. Proposals will be scored; if a minimal score is not achieved, the State will seek proposals from additional entities.