California's Fee-for-Service Medi-Cal Program Health Care Access Monitoring Plan

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Table of Contents

Table of Contents 2
Table of Figures 6
Table of Tables 10
Introduction 15
Background 17
Access Monitoring and Documentation Requirements 17
Summary of Access Monitoring Plan Requirements 17
Medi-Cal Overview 17
Eligibility 18
Benefits 18
Health Care Delivery System 19
Medi-Cal Population Characteristics 20
Medi-Cal Program Changes 22
Shifts to Managed Care 24
Population Expansions 27
Fee-for-Service: A Changed Landscape 29
The Role of Fee-for-Service in Medi-Cal 30
Mandatory Managed Care 33
Individuals Not Entitled to Full Scope State Plan Benefits 36
Dual Eligibles 39
Share-of-Cost 41
FFS Full-Scope Medi-Cal Only (No SOC, Non-Dual Eligible) 43
Characteristics of the Fee-for-Service Population 45
Literature Review 50
Primary Access Elements 50
Insurance Coverage 50
Provider Supply 51
Provider Reimbursement 55
Service Utilization and Other Elements of Access 56
Patient-Level Barriers 56
Andersen's Model for the Study of Access to Health Care Services 57
MACPAC Access Monitoring Framework 59
DHCS' Access Monitoring Framework 60

Foundational Concepts 60
Predisposing Characteristics of the Population 60
Enabling or Impeding Factors 61
Realized Access 62
Identified Access Domains 62
Methodology 62
Study Population 62
Baseline Study Periods 63
Data Availability 63
Access Evaluation Domains 64
Evaluation Domain: Beneficiary Participation 65
Evaluation Domain: Provider Participation 66
Evaluation Domain: Realized Access 69
Evaluation Domain: Obstetric Services and Births Outcomes 75
Evaluation Domain: Feedback 78
Evaluation Domain: Dental Eligibles and Utilization 80
Evaluation Domain: FFS Provider Reimbursement Rates 81
Access Monitoring Process 83
Understanding the Monitoring Process 85
Limitations of the Initial Monitoring Stage 86
Procedures for Continued Access Monitoring 87
Appendix A: Baseline Analysis 90
Domain: Beneficiary Participation 90
Introduction 90
Trend in Overall Medi-Cal Enrollment, 2008-2016 90
Distribution of FFS Medi-Cal Beneficiaries, by Age Group 91
Distribution of FFS Medi-Cal Beneficiaries, by Aid Category 92
Distribution of FFS Medi-Cal Beneficiaries, by Gender 94
Distribution of FFS Medi-Cal Beneficiaries, by Geographic Region 96
Distribution of FFS Medi-Cal Beneficiaries, by Race/Ethnicity 97
Distribution of FFS Medi-Cal Beneficiaries, by Primary Language Spoken 98
Conclusion 98
Domain: Provider Participation 100
Introduction 100

Providers by Provider Sub-Group and Geographic Region 102
Conclusion 125
Domain: Realized Access 126
Introduction 126
Utilization Trends 126
Pharmacy Utilization 133
Conclusion 135
Domain: Obstetric Services and Births Outcomes 136
Introduction 136
Characteristics of Medi-Cal FFS Funded Births 138
Initiation of Prenatal Care 141
Low-Birthweight among Singleton Births 144
Pre-Term among Singleton Births 149
Conclusion 152
Domain: Feedback 154
Introduction 154
Calls Received from FFS Medi-Cal Beneficiaries, by Quarter 155
Calls Received from FFS Medi-Cal Beneficiaries, by Month 155
Calls Received from FFS Medi-Cal Beneficiaries, by Geographic Region 156
Calls Received from FFS Medi-Cal Beneficiaries, by Aid Category 160
Calls Received from FFS Medi-Cal Beneficiaries, by Call Category 160
Top Three Call Categories, by Aid Category 161
Dedicated Webpage and Email 162
Conclusion 162
Domain: Dental 163
Introduction 163
Dental Providers 164
Beneficiary Participation and Utilization 165
Reimbursement Rates Comparison 178
Domain: FFS Provider Reimbursement Rates 182
Introduction 182
FFS Provider Reimbursement Rate Comparisons 183
Baseline Analysis Conclusions 184
Appendix B: FFS Medi-Cal Data Sources 185

Medi-Cal Claims and Encounters 185
Medi-Cal Provider Master File (PMF) 185
MIS/DSS Eligibility Tables 185
Appendix C: Aid and County Codes by Delivery System 186
Appendix D: Aid Code Categories 189
Appendix E: Geographic Region Categories 190
Appendix F: Dental Services' Geographic Region Categories 191
Appendix G: Dental Services' Procedure Code Descriptions 192
Appendix H: Provider Type Categories 193
Appendix I: Modified Call Categories 196
Appendix J: Demographics and Length of Enrollment 205
Appendix K: Comparison of Medicare to Medi-Cal FFS rates by Procedure Code 208
Works Cited 256

Table of Figures

Figure 1: Socioeconomic Characteristics of California's Nonelderly Adult Population by Insurance Coverage, 2013-14 CHIS 21

Figure 2: Health Characteristics of California's Nonelderly Adult Population by Insurance Coverage, 2013-2014 CHIS 22

Figure 3: Biannual Trend in Medi-Cal FFS and Managed Care Participation from January 2008-January 2016 23

Figure 4: Distribution of Cal MediConnect Participation in June 2016, by County 26

Figure 5: Distribution of Medi-Cal Participation in January 2013 and January 2016, by Delivery System 27

Figure 6: Certified Eligible Medi-Cal Beneficiaries Enrolled in Optional Target Low-Income Children Program (OTLICP) Aid Codes from December 2012 – December 2013 28

Figure 7: Certified Eligible Medi-Cal Beneficiaries Enrolled in the ACA Expansion Adult Ages 19-64 Aid Category from December 2013-December 2015 29

Figure 8: Distribution of Certified Eligible FFS Medi-Cal Beneficiaries who were Enrolled at any Point in 2015, by Administrative Category 33

Figure 9: Distribution of Certified Eligible FFS Medi-Cal Beneficiaries in 2015, by Managed Care Requirements 34

Figure 10: Distribution of Certified Eligible FFS Medi-Cal Beneficiaries in 2015, by Number of Months Assigned to FFS 35

Figure 11: Primary Care Service Visits Rate per 1,000 Member Months among Certified Eligible FFS Medi-Cal Beneficiaries in SFY 2014-15, by Length of FFS Enrollment 36

Figure 12: Distribution of FFS Certified Eligible Individuals Not Entitled to Full Scope State Plan Benefits Enrolled at any Point in 2015, by Aid Category 37

Figure 13: Distribution of Dual Eligible Medi-Cal Beneficiaries Enrolled at any Point in 2015, by Long-Term Care Enrollment Status 41

Figure 14: Percentage of Certified Eligible FFS Medi-Cal Beneficiaries with a Share-of-Cost Enrolled at any Point in 2015, by FFS Member Months 42

Figure 15: Count of Certified Eligible FFS Medi-Cal Beneficiaries Enrolled at any Point in 2015 with a Share-of-Cost, by FFS Member Months and Long-Term Care Enrollment Status 43

Figure 16: Distribution of Certified Eligible Medi-Cal Beneficiaries Enrolled at any Point in 2015, by Age Group and Delivery System 46

Figure 17: Distribution of Certified Eligible FFS Medi-Cal and Medi-Cal Managed Care Beneficiaries Enrolled at any Point in 2015, and California Residents in 2014, by Race/Ethnicity 47

Figure 18: Distribution of Certified Eligible Medi-Cal Beneficiaries in 2015, by Delivery System and Primary Language Spoken 48

Figure 19: Ronald Andersen's Framework for the Study of Access to Health Care Services 58

Figure 20: DHCS Access Monitoring Process 83

Figure 21: DHCS Access Monitoring Process Flow 85

Figure 22: Biannual Trend in Medi-Cal FFS and Managed Care Participation from January 2008-January 2016 91

Figure 23: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Age Group 92

Figure 24: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Aid Category 93

Figure 25: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Gender 94

Figure 26: Distribution of Female Beneficiaries with 11+ Months of FFS Enrollment in SFY 2014-15 by Age, and Distribution of Females with 11+ Months of FFS Enrollment Between the Ages of 15 and 44, By Aid Category 95

Figure 27: Distribution of Females with 11+ Months of FFS Enrollment Between the Ages of 15 and 44 in SFY 2014-15, By Aid Category 95

Figure 28: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Geographic Region 96

Figure 29: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Race/Ethnicity 97

Figure 30: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Primary Language Spoken 98

Figure 31: Total Medi-Cal Participating Primary Care Providers from SFY 2013-14 to 2014-15, by Geographic Region 103

Figure 32: Statewide FFS Medi-Cal Primary Care Service Areas and FFS Primary Care Provider Locations in 2014-15 108

Figure 33: Total Medi-Cal Participating Specialist Providers from SFY 2013-14 to 2014-15, by Geographic Region 110

Figure 34: Total Medi-Cal Participating Behavioral Health Providers from SFY 2013-14 to 2014-15, by Geographic Region 113

Figure 35: Total Medi-Cal Participating Pre- and Post-Natal Obstetric Providers from SFY 2013-14 to 2014-15, by Geographic Region 116

Figure 36: Total Medi-Cal Participating Home Health Providers from SFY 2013-14 to 2014-15, by Geographic Region 119

Figure 37: Total Medi-Cal Participating Pharmacies from SFY 2013-14 to 2014-15, by Geographic Region 121

Figure 38: Statewide Full-Scope FFS Medi-Cal Pharmacy Service Areas and FFS Medi-Cal Pharmacy Locations in SFY 2014-15 123

Figure 39: Distribution of California Births in 2013, by Payer Type and Delivery System..... 138

Figure 40: Distribution of FFS Medi-Cal Births in 2013, by Age Group..... 139

Figure 41: Distribution of FFS Medi-Cal Births in 2013, by Aid Category 139

Figure 42: Distribution of FFS Medi-Cal Births in 2013, by Race/Ethnicity 140

Figure 43: Distribution of FFS Medi-Cal Births in 2013, by Geographic Region 140

Figure 44: Percent of Early Prenatal Care Initiation among new Californian Mothers in 2013, by Payer Type..... 141

Figure 45: Percent of Early Prenatal Care Initiation among FFS Medi-Cal Mothers in 2013, by Scope of Coverage 141

Figure 46: Percent of Early Prenatal Care Initiation among FFS Medi-Cal Mothers in 2013, by Aid Category..... 142

Figure 47: Percent of Early Prenatal Care Initiation among FFS Medi-Cal Mothers in 2013, by Geographic Region..... 143

Figure 48: Percent of Early Prenatal Care Initiation among FFS Medi-Cal Mothers in 2013, by Age Group 143

Figure 49: Proportion of Early Prenatal Care Initiation among FFS Medi-Cal Mothers in 2013, by Race/Ethnicity 144

Figure 50: Percent of Low-Birthweight Singleton Births in 2013, by Payer Source 144

Figure 51: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2013, by Timing of Prenatal Care Initiation..... 145

Figure 52: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2013, by Scope of Coverage 146

Figure 53: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2013, by Aid Category..... 146

Figure 54: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2013, by Geographic Region..... 147

Figure 55: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2013, by Maternal Age Group 148

Figure 56: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2012, by Race/Ethnicity 148

Figure 57: Percent of Preterm Singleton Births in California in 2013, by Payer Source..... 149

Figure 58: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2013, by Timing of Prenatal Care Initiation..... 149

Figure 59: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2012, by Scope of Coverage 150

Figure 60: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2013, by Aid Category 150

Figure 61: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2013, by Region 151

Figure 62: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2013, by Maternal Age Group 151

Figure 63: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2012, by Race/Ethnicity 152

Figure 64: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Quarter 155

Figure 65: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Geographic Region (Southern Only) 157

Figure 66: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Geographic Region (Non-Southern) 158

Figure 67: Aggregate Average Medi-Cal Rates as Percentage of Medicare Rates 183

Figure 68: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Age Group and Duration of Enrollment 205

Figure 69: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Aid Category and Duration of Enrollment 205

Figure 70: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Gender and Duration of Enrollment 206

Figure 71: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Region and Duration of Enrollment 206

Figure 72: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Race/Ethnicity and Duration of Enrollment 207

Figure 73: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Language Spoken and Duration of Enrollment 207

Table of Tables

Table 1: Medi-Cal FFS Beneficiaries Shifting to Medi-Cal Managed Care, 2008-2016 24

Table 2: Medi-Cal Only Seniors and Persons with Disabilities Beneficiaries Shifting to Medi-Cal Managed Care 25

Table 3: FFS Administrative Categories and Access Limitations 31

Table 4: Interpreting the Utilization of Restricted-Scope Services 38

Table 5: Medicare vs. Medi-Cal Services For Dually Eligible Individuals 39

Table 6: Top 10 Aid Codes in the FFS Full-Scope Medi-Cal Only Group, 2015 44

Table 7: Median Age of Medi-Cal FFS Beneficiaries and Medi-Cal Managed Care Beneficiaries in 2015, and California Residents in 2014 45

Table 8: Proportion of the Population with a Disability among Certified Eligible FFS Medi-Cal and Medi-Cal Managed Care Beneficiaries in 2015, and California Residents in 2014 46

Table 9: Distribution of Certified Eligible FFS Medi-Cal and Medi-Cal Managed Care Beneficiaries in 2015, and California Residents in 2014, by Metropolitan Status 48

Table 10: Distribution of Certified Eligible FFS Medi-Cal and Medi-Cal Managed Care Beneficiaries in 2015, and California Residents in 2014, by Gender 49

Table 11: Primary Care Category of Service Definition 70

Table 12: Specialty Category of Service Definition 70

Table 13: Behavioral Health Provider Definition 72

Table 14: Pre and Post-Natal Service Category 72

Table 15: Health Home Service Category 72

Table 16: Pharmacy Service Category 73

Table 17: Total Medi-Cal Participating Primary Care Providers in SFY 2013-14, by Provider Sub-Group and Geographic Region 102

Table 18: Total Medi-Cal Participating Primary Care Providers in SFY 2014-15, by Provider Sub-Group and Geographic Region 103

Table 19: FFS Full-Scope Medi-Cal Only Beneficiary-to-Primary-Care-Provider Ratios in SFY 2013-14 and 2014-15, by Geographic Region 104

Table 20: Total Medi-Cal Participating Primary Care Providers in SFY 2013-14, by Service Setting and Geographic Region 105

Table 21: Total Medi-Cal Participating Primary Care Providers in SFY 2014-15, by Service Setting and Geographic Region 105

Table 22: Proportion of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Primary Care Service Area, by Geographic Region 106

Table 23: Average Driving Time to Reach Primary Care Appointment among FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Primary Care Service Area, by Geographic Region 106

Table 24: Average Driving Distance to Reach Primary Care Appointment among FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Primary Care Service Area, by Geographic Region 107

Table 25: Total Medi-Cal Participating Specialist Providers in SFY 2013-14, by Provider Sub-Group and Geographic Region 109

Table 26: Total Medi-Cal Participating Specialist Providers in SFY 2014-15, by Provider Sub-Group and Geographic Region 109

Table 27: Total Medi-Cal Participating Specialist Providers in SFY 2013-14, by Service Setting and Geographic Region 111

Table 28: Total Medi-Cal Participating Specialist Providers in SFY 2014-15, by Service Setting and Geographic Region 111

Table 29: Total Medi-Cal Participating Behavioral Health Providers in SFY 2013-14, by Provider Sub-Group and Geographic Region 112

Table 30: Total Medi-Cal Participating Behavioral Health Providers in SFY 2014-15, by Provider Sub-Group and Geographic Region 113

Table 31: Total Medi-Cal Participating Behavioral Health Providers in SFY 2013-14, by Service Setting and Geographic Region 114

Table 32: Total Medi-Cal Participating Behavioral Health Providers in SFY 2014-15, by Service Setting and Geographic Region 114

Table 33: Total Medi-Cal Participating Pre- and Post-Natal Obstetric Providers in SFY 2013-14, by Provider Sub-Group and Geographic Region 115

Table 34: Total Medi-Cal Participating Pre- and Post-Natal Obstetric Providers in SFY 2014-15, by Provider Sub-Group and Geographic Region 116

Table 35: Total Medi-Cal Participating Pre- and Post-Obstetric Providers in SFY 2013-14, by Service Setting and Geographic Region 117

Table 36: Total Medi-Cal Participating Pre- and Post-Obstetric Providers in SFY 2014-15, by Service Setting and Geographic Region 117

Table 37: Total Medi-Cal Participating Home Health Providers in SFY 2013-14, by Geographic Region 118

Table 38: Total Medi-Cal Participating Home Health Providers in SFY 2014-15, by Geographic Region 118

Table 39: Total Medi-Cal Participating Home Health Providers in SFY 2013-14, by Service Setting and Geographic Region 119

Table 40: Total Medi-Cal Participating Home Health Providers in SFY 2014-15, by Service Setting and Geographic Region 120

Table 41: Total Medi-Cal Participating Pharmacies in SFY 2013-14, by Geographic Region 120

Table 42: Total Medi-Cal Participating Pharmacies in SFY 2014-15, by Geographic Region 121

Table 43: Percent of Full-Scope FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Pharmacy Service Area, by Geographic Region 122

Table 44: Average Driving Time to Reach Nearest Pharmacy among Full-Scope FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Pharmacy Service Area, by Geographic Region 124

Table 45: Average Driving Distance to Reach Nearest Pharmacy among Full-Scope FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Pharmacy Service Area, by Geographic Region 125

Table 46: Visit Rates by Service Category, Statewide, Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15 127

Table 47: Visit Rates by Service Category and Region Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15 127

Table 48: Visit Rates by Service Category and Age Group Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15 129

Table 49: Visit Rates by Service Category and Gender Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15 130

Table 50: Visit Rates by Service Category and Aid Category Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15 131

Table 51: Visit Rates by Service Category and Race/Ethnicity Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15 132

Table 52: Statewide Pharmacy Claim Lines per 1,000 Member Months; July 2012 to June 2015 133

Table 53: Pharmacy Claim Lines per 1,000 Member Months, by Geographic Region; July 2012 to June 2015 133

Table 54: Pharmacy Claim Lines per 1,000 Member Months, by Age Group; July 2012 to June 2015 134

Table 55: Pharmacy Claim Lines per 1,000 Member Months, by Gender; July 2012 to June 2015 134

Table 56: Pharmacy Claim Lines per 1,000 Member Months, by Aid Category; July 2012 to June 2015 134

Table 57: Pharmacy Claim Lines per 1,000 Member Months, by Race/Ethnicity; July 2012 to June 2015 135

Table 58: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Month 155

Table 59: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Geographic Region and Month 159

Table 60: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Aid Category 160

Table 61: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Call Category 161

Table 62: Top Three Categories of Calls Received from FFS Medi-Cal Beneficiaries in the Parent/Caretaker Relative & Child Aid Category in SFYs 2013-14 and 2014-15 161

Table 63: Top Three Categories of Calls Received from FFS Medi-Cal Beneficiaries in the Seniors and Persons with Disabilities Aid Category in SFYs 2013-14 and 2014-15 162

Table 64: Denti-Cal Provider Enrollment - Active Offices & Renderers in CY 2014 and 2015, by Geographic Region 164

Table 65: Proportion of FFS Medi-Cal Beneficiaries Ages 0-20 Who Received a Preventive Dental Service, Any Dental Service, or a Dental Visit at a Clinic in CY 2014, by Age Group and Geographic Region 165

Table 66: Proportion of FFS Medi-Cal Beneficiaries Ages 0-20 Who Received a Preventive Dental Service, Any Dental Service, or a Dental Visit at a Clinic in CY 2015, by Age Group and Geographic Region 171

Table 67: Percentage of 25 Most Utilized Denti-Cal Procedures Reimbursement Rates in SFY 2013-2014 in Relation to Other Comparable Medicaid Programs 178

Table 68: Percentage of 25 Most Utilized Denti-Cal Procedures Reimbursement Rates in SFY 2014-2015 in Relation to Other Comparable Medicaid Programs 180

Table 69: Aggregate Average Medi-Cal Rates as Percentage of Medicare Rates 183

Table 70: County Codes in 2015 by Delivery Type and Dual Status 186

Table 71: Mandatory Managed Care – An Exemption is Required for Beneficiaries to Stay in FFS – Aid Codes in 2015 by Delivery Type, County, and Dual Status 186

Table 72: Voluntary - Beneficiaries May Choose to Stay in FFS - Aid Codes in 2015 by Delivery Type, County, and Dual Status 187

Table 73: FFS Only – Beneficiaries are not able to Enroll in Managed Care Plans - Aid Codes in 2015 by Delivery Type, County, and Dual Status 188

Table 74: Aid Code Grouping Schema 189

Table 75: Geographic Region Grouping Schema 190

Table 76: Dental Services' Geographic Region Grouping Schema 191

Table 77: Dental Services' Procedure Code Descriptions 192
Table 78: Description of Provider Types Used in Provider Participation and Service Utilization Measures 193
Table 79: Modified Call Categories Used in Feedback Measure 196
Table 80: Physician Specialist Services 208
Table 81: Primary Care Services 253
Table 82: Behavioral Health Services 255
Table 83: Pre- and Post- Natal Services 255

Introduction

California's Medicaid program, Medi-Cal, provides health care services for millions of low income individuals including families, seniors, and persons with disabilities. Medicaid was authorized in 1965 and makes federal funds available to participant states that agree to administer their programs in accordance with title XIX of the Social Security Act. The Centers for Medicare & Medicaid Services (CMS) provides federal oversight of state Medicaid programs, and ensures states' compliance with title XIX requirements through the development, issuance, and enforcement of federal Medicaid regulations.

In what has become known as the "equal access clause," section 1902(a)(30)(A) of the Social Security Act requires states to have in place methods and procedures to assure that "payments are consistent with efficiency, economy, and quality of care and are sufficient to enlist enough providers so that care and services are available under the plan at least to the extent that such care and services are available to the general population in the geographic area."[1]

In November of 2015, CMS finalized amendments to Subpart B of part 447 of title 42 of the Code of Federal Regulations (42 CFR Part 447) (the "final rule") that address states' methods for assuring access to covered Medicaid services in Fee-for-Service (FFS) delivery systems [2]. These regulations detail a standard process for each state to follow to document compliance with section 1902(a)(30)(A) of the Social Security Act, including the design and development of an access monitoring plan that facilitates analysis of specific health care measures and provider/service payment reviews, both on a recurring basis and under certain circumstances required by federal Medicaid regulation. [3]

The California Department of Health Care Services (DHCS) is directly responsible for overseeing access to health care services for Medi-Cal beneficiaries enrolled in California's FFS delivery system. DHCS developed this monitoring plan in response to the new requirements of 42 CFR Part 447, and to define the systematic and data-driven approach for the ongoing measuring and monitoring access to health care services for individuals participating in Medi-Cal's traditional FFS delivery system.

DHCS' framework for measuring and monitoring access in Medi-Cal's FFS delivery system is adapted from a synthesis of several sources, including the Institute of Medicine (IOM), the Agency for Healthcare Quality and Research (AHRQ), Congress' Medicaid and Children's Health Insurance Program (CHIP) Payment and Access Commission (MACPAC), and the published works of health services researchers. The framework incorporates the idea that access is the act of linking a population to needed and appropriate health care services. DHCS' framework includes the following components:

1. Predisposing Characteristics of the Population
    - A population's demographic and health composition are important predisposing factors to accessing health care services, and often drive the need for such services.
2. Enabling or Impeding Factors
    - Many enabling or impeding factors, including national and state economic and political influences, as well as health system factors, can impact access to FFS Medi-Cal services.
3. Realized Access
    - The appropriate and timely use of health care services is included in the model as outputs or evidence that health care access was realized.

Based on these components, DHCS identified evaluation domains focused on beneficiary participation, provider availability, and service utilization. DHCS' access monitoring process will be divided into seven domains:

1.) Beneficiary Participation,
2.) Provider Participation,
3.) Realized Access (Service Utilization),
4.) Obstetric Services and Births Outcomes,
5.) Feedback,
6.) Dental, and
7.) Provider Reimbursement Rates.

These core domains were selected to provide a broad picture of health care access in Medi-Cal's FFS delivery system, while taking into account the limitations of readily available data sources, the time required for reporting, and the unique administrative characteristics of the FFS Medi-Cal population. The set of domains and analyses identified in this document will be used to track trends and identify any access deficiencies in FFS Medi-Cal moving forward.

Background

Access Monitoring and Documentation Requirements

DHCS developed this monitoring plan in response to CMS' new requirements for states' documentation of access to care and service payment rates. In November 2015, CMS released its final rule with a comment period along with a related request for information (RFI) on access to care under Medicaid FFS. The final rule primarily focuses on what states must do to document and report their approach to monitoring access to care in FFS delivery. These new requirements necessitate the design and development of an access monitoring plan. In addition, the final rule requires states to establish procedures to review the effects on beneficiary access of proposed rate reductions and payment restructuring.

Summary of Access Monitoring Plan Requirements

CMS requires that the access monitoring plan address and consider the following elements:

- Needs of the enrollees,
- Availability of providers,
- Changes in beneficiary utilization of covered services,
- Characteristics of the Medi-Cal beneficiary population; and
- Service payment information.

CMS requires that the following providers and services types be periodically analyzed in pursuant to its access monitoring plan at least once every three years:

- Primary Care providers/services,
- Physician Specialists/services,
- Behavioral Health providers/services,
- Pre- and Post-Natal Obstetric providers/services, and
- Home Health providers/services.

CMS also requires that California's access monitoring plan include a description of the data elements California will use to inform access monitoring and analysis, including data sources, methodologies, baselines, assumptions, trends and factors, and thresholds;[4] and mechanisms for facilitating beneficiary, provider, and other stakeholder input on access to care[5].

Medi-Cal Overview

Implemented in 1966, Medi-Cal is a public health insurance program that provides comprehensive health care services for low-income individuals including families with children, seniors, persons with disabilities, foster care, pregnant women, and low income people with

specific diseases such breast cancer or HIV/AIDS. Medi-Cal is financed equally by the State and federal government[6]. Medi-Cal is part of California's largest safety-net program whose providers are defined by their willingness to serve patients regardless of the patients' ability to pay for services rendered, and by the proportion of vulnerable populations included in their case mix. Medi-Cal funding is a vitally important factor in sustaining California's overall health delivery system.

Medi-Cal plays a significant role in providing health care coverage to California's overall population. In February 2016, Medi-Cal provided health care coverage for more than 13 million people, or roughly 33% of the state's population.[7] Medi-Cal also financed 50% of the State's births, and provided health care coverage for 50% of California's children.[8,9]

The role that Medi-Cal plays in providing health care coverage to the population varies by county. For instance, in counties such as Tulare and Merced, Medi-Cal provided coverage to roughly 50% of the population in September 2015. In other counties such as Placer, Marin, San Mateo, and El Dorado, approximately 20% of residents were enrolled in Medi-Cal during the same time period. Of particular note, within Los Angeles County, where more than one-quarter of the state population resides, close to 40% of the county's population was enrolled in Medi-Cal in September 2015.[10]

Eligibility

Individuals often become eligible for Medi-Cal based on economic challenges, but may also qualify on the basis of being diagnosed with a specific disease, medical condition, or through disability status. Particular eligibility groups include adults ages under 65 whose income is at or below 138% of FPL, indigent seniors 65 or older, people with disabilities, individuals who are blind, children, pregnant women, children in foster care programs, people without satisfactory immigration status, individuals diagnosed with breast or cervical cancer, HIV/AIDS, and others.

Some subpopulations may gain access to Medi-Cal-administered health care services only after experiencing an acute care hospital admission. In these cases, such individuals are not eligible for Medi-Cal at the time of admission, but gain Medi-Cal eligibility retroactively.[11] Other people become eligible because they cannot pay all of their medical expenses. These individuals must generally pay a portion of their medical expenses, known as a "share of cost," before Medi-Cal pays for services. Similarly, individuals that require institutional long term care become eligible for Medi-Cal covered services once they contribute a certain share of cost towards the monthly nursing home expenses (sometimes referred to "income spend down").[12]

Benefits

The federal government mandates a minimum set of benefits be available to beneficiaries who are eligible for full-scope Medi-Cal services. These full scope state plan benefits include but are

not limited to: outpatient (ambulatory) services; emergency services; hospital inpatient and outpatient services; maternity and newborn care; mental health and substance use disorder services; prescription drugs; laboratory; preventive and wellness services, and children's services. In addition to these mandatory services, California also provides optional benefits such as dental, home- and community-based waiver services, acupuncture, and medical equipment.[13]

Additionally, certain groups may only be eligible for a limited scope of coverage and not Medi-Cal's full scope. For example, certain individuals without Satisfactory Immigration Status (SIS) are only eligible for state-covered pregnancy services and federally required emergency medical care. Similarly, individuals whose eligibility pathway included the breast and cervical cancer treatment program may receive services limited their specific condition or disease.

Health Care Delivery System

There are two primary health care delivery systems in the Medi-Cal program: FFS and managed care. Following recent initiatives to expand coordinated care and organized delivery, described in further detail herein, managed care is now the predominant system employed in Medi-Cal. In 2015, nearly 80% of all Medi-Cal beneficiaries received services through the managed care delivery system, and when accounting for full-scope Medi-Cal populations, managed care enrollment is at approximately 90%.

In the FFS delivery model, the State pays the health care provider for each administered State plan service. In contrast, in the managed care delivery system, typically the state pays a contracted health plan a fixed capitated payment amount for each enrolled beneficiary. Managed care plans are then responsible for providing all delegated services.

Certain categories of service, or specialized types of services within a particular category, are not delegated to the primary Medi-Cal managed care plan. These "carve-outs" are either administered pursuant to standalone delivery arrangements (which can take either a FFS or managed care form, or both), or remain the responsibility of the State to reimburse through the FFS system.

For standalone delivery arrangements, the key examples in Medi-Cal are: (1) Specialty Mental Health Services delivered/reimbursed exclusively via County Mental Health Plans (MHPs) pursuant to the State's 1915(b) waiver; (2) Substance Use Disorder Services delivered/reimbursed via the FFS Drug Medi-Cal program, or in the future pursuant to approved county-based Drug Medi-Cal Organized Delivery System (DMC-ODS) pilots authorized by the "Medi-Cal 2020" Section 1115 demonstration project; and (3) Dental Services delivered/reimbursed via either FFS Denti-Cal or via standalone dental managed care plans in Sacramento and Los Angeles counties.

As reiterated by CMS in the preamble to the access final rule, section 1902(a)(30)(A) of the Social Security Act governs fee-for-service delivery, meaning State payments made directly to providers for services and not payments made to managed care entities.[14] As a result, this monitoring plan is tailored to account for the above described complexities in Medi-Cal delivery, and will facilitate analysis and review of access to care for the FFS populations that are not enrolled in a Medi-Cal managed care plan.

Access for services delivered through a Medi-Cal managed care plan, or for particular service categories delivered via standalone managed care arrangements such as MHPs, DMC-ODS pilots, or dental managed care plans, are subject to the separate requirements of 42 CFR Part 438 (e.g., network adequacy and quality reviews), and thus beyond the scope of this monitoring plan. However, for managed care enrollees accessing carve-out services through standalone FFS delivery arrangements (i.e., FFS Drug Medi-Cal and FFS Denti-Cal), their service utilization and access to care within these categories will be accounted for in this monitoring plan.

Aside from these standalone arrangements, there are also specialized types of services within a category, or a level of service utilization beyond an enumerated threshold, that are not delegated to contracted Medi-Cal managed care plans. For example, this type of carve-out includes certain prescription drugs. In the case of a managed care enrollee receiving a small portion of care within a particular service category by way of FFS, their utilization is still driven and coordinated by the primary Medi-Cal managed care plan. Because of the smaller magnitude, and concerns over the potential for skewed and inaccurate data or resultant analysis, this type of utilization by managed care enrolled beneficiaries is not incorporated into this monitoring plan.

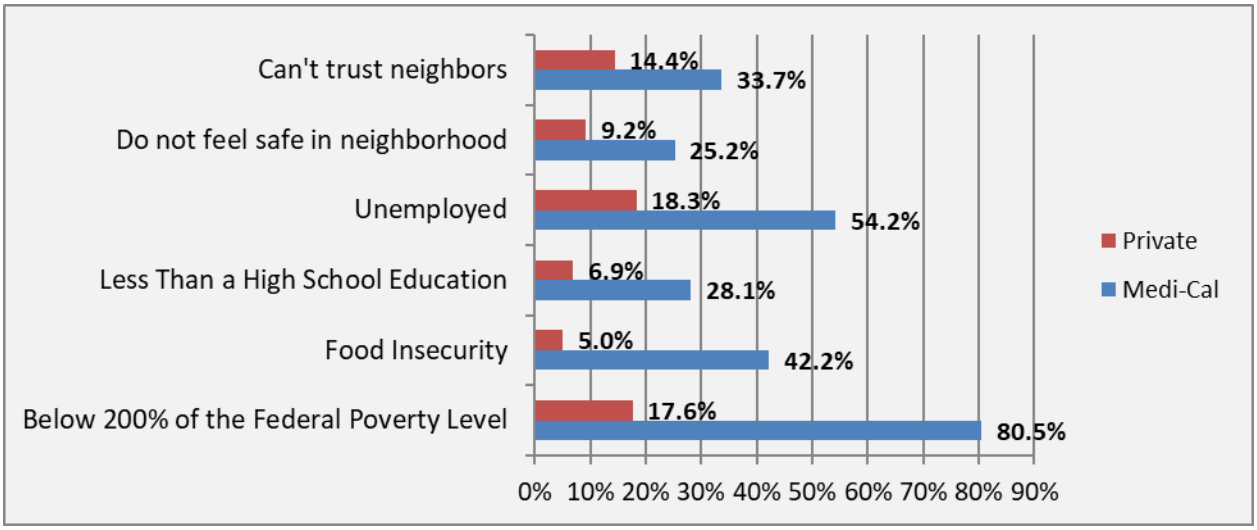
Medi-Cal Population Characteristics

The unique characteristics of Medi-Cal beneficiaries pose particular challenges to policy makers seeking to provide access to care. Knowledge of the Medi-Cal population's unique demographic and clinical characteristics provides administrators with a better understanding of how to shape policies and processes so that all beneficiaries are able to successfully obtain needed health care services. The California Health Interview Survey (CHIS), a population-based telephone survey representing California's noninstitutionalized population living in households, provides a source for examining the characteristics of the Medi-Cal population. Although the data does not allow DHCS to specifically isolate the experiences of FFS respondents, it remains a valuable source of information about the Medi-Cal population in general. The CHIS presents information on socio-demographic determinants of health and health behaviors that are not available in administrative data, and allows for comparisons between the Medi-Cal population and individuals with private insurance.

According to the 2013-14 CHIS, Medi-Cal beneficiaries tend to be of lower socioeconomic status. Most Medi-Cal beneficiaries (80.5%) had an income below 200% of the Federal Poverty Level (FPL) while less than a fifth (17.6%) of individuals with private insurance had an income below 200% FPL. Additionally, food insecurity was prevalent among the Medi-Cal population: Nonelderly adults enrolled in Medi-Cal were more than eight times as likely to experience food insecurity as individuals with private insurance (42.2% and 5.0%, respectively) (Figure 1).

In addition, nonelderly adults with Medi-Cal coverage generally have lower educational attainment, and were more than four times as likely as individuals with private insurance to not have a high school diploma (28.1% and 6.9%, respectively). In 2013-14, more than half of nonelderly adults enrolled in Medi-Cal were unemployed (54.2%), nearly three times the proportion among nonelderly adults with private insurance (18.3%). Additionally, nonelderly adults enrolled in Medi-Cal are less likely to live in safe and trusting neighborhoods. When compared to individuals with private insurance, nonelderly Medi-Cal adults were less likely to report feeling safe in their neighborhood (42.4% and 50.6%, respectively) and more likely to feel that they couldn't trust people in their neighborhood (33.7% and 14.4%) (Figure 1).

Figure 1: Socioeconomic Characteristics of California's Nonelderly Adult Population by Insurance Coverage, 2013-14 CHIS

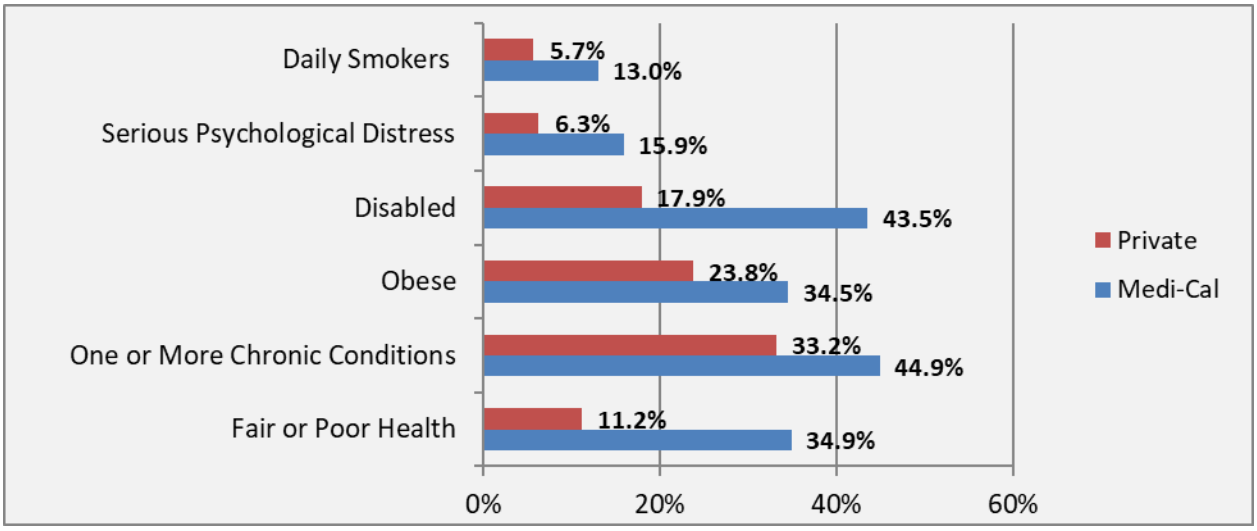


Source: Created by DHCS Research and Analytic Studies Division using 2013–14 California Health Interview Survey data obtained by the University of California at Los Angeles.

Medi-Cal beneficiaries tend to have more physical and mental health problems than other populations. Nonelderly adults enrolled in Medi-Cal were more than three times as likely as individuals with private insurance to have a fair or poor health status (34.9% and 11.2%, respectively). Medi-Cal beneficiaries were also more likely to have one or more chronic conditions than individuals with private insurance (44.9% and 33.2%, respectively). More than a

third of nonelderly adults enrolled in Medi-Cal were obese (34.5%), which was more than a third higher than among nonelderly adults with private insurance (23.8%). Additionally, nonelderly Medi-Cal adults were more likely to have serious psychological distress than individuals with private insurance (15.9% and 6.3%, respectively) (Figure 2).

Figure 2: Health Characteristics of California's Nonelderly Adult Population by Insurance Coverage, 2013-2014 CHIS



Source: Created by DHCS Research and Analytic Studies Division using 2013–14 California Health Interview Survey data obtained by the University of California at Los Angeles.

Unlike the more homogenous populations covered by commercial and employer-based private insurance, Medi-Cal provides medical coverage to a variety of disadvantaged sub-populations. The Medi-Cal population is comprised of a diverse set of sub-populations with unique demographic traits, clinical characteristics, benefit packages, and Medi-Cal administrative complexities. Understanding the general characteristics of the Medi-Cal population is the first step in a multi-dimensional process for understanding access to needed health care services. An assessment of access to health care services requires an examination of the relationships between human behavior, organizational structures, environmental influences, public policy, and economic factors.

Medi-Cal Program Changes

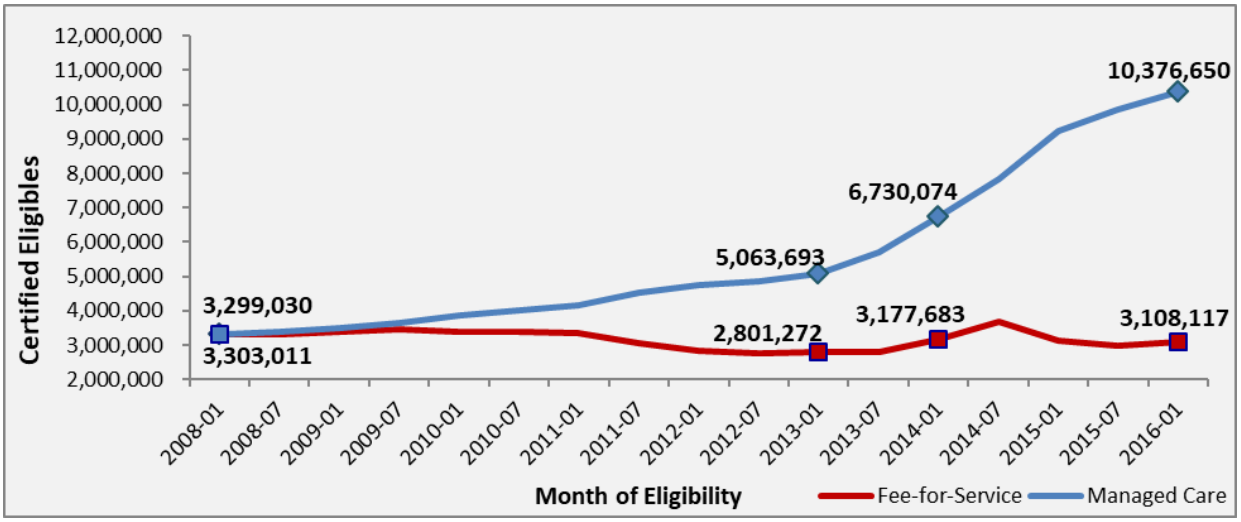
Along with a general understanding of how the overall Medi-Cal population differs from individuals with private health insurance, it is also important to understand how the FFS delivery system has come to serve only a fraction of the 13.5 million Medi-Cal beneficiaries, and how this fact impacts analyses of access to care.

In general, as noted above Medi-Cal beneficiaries receive care through one of two service delivery systems: FFS and managed care. Under the FFS delivery system, beneficiaries seek medical services from a Medi-Cal provider and the provider bills the Medi-Cal program for each

service administered. Under the FFS system, beneficiaries are responsible for locating their own providers. In the second delivery system, Medi-Cal managed care, DHCS contracts with health care plans to administer health care services to Medi-Cal plan members. The contracting health plans are paid a monthly payment for each Medi-Cal member and assume the financial risk for all delegated health care services. Health plans arrange and coordinate care for each member through a defined network of providers. Both FFS and managed care delivery systems serve beneficiaries who are eligible only for Medi-Cal benefits (Medi-Cal Only), as well as those dually eligible for Medi-Cal and Medicare benefits (Dual Eligibles).

Since 2008, California has progressively expanded the Medi-Cal managed care delivery system throughout the state. Counties once served exclusively by the FFS delivery system saw a majority of their Medi-Cal population shift into contracting managed care health plans. In addition, as the Medi-Cal program expanded to cover millions of new individuals, including those part of the Patient Protection and Affordable Care Act (ACA), California required most of them to enroll into managed care. The end result was a massive shift in individuals, away from FFS and into Medi-Cal managed care.

Figure 3: Biannual Trend in Medi-Cal FFS and Managed Care Participation from January 2008-January 2016



Source: Created by DHCS Research and Analytic Studies Division.

In January 2008, Medi-Cal's 6.6 million certified eligible[i] beneficiaries were evenly split between the two delivery systems, with managed care and FFS serving approximately 3.3 million beneficiaries each. But by January 2016, even as the overall Medi-Cal program had soared to cover roughly 13.5 million Californians, only 3.1 million individuals participated in the FFS

[i] In order to become "certified eligible," beneficiaries must qualify for the program through a valid eligibility determination and be actively enrolled.

system. Of all Medi-Cal beneficiaries, 77% were enrolled in managed care, while only 23% were enrolled in FFS (Figure 3).

Shifts to Managed Care

Geographic Expansions

Over the past decade, DHCS has focused on transforming the delivery of Medi-Cal services by expanding managed care into all 58 counties through Health Maintenance Organizations (HMO) and locally organized health plans. DHCS initiated the first major geographic expansion of Medi-Cal managed care delivery models in 1993. DHCS shifted a large proportion of FFS beneficiaries in 13 counties into managed care, doubling the number of managed care beneficiaries from 600,000 to 1.2 million. Since 1993, DHCS has continued geographic and eligibility-based expansions of Medi-Cal managed care.

Table 1: Medi-Cal FFS Beneficiaries Shifting to Medi-Cal Managed Care, 2008-2016

Managed Care Plan Model[ii]	Transition Counties	Transition Year	Approximate Number of Transition Beneficiaries
COHS	San Luis Obispo	2008	25,000
COHS	Sonoma, Merced	2009	117,000
Mixed	Working Disabled	2009	11,400
Two-Plan	Kings, Madera	2011	49,000
COHS	Mendocino, Marin, Ventura	2011	142,000
COHS	8 Northern Counties	2013	111,000
Regional[iii]	18 Sacramento Valley/ Sierra Range/Foothills Counties	2013	164,000
Imperial	Imperial	2013	44,000
San Benito	San Benito	2013	7,000
		Total	**659,000**

Source: Created by DHCS Research and Analytic Studies Division using data from the Management Information System/Decision Support System's (MIS/DSS) eligibility tables as of May 2016.

[ii] Detailed definitions of each Medi-Cal managed care model are available at: http://www.dhcs.ca.gov/provgovpart/Documents/MMCDModelFactSheet.pdf.

[iii] AB 1467, the health omnibus budget trailer bill, authorized the expansion of Medi-Cal managed care to Medi-Cal beneficiaries residing in 28 rural California counties. Previously, the Budget Act of 2005 authorized expansion of Medi-Cal managed care into 13 new counties. The counties of El Dorado, Imperial, Lake, Placer, and San Benito were part of this 13 county expansion effort. As a result, these counties became part of the 28 rural county expansion efforts. DHCS Quarterly Update Medi-Cal Managed Healthcare Expansion into Rural Counties and the Medi-Cal Managed Care Program *(July - September 2014)* (2015, February). Retrieved from http://www.dhcs.ca.gov/formsandpubs/Documents/Legislative%20Reports/Managed%20Care%20Quarterly/Mgd Care_Rural_Expansion.pdf

Between 2008 and 2013, California expanded managed care into 36 additional counties, shifting nearly 700,000 individuals into Medi-Cal managed care health plans. Table 1 displays the distribution of beneficiaries, by county and managed care plan model, that have shifted from FFS to managed care as part of geographic expansions. For instance, 111,000 FFS Medi-Cal Only beneficiaries shifted into a Medi-Cal managed care plan in September 2013 with the establishment of a single County Organized Health System (COHS) in Del Norte, Humboldt, Lake, Lassen, Modoc, Shasta, Siskiyou, and Trinity counties. Another 164,000 FFS Medi-Cal Only beneficiaries transitioned to managed care plans in November 2013 with the establishment of the Regional model in Alpine, Amador, Butte, Calaveras, Colusa, El Dorado, Glenn, Inyo, Mariposa, Mono, Nevada, Placer, Plumas, Sierra, Sutter, Tehama, Tuolumne, and Yuba counties (Table 1).

SPD Transition

In addition to the establishment of managed care within formerly FFS-only counties, beginning in 2011, Medi-Cal also initiated the mandatory enrollment of Medi-Cal Only Seniors and Persons with Disabilities (SPDs) into Medi-Cal managed care plans.

Table 2: Medi-Cal Only Seniors and Persons with Disabilities Beneficiaries Shifting to Medi-Cal Managed Care

Managed Care Eligibility Pathway	Transition Year	Transition Counties	Approximate Number of Transition Beneficiaries
Medi-Cal Only SPD	2011	Two-Plan & GMC model counties (16 counties)	148,000
Medi-Cal Only SPD	2012	Two-Plan & GMC model counties (16 counties)	92,000
Medi-Cal Only SPD	2014	Regional & Imperial model (19 counties)	24,000
		Total	**264,000**

Source: Data from the *Medi-Cal Managed Care Division's SPD Monitoring Dashboard* (January 2013). http://www.dhcs.ca.gov/individuals/Documents/MMCD_SPD/ChartsRptsData/SPD_Dashboard_Jan2013.pdf

The SPD population represents one of Medi-Cal's costliest and medically complex groups. This subpopulation, which formerly received care through the FFS delivery system, comprises aged and/or blind/disabled individuals who qualify for coverage on the basis of age, health/disability status, and/or a linkage to Supplemental Security Income.

In June 2011, DHCS began the transition of full-scope Medi-Cal Only SPDs from FFS to managed care in 16 counties where the Two-Plan and Geographic Managed Care (GMC) models were administered.[15] From June 2011 to May 2012, approximately 240,000 SPD beneficiaries were transitioned into a managed care plan in Alameda, Contra Costa, Fresno, Kern, Kings, Los

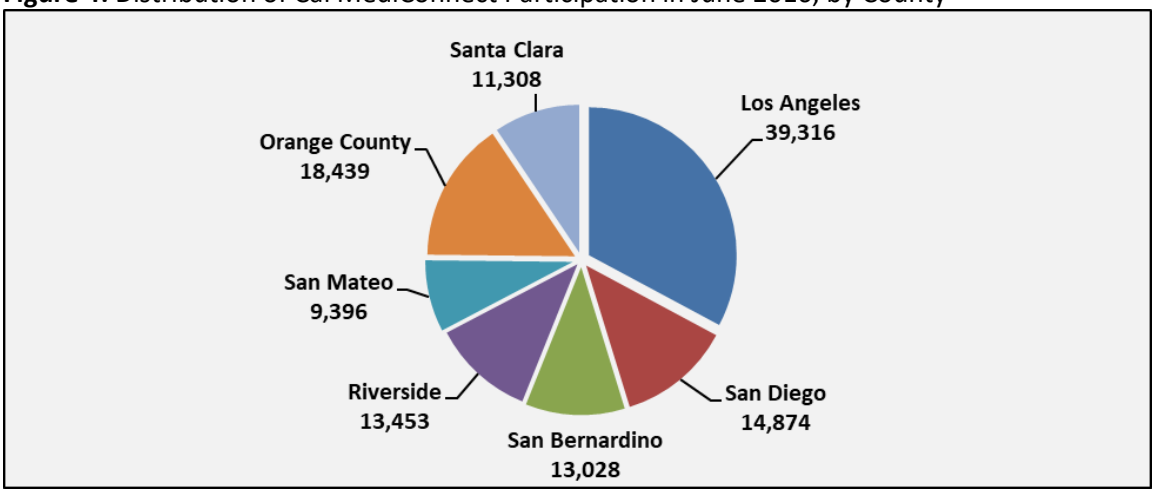
Angeles, Madera, Riverside, Sacramento, San Bernardino, San Diego, San Francisco, San Joaquin, Santa Clara, Stanislaus, and Tulare counties. In turn, after the establishment of managed care in 19 counties through the implementation of the Regional and Imperial models in late 2013, approximately 24,000 Medi-Cal Only SPDs were transitioned from FFS to managed care in December 2014 (Table 2).[16]

Coordinated Care Initiative

In an effort to better manage health care outcomes and the coordination of benefits for Dual Eligible individuals with both Medi-Cal and Medicare coverage, California introduced the Coordinated Care Initiative (CCI) program in 2014. CCI established Cal MediConnect, a three-year demonstration project in seven counties wherein Dual Eligibles could voluntarily enroll in a single health plan to receive coordinated medical, behavioral health, long-term institutional, and home- and community-based services. Cal MediConnect plans not only coordinate the health care of Dual Eligibles, but also coordinate the different benefits offered by Medi-Cal and Medicare into a unified service delivery system.

While enrollment into Cal MediConnect plans is voluntary for Dual Eligibles, those who chose not to enroll were still mandatorily enrolled in one of the county's respective Medi-Cal managed care plans (e.g., L.A. Care or Health Net in Los Angeles). Prior to the implementation of Cal MediConnect, a majority of Dual Eligibles in the seven demonstration counties were enrolled in FFS. Whether Dual Eligibles choose to enroll in a Cal MediConnect plan or one of the Medi-Cal managed care plans, the end result is still a shift of Dual Eligibles from FFS to managed care for purposes of Medi-Cal's benefits (either into a Cal MediConnect plan or a Medi-Cal managed care plan). As of June 2016, nearly 120,000 Dual Eligibles had enrolled in a Cal MediConnect plan (Figure 4).

Figure 4: Distribution of Cal MediConnect Participation in June 2016, by County



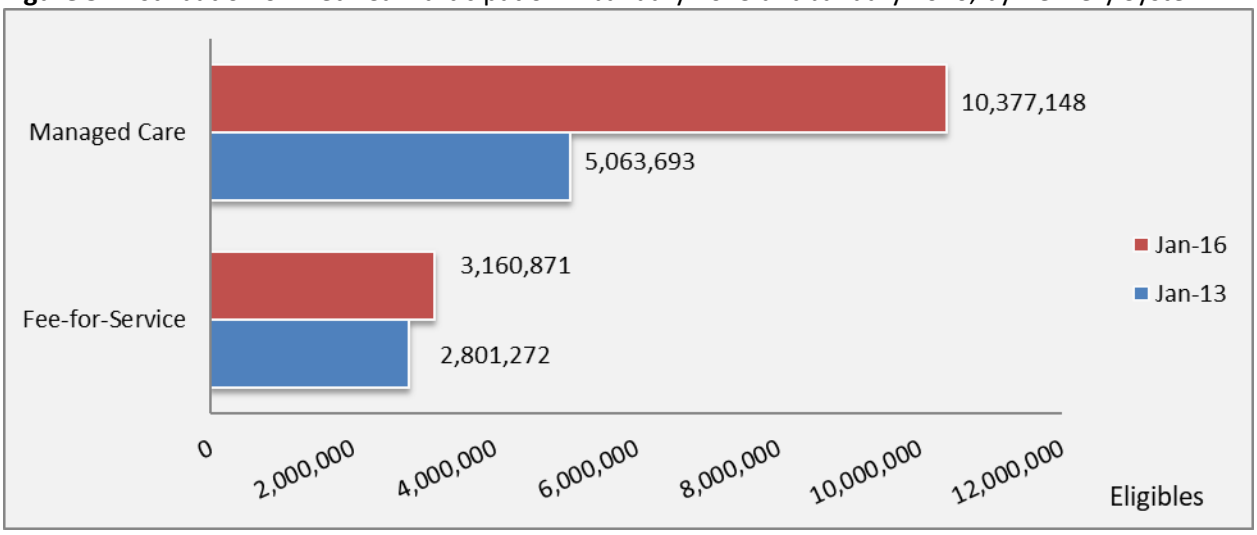
Source: http://www.calduals.org/wp-content/uploads/2016/07/CMC-Enrollment-Dashboard-June-Final.pdf

Population Expansions

The establishment of Medi-Cal managed care in all 58 counties set the stage so that nearly all new enrollments are directed into the managed care delivery system. Beginning in 2013, Medi-Cal experienced increases in enrollment far greater than the program had seen throughout its entire history. The tremendous growth was fueled by the transition of nearly one million children from the state's Healthy Families Program (HFP) into Medi-Cal, and later in 2014 by the addition of over 2.5 million optional ACA low-income adults. The massive enrollment surge, directed predominantly to the statewide managed care system, further accelerated the divergence between the number of beneficiaries served by FFS and those served by managed care.

Between January 2013 and January 2016, managed care enrollment increased by 105%, from just over five million beneficiaries to well over 10 million. Yet over that same time period the FFS delivery system saw only 13% growth, increasing from approximately 2.8 million beneficiaries to just over 3.1 million (Figure 5).

Figure 5: Distribution of Medi-Cal Participation in January 2013 and January 2016, by Delivery System



Source: Created by DHCS Research and Analytic Studies Division using data from the Management Information System/Decision Support System's (MIS/DSS) eligibility tables. Data were extracted from MIS/DSS four months after corresponding time period to allow for updates to enrollment.

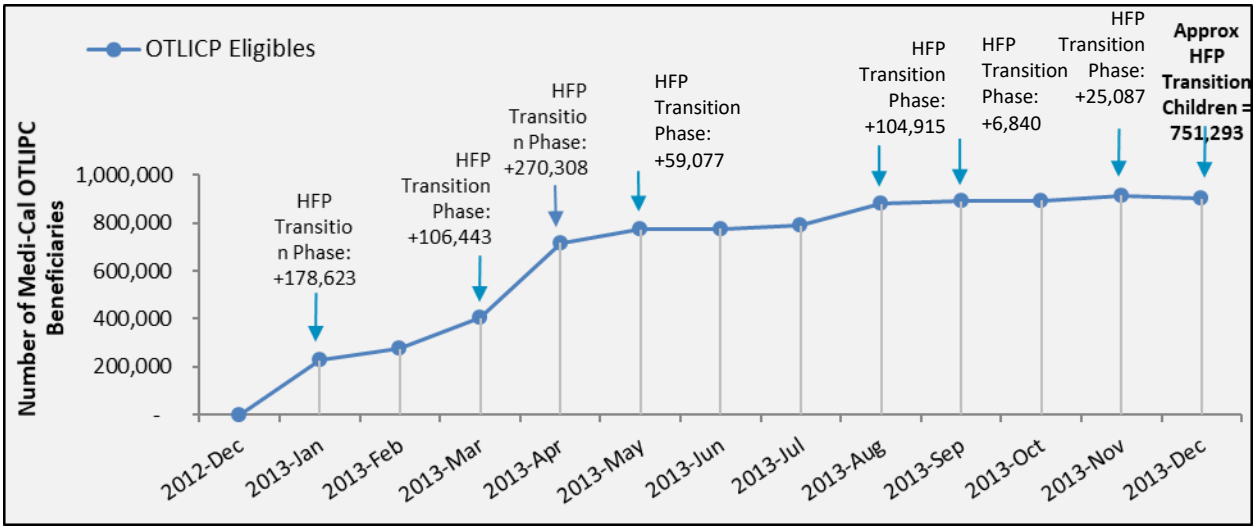
Healthy Families Program Transition

The HFP was California's version of S-CHIP, the federal health insurance program for children in low-income families. The program became operative in California in 1998 for the purpose of providing low-cost health insurance to children under the age of 19 in families with household incomes too high to qualify for Medi-Cal (up to 250% FPL).[17] The 2012-13 California budget eliminated the HFP and required that all HFP children be transitioned into Medi-Cal. Legislation

mandated that children in the HFP transition into Medi-Cal in multiple phases throughout 2013 (Figure 6).

DHCS designed the overall transition so that most HFP beneficiaries were enrolled into a managed care plan in which their existing HFP primary care provider was also a Medi-Cal provider in the plan's network. On January 1, 2013, DHCS began the first phase in 2013 to transition approximately 750,000 children from the HFP into Medi-Cal – dependent on the beneficiaries' county of residence and health care plan (Figure 6). While the transition was successful in maintaining continued enrollment through a managed care plan for most children, some were temporarily enrolled in FFS for a multitude of reasons. Participation rates for these children in FFS declined as they were re-determined into aid codes that required enrollment in a Medi-Cal managed care plan.

Figure 6: Certified Eligible Medi-Cal Beneficiaries Enrolled in Optional Target Low-Income Children Program (OTLICP) Aid Codes from December 2012 – December 2013



Source: Created by RASD using data from the MIS/DSS data warehouse and transition data from the DHCS Final Transition Report.

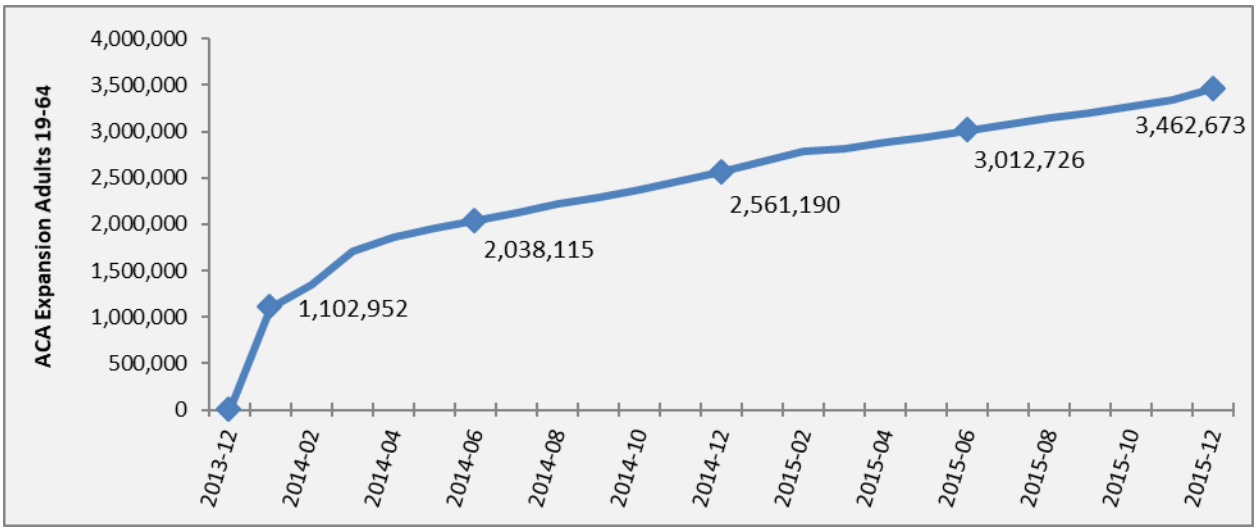
ACA Implementation

On the heels of the HFP transition, the implementation of the ACA continued to dramatically alter the overall Medi-Cal population. The ACA was signed into law by President Obama in March 2010. Under the ACA, states gained the option to expand Medicaid eligibility to previously ineligible low-income adults ages 19-64 (at or below 138% FPL) without dependent children.[iv] On June 27, 2013, Governor Brown signed into law Assembly Bill x1-1and Senate Bill

[iv] On June 28, 2012, the United States Supreme Court held in *National Federation of Independent Business v. Sebelius* (132 S. Ct. 2566) that the mandatory expansion of states' Medicaid eligibility rules to include childless adults exceeded congressional authority under the Spending Clause of the US Constitution. This effectively made

x1-1, authorizing California to expand the Medi-Cal program to include this optional population effective January 1, 2014. Before implementation of the optional expansion, Medi-Cal primarily provided coverage to individuals with disabilities, low-income children and their parent/caretaker and/or relatives, pregnant women, aged individuals, and individuals with particularly complex medical conditions.

Figure 7: Certified Eligible Medi-Cal Beneficiaries Enrolled in the ACA Expansion Adult Ages 19-64 Aid Category from December 2013-December 2015



Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables extracted in June 2016.

The ACA optional adult expansion extended coverage for individuals ages 19-64, thus opening the door for millions of newly eligible enrollees. In January 2014, the first month of Medi-Cal eligibility for the optional adult population, more than one million new adults enrolled. By the end of 2014, an additional 1.5 million adult beneficiaries had enrolled. By the end of 2015, nearly 3.5 million adult beneficiaries were enrolled in Medi-Cal through the ACA implementation, accounting for approximately 26% of the overall Medi-Cal population. The Medicaid expansion in California led to a sharp increase in overall Medi-Cal enrollment, and it was primary directed into managed care (Figure 7).

Fee-for-Service: A Changed Landscape

Since January 2013, the Medi-Cal program has added more than 5.6 million beneficiaries. The growth in the Medi-Cal managed care delivery system accounts for 5.3 million of those individuals. Over this same time period, the FFS delivery system has grown by just over 200,000 beneficiaries. To conduct a meaningful access analysis, a number of questions about FFS and its

the expansion of eligibility optional, and California is one of 32 states to date, including the District of Columbia, to exercise this option.

population must be explored before access measures are designed, developed, and interpreted:

- If most of the Medi-Cal population is required to enroll in the managed care delivery system, which individuals continue to participate in Medi-Cal's FFS delivery system?
- Are all FFS beneficiaries entitled to receive the same Medi-Cal benefits?
- What is the nature and duration of FFS delivery system participation?

Answers to these questions will determine how effective access measures can be for different subpopulations. Information about the nuances of exposure to preventative care, transitory enrollment, and program administration ensure the appropriate context is considered when analyzing and interpreting access metrics. It is only after these questions are explored that a true picture of FFS emerges and a genuine discussion about access to care can be presented.

The Role of Fee-for-Service in Medi-Cal

In the early years of Medi-Cal, FFS was the sole delivery system. It was the single source of care for all Medi-Cal beneficiaries, regardless of the various eligibility pathways they took into the program or the different health care benefits each was entitled to. But with the introduction of the managed care delivery system, and its expansion throughout the state since 1972, the traditional role of FFS has evolved. The process of enrolling in a managed care plan, along with the set of services that plans are contracted to provide, redefined FFS as a system that primarily helps facilitate plan enrollment, provides coverage to select groups who through policy or other circumstances received health care services through Medi-Cal's FFS delivery system, and one that provides services to groups of individuals entitled to differing sets of benefits not aligned with the scope of services provided by contracted plans.

The FFS system is now defined by the multitude of dissimilar populations it serves. In essence, although FFS is conceptually thought of as a single system, in order to understand how access to care can accurately be evaluated, FFS must be reimagined as a cluster of mini-delivery systems serving each unique FFS Medi-Cal subpopulation in different ways. These groups not only differ in their characteristics and how they interact with the FFS system, but also exhibit varying complexities and limitations with respect to access analysis (Table 3).

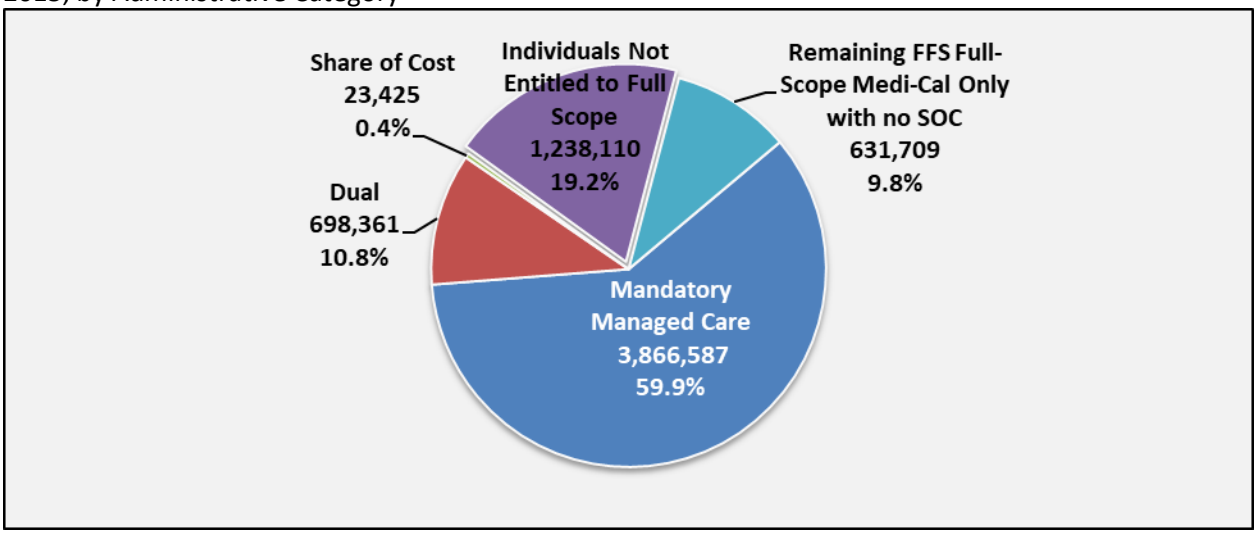
Table 3: FFS Administrative Categories and Access Limitations

Administrative Subgroup	Description of Category	General Limitations in Access Analysis
Mandatory Managed Care	Individuals in aid codes that require enrollment in a managed care plan. They are temporarily placed in FFS while they wait to receive informational materials and complete their health plan selection (approximately three months).	With individuals only in the FFS system temporarily, it is problematic to interpret access, especially preventative care, because the individual has not had adequate time to interact with the system.
Individuals Not Entitled to Full Scope State Plan Benefits	Individuals in aid codes that restrict benefits. This group primarily consists of beneficiaries without SIS (undocumented immigrants) who qualify for pregnancy-related and emergency services only. Other subpopulations in this category include beneficiaries receiving treatment for specific conditions such as breast and cervical cancer or tuberculosis; pregnancy women who were determined eligible pursuant to Medi-Cal's presumptive eligibility for pregnant women program, and incarcerated individuals who have access to acute hospital inpatient services only.	Access analyses can only focus on the specific services the individual may receive. As an example, for many preventive care cannot be examined, since these beneficiaries generally do not qualify for preventative services. In other cases, such as pregnant women, access evaluations may be performed related to the receipt of preventive care services such as pre-natal and post-partum care.
Dual Eligible	Individuals who are enrolled in both Medi-Cal and Medicare.	Medicare is the primary payer, responsible for directing care for the individual. Medi-Cal only provides co-payment and cost-sharing coverage, long-term care services, and wrap-around services that are not part of the Medicare benefits package but are covered by Medi-Cal. As a result, examining utilization and access for these individuals would be a reflection of the Medicare system rather than Medi-Cal.

Administrative Subgroup	Description of Category	General Limitations in Access Analysis
Share-of-Cost (SOC)	Individuals who must pay a specified amount out-of-pocket before they are entitled to Medi-Cal benefits. The SOC requirement resets each month.	These individuals may have experienced periods of sporadic Medi-Cal enrollment depending on whether or not they fulfilled their SOC, and therefore may not have had a period of meaningful exposure to the FFS delivery system. For example, in June of 2015, of the 345,092 individuals with a SOC of $1 or more, only 72,843 people met their SOC each month.
FFS Full-Scope Medi-Cal Only (No SOC, Non-Dual)	Individuals entitled to state plan full scope Medi-Cal benefits, but who are not required to enroll in a managed care plan and do not have Medicare coverage or a SOC requirement.	These individuals represent mixed eligibility pathways, needs, and administrative enrollment options. The heterogeneous nature of these groups result in small subpopulations that cannot be meaningfully examined individually.
Individuals who are determined eligible for Medi-Cal for retroactive months-of-eligibility	These are individuals are determined eligible for Medi-Cal generally after experiencing a medical event. Prior to the event, the individual had not applied for Medi-Cal coverage.	This population introduced complexities when evaluating health care outcomes, etc. Medi-Cal's delivery system generally had no influence on the health event, as they were not eligible for the program until after the health event.

Looking at FFS enrollment by the administrative categories defined in Table 3 reveals the various roles FFS fills. Figure 8 reflects enrollment for individuals who were ever enrolled in FFS, for any duration, throughout 2015. Nearly 60% of individuals who interacted with the FFS system were in aid codes that require enrollment in managed care and in the process of transitioning to Medi-Cal's managed care delivery system. Another 19% are beneficiaries who are not entitled to full scope Medi-Cal state plan benefits. Individuals within this group may receive benefits associated with a specific health condition or may be entitled to specific health care services related to an emergency condition, hospital acute care stay, etc. Beneficiaries dually eligible for Medi-Cal and Medicare represented just over 10% of the population, and those with a Share-of-Cost (SOC) accounted for less than 1% of all FFS beneficiaries. Finally, individuals entitled to full-scope Medi-Cal, but without Medicare coverage or a SOC obligation, accounted for approximately 10% of individuals enrolled in FFS (Figure 8).

Figure 8: Distribution of Certified Eligible FFS Medi-Cal Beneficiaries who were Enrolled at any Point in 2015, by Administrative Category



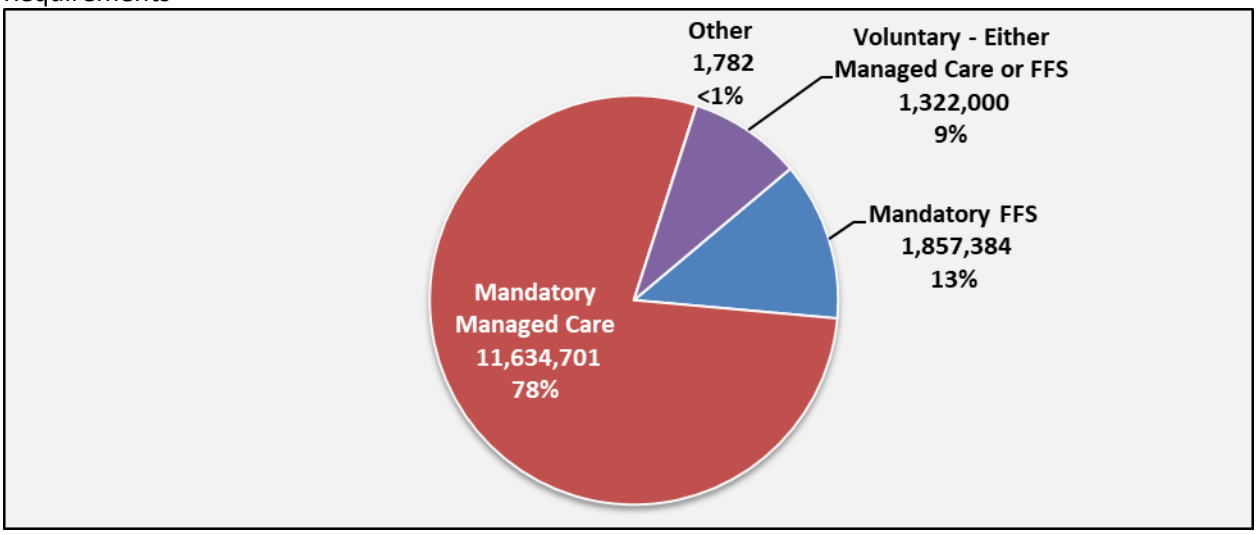
Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016. The Share of Cost (SOC) category includes those individuals in a SOC aid code with a SOC of $1 or greater.

A discussion of each administrative category provides additional context that helps inform the unique challenges when considering access in the FFS system. It also elaborates on important factors that DHCS used to guide the methodology for access analyses.

Mandatory Managed Care

When a person first enrolls in Medi-Cal, several factors affect which delivery system they will be enrolled in. Some groups are mandatorily enrolled in managed care based on a combination of their aid categories (determined by how a beneficiary qualifies for Medi-Cal), their county of residence, and their enrollment status in Medicare. (See Appendix C for a detailed matrix of aid code enrollment.) This group accounted for 78% of all certified eligible beneficiaries to ever enroll in Medi-Cal in 2015 (Figure 9).

Figure 9: Distribution of Certified Eligible FFS Medi-Cal Beneficiaries in 2015, by Managed Care Requirements

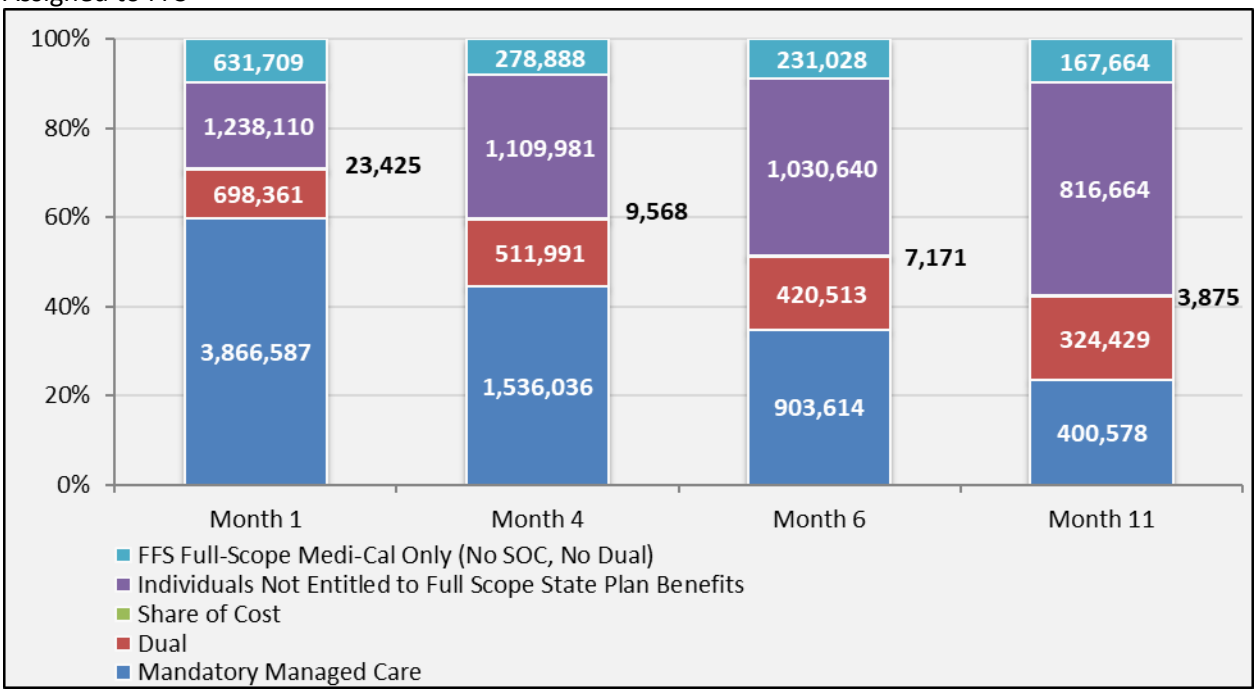


Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016.

Health plan enrollment choices vary by county, both in the number and types of plans available. Some counties, such as Sacramento, have a managed care model that can offer four or more health plan choices. Other counties, such San Mateo, have a single Medi-Cal managed care plan. Regardless of the number of health plan choices an individual may have, when they become eligible in an aid code requiring managed care enrollment they must enroll in a health plan. If a plan is not selected, then the state makes an assignment (beneficiaries can switch plans at any time in counties with more than one plan).

An individual may request an exemption from being mandatorily enrolled in managed care for certain medical reasons such as an acute condition, pregnancy, terminal illness, the care of a newborn child, and the performance of previously planned surgeries. But in general, outside of the medical exemption process, a beneficiary in a managed care aid code cannot remain in FFS.

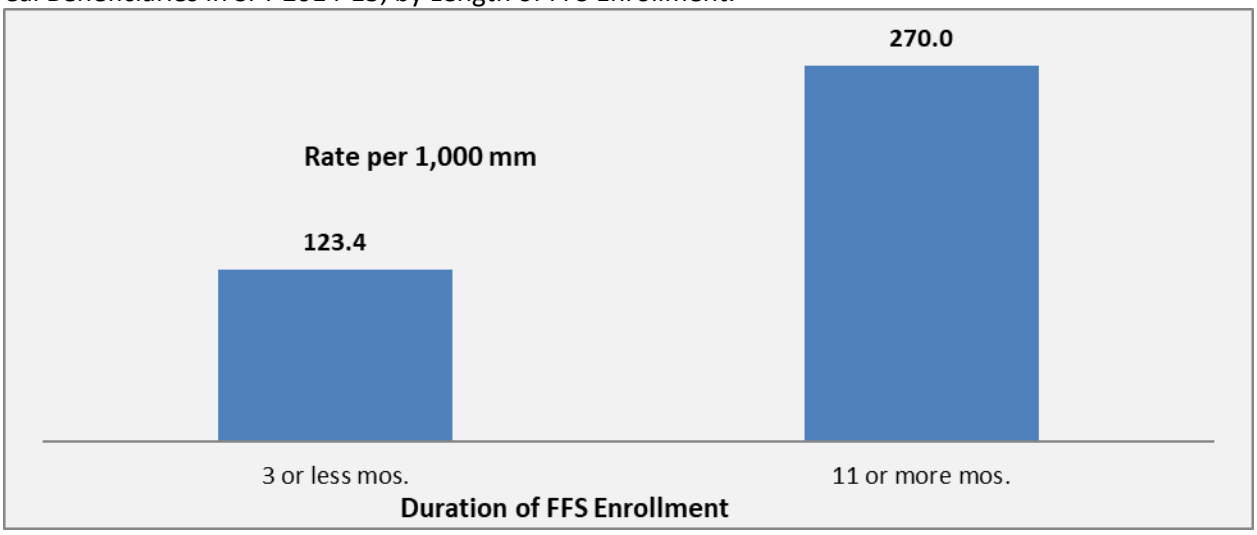
Figure 10: Distribution of Certified Eligible FFS Medi-Cal Beneficiaries in 2015, by Number of Months Assigned to FFS



Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016.

In 2015, more than 3.8 million eligibles enrolled in a managed care mandatory aid code participated in FFS for at least one month, representing 60% of FFS enrollment. But after 11 months, that number drops by 3.4 million and represents only 24% of FFS enrollment (Figure 10). Individuals participating in FFS for a short period of time use services differently than those with longer continuous enrollment. For example, in State Fiscal Year (SFY) 2014-15 the rate of utilization for services from primary care providers was more than double among beneficiaries with at least 11 months of enrollment compared to those with three or fewer months of enrollment in FFS (Figure 11).

Figure 11: Primary Care Service Visits Rate per 1,000 Member Months among Certified Eligible FFS Medi-Cal Beneficiaries in SFY 2014-15, by Length of FFS Enrollment.



Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility and claims tables for SFY 2014-15 and extracted in July 2016.
Note: Primary care providers include physicians, physician groups, and clinics with the following classifications: general practice, family practice, gynecology, obstetrics, obstetrics-gynecology, preventive, pediatrics, internal medicine, rural health clinic/federally qualified health center, free clinic, community clinic, multispecialty clinic, clinic exempt from licensure, county clinics not associated with hospital, otherwise undesignated clinic, tribal health.

Given the short duration of FFS enrollment for most mandatory managed care enrollees, evaluating access to care is problematic. These individuals enter FFS with unknown health care needs, and then transition into Medi-Cal managed care before establishing any consistent exposure to the FFS system that would allow DHCS to examine their access to services. A meaningful access analysis, and any potential intervention for this population requires a longer duration of continuous FFS enrollment.

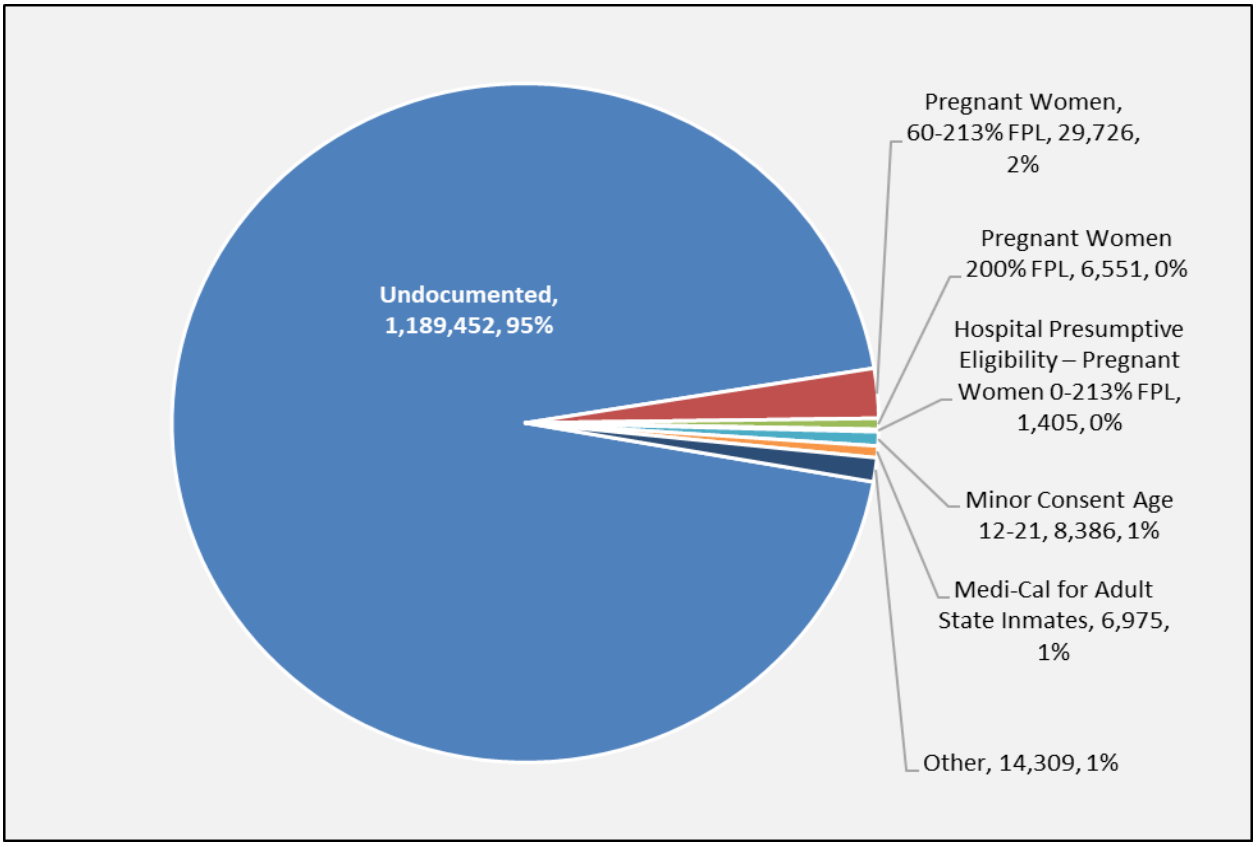
Individuals Not Entitled to Full Scope State Plan Benefits

The largest administrative group with the longest continuous enrollment in Medi-Cal's FFS delivery system includes individuals who are not entitled to full scope state plan benefits (these populations are sometimes referred to as restricted scope).

The largest group within this subpopulation included individuals without satisfactory immigration status (SIS) enrolled in Undocumented aid codes, which comprised 94% of the population not entitled to full-scope state plan benefits participating in Medi-Cal's FFS delivery system (Figure 12). Other large subpopulations not entitled to full scope state plan benefits participating in Medi-Cal's FFS delivery system included pregnant women with income 139-213 percent of the federal poverty level, minor consent and Medi-Cal for adult state inmates were

the other large subpopulations among Medi-Cal's populations not entitled to full scope state plan benefits (Figure 12). Medi-Cal coverage for these beneficiaries is restricted to emergency and pregnancy-related (pre-natal and post-partum) services.

Figure 12: Distribution of FFS Certified Eligible Individuals Not Entitled to Full Scope State Plan Benefits Enrolled at any Point in 2015, by Aid Category.



Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016.

In terms of its size and beneficiaries' duration of enrollment, the Undocumented aid category is ideal for measuring access to services. Unfortunately, since the group is entitled to only a limited scope of services, any evaluation of access to care is narrowed to primary focus areas such as pregnancy related services, which includes pre-natal and post-partum care (Table 4).

Table 4: Interpreting the Utilization of Restricted-Scope Services.

Eligible Services	What Service Utilization Reflects
Emergency Services	Hospital emergency department use rates may be evaluated, but interpreting the results requires consideration of the context. Unlike individuals eligible for full scope state plan benefits, the undocumented are entitled to only emergency and pregnancy related services. Therefore, in many cases, the hospital emergency room represents the initial door into the health care system. A high emergency department rate does not reflect poor access to Medi-Cal primary care, as it is not a covered benefit.
Pregnancy-Related Services	Utilization of pre-natal and post-partum pregnancy services can be used to evaluate access to care in the Undocumented population, as pregnancy-related services are covered by Medi-Cal, and likely all of these services were provided by Medi-Cal. In addition, various birth outcomes such as low birthweight, preterm births, etc. may be evaluated.

In the case of the Undocumented aid category, Emergency Department (ED) visits in Medi-Cal cannot generally be used to evaluate Medi-Cal's performance with respect to preventative services (Table 4). The very fact that this group, outside of pregnancy, does not qualify for preventative services means ED utilization simply reflects the only avenue to health care services covered by Medi-Cal. Contrary to the assumption that low ED rates are "good," it can be argued that consistently high ED rates among Undocumented beneficiaries serve as evidence that individuals are accessing services without issue, given the current policy. In terms of evaluating the significance of high ED use rates among the Undocumented: high ED use rates cannot generally be interpreted as a failure of Medi-Cal's primary care access, but demonstrate that Undocumented beneficiaries are generally not covered by Medi-Cal for preventative services. Exceptions include pregnancy-related pre-natal and post-partum care, and select birth outcomes which can be evaluated and are included in this report under the Obstetric Services and Births Outcomes domain.

In general, access to emergency services is primarily provided for through federal statute that requires acute care emergency departments to evaluate and treat emergent conditions. The Emergency Medical Treatment and Labor Act (EMTALA) of 1986 requires hospital EDs to provide screening and treatment for emergency conditions (including labor) for anyone who presents, regardless of their ability to pay for care.[18]

Evaluating Medi-Cal's populations not entitled to state plan full scope benefits calls attention to the complexities that those conducting access studies must heed when organizing, analyzing,

and interpreting statistics. It is particularly important to consider how such a group as the Undocumented influences the results of the population as a whole, and what to expect when that group is examined independently. For example, the Undocumented may seek care through hospital EDs for much of their health care needs. While for many groups this may indicate an access to care issue, but in the case of the Undocumented this simply reflects their awarded benefit package and primary means of accessing the health care system. For many undocumented women, the hospital ED represents an entry into the hospital acute care setting for the delivery of a child. How one interprets this statistic requires an understanding of the benefits awarded and delivery system access points based on those benefits.

Dual Eligibles

Medicare is a federal health care program for individuals who are age 65 or older, or younger people who have a disability or are living with permanent kidney failure or HIV/AIDS. Generally, Medicare covers physician services, preventative services, outpatient care, inpatient hospital stays, and skilled nursing facility care.[19] Some individuals who qualify for Medicare benefits also qualify for Medi-Cal on the basis of disability or income level. In this monitoring plan, individuals with both Medicare and Medi-Cal coverage are referred to as Dual Eligibles.

Federal law requires that Medicaid be the payer of last resort.[20] Consequently, Medicare benefits must be utilized and paid for before Medi-Cal services can be reimbursed. If Medicare does not cover a specific service, or a Medicare benefit is exhausted, and the beneficiary has no other private insurance, then Medi-Cal coverage can be applied. Table 5 provides a general description of services covered by each program related to dually eligible individuals.

Table 5: Medicare vs. Medi-Cal Services For Dually Eligible Individuals

Program	Medicare	Medi-Cal (Medicaid)
General list of services Covered	• Physician Services/ Preventive services • Hospital Care • Skilled nursing facility care (up to 100 days) • Home health care • Hospice • Prescription drugs • Durable medical equipment (DME)	• Medicare cost sharing and co-payments • Skilled nursing facility care (after Medicare benefits are exhausted/custodial care) • Some prescription drugs not covered by Medicare • DME not covered by Medicare • Optional services (vary by state): dental, vision, home-and-community-based services, personal care, and select home health care

Sources: http://www.calduals.org/background/faq/#duals and https://www.medicare.gov/.

When comparing the general list of services covered by the two programs, it becomes clear that Medicare directs many of these individual's health care services. Medicare plays the central role in providing preventative services and coordinating specialty care. It is also responsible for most inpatient and outpatient benefits[v], and most importantly for deciding whether many of these services are medically necessary.

When it comes to Medi-Cal coverage, long-term services and supports (LTSS) are the benefits most commonly associated with Dual Eligibles. This includes both skilled nursing facility services and other support services delivered in the community like in-home-supportive services/personal care services. Medicare covers care in a skilled nursing facility (SNF) for up to 100 days if it's medically necessary and not classified as custodial care.[vi] Should a Dual Eligible require skilled nursing beyond 100 days, the Medi-Cal program then covers care. Medi-Cal steps in to provide coverage for custodial care through various programs.

Medicare is still responsible for preventative, inpatient, and outpatient care, even when the skilled nursing services or other LTSS are provided and paid for by Medi-Cal. Although Dual Eligibles in SNFs account for some of the most clinically complex and costly beneficiaries, they represent only a fraction of the Dual Eligible population. Throughout 2015, more than 700,000 Dual Eligibles were enrolled in FFS for at least one month. Only 6%, or just over 40,000 individuals, were enrolled in long-term care aid codes (Figure 13). These individuals resided in skilled nursing facilities and in many cases their eligibility pathway was through Medi-Cal's medically needy long-term care program. Others may have used skilled nursing facility services throughout the year, but are not enrolled in a LTC aid codes. There were 61,402 individuals who were dually eligible but not enrolled in a LTC aid code that used skilled nursing facility services throughout SFY 2014-15.

In addition to skilled nursing facility services, Medi-Cal may provide reimbursement for various social and coordination services through sister Departments such as the Department of Social Services and the Department of Developmental Services. These services may include intermediate care services for the developmentally disabled, in-home supportive services, regional center services, and various waiver services, etc.

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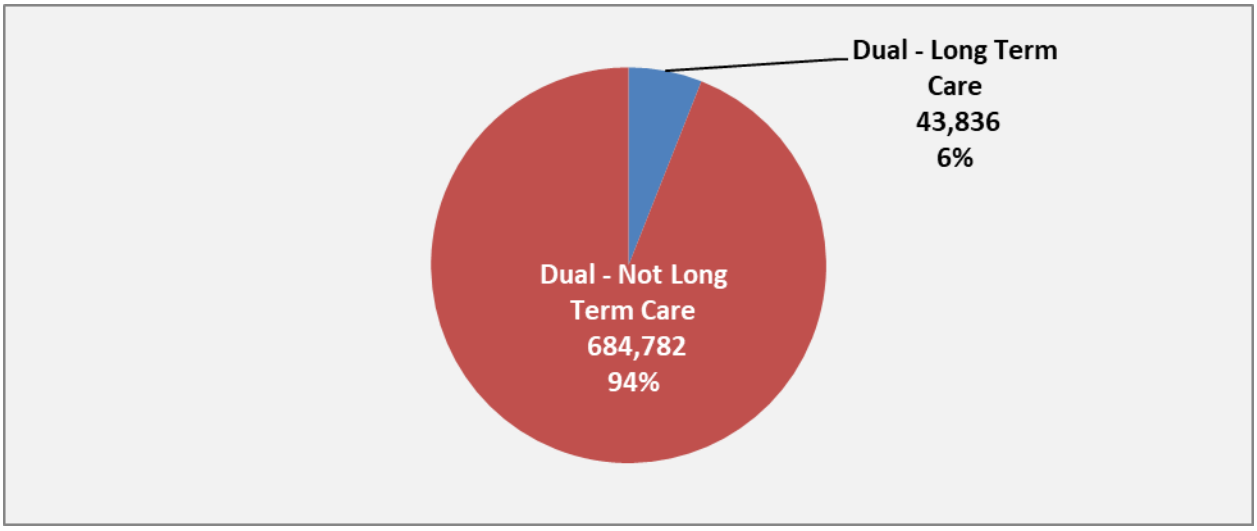
[v] Medicare covers the first 100 days of inpatient care. After the first 20 days, a co-payment applies and is covered by Medi-Cal.

vi Medically necessary skilled nursing facility care includes services such as the changing of sterile dressing. Custodial care includes services such as aid with activities of daily living (bathing, dressing, etc.).

Figure 13: Distribution of Dual Eligible Medi-Cal Beneficiaries Enrolled at any Point in 2015, by Long-Term Care Enrollment Status.



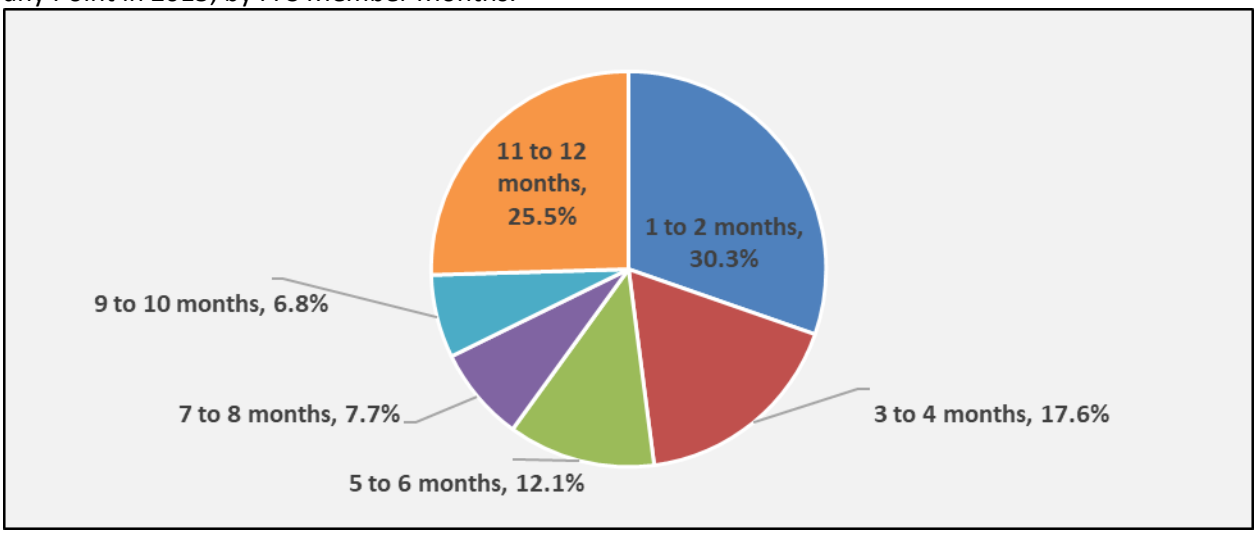
Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015.

Medicare's role as the primary coordinator of care for Dual Eligibles is important in terms of access to care. It reveals the limited influence that Medi-Cal has on certain services, and presents another key consideration when analyzing service utilization and health outcomes for Dual Eligibles. Similar to the limitations presented by individuals not entitled to full scope benefits, statistics related to Dual Eligibles must be evaluated in light of the interaction between Medi-Cal and Medicare's delivery systems. Dual Eligibles may interact with Medi-Cal's FFS delivery system in very specific instances, but an individual's health care is primarily coordinated outside of the Medi-Cal program, in many cases by the Medicare primary care provider.

Share-of-Cost

Some individuals may have too much income to qualify for Medi-Cal, but have medical costs that they are unable to afford. In these cases, Medi-Cal may provide services once the beneficiary has spent a predetermined amount on medical care, known as a SOC. Eligibility for these individuals varies based on their monthly medical expenses and their ability to meet their SOC. In most counties, individuals with a SOC must participate in the FFS delivery system. Individual's subject to a SOC are generally excluded from Medi-Cal managed care participation; they generally participate in Medi-Cal's traditional FFS delivery system.

Figure 14: Percentage of Certified Eligible FFS Medi-Cal Beneficiaries with a Share-of-Cost Enrolled at any Point in 2015, by FFS Member Months.

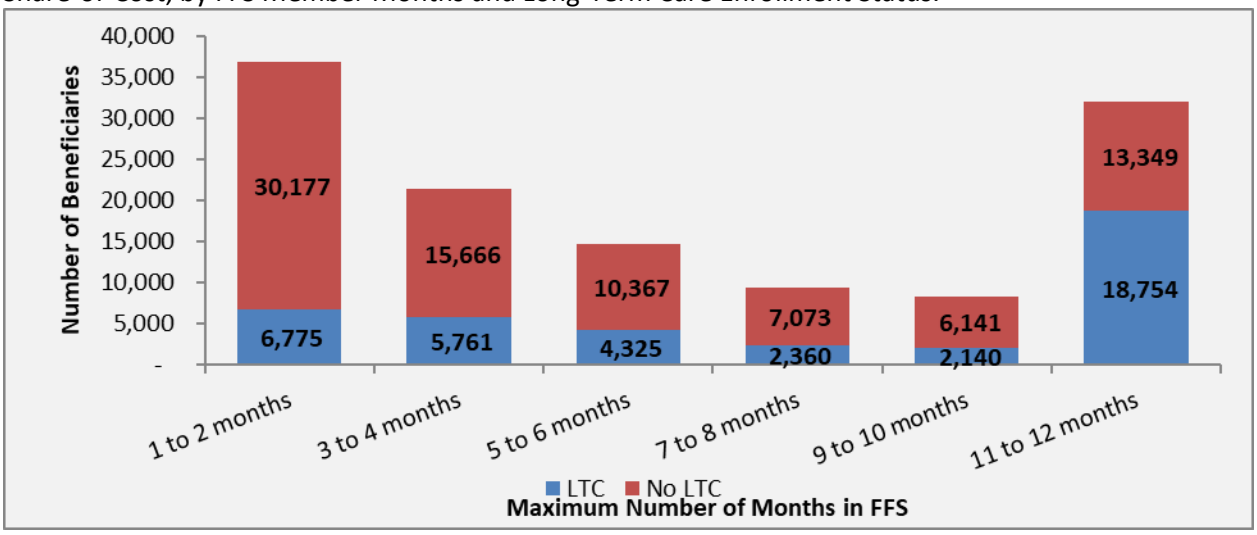


Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015.

Looking at continuous enrollment for individuals with a SOC in 2015 illustrates their diminishing participation over time. SOC beneficiaries with either one or two months of enrollment in FFS represent 30% of all SOC member months. Those with six or fewer months of continuous enrollment combine to account for nearly 60% of all SOC member months (Figure 14).

An exception to the downward trend occurs in member months for individuals with 11 or 12 months of enrollment. This rise is the result of individuals in long-term care or receiving IHSS. Many individuals in Medi-Cal that are institutionalized for long-term care have a SOC that is allocated towards the monthly nursing facility costs. Individuals in long-term care accounted for 58% of beneficiaries with a SOC enrolled for 11 or 12 continuous months (Figure 15). Similarly, individuals receiving IHSS may also meet their monthly SOC obligation based on the expenses to be incurred for the month related to IHSS.

Figure 15: Count of Certified Eligible FFS Medi-Cal Beneficiaries Enrolled at any Point in 2015 with a Share-of-Cost, by FFS Member Months and Long-Term Care Enrollment Status.



Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015.

Evaluating access to Medi-Cal services for those with a SOC becomes problematic for the same reasons it is difficult to interpret results for other administrative categories that generally lack significant, continuous enrollment. But the SOC group presents another conceptual challenge for access monitoring. An individual may meet their SOC and be covered by Medi-Cal for a few consecutive months, generally for episodic heath care events. They may then lose coverage when they no longer need health care services and do not meet their SOC in subsequent months. However, should that individual ever meet their SOC again and become eligible to receive Medi-Cal covered benefits after a break in coverage, any care, utilization, and outcomes that take place while not covered by Medi-Cal will be unknown to the program. More importantly, utilization in Medi-Cal may become a reflection of care received outside of the system. Medi-Cal does not receive information about medical services received before a SOC has been met. For certain measures, such as ambulatory care sensitive conditions (ACSC), this group poses significant challenges for evaluating the impact of Medi-Cal's ambulatory care delivery system when exposure to the system is limited or at best episodic.

FFS Full-Scope Medi-Cal Only (No SOC, Non-Dual Eligible)

Individuals who do not fall into one of the four categories detailed above are beneficiaries with full-scope Medi-Cal coverage. Based on 2015, Individuals in this group represent 125 different aid codes (Table 6). As an example, the top 10 aid codes based on enrollment counts represent those determined presumptively eligible such as the Child and Health Disability Prevention (CHDP) child group, and those whose eligibility pathway was through Adoption/Foster Care.

Table 6: Top 10 Aid Codes in the FFS Full-Scope Medi-Cal Only Group, 2015.

Aid Code		# of Beneficiaries
8W	CHDP Gatewayvii	180,129
8E	Accelerated Enrollment. Provides immediate, temporaryviii,	136,269
P3	Presumptive Eligibility - Adults	94,238
8U	Child Health and Disability Prevention (CHDP) Gateway Deemedix Infant.	51,498
03	Adoption Assistance Program (AAP)x	51,481
42	AFDC-Foster Carexi	22,860
8X	CHDP Gateway Title XXI Medi-Cal PE, Targeted Low-Income FPL for Children (Medicaid-Children's Health Insurance Program Title XXI). xii Program	14,390
P2	Presumptive Eligibility – Parent/Caretaker Relativexiii	11,303
40	AFDC-Foster Carexiv	11,195
04	AAP/Aid for Adoption of Children (AAC)	10,896
Multiple	*115 other aid codes*	*Individual aid codes each include fewer than 10,000 beneficiaries*
Grand Total	**125 Aid Codes**	**669,825**

Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015.

It is a melting pot of different aid codes that span the spectrum of eligibility pathways. Some like the presumptively eligible are awarded Medi-Cal eligibility and will eventually undergo a final eligibility determination and be enrolled in aid codes that are most likely classified as mandatorily enrolled in managed care. Others like the foster care subgroups are unique in that they require specific types of services based on their underlying medical and

[vii] Provides for the pre-enrollment of children into the Medi-Cal program who are screened as probable for Medi-Cal eligibility. Provides temporary full-scope Medi-Cal benefits with no SOC.
[viii] Provides immediate, temporary, FFS, full-scope Medi-Cal benefits.
[ix] Deemed Infant. Provides full-scope, no SOC Medi-Cal benefits for infants born to mothers who were enrolled in Medi-Cal with no SOC in the month of the infant's birth.
[x] Covers children receiving federal cash grants under Title IV-E to facilitate the adoption of hard-to-place children who would require permanent foster care (FC) placement without such assistance.
[xi] Covers children on whose behalf financial assistance is provided for federal FC placement.
[xii] Targeted Low-Income FPL for Children (Medicaid-Children's Health Insurance Program Title XXI). Provides for the pre-enrollment of children into the Medi-Cal program who are screened as probable for Medi-Cal eligibility. Provides temporary full-scope Medi-Cal benefits with no SOC.
[xiii] Provides full-scope, no cost Medi-Cal coverage for parent-caretakers with income at 0 to 109 percent of the FPL.
[xiv] Covers children on whose behalf financial assistance is provided for state only FC placement.

psychological/social needs. Beneficiaries in the CHDP Gateway Title XXI Medi-Cal PE, Targeted Low-Income FPL for Children (Medicaid-Children's Health Insurance Program Title XXI) Program are children who are pre-enrolled into Medi-Cal and screened as probable for program eligibility providing for temporary full-scope benefits with no SOC. Note that these children may transition to mandatory aid codes and then move to managed care, making this a temporary program until a full Medi-Cal eligibility determination is performed.

As with most issues related to Medi-Cal, generalizations about Medi-Cal's FFS participants entitled to state plan full scope services cannot be easily made, the exceptions and caveats a numerous and complicated. Each group has unique needs and even though they may be entitled to full scope services, many are transitioning between Medi-Cal's traditional FFS system and managed care. This in turn results in short stays in the FFS delivery system, where the care may be episodic and associated with urgent or emergent conditions.

Characteristics of the Fee-for-Service Population

The Medi-Cal FFS population differs from the Medi-Cal managed care population, as well as from the overall California population in several ways that can impact health care needs, access to care, and outcomes. Much research that has been conducted that demonstrates the unique factors, needs, and utilization patterns of Medi-Cal's unique population. However, differences between the Medi-Cal FFS and managed care populations has not received the same in-depth exploration. This is especially the case in recent years as the FFS population has been altered by Medi-Cal's delivery system reforms.

The median age for Medi-Cal's FFS population is 15 years older than for the Medi-Cal managed care population. Interestingly, the FFS Medi-Cal median age is the same as for California as a whole (Table 7).

Table 7: Median Age of Medi-Cal FFS Beneficiaries and Medi-Cal Managed Care Beneficiaries in 2015, and California Residents in 2014.

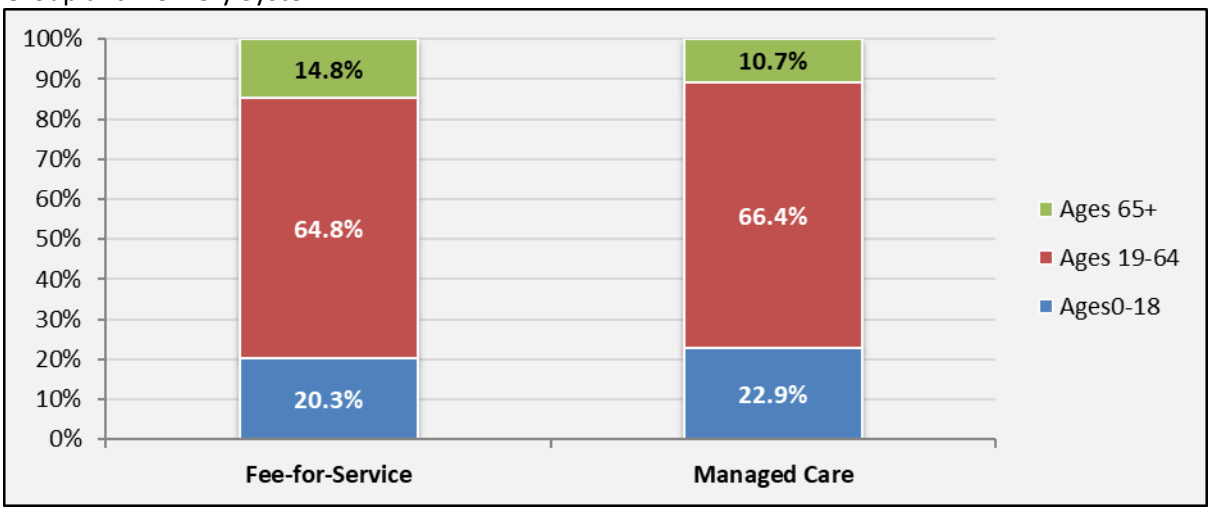
	Fee-for-Service	Managed Care	California
Median Age	36	21	36

Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016 and the U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates.

The distribution of ages in the FFS population is also very different than that of the managed care population. Individuals participating in Medi-Cal's FFS delivery system had a slightly smaller proportion of children ages 0-18 and adults ages 19-64 compared to the managed care

population. Conversely, FFS participants had a larger proportion of individuals ages 65 and older compared to their managed care counterparts (Figure 16).

Figure 16: Distribution of Certified Eligible Medi-Cal Beneficiaries Enrolled at any Point in 2015, by Age Group and Delivery System.



Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2015.

The proportion of individuals with a disability was relatively consistent between the FFS, managed care, and California populations (Table 8). This may not mean that these populations are clinically similar, however, as having a disability status does not indicate the severity or potential treatments needed for the disability. In addition, the method for collecting the status was based on two different methods, one involved a survey and one involved individuals meeting supplemental security income disability criteria.

Table 8: Proportion of the Population with a Disability among Certified Eligible FFS Medi-Cal and Medi-Cal Managed Care Beneficiaries in 2015, and California Residents in 2014

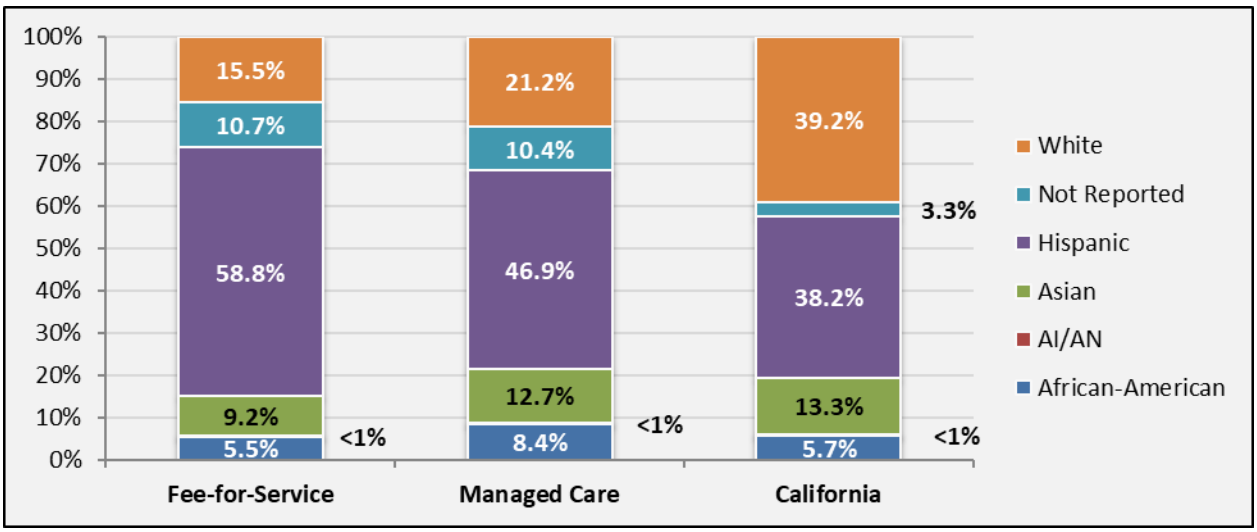
	Fee-for-Service	Managed Care	California
Percent of Population with a Disability	10.8%	10.2%	10.3%

Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016 and the U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates (includes Medi-Cal data).

Race/ethnicity is another factor that has been shown to affect health outcomes.[21, 22] In 2014-2015, the Medi-Cal population was more racially diverse than California as a whole. The FFS Medi-Cal population, while still diverse, was less diverse than the managed care population (Figure 17). The larger proportion of Hispanics participating in Medi-Cal's traditional FFS delivery system was largely due to the Undocumented population that can, for the most part,

only receive services in the FFS delivery system. Roughly 85% of the Undocumented aid code group is classified as Hispanic.

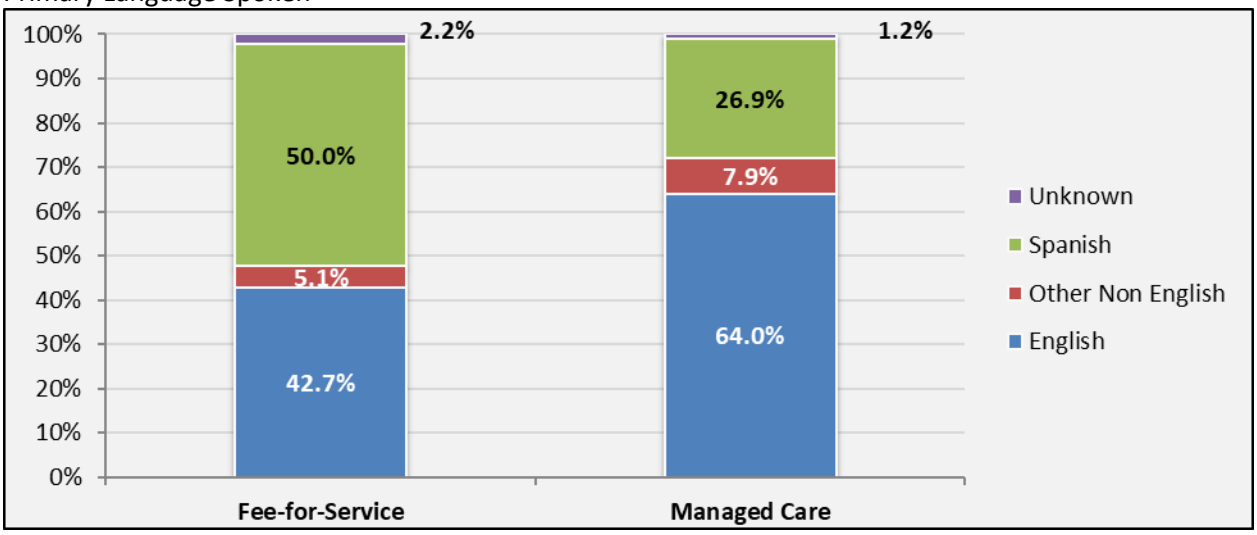
Figure 17: Distribution of Certified Eligible FFS Medi-Cal and Medi-Cal Managed Care Beneficiaries Enrolled at any Point in 2015, and California Residents in 2014, by Race/Ethnicity.



Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2015 and the U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates.

It is also important to examine the distribution of primary languages within the Medi-Cal population to better understand factors that may influence FFS beneficiaries' access to care. In managed care, the largest group were those who spoke English as a primary language (64.0%). By comparison, the most common primary language spoken in the FFS population was Spanish (50.0%) (Figure 18). Again, the dominance of Spanish as a spoken language is primarily the result of the fact that Undocumented individuals generally participate in Medi-Cal's FFS delivery system only.

Figure 18: Distribution of Certified Eligible Medi-Cal Beneficiaries in 2015, by Delivery System and Primary Language Spoken



Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016.

Where one lives can also impact their ability to access medical care. Individuals living in rural geographic areas may experience longer driving times and distances to the nearest medical care location, and there may be fewer physicians practicing in a given county (regardless of health insurance type). Low-income individuals living in urban areas who walk or rely on public transportation also experience access barriers, being less likely to have a usual source of care and more likely to wait more than two days before seeking care.[23,24] Although barriers for urban and rural patients are similar, potential solutions are different, making it important to consider the distribution of individuals in metropolitan and non-metropolitan areas. While 2.2% of Californians live in non-metropolitan counties, only 1.4% of FFS Medi-Cal beneficiaries live in such areas (Table 9).

Table 9: Distribution of Certified Eligible FFS Medi-Cal and Medi-Cal Managed Care Beneficiaries in 2015, and California Residents in 2014, by Metropolitan Status.

Geographic Area	FFS	Managed Care	California
Non-Metropolitan County	1.4%	2.5%	2.2%
Metropolitan County	98.6%	97.5%	97.8%

Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016 and the U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates.

Gender must also be taken into consideration when evaluating access to health care services. Men are less likely to utilize preventative services such as blood pressure checks, cholesterol screenings, flu shots, and dental exams compared to their female counterparts.[25] While Californians are fairly evenly split between genders, Medi-Cal beneficiaries – particularly those

in the FFS delivery system – are more likely to be female (Table 10). When compared to Medi-Cal's managed care delivery system participants, Medi-Cal's FFS participants are more likely to be female. This is again a consequence of the dominance within the FFS population of the Undocumented population and other eligibility pathways that initially start their Medi-Cal eligibility within Medi-Cal's FFS delivery system (e.g. pregnancy related, etc).

Table 10: Distribution of Certified Eligible FFS Medi-Cal and Medi-Cal Managed Care Beneficiaries in 2015, and California Residents in 2014, by Gender.

Gender	FFS	Managed Care	California
Male	42.4%	46.4%	49.7%
Female	57.6%	53.6%	50.3%

Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016 and the U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates.

Literature Review

The purpose of this section is to summarize the available literature on how health care access has been defined and operationalized in health services research. A meta-analysis of relevant literature provided recommendations for how to efficiently and effectively monitor health care access in Medicaid health systems.

Over the past 60 years, researchers have struggled with how to best define and measure access to health care services. The concept of health care access resists a simplified definition or standard set of measurements, and is often misunderstood. As noted by the IOM, "Often because of difficulties in defining and measuring the concept, people equate access (simply) with insurance coverage or with having enough doctors and hospitals in the geographic area in which they live. But having insurance or nearby health care providers is no guarantee that people who need services will get them." [26]

Understanding access to health care requires a multi-dimensional examination of the relationships between human behavior, organizational structures, environmental influences, public policy, and economic impacts. Many concepts have informed research over the decades, addressing a variety of elements that measure factors which may enable or impede an individual's access to health care services. However, there is no single, standardized measure that alone can indicate the state of access in a given health care delivery system.

Primary Access Elements

Although the study of access to health care services is inherently complex and difficult to conceptualize, with a wide array of factors influencing patient access on multiple levels, several elements are universally recognized as primary drivers that help form the foundation of health care access.

Insurance Coverage

The most fundamental and frequently studied variable in health care access is health insurance. Many health services researchers have provided strong evidence that a lack of health insurance is a major deterrent to health care access and utilization, which can lead to poor health outcomes.

The IOM Committee on the Consequences of Uninsurance (IOM-COU) summarizes the evidence on the effects of being uninsured in the United States, reporting that health insurance is associated with better health outcomes and increases the likelihood of receiving appropriate preventive, chronic, and acute care services. Additionally, individuals without health insurance coverage are more likely to experience sharper declines in health status and die sooner than those with continuous health insurance coverage. [27]

Although health insurance is an important enabler of health services utilization, it is only one of several important factors in health care access.

Provider Supply

Demand for safety-net health care services has been defined as, "the extent of need for safety-net services … affected by a wide variety of factors, particularly the size of the population potentially using safety-net providers and the intensity of their need." [28] Health care demand has been studied in various ways – focusing both on assessing community-wide health care resources available to serve the needy, as well as considering the unique characteristics of the population placing demand on services in the safety-net system.

To meet this demand, there must be at least an adequate supply of physicians and other health care providers. Physician supply has been defined as "the number of licensed physicians working in a health care system or active in the labor market."[29] The same concept can be applied to other health care providers such as physician assistants, nurse practitioners, nurses, dentists, optometrists, behavioral health therapists, and physical therapists. In this section, we will discuss what existing literature has to say about provider supply and its effect on access to care, especially for the Medi-Cal and Medicaid populations.

Impact of the ACA

The enactment of health care legislation over the past several years, including the ACA and the Children's Health Insurance Program Reauthorization Act (CHIPRA), has expanded publicly funded health insurance coverage to millions who were previously uninsured, including more than 10 million individuals new to Medicaid as a result of the ACA's eligibility expansions.[30]

These gains have minimized one of the fundamental barriers to accessing care, and one of the tests facing these health care coverage expansion programs will be in accommodating the increased demand for health care services in the Medi-Cal program. However, several years after the ACA's initial implementation, research indicated that the health law was likely to have a relatively modest impact on demand for services, and existing provider supply should be sufficient to meet any increase in demand.[31] A study assessing effects of the ACA five years after its passage supported this and found a high degree of consumer satisfaction with access to services, with about 75% of individuals seeking appointments with new primary care physicians being able to secure one within four weeks.[32]

Monitoring Provider Supply

Population characteristics such as age distribution, the level of illness and disability, cultural diversity, and the geographic distribution of the population have been identified in the

literature as important factors to consider in a health care access monitoring system, since each in some way relates to specific demands for services.[33]

For example, a population comprised predominantly of older or disabled adults places greater demand on specialty services such as cardiology or orthopedic surgery, while a population comprised mainly of children places a greater demand on pediatric services. Other studies which focus on assessing health care capacity examine community-level factors of access such as the availability of providers offering services within the community, the overall availability of hospital beds, the preponderance of poverty in the community, and market factors such as the extent to which managed care is the primary health delivery model.

Adequate provider supply, which is probably the most commonly used community-level measure of health care access, is associated with many positive health outcomes. For example, studies have found a significant association between adequate primary care physician supply and lower mortality, longer life expectancy, and better birth outcomes. These positive outcomes occur even in the presence of individual-level inequities such as income and racial/ethnic characteristics.[34]

Studies assessing the impact of provider supply have examined several practice characteristics such as location (rural vs. urban), health care setting (large group, public or private hospital, academic medical centers, or community health clinics), and provider specialty area. For example, health care resources tend to be scarcer in rural and poor inner-city areas compared to metropolitan areas with higher incomes; and public and teaching hospitals tend to serve a larger proportion of uninsured or publicly insured patients. When the number of public hospitals shrinks, or when the proportion of low-income patients who reside in rural or inner-city areas grows, the supply and demand for services change in marked ways.

Specialist Accessibility

The availability of specific professional subgroups (including primary care physicians, obstetricians/gynecologists, specialty care, and surgical specialty practitioners) in the health care system can impact a patient's access to services. Studies have cited problems with access for California's uninsured and low-income population to specialty providers such as neurologists, allergy/immunology specialists, orthopedists, and others.[35,36] In addition to limitations rooted in families' lack of resources (including low levels of income, education, language proficiency, and health literacy), the main reasons cited for these access problems were finding a specialist willing to accept new patients, and the inability of patients to obtain timely appointments. Even when they secure appointments with specialists, uninsured and publicly insured patients face longer delays in receiving care compared to their privately insured counterparts with similar conditions.[37]

Rural vs. Urban

The impact of providers and specialist accessibility is even starker when examining the differences in provider supply within rural vs. urban areas. Provider supply has been a long-standing issue affecting health care access for patients in rural parts of the U.S. While 20% of Americans live in rural areas, only 9% of the nation's physicians practice there. Rural residents account for a large proportion of America's disabled population, and rural areas have difficulties in attracting and retaining qualified health care professionals, often lacking the resources necessary to offer highly specialized services. In comparison to urban residents, patients living in rural areas have access to fewer hospital beds, physicians, nurses, and specialty providers per capita, and face increased transportation barriers. The limited supply of providers offering services in rural areas can lead to patients making fewer physician visits and seeking care later in the course of their illness.[38]

Assertions about Rural vs. Urban Physician Supply

Most existing literature regarding physician supply in urban and rural areas asserts that there is a relative shortage of physicians per population in rural areas, compared to urban areas[39 40]. As of August 2014, 60% of Primary Medical Health Professional Shortage Areas were located in non-metropolitan areas[41]. However, there is not universal agreement among researchers as to whether such a shortage exists in rural areas. At least one study asserts that the disparity between urban and rural physician supply may reflect oversupply, especially among specialists, in urban areas. It may also not reflect the usage of urban physicians' (especially specialists) services by rural residents[42].

If shortages exist, they may in part be a symptom of a national health care labor shortage[43]. Geographic distribution of supply can also vary by health care workforce sector. For example, compared to other provider types, there are proportionately fewer oral and behavioral health professionals living and practicing in rural areas[44].

Factors that Affect Physician Location

There are numerous factors that affect physician location. First, unlike many Western nations, the US does not manage or regulate the amount, type, and geographic distribution of its workforce. Thus, members of the healthcare workforce have considerable freedom to choose where and how they work. This freedom and the resulting geographic imbalance suggest that there are inferior incentives to practice in rural areas[45].

Other factors that affect physician location include specialization; years of training and education; and gender. Specialty affects physician location decision far more than any other factor. The more highly specialized the physician or other provider type, and the more years of education and training he or she has, the more likely he or she will practice in an urban area, and the less likely he or she will choose a rural area[46 47]. Female doctors prefer urban practice

more strongly than male doctors. As women continue to account for a progressively increasing percentage of medical students and ultimately physicians, this preference could pose a challenge for recruitment of physicians to practice in rural areas[48].

While one might assume that income prospects would drive physicians to practice in urban areas, average physician incomes in rural and urban areas do not differ significantly. Also, after accounting for local cost of living, rural physician incomes provide significantly more purchasing power. Thus, earning potential is not necessarily a driving factor in physicians' location decisions[49].

Rural vs Urban Physician Supply, and its Effect on Access

Physician supply ultimately affects access to care more in rural areas than urban ones. In urban areas, lack of insurance and demographic characteristics such as income and race/ethnicity affect access much more significantly than physician supply. A more equitably distributed supply within urban areas would not likely resolve those fundamental access inequities[50]. Since the ACA has contributed to increasingly equitable insurance status, it will likely serve to further illustrate that physician supply more negatively affects rural areas[51]. Finally, even though rural residents are more likely than their urban counterparts to have a usual source of care, they are more likely to have difficulty accessing that source of care, largely due to the need for extensive travel time to see their providers[52].

Evaluating Adequacy

Identifying areas of oversupply and shortages of Medi-Cal providers and specialists is critical in assessing access and meeting the demand for health care services. There were several methodologies identified in the literature that are used to evaluate the adequacy of provider supply. Three complementary methods are described below.[53]

Relative benchmarking uses population-to-physician ratios in a geographic area of interest, and compares this ratio to those of other geographic areas. A county-based or local population-to-provider ratio that is well above the mean for the state could be an indication of under-supply and a signal for Medicaid officials to investigate further.

Normative benchmarking utilizes a pre-determined desired ratio of the population to providers against the actual ratio. The HPSA's population-to-primary-care-physician ratio of 3,500:1 as a benchmark for "high need" is an example of a normative ratio. Of course, such ratios vary by provider type, and demand for services varies by physician specialty. For example, the number of visits to pediatricians or family practice physicians, per thousand members, is likely to be greater than the number of visits to dermatologists or ophthalmologists.

Economic analysis of the physician labor market is the analysis of the provider market, and the impact of reimbursement rates and compensation, as various health care organizations

compete for the limited supply of physician services by offering higher payments. However, not all providers share the same sensitivity – or elasticity – to price. Some physicians are able to accommodate a greater number of Medi-Cal beneficiaries as a percentage of their overall practice than others.

> "Although high fee levels increase the probability that individual physicians will accept Medicaid patients, high fee levels do not necessarily lead to high levels of physician Medicaid acceptance in an area. Numerous other physician practice, health system, and community characteristics also affect Medicaid acceptance. The effects of Medicaid fees on Medicaid acceptance are substantially lower in areas with high Medicaid managed care penetration and for physicians who practice in institutional settings. The results suggest that a broad range of factors need to be considered to increase access to physicians for Medicaid enrollees." [54]

Provider Reimbursement

Physicians' willingness to participate in the Medicaid program is an important aspect of provider supply in Medi-Cal. Certain surveys that assess a provider's willingness to participate in the Medicaid program have reported inadequate and delayed reimbursement as a primary reason for not participating in the Medicaid program.[55, 56, 57]

Though many studies demonstrate an observable association between higher reimbursement rates and higher physician participation in the Medicaid program, there is conflicting evidence as to the degree of that association. For instance, a study of Mississippi's Medicaid program found that after implementing a legislatively mandated 5.4% reduction in provider reimbursements in 2002, the program saw little to no impact on provider participation. Data show that providers slightly increased their number of appointments to compensate for lost revenue, but even modest impacts on beneficiary access proved to be temporary.[58]

More recent studies assessing the effects of the ACA's increase in Medicaid primary care physician reimbursements to Medicare levels in 2013 and 2014 found similar results in terms of the impact of reimbursement rates on provider participation. In 10 states, an 8% increase in appointment availability was observed among participating Medicaid providers following the reimbursement increase compared to a 1% increase among privately insured patients. However, no effect on the proportion of providers accepting Medicaid patients was observed. [59, 60]

Other studies recognize that fee levels are only one of many factors that affect the relative number of physicians who are willing to accept Medicaid patients. For example, general internists and family practitioners, physicians from ethnic minority groups, physicians who deliver services in institutional settings, and those practicing in lower-income communities are more likely to participate in the Medicaid program, regardless of reimbursement policies.[61]

Service Utilization and Other Elements of Access

Appropriate health care utilization, or "realized access," is the ultimate outcome of achieving effective health care access. Studies have demonstrated that any one of several barriers to access may hinder the ability for patients to access appropriate primary care services, and increase the likelihood for those with chronic conditions to delay needed care or to seek care in emergency departments.

Access to preventive services such as routine blood pressure and cholesterol screening, dental check-ups, vaccinations, and routine cancer screening are hindered when patients face major barriers such as a lack of insurance and a limited availability of providers, as well as when they face other patient-level access barriers such as a lack of a usual source of care, and language and transportation difficulties. Eliminating these health care access barriers places patients on a pathway to appropriate health care utilization and, ultimately, better health outcomes.

Patient-Level Barriers

The concept of access to health care services encompasses much more than the three primary pillars of insurance coverage, provider supply, and service utilization. Barriers often cited by low-income and publicly insured patients include: the doctor's lack of responsiveness; a feeling of being unwelcome at doctor's offices; an inability to pay their portion of costs; being too busy to take time off of work for appointments; and having prior commitments to care for family members, leaving insufficient time to seek care.[62, 63, 64, 65]

Even peripheral patient- and community-level issues such as housing instability and food insecurity have been cited as major impediments to health care access, leading to high rates of acute care.[66] These issues were observed across demographics, with a higher prevalence noted among young adults, women, parents, low-income individuals, and those diagnosed with at least one chronic health condition.[67]

In addition, studies have shown that patients encounter a number of process obstacles in getting needed care, such as long telephone wait times, waiting several days for an appointment, and encountering providers who do not have weekend or evening hours.[68]

Patients who live in remote areas of the country experience serious obstacles in accessing needed medical care due to geographic distances and transportation problems. Long transportation times (greater than 30 minutes) and provider proximity have been associated with more frequent use of emergency room visits.[69] Low-income urban patients who walk or rely on public transportation are less likely to have a usual source of care, wait more than two days before seeking care, and are less likely to seek care when new problems and exacerbations of chronic problems arise.[70, 71]

Andersen's Model for the Study of Access to Health Care Services

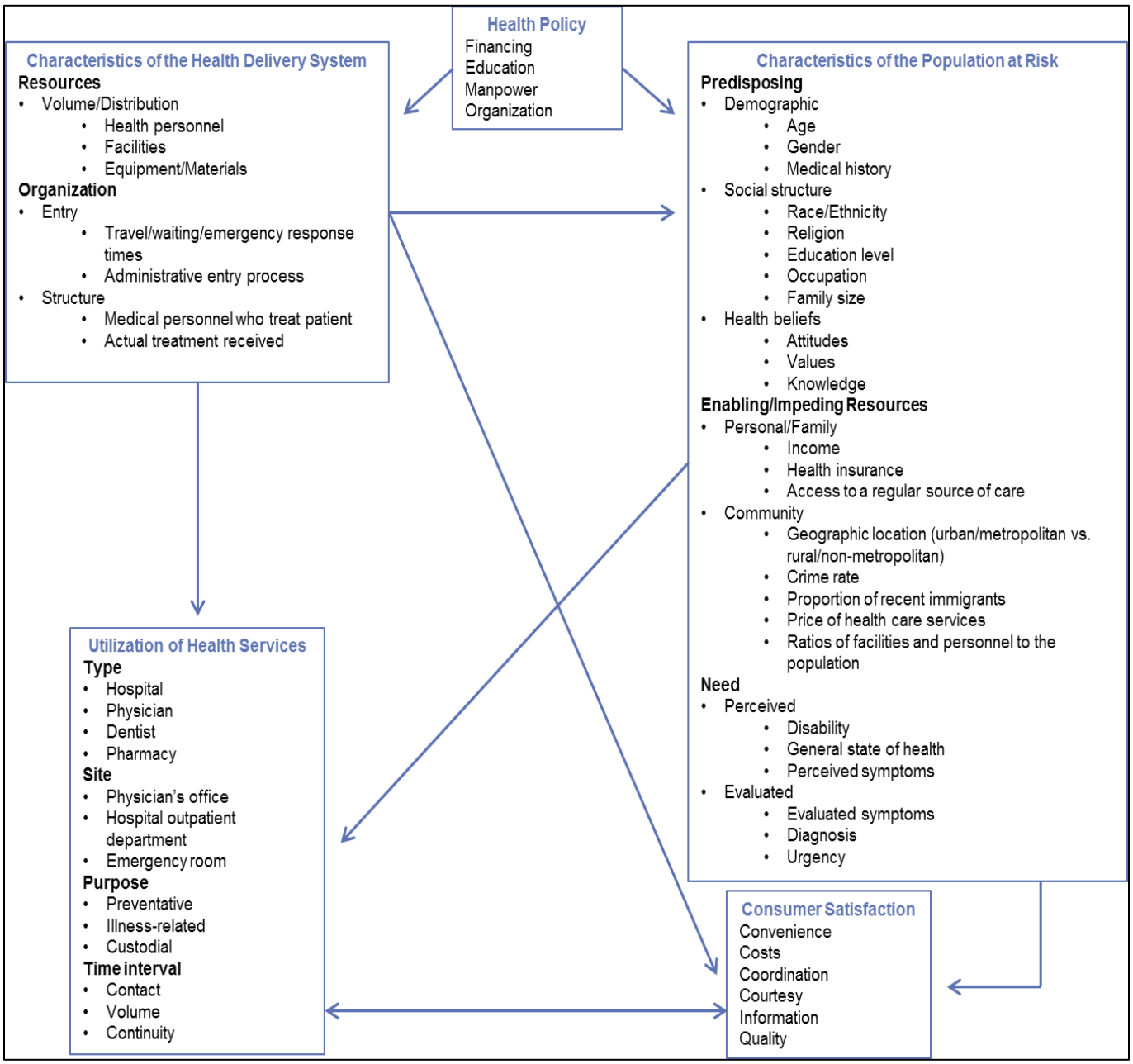
Researcher Ronald Andersen's work was predicated on the idea that the study of access to health care services encompasses much more than foundational elements such as insurance coverage and provider supply. Started almost 50 years ago and developed further since, Andersen's remains the most-often cited and studied framework for measuring health care access.

In the initial model, developed in 1968, Andersen sought to "construct an integrated theoretical framework for the study of access and to suggest how empirical indicators of the concept might be derived from it." This framework was further developed in the ensuing decades. The second iteration, published in 1974 and co-authored by researcher Lu Ann Aday, refined the model and has served as a primary influence for future researchers' study of health care access. Andersen's model also serves as a resource to understand how an array of internal factors and external influences interact to ultimately determine patient access – underlining the fact that access to health care services, and the ability of a population to utilize them, encompasses far more than the presence of insurance coverage and adequate provider supply.

At the center of Andersen's model is the overarching influence of federal, state, and local health policy. Health policy directly affects the characteristics of the health delivery system, impacting the volume and distribution of resources, as well as organizational factors such as the administrative entry process and the actual course of treatment received by the patient once they have gained entry into the health care delivery system. In turn, the characteristics of the health delivery system can affect patients' utilization of health care services, determining the type of health care sought and the site at which it is rendered.

The health delivery system can also impact a patient's purpose for seeking care as well as their continuity of care. In a different but equally tangible fashion, the use of health care services is also informed by the characteristics of the population at risk, defined by Andersen as the population's predisposing demographic, social, and belief-based characteristics; personal and community-based factors that either enable or impede their access to care; and perceived and objectively evaluated need-based factors. Some of these characteristics of the population at risk are themselves influenced by federal, state, and local health policy and the characteristics of the health delivery system, such as patients' health beliefs, and their perceived and evaluated needs (Figure 19).

Figure 19: Ronald Andersen's Framework for the Study of Access to Health Care Services



Source: Created by DHCS-RASD, based on "Revisiting the Behavioral Model and Access to Medical Care: Does It Matter?" (1995) by Ronald Andersen.

As a practical application of Andersen's model, consider the issue of ED utilization. When one is attempting to diagnose the reasons for high ED use, one must consider that this issue is influenced by many different factors from various areas of the framework. The explanation may tie into the characteristics of the health delivery system, such as the insufficient volume and distribution of primary care resources that cause a higher utilization of ED services. Or, the answer may lie in the characteristics of the population at risk, such as some patients' belief that

ED facilities render more complete care than primary care physicians. Finally, one must consider the possibility that ED use may be influenced simply by patients' legitimate perceived and evaluated needs, or that all of these factors have had a tangible influence on rates of ED utilization.[72]

As demonstrated by Andersen's framework, the study of access to health care services represents a complex tapestry of interwoven factors that work in concert to determine an individual's access to care, with each major factor influencing and in turn being influenced by one another.

MACPAC Access Monitoring Framework

The Medicaid and CHIP Payment and Access Commission (MACPAC) prepared a report to Congress in 2011, incorporating many of the previously mentioned elements in their recommendations for measuring and monitoring access to health care services among Medicaid and CHIP populations. In its report, MACPAC presents an access framework with an emphasis on three main areas: the unique characteristics of Medicaid and CHIP enrollees; the availability of Medicaid and CHIP providers; and the appropriate utilization of health care services.[73]

Population characteristics such as age distribution, gender, the level of illness and disability, cultural diversity, and geographic distribution are recognized as important factors in an analysis of health care access, as each of these aspects drives health care use in some way.

The Commission's framework recognizes that most Medicaid beneficiaries are lower income, making cost-sharing requirements for services particularly challenging. A large proportion of the Medicaid population is culturally and linguistically diverse, and many may have difficulties understanding and acting upon health care information. Additionally, the Medicaid beneficiary population is comprised of a large proportion of disabled individuals and other people with complex health care needs.

The availability of services, specifically the adequacy of provider supply and specialty mix, is highly correlated with beneficiaries' receipt of needed services. Examining the adequacy of Medi-Cal delivery systems requires an analysis of the number and types of providers available to the Medi-Cal population, their service location, and whether the Medi-Cal provider network reflects the needs of the beneficiaries. Provider supply may be driven by payment and other program policies, and may further influence whether providers are willing to accept new Medicaid patients.

The final area of the framework focuses on the way beneficiaries use health care services, often referred to as "realized access." This area places attention on what services are being used, the affordability of such services, how easily beneficiaries can navigate the health system, as well as

beneficiary experiences and feedback. The appropriate use of health care services, which is a fundamental goal in achieving adequate access, directly leads to better health outcomes.

Combined, these three areas of access monitoring provide a comprehensive picture of health care access for Medicaid beneficiaries. MACPAC's report appreciates that substantial differences in state program policies exist, and places emphasis on tailored measures that reflect the local health system and the needs of the local populations. The framework recommended by MACPAC offers a realistic approach that considers data limitations and other resource constraints, with a focus on implementing measures more likely to reveal important barriers to health care access.

DHCS' Access Monitoring Framework

As the determinants of access remain a complicated interplay of factors, DHCS developed an access monitoring framework that casts a wide net across the Medi-Cal delivery system to best evaluate access to health care services.

Information published by MACPAC was used as the primary source of material for developing DHCS' framework for evaluating healthcare access. Additional sources of information that contributed to this effort included published work from the Institute of Medicine, Agency for Healthcare Research and Quality (AHRQ), and the published works of health services researchers. Finally, the requirements from the final rule were evaluated and incorporated into DHCS' framework.

Foundational Concepts

DHCS' framework is predicated on the idea that access is the act of linking a population to needed and appropriate health care services, incorporating the following concepts:

1. *Predisposing Characteristics of the Population* – A population's demographic and health composition are important predisposing factors to accessing health care services, and often drive the need for such services.
2. *Enabling or Impeding Factors* – Many enabling or impeding factors, including national and state economic and political influences, health system factors, and patient-level barriers, can impact access to FFS Medi-Cal services.
3. *Realized Access* – The appropriate and timely use of health care services serves as evidence that health care access was realized.

Predisposing Characteristics of the Population

The MACPAC framework considers the unique characteristics of the Medicaid and CHIP populations, including their cultural and linguistic diversity, geographic location, and complex health care needs. In our framework, predisposing characteristics are the basic demographic

composition of the population. They include age, gender, race/ethnicity, primary language spoken, geographic region, and disability status.

Population characteristics often drive the need for health care services. For example, a population comprised of women of reproductive age places demand on obstetric and gynecological services, while a population of primarily older adults places demand on a different set of services such as those to manage chronic conditions.

Additionally, important is the geographic distribution of the population in relation to health care service locations. In the FFS Medi-Cal delivery system, roughly 78% of the population is located in urban areas, while 22% are located in areas classified as rural or frontier (one with a population density equal to or less than 11 persons per square mile).

Enabling or Impeding Factors

There is a myriad of factors that can potentially enable or impede access to health care services. National and state economic environments – including unemployment rates, rates of uninsured in the general population, state budget crises, and other economic influences – have a substantial impact on a population's ability to access health care services

For example, when unemployment rates increase, many people lose employer-based health insurance and their ability to access health care. Increased unemployment in a population places greater demand on publicly funded health care programs, and may lead to impediments in health care access via the diminished availability of vital program services.

Characteristics of a community's health care delivery systems, including the penetration rates of managed care, health care workforce distribution, and the availability of physicians and medical specialists, as well as the willingness of providers to participate in publicly funded health care programs, all contribute to health care access in one form or another.

Provider availability, particularly in rural and low-income areas of the country, and the proximity of available health care services in relation to the populations they serve, are all considered important factors in accessing health care and have been incorporated into the access model. The model further recognizes that federal and state policies may influence, both positively and negatively, the supply of providers that deliver services in publicly funded programs, and ultimately enable or hinder access to health care for Medi-Cal and CHIP populations.

Many of the enabling/impeding factors described above have been recognized by the MACPAC Commission as important elements to consider in regards to access monitoring. The enabling/impeding factors we list have all been documented by health services researchers as long-standing and important influences to accessing health care, but are in no way intended to be an exhaustive list of factors affecting access.

Realized Access

DHCS' access monitoring model utilizes the appropriate and timely use of health care services as evidence that health care access was realized. In this model, evidence of realized access is obtained through numerous information sources. For instance, Medi-Cal administrative claims submitted for services paid under a FFS arrangement enables the State to analyze realized access for its Medicaid beneficiaries over time and for specific subgroups. Examples of realized access identified through administrative data include claims reflecting doctor visits, dental visits, and other health care services.

Administrative data alone does not provide information regarding beneficiaries who are unable to access services, or the reasons for these access difficulties. The reasons for beneficiaries not accessing services can be identified through information sources such as a hotline for beneficiaries to directly express their experiences with the Medi-Cal program. DHCS' model incorporates a measure that tracks beneficiaries' experiences with the FFS delivery system through their interaction with the DHCS help line.

As conveyed in the available literature, the study of beneficiary access to health care services includes far more than the key foundational concepts like insurance coverage and provider supply.

Identified Access Domains

Several healthcare access domains were identified using the research and frameworks described above. The primary goal was to select a limited number of measures for each of three key areas recommended by MACPAC that are known to influence healthcare access, and that would provide useful data on access among Medi-Cal beneficiaries for state policymakers. DHCS further considered the availability of data used to evaluate access to care, the ability to compare calculated measures by geographic regions, and the comparability of measures to national surveys or nationally recognized clinical best practices.

Methodology

Study Population

As previously discussed, many Medi-Cal beneficiaries in FFS are part of groups with administrative characteristics that prevent consistent participation in Medi-Cal's FFS delivery system. This becomes problematic for meaningful access analysis. In order to evaluate only those Medi-Cal beneficiaries with consistent exposure to the FFS delivery system, the study population for the evaluation domains of beneficiary participation and service utilization will only include Medi-Cal certified eligibles that were enrolled for at least 11 months in a given fiscal year. In terms of the baseline data included with this monitoring plan, it means that for state fiscal years 2012-13 and 2013-14, DHCS analyzed information for those beneficiaries with at least 11 months of enrollment in that fiscal year. The same process is repeated for state fiscal

year 2014-15. This methodology approximates that used for analysis of Healthcare Effectiveness Data and Information Set (HEDIS) measures in Medi-Cal managed care quality reporting. HEDIS® measures are based in part on the supposition that the delivery system is accountable for providing specific services to enrolled members, and the minimum period of enrollment is designed to give the system reasonable opportunity to fulfill that responsibility prior to measurement. This does not affect evaluation domains relating to provider participation or feedback.

Baseline Study Periods

The baseline, included as Appendix A in this monitoring plan, will include State Fiscal Years (SFY) 2012-13, 2013-14, and 2014-15 data, with the first analysis of access covering future SFYs 2015-16 and 2016-17 data.

Data Availability

In identifying measures to assess access to Medi-Cal FFS administered services, attention was given to the availability of data that could be used to evaluate key access to care areas. DHCS focused heavily on administrative program data that were readily available and would allow for the monitoring of trends in enrollment by specific sub-populations, provider availability by geographic distribution and provider type, and healthcare utilization. These data include Medi-Cal paid claims data, Medi-Cal eligibility data, and California Vital Statistics data. A detailed description of each administrative data source is presented in Appendix B.

The administrative data sources identified for use in calculating some of the proposed healthcare access measures are not considered complete for 12-months following the end of the reporting period. Reporting of these measures is only feasible when complete data sets can be compiled. In addition, considerable data manipulation is necessary prior to undertaking any analysis.

Each of these administrative data sources offer valuable information for access monitoring on a timely basis. For example, Medi-Cal's eligibility data provides detailed information on a beneficiary's length of enrollment, aid category under which they are eligible for services, age, race/ethnicity, and primary language spoken. Though offering timely resources for access monitoring, these administrative data sources are not without limitations. For example, although Medi-Cal's eligibility data contain information on the primary language spoken by a beneficiary, Provider Master File data on provider languages spoken and the availability of interpretive services are lacking. Such limitations hinder DHCS' ability to assess provider availability for non-English speaking beneficiaries. And, although it can be identified whether a beneficiary had at least one physician visit during the year using paid claims data, the reasons for those not receiving care when using these same administrative data sources cannot be evaluated.

Access Evaluation Domains

DHCS' access analysis will be divided into seven domains:

1.) Beneficiary Participation,
2.) Provider Participation,
3.) Realized Access (Service Utilization),
4.) Obstetric Services and Births Outcomes,
5.) Feedback,
6.) Dental, and
7.) Provider Reimbursement Rates.

Evaluation Domain: Beneficiary Participation

Rationale: Changes in FFS Medi-Cal program participation may have an impact on demand for program services. This evaluation domain will allow DHCS to monitor the changing demand for program services by enrollee demographic characteristics, eligibility category, and geographic location.

The California HealthCare Foundation has proposed population-specific measures that include pregnant women, children, seniors, and people with disabilities as part of its recommendations for measuring Medicaid program performance[74]. Measures such as this have also been recommended by the AHRQ as one of many tools to monitor access in safety net healthcare systems. Data can be compared to identify trends in FFS Medi-Cal enrollment to anticipate need for program services. Administrative data is readily available for this measure through the Medi-Cal program.

Analysis Performed and Measures Evaluated: The beneficiary participation entails evaluating Medi-Cal's FFS population along several dimensions. These include:

- the trend in FFS Medi-Cal participation,
- the distribution of FFS Medi-Cal beneficiaries by length of enrollment,
- the distribution of FFS Medi-Cal beneficiaries by age group,
- the distribution of FFS Medi-Cal beneficiaries by aid category,
- the distribution of FFS Medi-Cal beneficiaries by gender,
- the distribution of FFS Medi-Cal women ages 15-44 by aid category,
- the distribution of FFS Medi-Cal beneficiaries by geographic region,
- the distribution of FFS Medi-Cal beneficiaries by race-ethnicity,
- the distribution of FFS Medi-Cal beneficiaries by primary language spoken.

***Methodology*:** Medi-Cal participation by certified eligibles in Medi-Cal's FFS health care delivery system will be evaluated using Medi-Cal eligibility data. Individuals who experienced 11 months of eligibility during the evaluation period will constitute the study population for this access analysis.

Data Source: Medi-Cal eligibility data

Evaluation Domain: Provider Participation

Rationale: Provider participation is an important first step in accessing health care, increasing the likelihood that patients receive preventive services and timely referral to needed care. Studies have reported that a higher supply of primary care physicians is associated with lower mortality rates, longer life expectancy, and better birth outcomes.

The analysis and findings associated with evaluating provider participation are designed to alert DHCS policymakers of any negative trends in Medi-Cal's enrolled FFS providers. The findings will allow DHCS to monitor trends in FFS provider participation by provider type and service setting. Decreases in provider participation rates will serve as a trigger for DHCS to further investigate whether the FFS Medi-Cal provider network is sufficient to meet enrollees' needs and consider options for reversing such trends. Measures such as this have been recommended by MACPAC as one of many tools to consider for monitoring access to health care services among Medicaid populations. Data can be utilized to identify trends in provider participation using administrative data readily available through the Medi-Cal program.

Analysis Performed and Measures Evaluated: In this section, several measures will be presented and evaluated. These include:

- Primary care providers
    - the number of primary care providers who rendered at least one service to FFS participating individuals by geographic region,
    - the FFS participants ever enrolled who were certified eligible for at least 11 months during the study period to participating primary care provider ratio by geographic region,
    - the distribution of primary care providers by service setting and geographic region.
    - the proportion of FFS Medi-Cal beneficiaries certified eligible for at least 11 months during the study period who resided outside of a primary care service area by geographic region,
    - the average total of FFS Medi-Cal beneficiaries residing within a primary care provider's medical service area by geographic region,
    - the average driving time to reach a primary care appointment among FFS participating Medi-Cal beneficiaries certified eligible for at Least 11 Months in the study period who resided inside/outside of a primary care service area, by geographic region, and
    - the average driving distance to reach a primary care appointment among FFS participating Medi-Cal beneficiaries certified eligible for at Least 11 Months in

the study period who resided inside/outside of a primary care service area, by geographic region.

- Specialists
    - The number of specialist providers who rendered at least one service to FFS participating individuals by geographic region, and
    - the distribution of specialist providers by service setting and geographic region.
- Behavioral Health providers
    - The number of Behavioral health providers who rendered at least one service to FFS participating individuals by geographic region, and
    - the distribution of Behavioral health providers by service setting and geographic region.
- Pre- and Post-Natal Obstetric providers
    - The number of Pre- and Post-Natal Obstetric providers who rendered at least one service to FFS participating individuals by geographic region, and
    - the distribution of Pre- and Post-Natal Obstetric providers by service setting and geographic region.
- Home Health providers
    - The number of Home Health providers who rendered at least one service to FFS participating individuals by geographic region, and
    - the distribution of Home Health providers by service setting and geographic region.
- Pharmacies
    - The number of participating pharmacies by geographic region,
    - the distribution of participating pharmacies by geographic region,
    - the proportion of FFS Medi-Cal beneficiaries certified eligible for at least 11 months during the study period who resided inside/outside of a pharmacy service area by geographic region, and
    - the average driving time to reach the nearest pharmacy among FFS participating Medi-Cal beneficiaries certified eligible for at least 11 months in the study period who resided inside/outside of a primary care service area, by geographic region, and

- the average driving distance to reach the nearest pharmacy among FFS participating Medi-Cal beneficiaries certified eligible for at least 11 months in the study period who resided inside/outside of a pharmacy service area, by geographic region.

Methodology: For the purpose of evaluating provider participation, the focus will be on providers who have rendered services to Medi-Cal enrollees (i.e. participating providers) during the state fiscal year. The count of providers for each group evaluated will be based on paid claims. An encounter — also referred to as a distinct visit — is defined as a contact between a provider and a Medi-Cal FFS beneficiary in which a Medi-Cal claim record(s) for reimbursement is generated and submitted for payment. A distinct visit represents a single encounter and is defined by the unique combination of the provider county, beneficiary's Client Identification Number, provider's NPI, and the date-of-service. Both billing and rendering providers are captured from claims data for these analyses. Evaluation of the following provider types will be performed by geographic region and service setting:

- Primary Care Physicians
- Behavioral Health
- Home Health
- Pre- and Post-Natal Obstetrics
- Physician Specialists
- Pharmacies

Additionally, participation counts for each provider type will be grouped by:

- Geographic region (Refer to Appendix E for county groupings)
- Service setting

Limitations: This analysis is inherently limited by the availability of data relating to physician participation. Administrative data do not denote the percentage of a given provider's hours or capacity that are devoted to treating FFS Medi-Cal beneficiaries compared with other types of health insurance for which the provider renders services (e.g., Medi-Cal managed care).

Data Source: Medi-Cal Paid Claims Data, Medi-Cal Eligibility data, and Provider Master File

Evaluation Domain: Realized Access

Rationale: Realized access refers to how individuals enrolled in FFS Medi-Cal are actually using healthcare services. Appropriate use of health care services is the end result of effective health care access. This measure is designed to analyze changes in health care utilization associated with individuals participating in Medi-Cal's FFS delivery system.

Methodology: Realized access focuses on analyzing changes in health care utilization. In order to establish control limits for utilization, the baseline study period selected was SFYs 2012-13, 2013-14 and 2014-15. Service Utilization events reflect only services rendered to beneficiaries in Medi-Cal's FFS delivery system who were certified eligible for Medi-Cal (meaning that they met eligibility requirements and were enrolled in the program) for at least 11 months in either SFY 2012-13, 2013-14 or 2014-15. The analysis of changes in service utilization were evaluated by service category, geographic region, aid category, age group, gender, and race/ethnicity.

The six service categories evaluated include:

- Primary Care
- Specialist
- Behavioral Health
- Pre- and Post-Natal Obstetric
- Home Health
- Pharmacy

Primary care was defined by categorizing Medi-Cal's declared provider specialty from the Provider Master File and clinics into a "primary care" service category. Table 11 presents the Medi-Cal provider specialties and the clinics which constitute the primacy care category of service.

Table 11: Primary Care Category of Service Definition.

Primary Care Providers - Physicians, Physician Groups, and Clinics	Medi-Cal Provider Type
Physicians and Physicians Groups	General Practice
	Family Practice
	Gynecology (D.O. only)
	Obstetrics (D.O. only), Endodontist (Dentists Only)
	Obstetrics-Gynecology (M.D. Only) Neonatal
	Preventive (M.D. only)
	Pediatrics, Periodontist (Dentists Only)
	Internal Medicine
Clinics	RURAL HEALTH CLINICS/FEDERALLY QUALIFIED HEALTH CENTER
	FREE CLINIC
	COMMUNITY CLINIC
	Multispecialty Clinic
	CLINIC EXEMP FROM LICENSURE
	COUNTY CLINICS NOT ASSOCIATED WITH HOSPITAL
	OTHERWISE UNDESIGNATED CLINIC
	Tribal Health

The specialty category for services included 40 different declared specialties as reflect on Medi-Cal's Provider Master File (Table 12).

Table 12: Specialty Category of Service Definition

Specialist Providers - Physicians and Physician Groups	Medi-Cal Provider Type
Physicians and Physicians Groups	General Surgery
	Allergy
	Otology, Laryngology, Rhinology
	Cardiovascular Disease (internal medicine)
	Dermatology
	Gynecology (Osteopaths only)
	Gastroenterology (internal medicine)
	Neurology
	Neurological Surgery
	Obstetrics (D. O. only)

Specialist Providers - Physicians and Physician Groups	Medi-Cal Provider Type
	OB-Gynecology (M. E. only)
	Ophthalmology, otolaryngology
	Ophthalmology
	Orthopedic Surgery
	Peripheral Vascular Disease or Surgery (D. O. only)
	Plastic Surgery
	Physical Medicine and Rehabilitation
	Psychiatry Neurology
	Proctology (colon and rectal surgery)
	Pulmonary Diseases
	Radiology
	Roentgenology
	Radiation Therapy (D.O. only)
	Thoracic Surgery
	Urology and Urological Surgery
	Pediatric Cardiology (internal medicine)
	Pediatrics
	Nuclear Medicine
	Pediatric Allergy
	Nephrology
	Hand Surgery
	Endocrinology
	Hematology
	Infectious Disease
	Neoplastic Diseases
	Neurology-Child
	Rheumatology
	Surgery Head and Neck
	Surgery Pediatric
	Surgery Traumatic

Table 13: Behavioral Health Provider Definition

Behavioral Health Providers - Physicians, Physician Groups, and Other Non-Physician Providers	Medi-Cal Provider Type
Physicians and Physician Groups	Psychiatry (child)
	Psychiatry Neurology (D.O. only)
	Psychiatry
	Marriage, family and child counselor
	Licensed clinical social worker
Other Non-Physician Providers	Psychologists
	Licensed Clinical Social Worker Individual
	Licensed Clinical Social Worker Group
	Marriage And Family Therapist Inidividual
	Marriage And Family Therapist Group

The pre and post-natal service category included physicians, physician groups, and other non-physician providers. Table 14 presents the list of Medi-Cal provider types constituting this service category.

Table 14: Pre and Post-Natal Service Category

Pre and Post Natal Providers - Physicians, Physicians Groups and Other Non-Physician Providers	Medi-Cal Provider Type
Physicians and Physician Groups	Gynecology (D.O. only)
	Obstetrics (D.O. only), Endodontist (Dentists Only)
	Obstetrics-Gynecology (M.D. Only) Neonatal
Other Non-Physician Providers	Certified Nurse Midwife
Other Non-Physician Providers	Birthing Center Services
	Alternative Birth Centers - Specialty Clinic

The health home service category included one Medi-Cal provider type that captured all health home services. The Provider Master File includes health home agencies as a unique provider type.

Table 15: Health Home Service Category

Non-Physician Provider	Medi-Cal Provider Type
Other Non-Physician Providers	HOME HEALTH AGENCIES

The pharmacy service category included one Medi-Cal provider type that captured all pharmacy services.

Table 16: Pharmacy Service Category

Non-Physician Provider	Medi-Cal Provider Type
Other Non-Physician Providers	Pharmacy Providers

As noted prior in this report, the FFS population is continuing to evolve. As individuals and specific services are moved and delegated to managed care delivery systems, the utilization among this population will be dramatically altered. Sample size and rate stability will be problematic and require reevaluation of groupings and specific baselines.

Looking into the future, the statistics presented here will be utilized to develop control charts and evaluate changes in utilization by various dimensions. It is expected that modifications to these baseline statistics will be required.

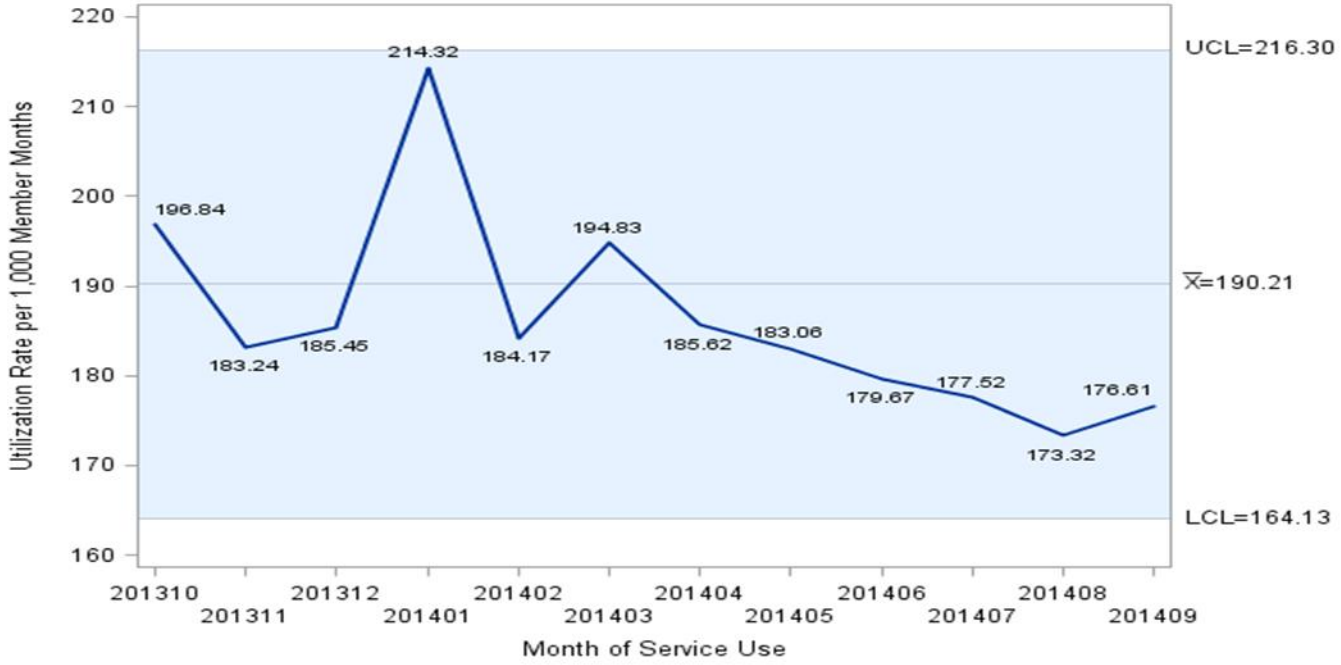
DHCS will use Shewhart control charts to identify how utilization changes over time. Control charts are a chronological time series of measures presented in a graph and plotted with an overall mean, upper and lower control thresholds. These thresholds or control limits are generally set at three standard deviations (or equivalent) from the mean, and define the natural range of variability expected from the plotted measures.
Comparing the plotted measures to the mean and upper and lower control limits can lead to inferences regarding whether the data are within an expected or predictable range, or whether there are marked changes in the data over time. Potential marked changes include:

- Eight or more consecutive points either all above, or all below, the mean line which indicates a “shift” in utilization patterns.
- Six or more consecutive points all going in the same direction (either up or down) which indicates a trend.

The data, presented in Appendix A will serve to establish a mean, upper and lower control limits in subsequent reports. Future data points will be plotted in the control charts using these established limits. Consecutive points plotted outside of the established limits will provide a signal indicating that healthcare utilization has deviated markedly from the expected range. In these circumstances, further investigation will be warranted.

Example Control Chart:

Pharmacy Services Utilization Rates among Adults Ages 21+ in the Undocumented Aid Category, October 2013–September 2014 Unique User Count **= 101,857**



Data Sources: The data utilized to capture Medi-Cal utilization rates (numerators) for individuals participating in the FFS delivery system included paid claims events with dates-of-service occurring during SFYs 2012-13, 2013-14, and 2-14-15. In addition, Medi-Cal's Provider Master File was referenced to develop unique service categories as noted above.
To develop denominators, Medi-Cal's eligibility was summarized for months of service occurring during SFYs 2012-13, 2013-14, and 2-14-15. The Medi-Cal eligibility data was used to create geographic region, aid category, age group, gender, and race/ethnicity groups.

Evaluation Domain: Obstetric Services and Births Outcomes

Rationale: Because a significant proportion of Medi-Cal's FFS population are women of child bearing age, the initiation of early prenatal care and birth outcomes are vital measures for evaluating access to health care services. In CY 2013, Medi-Cal's FFS delivery system accounted for 58.5% of all Medi-Cal births.

Effective and early prenatal care helps to avoid negative birth outcomes such as low birthweight, preterm births, or infant mortality. Important developments occur within the fetus in the first 12 weeks of pregnancy; therefore, timely prenatal care is essential. Women who initiate prenatal care later in their pregnancies are at increased risk for having a preterm or low-birthweight newborn, and having a baby requiring care in an intensive care unit.[75] The Healthy People 2020 goal states that 77.9% or more of all pregnant women in the U.S. should initiate prenatal care in their first trimester.[76]

Low birthweight (<2,500 grams) is a major contributor to infant mortality. In the U.S., the three leading causes of infant death are congenital defects, low birthweight, and sudden infant death syndrome (SIDS), all of which account for 44% of infant deaths nationally.[77] Hospital costs for newborns delivered in the low birthweight and very low birthweight ranges (<1,500 grams) are substantially higher than for normal-birthweight newborns (≥2,500 grams).[78] In addition, newborns delivered at low or very low birthweight are at increased risk for life-long disabilities.

Additionally, the percentage of preterm births is almost twice as high in the U.S. compared to other developed countries.[79] Babies born prematurely (<37 complete weeks of gestation) are at increased risk for death and life-long disabling conditions including hearing and vision loss, respiratory problems, mental retardation, and cerebral palsy.[80] The Healthy People 2020 goal is to reduce the percent of preterm births to 11.4%.

In this evaluation domain, an assessment of timely prenatal care initiation and select birth outcomes are considered. Review of FFS use can be evaluated by Medi-Cal service types using readily available Medi-Cal paid claims data.

Analysis Performed and Measures Evaluated: In this section, several measures will be presented and evaluated. These include:

- Characteristics of Medi-Cal funded births
    - Distribution of California Births in CY 2013 by payer type and delivery system,
    - Distribution of FFS Medi-Cal births in CY 2013 by age group,
    - Distribution of FFS Medi-Cal births in CY 2013 by aid category,
    - Distribution of FFS Medi-Cal births in CY 2013 by race/ethnicity, and
    - Distribution of FFS Medi-Cal births in CY 2013 by geographic region.

- Initiation of prenatal care
    - Percentage of California mothers that initiated prenatal care in the first trimester during CY 2013 by payer type,
    - Percentage of FFS Medi-Cal mothers that initiated prenatal care in the first trimester during CY 2013 by scope of coverage,
    - Percentage of FFS Medi-Cal mothers that initiated prenatal care in the first trimester during CY 2013 by aid category,
    - Percentage of FFS Medi-Cal mothers that initiated prenatal care in the first trimester during CY 2013 by geographic region,
    - Percentage of FFS Medi-Cal mothers that initiated prenatal care in the first trimester during CY 2013 by age group, and
    - Percentage of FFS Medi-Cal mothers that initiated prenatal care in the first trimester during CY 2013 by race/ethnicity.
- Low-Birthweight among Singleton births
    - Percentage of singleton births classified as low birthweight (<2,500 grams) in CY 2013 by payer type,
    - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by timing of prenatal care initiation,
    - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by scope of coverage,
    - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by aid category,
    - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by geographic region,
    - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by age group, and
    - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by race/ethnicity.
- Pre-Term among Singleton Births
    - Percentage of singleton births classified as preterm (<37 complete weeks of gestation) in 2013 by payer type,

- Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by timing of prenatal care initiation,
- Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by scope of coverage,
- Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by aid category,
- Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by geographic region,
- Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by age group, and
- Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by race/ethnicity.

***Methodology*:** The primary source of data for this measure is the birth certificates registered in California and recorded on the Birth Statistical Master File (BSMF) maintained by the California Department of Public Health's (CDPH) Center for Health Statistics. Analyses in this measure cover both singleton and multiple-birth outcomes among FFS Medi-Cal Only mothers.

Data reflecting maternal age, education level, prevalence of smoking during pregnancy, and pre-pregnancy weight were also obtained from the California BSMF. Additional data from the Office of Statewide Planning and Development (OSHPD) hospital discharge file were used to identify comorbidities among women with deliveries in a hospital.

Medi-Cal hospital inpatient claims containing a delivery diagnosis code and dates of service will be used to confirm birth certificate records for women giving birth while participating in FFS Medi-Cal. Births to these mothers were also validated against program enrollment data from the Medi-Cal Eligibility Determination System (MEDS).

Self-reported prenatal care utilization data was collected from California birth certificates. Females were identified as having early initiation of prenatal care if their first visit occurred during the first trimester of their pregnancy. Early births, or preterm births, denote babies born before 37 full weeks of gestation. Low birthweight refers to a birthweight less than 2,500 grams.

Data Source: Birth Statistical Master File, Office of Statewide Health Planning and Development Patient Discharge Data, Medi-Cal paid claims data, and Medi-Cal eligibility data.

Evaluation Domain: Feedback

Rationale: Help lines provide needed assistance to FFS Medi-Cal beneficiaries and providers experiencing difficulties navigating the health care system and assist DHCS in monitoring health care access. While several administrative data sources can be used to monitor Medi-Cal participation and utilization, help lines provide DHCS with information regarding experiences, including difficulties enrolling in the program, finding a provider, and receiving referrals to specialists. This type of feedback enables DHCS to identify potential factors impeding beneficiaries' use of services.

DHCS is also developing an Access Monitoring and Public Input webpage that will house this monitoring plan (including subsequent iterations and updates), reviews conducted according to this plan, as well ways that beneficiaries, providers, or other members of the public can contact DHCS regarding general access issue or provide public input on proposed State plan amendments.

Analysis Performed and Measures Evaluated: In this section, several measures will be presented and evaluated. These include:

- Total calls received from FFS Medi-Cal beneficiaries during SFYs 2013-14 and 2014-15 by quarter,
- Total calls received from FFS Medi-Cal beneficiaries during SFYs 2013-14 and 2014-15 by month,
- Total calls received from FFS Medi-Cal beneficiaries residing in Los Angeles and Southern California geographic regions in SFYs 2013-14 and 2014-15 by quarter,
- Total calls received from FFS Medi-Cal beneficiaries residing all other geographic regions in SFYs 2013-14 and 2014-15 by quarter,
- Total calls received from FFS Medi-Cal beneficiaries during SFYs 2013-14 and 2014-15 by geographic region and month,
- Total calls received from FFS Medi-Cal beneficiaries during SFYs 2013-14 and 2014-15 by aid category,
- Total calls received from FFS Medi-Cal beneficiaries during SFYs 2013-14 and 2014-15 by call category,
- Top three categories of calls received from FFS Medi-Cal beneficiaries in the Parent/Caretaker Relative aid category during SFYs 2013-14 and 2014-15, and

- Top three categories of calls received from FFS Medi-Cal beneficiaries in the SPD aid category during SFYs 2013-14 and 2014-15.

Methodology: As data from the Department's general helpline are not yet usable, this report relies on data obtained from the Medi-Cal Managed Care Office of the Ombudsman for the purpose of monitoring health care access. Upon receiving a call, the Office of the Ombudsman identifies whether a beneficiary is enrolled in FFS by their Medi-Cal identification number. For each of these calls, the call center recorded the date and time of their call, beneficiary aid category, county of residence, and reason for the call. The Office of the Ombudsman dataset will be evaluated and grouped by various dimensions and trends in call volume will explored and evaluated against any changes in Medi-Cal policies or environmental changes.

Limitations: The contact information for the Office of the Ombudsman call center is listed on managed care informing materials (e.g. Notification to beneficiaries that they must enroll in managed care). As a result, calls received from FFS beneficiaries may be skewed in reflecting transition-related issues. For instance, these issues may include questions from beneficiaries regarding pending enrollment or whether their FFS provider will be available to them in managed care.

Data Source: Medi-Cal Managed Care Office of the Ombudsman call center (for baseline analysis); in the future, information from the FFS helpline as well as contacts through the Access webpage will be included.

Evaluation Domain: Dental Eligibles and Utilization

Rationale: The benefits of seeing a dentist annually include an increased likelihood of receiving early diagnosis and treatment of dental disease and preventive dental services. Measures such as this have also been recommended by the AHRQ as one of many tools to monitor access in safety net healthcare systems. Data can be utilized to identify trends in Denti-Cal and to anticipate need for program services. Administrative data is readily available for this measure through the Denti-Cal program.

Analysis Performed and Measures Evaluated: In this section, several measures will be presented and evaluated. These include:

- Distribution of dental providers in CY 2014 and CY 2015 by geographic region,
- Proportion of FFS Medi-Cal beneficiaries Ages 0-20 with at least 11 months of enrollment in either CY 2014 or CY 2015 who received a preventative dental service by geographic region,
- Proportion of FFS Medi-Cal beneficiaries Ages 0-20 with at least 11 months of enrollment in either CY 2014 or CY 2015 who received any type of dental service by geographic region,
- Proportion of FFS Medi-Cal beneficiaries Ages 0-20 with at least 11 months of enrollment in either CY 2014 or CY 2015 who received a dental service in a clinic setting by geographic region,
- Percentage of 25 most utilized dental procedure reimbursement rates in SFY 2013-14 in relation to of comparable State's Medicaid programs, and
- Percentage of 25 most utilized dental procedure reimbursement rates in SFY 2014-15 in relation to of comparable State's Medicaid programs.

Methodology: The Dental measure analyzes dental services utilization in CY 2014 among beneficiaries who were continuously eligible for at least 11 months in the study period. As beneficiaries ages 21 and older became eligible to receive dental services in May 2014,[xv] the analysis focuses on dental services utilization among beneficiaries ages 0 – 20. The unit of measure is the number of unique visits. Note that all Medi-Cal beneficiaries, including those in managed care health plans, are included in these analyses.

Data Source: MIS/DSS and the Medi-Cal Fiscal Intermediary's 35-file of paid claims records.

[xv] http://www.denti-cal.ca.gov/WSI/Bene.jsp?fname=MedicalAdultDentalBeneInfo

Evaluation Domain: FFS Provider Reimbursement Rates

Rationale: Provider reimbursement rate comparisons are a tool that CMS requires states to consider in analyzing whether Medicaid payments are sufficient to enlist providers and assure beneficiary access to covered care consistent with section 1902(a)(30)(A) of the Social Security Act. The comparative payment review under the final rule requires the state to compare FFS reimbursement rates with other health payer payments.

Analysis Performed and Measures Evaluated: This measure will compare Medi-Cal FFS and Medicare provider reimbursement rates. In particular, this section will evaluate the aggregate average FFS Medi-Cal reimbursement rates as a percentage of Medicare reimbursement rates by service type.

Methodology: DHCS developed a side-by-side comparison of Medi-Cal and Medicare payment rates, in addition to aggregate total expenditure comparisons by percentage, for Primary Care Services, Physician Specialist Services, Pre- and Post-Natal Obstetric Services, and Behavioral–Mental Health Services.

Limitations: CMS issued *"Access Rule Implementation Frequently Asked Questions (FAQs)"* on March 16, 2016. In this document Q&A #15, includes several possible payment sources including Medicare payment rates or rates paid by the state employee health insurance, state-based exchanges, private pay information from third party vendors, survey information and all payer databases. In meeting the new requirements set forth in 42 CFR 447.203, DHCS is choosing to compare Medi-Cal with Medicare rates only, due to significant challenges in providing other comparisons, including comparisons to third party payors, commercial and public capitation rate systems, and comparisons to other state Medicaid rates.

Comparing rates to third party (non-government) payors on a routine basis would require multiple data reporting requirements between the DHCS and the provider community. DHCS does not currently have access, or the resources, to provide reliable, consistent third party payor comparisons. Comparing to commercial and public capitation rate systems would not be applicable, as capitation payments are in the aggregate and in most cases cannot be itemized to separately billable items. The state employee health insurance and the state-based exchange provide coverage through multiple commercial health plans and do not have an available rate schedule for comparison. California does not maintain an all-payer database.

For this report DHCS did not have access to information on other state Medicaid rates. Other state Medicaid programs may be a more appropriate comparison for public payors than

Medicare given the significant differences between the age, other demographics and health needs of the Medicare population and the providers who serve them.

In addition, Home Health Services and Substance Use Disorder Services are excluded from comparison due to lack of a comparable Medicare fee and/or Medi-equivalent Current Procedural Terminology (CPT) code.

The rate comparison will continue to be monitored and updated as additional sources of information are available.

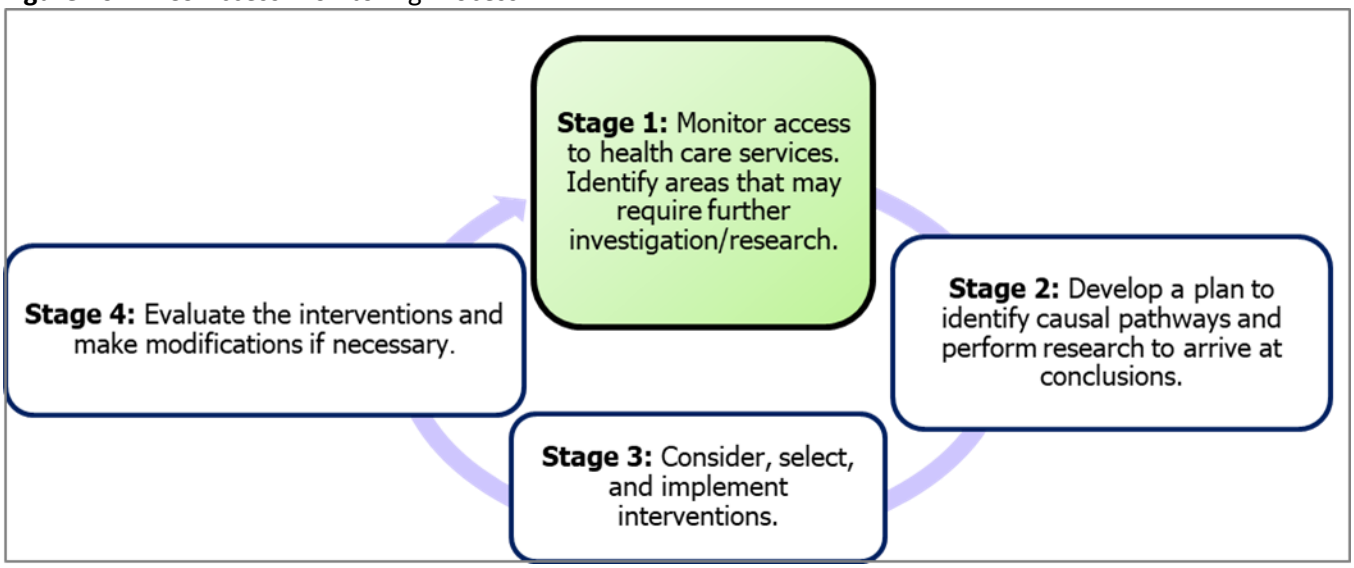
Data Source: For baseline analysis, Medi-Cal and Medicare fee schedules. In the future, DHCS will work to compare to other Medicaid programs which reflect a more similar population and service delivery than Medicare.

Access Monitoring Process

Monitoring represents a special type of research. It is generally descriptive in nature, and does not readily result in identifying or explaining unknown causal pathways or mechanisms. In general, one cannot make specific statements or inferences regarding causality based on monitoring efforts alone. Therefore, it follows that specific interventions generally cannot be developed or implemented absent further investigation.[xvi]

This does not mean that specific hypotheses or inferences cannot be proposed, but rather that these inferences or hypotheses will require deeper research and investigation to arrive at an informed conclusion. These investigational efforts will help those responsible for providing access to health care services identify the causes of any access barriers and develop appropriate interventions. DHCS' monitoring of access to health care services encompasses four specific stages (Figure 20).

Figure 20: DHCS Access Monitoring Process



Source: Created by DHCS Research and Analytic Studies Division.

[xvi] Readers should not confuse help-line interventions with access monitoring as discussed here. It is understood that help-line or call centers are designed to resolve specific patient access barriers so that proper health care can be ascertained. In terms of system-wide access to health care services, information from these help-line calls is used to inform the "system," allowing those responsible for providing access to health care services to identify systematic patterns. This information will then be used in further research to possibly identify systemic access barriers and design/implement interventions.

The process of monitoring health care access includes the collection and analysis of data, and the interpretation of trends. Once in place, data collected from the access measures may reveal problem areas or concerns affecting the appropriate use or underuse of health care services.

What is needed is a systematic and solution-oriented process to investigate such data variations, as well as a process to evaluate actions taken in response to problem-solving initiatives. These stages include defining the problem area, undertaking investigations to identify the root cause of data variations, implementing solutions, and evaluating the effectiveness of these solutions.

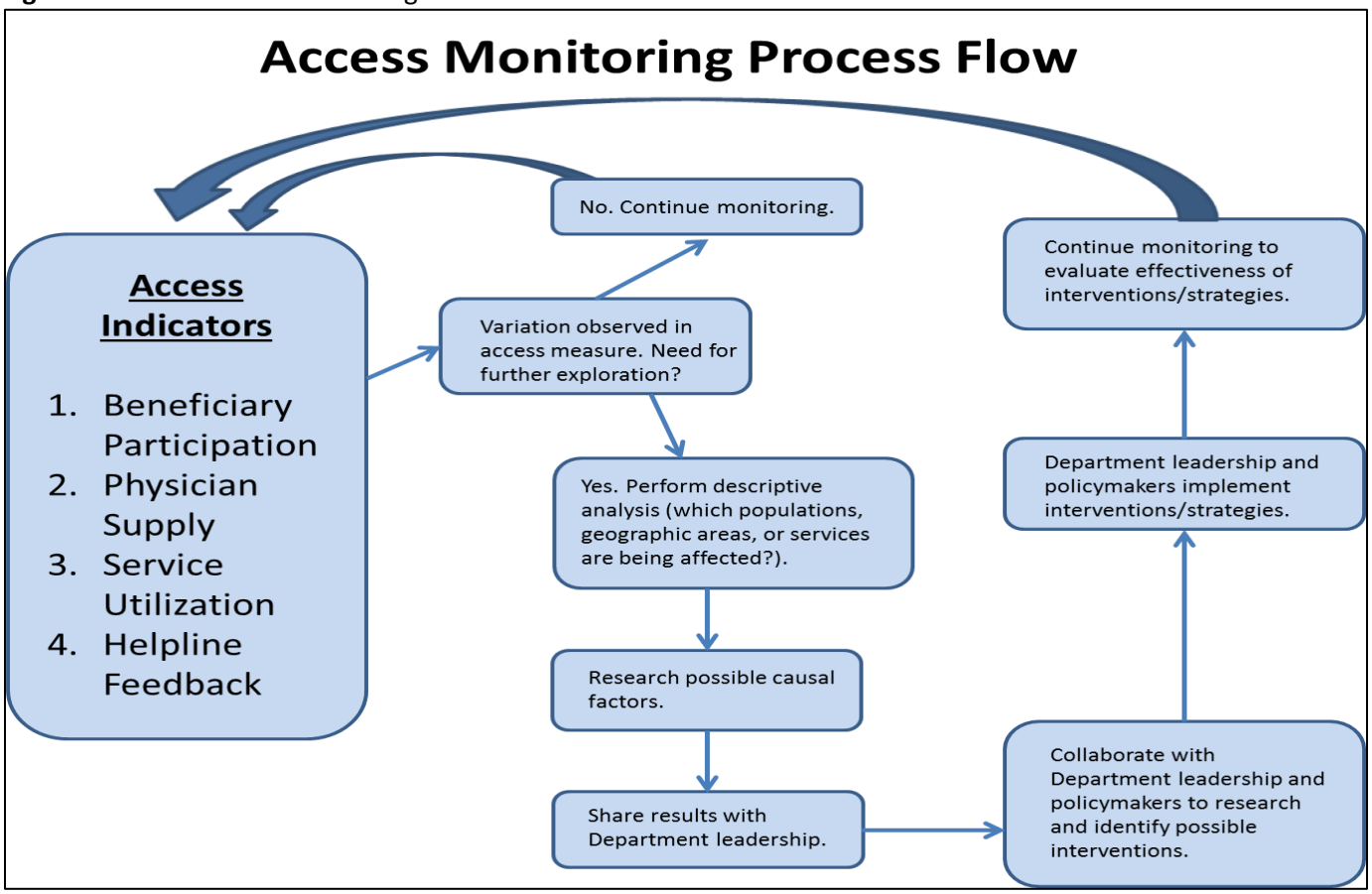
The first stage in the investigation process is to describe the data variations and any possible explanatory factors, and assess whether a problem exists. Can the changes observed in the data be a systematic error or bias? For example, can a sudden change in patient/provider ratios be explained by changes in the data collection system, or a change in how "primary care provider" has been defined? Are the changes in data of a magnitude to warrant further investigation?

Once it is decided that a real problem exists, further data is needed to describe the problem. Which subgroups (e.g., age, race/ethnicity, aid groups) of the population are affected? Does the problem exist only in certain counties, rural/urban communities, or health care settings? When did the problem first surface? Were there any significant events that occurred at the same time? Any unusual patterns identified in this stage will help define the problem and aid in formulating a hypothesis regarding the causes or determinants of the problem.

The second stage in investigating health care access deficiencies is an in-depth analysis of the hypothesis entailing further observational or experimental studies, literature reviews, informant interviews, and/or implementation of surveys. The aim of hypothesis testing is to identify factors associated with the problem. The definition of the problem will determine the approaches employed in hypothesis testing and the areas of focus (specific subgroups, locations, etc.). Selecting an approach and specific study design will further be influenced by the strengths and weaknesses of the available methods and the availability of resources.

When factors associated with the access problem are identified, information evaluating a variety of programmatic solutions and their likely success is needed. The strategies employed to improve health care access may include the development of new regulations, the modification or development of new direct service programs, or the alteration of program policies (Figure 21).

Figure 21: DHCS Access Monitoring Process Flow



Source: Created by DHCS Research and Analytic Studies Division.

Though epidemiology and health services research may not contribute largely to the identification and implementation of programmatic solutions, these disciplines do play an important role in communicating their findings to health program and health policy leaders. Using results from Stages 1 and 2, researchers can convey the significance of the health care access problem to those on the leadership team whose role it is to find appropriate solutions to address the problem.

Data presented for this purpose should help tailor the solutions to the specific communities and populations affected. Once the programmatic solutions are implemented, the monitoring of health care access must continue and, where appropriate, focused evaluation studies that measure the success or failure of these solutions must be employed.

Understanding the Monitoring Process

To fully understand access monitoring activities and limitations, it is useful to provide an analogy.

Consider the process of driving a car. When operating a vehicle, a driver is provided with a dashboard of gauges that indicate engine temperature, fuel levels, whether the door is ajar, etc. These gauges represent devices designed to allow the driver to monitor aspects of the vehicle's performance.

If a driver is alerted by the temperature gauge that their engine is hot, the driver must make a decision. At this point, the driver is simply alerted to the fact that the engine is hot, but does not know what is causing the rise in temperature. The driver has two options: (1) Keep driving and hope that the engine will not be damaged; or (2) Pull over and inspect the engine. It is important to point out that the monitoring stage in this case only provided the driver with a warning or cause for concern; the driver does not know the cause of the high temperature reading and cannot decide on an intervention at this point. The identification of this potential problem requires further evaluation.

In Stage 2, the driver now must take a closer look and perform some research. The problem might be related to the radiator hose, a stuck thermostat, an oil leak, or a defective temperature gauge. Further investigation will help the driver definitively identify if and why the engine is hot.

Assuming that research uncovers a radiator hose leak, and that the driver just happens to have a spare and all of the tools necessary to change it, they are now ready to move into the interventions of Stage 3. In this stage, the driver can fix the identified problem by replacing the radiator hose.

At this point in the process, the driver was alerted to a possible problem by monitoring the dashboard gauges, identified the likely cause for the overheating engine through research, and then selected an intervention. They are ready to move onto the final stage: evaluating the effects of the intervention. Now that the hose has been changed, the driver must monitor the temperature gauge in order to evaluate whether the intervention is actually lowering the engine temperature and achieving the expected result. Once the intervention is determined to be successful, the driver is ready to resume driving.

Limitations of the Initial Monitoring Stage

In terms of monitoring access to health care services, this report represents Stage 1. At this point, one cannot readily identify causal relationships or determine why a particular outcome has occurred. Like the temperature gauge in the previous driving analogy, access monitoring activities provide decision-makers with a set of gauges but do not identify why a particular outcome is occurring. They may cause one to pause and further evaluate or research a particular area, but the monitoring activities in and of themselves do not allow one to develop causal relationships.

For example, consider the issue of emergency department (ED) utilization. Is a high rate of ED visits caused by medical conditions warranting such a rate? Is it caused by a lack of ambulatory care providers in the community, or health care needs arising after hours? Is it caused by a belief that ED providers render superior care compared to ambulatory care providers? Each of these potential drivers of ED use requires different interventions. In some cases, additional options for accessing primary care may suffice, while in other cases patient education is warranted.

It is vitally important that those charged with providing access to health care services understand the importance of access monitoring, as well as its limitations. Readers of this report must recognize that while access monitoring identifies areas for further research, it is the further research in Stage 2 that will identify causal pathways and produce the most important knowledge regarding access to health care services. Through this research, specific interventions can be developed and directed at problem areas. Proper interventions can only be designed once we have correctly defined and documented barriers to access.

Procedures for Continued Access Monitoring

In order to satisfy the requirements of CMS' final rule on monitoring access to health care services in states' FFS delivery systems, updated data and analysis pertaining to all access measures will be incorporated into DHCS' FFS access monitoring review plan every three years, or more frequently as required under 42 CFR Part 447. Additionally, DHCS will have ongoing mechanisms in place for public input via hotlines, the Office of the Ombudsman, and a specific website with a dedicated email box. DHCS will respond to public input with appropriate investigation, analysis, and response, and will maintain a record of input and the nature of the Department's response, to be posted on the public input website.

Addressing Access Issues

In the event that potential access deficiencies are identified through data analysis, and are determined through further investigation to represent genuine access issues, DHCS will submit a corrective action plan to CMS within 90 days of identifying these issues.

The Department will include specific steps and timelines to address the issues, and remediation of the deficiencies will be made within 12 months. Remediation efforts may include: modifying payment rates; improving outreach to providers; reducing barriers to provider enrollment; providing additional transportation to services; and improving care coordination. Resulting improvements will be designed to be measurable and sustainable.

Part of this exploration process will involve soliciting input from the Department's stakeholders on the possible causes of health care access problems, and working with stakeholders to identify innovative solutions. DHCS also proposes to notify CMS of any access issues uncovered in its monitoring process. As a part of this process, DHCS will involve a variety of stakeholders including beneficiaries, health advocacy organizations, physicians, clinics, hospitals, other affected provider types, and other interested parties.

If the Department cannot definitively conclude that an access problem exists, we will develop a specific plan of action that will be provided to CMS and stakeholders that will include how we plan to continue to monitor and assess the specific situation, including the specific analyses and other steps to be taken.

Proposing State Plan Amendments to Reduce or Restructure Provider Payments

In the event that the State intends to submit a State Plan Amendment (SPA) to reduce or restructure FFS Medi-Cal payment rates, and such changes could result in diminished access, the State will conduct an access review in accordance with the procedures outlined in this access monitoring plan. As a part of any such access reviews, DHCS will take into account relevant input from beneficiaries, providers, and other stakeholders on access to the affected services and the impact of the proposed action on continued access. On a dedicated access webpage, DHCS will provide electronic notice for applicable SPA proposals, post the proposed SPA language prior to submission to CMS, and allow the public to submit input to DHCS via a dedicated email address. DHCS will maintain a record of the volume of input, the nature of the feedback received, and how DHCS responded to such input, as appropriate.

For any proposed SPAs affecting payment rates, DHCS will provide CMS with the most recent access monitoring review for the service at issue, an analysis of the effect of the proposed change access, and a specific analysis of any information and/or concerns expressed in input from affected stakeholders. Additionally, the Department will establish procedures to monitor access after implementation of a rate reduction or restructuring, as required in 42 CFR Part 447. These procedures will include an annual review of impacted providers and services – with defined measures, baseline data, and thresholds – to remain in place for at least three years following the effective date of the SPA.

Monitoring Plan Refinements

The health care access monitoring plan presented in this document proposes an initial set of measures based on data readily available to the Department. The bulk of the proposed access measures can be analyzed using administrative data sources that currently offer the best

information pertaining to beneficiary characteristics, provider availability, and service utilization.

The development of the FFS Medi-Cal health care access monitoring plan should be viewed as a long-term iterative process that will evolve over time as new measures are developed, monitoring priorities shift, and techniques necessary for calculating these measures are refined. Interpreting measures of utilization from the perspective of access is a challenging endeavor as use is affected by many factors, only some of which policymakers and program administrators can control.

Throughout the year, DHCS will review the literature and look for new and innovative ways of monitoring and measuring access to health care services. This monitoring refinement process will include assessing changes in available data as well as changes in national benchmarks for access. If as a result of this refinement process DHCS determines that measures need to be changed, added or removed, DHCS will document the changes.

Appendix A: Baseline Analysis

Domain: Beneficiary Participation

Introduction

The Beneficiary Participation domain is designed to describe the characteristics of Medi-Cal's FFS participants. This includes evaluations by length of enrollment, age group, aid category, gender, geographic region, race/ethnicity, and primary language. The baseline study periods are State Fiscal Years (SFY) 2013-14 and 2014-15. Most analyses in the Beneficiary Participation evaluation domain reflect only beneficiaries who were certified eligible for Medi-Cal for at least 11 months in either SFY 2013-14 or 2014-15 (Refer to Appendix J for demographic and administrative characteristics of individuals enrolled in FFS fewer than 11 months).

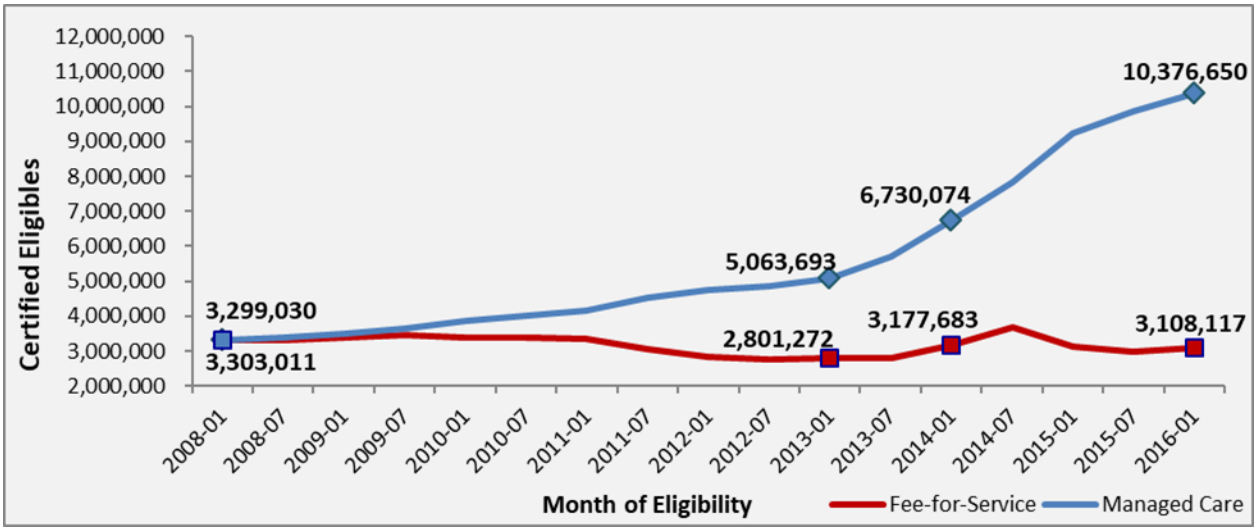
In this section, Medi-Cal's FFS population will be evaluated along several dimensions. These include:

- the trend in FFS Medi-Cal participation,
- the distribution of FFS Medi-Cal beneficiaries by length of enrollment,
- the distribution of FFS Medi-Cal beneficiaries by age group,
- the distribution of FFS Medi-Cal beneficiaries by aid category,
- the distribution of FFS Medi-Cal beneficiaries by gender,
- the distribution of FFS Medi-Cal women ages 15-44 by aid category,
- the distribution of FFS Medi-Cal beneficiaries by geographic region,
- the distribution of FFS Medi-Cal beneficiaries by race/ethnicity,
- the distribution of FFS Medi-Cal beneficiaries by primary language spoken.

Trend in Overall Medi-Cal Enrollment, 2008-2016

In January 2008, Medi-Cal's 6.6 million certified eligible beneficiaries were evenly split between the two delivery systems, with managed care and FFS serving approximately 3.3 million beneficiaries each. But by January 2016, even as the overall Medi-Cal program had soared to cover roughly 13.5 million Californians, only 3.1 million individuals participated in the FFS system. Of all Medi-Cal beneficiaries, nearly 77% were enrolled in managed care, while only 23% were enrolled in FFS (Figure 22).

Figure 22: Biannual Trend in Medi-Cal FFS and Managed Care Participation from January 2008-January 2016.

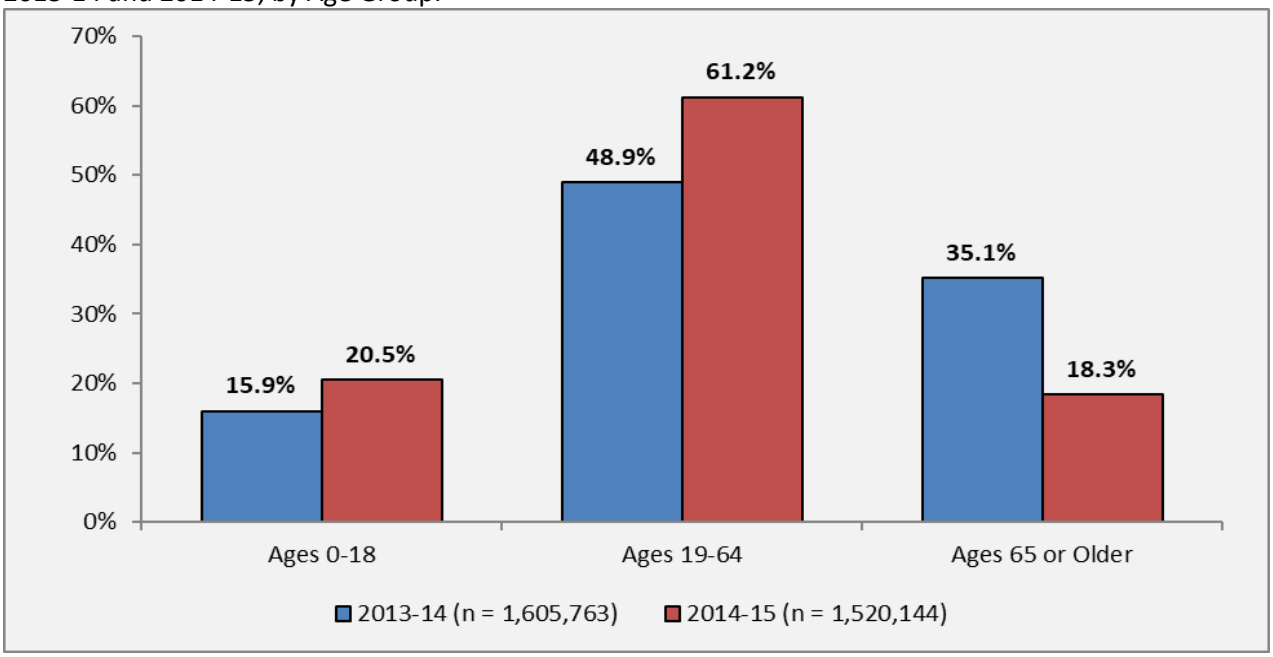


Source: Created by DHCS Research and Analytic Studies Division.

Distribution of FFS Medi-Cal Beneficiaries, by Age Group

Adults ages 19-64 represented the largest proportion of the FFS Medi-Cal population in SFY 2013-14 (48.9%) and increased to 61.2% of the FFS Medi-Cal population in SFY 2014-15. Following implementation of the ACA in January 2014, Medi-Cal experienced a surge in enrollment among previously ineligible low-income adults ages 19-64 (at or below 138% Federal Poverty Level). These adults were initially participants of Medi-Cal's FFS delivery system until their managed care health plan selection was complete. Beneficiaries ages 65 and older represented 35.1% of the FFS Medi-Cal population in 2013-14 and decreased to 18.3% of the FFS Medi-Cal population in SFY 2014-15 (Figure 23). During this time period, many beneficiaries in the SPD aid categories were transitioned from the FFS delivery system to managed care.

Figure 23: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Age Group.

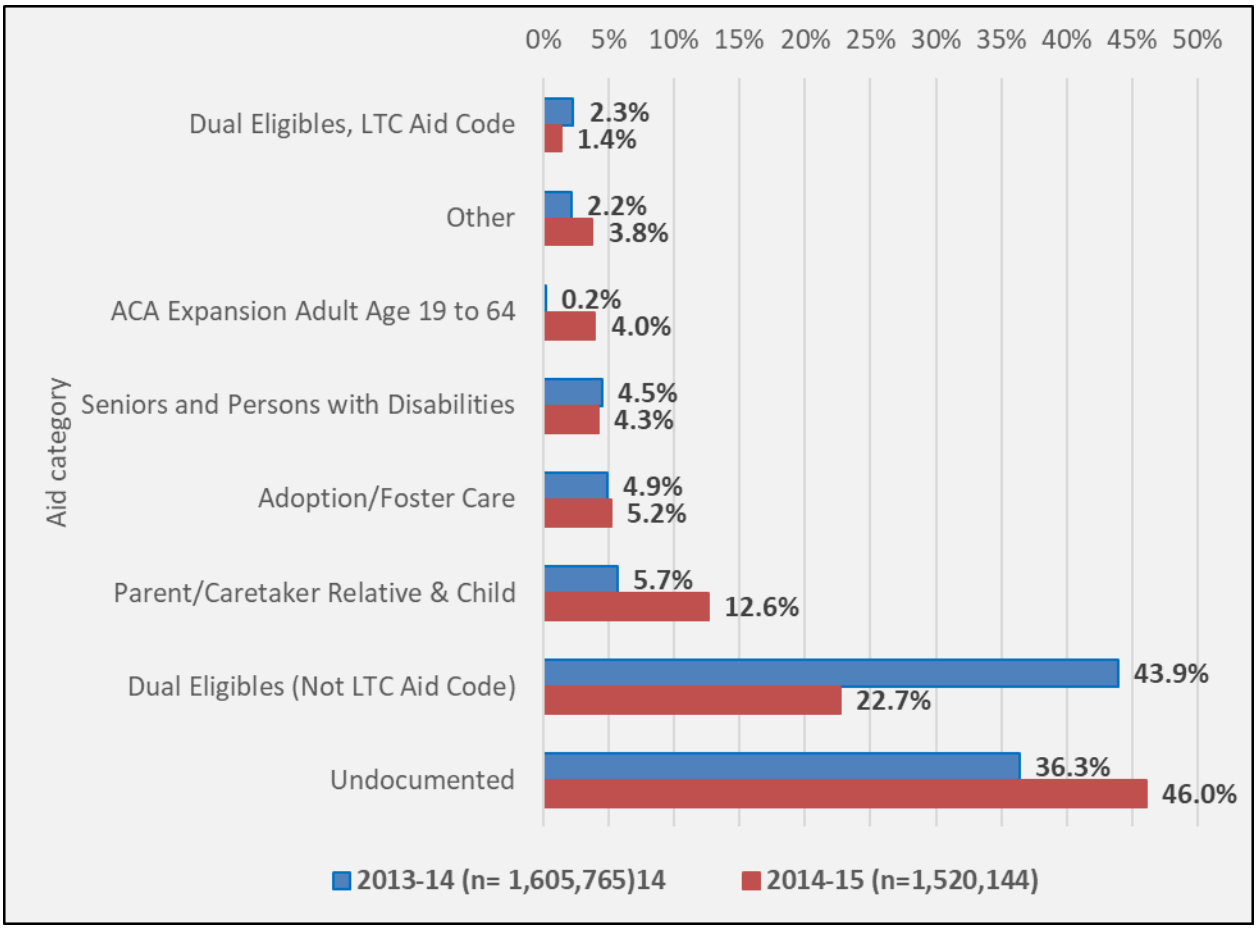


Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) eligibility tables with dates of eligibility from July 2013–June 2015. Data were extracted from the MIS/DSS 12 months after the corresponding time period to allow for updates to enrollment.

Distribution of FFS Medi-Cal Beneficiaries, by Aid Category

The largest aid category within Medi-Cal's FFS population in SFY 2013-14 was the Dual Eligible (Not LTC Aid Code) group, which constituted 43.9% of the population. However, in SFY 2014-15 the Undocumented aid category became the largest group representing 46.0% of Medi-Cal's FFS population (Figure 24). This change was the result of the Medi-Cal CCI program and COHS expansion in 8 northern California rural counties, which transitioned many of Medi-Cal's dual eligible individuals from FFS to managed care.

Figure 24: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Aid Category**.**

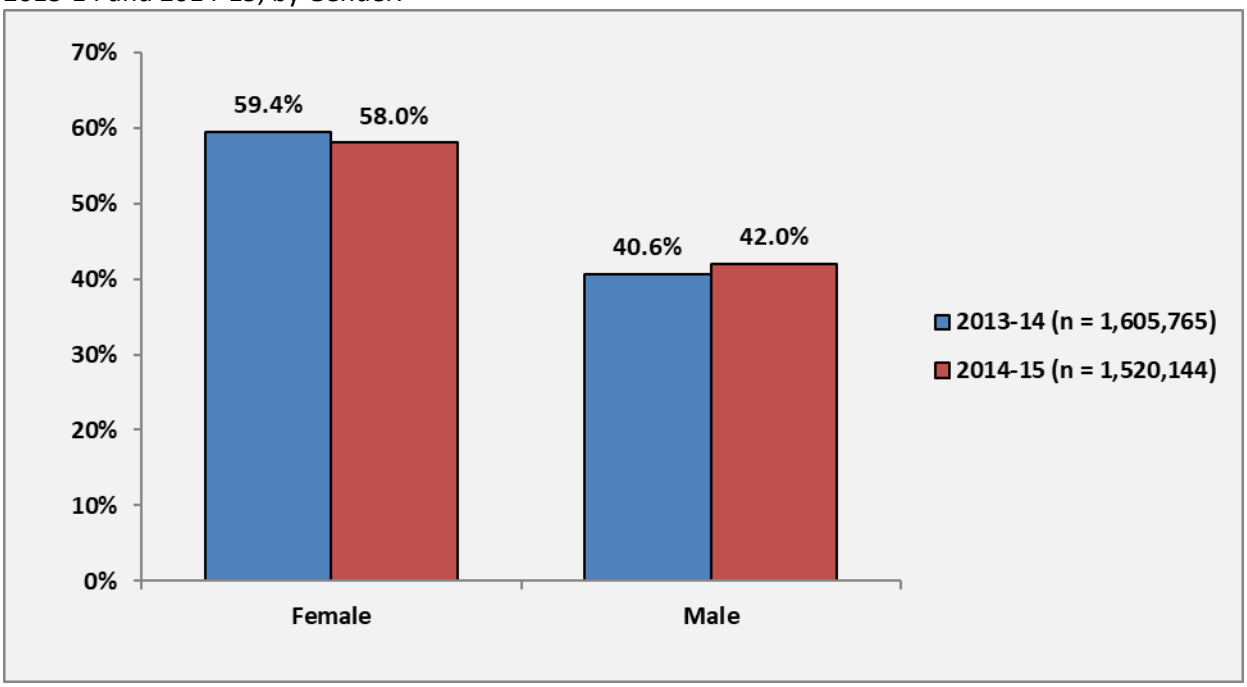


Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) eligibility tables with dates of eligibility from July 2013–June 2015. Data were extracted from the MIS/DSS 12 months after the corresponding time period to allow for updates to enrollment.

Distribution of FFS Medi-Cal Beneficiaries, by Gender

Despite programmatic changes in the FFS delivery system, the distribution of gender among Medi-Cal's FFS population was relatively consistent from SFY 2013-14 to SFY 2014-15. In both SFYs, females constituted a greater percent of the FFS Medi-Cal population than males, accounting for almost 60% of the population (Figure 25). This distribution is due, in part, to the large proportion of female beneficiaries enrolled in the Undocumented aid category.

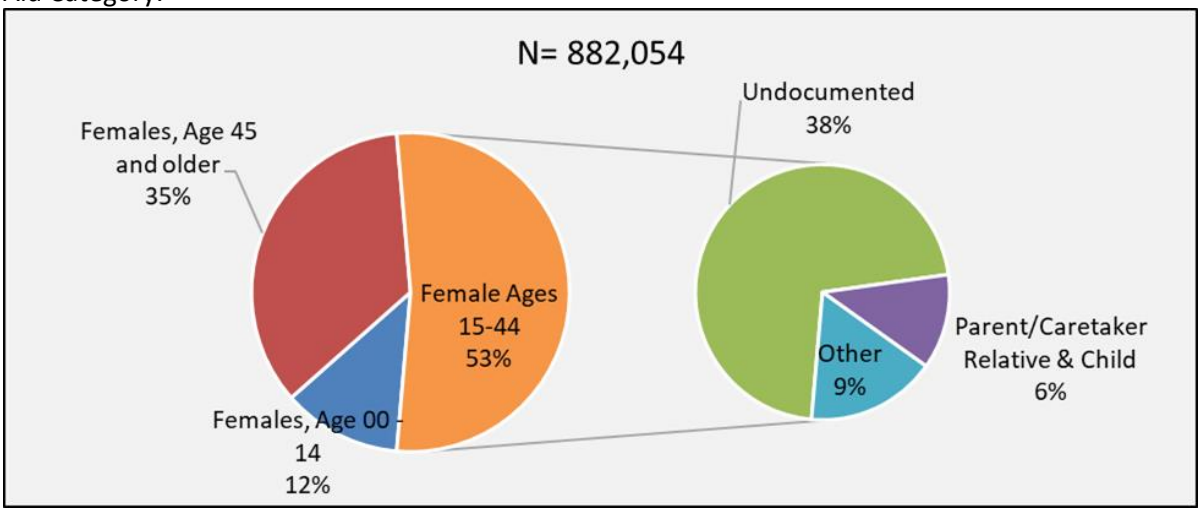
Figure 25: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Gender.



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) eligibility tables with dates of eligibility from July 2013–June 2015. Data were extracted from the MIS/DSS 12 months after the corresponding time period to allow for updates to enrollment.

Approximately 53% of female beneficiaries enrolled in FFS for at least 11 months were ages 15-44, with 38% in the Undocumented aid category, 6% in the Parent/Caretaker Relative & Child aid category, and 9% enrolled in other aid categories (Figures 26).

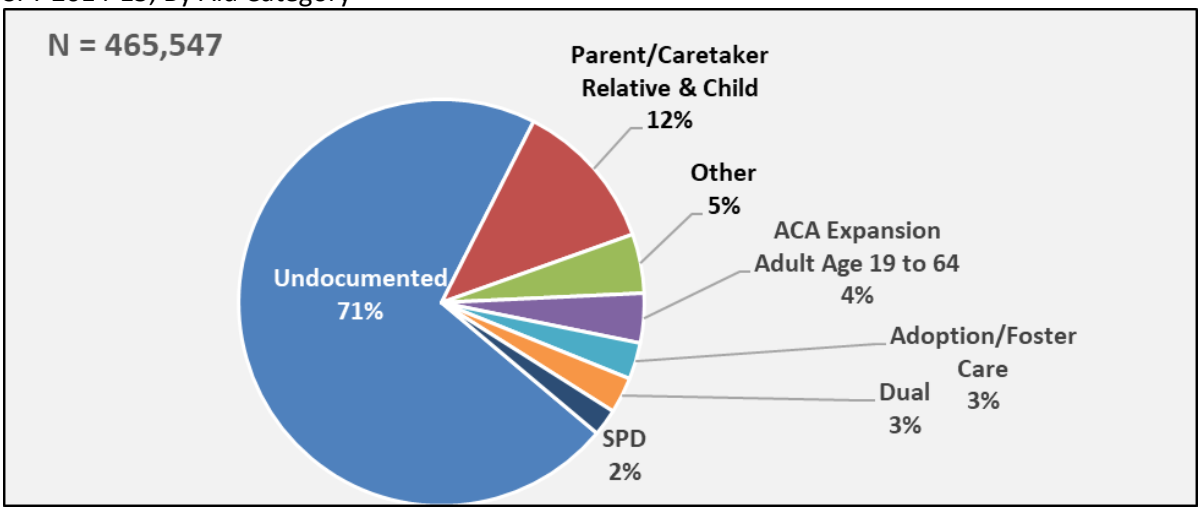
Figure 26: Distribution of Female Beneficiaries with 11+ Months of FFS Enrollment in SFY 2014-15 by Age, and Distribution of Females with 11+ Months of FFS Enrollment Between the Ages of 15 and 44, By Aid Category.



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) eligibility tables with dates of eligibility from July 2013–June 2015. Data were extracted from the MIS/DSS 12 months after the corresponding time period to allow for updates to enrollment.

Women enrolled in the Undocumented aid category accounted for 71% of all FFS Medi-Cal female beneficiaries between the ages of 15 and 44 with at 11 months of enrollment in SFY 2014-15. The Parent/Caretaker Relative & Child aid group (12%) accounted for the second largest proportion of females participating in FFS Medi-Cal (Figure 27).

Figure 27: Distribution of Females with 11+ Months of FFS Enrollment Between the Ages of 15 and 44 in SFY 2014-15, By Aid Category

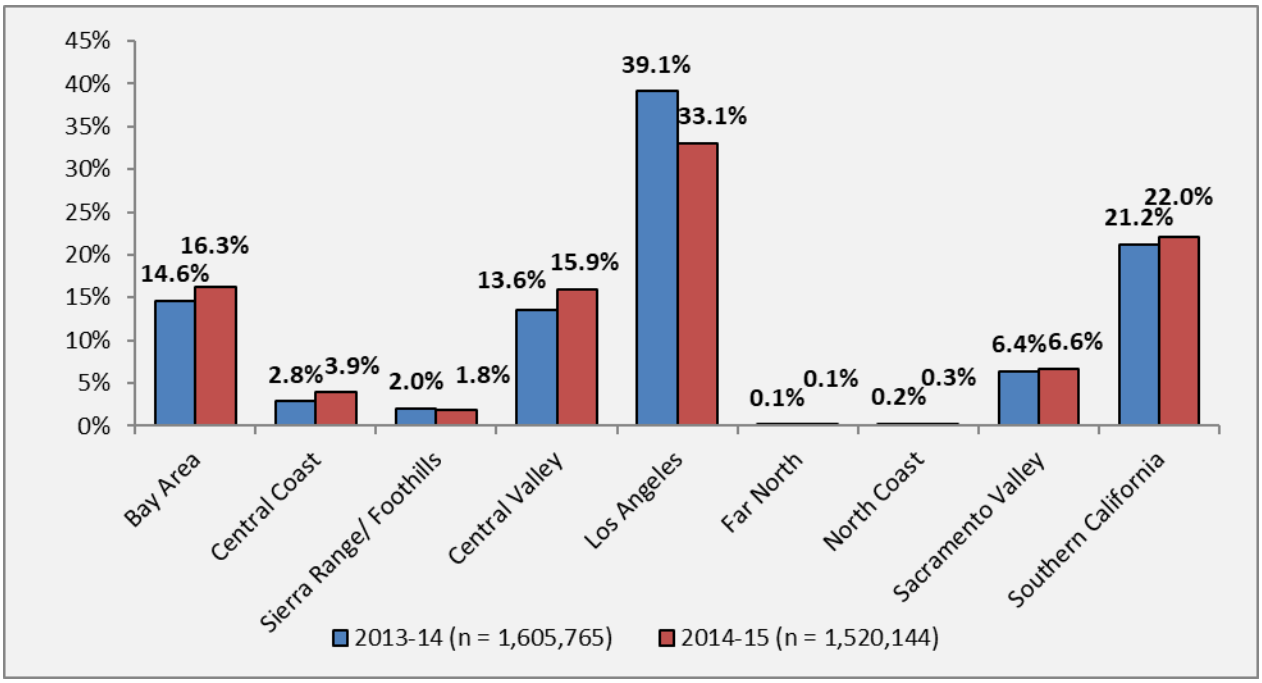


Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) eligibility tables with dates of eligibility from July 2013–June 2015. Data were extracted from the MIS/DSS 12 months after the corresponding time period to allow for updates to enrollment.

Distribution of FFS Medi-Cal Beneficiaries, by Geographic Region

The Los Angeles and Southern California geographic regions had the highest proportion of FFS Medi-Cal enrollment during both SFYs 2013-14 and 2014-15. Combined, these two geographic regions comprised more than half of the total FFS population at 55.1% in SFY 2014-15 (Figure 29). Due to the expansion of the managed care delivery system in rural counties in 2013, many counties exhibited a decrease in their Medi-Cal FFS participation. The North Coast (0.3%) and Far North (0.1%) regions, both comprised of rural counties with small populations, had the smallest percentages of FFS participation in SFY 2014-15 (Figure 28).

Figure 28: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Geographic Region.

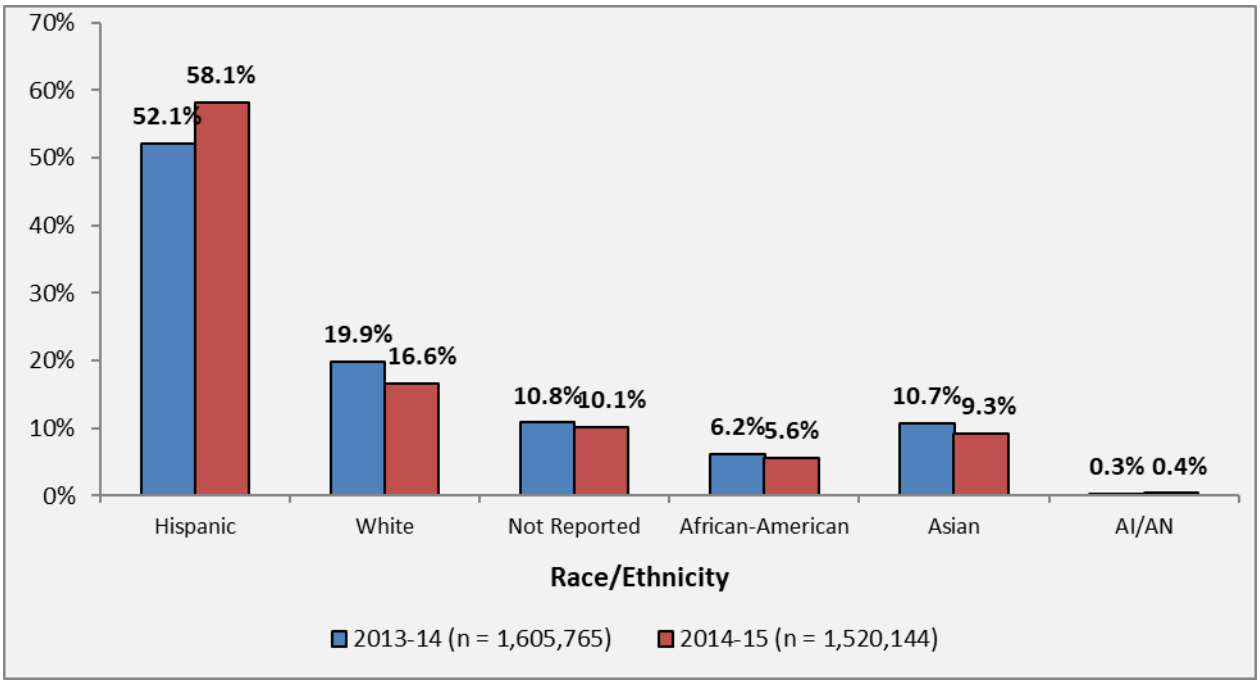


Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) eligibility tables with dates of eligibility from July 2013–June 2015. Data were extracted from the MIS/DSS 12 months after the corresponding time period to allow for updates to enrollment.

Distribution of FFS Medi-Cal Beneficiaries, by Race/Ethnicity

Hispanic beneficiaries represented the largest percent of FFS participants in both SFY 2013-14 (52.1%) and SFY 2014-15 (58.1%), followed by Non-Hispanic Whites (19.9% in SFY 2013-14 and 16.6% in SFY 2014-15), African Americans (6.2% in SFY 2013-14 and 5.6% in SFY 2014-15), and Asian (10.7% in SFY 2013-14 and 9.3% in SFY 2014-15) (Figure 29).

Figure 29: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Race/Ethnicity.

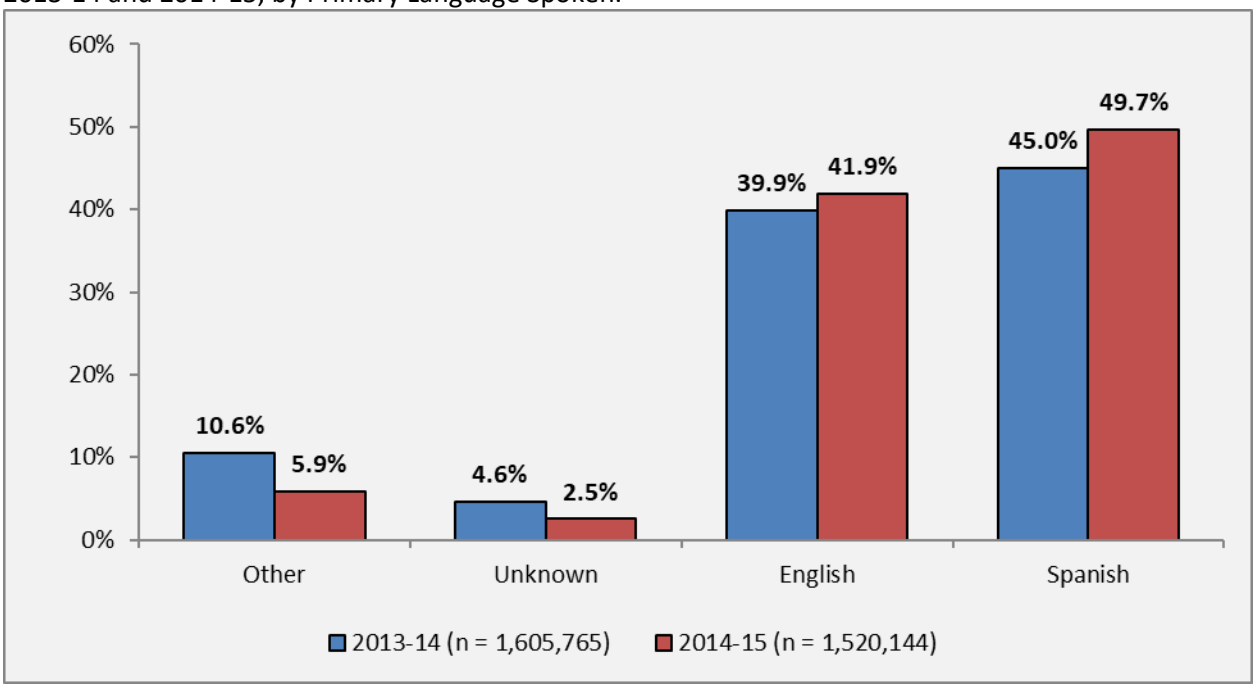


Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) eligibility tables with dates of eligibility from July 2013–June 2015. Data were extracted from the MIS/DSS 12 months after the corresponding time period to allow for updates to enrollment.

Distribution of FFS Medi-Cal Beneficiaries, by Primary Language Spoken

Together, Spanish (45.0%) and English (39.9%) represented the primary languages spoken by nearly 85% of the certified eligible FFS Medi-Cal population in SFY 2014-15. In SFY 2014-15, these combined languages had increased, and accounted for nearly 92% of the FFS Medi-Cal population (Figure 30).

Figure 30: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFYs 2013-14 and 2014-15, by Primary Language Spoken.



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) eligibility tables with dates of eligibility from July 2013-June 2015. Data were extracted from the MIS/DSS 12 months after the corresponding time period to allow for updates to enrollment.

Conclusion

There are a number of notable findings based on the review and evaluation of Medi-Cal's FFS participant population. These finding will influence how access measures are evaluated and interpreted, and will guide further data analysis.

- The predominate population remaining in Medi-Cal's FFS delivery system is the Undocumented, which accounted for 46.0% of the overall population in SFY 2014-15. These individuals are entitled to emergency and pregnancy related services only. For many within this population, the main access point into the health care system is through hospital emergency rooms.

- Hispanics constituted roughly 60% of the FFS population. The percent of the population identifying as Hispanic has risen between SFY 2013-14 and SFY 2014-15. This is the result of the continued transformation of Medi-Cal's delivery system from FFS to managed care. As additional populations not classified as Undocumented are transitioned from FFS to managed care, the characteristics of the predominate subgroup (i.e. Undocumented) begins to influence the ethnic characteristics. Roughly 85% of the Undocumented subgroup is classified as Hispanic.
- Medi-Cal's dual eligible population has declined among the FFS population with the implementation of the CCI in 2014. Medi-Cal's CCI transitioned dually eligible individuals from FFS to Medi-Cal managed care health plans. In addition, the implementation of COHS in various counties has influenced this outcome, as dually eligible individuals in such counties generally transition from FFS to managed care.
- Similarly, Medi-Cal SPDs, which represents one of Medi-Cal's most costly and medically challenging populations, has also declined within the FFS delivery system. They now constitute roughly 4% of the FFS population. Members of the SPD subpopulation are generally in need of complex health care services and many require access to multiple specialists. Individuals within this group may also have received a medical exemption because they are undergoing treatment for a complex medical condition and have a relationship with a provider that is not part of a contracting Medi-Cal managed care plan.
- Females represent roughly 60% of the FFS population. This is a consequence of the Undocumented population and also presumptive pregnancy eligibility pathways.
- The dominate age group is 19 to 64.
- Over half of all females participating in FFS Medi-Cal were of reproductive age (ages of 15-44). Approximately, 71% of FFS Medi-Cal females of reproductive age were in the Undocumented aid code category. This necessitates a need for obstetric and gynecological care.
- Children participating in the state's foster care system represented roughly 5% of the FFS population. These children are especially vulnerable and have unique psycho-social and health care needs. They may have short stays within the Medi-Cal program and may transition from one geographic region to another.

Domain: Provider Participation

Introduction

Provider participation is an important first step in accessing health care, increasing the likelihood that patients receive preventive services and timely referral to needed care. Studies have reported that a higher supply of primary care physicians is associated with lower mortality rates, longer life expectancy, and better birth outcomes. The analysis and findings associated with evaluating provider participation are designed to alert DHCS policymakers of any negative trends in Medi-Cal's enrolled FFS providers. The findings will allow DHCS to monitor trends in FFS provider participation by provider type and service setting.

The Provider Participation measures are designed to assess the availability of care through enrolled providers by geographic region, provider type, and site of service. The baseline study periods are SFYs 2013-14 and 2014-15. The Provider Participation measures reflect providers who rendered at least one service that was reimbursed through Medi-Cal's FFS delivery system.

In this section, several measures will be presented and evaluated. These include:

- Primary care providers
    - The number of primary care providers who rendered at least one service to FFS participating individuals by geographic region,
    - the FFS participants ever enrolled who were certified eligible for at least 11 months during the study period to participating primary care provider ratio by geographic region,
    - the distribution of primary care providers by service setting and geographic region.
    - the proportion of FFS Medi-Cal beneficiaries certified eligible for at least 11 months during the study period who resided inside/outside of a primary care service area by geographic region,
    - the average total of FFS Medi-Cal beneficiaries residing within a primary care provider's medical service area by geographic region,
    - the average driving time to reach a primary care appointment among FFS participating Medi-Cal beneficiaries certified eligible for at least 11 months in the study period who resided inside/outside of a primary care service area, by geographic region, and
    - the average driving distance to reach a primary care appointment among FFS participating Medi-Cal beneficiaries certified eligible for at least 11 months in the

study period who resided inside/outside of a primary care service area, by geographic region.

- Specialist providers
    - The number of specialist providers who rendered at least one service to FFS participating individuals by geographic region, and
    - the distribution of specialist providers by service setting and geographic region.
- Behavioral Health
    - The number of Behavioral health providers who rendered at least one service to FFS participating individuals by geographic region, and
    - the distribution of Behavioral health providers by service setting and geographic region.
- Pre- and Post-Natal Obstetric providers
    - The number of Pre- and Post-Natal Obstetric providers who rendered at least one service to FFS participating individuals by geographic region, and
    - the distribution of Pre- and Post-Natal Obstetric providers by service setting and geographic region.
- Home Health providers
    - The number of Home Health providers who rendered at least one service to FFS participating individuals by geographic region, and
    - the distribution of Home Health providers by service setting and geographic region.
- Pharmacies
    - The number of participating pharmacies by geographic region,
    - the distribution of participating pharmacies by geographic region,
    - the proportion of FFS Medi-Cal beneficiaries certified eligible for at least 11 months during the study period who resided inside/outside of a pharmacy service area by geographic region, and
    - the average driving time to reach the nearest pharmacy among FFS participating Medi-Cal beneficiaries certified eligible for at least 11 months in the study period who resided inside/outside of a pharmacy service area, by geographic region, and

- the average driving distance to reach the nearest pharmacy among FFS participating Medi-Cal beneficiaries certified eligible for at least 11 months in the study period who resided inside/outside of a pharmacy service area, by geographic region.

Providers by Provider Sub-Group and Geographic Region

Primary Care Providers

Primary care providers include physicians, physician groups, and clinics with the following classifications: general practice, family practice, gynecology, obstetrics, obstetrics-gynecology, preventive, pediatrics, internal medicine, rural health clinic/federally qualified health center, free clinic, community clinic, multispecialty clinic, clinic exempt from licensure, county clinics not associated with hospital, otherwise undesignated clinics, and tribal health clinics. Please note that providers may provide services in more than one region. Also note that primary care providers classified as gynecology, obstetrics, and obstetrics-gynecology will also be included in the participation totals of pre- and post-natal obstetric providers. Statewide during SFY 2013-14, there were 34,712 Primary Care providers that provided services to Medi-Cal beneficiaries, compared to 36,737 during SFY 2014-15. The geographic region with the largest number of participating Primary Care providers was Los Angeles, with 10,047 providers during SFY 2013-14 and 11,012 during SFY 2014-15. The geographic regions with the next-largest number of participating Primary Care providers were Southern California, with 9,494 participating providers during SFY 2013-14 and 10,095 during SFY 2014-15; and the Bay Area, with 9,091 participating providers during SFY 2013-14 and 9,512 during SFY 2014-15 (Tables 17-18; Figure 31).

Table 17: Total Medi-Cal Participating Primary Care Providers in SFY 2013-14, by Provider Sub-Group and Geographic Region.

Primary Care Providers				
Geographic Region	**Total Providers**	**Total Physicians**	**Total Physician Groups**	**Total Clinics**
STATEWIDE	**34,712**	**31,206**	**2,043**	**1,463**
Bay Area	9,091	8,593	242	256
Central Coast	1,950	1,716	113	121
Central Valley	4,345	3,818	234	293
Far North	390	329	18	43
Los Angeles	10,047	9,042	723	282
North Coast	480	380	31	69
Sacramento Valley	2,688	2,464	118	106
Sierra Range/Foothills	1,524	1,410	50	64
Southern California	9,494	8,670	582	242

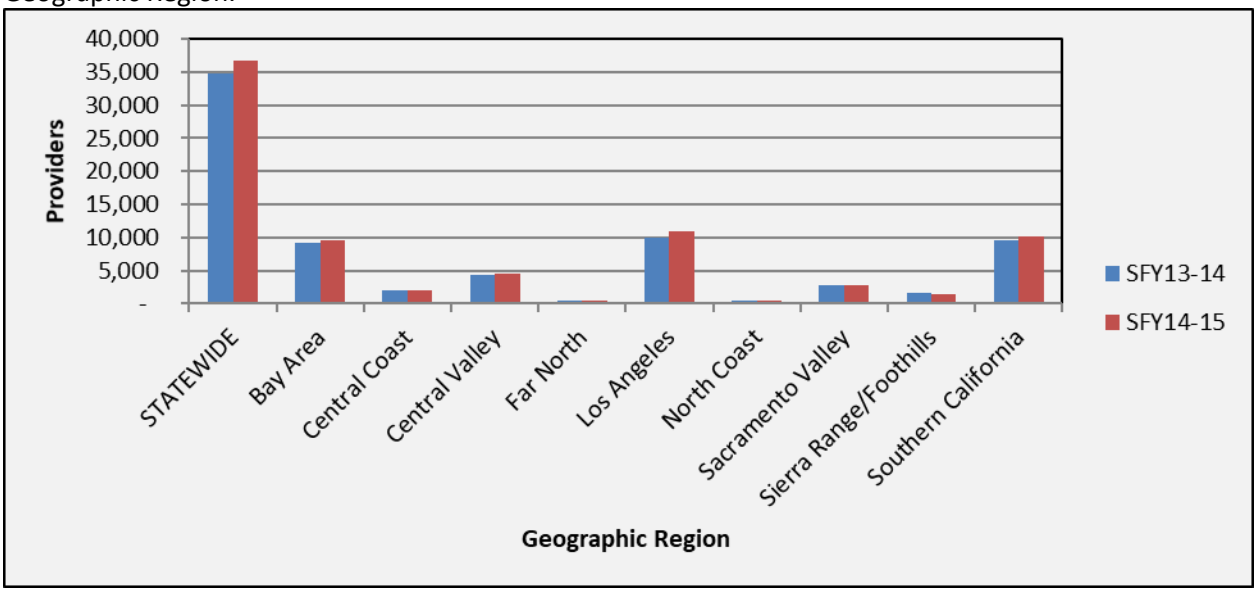
Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 18: Total Medi-Cal Participating Primary Care Providers in SFY 2014-15, by Provider Sub-Group and Geographic Region.

Primary Care Providers				
Geographic Region	**Total Providers**	**Total Physicians**	**Total Physician Groups**	**Total Clinics**
STATEWIDE	**36,737**	**33,192**	**2,018**	**1,527**
Bay Area	9,512	9,020	236	256
Central Coast	2,014	1,772	113	129
Central Valley	4,527	3,978	237	312
Far North	354	294	17	43
Los Angeles	11,012	9,984	722	306
North Coast	410	319	24	67
Sacramento Valley	2,712	2,488	115	109
Sierra Range/Foothills	1,494	1,381	49	64
Southern California	10,095	9,269	571	255

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Figure 31: Total Medi-Cal Participating Primary Care Providers from SFY 2013-14 to 2014-15, by Geographic Region.



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 19 displays FFS Full-Scope Medi-Cal eligible only beneficiary-to-primary-care-provider ratios in SFY 2013-14 and 2014-15 by geographic region. The first two columns display the ratios for individuals who were entitled to full scope services. Those entitled to limited scope services were excluded as they are either not entitled to Medi-Cal covered primary care services, or services not classified as emergency, or Medicare generally provides most primary

care services. If these groups were included, the population to primary care ratio would be no greater than 105 (last column, Table 19).

Table 19: FFS Full-Scope Medi-Cal Only Beneficiary-to-Primary-Care-Provider Ratios in SFY 2013-14 and 2014-15, by Geographic Region.

Geographic Region	FFS Full Scope SFY 2013-14	FFS Full Scope SFY 2014-15	Population / Primary Care Ratio Assuming All FFS Eligibles Are Eligible for Primacy Care (SFY 14-15)
STATEWIDE	**16.8**	**21.8**	**90.9**
Bay Area	8.9	15.7	49.6
Central Coast	19.7	4.9	61.8
Central Valley	20.0	31.3	98.4
Far North	1.2	3.2	44.7
Los Angeles	24.5	18.3	105.4
North Coast	4.8	2.1	45.6
Sacramento Valley	6.0	29.8	80.7
Sierra Range/Foothills	1.7	15.7	49.0
Southern California	11.5	19.0	80.6

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Statewide during both SFY 2013-14 and SFY 2014-15, Primary Care providers that provided services to Medi-Cal beneficiaries were concentrated in the Clinic (22,906 during SFY 2013-14 and 24,503 during SFY 2014-15) and Hospital Outpatient (19,850 during SFY 2013-14 and 20,920 during SFY 2014-15) service settings. The geographic regions with the largest number of participating Primary Care providers during both SFY 2013-14 and SFY 2014-15, regardless of service setting, were the Bay Area, Los Angeles, and Southern California (Tables 20-21).

Table 20: Total Medi-Cal Participating Primary Care Providers in SFY 2013-14, by Service Setting and Geographic Region.

Primary Care Providers				
Geographic Region	**Clinics**	**Hospital Outpatient**	**Emergency Department**	**Other**
STATEWIDE	**22,906**	**19,850**	**5,793**	**6,951**
Bay Area	5,125	5,229	1,162	1,193
Central Coast	1,190	1,120	413	196
Central Valley	2,892	2,254	791	875
Far North	222	205	76	83
Los Angeles	6,357	5,012	1,310	2,506
North Coast	277	326	92	81
Sacramento Valley	1,483	1,655	415	363
Sierra Range/Foothills	731	905	233	218
Southern California	5,806	4,929	1,606	1,891

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 21: Total Medi-Cal Participating Primary Care Providers in SFY 2014-15, by Service Setting and Geographic Region.

Primary Care Providers				
Geographic Region	**Clinics**	**Hospital Outpatient**	**Emergency Department**	**Other**
STATEWIDE	**24,503**	**20,920**	**6,263**	**7,744**
Bay Area	5,590	5,453	1,367	1,116
Central Coast	1,207	1,147	442	307
Central Valley	3,007	2,264	764	874
Far North	175	164	71	64
Los Angeles	6,993	5,501	1,448	3,037
North Coast	245	224	85	40
Sacramento Valley	1,415	1,676	463	408
Sierra Range/Foothills	728	842	238	162
Southern California	6,297	5,274	1,725	2,191

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Statewide, approximately 99.6% of FFS Medi-Cal beneficiaries certified eligible for at least 11 months in SFY 2014-15 resided inside of a primary care service area. The geographic regions with the largest proportions of beneficiaries residing outside of a primary care service area were the Sierra Range/Foothills (1.5%) and the Far North (1.2%). In SFY 2014-15, roughly 0.4% of FFS Medi-Cal beneficiaries certified eligible for at least 11 months resided outside of a primary care service area. The geographic regions with the largest proportions of beneficiaries residing outside of a primary care service area were the North Coast (3.8%) and the Sierra Range/Foothills (1.6%) (Table 22).

Table 22: Proportion of FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Primary Care Service Area, by Geographic Region.

Geographic Region	% of Beneficiaries Residing Inside of Medical Service Area	% of Beneficiaries Residing Outside of Medical Service Area
STATEWIDE	**99.6%**	**0.4 %**
Bay Area	100.0*	0.0%
Central Coast	99.3%	0.7%
Central Valley	99.7%	0.3 %
Far North	99.1%	0.9%
Los Angeles	99.6%	0.4%
North Coast	96.2%	3.8%
Sacramento Valley	99.6%	0.4%
Sierra Range/Foothills	98.4%	1.6%
Southern California	99.3%	0.7%

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Across all of the analyzed geographic regions, FFS beneficiaries residing within a primary care service area during SFY 2104-15 averaged just under four minutes in driving time to reach their appointment. In SFY 2014-15, the geographic regions with the longest average driving times to reach a primary care physician appointment among FFS beneficiaries residing outside of a primary care service area were the Far North (46.3 minutes) and the Central Coast (42.8 minutes) (Table 23).

Table 23: Average Driving Time to Reach Primary Care Appointment among FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Primary Care Service Area, by Geographic Region.

Geographic Region	Average Driving Time (in Minutes) for Beneficiaries Residing Inside of Service Area	Average Driving Time (in Minutes) for Beneficiaries Residing Outside of Service Area
Bay Area	3.6	40.1
Central Coast	3.7	42.8
Central Valley	3.6	39.2
Far North	3.8	46.3
Los Angeles	3.6	39.5
North Coast	3.5	28.2
Sacramento Valley	3.6	40.0
Sierra Range/Foothills	3.6	41.2
Southern California	3.6	40.4

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.
Note: Drive time and distance is calculated for each beneficiary to the closest Primary Care Provider.

Across all of the analyzed geographic regions, FFS beneficiaries residing within a primary care service area during SFY 2104-15 averaged just under two miles in driving distance to reach their appointment. In SFY 2014-15, the geographic regions with the longest average driving distances to reach a primary care physician appointment among FFS beneficiaries residing outside of a primary care service area were the North Coast (37.5 minutes) and the Central Coast (30.0 miles) (Table 24).

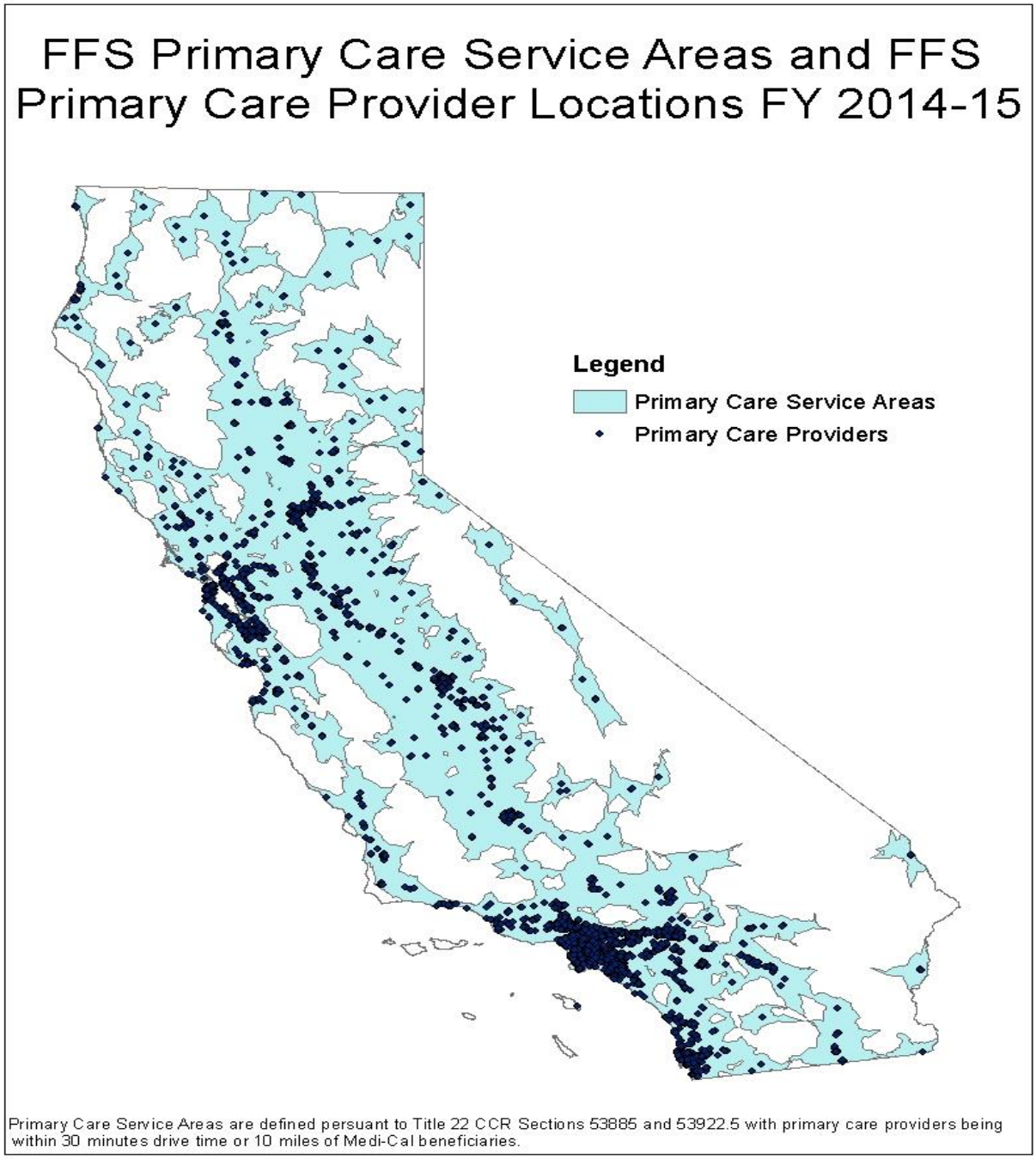
Table 24: Average Driving Distance to Reach Primary Care Appointment among FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Primary Care Service Area, by Geographic Region.

Geographic Region	Average Driving Distance (in Miles) for Beneficiaries Residing Inside of Service Area	Average Driving Distance (in Miles) for Beneficiaries Residing Outside of Service Area
Bay Area	1.4	27.1
Central Coast	1.5	30.0
Central Valley	1.4	26.8
Far North	1.5	17.2
Los Angeles	1.4	28.1
North Coast	1.4	37.5
Sacramento Valley	1.4	26.6
Sierra Range/Foothills	1.5	25.8
Southern California	1.5	28.5

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.
Note: Drive time and distance is calculated for each beneficiary to the closest Primary Care Provider.

Figure 32 provides a visual depiction of the primary care service areas and the distribution of FFS primary care provider locations throughout the state.

Figure 32: Statewide FFS Medi-Cal Primary Care Service Areas and FFS Primary Care Provider Locations in 2014-15.



Specialist Providers

Specialist providers include physicians and physician groups. See Appendix H for a complete description of provider specialties. Statewide during SFY 2013-14, there were 33,475 Specialist providers that provided services to Medi-Cal beneficiaries, compared to 34,782 during SFY 2014-15. The geographic region with the largest number of participating Specialist providers was Los Angeles, with 10,028 providers during SFY 2013-14 and 10,648 during SFY 2014-15. The geographic regions with the next-largest number of participating Specialist providers were Southern California, with 9,269 participating providers during SFY 2013-14 and 9,830 during SFY 2014-15; and the Bay Area, with 8,553 participating providers during SFY 2013-14 and 8,881 during SFY 2014-15 (Tables 25-26; Figure 33).

Table 25: Total Medi-Cal Participating Specialist Providers in SFY 2013-14, by Provider Sub-Group and Geographic Region.

Specialist Providers			
Geographic Region	**Total Providers**	**Total Physicians**	**Total Physician Groups**
STATEWIDE	**33,475**	**30,729**	**2,746**
Bay Area	8,553	8,122	431
Central Coast	1,896	1,710	186
Central Valley	3,964	3,659	305
Far North	290	264	26
Los Angeles	10,028	9,188	840
North Coast	404	371	33
Sacramento Valley	2,931	2,746	185
Sierra Range/Foothills	1,561	1,492	69
Southern California	9,269	8,514	755

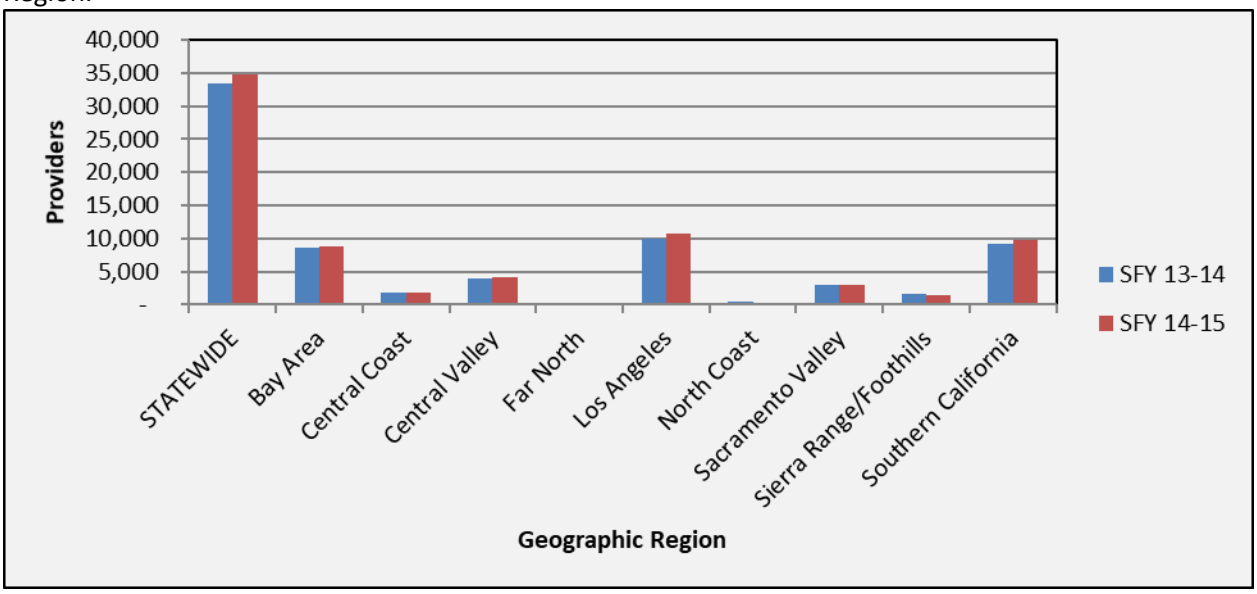
Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 26: Total Medi-Cal Participating Specialist Providers in SFY 2014-15, by Provider Sub-Group and Geographic Region.

Specialist Providers			
Geographic Region	**Total Providers**	**Total Physicians**	**Total Physician Groups**
STATEWIDE	**34,782**	**32,107**	**2,675**
Bay Area	8,881	8,458	423
Central Coast	1,896	1,708	188
Central Valley	4,139	3,828	311
Far North	265	238	27
Los Angeles	10,648	9,825	823
North Coast	323	298	25
Sacramento Valley	2,932	2,766	166
Sierra Range/Foothills	1,437	1,381	56
Southern California	9,830	9,096	734

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Figure 33: Total Medi-Cal Participating Specialist Providers from SFY 2013-14 to 2014-15, by Geographic Region.



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Statewide, during both SFY 2013-14 and SFY 2014-15, Specialist providers that provided services to Medi-Cal beneficiaries were concentrated in the Hospital Inpatient (24,070 during SFY 2013-14 and 24,801 during SFY 2014-15), Hospital Outpatient (22,423 during SFY 2013-14 and 23,209 during SFY 2014-15), and Clinic (22,092 during SFY 2013-14 and 22,982 during SFY 2014-15) service settings. The geographic regions with the largest number of participating Specialist providers during both SFY 2013-14 and SFY 2014-15, regardless of service setting, were the Bay Area, Los Angeles, and Southern California (Tables 27-28).

Table 27: Total Medi-Cal Participating Specialist Providers in SFY 2013-14, by Service Setting and Geographic Region.

Specialist Providers					
Geographic Region	**Emergency Department**	**Hospital Inpatient**	**Hospital Outpatient**	**Clinics**	**Other**
STATEWIDE	**8,046**	**24,070**	**22,423**	**22,092**	**5,406**
Bay Area	1,696	5,432	5,636	4,649	875
Central Coast	481	1,289	1,202	1,261	153
Central Valley	927	2,253	2,362	2,782	719
Far North	80	153	208	217	50
Los Angeles	1,846	6,925	5,840	6,145	1,922
North Coast	83	200	335	203	66
Sacramento Valley	642	1,902	2,117	1,700	337
Sierra Range/Foothills	378	826	1,115	731	148
Southern California	2,224	6,702	5,806	5,745	1,483

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 28: Total Medi-Cal Participating Specialist Providers in SFY 2014-15, by Service Setting and Geographic Region.

Specialist Providers					
Geographic Region	**Emergency Department**	**Hospital Inpatient**	**Hospital Outpatient**	**Clinics**	**Other**
STATEWIDE	**8,764**	**24,801**	**23,209**	**22,982**	**6,222**
Bay Area	1,949	5,634	5,769	5,029	801
Central Coast	495	1,294	1,168	1,224	252
Central Valley	958	2,300	2,391	2,908	745
Far North	67	164	173	185	39
Los Angeles	2,052	7,203	6,225	6,447	2,388
North Coast	85	168	237	180	21
Sacramento Valley	706	1,909	2,088	1,581	416
Sierra Range/Foothills	369	846	980	697	126
Southern California	2,491	7,044	6,165	6,068	1,788

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Behavioral Health Providers

Behavioral Health providers include physicians, physician groups, and other non-physician providers such as psychologists. Statewide during SFY 2013-14, there were 863 Behavioral Health providers that provided services to Medi-Cal beneficiaries, compared to 1,002 during

SFY 2014-15. The geographic region with the largest number of participating Behavioral Health providers was Los Angeles, with 247 providers during SFY 2013-14 and 282 during SFY 2014-15. The geographic regions with the next-largest number of participating Behavioral Health providers were the Bay Area, with 217 participating providers during SFY 2013-14 and 263 during SFY 2014-15; and Southern California, with 197 participating providers during SFY 2013-14 and 253 during SFY 2014-15 (Tables 29-30; Figure 34). It is important to note that given the delivery system structure in Medi-Cal that the FFS Medi-Cal delivery system is a very minor component of the delivery system for behavioral health. Mental health services are primarily delivered through a managed care delivery system, as noted earlier, County Mental Health plans are entirely responsible for specialty mental health services, and in addition, for mild to moderate metal health conditions Medi-Cal managed care plans have the responsibility for those services for managed care enrollees.

Table 29: Total Medi-Cal Participating Behavioral Health Providers in SFY 2013-14, by Provider Sub-Group and Geographic Region.

Behavioral Health Providers				
Geographic Region	**Total Providers**	**Total Physicians**	**Total Physician Groups**	**Total Other Non-Physician Providers**
STATEWIDE	**863**	**581**	**41**	**241**
Bay Area	217	158	14	45
Central Coast	41	28	2	11
Central Valley	83	60	3	20
Far North	7	6		1
Los Angeles	247	145	16	86
North Coast	5	4	1	
Sacramento Valley	95	65	4	26
Sierra Range/Foothills	27	21	2	4
Southern California	197	133	8	56

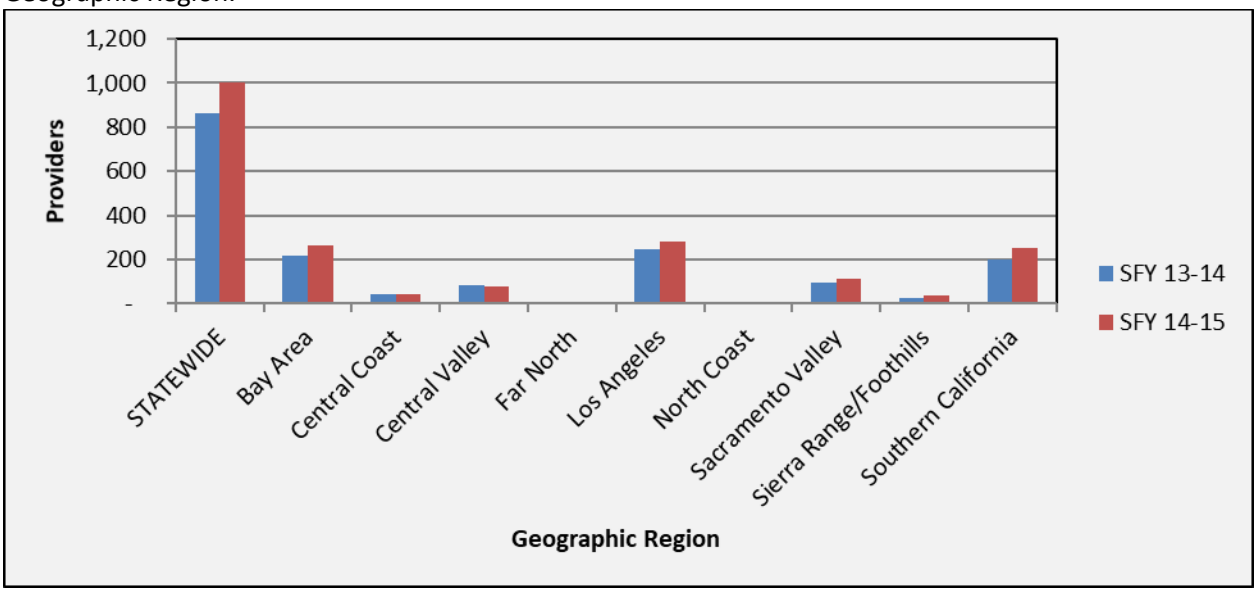
Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 30: Total Medi-Cal Participating Behavioral Health Providers in SFY 2014-15, by Provider Sub-Group and Geographic Region.

Behavioral Health Providers				
Geographic Region	**Total Providers**	**Total Physicians**	**Total Physician Groups**	**Total Other Non-Physician Providers**
STATEWIDE	**1,002**	**656**	**41**	**305**
Bay Area	263	180	13	70
Central Coast	44	27	2	15
Central Valley	79	52	4	23
Far North	5	5		
Los Angeles	282	176	14	92
North Coast	6	4	1	1
Sacramento Valley	110	80	4	26
Sierra Range/Foothills	36	25	2	9
Southern California	253	158	10	85

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Figure 34: Total Medi-Cal Participating Behavioral Health Providers from SFY 2013-14 to 2014-15, by Geographic Region.



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Statewide, during both SFY 2013-14 and SFY 2014-15, Behavioral Health providers that provided services to Medi-Cal beneficiaries were concentrated in the Hospital Inpatient (337 during SFY 2013-14 and 402 during SFY 2014-15), Hospital Outpatient (372 during SFY 2013-14 and 381 during SFY 2014-15), and Clinic (350 during SFY 2013-14 and 442 during SFY 2014-15)

service settings. The geographic regions with the largest number of participating Behavioral Health providers during both SFY 2013-14 and SFY 2014-15, regardless of service setting, were the Bay Area, Los Angeles, and Southern California (Tables 31-32).

Table 31: Total Medi-Cal Participating Behavioral Health Providers in SFY 2013-14, by Service Setting and Geographic Region.

Behavioral Health Providers					
Geographic Region	**Emergency Department**	**Hospital Inpatient**	**Hospital Outpatient**	**Clinics**	**Other**
STATEWIDE	**131**	**337**	**372**	**350**	**153**
Bay Area	29	79	92	86	26
Central Coast	3	13	11	27	4
Central Valley	6	27	46	34	7
Far North	-	-	2	5	2
Los Angeles	54	115	86	91	59
North Coast	-	-	3	2	
Sacramento Valley	16	36	53	34	10
Sierra Range/Foothills	3	5	17	7	3
Southern California	24	71	84	78	45

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 32: Total Medi-Cal Participating Behavioral Health Providers in SFY 2014-15, by Service Setting and Geographic Region.

Behavioral Health Providers					
Geographic Region	**Emergency Department**	**Hospital Inpatient**	**Hospital Outpatient**	**Clinics**	**Other**
STATEWIDE	**160**	**402**	**381**	**442**	**159**
Bay Area	35	105	100	117	20
Central Coast	3	13	16	28	4
Central Valley	6	20	40	40	5
Far North	-	-	1	5	
Los Angeles	55	129	90	121	63
North Coast	1	1	4	3	
Sacramento Valley	28	50	49	34	9
Sierra Range/Foothills	5	6	19	16	2
Southern California	34	91	88	100	65

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Pre- and Post-Natal Obstetric Providers

Pre- and Post-Natal Obstetric providers include physicians, physician groups, and other non-physician providers such as midwives (Appendix H). Statewide during SFY 2013-14, there were 4,475 Pre- and Post-Natal Obstetric providers that provided services to Medi-Cal beneficiaries, compared to 4,670 during SFY 2014-15. The geographic region with the largest number of participating Pre- and Post-Natal Obstetric providers was Los Angeles, with 1,357 providers during SFY 2013-14 and 1,499 during SFY 2014-15. The geographic regions with the next-largest number of participating Pre- and Post-Natal Obstetric providers were Southern California, with 1,312 participating providers during SFY 2013-14 and 1,415 during SFY 2014-15; and the Bay Area, with 1,092 participating providers during SFY 2013-14 and 1,132 during SFY 2014-15 (Tables 33-34; Figure 35).

Table 33: Total Medi-Cal Participating Pre- and Post-Natal Obstetric Providers in SFY 2013-14, by Provider Sub-Group and Geographic Region.

Pre- and Post-Natal Obstetric Providers				
Geographic Region	**Total Providers**	**Total Physicians**	**Total Physician Groups**	**Total Other Non-Physician Providers**
STATEWIDE	**4,475**	**3,847**	**431**	**197**
Bay Area	1,092	1,010	41	41
Central Coast	275	238	35	2
Central Valley	573	525	43	5
Far North	30	27	3	
Los Angeles	1,357	1,131	168	58
North Coast	54	43	6	5
Sacramento Valley	340	302	24	14
Sierra Range/Foothills	180	166	12	2
Southern California	1,312	1,100	123	89

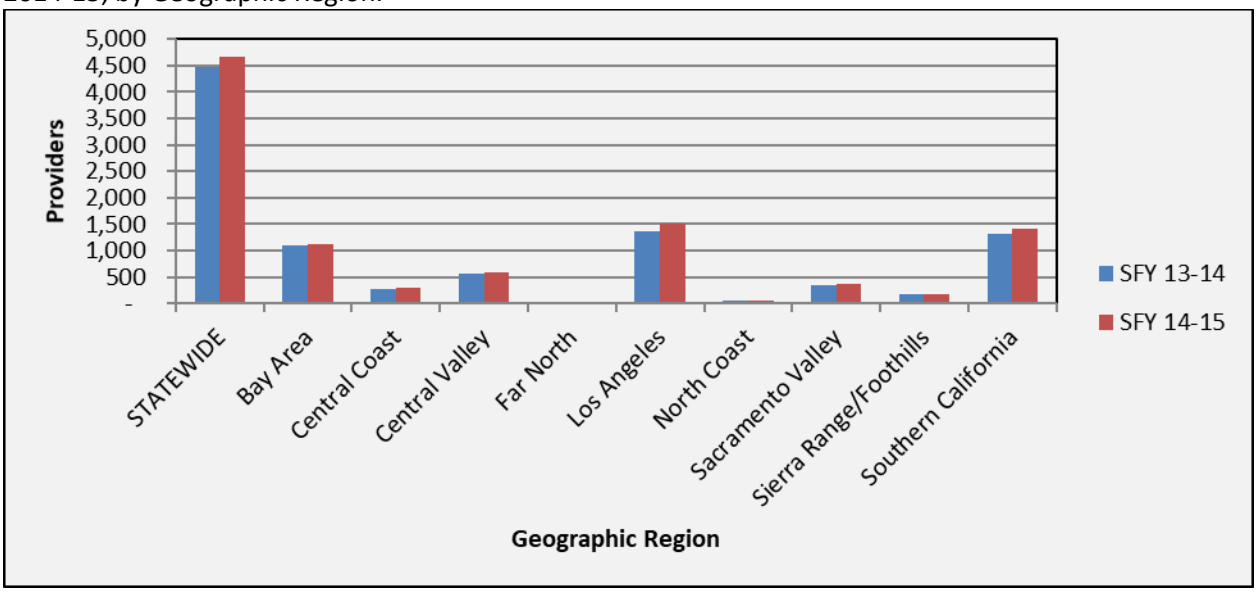
Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 34: Total Medi-Cal Participating Pre- and Post-Natal Obstetric Providers in SFY 2014-15, by Provider Sub-Group and Geographic Region.

Pre- and Post-Natal Obstetric Providers				
Geographic Region	**Total Providers**	**Total Physicians**	**Total Physician Groups**	**Total Other Non-Physician Providers**
STATEWIDE	**4,670**	**4,015**	**421**	**234**
Bay Area	1,132	1,048	42	42
Central Coast	288	245	38	5
Central Valley	598	545	46	7
Far North	29	26	3	
Los Angeles	1,499	1,260	165	74
North Coast	52	42	5	5
Sacramento Valley	360	324	23	13
Sierra Range/Foothills	181	166	11	4
Southern California	1,415	1,190	117	108

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Figure 35: Total Medi-Cal Participating Pre- and Post-Natal Obstetric Providers from SFY 2013-14 to 2014-15, by Geographic Region.



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Statewide, during both SFY 2013-14 and SFY 2014-15, Pre- and Post-Natal Obstetric providers that provided services to Medi-Cal beneficiaries were concentrated in the Hospital Inpatient (3,587 during SFY 2013-14 and 3,745 during SFY 2014-15), Hospital Outpatient (3,509 during SFY 2013-14 and 3,577 during SFY 2014-15), and Clinic (3,269 during SFY 2013-14 and 3,369 during SFY 2014-15) service settings. The geographic regions with the largest number of

participating Pre- and Post-Natal Obstetric providers during both SFY 2013-14 and SFY 2014-15, regardless of service setting, were the Bay Area, Los Angeles, and Southern California (Tables 35-36). Please note that primary care providers classified as gynecology, obstetrics, and obstetrics-gynecology will also be included in the participation totals of pre- and post-natal obstetric providers.

Table 35: Total Medi-Cal Participating Pre- and Post-Obstetric Providers in SFY 2013-14, by Service Setting and Geographic Region.

Pre- and Post-Natal Obstetric Providers					
Geographic Region	**Emergency Department**	**Hospital Inpatient**	**Hospital Outpatient**	**Clinics**	**Other**
STATEWIDE	**1,350**	**3,587**	**3,509**	**3,269**	**722**
Bay Area	216	744	850	721	109
Central Coast	101	225	211	198	43
Central Valley	180	387	412	430	79
Far North	13	22	23	24	4
Los Angeles	319	1,018	902	895	280
North Coast	13	38	49	36	10
Sacramento Valley	100	236	275	211	33
Sierra Range/Foothills	40	118	146	84	13
Southern California	398	1,068	971	857	193

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 36: Total Medi-Cal Participating Pre- and Post-Obstetric Providers in SFY 2014-15, by Service Setting and Geographic Region.

Pre- and Post-Natal Obstetric Providers					
Geographic Region	**Emergency Department**	**Hospital Inpatient**	**Hospital Outpatient**	**Clinics**	**Other**
STATEWIDE	**1,362**	**3,745**	**3,577**	**3,369**	**883**
Bay Area	250	783	835	731	105
Central Coast	97	236	216	201	43
Central Valley	169	408	419	441	76
Far North	6	21	23	20	3
Los Angeles	331	1,065	924	943	396
North Coast	12	27	38	33	6
Sacramento Valley	99	245	284	198	52
Sierra Range/Foothills	40	120	139	83	12
Southern California	426	1,147	1,026	926	247

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Home Health Providers

Statewide during SFY 2013-14, there were 331 Home Health providers that provided services to Medi-Cal beneficiaries, compared to 330 during SFY 2014-15. The geographic region with the largest number of participating Home Health providers was Los Angeles, with 108 providers during SFY 2013-14 and 109 during SFY 2014-15. The geographic regions with the next-largest number of participating Home Health providers were Southern California, with 76 participating providers during SFY 2013-14 and 78 during SFY 2014-15; and the Bay Area, with 45 participating providers during both SFY 2013-14 and SFY 2014-15 (Tables 37-38; Figure 36).

Table 37: Total Medi-Cal Participating Home Health Providers in SFY 2013-14, by Geographic Region.

Home Health Providers	
Geographic Region	**Total Providers**
STATEWIDE	**331**
Bay Area	45
Central Coast	14
Central Valley	35
Far North	4
Los Angeles	108
North Coast	6
Sacramento Valley	29
Sierra Range/Foothills	14
Southern California	76

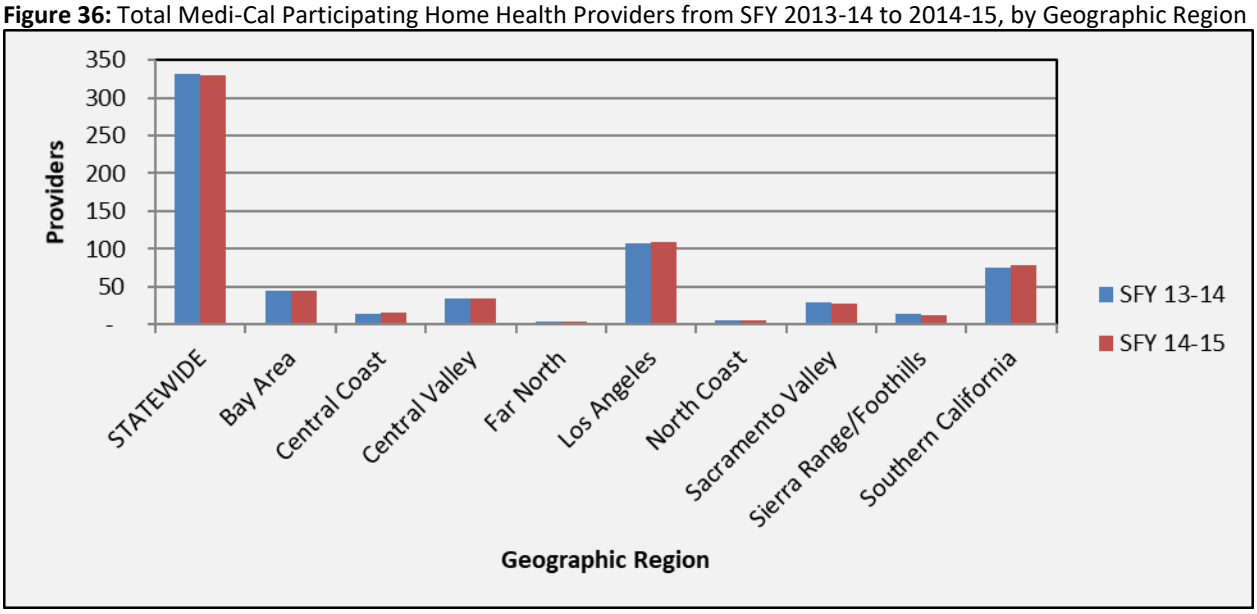
Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 38: Total Medi-Cal Participating Home Health Providers in SFY 2014-15, by Geographic Region.

Home Health Providers	
Geographic Region	**Total Providers**
STATEWIDE	**330**
Bay Area	45
Central Coast	16
Central Valley	35
Far North	4
Los Angeles	109
North Coast	5
Sacramento Valley	27
Sierra Range/Foothills	12
Southern California	78

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Figure 36: Total Medi-Cal Participating Home Health Providers from SFY 2013-14 to 2014-15, by Geographic Region



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Statewide, during both SFY 2013-14 and SFY 2014-15, Home Health providers that provided services to Medi-Cal beneficiaries were heavily concentrated in the Other (330 during both SFY 2013-14 and SFY 2014-15) service setting. The geographic regions with the largest number of participating Home Health providers in the Other service setting, during both SFY 2013-14 and SFY 2014-15, were the Bay Area, Los Angeles, and Southern California (Tables 39-40).

Table 39: Total Medi-Cal Participating Home Health Providers in SFY 2013-14, by Service Setting and Geographic Region.

Home Health Providers				
Geographic Region	**Hospital Inpatient**	**Hospital Outpatient**	**Clinics**	**Other**
STATEWIDE	**6**	**2**	**2**	**330**
Bay Area	1	-	-	45
Central Coast	-	1	-	13
Central Valley	1	-	-	35
Far North	-	1	-	4
Los Angeles	3	-	-	108
North Coast	-	-	-	6
Sacramento Valley	-	-	1	29
Sierra Range/Foothills	-	-		14
Southern California	1	-	1	76

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 40: Total Medi-Cal Participating Home Health Providers in SFY 2014-15, by Service Setting and Geographic Region.

Home Health Providers				
Geographic Region	**Hospital Inpatient**	**Hospital Outpatient**	**Clinics**	**Other**
STATEWIDE	**6**	**-**	**2**	**330**
Bay Area	1	-	-	45
Central Coast	-	-	-	16
Central Valley	2	-	-	35
Far North	-	-	-	4
Los Angeles	2	-	-	109
North Coast	-	-	-	5
Sacramento Valley	1	-	1	27
Sierra Range/Foothills	-	-	-	12
Southern California	-	-	1	78

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Pharmacy Participation

Statewide during State Fiscal Year (SFY) 2013-14, there were 5,506 pharmacies that provided services to Medi-Cal beneficiaries, compared to 5,598 during SFY 2014-15. The geographic region with the largest number of participating pharmacies was Los Angeles, with 1,547 providers during SFY 2013-14 and 1,575 during SFY 2014-15. The geographic regions with the next-largest number of participating pharmacies were Southern California, with 1,514 participating pharmacies during SFY 2013-14 and 1,562 during SFY 2014-15; and the Bay Area, with 943 participating pharmacies during SFY 2013-14 and 953 during SFY 2014-15 (Tables 41-42; Figure 37).

Table 41: Total Medi-Cal Participating Pharmacies in SFY 2013-14, by Geographic Region.

Pharmacies	
Geographic Region	**Total Pharmacies**
STATEWIDE	**5,506**
Bay Area	943
Central Coast	316
Central Valley	592
Far North	55
Los Angeles	1,547
North Coast	58
Sacramento Valley	320
Sierra Range/Foothills	161
Southern California	1,514

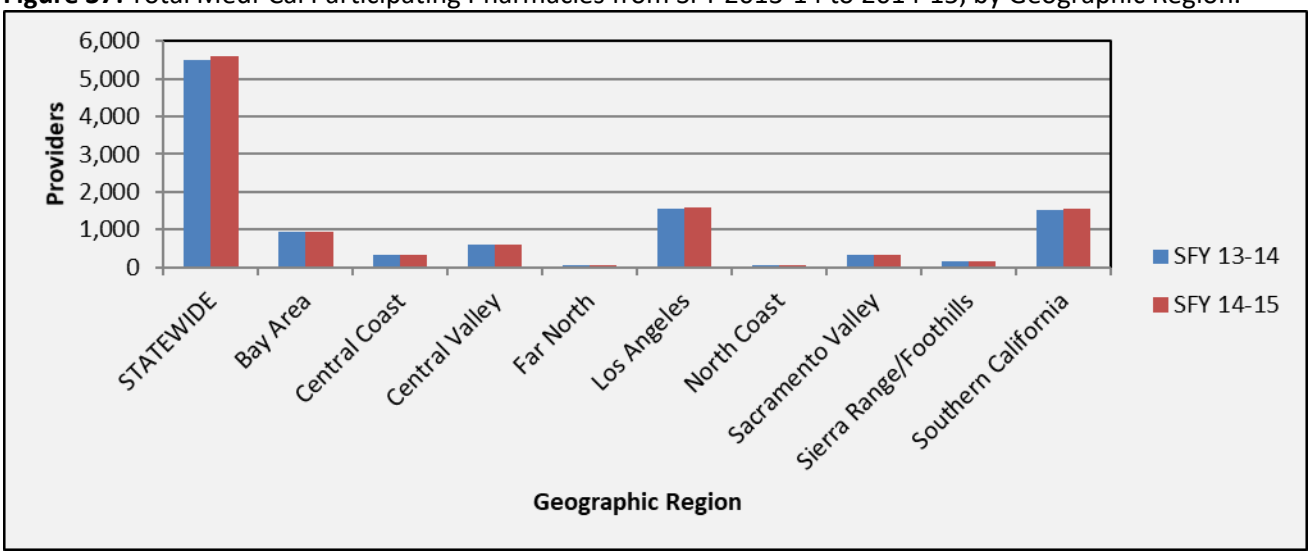
Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Table 42: Total Medi-Cal Participating Pharmacies in SFY 2014-15, by Geographic Region.

Pharmacies	
Geographic Region	**Total Pharmacies***
STATEWIDE	**5,598**
Bay Area	953
Central Coast	325
Central Valley	589
Far North	51
Los Angeles	1,575
North Coast	56
Sacramento Valley	326
Sierra Range/Foothills	161
Southern California	1,562

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.
*Based on Medi-Cal Provider Manual terminology.

Figure 37: Total Medi-Cal Participating Pharmacies from SFY 2013-14 to 2014-15, by Geographic Region.



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Statewide, approximately 99.6% of full-scope FFS Medi-Cal beneficiaries certified eligible for at least 11 months in SFY 2014-15 resided inside of a pharmacy service area. The geographic regions with the highest percentages of beneficiaries residing outside of a pharmacy service area were the North Coast (3.5%) and Sierra Range/Foothills (1.5%) regions (Table 43).

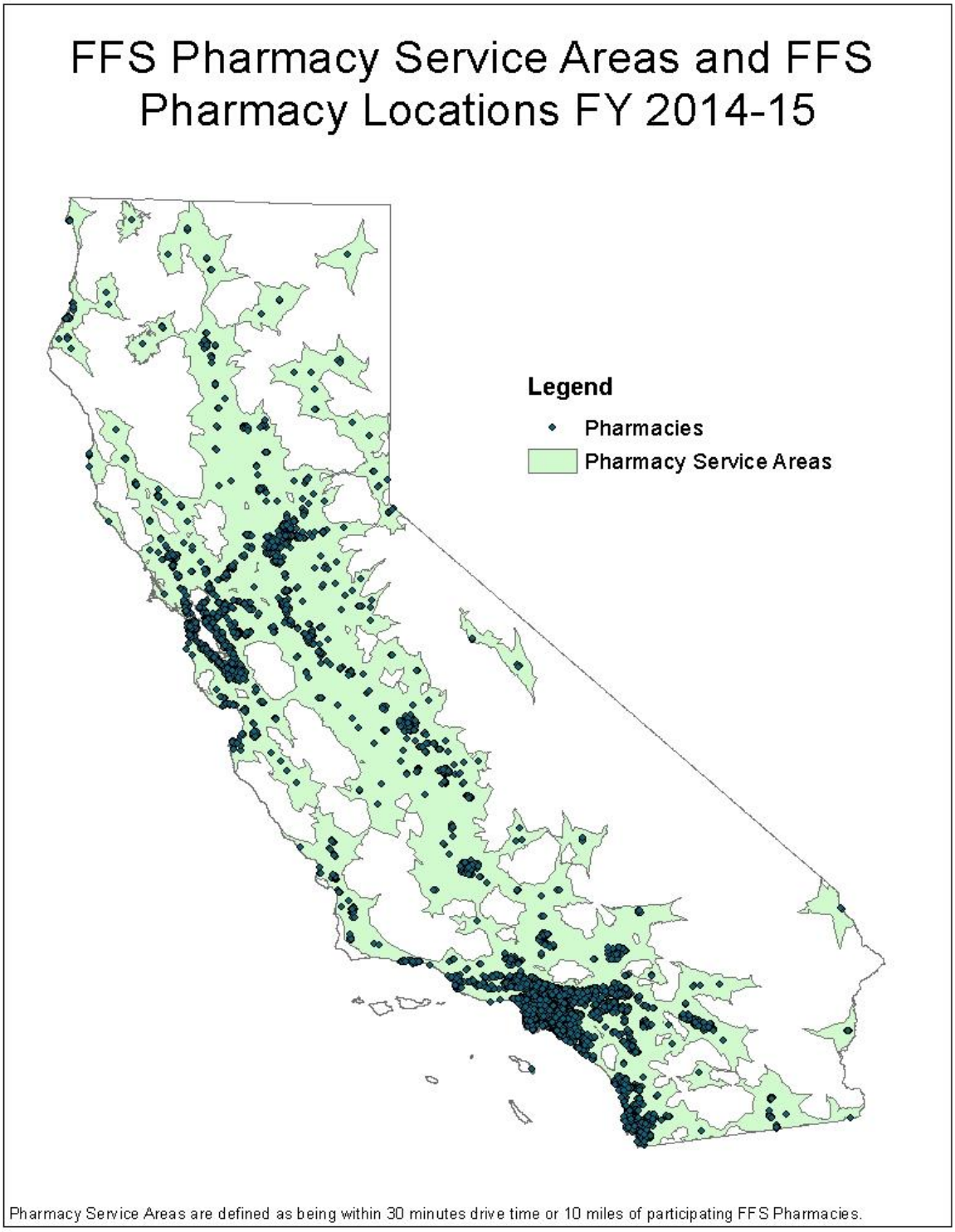
Table 43: Percent of Full-Scope FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Pharmacy Service Area, by Geographic Region.

Geographic Region	% of Beneficiaries Residing Inside of Medical Service Area	% of Beneficiaries Residing Outside of Medical Service Area
STATEWIDE	**99.6%**	**0.4%**
Bay Area	100.0%	0.0%
Central Coast	99.4%	0.6%
Central Valley	99.7%	0.3%
Far North	99.1%	0.9%
Los Angeles	99.6%	0.4%
North Coast	96.5%	3.5%
Sacramento Valley	99.6%	0.4%
Sierra Range/Foothills	98.5%	1.5%
Southern California	99.3%	0.7%

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.

Figure 38 provides a visual depiction of the pharmacy service areas and the distribution of FFS pharmacy locations throughout the state.

Figure 38: Statewide Full-Scope FFS Medi-Cal Pharmacy Service Areas and FFS Medi-Cal Pharmacy Locations in SFY 2014-15.



DHCS utilized California regulations for primary care providers as a benchmark for measuring the maximum driving distance or time for Medi-Cal beneficiaries to reach a pharmacy.[xvii] Additionally, it should be noted that due to the popularity of mail-service pharmacies that deliver prescriptions directly to beneficiaries' residences, the overall significance of this analysis may be limited as it presents data on pick-up prescriptions only.

Across all of the analyzed geographic regions, full-scope FFS Medi-Cal beneficiaries residing within a pharmacy service area during SFY 2014-15 averaged just over 3 minutes in driving time to reach the nearest pharmacy. In SFY 2014-15, the geographic regions with the longest average driving times to reach a pharmacy among full-scope FFS Medi-Cal beneficiaries residing outside of a pharmacy service area were the Far North (53.7 minutes) and Sierra Range/Foothills (48.0 minutes) regions (Table 44).

Table 44: Average Driving Time to Reach Nearest Pharmacy among Full-Scope FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Pharmacy Service Area, by Geographic Region.

Geographic Region	Average Driving Time (in Minutes) for Beneficiaries Residing Inside of Service Area	Average Driving Time (in Minutes) for Beneficiaries Residing Outside of Service Area
STATEWIDE	**3.2**	**40.2**
Bay Area	2.7	31.5
Central Coast	4.2	46.0
Central Valley	3.3	32.7
Far North	5.5	53.7
Los Angeles	2.3	31.3
North Coast	5.8	38.4
Sacramento Valley	3.2	34.6
Sierra Range/Foothills	5.2	48.0
Southern California	4.0	40.0

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.
Note: Drive time and distance are calculated for each beneficiary to the closest pharmacy.

Across all of the analyzed geographic regions, full-scope FFS Medi-Cal beneficiaries residing within a pharmacy service area during SFY 2014-15 averaged just over 1 mile in driving distance to reach their pharmacy. In SFY 2014-15, the geographic regions with the longest average driving distances to reach a pharmacy among full-scope FFS Medi-Cal beneficiaries residing outside of a pharmacy service area were the Far North (44.9 miles) and Sierra Range/Foothills (35.6 miles) regions (Table 45).

[xvii] California Code of Regulations, Title 22, Section 53885

Table 45: Average Driving Distance to Reach Nearest Pharmacy among Full-Scope FFS Medi-Cal Beneficiaries Certified Eligible for at Least 11 Months in SFY 2014-15 Who Reside Inside/Outside of a Pharmacy Service Area, by Geographic Region.

Geographic Region	Average Driving Distance (in Miles) for Beneficiaries Residing Inside of Service Area	Average Driving Distance (in Miles) for Beneficiaries Residing Outside of Service Area
STATEWIDE	**1.2**	**29.0**
Bay Area	0.7	16.0
Central Coast	1.8	27.7
Central Valley	1.4	18.8
Far North	3.1	44.9
Los Angeles	0.7	23.0
North Coast	3.2	24.9
Sacramento Valley	1.3	22.6
Sierra Range/Foothills	2.6	35.6
Southern California	1.8	30.5

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims and provider tables.
Note: Drive time and distance are calculated for each beneficiary to the closest pharmacy.

Conclusion

- The statewide number of participating Primary Care Physicians, physician Specialists, Behavioral Health Providers, Pre-and Post-Natal Obstetric providers, all increased between SFY 2013-14 and 2014-15. Participation of Home Health Providers remained consistent between the two study periods.
- The statewide beneficiary to Primary Care Physician ratio was 21.8 in SFY 2014-15, and the highest ratio was in the Central Valley at 31.3 beneficiaries per provider.
- Primary Care Physician provided services almost equally among hospital inpatient, outpatient, and clinic service settings; however, clinics had the most services by Primary Care Providers.
- Less than 1% of the individuals enrolled in FFS for 11 months in SFY 2014-15 resided outside of a Primary Care Physician service (more than 10 miles in distance or 30 minutes in travel time).
- The longest average driving time (46.8 minutes) and distance (37.5 miles) to a Primary Care Physician in SFY 2014-15 were in the rural regions of the Far North and North Coast.
- For the 98.6% of individuals in FFS within a Primary Care Physician service area during SFY 2014-15, the average drive time was 3.6 minutes and the average distance was 1.4 miles.

Domain: Realized Access

Introduction

Realized access focuses on analyzing changes in health care utilization. In order to establish control limits for utilization, the baseline study period selected was SFYs 2012-13, 2013-14 and 2014-15. Service Utilization events reflect only services rendered to beneficiaries in Medi-Cal's FFS delivery system who were certified eligible for Medi-Cal (meaning that they met eligibility requirements and were enrolled in the program) for at least 11 months in either SFY 2012-13, 2013-14 or 2014-15[xviii]. The analysis of changes in service category utilization were evaluated by geographic region, age group, gender, aid category, and race/ethnicity.

The six service categories evaluated include:

- Primary Care
- Specialist
- Behavioral Health
- Home Health
- Pre- and Post-Natal Obstetric[xix]
- Pharmacy

Utilization Trends

Service Category

The table below displays utilization for all service categories, statewide, for SFYs 2012-13, 2013-14, and 2014-15. The table lists the mean visit rate per 1,000 member months, minimum and maximum rates over the three-year baseline period, and the lower and upper confidence levels, for each service category.

[xviii]The Pre-Post-natal service category includes services for women ages 15-44 enrolled in FFS for any length of period. It is not limited to only those women with at least 11 months of enrollment in FFS.

[xix]Pre-and Post-Natal Obstetric services includes services by providers categorized in Gynecology, Obstetrics, Obstetrics-Gynecology Neonatal, Certified Nurse Midwife, Birthing Centers, Alternative Birthing Centers, and may include services other than pre-and post-natal care.

Table 46: Visit Rates by Service Category, Statewide, Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15

Service Category	Mean rate per 1,000 MM	Minimum Rate	Maximum Rate	Lower Confidence Level	Upper Confidence Level
Primary Care	140.4	92.9	176.1	133.9	147.0
Behavioral Care	1.4	0.9	1.9	1.3	1.5
Home Health	1.6	0.8	4.2	1.2	2.0
Pre-Post-natal†	294.9	178.2	540.8	257.9	331.9
Specialty Care	64.5	51.6	77.0	62.2	66.7

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.
†The Pre-Post-natal service category includes services for women ages 15-44 enrolled in FFS for any length of period. It is not limited to only those women with at least 11 months of enrollment in FFS.

Service Category by Region

The table below displays utilization for all service categories, by region, for fiscal years 2012-13, 2013-14, and 2014-15. The table lists the mean visit rate per 1,000 member months, minimum and maximum rates over the three-year baseline period, and the lower and upper confidence levels, for each service category.

Table 47: Visit Rates by Service Category and Region Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15.

Region	Service Category	Mean rate per 1,000 MM	Minimum Rate	Maximum Rate	Lower Confidence Level	Upper Confidence Level
Bay Area	Primary Care	91.3	67.5	105.2	87.8	94.9
	Behavioral Care	0.4	0.3	0.6	0.4	0.4
	Home Health	0.8	0.2	2.5	0.5	1.0
	†Pre-Post-natal	230.8	135.7	404.2	203.9	257.8
	Specialty Care	40.5	34.2	49.4	39.1	41.8
Central Coast	Primary Care	208.6	144.0	268.3	196.6	220.5
	Behavioral Care	0.1	-	0.2	0.0	0.1
	Home Health	1.4	0.9	1.9	1.3	1.5
	†Pre-Post-natal	313.9	172.7	565.4	275.2	352.6
	Specialty Care	35.4	29.7	42.1	34.2	36.6
Central Valley	Primary Care	116.4	90.7	140.1	112.1	120.8
	Behavioral Care	0.7	0.3	1.1	0.6	0.7
	Home Health	0.4	0.2	1.0	0.3	0.5
	†Pre-Post-natal	293.3	186.2	482.7	263.4	323.2

Region	Service Category	Mean rate per 1,000 MM	Minimum Rate	Maximum Rate	Lower Confidence Level	Upper Confidence Level
	Specialty Care	41.6	32.8	49.3	40.1	43.2
Far North	Primary Care	232.8	101.0	377.0	202.7	262.9
	Behavioral Care	2.0	0.2	7.3	1.4	2.6
	Home Health	1.4	-	6.5	0.6	2.1
	†Pre-Post-natal	183.4	35.9	384.5	148.4	218.5
	Specialty Care	108.7	30.2	235.1	88.3	129.1
Los Angeles	Primary Care	124.0	80.8	196.0	111.7	136.3
	Behavioral Care	0.8	0.4	1.3	0.7	0.9
	Home Health	2.0	0.8	5.4	1.5	2.5
	†Pre-Post-natal	298.7	162.9	579.4	258.1	339.3
	Specialty Care	68.3	39.4	102.8	61.5	75.1
North Coast	Primary Care	182.7	61.5	407.4	145.7	219.7
	Behavioral Care	0.0	-	0.5	0.0	0.1
	Home Health	0.5	-	1.9	0.2	0.7
	†Pre-Post-natal	167.2	54.0	305.3	139.5	195.0
	Specialty Care	38.3	9.6	81.8	30.4	46.2
Sacramento Valley	Primary Care	160.2	70.3	329.9	132.3	188.1
	Behavioral Care	5.4	2.4	7.6	4.9	5.9
	Home Health	3.4	1.9	4.6	3.2	3.6
	†Pre-Post-natal	253.4	176.9	425.0	234.3	272.5
	Specialty Care	84.7	39.5	119.4	74.6	94.8
Sierra Range/Foothills	Primary Care	161.5	74.6	305.2	140.4	182.6
	Behavioral Care	6.0	3.2	10.0	5.4	6.6
	Home Health	2.4	0.6	4.7	1.9	2.8
	†Pre-Post-natal	285.0	140.8	561.9	249.0	321.1
	Specialty Care	73.3	47.5	112.6	66.4	80.2
	Primary Care	167.1	111.6	231.3	155.9	178.4
	Behavioral Care	1.3	0.9	1.5	1.2	1.3

Region	Service Category	Mean rate per 1,000 MM	Minimum Rate	Maximum Rate	Lower Confidence Level	Upper Confidence Level
Southern California	Home Health	1.9	0.6	5.7	1.3	2.5
	†Pre-Post-natal	342.6	168.8	699.4	289.0	396.2
	Specialty Care	76.2	55.5	104.0	71.4	81.0

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.
†The Pre-Post-natal service category includes services for women ages 15-44 enrolled in FFS for any length of period. It is not limited to only those women with at least 11 months of enrollment in FFS.

Service Category by Age Group

The table below displays utilization for all service categories, by age group, for fiscal years 2012-13, 2013-14, and 2014-15. The table lists the mean visit rate per 1,000 member months, minimum and maximum rates over the three-year baseline period, and the lower and upper confidence levels, for each service category.

Table 48: Visit Rates by Service Category and Age Group Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15.

Age Group	Service Category	Mean rate per 1,000 MM	Minimum Rate	Maximum Rate	Lower Confidence Level	Upper Confidence Level
Age 0-18	Primary Care	172.6	134.4	259.2	163.2	182.1
	Behavioral Care	2.3	1.7	3.3	2.2	2.5
	Home Health	5.8	2.6	14.7	4.4	7.1
	Specialty Care	62.3	53.4	70.0	60.7	63.9
Age 19-64	Primary Care	189.9	137.9	232.0	181.2	198.5
	Behavioral Care	1.5	0.9	2.3	1.4	1.6
	Home Health	0.9	0.5	2.2	0.7	1.1
	Specialty Care	88.2	70.8	107.7	85.3	91.1
Age 65 and over	Primary Care	18.4	10.1	31.3	15.7	21.0
	Behavioral Care	0.2	0.1	0.3	0.2	0.2
	Home Health	0.1	0.0	0.1	0.1	0.1
	Specialty Care	17.9	9.0	30.9	15.2	20.6

Age Group	Service Category	Mean rate per 1,000 MM	Minimum Rate	Maximum Rate	Lower Confidence Level	Upper Confidence Level
Age 15-44 (Women Only)	†Pre-Post-natal	294.9	178.2	540.8	257.9	331.9

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.
†The Pre-Post-natal service category includes services for women ages 15-44 enrolled in FFS for any length of period. It is not limited to only those women with at least 11 months of enrollment in FFS.

Service Category by Gender

The table below displays utilization for all service categories, by gender, for fiscal years 2012-13, 2013-14, and 2014-15. The table lists the mean visit rate per 1,000 member months, minimum and maximum rates over the three-year baseline period, and the lower and upper confidence levels, for each service category.

Table 49: Visit Rates by Service Category and Gender Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15

Gender	Service Category	Mean rate per 1,000 MM	Minimum Rate	Maximum Rate	Lower Confidence Level	Upper Confidence Level
Female	Primary Care	172.2	112.0	216.9	163.5	180.8
	Behavioral Care	1.1	0.8	1.6	1.0	1.2
	Home Health	1.4	0.7	3.2	1.1	1.6
	†Pre-Post-natal	294.9	178.2	540.8	257.9	331.9
	Specialty Care	66.2	53.3	80.5	63.7	68.6
Male	Primary Care	88.0	64.9	112.4	84.0	92.0
	Behavioral Care	1.5	1.1	1.8	1.4	1.5
	Home Health	2.0	0.9	5.6	1.5	2.6
	Specialty Care	57.8	43.1	72.0	55.1	60.5

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.
†The Pre-Post-natal service category includes services for women ages 15-44 enrolled in FFS for any length of period. It is not limited to only those women with at least 11 months of enrollment in FFS.

Service Category by Aid Category

The table below displays utilization for all service categories, by aid category, for fiscal years 2012-13, 2013-14, and 2014-15. The table lists the mean visit rate per 1,000 member months, minimum and maximum rates over the three-year baseline period, and the lower and upper confidence levels, for each service category. For the purposes of this utilization analysis, the Other aid category includes Parent/Caretaker Relative & Child, ACA Expansion Adult Ages 19 to 64, and Adoption/Foster. Also note that low rates for the Dual category reflect Medicare's role as the primary provider of services.

Table 50: Visit Rates by Service Category and Aid Category Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15.

Aid Category	Service Category	Mean rate per 1,000 MM	Minimum Rate	Maximum Rate	Lower Confidence Level	Upper Confidence Level
Dual	Primary Care	5.0	0.7	11.8	4.1	6.0
	Behavioral Care	0.1	0.0	0.2	0.1	0.1
	Home Health	0.0	0.0	0.1	0.0	0.1
	Specialty Care	4.8	0.6	12.4	3.8	5.8
Other	Primary Care	277.4	178.1	395.9	257.1	297.7
	Behavioral Care	3.5	2.1	5.3	3.1	3.8
	Home Health	1.3	0.6	2.6	1.0	1.5
	†Pre-Post-natal	171.9	56.3	395.9	142.9	200.9
	Specialty Care	116.6	83.1	162.4	109.4	123.8
Seniors and Persons with Disabilities	Primary Care	657.5	553.6	746.8	639.8	675.2
	Behavioral Care	11.6	6.1	14.6	10.9	12.3
	Home Health	27.2	13.1	66.8	21.1	33.2
	Specialty Care	496.0	340.9	585.1	471.5	520.5
Undocumented	Primary Care	137.6	103.9	176.3	130.6	144.7
	Behavioral Care	0.2	0.1	0.3	0.1	0.2
	Home Health	0.2	0.1	0.3	0.1	0.2
	†Pre-Post-natal	424.9	227.6	676.3	377.5	472.3
	Specialty Care	41.8	30.0	52.8	39.8	43.9

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.

†The Pre-Post-natal service category includes services for women ages 15-44 enrolled in FFS for any length of period. It is not limited to only those women with at least 11 months of enrollment in FFS.

Service Category by Race/Ethnicity

The table below displays utilization for all service categories, by race/ethnicity, for fiscal years 2012-13, 2013-14, and 2014-15. The table lists the mean visit rate per 1,000 member months, minimum and maximum rates over the three-year baseline period, and the lower and upper confidence levels, for each service category. For the purposes of utilization analysis, the Other aid category includes Parent/Caretaker Relative & Child, ACA Expansion Adult Ages 19 to 64, and Adoption/Foster.

Table 51: Visit Rates by Service Category and Race/Ethnicity Per 1,000 Member Months in SFYs 2012-13, 2013-14 and 2014-15.

Ethnicity	Service Category	Mean rate per 1,000 MM	Minimum Rate	Maximum Rate	Lower Confidence Level	Upper Confidence Level
AI/AN	Primary Care	181.7	105.1	383.8	156.1	207.2
	Behavioral Care	4.9	0.8	14.6	3.7	6.0
	Home Health	2.3	0.5	5.9	1.8	2.9
	†Pre-Post-natal	225.1	110.3	389.1	202.4	247.8
	Specialty Care	87.3	59.3	118.6	81.6	93.1
Asian	Primary Care	46.2	32.8	60.7	43.1	49.2
	Behavioral Care	0.3	0.2	0.5	0.3	0.3
	Home Health	1.2	0.5	3.5	0.8	1.5
	†Pre-Post-natal	222.7	69.9	560.0	174.1	271.3
	Specialty Care	27.1	18.9	35.4	25.7	28.5
African-American	Primary Care	107.8	83.6	125.8	104.3	111.3
	Behavioral Care	2.0	1.5	3.0	1.9	2.1
	Home Health	2.7	1.4	6.5	2.2	3.3
	†Pre-Post-natal	127.9	64.1	253.3	110.5	145.4
	Specialty Care	62.6	48.9	76.8	60.1	65.2
Hispanic	Primary Care	122.2	89.8	162.2	115.2	129.3
	Behavioral Care	0.5	0.3	0.7	0.5	0.6
	Home Health	0.9	0.4	2.6	0.6	1.1
	†Pre-Post-natal	354.3	204.2	606.4	312.5	396.1
	Specialty Care	48.7	35.5	59.3	46.7	50.6
Not Reported	Primary Care	291.9	103.0	677.0	226.9	356.8
	Behavioral Care	2.4	1.3	4.1	2.1	2.7
	Home Health	2.5	1.0	5.9	2.0	3.1
	†Pre-Post-natal	196.1	86.9	454.9	158.0	234.3

Ethnicity	Service Category	Mean rate per 1,000 MM	Minimum Rate	Maximum Rate	Lower Confidence Level	Upper Confidence Level
	Specialty Care	128.1	58.3	273.6	102.9	153.3
White	Primary Care	126.7	87.6	215.5	113.2	140.1
	Behavioral Care	2.4	1.6	3.7	2.2	2.6
	Home Health	3.0	1.5	6.7	2.5	3.6
	†Pre-Post-natal	188.9	88.9	396.4	163.9	213.8
	Specialty Care	63.8	44.3	84.4	59.7	67.8

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.

†The Pre-Post-natal service category includes services for women ages 15-44 enrolled in FFS for any length of period. It is not limited to only those women with at least 11 months of enrollment in FFS.

Pharmacy Utilization

The tables below display statewide pharmacy utilization for SFY 2012-13 through 2014-15. The tables list the pharmacy claim lines per 1,000 member months, as well as the minimum and maximum rates over the three-year baseline period. Data are also presented by geographic region, age group, gender, aid category, and race/ethnicity (Tables 52-57).

Table 52: Statewide Pharmacy Claim Lines per 1,000 Member Months; July 2012 to June 2015.

RX Claim Lines per 1,000 MM	Minimum Rate	Maximum Rate
463.5	328.6	600.8

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.

Table 53: Pharmacy Claim Lines per 1,000 Member Months, by Geographic Region; July 2012 to June 2015.

Geographic Region	RX Claim Lines per 1,000 MM	Minimum Rate	Maximum Rate
Bay Area	352.6	278.6	424.5
Central Coast	197.4	174.7	233.0
Central Valley	406.6	324.3	506.5
Far North	632.3	243.8	1,106.0
Los Angeles	466.6	333.7	590.1
North Coast	467.7	170.5	1,036.4
Sacramento Valley	662.2	355.5	860.8

Geographic Region	RX Claim Lines per 1,000 MM	Minimum Rate	Maximum Rate
Sierra Range/Foothills	690.9	329.7	1,015.2
Southern California	468.9	381.5	572.6

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.

Table 54: Pharmacy Claim Lines per 1,000 Member Months, by Age Group; July 2012 to June 2015.

Age Group	RX Claim Lines per 1,000 MM	Minimum Rate	Maximum Rate
Ages 0-18	344.4	282.1	437.0
Ages 19-64	487.3	325.6	668.4
Ages 65 and Older	508.9	387.0	646.1

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.

Table 55: Pharmacy Claim Lines per 1,000 Member Months, by Gender; July 2012 to June 2015.

Gender	RX Claim lines per 1,000 MM	Minimum Rate	Maximum Rate
Female	482.1	341.0	635.3
Male	437.1	311.3	551.7

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.

Table 56: Pharmacy Claim Lines per 1,000 Member Months, by Aid Category; July 2012 to June 2015.

Aid Category	RX Claim Lines per 1,000 MM	Minimum Rate	Maximum Rate
Dual Eligible	454.7	328.8	606.4
Other	511.5	328.4	691.5
Seniors and Persons with Disabilities	2,715.3	2,198.8	3,071.0
Undocumented	165.1	147.3	191.8

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.

Table 57: Pharmacy Claim Lines per 1,000 Member Months, by Race/Ethnicity; July 2012 to June 2015.

Race/Ethnicity	RX Claim Lines per 1,000 MM	Minimum Rate	Maximum Rate
American Indian/Alaskan Native	712.9	483.6	893.0
Asian	542.4	347.6	702.0
African-American	607.0	518.6	720.0
Hispanic	306.9	237.0	377.2
Not Reported	530.8	397.6	685.4
White	738.7	529.3	952.0

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) claims, provider, and enrollment tables.

Conclusion

- The utilization statistics presented in this domain for state fiscal years 2012-13, 2013-14, and 2014-15 form a baseline that will be utilized to develop Shewhart control charts. This will allow DHCS to compare future utilization rates to the mean, upper, and lower control limits and can lead to inferences regarding whether the data are within an expected or predictable range, or whether there are marked changes in the data over time.
- Although the utilization data will be utilized for subsequent analyses, the rates presented for each grouping are consistent with scope of coverage, geographic dispersion,
- As previously discussed, when individuals and specific services are moved and delegated to managed care delivery systems, the utilization among the FFS population is dramatically altered. As a result, sample size and rate stability may become problematic and require reevaluation of groupings and specific baselines.

Domain: Obstetric Services and Births Outcomes

Introduction

Timely prenatal care initiation, preterm births, and low-birthweight births. According to the American Congress of Obstetricians and Gynecologists (ACOG), prenatal care should begin in the first trimester of pregnancy, with a total of 14 prenatal care visits in a standard 40-week pregnancy.[81] A normal pregnancy generally lasts 40 weeks.[82] Early births, or preterm births, denote babies born before 37 full weeks of gestation.[83] Preterm deliveries can result in babies being born at low birthweight.[84] Low birthweight refers to a birthweight less than 2,500 grams.[85] Low-birthweight and preterm deliveries are important public health indicators as they can reveal long-term maternal malnutrition, poor health, and poor pregnancy care.[86]

Health professionals consider prenatal care an effective and efficient way to improve birth outcomes, prevent complications, and decrease the incidence of maternal and infant mortality.[87] Prenatal care is one of the most widely used preventive health services in the United States, yet prenatal care is often underutilized among low-income women.[88] Failure to receive early and adequate prenatal care is associated with poor birth outcomes such as low birthweight and preterm delivery.[89]

In this evaluation domain, measures related to timely prenatal care initiation and select birth outcomes are considered. These include:

- Characteristics of Medi-Cal funded births
    - Distribution of California Births in CY 2013 by payer type and delivery system,
    - Distribution of FFS Medi-Cal births in CY 2013 by age group,
    - Distribution of FFS Medi-Cal births in CY 2013 by aid category,
    - Distribution of FFS Medi-Cal births in CY 2013 by race/ethnicity, and
    - Distribution of FFS Medi-Cal births in CY 2013 by geographic region.
- Initiation of prenatal care
    - Percentage of California mothers that initiated prenatal care in the first trimester during CY 2013 by payer type,
    - Percentage of FFS Medi-Cal mothers that initiated prenatal care in the first trimester during CY 2013 by scope of coverage,
    - Percentage of FFS Medi-Cal mothers that initiated prenatal care in the first trimester during CY 2013 by aid category,

  - Percentage of FFS Medi-Cal mothers that initiated prenatal care in the first trimester during CY 2013 by geographic region,
  - Percentage of FFS Medi-Cal mothers that initiated prenatal care in the first trimester during CY 2013 by age group, and
  - Percentage of FFS Medi-Cal mothers that initiated prenatal care in the first trimester during CY 2013 by race/ethnicity.

- Low-Birthweight among Singleton births
  - Percentage of singleton births classified as low birthweight (<2,500 grams) in CY 2013 by payer type,
  - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by timing of prenatal care initiation,
  - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by scope of coverage,
  - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by aid category,
  - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by geographic region,
  - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by age group, and
  - Percentage of singleton births classified as low birthweight (<2,500 grams) among FFS Medi-Cal mothers in CY 2013 by race/ethnicity.

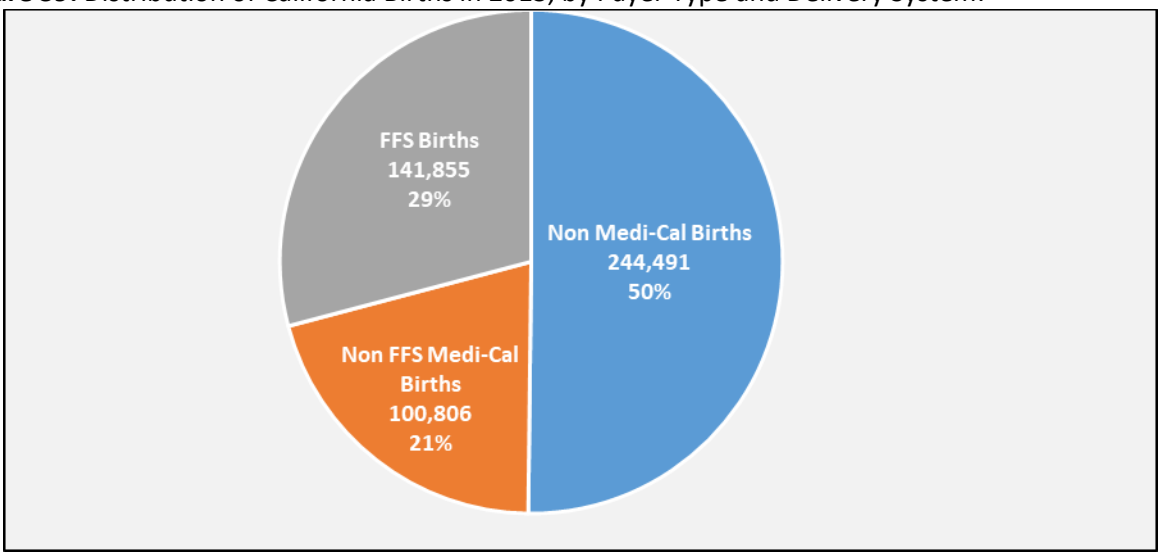
- Pre-Term among Singleton Births
  - Percentage of singleton births classified as preterm (<37 complete weeks of gestation) in 2013 by payer type,
  - Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by timing of prenatal care initiation,
  - Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by scope of coverage,
  - Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by aid category,

- Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by geographic region,
- Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by age group, and
- Percentage of singleton births classified as preterm (<37 complete weeks of gestation) among FFS Medi-Cal mothers in 2013 by race/ethnicity.

Characteristics of Medi-Cal FFS Funded Births

In calendar year (CY) 2013, FFS funded births accounted for 29% of all births in California and 58% of all Medi-Cal births. Medi-Cal as a whole funded 50% of births in California (Figure 39).

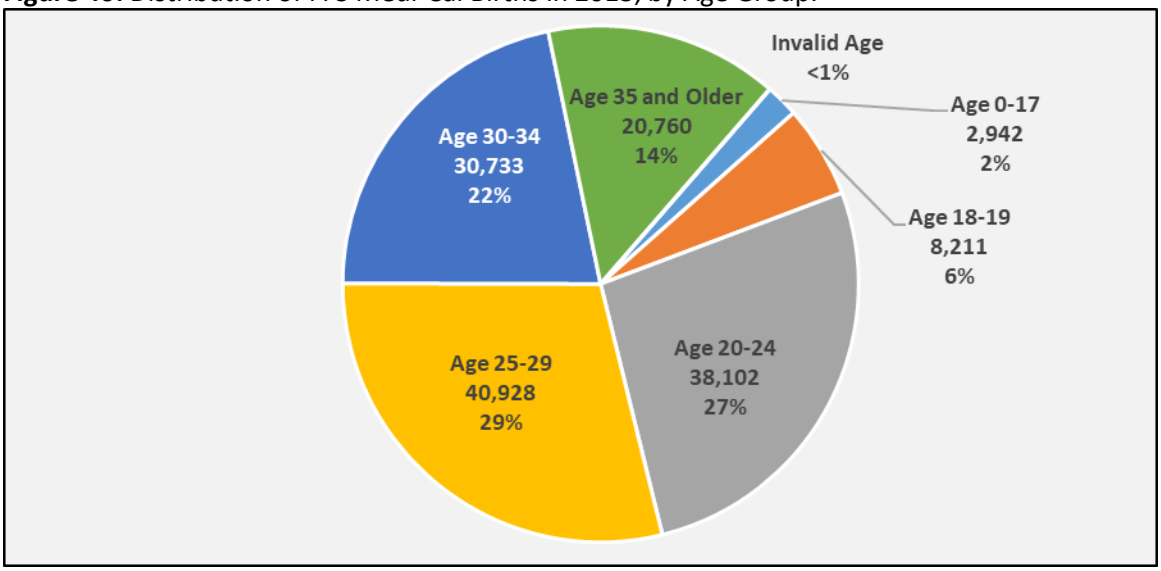
Figure 39: Distribution of California Births in 2013, by Payer Type and Delivery System.



Source: Watkins, J. 2016. 2013 Medi-Cal Birth Statistics. California Department of Health Care Services. Sacramento, CA. July 2016

The largest age group for mothers whose births in 2013 were funded by Medi-Cal's FFS delivery system was those Ages 25-29 (29%) closely followed by those Ages 20-24 (27%). Age groups with the smallest proportion of FFS births were those ages 0-17 (2%) and those ages 18-19 (6%; Figure 40).

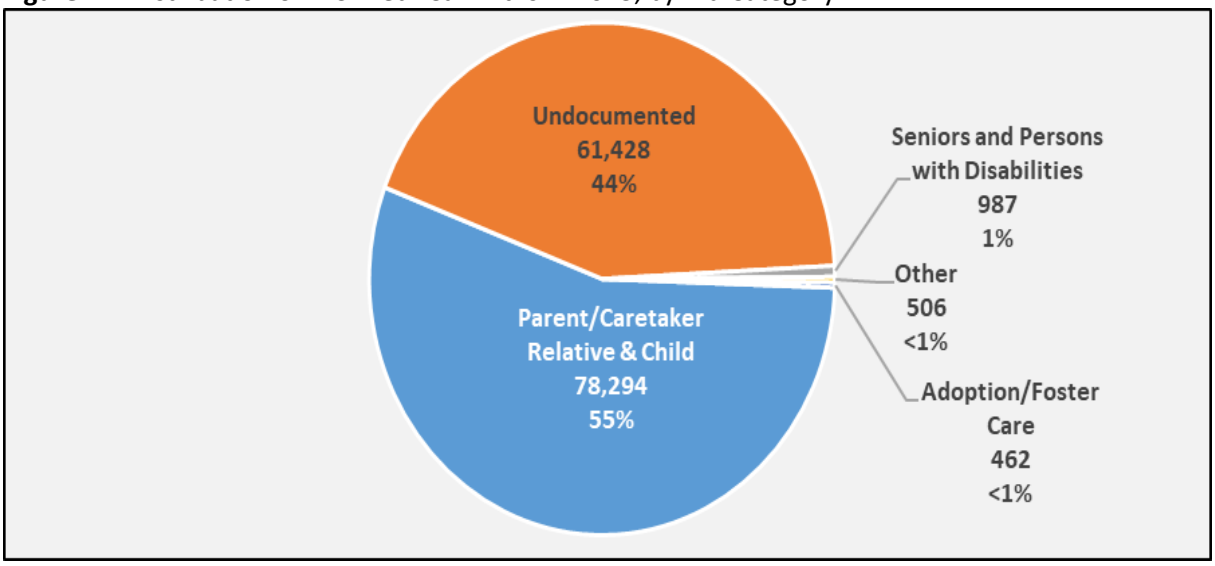
Figure 40: Distribution of FFS Medi-Cal Births in 2013, by Age Group.



Source: California Birth Statistical Master File, 2013 and Medi-Cal Eligibility Data.

Two aid code groupings, Parent/Caretaker Relative & Child and Undocumented, accounted for 99% of all FFS funded births (Figure 41). The Undocumented aid code group is only eligible for emergency and pregnancy-related services.

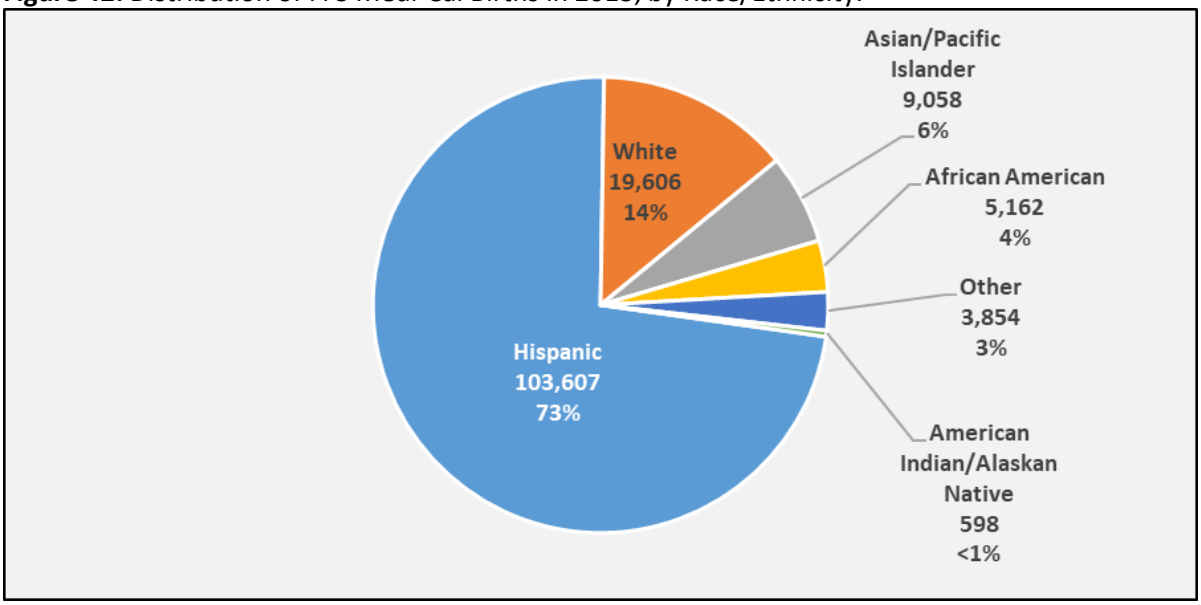
Figure 41: Distribution of FFS Medi-Cal Births in 2013, by Aid Category.



Source: California Birth Statistical Master File, 2013 and Medi-Cal Eligibility Data.

The vast majority of women who experienced a FFS funded birth in 2013 were Hispanic (73%). The next most common race/ethnicity was White, with 14% of births being to white mothers (Figure 42).

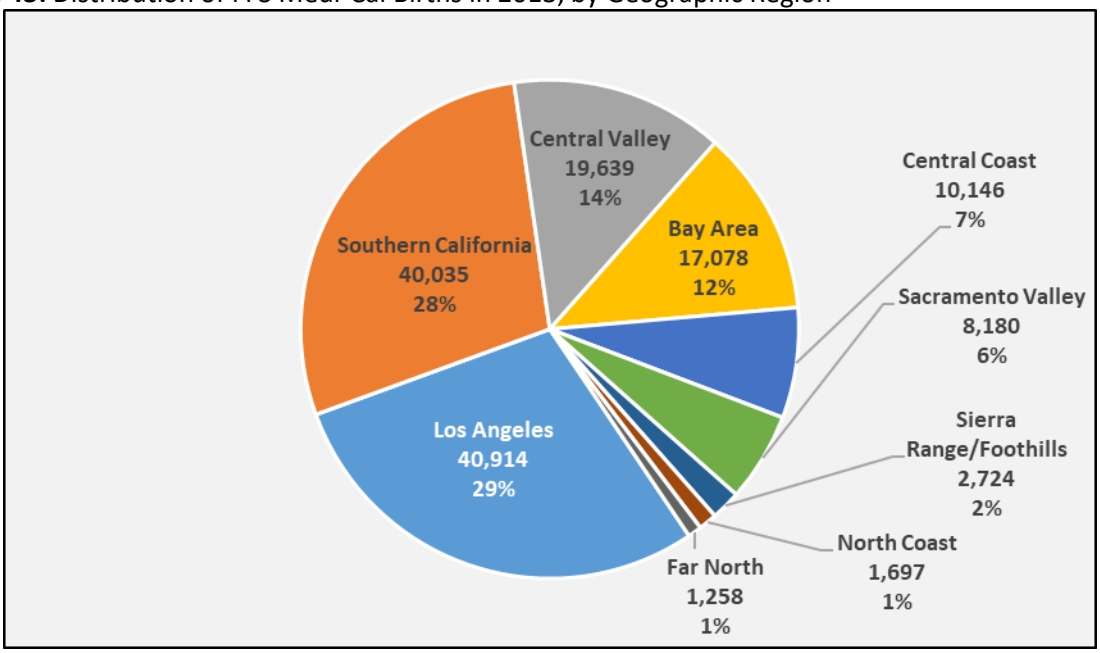
Figure 42: Distribution of FFS Medi-Cal Births in 2013, by Race/Ethnicity.



Source: California Birth Statistical Master File, 2013 and Medi-Cal Eligibility Data.

The Los Angeles (29%) and Southern California (28%) regions had the largest proportions FFS births in 2013. Combined, these two geographic regions accounted for more than half of the total FFS births at 57%, or roughly 80,949 births. The North Coast (1%) and Far North (1%) regions had the smallest proportions of births covered by FFS (Figure 43).

Figure 43: Distribution of FFS Medi-Cal Births in 2013, by Geographic Region

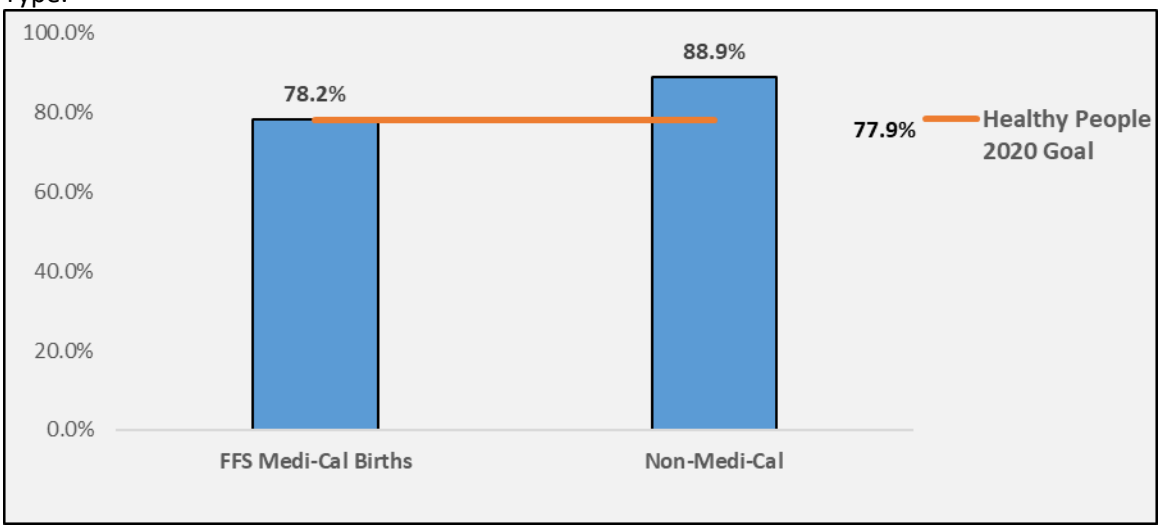


Source: California Birth Statistical Master File, 2013 and Medi-Cal Eligibility Data.

Initiation of Prenatal Care

FFS Medi-Cal mothers (78.2%) met the Healthy People 2020 goal of having at least 77.9% access early prenatal care, compared 88.9% of non-Medi-Cal births (Figure 44).

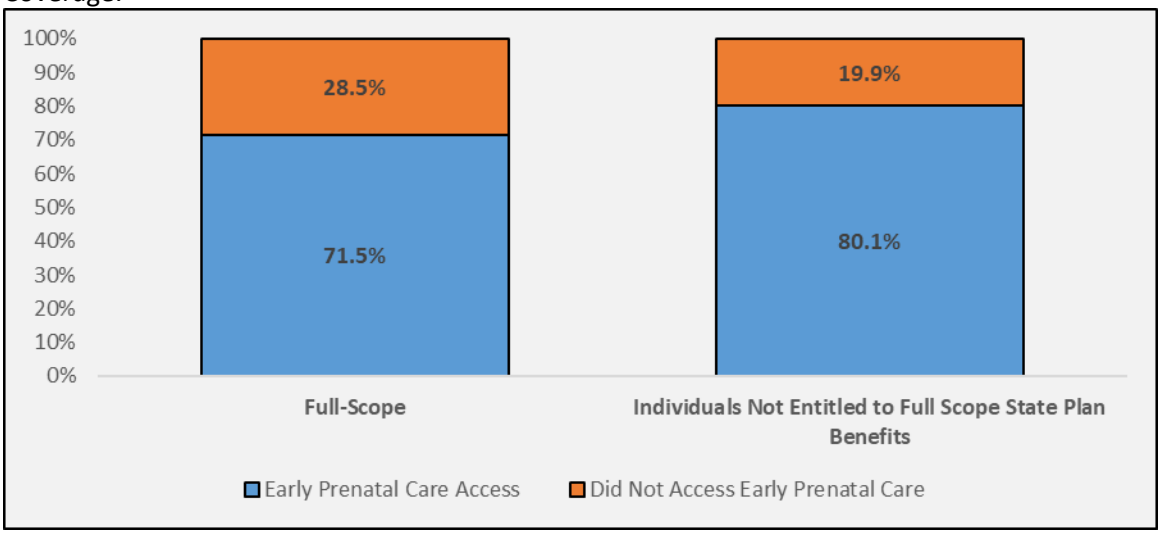
Figure 44: Percent of Early Prenatal Care Initiation among new Californian Mothers in 2013, by Payer Type.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

Medi-Cal mothers not entitled to full scope State Plan benefits (80.1%) were more likely to access timely prenatal care than those entitled to full-scope benefits (71.5%) (Figure 45).

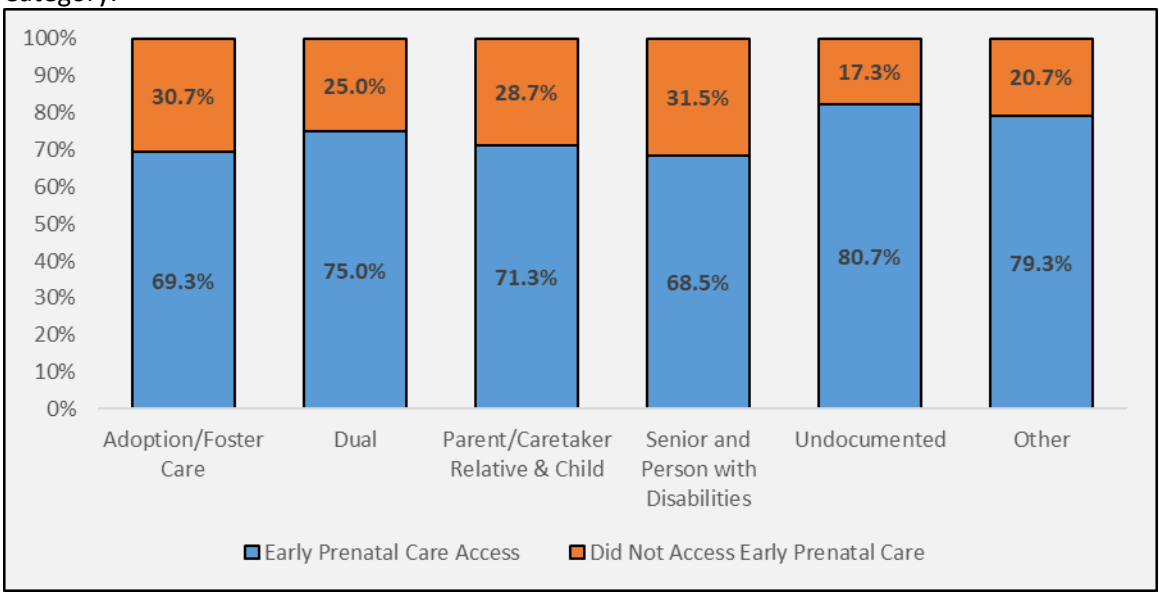
Figure 45: Percent of Early Prenatal Care Initiation among FFS Medi-Cal Mothers in 2013, by Scope of Coverage.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2012 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

FFS Medi-Cal mothers in the Undocumented (80.7%) and Other (79.3%) aid categories had the highest percentages of early prenatal care initiation, while those in the Disabilities (68.5%) and Foster Care (69.3%) aid categories had the lowest percentages (Figure 46).

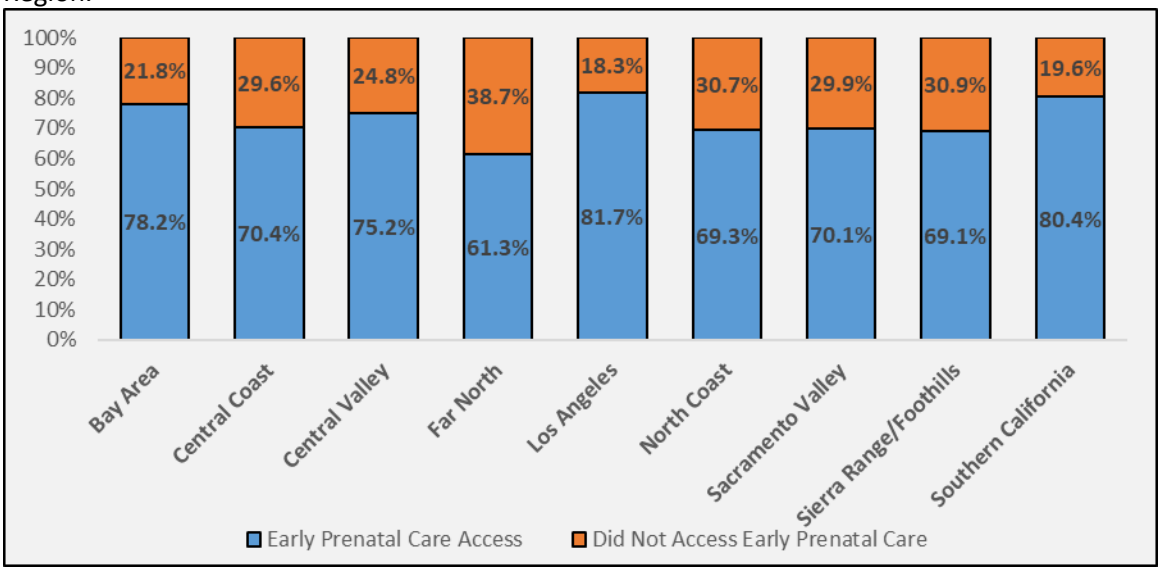
Figure 46: Percent of Early Prenatal Care Initiation among FFS Medi-Cal Mothers in 2013, by Aid Category.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

Only two regions met or exceeded the Healthy People 2020 goal of 77.9% of women accessing prenatal care in the first trimester: Lost Angeles (81.7%) and Southern California (80.4%). Those living in the North Coast (69.3%) and the Far North regions (61.3%) were the least likely to have initiated early prenatal care (Figure 47).

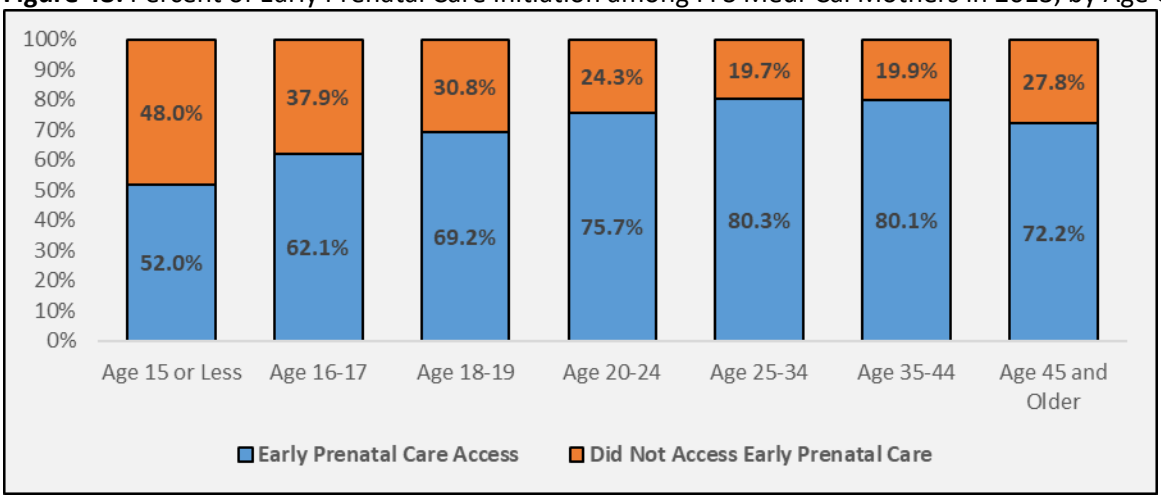
Figure 47: Percent of Early Prenatal Care Initiation among FFS Medi-Cal Mothers in 2013, by Geographic Region.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

FFS Medi-Cal mothers ages 25-34 (80.3%) and mothers ages 35-44 (80.1%) were most likely to access early prenatal care (80.3%). Mothers ages 15 and younger (52.0%) and mothers ages 16-17 (62.1%) were the least likely to access early prenatal care (Figure 48).

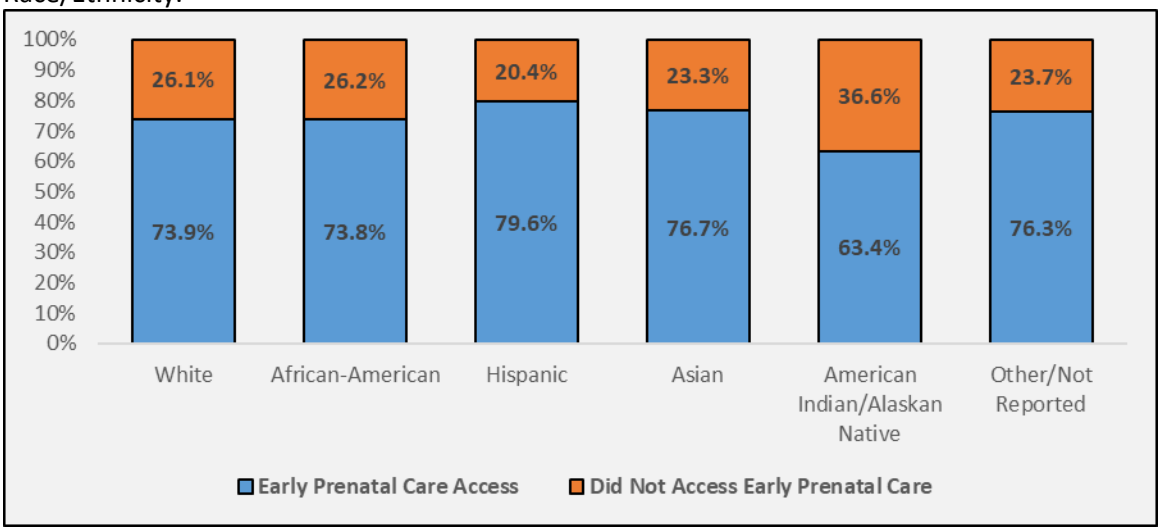
Figure 48: Percent of Early Prenatal Care Initiation among FFS Medi-Cal Mothers in 2013, by Age Group



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

American Indians/Alaskan Natives (63.4%) had the lowest percentage of early prenatal care initiation, while Hispanics (79.6%) had the highest percentage (Figure 49).

Figure 49: Proportion of Early Prenatal Care Initiation among FFS Medi-Cal Mothers in 2013, by Race/Ethnicity.

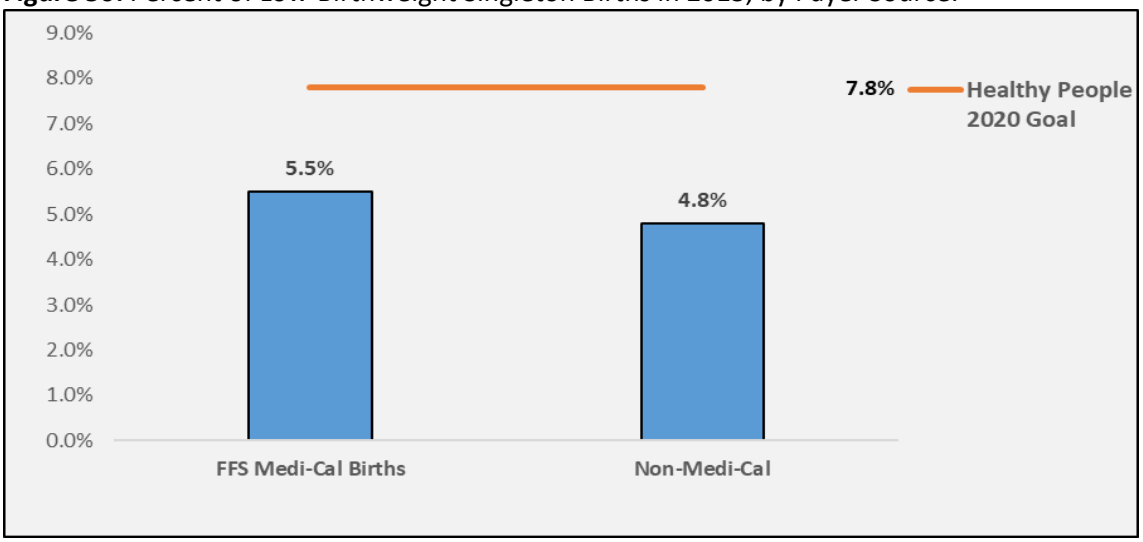


Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 20132, reflecting a 12-month reporting lag.

Low-Birthweight among Singleton Births

In 2013, the percent of FFS Medi-Cal mothers with a low-birthweight singleton delivery was 5.5%, meeting the Healthy People 2020 Goal of 7.8% or less (Figure 50).

Figure 50: Percent of Low-Birthweight Singleton Births in 2013, by Payer Source.

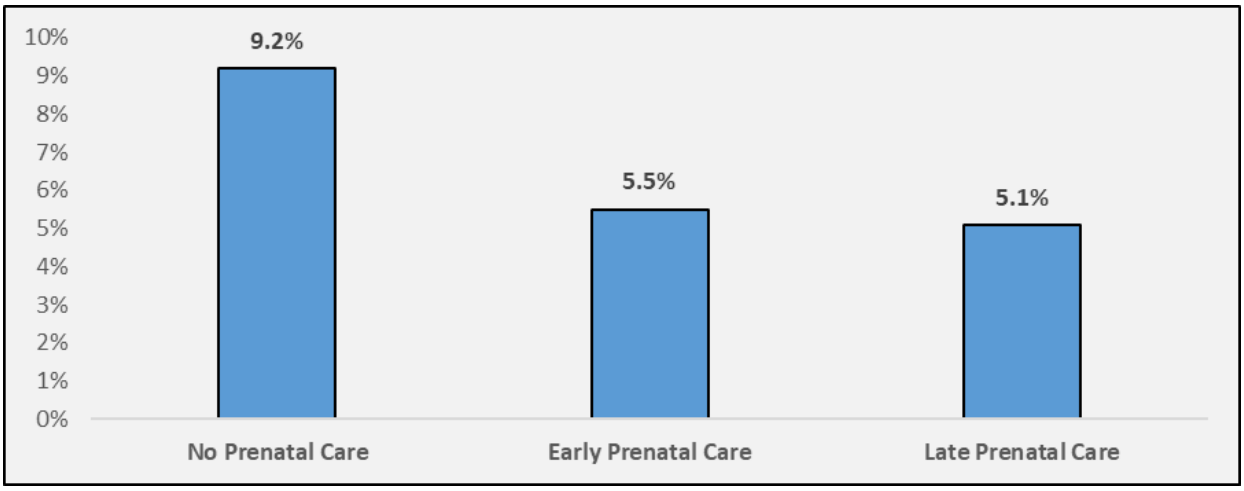


Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning

and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

FFS Medi-Cal mothers who received no prenatal care (9.2%) had a much larger percentage of low-birthweight deliveries than those who initiated prenatal care at any time during their pregnancy, and were 1.6 times more likely to have a low-birthweight delivery than mothers who initiated prenatal care in the first trimester (5.5%) (Figure 51).

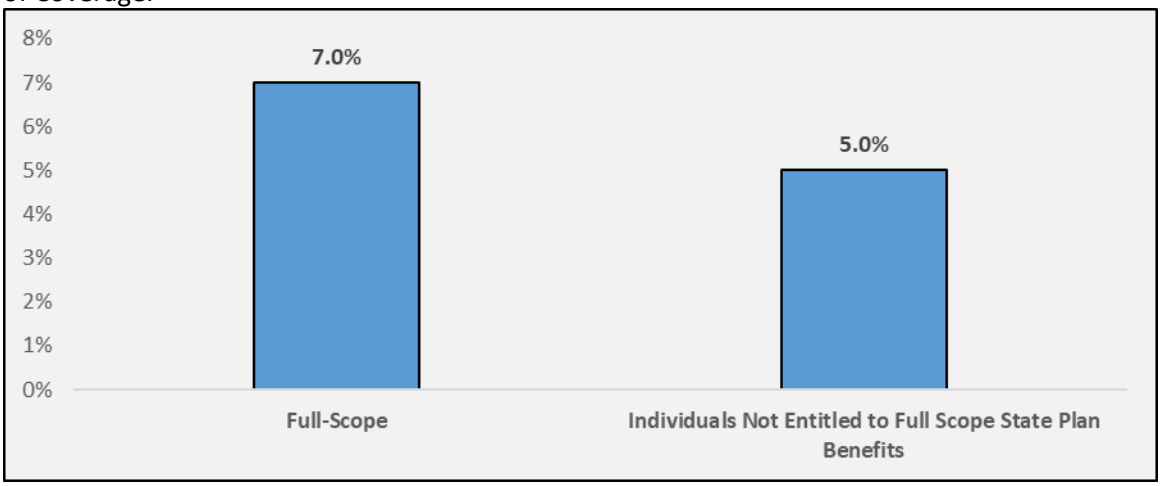
Figure 51: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2013, by Timing of Prenatal Care Initiation.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

Among FFS Medi-Cal mothers in 2013, those entitled to full-scope benefits (7.0%) had a higher percentage of low-birthweight deliveries than individuals not entitled to full scope State Plan benefits (5.0%) (Figure 52).

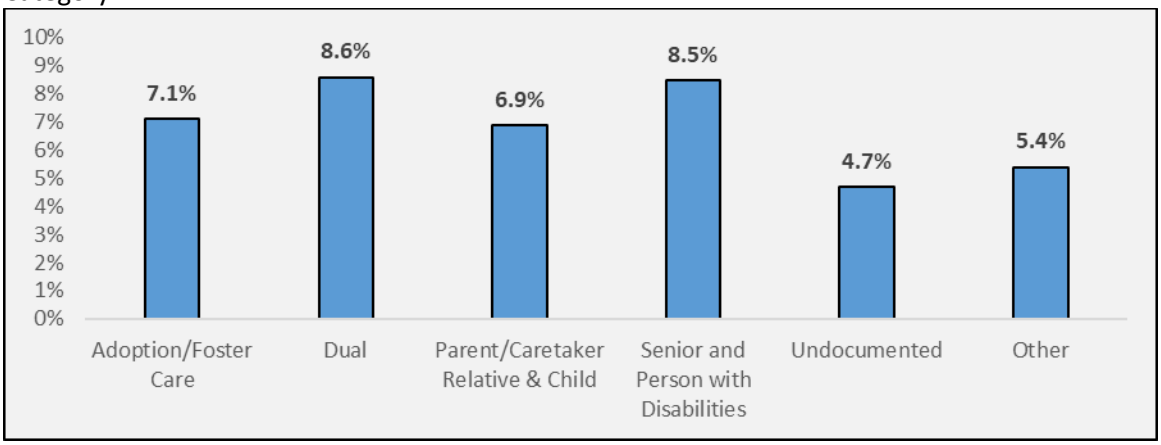
Figure 52: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2013, by Scope of Coverage.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

FFS Medi-Cal mothers categorized as Dually eligible for Medi-Cal and Medicare eligible (8.6%) and those with a Disability (8.5%) had the highest percentage of low-birthweight deliveries, while mothers in the Undocumented aid category (4.7%) had the lowest percentage (Figure 53).

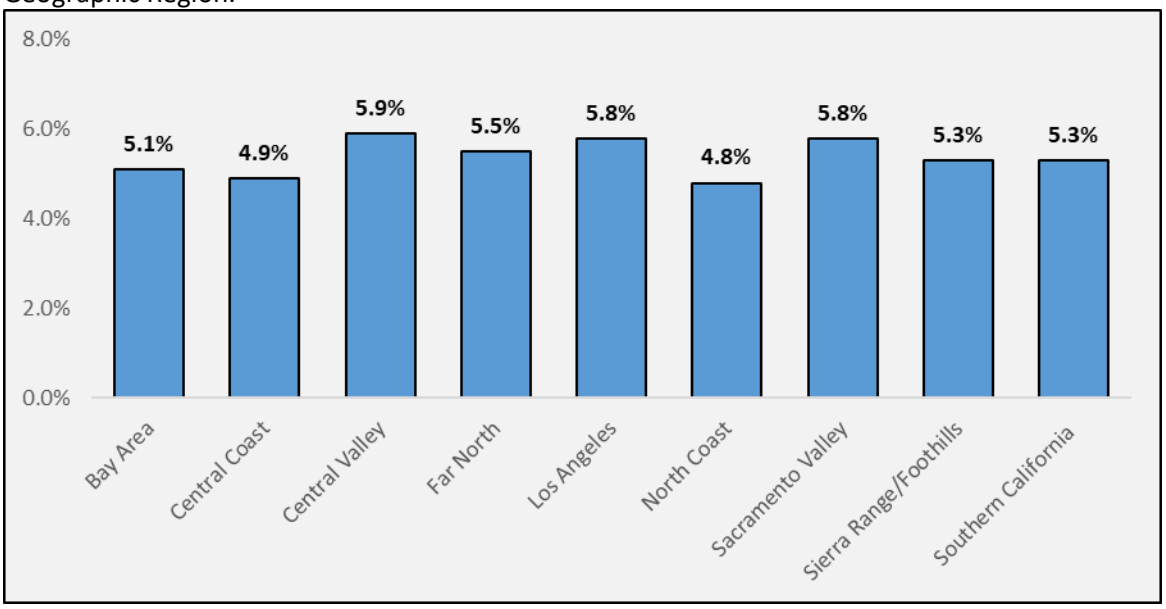
Figure 53: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2013, by Aid Category.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

FFS Medi-Cal mothers residing in the Central Valley (5.9%), Los Angeles (5.8%), and Sacramento Valley (5.8%) regions had the highest percentage of low-birthweight deliveries when compared to the other regions. However, all regions met the Healthy People 2020 goal of less than or equal to 7.8% (Figure 54).

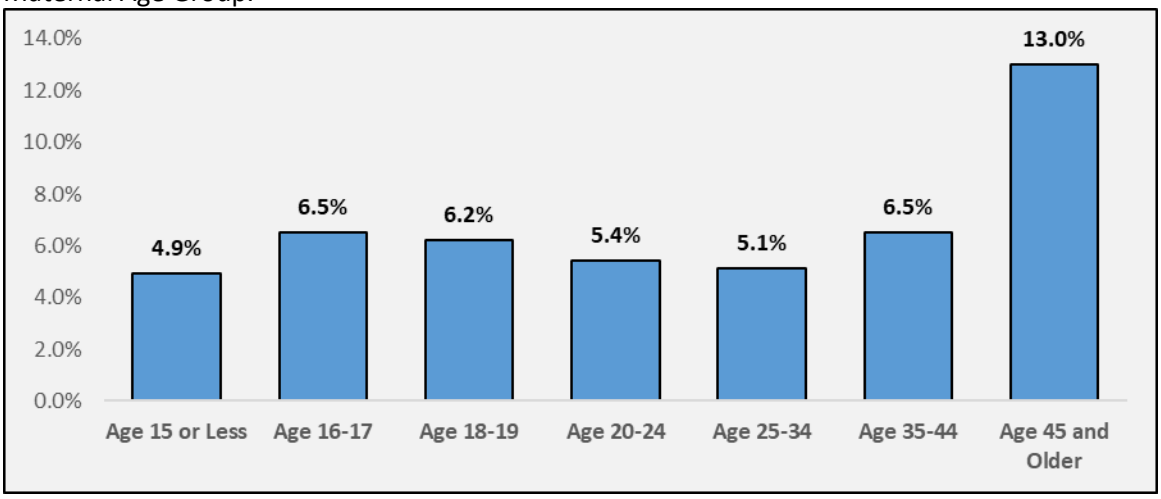
Figure 54: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2013, by Geographic Region.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

FFS Medi-Cal mothers ages 45 and older (13.0%) had the highest percentage of low-birthweight deliveries and was the only group not to meet the Healthy People 2020 goal. Conversely, those ages 15 years and younger had the lowest percentage of low-birthweight deliveries (4.9%; Figure 55).

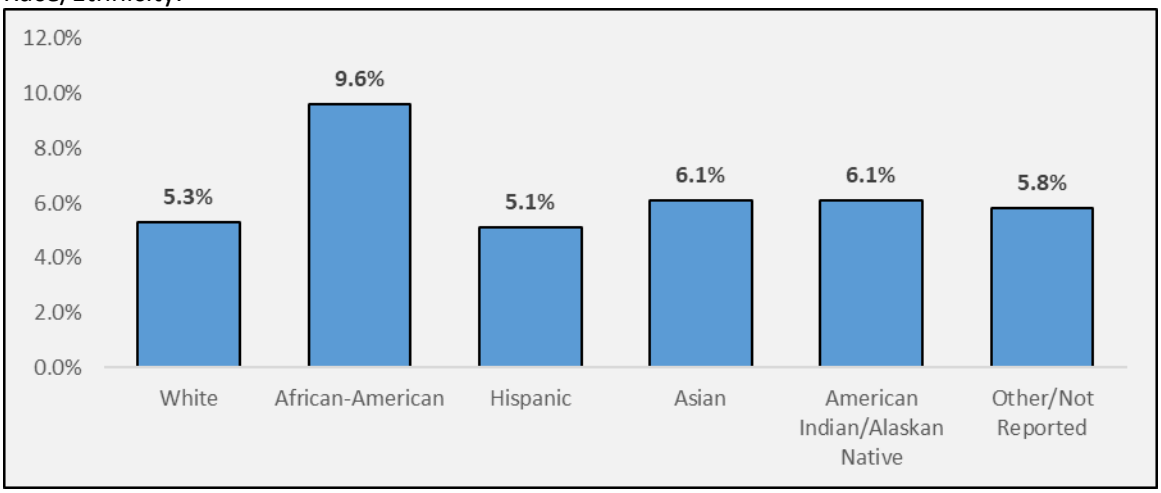
Figure 55: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2013, by Maternal Age Group.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

African-American mothers participating in FFS Medi-Cal had a higher percentage of low-birthweight births (9.6%) than mothers in other racial/ethnic cohorts and was the only group not to meet the Healthy People 2020 goal of less than or equal to 7.8% (Figure 56).

Figure 56: Percent of Low-Birthweight Singleton Births among FFS Medi-Cal Mothers in 2012, by Race/Ethnicity.

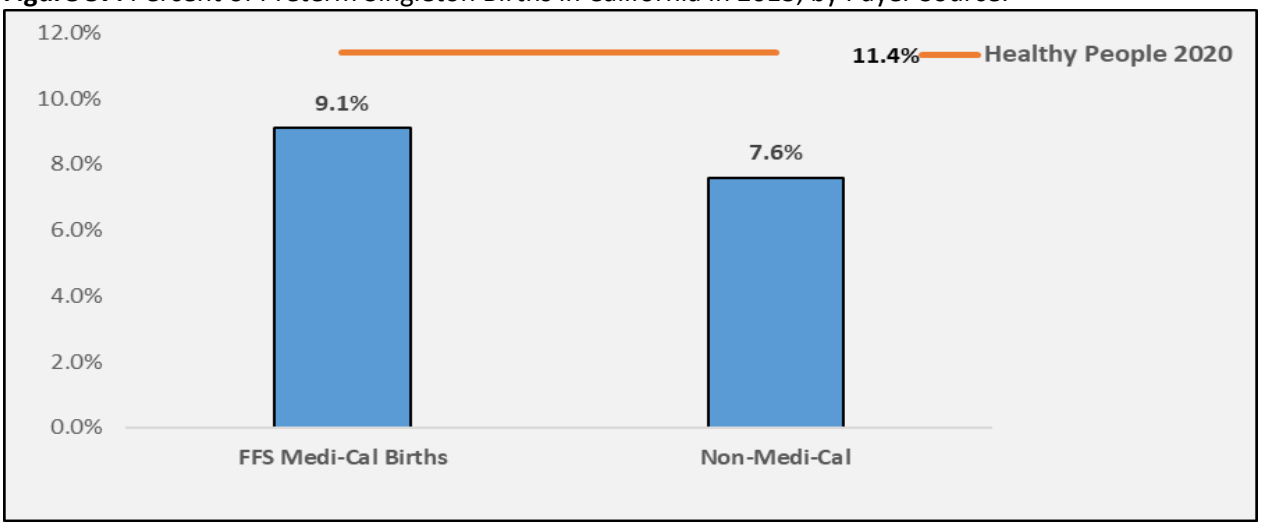


Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

Pre-Term among Singleton Births

The percent of preterm singleton deliveries among FFS Medi-Cal mothers was 9.1%, meeting the Healthy People 2020 Goal of 11.4% or less (Figure 57).

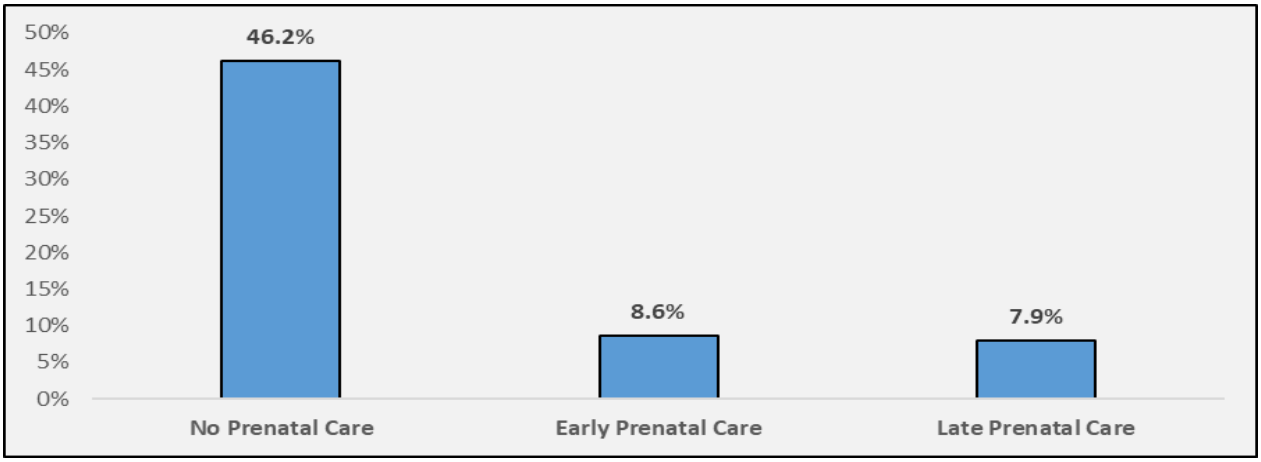
Figure 57: Percent of Preterm Singleton Births in California in 2013, by Payer Source.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

FFS Medi-Cal mothers who did not receive prenatal care (46.2%) were more than five times more likely to have a preterm delivery than mothers who received early prenatal care (Figure 58).

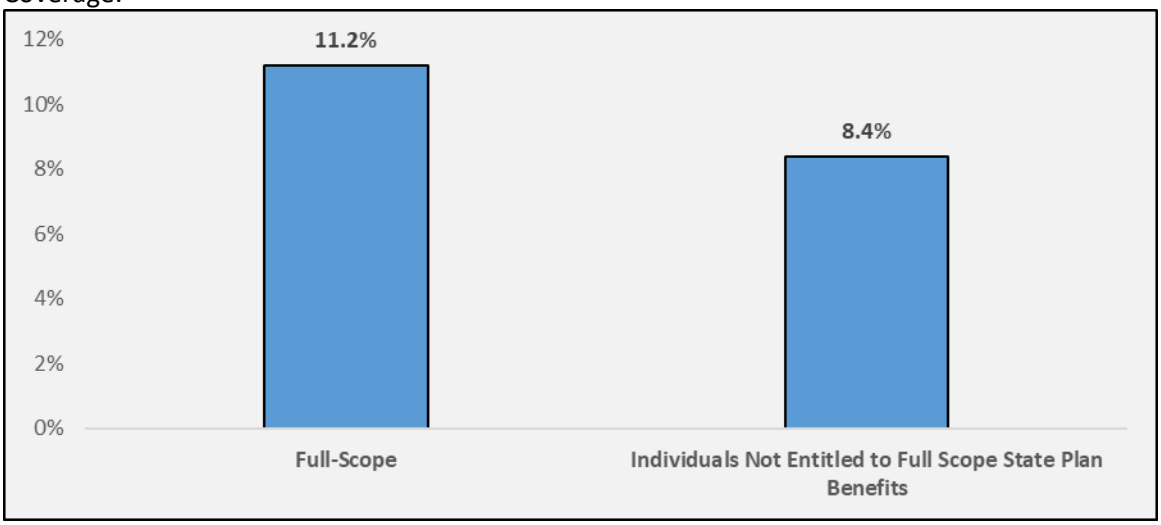
Figure 58: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2013, by Timing of Prenatal Care Initiation.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

Preterm deliveries were also more common among FFS Medi-Cal mothers with full-scope benefits (11.2%) than mothers not entitled to full scope State Plan benefits (8.4%) (Figure 59).

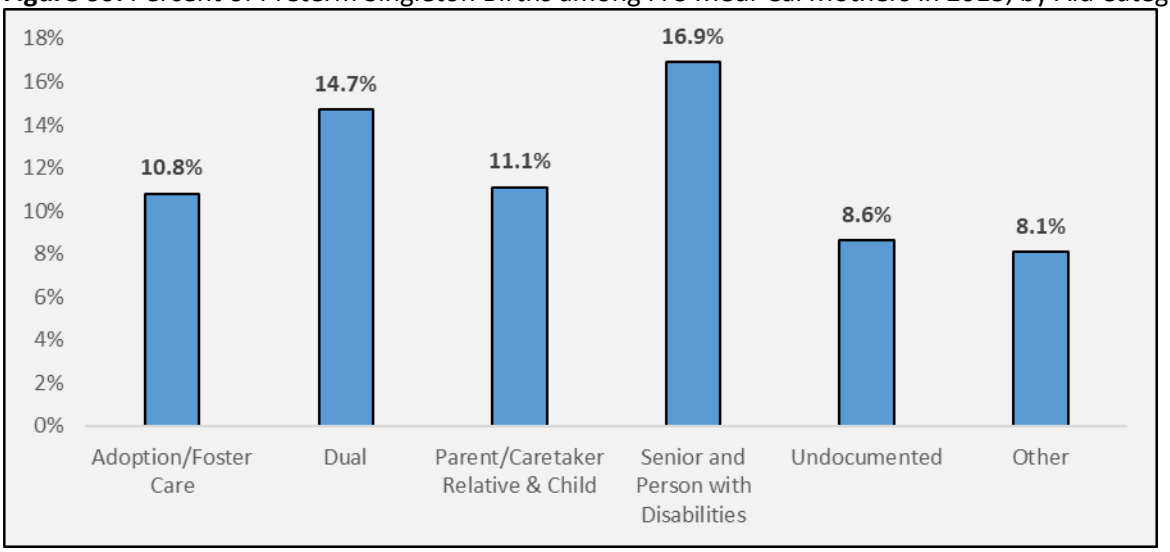
Figure 59: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2012, by Scope of Coverage.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

FFS Medi-Cal mothers enrolled in a Disability aid category (16.9%) had the highest percentage of preterm deliveries compared with mothers in any other aid category (Figure 60).

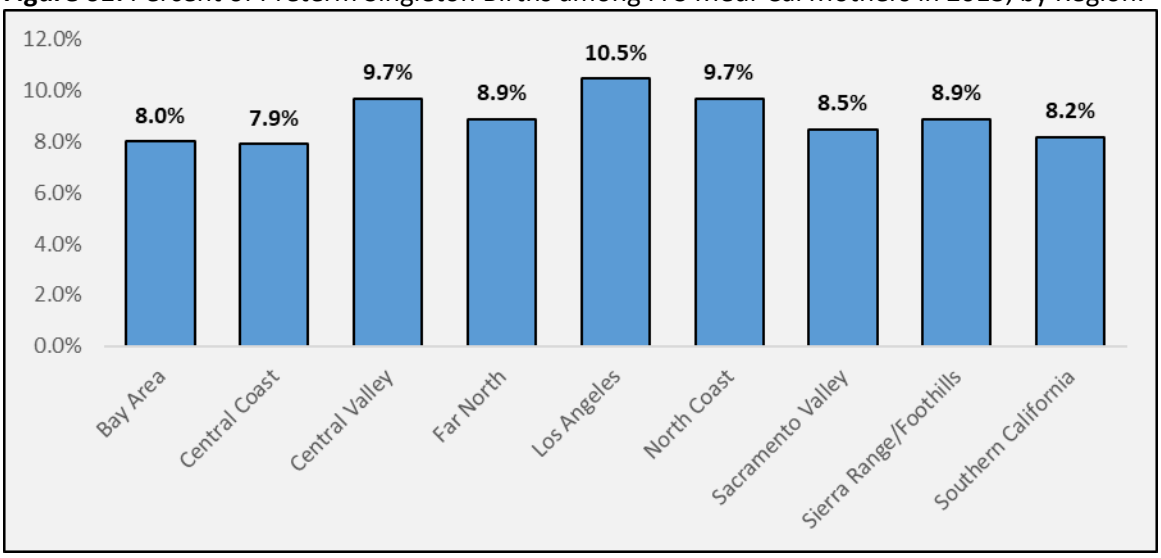
Figure 60: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2013, by Aid Category.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

All regions met the Healthy People 2020 goal of less than 11.4% preterm deliveries. The Los Angeles (10.5%), Central Valley (9.7%) and North Coast (9.7%) regions had the highest percentage of preterm deliveries, while the Central Coast (7.9%) and Bay Area (8.0%) regions had the lowest (Figure 61).

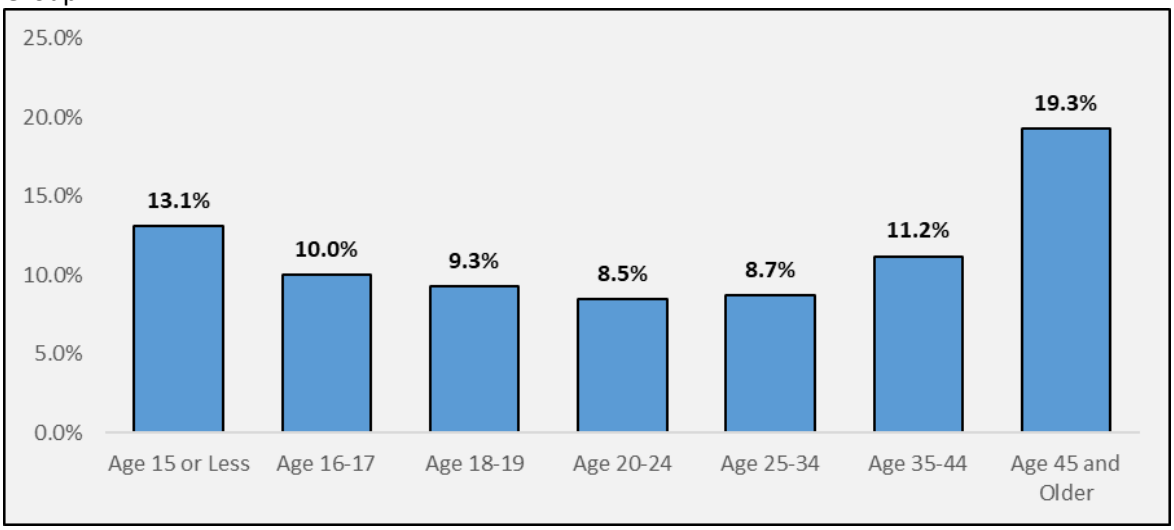
Figure 61: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2013, by Region.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

The highest percentage of preterm deliveries was seen among FFS Medi-Cal mothers ages 45+(19.3%; Figure 62).

Figure 62: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2013, by Maternal Age Group.

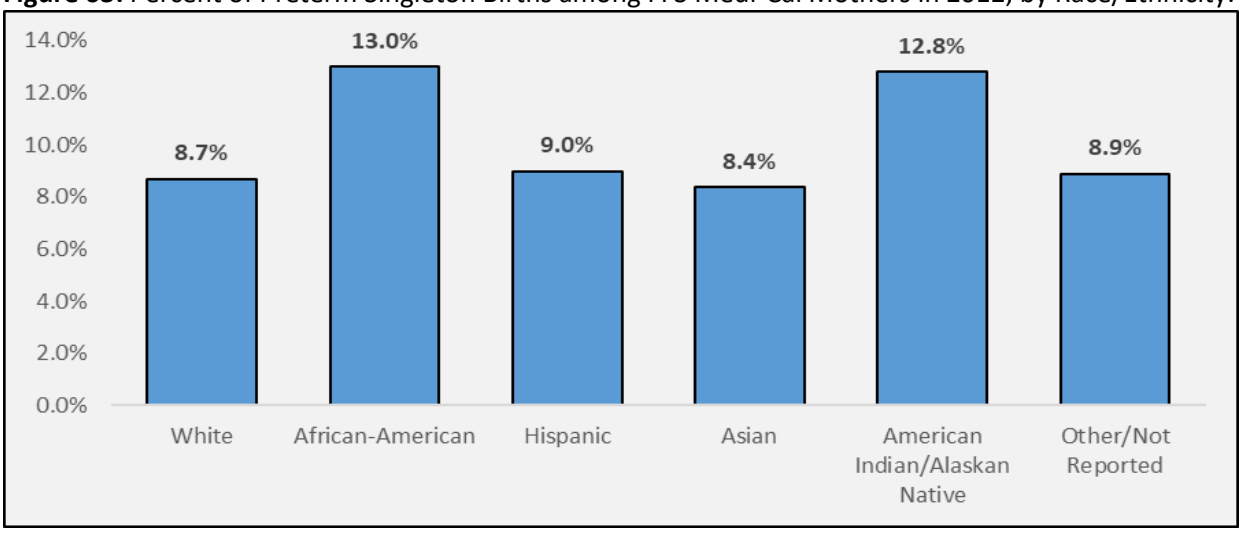


Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning

and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

African-American (13.0%) and American Indian/Alaskan Native (12.8%) mothers participating in FFS Medi-Cal had a higher percentage of preterm deliveries than mothers in other racial/ethnic cohorts (Figure 63).

Figure 63: Percent of Preterm Singleton Births among FFS Medi-Cal Mothers in 2012, by Race/Ethnicity.



Source: Created by DHCS Research and Analytic Studies Division using data from the California Department of Public Health 2013 Birth Statistical Master File, the Office of Statewide Health Planning and Development 2013 Patient Discharge Data, and the Medi-Cal Eligibility Data System Monthly Extract Files for January 2013–December 2013, reflecting a 12-month reporting lag.

Conclusion

Overall, Medi-Cal mothers participating in FFS met the Healthy People 2020 goals for early prenatal care, low birthweight, and preterm deliveries. Differences were noted among race-ethnicities, age groups, geographic regions, and Medi-Cal eligibility pathways.

- Of all births funded by Medi-Cal, 58% were funded by Medi-Cal's FFS delivery system.
- Mothers classified as Undocumented accounted for 44% of all Medi-Cal FFS funded births.
- Seventy-three percent of the birth mothers were classified as Hispanic.
- FFS Medi-Cal mothers (78.2%) met the Healthy People 2020 goal of having at least 77.9% access early prenatal care.

- FFS mothers not entitled to full scope State Plan benefits (80.1%) were more likely to access timely prenatal care than those entitled to full-scope benefits (71.5%).

- American Indians/Alaskan Natives (63.4%) had the lowest percentage of early prenatal care initiation, while Hispanics (79.6%) had the highest percentage.

- In 2013, the percent of FFS Medi-Cal mothers with a low-birthweight singleton delivery was 5.1%, meeting the Healthy People 2020 Goal of 7.8% or less.

- African-American mothers participating in FFS Medi-Cal had a higher percentage of low-birthweight births (9.6%) than mothers in other racial/ethnic cohorts and was the only group not to meet the Healthy People 2020 goal of less than or equal to 7.8%.

- All geographic regions evaluated met the Healthy People 2020 goal of less than or equal to 7.8%.

- FFS Medi-Cal mothers ages 45 and older (13.0%, N=237) had the highest percentage of pregnancies result in low-birthweight deliveries. Additionally, women ages 15 and younger (4.9%, N=435) had a small percentage of pregnancies result in low-birthweight deliveries.

- African-American mothers participating in FFS Medi-Cal experienced the highest percentage of low-birthweight births (9.6%) among the racial/ethnic cohorts evaluated.

- The percent of preterm singleton deliveries among FFS Medi-Cal mothers was 9.1%, meeting the Healthy People 2020 Goal of 11.4% or less.

- African-American (13.0%) and American Indian/Alaskan Native (12.8%) mothers participating in FFS Medi-Cal had a higher percentage of preterm deliveries than mothers in other racial/ethnic cohorts.

Domain: Feedback

Introduction

Helplines provide needed assistance to FFS Medi-Cal beneficiaries and providers experiencing difficulties navigating the health care system and assist the California DHCS in monitoring health care access. Two helplines are available to FFS Medi-Cal beneficiaries and providers: DHCS' Medi-Cal Member and Provider Helpline, and the Medi-Cal Managed Care Office of the Ombudsman call center. DHCS' Medi-Cal Member and Provider Helpline serves as a direct source of information for providers, beneficiaries, and prospective enrollees. DHCS is currently working to identify how data and information generated from this helpline can best be incorporated into this measure. Although it is primarily focused on assisting Medi-Cal managed care beneficiaries, the Office of the Ombudsman call center provides FFS Medi-Cal beneficiaries with general program information. Until data from DHCS' helpline become available, this report will present data from the Office of the Ombudsman call center.

The following baseline analysis analyzes beneficiaries' experiences in Medi-Cal's FFS delivery system based on data collected from the Medi-Cal Managed Care Division's Office of the Ombudsman call center. The baseline study period is SFYs 2013-14 and 2014-15. In this analysis, several measures will be presented and evaluated; including:

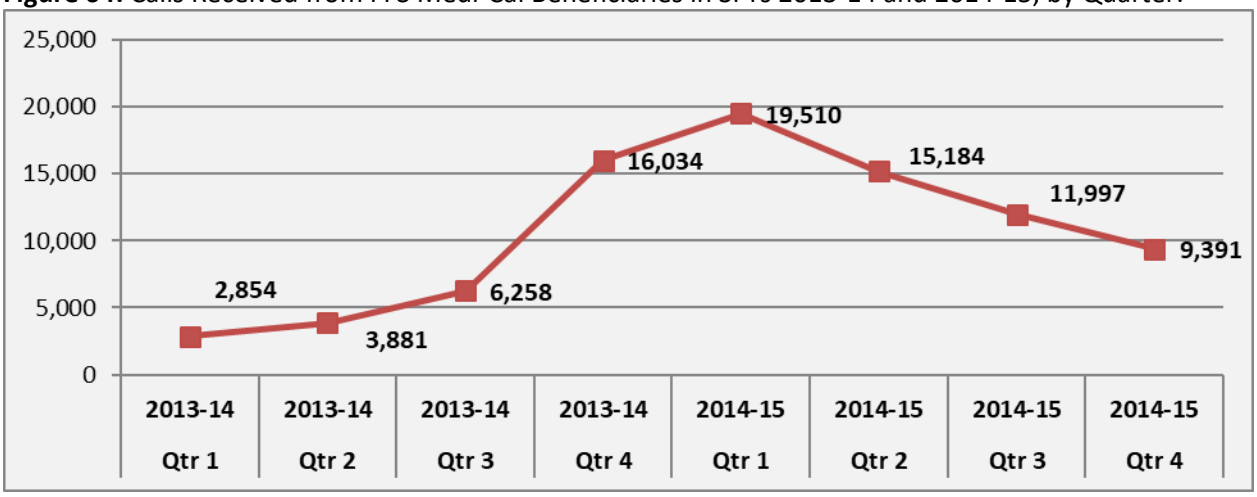
- Total calls received from FFS Medi-Cal beneficiaries during SFYs 2013-14 and 2014-15 by quarter,
- Total calls received from FFS Medi-Cal beneficiaries during SFYs 2013-14 and 2014-15 by month,
- Total calls received from FFS Medi-Cal beneficiaries residing in Los Angeles and Southern California geographic regions in SFYs 2013-14 and 2014-15 by quarter,
- Total calls received from FFS Medi-Cal beneficiaries residing all other geographic regions in SFYs 2013-14 and 2014-15 by quarter,
- Total calls received from FFS Medi-Cal beneficiaries during SFYs 2013-14 and 2014-15 by geographic region and month,
- Total calls received from FFS Medi-Cal beneficiaries during SFYs 2013-14 and 2014-15 by aid category,
- Total calls received from FFS Medi-Cal beneficiaries during SFYs 2013-14 and 2014-15 by call category,

- Top three categories of calls received from FFS Medi-Cal beneficiaries in the Parent/Caretaker Relative aid category during SFYs 2013-14 and 2014-15, and
- Top three categories of calls received from FFS Medi-Cal beneficiaries in the SPD aid category during SFYs 2013-14 and 2014-15.

Calls Received from FFS Medi-Cal Beneficiaries, by Quarter

During SFYs 2013-14 and 2014-15, the volume of calls from FFS Medi-Cal beneficiaries steadily increased through the first quarter of SFY 2014-15, followed by a steady decline. The sharpest increase in call volume was seen between the third and fourth quarters of SFY 2013-14, which is attributable to the managed care expansions in late 2013 and the implementation of the ACA in 2014 (Figure 64).

Figure 64: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Quarter.



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Managed Care Division's Office of the Ombudsman call center.

Calls Received from FFS Medi-Cal Beneficiaries, by Month

During SFYs 2013-14 and 2014-15, the volume of calls from FFS Medi-Cal beneficiaries fluctuated greatly by month but generally increased through September of SFY 2014-15, followed by a steady decline. The sharpest increase in call volume (88.8%) was seen in April of SFY 2013-14 (Table 58).

Table 58: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Month.

State Fiscal Year	Month	Call Count	% Change from Previous Month
2013-14	July	923	N/A
2013-14	August	980	6.2%

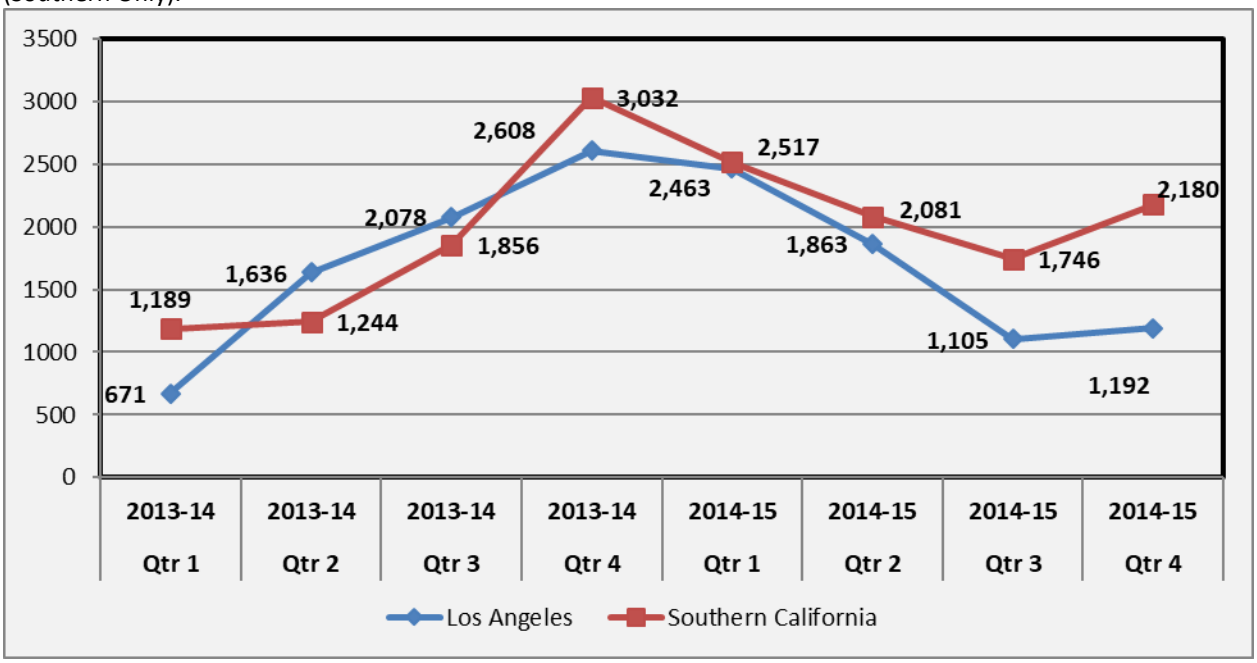
State Fiscal Year	Month	Call Count	% Change from Previous Month
2013-14	September	951	-3.0%
2013-14	October	1,242	30.6%
2013-14	November	1,062	-14.5%
2013-14	December	1,577	48.5%
2013-14	January	2,140	35.7%
2013-14	February	2,166	1.2%
2013-14	March	1,952	-9.9%
2013-14	April	3,686	88.8%
2013-14	May	5,283	43.3%
2013-14	June	7,065	33.7%
2014-15	July	6,044	-14.5%
2014-15	August	6,267	3.7%
2014-15	September	7,199	14.9%
2014-15	October	6,817	-5.3%
2014-15	November	4,294	-37.0%
2014-15	December	4,073	-5.2%
2014-15	January	3,318	-18.5%
2014-15	February	4,179	26.0%
2014-15	March	4,500	7.7%
2014-15	April	3,800	-15.6%
2014-15	May	3,356	-11.7%
2014-15	June	2,235	-33.4%
Grand Total		**85,109**	

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Managed Care Division's Office of the Ombudsman call center.

Calls Received from FFS Medi-Cal Beneficiaries, by Geographic Region

During SFYs 2013-14 and 2014-15, calls from FFS Medi-Cal beneficiaries residing in the Los Angeles and Southern California geographic regions exhibited a similar volume and a similar pattern, generally increasing through the fourth quarter of SFY 2013-14, then gradually decreasing with a slight uptick in volume during the fourth quarter of SFY 2014-15 (Figure 65).

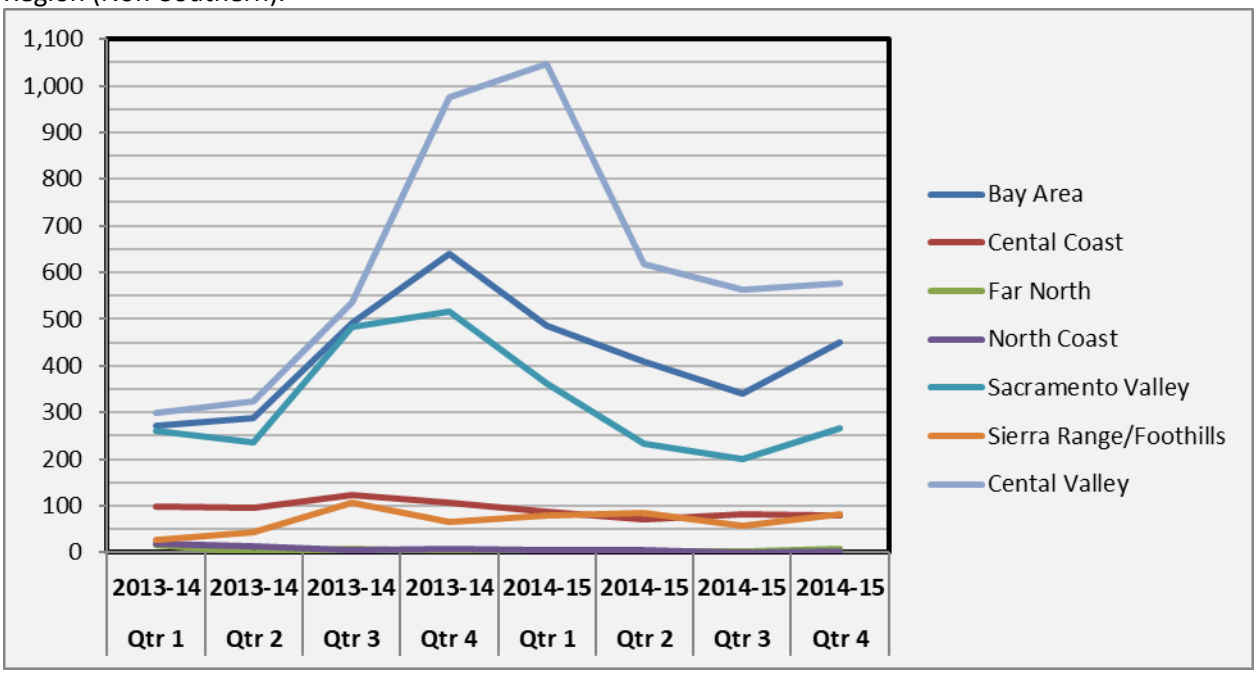
Figure 65: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Geographic Region (Southern Only).



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Managed Care Division's Office of the Ombudsman call center.

During SFYs 2013-14 and 2014-15, calls from FFS Medi-Cal beneficiaries residing outside the Los Angeles and Southern California geographic regions were concentrated in the Central Valley, Bay Area, and Sacramento Valley regions. Call volume in these three geographic regions showed similar patterns, spiking during the fourth quarter of SFY 2013-14. The spike in call volume that occurred in the Southern California geographic region during the first quarter of SFY 2014-15 is likely due the implementation of the CCI in San Diego County (Figure 66).

Figure 66: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Geographic Region (Non-Southern).



Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Managed Care Division's Office of the Ombudsman call center.

During SFYs 2013-14 and 2014-15, the volume of calls from FFS Medi-Cal beneficiaries was concentrated in the heavily populated Southern California, Los Angeles, and Bay Area geographic regions, followed by the Central Valley and Sacramento Valley regions. Call volume exhibited significant fluctuation by geographic region, with the highest volumes generally seen during the second half of SFY 2013-14 and the first half of SFY 2014-15. A significant proportion of calls received were from beneficiaries whose geographic region of residence was unknown or not reported (Table 59).

Table 59: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Geographic Region and Month.

State Fiscal Year	Month	Bay Area	Central Coast	Central Valley	Far North	Los Angeles	North Coast	Sacramento Valley	Sierra Range/ Foothills	Southern California	Unknown/ Not Reported
13-14	July	89	36	111	6	205	10	101	9	354	2
13-14	Aug.	124	43	98	9	179	8	85	7	426	1
13-14	Sept.	58	20	89	1	287	0	75	10	409	2
13-14	Oct.	81	20	118	0	532	0	91	5	395	0
13-14	Nov.	90	10	75	0	425	9	76	16	360	1
13-14	Dec.	118	66	132	0	679	3	68	22	489	0
13-14	Jan.	183	48	175	0	689	1	198	74	544	228
13-14	Feb.	184	37	157	5	750	3	164	22	685	159
13-14	March	124	38	204	2	639	0	121	12	627	185
13-14	April	218	40	274	0	837	2	183	26	993	1,113
13-14	May	217	32	332	2	985	2	169	16	1,032	2,496
13-14	June	206	34	369	0	786	5	163	24	1,007	4,471
14-15	July	172	32	413	0	833	3	151	22	777	3,641
14-15	Aug.	167	28	287	0	775	2	110	29	845	4,024
14-15	Sept.	147	28	346	1	855	0	102	27	895	4,798
14-15	Oct.	160	26	233	0	740	3	94	41	830	4,690
14-15	Nov.	116	22	183	1	575	2	56	15	565	2,759
14-15	Dec.	134	23	201	1	548	1	84	28	686	2,367
14-15	Jan.	118	13	167	1	401	0	75	25	557	1,961
14-15	Feb.	102	33	200	2	383	0	51	16	598	2,794
14-15	March	121	35	195	0	321	0	75	16	591	3,146
14-15	April	155	30	224	1	421	0	72	21	698	2,178
14-15	May	143	25	187	0	393	0	76	29	673	1,830
14-15	June	153	25	165	7	378	1	118	32	809	547
Totals		**3,380**	**744**	**4,935**	**39**	**13,616**	**55**	**2,558**	**544**	**15,845**	**43,393**

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Managed Care Division's Office of the Ombudsman call center.

Calls Received from FFS Medi-Cal Beneficiaries, by Aid Category

During SFYs 2013-14 and 2014-15, calls from FFS Medi-Cal beneficiaries were concentrated in the Parent/Caretaker Relative & Child and Seniors and Persons with Disabilities (SPD) aid categories. The largest increase in call volume from SFYs 2013-14 to 2014-15 was seen in the Adoption/Foster Care aid category (121.2%), and the largest decrease was seen in the SPD aid category (-21.2%). Overall, call volume by aid category increased 7.7% from SFYs 2013-14 to 2014-15 (Table 60).

Table 60: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Aid Category.

Aid Category	SFY 2013-14	SFY 2014-15	% Change
Parent/Caretaker Relative & Child	8,164	8,034	-1.6%
Seniors and Persons with Disabilities	6,308	4,972	-21.2%
ACA Expansion Adult Ages 19 to 64	2,379	4,102	72.4%
Adoption/Foster Care	689	1,524	121.2%
Undocumented	335	615	83.6%
Grand Total	**17,875**	**19,247**	**7.7%**

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Managed Care Division's Office of the Ombudsman call center. 47,987 calls received during this time period included no Aid Code information (11,152 in SFY 2013-14; 36,835 in SFY 2014-15).

Calls Received from FFS Medi-Cal Beneficiaries, by Call Category

During SFYs 2013-14 and 2014-15, calls from FFS Medi-Cal beneficiaries were concentrated in the Miscellaneous Issues and Enrollment/Disenrollment call categories. The largest increase in call volume from SFYs 2013-14 to 2014-15 was seen in the Miscellaneous Issues call category (228.4%), and the largest decrease was seen in the Healthy Families Transition call category (-98.9%). Overall, call volume by call category increased 93.2% from SFYs 2013-14 to 2014-15 (Table 61).

Table 61: Calls Received from FFS Medi-Cal Beneficiaries in SFYs 2013-14 and 2014-15, by Call Category.

Call Category	SFY 2013-14	SFY 2014-15	% Change
COC - Continuity of Care	38	26	-31.6%
EDU - Education & Outreach	4,160	3,523	-15.3%
ELG - Eligibility	2,237	2,614	16.9%
HCO - Enrollment/Disenrollment	11,028	14,359	30.2%
HCP - Health Care Plan Issues	107	103	-3.7%
HFT - Healthy Families Transition	89	1	-98.9%
MISC - Miscellaneous Issues	10,561	34,680	228.4%
OHC - Other Health Coverage	604	513	-15.1%
PRV - Plan Subcontractor/Provider Issues	100	124	24.0%
QOC - Quality of Care	103	139	35.0%
Grand Total	**29,027**	**56,082**	**93.2%**

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Managed Care Division's Office of the Ombudsman call center.

Top Three Call Categories, by Aid Category

During SFYs 2013-14 and 2014-15, calls from FFS Medi-Cal beneficiaries in the Parent/Caretaker Relative & Child aid category were heavily concentrated in the Enrollment/Disenrollment call category. The largest change in call volume from SFYs 2013-14 to 2014-15 was seen in the Miscellaneous Issues call category (-66.9%) (Table 62).

Table 62: Top Three Categories of Calls Received from FFS Medi-Cal Beneficiaries in the Parent/Caretaker Relative & Child Aid Category in SFYs 2013-14 and 2014-15.

SFY	Call Category	Aid Category	# of Calls	% Change
2013-14	MISC - Miscellaneous Issues	Parent/Caretaker Relative & Child	815	N/A
2014-15	MISC - Miscellaneous Issues	Parent/Caretaker Relative & Child	270	-66.9%
2013-14	HCO - Enrollment/Disenrollment	Parent/Caretaker Relative & Child	6,029	N/A
2014-15	HCO - Enrollment/Disenrollment	Parent/Caretaker Relative & Child	6,480	7.5%
2013-14	EDU - Education & Outreach	Parent/Caretaker Relative & Child	212	N/A
2014-15	EDU - Education & Outreach	Parent/Caretaker Relative & Child	264	24.5%

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Managed Care Division's Office of the Ombudsman call center.

During SFYs 2013-14 and 2014-15, calls from FFS Medi-Cal beneficiaries in the SPD aid category were concentrated in the Education & Outreach call category. The largest change in call volume from SFYs 2013-14 to 2014-15 was seen in the Miscellaneous Issues call category (-75.0%) (Table 63).

Table 63: Top Three Categories of Calls Received from FFS Medi-Cal Beneficiaries in the Seniors and Persons with Disabilities Aid Category in SFYs 2013-14 and 2014-15.

SFY	Call Category	Aid Category	# of Calls	% Change
2013-14	MISC - Miscellaneous Issues	Seniors and Persons with Disabilities	971	N/A
2014-15	MISC - Miscellaneous Issues	Seniors and Persons with Disabilities	243	-75.0%
2013-14	HCO - Enrollment/Disenrollment	Seniors and Persons with Disabilities	1,672	N/A
2014-15	HCO - Enrollment/Disenrollment	Seniors and Persons with Disabilities	1,850	10.7%
2013-14	EDU - Education & Outreach	Seniors and Persons with Disabilities	3,097	N/A
2014-15	EDU - Education & Outreach	Seniors and Persons with Disabilities	2,388	-22.9%

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Managed Care Division's Office of the Ombudsman call center.

Dedicated Webpage and Email

As previously indicated, as a part of the development of this access monitoring plan, DHCS has developed a dedicated access webpage and email boxes. The dedicated webpage will provide the public with information about this monitoring plan (including future updates), future access reviews, as well as information on state plan amendments affecting payment rates. In addition, the dedicated email boxes will provide mechanisms for public input on access generally as well as on specific state plan amendments. The information collected through these sources will be used in future access analyses.

Conclusion

- A sharp increase in calls from individuals in FFS occurred statewide at the end of calendar year 2013 and the beginning of 2014. This spike reflects the managed care rural expansions late in 2013 and the implementation of the ACA in 2014.

- Secondary spikes at the end of SFY 2014-15 in the Southern California and Bay Area regions likely represent the implementation of CCI and Cal MediConnect plans in those counties.

Domain: Dental

Introduction

The benefits of seeing a dentist annually include an increased likelihood of receiving preventive dental services, and early diagnosis and treatment of dental problems. As beneficiaries ages 21 and older became eligible to receive dental services in May 2014,[xx] the following baseline analysis focuses on dental services utilization among beneficiaries ages 0-20 who were continuously eligible for at least 11 months during the study period.

In this section, several measures will be presented and evaluated. These include:

- Distribution of dental providers in CY 2014 and CY 2015 by geographic region,
- Proportion of FFS Medi-Cal beneficiaries Ages 0-20 with at least 11 months of enrollment in either CY 2014 or CY 2015 who received a preventative dental service by geographic region,
- Proportion of FFS Medi-Cal beneficiaries Ages 0-20 with at least 11 months of enrollment in either CY 2014 or CY 2015 who received any type of dental service by geographic region,
- Proportion of FFS Medi-Cal beneficiaries Ages 0-20 with at least 11 months of enrollment in either CY 2014 or CY 2015 who received a dental service in a clinic setting by geographic region,
- Percentage of 25 most utilized dental procedure reimbursement rates in SFY 2013-14 in relation to of comparable State's Medicaid programs, and
- Percentage of 25 most utilized dental procedure reimbursement rates in SFY 2014-15 in relation to of comparable State's Medicaid programs.

[xx] http://www.denti-cal.ca.gov/WSI/Bene.jsp?fname=MedicalAdultDentalBeneInfo

Dental Providers

Table 64: Denti-Cal Provider Enrollment - Active Offices & Renderers in CY 2014 and 2015, by Geographic Region.

Region	CY 2014	CY 2014	CY 2015	CY 2015
Region	Service Office Locations	Rendering Providers	Service Office Locations	Rendering Providers
Alameda	158	351	143	338
Central Coast	62	158	55	149
Central Valley	199	544	192	510
Contra Costa	59	180	58	183
Greater Fresno	173	356	169	295
Greater Sacramento	148	492	151	306
Inland Desert	15	44	18	48
Inland Empire	727	1,574	743	1,508
Kern	94	279	90	226
Los Angeles	2,307	4,044	2,253	3,812
North Bay	79	226	81	222
Northern	99	179	89	152
Orange	726	1,312	736	1,283
San Diego	338	664	342	648
San Francisco	111	235	91	216
San Mateo	49	110	46	108
Santa Clara	272	503	251	484
South Coast	162	355	166	344
Out of State	9	9	2	2
Unduplicated Total	**5,784**	**8,561**	**5,676**	**8,001**

Source: Prepared by DHCS' Medi-Cal Dental Services Division using data from the MIS/DSS, the Medi-Cal Fiscal Intermediary's 35c-file of paid claims records, and the PMF.

Beneficiary Participation and Utilization

The Dental measure analyzes dental services utilization among beneficiaries ages 0-20 with at least 11 months of eligibility during the study period.

Table 65: Proportion of FFS Medi-Cal Beneficiaries Ages 0-20 Who Received a Preventive Dental Service, Any Dental Service, or a Dental Visit at a Clinic in CY 2014, by Age Group and Geographic Region.

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
Alameda	Ages 0-3	22,113	2,827	12.8%	3,747	16.9%	4,185	18.9%
	Ages 4-5	14,607	5,085	34.8%	5,565	38.1%	3,505	24.0%
	Ages 6-8	22,589	9,071	40.2%	9,528	42.2%	4,695	20.8%
	Ages 9-11	20,119	7,859	39.1%	8,229	40.9%	3,543	17.6%
	Ages 12-14	18,457	6,589	35.7%	6,997	37.9%	2,728	14.8%
	Ages 15-18	22,446	7,023	31.3%	7,787	34.7%	2,163	9.6%
	Ages 19-20	7,775	1,708	22.0%	1,977	25.4%	385	5.0%
	Ages 0-20	**128,106**	**40,162**	**31.4%**	**43,830**	**34.2%**	**21,204**	**16.6%**
Central Coast	Ages 0-3	19,353	6,103	31.5%	6,574	34.0%	2,610	13.5%
	Ages 4-5	12,047	6,759	56.1%	7,150	59.4%	2,023	16.8%
	Ages 6-8	18,875	10,822	57.3%	11,154	59.1%	3,004	15.9%
	Ages 9-11	15,963	8,657	54.2%	8,973	56.2%	2,309	14.5%
	Ages 12-14	13,279	6,658	50.1%	6,980	52.6%	1,600	12.0%
	Ages 15-18	15,046	6,378	42.4%	6,926	46.0%	1,416	9.4%
	Ages 19-20	5,025	1,218	24.2%	1,415	28.2%	346	6.9%
	Ages 0-20	**99,588**	**46,595**	**46.8%**	**49,172**	**49.4%**	**13,308**	**13.4%**

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
Central Valley	Ages 0-3	62,117	9,739	15.7%	11,225	18.1%	2,640	4.3%
	Ages 4-5	39,926	18,406	46.1%	19,815	49.6%	2,882	7.2%
	Ages 6-8	61,723	31,223	50.6%	32,950	53.4%	4,310	7.0%
	Ages 9-11	55,303	26,029	47.1%	27,623	49.9%	3,791	6.9%
	Ages 12-14	50,404	20,287	40.2%	22,342	44.3%	3,446	6.8%
	Ages 15-18	59,151	19,583	33.1%	23,120	39.1%	3,287	5.6%
	Ages 19-20	21,089	4,647	22.0%	5,927	28.1%	767	3.6%
	Ages 0-20	**349,713**	**129,914**	**37.1%**	**143,002**	**40.9%**	**21,123**	**6.0%**
Contra Costa	Ages 0-3	15,171	1,518	10.0%	2,090	13.8%	1,447	9.5%
	Ages 4-5	9,720	3,115	32.0%	3,563	36.7%	1,577	16.2%
	Ages 6-8	15,230	5,840	38.3%	6,383	41.9%	2,326	15.3%
	Ages 9-11	13,650	5,237	38.4%	5,623	41.2%	1,776	13.0%
	Ages 12-14	12,701	4,543	35.8%	4,963	39.1%	1,254	9.9%
	Ages 15-18	15,201	4,724	31.1%	5,451	35.9%	995	6.5%
	Ages 19-20	5,158	1,064	20.6%	1,306	25.3%	182	3.5%
	Ages 0-20	**86,831**	**26,041**	**30.0%**	**29,379**	**33.8%**	**9,557**	**11.0%**
Greater Fresno	Ages 0-3	44,102	7,470	16.9%	8,978	20.4%	2,099	4.8%
	Ages 4-5	27,618	13,134	47.6%	14,265	51.7%	2,326	8.4%
	Ages 6-8	42,337	22,024	52.0%	23,149	54.7%	3,686	8.7%
	Ages 9-11	36,964	18,216	49.3%	19,367	52.4%	3,067	8.3%
	Ages 12-14	33,140	14,055	42.4%	15,424	46.5%	2,351	7.1%
	Ages 15-18	39,975	14,288	35.7%	16,643	41.6%	2,261	5.7%
	Ages 19-20	13,127	3,059	23.3%	3,817	29.1%	524	4.0%
	Ages 0-20	**237,263**	**92,246**	**38.9%**	**101,643**	**42.8%**	**16,314**	**6.9%**

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Greater Sacramento	Ages 0-3	11,266	1,305	11.6%	1,739	15.4%	778	6.9%
	Ages 4-5	6,457	2,175	33.7%	2,413	37.4%	721	11.2%
	Ages 6-8	10,727	4,090	38.1%	4,347	40.5%	1,176	11.0%
	Ages 9-11	10,104	3,544	35.1%	3,787	37.5%	1,034	10.2%
	Ages 12-14	9,494	2,950	31.1%	3,220	33.9%	782	8.2%
	Ages 15-18	12,089	3,315	27.4%	3,873	32.0%	766	6.3%
	Ages 19-20	4,295	674	15.7%	920	21.4%	193	4.5%
	Ages 0-20	**64,432**	**18,053**	**28.0%**	**20,299**	**31.5%**	**5,450**	**8.5%**
Inland Desert	Ages 0-3	1,699	154	9.1%	171	10.1%	236	13.9%
	Ages 4-5	1,070	270	25.2%	289	27.0%	290	27.1%
	Ages 6-8	1,622	429	26.4%	452	27.9%	465	28.7%
	Ages 9-11	1,514	375	24.8%	399	26.4%	378	25.0%
	Ages 12-14	1,355	263	19.4%	308	22.7%	282	20.8%
	Ages 15-18	1,733	316	18.2%	375	21.6%	278	16.0%
	Ages 19-20	682	69	10.1%	102	15.0%	74	10.9%
	Ages 0-20	**9,675**	**1,876**	**19.4%**	**2,096**	**21.7%**	**2,003**	**20.7%**
Inland Empire	Ages 0-3	108,281	20,875	19.3%	23,773	22.0%	1,440	1.3%
	Ages 4-5	68,448	35,902	52.5%	37,936	55.4%	1,687	2.5%
	Ages 6-8	108,278	62,556	57.8%	65,320	60.3%	2,953	2.7%
	Ages 9-11	98,307	54,213	55.1%	56,663	57.6%	2,404	2.4%
	Ages 12-14	91,652	45,772	49.9%	48,477	52.9%	1,551	1.7%
	Ages 15-18	112,905	47,725	42.3%	53,125	47.1%	1,343	1.2%
	Ages 19-20	39,216	11,109	28.3%	13,386	34.1%	283	0.7%
	Ages 0-20	**627,087**	**278,152**	**44.4%**	**298,680**	**47.6%**	**11,661**	**1.9%**

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
Kern	Ages 0-3	27,621	7,284	26.4%	8,217	29.7%	635	2.3%
	Ages 4-5	17,299	10,473	60.5%	11,115	64.3%	740	4.3%
	Ages 6-8	26,382	15,991	60.6%	16,755	63.5%	1,066	4.0%
	Ages 9-11	23,247	13,231	56.9%	13,927	59.9%	891	3.8%
	Ages 12-14	20,881	10,254	49.1%	11,077	53.0%	764	3.7%
	Ages 15-18	24,637	9,897	40.2%	11,421	46.4%	865	3.5%
	Ages 19-20	8,789	2,062	23.5%	2,680	30.5%	271	3.1%
	Ages 0-20	**148,856**	**69,192**	**46.5%**	**75,192**	**50.5%**	**5,232**	**3.5%**
Los Angeles	Ages 0-3	165,013	47,001	28.5%	50,633	30.7%	5,090	3.1%
	Ages 4-5	105,140	67,198	63.9%	69,620	66.2%	2,759	2.6%
	Ages 6-8	166,903	112,114	67.2%	115,422	69.2%	2,882	1.7%
	Ages 9-11	149,106	95,002	63.7%	97,878	65.6%	2,158	1.4%
	Ages 12-14	138,670	78,499	56.6%	82,030	59.2%	1,909	1.4%
	Ages 15-18	176,330	81,697	46.3%	89,141	50.6%	2,338	1.3%
	Ages 19-20	67,235	20,703	30.8%	24,087	35.8%	731	1.1%
	Ages 0-20	**968,397**	**502,214**	**51.9%**	**528,811**	**54.6%**	**17,867**	**1.8%**
North Bay	Ages 0-3	18,921	2,530	13.4%	2,925	15.5%	4,852	25.6%
	Ages 4-5	12,396	3,554	28.7%	3,806	30.7%	3,916	31.6%
	Ages 6-8	19,441	5,995	30.8%	6,336	32.6%	5,817	29.9%
	Ages 9-11	17,229	5,228	30.3%	5,594	32.5%	4,545	26.4%
	Ages 12-14	15,295	4,483	29.3%	4,925	32.2%	3,221	21.1%
	Ages 15-18	18,005	4,434	24.6%	5,254	29.2%	2,863	15.9%
	Ages 19-20	5,778	845	14.6%	1,166	20.2%	500	8.7%
	Ages 0-20	**107,065**	**27,069**	**25.3%**	**30,006**	**28.0%**	**25,714**	**24.0%**

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
Northern	Ages 0-3	27,123	1,987	7.3%	2,872	10.6%	4,787	17.6%
	Ages 4-5	16,752	3,655	21.8%	4,131	24.7%	5,317	31.7%
	Ages 6-8	25,933	5,423	20.9%	5,837	22.5%	8,894	34.3%
	Ages 9-11	23,532	4,462	19.0%	4,902	20.8%	7,636	32.4%
	Ages 12-14	21,543	3,702	17.2%	4,422	20.5%	5,839	27.1%
	Ages 15-18	27,204	3,992	14.7%	5,431	20.0%	6,310	23.2%
	Ages 19-20	10,098	881	8.7%	1,399	13.9%	1,546	15.3%
	Ages 0-20	**152,185**	**24,102**	**15.8%**	**28,994**	**19.1%**	**40,329**	**26.5%**
Orange	Ages 0-3	51,376	15,046	29.3%	15,966	31.1%	2,446	4.8%
	Ages 4-5	33,526	21,087	62.9%	21,844	65.2%	1,174	3.5%
	Ages 6-8	54,662	36,451	66.7%	37,472	68.6%	1,671	3.1%
	Ages 9-11	49,601	31,178	62.9%	32,123	64.8%	1,332	2.7%
	Ages 12-14	45,652	25,779	56.5%	26,859	58.8%	886	1.9%
	Ages 15-18	56,860	26,874	47.3%	28,897	50.8%	774	1.4%
	Ages 19-20	16,964	5,868	34.6%	6,548	38.6%	92	0.5%
	Ages 0-20	**308,641**	**162,283**	**52.6%**	**169,709**	**55.0%**	**8,375**	**2.7%**
San Diego	Ages 0-3	44,401	10,229	23.0%	11,153	25.1%	5,716	12.9%
	Ages 4-5	27,319	13,180	48.2%	14,107	51.6%	4,402	16.1%
	Ages 6-8	42,607	21,790	51.1%	22,674	53.2%	6,364	14.9%
	Ages 9-11	38,606	18,223	47.2%	19,105	49.5%	5,453	14.1%
	Ages 12-14	35,982	14,785	41.1%	15,896	44.2%	4,276	11.9%
	Ages 15-18	45,232	14,992	33.1%	17,194	38.0%	4,109	9.1%
	Ages 19-20	13,591	2,917	21.5%	3,623	26.7%	857	6.3%
	Ages 0-20	**247,738**	**96,116**	**38.8%**	**103,752**	**41.9%**	**31,177**	**12.6%**

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
San Francisco	Ages 0-3	8,627	1,872	21.7%	2,096	24.3%	1,795	20.8%
	Ages 4-5	5,095	2,068	40.6%	2,186	42.9%	1,119	22.0%
	Ages 6-8	8,048	3,618	45.0%	3,816	47.4%	1,572	19.5%
	Ages 9-11	7,276	3,276	45.0%	3,469	47.7%	1,118	15.4%
	Ages 12-14	6,799	2,871	42.2%	3,074	45.2%	836	12.3%
	Ages 15-18	9,356	3,269	34.9%	3,684	39.4%	1,012	10.8%
	Ages 19-20	3,475	856	24.6%	1,016	29.2%	228	6.6%
	Ages 0-20	**48,676**	**17,830**	**36.6%**	**19,341**	**39.7%**	**7,680**	**15.8%**
San Mateo	Ages 0-3	8,607	1,449	16.8%	1,547	18.0%	1,060	12.3%
	Ages 4-5	5,371	2,284	42.5%	2,358	43.9%	800	14.9%
	Ages 6-8	8,291	4,326	52.2%	4,459	53.8%	837	10.1%
	Ages 9-11	7,225	3,744	51.8%	3,850	53.3%	626	8.7%
	Ages 12-14	6,548	3,043	46.5%	3,177	48.5%	448	6.8%
	Ages 15-18	7,779	2,874	36.9%	3,086	39.7%	356	4.6%
	Ages 19-20	2,452	601	24.5%	664	27.1%	70	2.9%
	Ages 0-20	**46,273**	**18,321**	**39.6%**	**19,141**	**41.4%**	**4,197**	**9.1%**
Santa Clara	Ages 0-3	22,965	5,219	22.7%	5,494	23.9%	1,609	7.0%
	Ages 4-5	14,530	8,188	56.4%	8,439	58.1%	1,411	9.7%
	Ages 6-8	23,649	13,871	58.7%	14,242	60.2%	1,994	8.4%
	Ages 9-11	21,203	11,966	56.4%	12,284	57.9%	1,585	7.5%
	Ages 12-14	20,251	10,519	51.9%	10,913	53.9%	1,350	6.7%
	Ages 15-18	23,338	9,829	42.1%	10,492	45.0%	1,574	6.7%
	Ages 19-20	7,562	2,197	29.1%	2,394	31.7%	311	4.1%
	Ages 0-20	**133,498**	**61,789**	**46.3%**	**64,258**	**48.1%**	**9,834**	**7.4%**

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South Coast	Ages 0-3	28,639	5,928	20.7%	6,531	22.8%	2,679	9.4%
	Ages 4-5	18,346	9,587	52.3%	10,075	54.9%	2,417	13.2%
	Ages 6-8	28,343	15,776	55.7%	16,372	57.8%	3,467	12.2%
	Ages 9-11	24,760	12,921	52.2%	13,426	54.2%	2,705	10.9%
	Ages 12-14	20,985	9,082	43.3%	9,580	45.7%	2,248	10.7%
	Ages 15-18	24,681	8,449	34.2%	9,394	38.1%	2,470	10.0%
	Ages 19-20	7,085	1,474	20.8%	1,831	25.8%	438	6.2%
	Ages 0-20	**152,839**	**63,217**	**41.4%**	**67,209**	**44.0%**	**16,424**	**10.7%**
Grand Total		**3,916,863**	**1,675,172**	**42.8%**	**1,794,514**	**45.8%**	**267,449**	**6.8%**

Source: Prepared by DHCS' Medi-Cal Dental Services Division using data from the MIS/DSS and the Medi-Cal Fiscal Intermediary's 35c-file of paid claims records.

Table 66: Proportion of FFS Medi-Cal Beneficiaries Ages 0-20 Who Received a Preventive Dental Service, Any Dental Service, or a Dental Visit at a Clinic in CY 2015, by Age Group and Geographic Region.

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
Alameda	Ages 0-3	23,004	3,491	15.2%	4,433	19.3%	3,836	16.7%
	Ages 4-5	14,665	4,868	33.2%	5,334	36.4%	3,392	23.1%
	Ages 6-8	23,852	9,111	38.2%	9,620	40.3%	4,554	19.1%
	Ages 9-11	21,709	7,961	36.7%	8,377	38.6%	3,673	16.9%

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
	Ages 12-14	19,770	6,534	33.1%	7,061	35.7%	2,777	14.0%
	Ages 15-18	24,628	7,065	28.7%	7,948	32.3%	2,347	9.5%
	Ages 19-20	9,693	1,893	19.5%	2,285	23.6%	522	5.4%
	Ages 0-20	**137,321**	**40,923**	**29.8%**	**45,058**	**32.8%**	**21,101**	**15.4%**
Central Coast	Ages 0-3	20,207	6,534	32.3%	7,139	35.3%	2,565	12.7%
	Ages 4-5	12,729	7,061	55.5%	7,512	59.0%	1,944	15.3%
	Ages 6-8	19,948	11,271	56.5%	11,718	58.7%	2,893	14.5%
	Ages 9-11	18,130	9,612	53.0%	10,008	55.2%	2,440	13.5%
	Ages 12-14	15,382	7,291	47.4%	7,757	50.4%	1,837	11.9%
	Ages 15-18	17,264	6,253	36.2%	7,027	40.7%	1,710	9.9%
	Ages 19-20	6,305	1,267	20.1%	1,568	24.9%	463	7.3%
	Ages 0-20	**109,965**	**49,289**	**44.8%**	**52,729**	**48.0%**	**13,852**	**12.6%**
Central Valley	Ages 0-3	65,113	10,625	16.3%	12,570	19.3%	3,032	4.7%
	Ages 4-5	41,784	18,699	44.8%	20,283	48.5%	3,020	7.2%
	Ages 6-8	65,146	31,984	49.1%	33,854	52.0%	4,719	7.2%
	Ages 9-11	61,584	27,836	45.2%	29,802	48.4%	4,524	7.3%
	Ages 12-14	55,216	21,374	38.7%	23,927	43.3%	3,811	6.9%
	Ages 15-18	66,345	20,734	31.3%	25,146	37.9%	3,929	5.9%
	Ages 19-20	26,364	5,258	19.9%	7,034	26.7%	1,056	4.0%
	Ages 0-20	**381,552**	**136,510**	**35.8%**	**152,616**	**40.0%**	**24,091**	**6.3%**
Contra Costa	Ages 0-3	16,171	1,894	11.7%	2,614	16.2%	1,315	8.1%
	Ages 4-5	10,226	3,241	31.7%	3,780	37.0%	1,483	14.5%
	Ages 6-8	16,311	5,875	36.0%	6,454	39.6%	2,380	14.6%
	Ages 9-11	15,526	5,549	35.7%	6,025	38.8%	1,957	12.6%

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
	Ages 12-14	14,389	4,752	33.0%	5,301	36.8%	1,297	9.0%
	Ages 15-18	17,562	4,771	27.2%	5,705	32.5%	1,171	6.7%
	Ages 19-20	7,025	1,216	17.3%	1,599	22.8%	239	3.4%
	Ages 0-20	**97,210**	**27,298**	**28.1%**	**31,478**	**32.4%**	**9,842**	**10.1%**
Greater Fresno	Ages 0-3	45,569	8,804	19.3%	10,104	22.2%	2,343	5.1%
	Ages 4-5	28,643	13,523	47.2%	14,609	51.0%	2,331	8.1%
	Ages 6-8	43,934	22,433	51.1%	23,609	53.7%	3,671	8.4%
	Ages 9-11	40,846	19,694	48.2%	20,915	51.2%	3,372	8.3%
	Ages 12-14	35,905	14,641	40.8%	16,310	45.4%	2,542	7.1%
	Ages 15-18	43,577	14,454	33.2%	17,271	39.6%	2,536	5.8%
	Ages 19-20	16,493	3,535	21.4%	4,581	27.8%	624	3.8%
	Ages 0-20	**254,967**	**97,084**	**38.1%**	**107,399**	**42.1%**	**17,419**	**6.8%**
Greater Sacramento	Ages 0-3	12,091	1,360	11.2%	1,931	16.0%	888	7.3%
	Ages 4-5	7,081	2,190	30.9%	2,515	35.5%	721	10.2%
	Ages 6-8	11,163	4,142	37.1%	4,400	39.4%	1,184	10.6%
	Ages 9-11	11,163	3,730	33.4%	3,948	35.4%	1,229	11.0%
	Ages 12-14	10,358	3,042	29.4%	3,385	32.7%	964	9.3%
	Ages 15-18	12,985	3,293	25.4%	3,926	30.2%	934	7.2%
	Ages 19-20	5,225	803	15.4%	1,066	20.4%	256	4.9%
	Ages 0-20	**70,066**	**18,560**	**26.5%**	**21,171**	**30.2%**	**6,176**	**8.8%**
Inland Desert	Ages 0-3	1,768	137	7.7%	155	8.8%	297	16.8%
	Ages 4-5	1,146	245	21.4%	263	22.9%	367	32.0%
	Ages 6-8	1,755	413	23.5%	438	25.0%	454	25.9%
	Ages 9-11	1,714	319	18.6%	357	20.8%	458	26.7%

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
	Ages 12-14	1,508	276	18.3%	314	20.8%	333	22.1%
	Ages 15-18	1,983	272	13.7%	358	18.1%	337	17.0%
	Ages 19-20	821	73	8.9%	110	13.4%	77	9.4%
	Ages 0-20	**10,695**	**1,735**	**16.2%**	**1,995**	**18.7%**	**2,323**	**21.7%**
Inland Empire	Ages 0-3	116,473	23,524	20.2%	27,051	23.2%	1,553	1.3%
	Ages 4-5	73,304	37,054	50.5%	39,367	53.7%	1,673	2.3%
	Ages 6-8	116,232	64,396	55.4%	67,520	58.1%	3,285	2.8%
	Ages 9-11	111,498	58,854	52.8%	61,738	55.4%	2,830	2.5%
	Ages 12-14	102,340	48,497	47.4%	51,704	50.5%	1,786	1.7%
	Ages 15-18	128,051	50,755	39.6%	57,401	44.8%	1,810	1.4%
	Ages 19-20	50,639	13,009	25.7%	16,104	31.8%	460	0.9%
	Ages 0-20	**698,537**	**296,089**	**42.4%**	**320,885**	**45.9%**	**13,397**	**1.9%**
Kern	Ages 0-3	29,549	8,428	28.5%	9,427	31.9%	762	2.6%
	Ages 4-5	18,344	10,965	59.8%	11,736	64.0%	695	3.8%
	Ages 6-8	28,459	17,191	60.4%	17,992	63.2%	1,037	3.6%
	Ages 9-11	26,274	14,553	55.4%	15,312	58.3%	969	3.7%
	Ages 12-14	23,414	11,124	47.5%	12,071	51.6%	868	3.7%
	Ages 15-18	27,847	10,548	37.9%	12,444	44.7%	1,029	3.7%
	Ages 19-20	10,817	2,425	22.4%	3,266	30.2%	332	3.1%
	Ages 0-20	**164,704**	**75,234**	**45.7%**	**82,248**	**49.9%**	**5,692**	**3.5%**
Los Angeles	Ages 0-3	174,177	50,875	29.2%	54,871	31.5%	5,577	3.2%
	Ages 4-5	107,766	66,457	61.7%	69,054	64.1%	3,052	2.8%
	Ages 6-8	173,745	112,759	64.9%	116,092	66.8%	3,296	1.9%
	Ages 9-11	163,794	100,957	61.6%	104,095	63.6%	2,615	1.6%

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
	Ages 12-14	148,811	81,558	54.8%	85,419	57.4%	2,158	1.5%
	Ages 15-18	190,807	83,710	43.9%	91,972	48.2%	2,730	1.4%
	Ages 19-20	81,890	22,839	27.9%	27,132	33.1%	881	1.1%
	Ages 0-20	**1,040,990**	**519,155**	**49.9%**	**548,635**	**52.7%**	**20,309**	**2.0%**
North Bay	Ages 0-3	19,751	2,624	13.3%	3,120	15.8%	4,721	23.9%
	Ages 4-5	13,088	3,579	27.3%	3,865	29.5%	4,058	31.0%
	Ages 6-8	20,785	6,020	29.0%	6,376	30.7%	6,259	30.1%
	Ages 9-11	19,331	5,590	28.9%	5,956	30.8%	5,325	27.5%
	Ages 12-14	17,315	4,485	25.9%	4,959	28.6%	3,948	22.8%
	Ages 15-18	20,510	4,534	22.1%	5,482	26.7%	3,477	17.0%
	Ages 19-20	7,717	1,025	13.3%	1,467	19.0%	719	9.3%
	Ages 0-20	**118,497**	**27,857**	**23.5%**	**31,225**	**26.4%**	**28,507**	**24.1%**
Northern	Ages 0-3	29,381	2,361	8.0%	3,314	11.3%	5,294	18.0%
	Ages 4-5	18,195	4,202	23.1%	4,723	26.0%	5,383	29.6%
	Ages 6-8	27,849	6,005	21.6%	6,464	23.2%	9,460	34.0%
	Ages 9-11	26,341	5,177	19.7%	5,657	21.5%	8,738	33.2%
	Ages 12-14	23,821	4,183	17.6%	4,973	20.9%	6,685	28.1%
	Ages 15-18	29,674	4,242	14.3%	5,916	19.9%	6,774	22.8%
	Ages 19-20	12,394	1,027	8.3%	1,734	14.0%	1,765	14.2%
	Ages 0-20	**167,655**	**27,197**	**16.2%**	**32,781**	**19.6%**	**44,099**	**26.3%**
Orange	Ages 0-3	53,168	15,517	29.2%	16,568	31.2%	2,733	5.1%
	Ages 4-5	34,187	20,247	59.2%	21,090	61.7%	1,364	4.0%
	Ages 6-8	56,747	35,856	63.2%	36,947	65.1%	2,288	4.0%
	Ages 9-11	54,269	32,656	60.2%	33,730	62.2%	1,881	3.5%

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
	Ages 12-14	49,944	26,851	53.8%	28,106	56.3%	1,039	2.1%
	Ages 15-18	63,549	28,132	44.3%	30,568	48.1%	960	1.5%
	Ages 19-20	23,551	7,253	30.8%	8,363	35.5%	173	0.7%
	Ages 0-20	**335,415**	**166,512**	**49.6%**	**175,372**	**52.3%**	**10,438**	**3.1%**
San Diego	Ages 0-3	49,788	11,686	23.5%	12,718	25.5%	6,077	12.2%
	Ages 4-5	30,373	13,952	45.9%	14,940	49.2%	4,457	14.7%
	Ages 6-8	46,977	22,714	48.4%	23,704	50.5%	6,692	14.2%
	Ages 9-11	45,350	20,102	44.3%	21,141	46.6%	6,223	13.7%
	Ages 12-14	41,249	15,646	37.9%	17,027	41.3%	4,869	11.8%
	Ages 15-18	53,030	15,680	29.6%	18,441	34.8%	5,067	9.6%
	Ages 19-20	20,188	3,624	18.0%	4,814	23.8%	1,273	6.3%
	Ages 0-20	**286,955**	**103,404**	**36.0%**	**112,785**	**39.3%**	**34,658**	**12.1%**
San Francisco	Ages 0-3	8,801	2,070	23.5%	2,207	25.1%	1,777	20.2%
	Ages 4-5	5,074	2,138	42.1%	2,250	44.3%	1,042	20.5%
	Ages 6-8	8,122	3,677	45.3%	3,838	47.3%	1,568	19.3%
	Ages 9-11	7,490	3,319	44.3%	3,476	46.4%	1,301	17.4%
	Ages 12-14	6,857	2,822	41.2%	3,030	44.2%	826	12.0%
	Ages 15-18	9,299	3,144	33.8%	3,541	38.1%	1,058	11.4%
	Ages 19-20	3,904	900	23.1%	1,106	28.3%	279	7.1%
	Ages 0-20	**49,547**	**18,070**	**36.5%**	**19,448**	**39.3%**	**7,851**	**15.8%**
San Mateo	Ages 0-3	8,425	1,502	17.8%	1,618	19.2%	1,294	15.4%
	Ages 4-5	5,419	2,099	38.7%	2,172	40.1%	898	16.6%
	Ages 6-8	8,493	3,983	46.9%	4,098	48.3%	1,066	12.6%
	Ages 9-11	7,784	3,665	47.1%	3,762	48.3%	739	9.5%

Geographic Region	Age Group	Total Beneficiaries with at least 11 of 12 months eligibility with no more than a one month gap	Total Beneficiaries with a Preventive Dental Service	% of Beneficiaries with a Preventive Dental Service	Total Beneficiaries with Any Dental Service	% of Beneficiaries with Any Dental Service	Total Beneficiaries with a Dental Visit at a Clinic	% of Beneficiaries with a Dental Visit at a Clinic
	Ages 12-14	7,100	3,025	42.6%	3,175	44.7%	514	7.2%
	Ages 15-18	8,549	2,793	32.7%	3,028	35.4%	437	5.1%
	Ages 19-20	3,386	691	20.4%	787	23.2%	90	2.7%
	Ages 0-20	**49,156**	**17,758**	**36.1%**	**18,640**	**37.9%**	**5,038**	**10.2%**
Santa Clara	Ages 0-3	23,813	5,415	22.7%	5,757	24.2%	1,775	7.5%
	Ages 4-5	14,916	7,714	51.7%	7,963	53.4%	1,549	10.4%
	Ages 6-8	24,484	13,542	55.3%	13,948	57.0%	2,152	8.8%
	Ages 9-11	23,138	12,096	52.3%	12,485	54.0%	1,881	8.1%
	Ages 12-14	21,938	10,407	47.4%	10,844	49.4%	1,567	7.1%
	Ages 15-18	26,137	9,986	38.2%	10,735	41.1%	1,732	6.6%
	Ages 19-20	9,948	2,569	25.8%	2,915	29.3%	408	4.1%
	Ages 0-20	**144,374**	**61,729**	**42.8%**	**64,647**	**44.8%**	**11,064**	**7.7%**
South Coast	Ages 0-3	30,438	7,324	24.1%	8,151	26.8%	2,615	8.6%
	Ages 4-5	19,338	10,046	51.9%	10,623	54.9%	2,253	11.7%
	Ages 6-8	30,508	16,773	55.0%	17,348	56.9%	3,556	11.7%
	Ages 9-11	28,455	14,781	51.9%	15,366	54.0%	2,917	10.3%
	Ages 12-14	24,022	10,290	42.8%	10,945	45.6%	2,354	9.8%
	Ages 15-18	28,555	9,454	33.1%	10,716	37.5%	2,579	9.0%
	Ages 19-20	10,101	1,910	18.9%	2,486	24.6%	588	5.8%
	Ages 0-20	**171,417**	**70,578**	**41.2%**	**75,635**	**44.1%**	**16,862**	**9.8%**
Grand Total		**4,289,023**	**1,754,982**	**40.9%**	**1,894,747**	**44.2%**	**292,719**	**6.8%**

Source: Prepared by DHCS' Medi-Cal Dental Services Division using data from the MIS/DSS and the Medi-Cal Fiscal Intermediary's 35c-file of paid claims records.

Reimbursement Rates Comparison

For the purposes of reimbursement rate comparison for dental services, DHCS utilized other available state Medicaid program information as it is the most appropriate given the lack of comparability with Medicare. While the overall average of DHCS's rates for the 25 most utilized FFS procedure codes may be lower, depending on the procedure, the applicable DHCS reimbursement rate was either higher or lower. In SFY 2013-14, Denti-Cal paid an overall average between 65.5 and 129.2 percent of New York, Illinois, Florida, and Texas' Medicaid Program's dental fee schedule. In SFY 2014-15, Denti-Cal paid an overall overage between 64.8 and 105.8 percent of New York, Illinois, Florida, and Texas' Medicaid Program's dental fee schedule.

Table 67: Percentage of 25 Most Utilized Denti-Cal Procedures Reimbursement Rates in SFY 2013-2014 in Relation to Other Comparable Medicaid Programs.

Procedure Code	Denti-Cal SMA	New York Reimbursement Rates and % Denti-Cal Pays		Illinois Reimbursement Rates and % Denti-Cal Pays		Florida Reimbursement Rates and % Denti-Cal Pays		Texas Reimbursement Rates and % Denti-Cal Pays	
D0120	$15.00	$25.00	60.0%	$28.00	53.6%	$29.12	51.5%	$28.85	52.0%
D0150	$25.00	$30.00	83.3%	$17.52	142.7%	$29.12	85.9%	$35.32	70.8%
D0210	$40.00	$50.00	80.0%	$25.06	159.6%	$58.24	68.7%	$70.64	56.6%
D0220	$10.00	$8.00	125.0%	$4.66	214.6%	$10.92	91.6%	$12.56	79.6%
D0230	$3.00	$5.00	60.0%	$3.16	94.9%	$6.76	44.4%	$11.51	26.1%
D0272	$10.00	$14.00	71.4%	$7.83	127.7%	$18.93	52.8%	$23.38	42.8%
D0274	$18.00	$24.00	75.0%	$14.07	127.9%	$25.48	70.6%	$34.61	52.0%
D0350	$6.00	$12.00	50.0%	N/A	N/A	$26.00	23.1%	$18.38	32.6%
D1110	$40.00	$45.00	88.9%	$21.15	189.1%	$36.40	109.9%	$54.88	72.9%
D1120	$30.00	$43.00	69.8%	$41.00	73.2%	$26.00	115.4%	$36.75	81.6%
D1206	$11.00	$30.00	36.7%	$26.00	42.3%	$4.16	264.4%	$14.70	74.8%
D1351	$22.00	$35.00	62.9%	$36.00	61.1%	$24.32	90.5%	$28.24	77.9%
D2140	$39.00	$50.00	78.0%	$25.68	151.9%	N/A	N/A	$64.41	60.5%
D2150	$48.00	$67.00	71.6%	$40.08	119.8%	N/A	N/A	$85.71	56.0%
D2160	$57.00	$82.00	69.5%	$48.33	117.9%	N/A	N/A	$109.19	52.2%

D2330	$55.00	$50.00	110.0%	$28.80	191.0%	N/A	N/A	$77.75	70.7%
D2391	$39.00	$50.00	78.0%	$25.68	151.9%	N/A	N/A	$82.40	47.3%
D2392	$48.00	$67.00	71.6%	$40.08	119.8%	N/A	N/A	$108.00	44.4%
D2930	$75.00	$116.00	64.7%	$61.11	122.7%	$74.36	100.9%	$152.94	49.0%
D3220	$71.00	$87.00	81.6%	$43.87	161.8%	$67.60	105.0%	$86.20	82.4%
D7140	$41.00	$50.00	82.0%	$32.57	125.9%	N/A	N/A	$65.70	62.4%
D7210	$85.00	$85.00	100.0%	$47.79	177.9%	$145.60	58.4%	$100.75	84.4%
D9230	$25.00	N/A	N/A	$21.65	115.5%	$55.99	44.7%	$27.81	89.9%
D9410	$20.00	$50.00	40.0%	N/A	N/A	N/A	N/A	$24.50	81.6%
D9430	$20.00	$20.00	100.0%	N/A	N/A	N/A	N/A	$14.70	136.1%
Average % Denti-Cal Pays of Other States' Medicaid Rates		**75.4%**		**129.2%**		**86.1%**		**65.5%**	

Source: Prepared by DHCS' Medi-Cal Dental Services Division using data from the MIS/DSS, the Medi-Cal Fiscal Intermediary's 35c-file of paid claims records, and Other State's (New York, Illinois, Florida, and Texas) Medicaid Program dental fee schedule.
N/A = No rate available for procedure code and/or procedure code is not a covered service by that state's Medicaid program.
*D1208 – Schedule of Maximum Allowwances average. Denti-Cal SMA dependent on beneficiary age ($6 – adult; $8 – child age 6 through 20; $18 – child age 0 through 5). Illinois SMA dependent on beneficiary age ($26 – child age 0 through 18; $14.85 – child age 19 through 20).
*D1120 – Schedule of Maximum Allowwances average. Illinois SMA dependent on beneficiary age ($41 – child age 0 through 18; $25.40 – child age 19 through 20).
*D1206 – Schedule of Maximum Allowwances average. Illinois SMA dependent on beneficiary age ($26 – child age 0 through 18; $14.85 – child age 19 through 20).

For Denti-Cal FFS in SFY 2014-15, California paid an average of 105.8, 94.2, 76.9, and 64.8 percent of Illinois, Florida, New York, and Texas' Medicaid Program's dental fee schedule, respectively.

Table 68: Percentage of 25 Most Utilized Denti-Cal Procedures Reimbursement Rates in SFY 2014-2015 in Relation to Other Comparable Medicaid Programs.

Procedure Code	Denti-Cal SMA	New York Reimbursement Rates and % Denti-Cal Pays		Illinois Reimbursement Rates and % Denti-Cal Pays		Florida Reimbursement Rates and % Denti-Cal Pays		Texas Reimbursement Rates and % Denti-Cal Pays	
D0120	$15.00	$25.00	60.0%	$28.00	53.6%	$22.29	67.3%	$28.85	52.0%
D0150	$25.00	$30.00	83.3%	$21.05	118.8%	$23.78	105.1%	$35.32	70.8%
D0210	$40.00	$50.00	80.0%	$30.10	132.9%	$47.56	84.1%	$70.64	56.6%
D0220	$10.00	$8.00	125.0%	$5.60	178.6%	$5.95	168.1%	$12.56	79.6%
D0230	$3.00	$5.00	60.0%	$3.80	78.9%	$4.46	67.3%	$11.51	26.1%
D0272	$10.00	$14.00	71.4%	$9.40	106.4%	$13.38	74.7%	$23.38	42.8%
D0274	$18.00	$24.00	75.0%	$16.90	106.5%	$16.35	110.1%	$34.61	52.0%
D0350	$6.00	$12.00	50.0%	N/A	N/A	$10.40	57.7%	$18.38	32.6%
D1110	$40.00	$45.00	88.9%	N/A	N/A	$26.75	149.5%	$54.88	72.9%
D1120*	$30.00	$43.00	69.8%	$33.20	90.4%	$20.81	144.2%	$36.75	81.6%
D1206*	$11.00	$30.00	36.7%	$20.43	53.8%	$16.35	67.3%	$14.70	74.8%
D1208*	$10.67	$14.00	76.2%	$20.43	52.2%	$16.35	65.3%	N/A	N/A
D1351	$22.00	$35.00	62.9%	$36.00	61.1%	$19.32	113.9%	$28.24	77.9%
D2140	$39.00	$50.00	78.0%	$30.85	126.4%	$46.08	84.6%	$64.41	60.5%
D2150	$48.00	$67.00	71.6%	$48.15	99.7%	$60.94	78.8%	$85.71	56.0%
D2160	$57.00	$82.00	69.5%	$58.05	98.2%	$75.80	75.2%	$109.19	52.2%
D2330	$55.00	$50.00	110.0%	$34.60	159.0%	$50.53	108.8%	$77.75	70.7%
D2391	$39.00	$50.00	78.0%	$30.85	126.4%	$46.08	84.6%	$82.40	47.3%
D2392	$48.00	$67.00	71.6%	$48.15	99.7%	$60.94	78.8%	$108.00	44.4%
D2930	$75.00	$116.00	64.7%	$73.40	102.2%	$101.07	74.2%	$152.94	49.0%
D3220	$71.00	$87.00	81.6%	$52.70	134.7%	$74.32	95.5%	$86.20	82.4%
D7140	$41.00	$50.00	82.0%	$39.12	104.8%	$40.13	102.2%	$65.70	62.4%
D7210	$85.00	$85.00	100.0%	$57.40	148.1%	$59.45	143.0%	$100.75	84.4%
D9230	$25.00	N/A	N/A	$26.00	96.2%	$41.62	60.1%	$27.81	89.9%
D9430	$20.00	$20.00	100.0%	N/A	N/A	N/A	N/A	$ 14.70	136.1%

Procedure Code	Denti-Cal SMA	New York Reimbursement Rates and % Denti-Cal Pays	Illinois Reimbursement Rates and % Denti-Cal Pays	Florida Reimbursement Rates and % Denti-Cal Pays	Texas Reimbursement Rates and % Denti-Cal Pays
Average % Denti-Cal Pays of Other States' Medicaid Rates		**76.9%**	**105.8%**	**94.2%**	**64.8%**

Source: Prepared by DHCS' Medi-Cal Dental Services Division using data from the MIS/DSS, the Medi-Cal Fiscal Intermediary's 35c-file of paid claims records, and Other State's (New York, Illinois, Florida, and Texas) Medicaid Program dental fee schedule.
N/A = No rate available for procedure code and/or procedure code is not a covered service by that state's Medicaid program.
*D1208 – Schedule of Maximum Allowwances average. Denti-Cal SMA dependent on beneficiary age ($6 – adult; $8 – child age 6 through 20; $18 – child age 0 through 5). Illinois SMA dependent on beneficiary age ($26 – child age 0 through 18; $14.85 – child age 19 through 20).
*D1120 – Schedule of Maximum Allowwances average. Illinois SMA dependent on beneficiary age ($41 – child age 0 through 18; $25.40 – child age 19 through 20).
*D1206 – Schedule of Maximum Allowwances average. Illinois SMA dependent on beneficiary age ($26 – child age 0 through 18; $14.85 – child age 19 through 20).

Domain: FFS Provider Reimbursement Rates

Introduction

Provider reimbursement rate comparisons enable DHCS to assure that payments for services are consistent with efficiency, economy, and quality of care. This section evaluates the aggregate average FFS Medi-Cal reimbursement rates as a percentage of Medicare reimbursement rates for the following FFS services:

Primary Care Services: DHCS is utilizing rates for the Primary Care Physician Service codes that were previously identified within SPA 13-003 (the 2013 and 2014 federally enhanced payments).

Physician Specialist Services: The Physician Specialist Services rates identified in this report represent a comprehensive subset of disciplines from the complete array of physician specialist services provided to beneficiaries.

Behavioral Health Services: Behavioral Health Services rate comparison only includes mental health services at this time. The DHCS is unable to include a substance use disorder services rate comparison due to the absence of comparable Medicare rates. The DHCS anticipates providing a useful rate comparison in future updates to the Access Monitoring Review Plan.

Pre- and Post-Natal Obstetric Services: DHCS conducted a rate comparison between Medi-Cal rates and the equivalent Medicare rates for pre- and post-natal obstetric services.

Home Health Services: DHCS is currently unable to provide a reliable rate comparison between Medi-Cal and Medicare rates for home health. DHCS anticipates providing a usable rate comparison in future updates to the Access Monitoring Review Plan.

FFS Provider Reimbursement Rate Comparisons

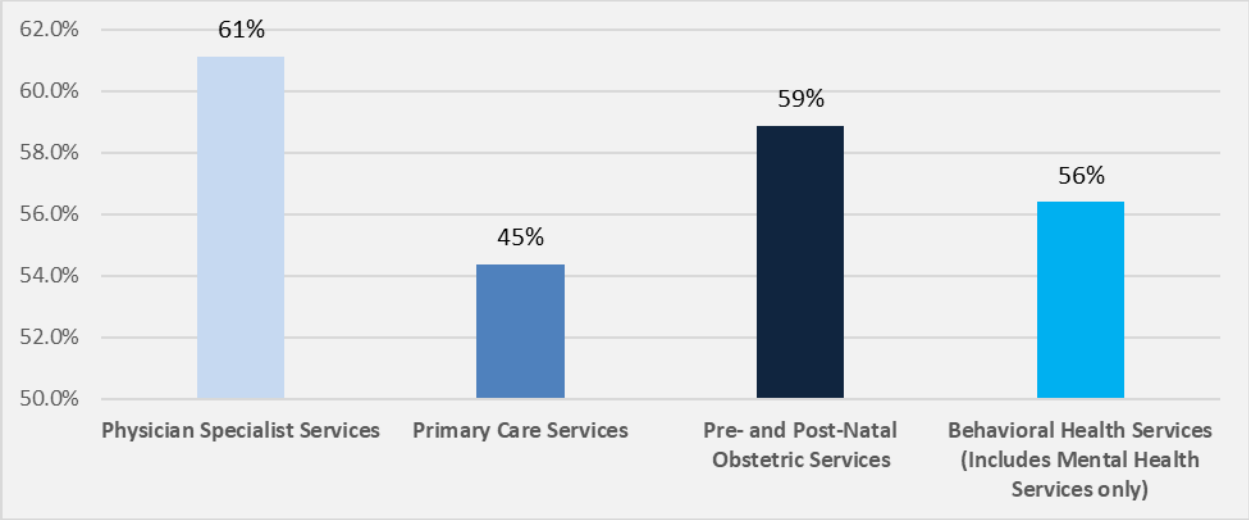
Table 69: Aggregate Average Medi-Cal Rates as Percentage of Medicare Rates.

Service Type	Aggregate Average Medicare Rate	Aggregate Average Medi-Cal Rate	Percentage
Physician Specialist Services	$844.71	$516.27	61.12%
Primary Care Services	$120.17	$53.65	44.64%
Pre- and Post-Natal Obstetric Services	$272.95	$160.71	58.88%
Home Health Services	N/A	$34.39	N/A
Behavioral Health Services (Includes Mental Health Services only.)	$74.26	$41.88	56.39%

Source: Created by DHCS' FFSRD

See Appendix K for Procedure Code comparisons

Figure 67: Aggregate Average Medi-Cal Rates as Percentage of Medicare Rates.



Source: Created by DHCS' FFSRD

Baseline Analysis Conclusions

Combined, the evaluated access measures present a detailed picture of FFS Medi-Cal, its unique subpopulations, provider composition, and service utilization. While intended as means for detecting signs of health care access disruptions, the measures presented in this monitoring plan serve as a baseline analysis and benchmark against which to compare results from future reports. Readers should exercise caution when referencing these results, as it is important to refer to the individual measures for important details regarding the background, methods of study, and specific subpopulations examined. Given that the measures and evaluations presented represent a starting point for investigating potential access issues, readers are reminded that that in many cases access barriers cannot be definitely identified, nor can interventions be designed without further investigation. The monitoring process represents and internal control that is designed to alert policy makers of potential access to care barriers.

California's FFS Medi-Cal Access Monitoring reports fulfill the first stage of the access monitoring process. Subsequent reports may identify areas that may warrant further investigation. If necessary, DHCS will assess the identified areas through further research to explore causality, selecting and implementing interventions, and evaluating the effectiveness of those interventions.

Appendix B: FFS Medi-Cal Data Sources

Medi-Cal Claims and Encounters

The Medi-Cal paid claims data are detailed records reflecting payments for services and products rendered/delivered to Medi-Cal eligibles. These paid claims are collected and processed for payment by one of several state departments or fiscal intermediaries. Medi-Cal paid claims data reflect payments to providers for services and or products rendered/delivered. Because of lags in data reporting and claims processing, paid claims data may be incomplete and require a waiting period between the date-of-service and date-of-payment. This lag between the date-of-service and date-of-payment generally requires about 12-months to accumulate a complete set of paid claims for any given month-of-service.

Medi-Cal Provider Master File (PMF)

The Medi-Cal PMF contains records for providers who bill services through the fiscal intermediary. The PMF contains information including service addresses, provider type and the categories of service billed by that provider. Providers may have more than one record on the PMF if they have multiple Medi-Cal provider IDs. Information on the PMF is updated frequently as the providers must report changes within 35 days. Providers billing for services authorized through other departments may be included on this file, but may be reported with a program-specific provider number. These files are downloaded monthly and are used to supplement information obtained from the claims and encounter data files.

MIS/DSS Eligibility Tables

The MIS/DSS contains observations reflecting the benefit history for anyone who received Medi-Cal or other state program benefits in the current and previous twelve months. Since Medi-Cal eligibility can be reported retroactively, final beneficiary counts are not considered “complete” until the end of a 12-month period. Data contained in the MIS/DSS eligibility tables are used to supplement information obtained from the claims and encounter data files and is used in many cases to create denominators and describe the populations of interest.

Appendix C: Aid and County Codes by Delivery System

Table 70: County Codes in 2015 by Delivery Type and Dual Status.

COHS Counties	COHS (P) Counties	GMC/Regional/2 Plan/Imperial Counties	San Benito
08, 12, 17, 18, 21, 23, 24, 25, 27, 30, 41, 40, 42, 44, 45, 47, 49, 53, 56	28, 48, 57	01, 02, 03, 04, 05, 06, 07, 09, 10, 11, 13, 14, 15, 16, 19, 20, 22, 26, 29, 31, 32, 33, 34, 36, 37, 38, 39, 43, 46, 50, 51, 52, 54, 55, 58	35

Source: Managed Care Mandatory or Voluntary Enrollment Chart, Sept. 18, 2015 version.
Note: Aid Codes not included - 0E, 6S, 5H, 5M, G0, G5, J7, R1.

Table 71: Mandatory Managed Care – An Exemption is Required for Beneficiaries to Stay in FFS – Aid Codes in 2015 by Delivery Type, County, and Dual Status.

COHS excluding Napa Solano and Yolo. Duals and Non Duals	COHS Napa, Solano, and Yolo Only (P). Duals and Non Duals	GMC/Regional/2 Plan/Imperial. Non Duals (Duals are always Voluntary)	San Benito, Duals and Non Duals
0A, 0M, 0N, 0P, 0R, 0T, 0U, 0W, 01, 02, 03, 04, 06, 07, 08, 1E, 1H, 10, 13, 14, 16, 17, 2E, 2H, 20, 23, 24, 26, 27, 3A, 3C, 3E, 3F, 3G, 3H, 3L, 3M, 3N, 3P, 3R, 3U, 3W, 30, 32, 33, 34, 35, 36, 37, 38, 39, 4A, 4F, 4G, 4H, 4K, 4L, 4M, 4N, 4S, 4T, 4W, 40, 42, 43, 45, 46, 47, 49, 5C, 5D, 5K, 53, 54, 59, 6A, 6C, 6E, 6G, 6H, 6J, 6N, 6P, 6R, 6V, 6W, 6X, 6Y, 60, 63, 64, 66, 67, 7A, 7J, 7S, 7U, 7W, 7X, 72, 8P, 8R, 81, 82, 83, 86, 87, E2, E5, E6, E7, H1, H2, H3, H4, H5, K1, L1, M1, M3, M5, M7, P5, P7, P9, T1, T2, T3, T4, T5	0A, 0M, 0N, 0P, 0R, 0T, 0U, 0W, 01, 02, 03, 04, 06, 07, 08, 1E, 1H, 10, 13, 14, 16, 17, 2E, 2H, 20, 23, 24, 26, 27, 3A, 3C, 3E, 3F, 3G, 3H, 3L, 3M, 3N, 3P, 3R, 3U, 3W, 30, 32, 33, 34, 35, 36, 37, 38, 39, 4A, 4F, 4G, 4H, 4K, 4L, 4M, 4N, 4S, 4T, 4W, 40, 42, 43, 45, 46, 47, 49, 5C, 5D, 5F, 5K, 53, 54, 55, 58, 59, 6A, 6C, 6E, 6G, 6H, 6J, 6N, 6P, 6R, 6V, 6W, 6X, 6Y, 60, 63, 64, 66, 67, 7A, 7J, 7S, 7U, 7W, 7X, 72, 8P, 8R, 81, 82, 83, 86, 87, C1, C2, C3, C4, C5, C6, C7, C8, C9, D1, D2, D3, D4, D5, D6, D7, D8, D9, E2, E5, E6, E7, H1, H2, H3, H4, H5, K1, L1, M1, M3, M5, M7, P5, P7, P9, T1, T2, T3, T4, T5	0A, 01, 02, 08, 1E, 1H, 10, 14, 16, 2E, 2H, 20, 24, 26, 3A, 3C, 3E, 3F, 3G, 3H, 3L, 3M, 3N, 3P, 3R, 3U, 3W, 30, 32, 33, 34, 35, 36, 38, 39, 47, 5C, 5D, 54, 59, 6A, 6C, 6E, 6G, 6H, 6J, 6N, 6P, 6V, 60, 64, 66, 7A, 7J, 7S, 7U, 7W, 7X, 72, 8P, 8R, 82, E2, E5, E6, E7, H1, H2, H3, H4, H5, K1, L1, M1, M3, M5, M7, P5, P7, P9, T1, T2, T3, T4, T5	No Mandatory Aid Codes in San Benito County

Source: Managed Care Mandatory or Voluntary Enrollment Chart, Sept. 18, 2015 version.
Note: Aid Codes not included - 0E, 6S, 5H, 5M, G0, G5, J7, R1.

Table 72: Voluntary - Beneficiaries May Choose to Stay in FFS - Aid Codes in 2015 by Delivery Type, County, and Dual Status.

COHS. Duals and Non Duals	GMC/Regional/2 Plan/Imperial, Voluntary for Duals (D)	GMC/Regional/2 Plan/Imperial, Voluntary for Non Duals	San Benito, Duals and Non Duals
No Voluntary Aid Codes in COHS counties.	0A, 0N, 0P, 0W, 01, 02, 03, 04, 06, 07, 08, 1E, 1H, 10, 14, 16, 2E, 2H, 20, 24, 26, 3A, 3C, 3E, 3F, 3G, 3H, 3L, 3M, 3N, 3P, 3R, 3U, 3W, 30, 32, 33, 34, 35, 36, 38, 39, 4A, 4F, 4G, 4H, 4K, 4L, 4M, 4N, 4S, 4T, 4W, 40, 42, 43, 45, 46, 47, 49, 5C, 5D, 5K, 54, 59, 6A, 6C, 6E, 6G, 6H, 6J, 6N, 6P, 6V, 60, 64, 66, 7A, 7J, 7S, 7U, 7W, 7X, 72, 8P, 8R, 82, 86, 87, E2, E5, E6, E7, H1, H2, H3, H4, H5, K1, L1, M1, M3, M5, M7, P5, P7, P9, T1, T2, T3, T4, T5	0N, 0P, 0W, 03, 04, 06, 07, 4A, 4F, 4G, 4H, 4K, 4L, 4M, 4N, 4S, 4T, 4W, 40, 42, 43, 45, 46, 49, 5K, 86, 87	0A, 0N, 0P, 0W, 01, 02, 03, 04, 06, 07, 08, 09, 1E, 1H, 10, 14, 16, 2E, 2H, 20, 24, 26, 3A, 3C, 3E, 3F, 3G, 3H, 3L, 3M, 3N, 3P, 3R, 3U, 3W, 30, 32, 33, 34, 35, 36, 38, 39, 4A, 4F, 4G, 4H, 4K, 4L, 4M, 4N, 4S, 4T, 4W, 40, 42, 43, 45, 46, 47, 49, 5C, 5D, 5K, 54, 59, 6A, 6C, 6E, 6G, 6H, 6J, 6N, 6P, 6V, 60, 64, 66, 7A, 7J, 7S, 7U, 7W, 7X, 72, 8P, 8R, 82, 86, E2, E5, E6, E7, H1, H2, H3, H4, H5, K1, L1, M1, M3, M5, M7, P5, P7, P9, T1, T2, T3, T4, T5

Source: Managed Care Mandatory or Voluntary Enrollment Chart, Sept. 18, 2015 version.
Note: Aid Codes not included - 0E, 6S, 5H, 5M, G0, G5, J7, R1.

Table 73: FFS Only – Beneficiaries are not able to Enroll in Managed Care Plans - Aid Codes in 2015 by Delivery Type, County, and Dual Status.

COHS excluding Napa Solano and Yolo. Duals and Non Duals	COHS Napa, Solano, and Yolo Only (P). Duals and Non Duals	GMC/Regional/2 Plan/Imperial. Duals and Non Duals	San Benito. Duals and Non Duals
0C, 0D, 0L, 0V, 0X, 0Y, 1U, 1X, 1Y, 18, 2A, 2V, 28, 3D, 3T, 3V, 4C, 4E, 4V, 44, 48, 5E, 5F, 5G, 5J, 5N, 5R, 5T, 5V, 5W, 5X, 50, 55, 58, 6U, 65, 68, 69, 7C, 7F, 7G, 7H, 7K, 7M, 7N, 7P, 7R, 7T, 7V, 71, 73, 74, 76, 77, 8E, 8F, 8G, 8H, 8N, 8T, 8U, 8V, 8W, 8X, 8Y, 80, 84, 85, 88, 89, 9A, 9H, 9J, 9K, 9L, 9M, 9N, 9P, 9R, 9U, 9V, C1, C2, C3, C4, C5, C6, C7, C8, C9, D1, D2, D3, D4, D5, D6, D7, D8, D9, E1, E4, F1, F2, F3, F4, G1, G2, G3, G4, G9, H6, H7, H8, H9, H0, J1, J2, M2, M4, M6, M8, M9, M0, N5, N6, N7, N8, N9, N0, P1, P2, P3, P4, P6, P8, P0, T6, T7, T8, T9, T0	0C, 0D, 0L, 0V, 0X, 0Y, 1U, 1X, 1Y, 18, 2A, 2V, 28, 3D, 3T, 3V, 4C, 4E, 4V, 44, 48, 5E, 5G, 5J, 5N, 5R, 5T, 5V, 5W, 5X, 50, 6U, 65, 68, 69, 7C, 7F, 7G, 7H, 7K, 7M, 7N, 7P, 7R, 7T, 7V, 71, 73, 74, 76, 77, 8E, 8F, 8G, 8H, 8N, 8T, 8U, 8V, 8W, 8X, 8Y, 80, 84, 85, 88, 89, 9A, 9H, 9J, 9K, 9L, 9M, 9N, 9P, 9R, 9U, 9V, E1, E4, F1, F2, F3, F4, G1, G2, G3, G4, G9, H6, H7, H8, H9, H0, J1, J2, M2, M4, M6, M8, M9, M0, N5, N6, N7, N8, N9, N0, P1, P2, P3, P4, P6, P8, P0, T6, T7, T8, T9, T0	0C, 0D, 0L, 0M, 0R, 0T, 0U, 0V, 0X, 0Y, 1U, 1X, 1Y, 13, 17, 18, 2A, 2V, 23, 27, 28, 3D, 3T, 3V, 37, 4C, 4E, 4V, 44, 48, 5E, 5F, 5G, 5J, 5N, 5R, 5T, 5V, 5W, 5X, 50, 53, 55, 58, 6R, 6U, 6W, 6X, 6Y, 63, 65, 67, 68, 69, 7C, 7F, 7G, 7H, 7K, 7M, 7N, 7P, 7R, 7T, 7V, 71, 73, 74, 76, 77, 8E, 8F, 8G, 8H, 8N, 8T, 8U, 8V, 8W, 8X, 8Y, 80, 81, 83, 84, 85, 88, 89, 9A, 9H, 9J, 9K, 9L, 9M, 9N, 9P, 9R, 9U, 9V, C1, C2, C3, C4, C5, C6, C7, C8, C9, D1, D2, D3, D4, D5, D6, D7, D8, D9, E1, E4, F1, F2, F3, F4, G1, G2, G3, G4, G9, H6, H7, H8, H9, H0, J1, J2, M2, M4, M6, M8, M9, M0, N5, N6, N7, N8, N9, N0, P1, P2, P3, P4, P6, P8, P0, T6, T7, T8, T9, T0	0C, 0D, 0L, 0M, 0R, 0T, 0U, 0V, 0X, 0Y, 1U, 1X, 1Y, 13, 17, 18, 2A, 2V, 23, 27, 28, 3D, 3T, 3V, 37, 4C, 4E, 4V, 44, 48, 5E, 5F, 5G, 5J, 5N, 5R, 5T, 5V, 5W, 5X, 50, 53, 55, 58, 6R, 6U, 6W, 6X, 6Y, 63, 65, 67, 68, 69, 7C, 7F, 7G, 7H, 7K, 7M, 7N, 7P, 7R, 7T, 7V, 71, 73, 74, 76, 77, 8E, 8F, 8G, 8H, 8N, 8T, 8U, 8V, 8W, 8X, 8Y, 80, 81, 83, 84, 85, 87, 88, 89, 9A, 9H, 9J, 9K, 9L, 9M, 9N, 9P, 9R, 9U, 9V, C1, C2, C3, C4, C5, C6, C7, C8, C9, D1, D2, D3, D4, D5, D6, D7, D8, D9, E1, E4, F1, F2, F3, F4, G1, G2, G3, G4, G9, H6, H7, H8, H9, H0, J1, J2, M2, M4, M6, M8, M9, M0, N5, N6, N7, N8, N9, N0, P1, P2, P3, P4, P6, P8, P0, T6, T7, T8, T9, T0

Source: Managed Care Mandatory or Voluntary Enrollment Chart, Sept. 18, 2015 version.
Note: Aid Codes not included - 0E, 6S, 5H, 5M, G0, G5, J7, R1.

Appendix D: Aid Code Categories

Table 74: Aid Code Grouping Schema.

Category	Aid Code
Dual Eligible	This group consists of those also enrolled in Medicare, therefore, can be any aid code
ACA Expansion Adult Age 19 to 64	7U, L1, M1, P3
Adoption/Foster Care	03, 04, 06, 07, 2P, 2R, 2S, 2T, 2U, 40, 42, 43, 45, 46, 49, 4A, 4E, 4F, 4G, 4H, 4L, 4M, 4N, 4S, 4T, 4W, 5K
Other	01, 02, 08, 0A, 0L, 0M, 0N, 0P, 0R, 0T, 0U, 0V, 0W, 0X, 0Y, 2A, 2V, 44, 4K, 4V, 5V, 65, 71, 73, 76, 77, 7F, 7G, 7H, 7M, 7N, 7P, 7R, 7V, 81, 82, 83, 86, 87, 8E, 8W, 90, F1, F2, F3, F4, F5, F6, F7, F8, G0, G1, G2, G3, G4, G5, G6, G7, G8, G9, J1, J2, J3, J4, J5, J6, J7, J8, M9, N0, N5, N6, N7, N8, N9, R1
Parent/Caretaker Relative/Child	3N, 30, 32, 33, 34, 35, 37, 38, 39, 3A, 3C, 3D, 3E, 3F, 3G, 3H, 3L, 3M, 3P, 3R, 3U, 3W, 47, 5C, 5D, 5E, 5X, 54, 59, 6R, 7A, 7J, 7S, 7T, 7W, 7X, 72, 8P, 8R, 8U, 8V, 8X, E2, E6, E7, H0, H1, H2, H3, H4, H5, H6, H7, H8, H9, K1, L2, L4, M3, M5, P1, P2, P4, P5, P7, P9, T1, T2, T3, T4, T5
Seniors and Persons with Disabilities	10, 13, 14, 16, 17, 18, 1E, 1H, 1X, 1Y, 20, 23, 24, 26, 27, 28, 2E, 2H, 36, 53, 60, 63, 64, 66, 67, 68, 6A, 6C, 6E, 6G, 6H, 6J, 6N, 6P, 6S, 6V, 6W, 6X, 6Y, 8G
Undocumented	1U, 3T, 3V, 48, 55, 58, 5F, 5H, 5J, 5M, 5N, 5R, 5T, 5W, 5Y, 69, 6U, 70, 74, 7C, 7K, 8N, 8T, C1, C2, C3, C4, C5, C6, C7, C8, C9, D1, D2, D3, D4, D5, D6, D7, D8, D9, L3, L5, M0, M2, M4, M6, M8, P0, P6, P8, T0, T6, T7, T8, T9

Appendix E: Geographic Region Categories

Table 75: Geographic Region Grouping Schema.

Geographic Region	Counties
Bay Area	Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma
Central Coast	Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Ventura
Central Valley	Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare
Far North	Modoc, Shasta, Siskiyou, Trinity
Los Angeles	Los Angeles
North Coast	Del Norte, Humboldt, Lake, Mendocino
Sacramento Valley	Butte, Colusa, Glenn, Sacramento, Sutter, Tehama, Yolo, Yuba
Sierra Range/Foothills	Alpine, Amador, Calaveras, El Dorado, Inyo, Lassen, Mariposa, Mono, Nevada, Placer, Plumas, Sierra, Tuolumne
Southern California	Imperial, Orange, Riverside, San Bernardino, San Diego

Appendix F: Dental Services' Geographic Region Categories

Table 76: Dental Services' Geographic Region Grouping Schema

Geographic Region	Counties
Alameda	Alameda
Central Coast	Monterey, San Benito, Santa Cruz
Central Valley	Mariposa, Merced, San Joaquin, Stanislaus, Tulare
Contra Costa	Contra Costa
Greater Fresno	Fresno, Kings, Madera
Greater Sacramento	El Dorado, Placer, Sacramento, Yolo
Inland Desert	Imperial, Inyo, Mono
Inland Empire	Riverside, San Bernardino
Kern	Kern
Los Angeles	Los Angeles
North Bay	Marin, Napa, Solano, Sonoma
Northern	Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Tuolumne, Yuba
Orange	Orange
San Diego	San Diego
San Francisco	San Francisco
San Mateo	San Mateo
Santa Clara	Santa Clara
South Coast	San Luis Obispo, Santa Barbara, Ventura

Appendix G: Dental Services' Procedure Code Descriptions

Table 77: Dental Services' Procedure Code Descriptions.

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Appendix H: Provider Type Categories

Table 78: Description of Provider Types Used in Provider Participation and Service Utilization Measures.

Primary Care Providers – Physicians, Physician Groups, and Clinics	
Physicians and Physicians Groups	General Practice
	Family Practice
	Gynecology (D.O. only)
	Obstetrics (D.O. only), Endodontist (Dentists Only)
	Obstetrics-Gynecology (M.D. Only) Neonatal
	Preventive (M.D. only)
	Pediatrics, Periodontist (Dentists Only)
	Internal Medicine
Clinics	Rural Health Clinics/Federally Qualified Health Center
	Free Clinic
	Community Clinic
	Multispecialty Clinic
	Clinic Exemp From Licensure
	County Clinics Not Associated With Hospital
	Otherwise Undesignated Clinic
	Tribal Health
Specialist Providers - Physicians and Physician Groups	
Physicians and Physicians Groups	General Surgery
	Allergy
	Otology, Laryngology, Rhinology
	Cardiovascular Disease (internal medicine)
	Dermatology
	Gynecology (Osteopaths only)
	Gastroenterology (internal medicine)
	Neurology
	Neurological Surgery
	Obstetrics (D. O. only)
	OB-Gynecology (M. E. only)
	Ophthalmology, otolaryngology
	Ophthalmology
	Orthopedic Surgery
	Peripheral Vascular Disease or Surgery (D. O. only)
	Plastic Surgery
	Physical Medicine and Rehabilitation
	Psychiatry Neurology
	Proctology (colon and rectal surgery)
	Pulmonary Diseases

	Radiology
	Roentgenology
	Radiation Therapy (D.O. only)
	Thoracic Surgery
	Urology and Urological Surgery
	Pediatric Cardiology (internal medicine)
	Pediatrics
	Nuclear Medicine
	Pediatric Allergy
	Nephrology
	Hand Surgery
	Endocrinology
	Hematology
	Infectious Disease
	Neoplastic Diseases
	Neurology-Child
	Rheumatology
	Surgery Head and Neck
	Surgery Pediatric
	Surgery Traumatic
Behavioral Health Providers - Physicians, Physician Groups, and Other Non-Physician Providers	
Physicians and Physician Groups	Psychiatry (child)
	Psychiatry Neurology (D.O. only)
	Psychiatry
	Marriage, family and child counselor
	Licensed clinical social worker
Other Non-Physician Providers	Psychologists
	Outpatient Heroin Detox Center
	Licensed Clinical Social Worker Individual
	Licensed Clinical Social Worker Group
	Mental Health Inpatient Services
	Drug Medi-Cal
	Marriage And Family Therapist Inidividual
	Marriage And Family Therapist Group
Pre and Post Natal Providers - Physicians, Physicians Groups and Other Non-Physician Providers	
Physicians and Physician Groups	Gynecology (D.O. only)
	Obstetrics (D.O. only), Endodontist (Dentists Only)
	Obstetrics-Gynecology (M.D. Only) Neonatal
Other Non-Physician Providers	Certified Nurse Midwife
	Birthing Center Services
	Alternative Birth Centers - Specialty Clinic

Home Health	
Other Non-Physician Providers	Home Health Agencies
Pharmacies	
Other Non-Physician Providers	Pharmacy Providers

Appendix I: Modified Call Categories

Table 79: Modified Call Categories Used in Feedback Measure.

Call Category	Reason for Call
COC - Continuity of Care	COC2 Pregnant
	COC3 PCP/Specialist Not in Same Plan
	COC5 Other Qualifying Condition
	COC6 SPD LTC Issue
	EDU1 Mandatory Enrollment Issue/ Wants to become FFS
	EDU8 Duals/CCI Education
	ELG4 Medi-Cal Eligibility Terminated
	ELG5 Share of Cost
	HCO16 MER/EDER Status Check
	HCO2 Requesting new enrollment into Plan
	HCO3 Wants to Change Plans
	HCO4 Wants to Disenroll from Plan to become FFS
	HCO6 MER/EDER Denial
	HCO8 Long Term Care Issue (DER Request)
	HCP7 Transportation
	MISC3 Other (Please specify in notes)
	MISC4 Voice Mail Call - No Answer
	MISC5 Voice Mail Call – Issue Resolved
	PRV2 Billing Discrepancy
	QOC1 Refusal of Care
	QOC2 Refusal of Medications
	QOC3 Denial of Medical Supplies
	QOC6 Prior Authorization Denial/Delay
	QOC8 Communication/ Behavior/ Attitude of Staff
EDU - Education & Outreach	COC1 Provider Not a Plan Partner
	COC2 Pregnant
	COC6 SPD LTC Issue
	EDU - Education & Outreach
	EDU1 Mandatory Enrollment Issue/ Wants to become FFS
	EDU2 Mandatory Enrollment Issue/ Enrolled into COHS
	EDU2 Mandatory Enrollment Issue/ Enrolled into COHS Plan
	EDU3 Notice of Action
	EDU4 SPD Education
	EDU5 ADHC Education

Call Category	Reason for Call
	EDU6 CBAS Education
	EDU7 Healthy Families Education
	EDU8 Duals/CCI Education
	ELG1 Inaccurate Aid Code
	ELG2 Inaccurate County Code
	ELG3 Address Correction/ Beneficiary Moved
	ELG4 Medi-Cal Eligibility Terminated
	ELG5 Share of Cost
	ELG6 Foster Care/Adoption Category
	ELG7 Restricted Aid Code
	HCO1 Hold on Plan
	HCO15 SPD MER/EDER Denial
	HCO16 MER/EDER Status Check
	HCO2 Requesting new enrollment into Plan
	HCO4 Wants to Disenroll from Plan to become FFS
	HCO9 Foster Care / Adoption (DER Request)
	HCP1 Not Assigned Requested PCP/IPA
	HCP12 Mental Health Access Issues
	HCP2 Wants to Change Provider
	HCP5 Health Card Not Issued
	HCP6 Communications/Behavior/Attitude of Staff
	HCP7 Transportation
	MISC2 Beneficiary Identification Card (BIC) Order
	MISC3 Other (Please specify in notes)
	MISC4 Voice Mail Call - No Answer
	MISC5 Voice Mail Call – Issue Resolved
	OHC1 Conflicting information about OHC Status
	PRV1 Provider Not Being Paid
	PRV2 Billing Discrepancy
	PRV3 Beneficiary Being Billed
	QOC1 Refusal of Care
	QOC2 Refusal of Medications
	QOC3 Denial of Medical Supplies
	QOC4 Denial of Durable Medical Equipment (DME)
	QOC5 Delay/ Denial of Referrals or Appointments
	QOC6 Prior Authorization Denial/Delay
	QOC7 Treatment/Diagnosis/Inappropriate Care
ELG - Eligibility	COC2 Pregnant

Call Category	Reason for Call
	COC6 SPD LTC Issue
	EDU1 Mandatory Enrollment Issue/ Wants to become FFS
	EDU3 Notice of Action
	EDU4 SPD Education
	EDU8 Duals/CCI Education
	ELG - Eligibility
	ELG1 Inaccurate Aid Code
	ELG2 Inaccurate County Code
	ELG3 Address Correction/ Beneficiary Moved
	ELG4 Medi-Cal Eligibility Terminated
	ELG5 Share of Cost
	ELG6 Foster Care/Adoption Category
	ELG7 Restricted Aid Code
	HCO1 Hold on Plan
	HCO10 Dental HP Enrollment
	HCO11 Dental HP Disenrollment
	HCO15 SPD MER/EDER Denial
	HCO16 MER/EDER Status Check
	HCO2 Requesting new enrollment into Plan
	HCO3 Wants to Change Plans
	HCO4 Wants to Disenroll from Plan to become FFS
	HCO5 Disenrollment to Medi-Medi
	HCO6 MER/EDER Denial
	HCO8 Long Term Care Issue (DER Request)
	HCO9 Foster Care / Adoption (DER Request)
	HCP1 Not Assigned Requested PCP/IPA
	HCP5 Health Card Not Issued
	MISC1 Systems Conflict
	MISC2 Beneficiary Identification Card (BIC) Order
	MISC3 Other (Please specify in notes)
	MISC4 Voice Mail Call - No Answer
	MISC5 Voice Mail Call – Issue Resolved
	MISC6 HF BiC Card Erroneous Mailing
	OHC1 Conflicting information about OHC Status
	PRV2 Billing Discrepancy
	PRV3 Beneficiary Being Billed
	QOC2 Refusal of Medications
	QOC5 Delay/ Denial of Referrals or Appointments

Call Category	Reason for Call
	QOC6 Prior Authorization Denial/Delay
HCO - Enrollment/Disenrollment	COC1 Provider Not a Plan Partner
	COC2 Pregnant
	COC6 SPD LTC Issue
	EDU1 Mandatory Enrollment Issue/ Wants to become FFS
	EDU2 Mandatory Enrollment Issue/ Enrolled into COHS
	EDU2 Mandatory Enrollment Issue/ Enrolled into COHS Plan
	EDU3 Notice of Action
	EDU4 SPD Education
	EDU6 CBAS Education
	EDU7 Healthy Families Education
	EDU8 Duals/CCI Education
	ELG1 Inaccurate Aid Code
	ELG2 Inaccurate County Code
	ELG3 Address Correction/ Beneficiary Moved
	ELG4 Medi-Cal Eligibility Terminated
	ELG5 Share of Cost
	ELG6 Foster Care/Adoption Category
	ELG7 Restricted Aid Code
	ELG8 Carved Out Zip Code
	HCO - Enrollment/Disenrollment
	HCO1 Hold on Plan
	HCO10 Dental HP Enrollment
	HCO11 Dental HP Disenrollment
	HCO12 Member Defaulted into a Plan without knowledge
	HCO13 Member's Plan changed without knowledge
	HCO15 SPD MER/EDER Denial
	HCO16 MER/EDER Status Check
	HCO2 Requesting new enrollment into Plan
	HCO3 Wants to Change Plans
	HCO4 Wants to Disenroll from Plan to become FFS
	HCO5 Disenrollment to Medi-Medi
	HCO6 MER/EDER Denial
	HCO7 Special Program Issue (DER Request)
	HCO8 Long Term Care Issue (DER Request)
	HCO9 Foster Care / Adoption (DER Request)
	HCP1 Not Assigned Requested PCP/IPA
	HCP12 Mental Health Access Issues

Call Category	Reason for Call
	HCP2 Wants to Change Provider
	HCP5 Health Card Not Issued
	HCP6 Communications/Behavior/Attitude of Staff
	MISC1 Systems Conflict
	MISC2 Beneficiary Identification Card (BIC) Order
	MISC3 Other (Please specify in notes)
	MISC4 Voice Mail Call - No Answer
	MISC5 Voice Mail Call – Issue Resolved
	OHC1 Conflicting information about OHC Status
	OHC2 Healthy Families
	PRV2 Billing Discrepancy
	PRV3 Beneficiary Being Billed
	QOC1 Refusal of Care
	QOC10 CBAS Evaluation Access Issue
	QOC2 Refusal of Medications
	QOC3 Denial of Medical Supplies
	QOC6 Prior Authorization Denial/Delay
HCP - Health Care Plan Issues	COC6 SPD LTC Issue
	EDU4 SPD Education
	EDU6 CBAS Education
	ELG2 Inaccurate County Code
	ELG3 Address Correction/ Beneficiary Moved
	ELG4 Medi-Cal Eligibility Terminated
	ELG5 Share of Cost
	ELG7 Restricted Aid Code
	HCO1 Hold on Plan
	HCO15 SPD MER/EDER Denial
	HCO16 MER/EDER Status Check
	HCO2 Requesting new enrollment into Plan
	HCO3 Wants to Change Plans
	HCO4 Wants to Disenroll from Plan to become FFS
	HCO6 MER/EDER Denial
	HCO8 Long Term Care Issue (DER Request)
	HCP - Health Care Plan Issues
	HCP1 Not Assigned Requested PCP/IPA
	HCP12 Mental Health Access Issues
	HCP2 Wants to Change Provider
	HCP3 Assigned PCP Outside 10Mi/30Min Radius

Call Category	Reason for Call
	HCP5 Health Card Not Issued
	HCP6 Communications/Behavior/Attitude of Staff
	HCP7 Transportation
	MISC2 Beneficiary Identification Card (BIC) Order
	MISC3 Other (Please specify in notes)
	MISC4 Voice Mail Call - No Answer
	MISC5 Voice Mail Call – Issue Resolved
	OHC1 Conflicting information about OHC Status
	PRV1 Provider Not Being Paid
	PRV2 Billing Discrepancy
	QOC1 Refusal of Care
	QOC2 Refusal of Medications
	QOC3 Denial of Medical Supplies
	QOC5 Delay/ Denial of Referrals or Appointments
	QOC6 Prior Authorization Denial/Delay
	QOC7 Treatment/Diagnosis/Inappropriate Care
HFT - Healthy Families Transition	ELG4 Medi-Cal Eligibility Terminated
	HCO2 Requesting new enrollment into Plan
	MISC3 Other (Please specify in notes)
	MISC4 Voice Mail Call - No Answer
	MISC5 Voice Mail Call – Issue Resolved
	OHC1 Conflicting information about OHC Status
	OHC2 Healthy Families
	PRV2 Billing Discrepancy
MISC - Miscellaneous Issues	COC2 Pregnant
	COC5 Other Qualifying Condition
	EDU1 Mandatory Enrollment Issue/ Wants to become FFS
	EDU3 Notice of Action
	EDU4 SPD Education
	EDU6 CBAS Education
	EDU8 Duals/CCI Education
	ELG1 Inaccurate Aid Code
	ELG2 Inaccurate County Code
	ELG3 Address Correction/ Beneficiary Moved
	ELG4 Medi-Cal Eligibility Terminated
	ELG5 Share of Cost
	ELG6 Foster Care/Adoption Category
	ELG7 Restricted Aid Code

Call Category	Reason for Call
	HCO1 Hold on Plan
	HCO11 Dental HP Disenrollment
	HCO14 CSRs Rude/Not Helpful/Incorrect Information
	HCO15 SPD MER/EDER Denial
	HCO16 MER/EDER Status Check
	HCO2 Requesting new enrollment into Plan
	HCO3 Wants to Change Plans
	HCO4 Wants to Disenroll from Plan to become FFS
	HCO6 MER/EDER Denial
	HCO8 Long Term Care Issue (DER Request)
	HCP2 Wants to Change Provider
	HCP5 Health Card Not Issued
	HCP7 Transportation
	MISC - Miscellaneous Issues
	MISC1 Systems Conflict
	MISC2 Beneficiary Identification Card (BIC) Order
	MISC3 Other (Please specify in notes)
	MISC4 Voice Mail Call - No Answer
	MISC5 Voice Mail Call – Issue Resolved
	OHC1 Conflicting information about OHC Status
	PRV1 Provider Not Being Paid
	PRV2 Billing Discrepancy
	PRV3 Beneficiary Being Billed
	QOC1 Refusal of Care
	QOC2 Refusal of Medications
	QOC3 Denial of Medical Supplies
	QOC4 Denial of Durable Medical Equipment (DME)
	QOC5 Delay/ Denial of Referrals or Appointments
	QOC6 Prior Authorization Denial/Delay
	QOC7 Treatment/Diagnosis/Inappropriate Care
	QOC9 Disability / Physical Access Issue
OHC - Other Health Coverage	COC1 Provider Not a Plan Partner
	COC2 Pregnant
	EDU1 Mandatory Enrollment Issue/ Wants to become FFS
	EDU3 Notice of Action
	EDU6 CBAS Education
	ELG4 Medi-Cal Eligibility Terminated
	ELG5 Share of Cost

Call Category	Reason for Call
	ELG7 Restricted Aid Code
	HCO2 Requesting new enrollment into Plan
	HCO2 Requesting new enrollment into Plan
	HCO4 Wants to Disenroll from Plan to become FFS
	HCO4 Wants to Disenroll from Plan to become FFS
	HCO5 Disenrollment to Medi-Medi
	HCO5 Disenrollment to Medi-Medi
	HCP2 Wants to Change Provider
	MISC2 Beneficiary Identification Card (BIC) Order
	MISC3 Other (Please specify in notes)
	MISC4 Voice Mail Call - No Answer
	MISC5 Voice Mail Call – Issue Resolved
	OHC - Other Health Coverage
	OHC1 Conflicting information about OHC Status
	OHC2 Healthy Families
	PRV3 Beneficiary Being Billed
PRV - Plan Subcontractor/Provider Issues	ELG4 Medi-Cal Eligibility Terminated
	HCO4 Wants to Disenroll from Plan to become FFS
	HCP6 Communications/Behavior/Attitude of Staff
	MISC3 Other (Please specify in notes)
	MISC4 Voice Mail Call - No Answer
	MISC5 Voice Mail Call – Issue Resolved
	OHC1 Conflicting information about OHC Status
	PRV - Plan Subcontractor/Prov
	PRV1 Provider Not Being Paid
	PRV2 Billing Discrepancy
	PRV3 Beneficiary Being Billed
	QOC1 Refusal of Care
	QOC2 Refusal of Medications
QOC - Quality of Care	EDU3 Notice of Action
	ELG3 Address Correction/ Beneficiary Moved
	ELG4 Medi-Cal Eligibility Terminated
	ELG5 Share of Cost
	ELG6 Foster Care/Adoption Category
	ELG7 Restricted Aid Code
	HCO16 MER/EDER Status Check
	HCO2 Requesting new enrollment into Plan
	HCO4 Wants to Disenroll from Plan to become FFS

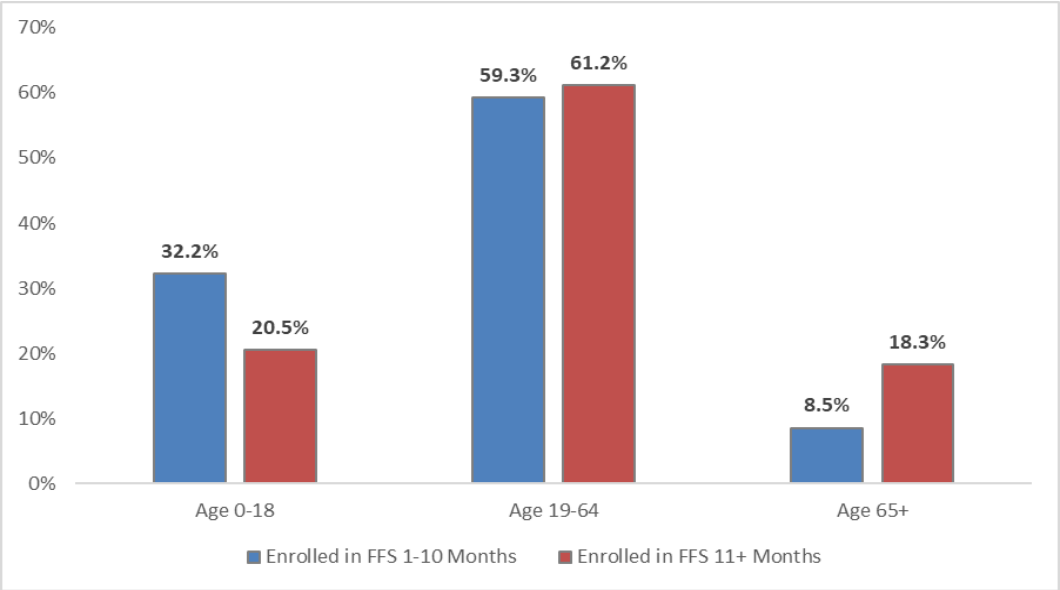
Call Category	Reason for Call
	HCO6 MER/EDER Denial
	HCO8 Long Term Care Issue (DER Request)
	HCO9 Foster Care / Adoption (DER Request)
	HCP2 Wants to Change Provider
	MISC3 Other (Please specify in notes)
	MISC4 Voice Mail Call - No Answer
	MISC5 Voice Mail Call – Issue Resolved
	PRV2 Billing Discrepancy
	QOC - Quality of Care
	QOC1 Refusal of Care
	QOC2 Refusal of Medications
	QOC3 Denial of Medical Supplies
	QOC4 Denial of Durable Medical Equipment (DME)
	QOC5 Delay/ Denial of Referrals or Appointments
	QOC6 Prior Authorization Denial/Delay
	QOC7 Treatment/Diagnosis/Inappropriate Care
	QOC8 Communication/ Behavior/ Attitude of Staff
	QOC9 Disability / Physical Access Issue

Note: The modified call categories in the first column were developed based on the reasons for call in the second column, which represent the call codes used by the Medi-Cal Managed Care Division's Office of the Ombudsman.

Source: Created by DHCS Research and Analytic Studies Division using data from the Medi-Cal Managed Care Division's Office of the Ombudsman call center.

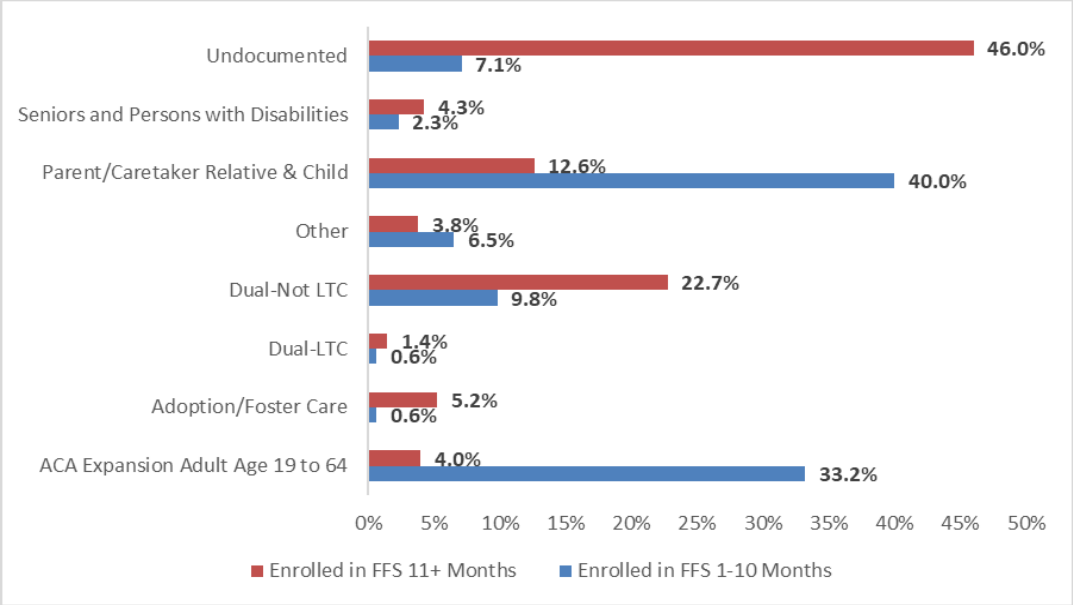
Appendix J: Demographics and Length of Enrollment

Figure 68: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Age Group and Duration of Enrollment.



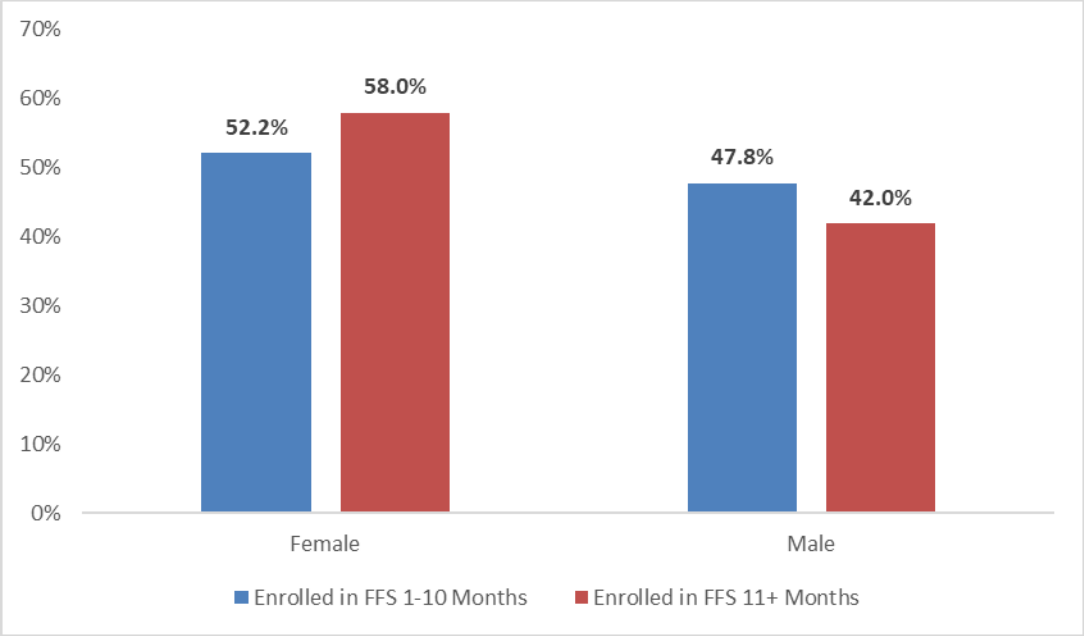
Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016.

Figure 69: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Aid Category and Duration of Enrollment.



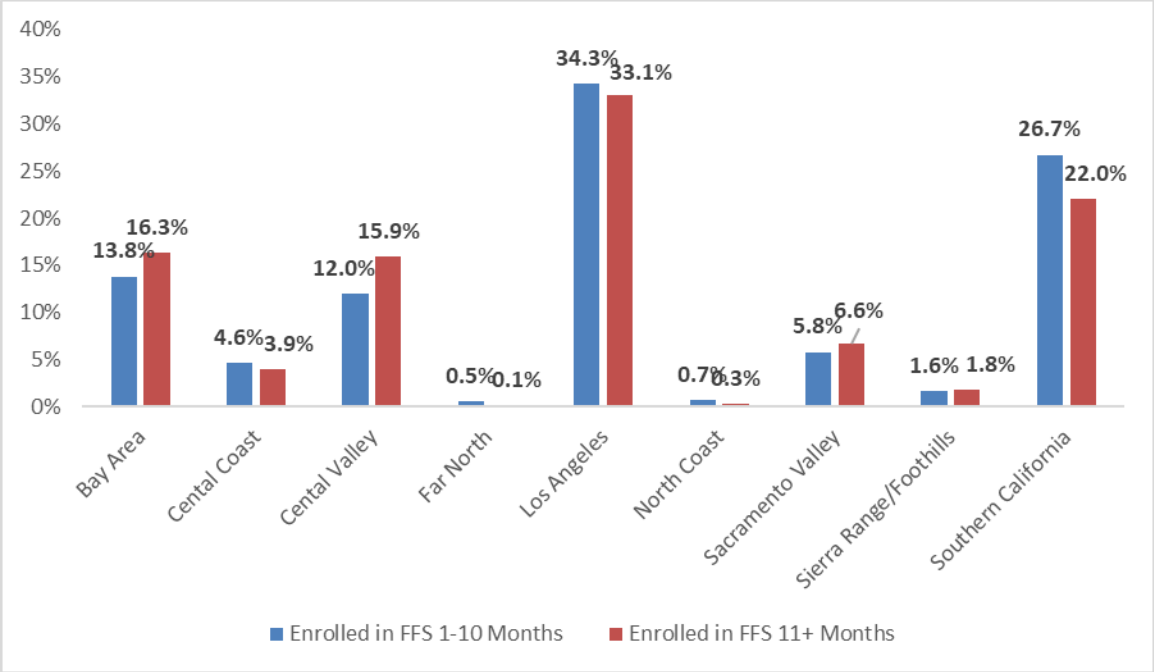
Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016.

Figure 70: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Gender and Duration of Enrollment.



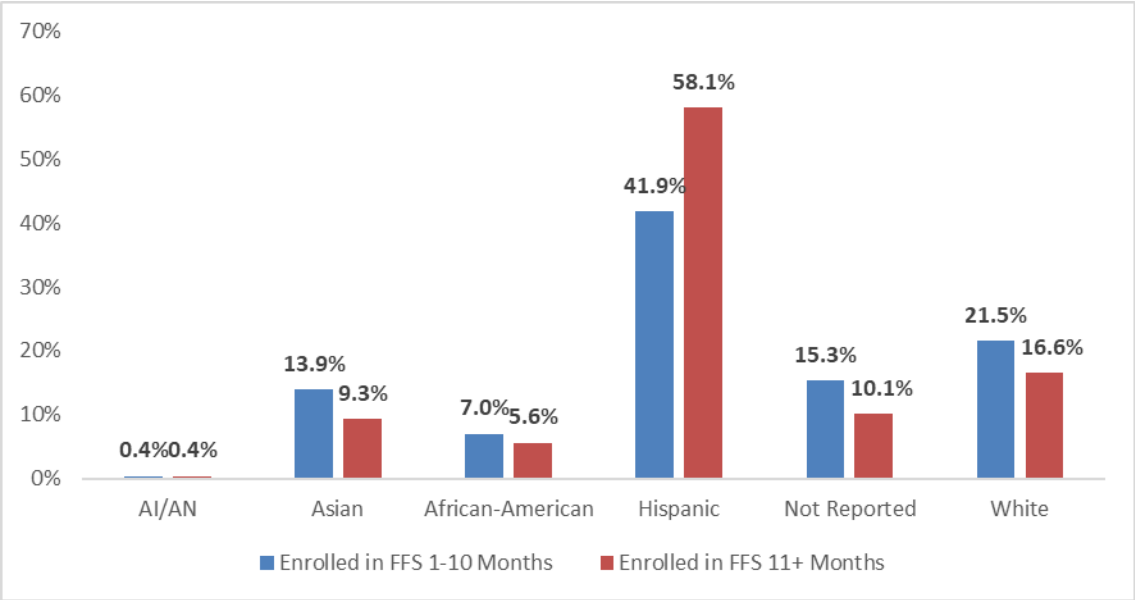
Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016.

Figure 71: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Region and Duration of Enrollment.



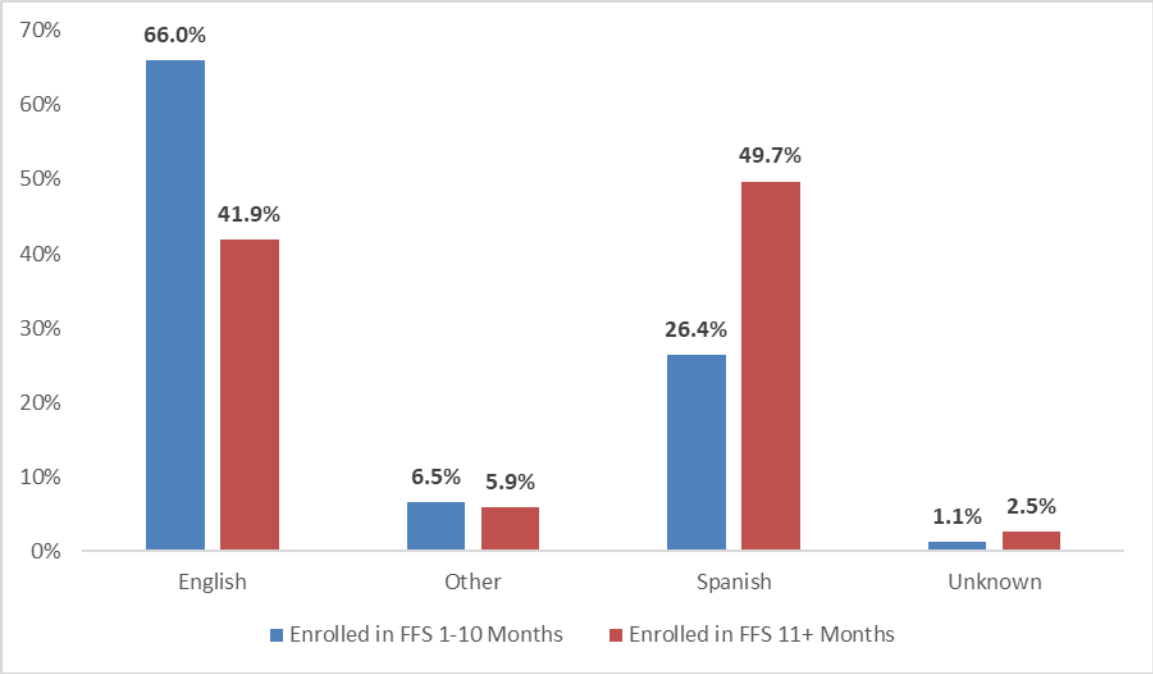
Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016.

Figure 72: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Race/Ethnicity and Duration of Enrollment.



Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016.

Figure 73: Distribution of FFS Medi-Cal Beneficiaries Certified Eligible in SFY 2014-15, by Language Spoken and Duration of Enrollment.



Source: Created by DHCS Research and Analytic Studies Division using data from the MIS/DSS eligibility tables for 2015 and extracted in May 2016.

Appendix K: Comparison of Medicare to Medi-Cal FFS rates by Procedure Code

Table 80: Physician Specialist Services

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
20005	$341.39	$200.30
20100	$651.37	$349.59
20101	$502.94	$112.06
20102	$547.82	$135.52
20103	$648.29	$182.43
20150	$978.92	$735.66
20200	$231.91	$54.36
20205	$321.32	$109.08
20206	$271.37	$65.90
20220	$190.94	$85.26
20225	$606.30	$148.92
20240	$167.57	$126.58
20245	$557.95	$210.72
20250	$423.55	$289.65
20251	$459.70	$361.13
20500	$115.14	$105.73
20501	$134.36	$223.38
20520	$227.09	$112.43
20525	$538.85	$290.02
20526	$84.20	$52.49
20527	$91.91	$49.32
20550	$64.53	$45.79
20551	$66.32	$52.49
20552	$61.06	$52.49
20553	$70.44	$52.49
20555	$353.05	$246.09
20600	$52.00	$32.39
20604	$79.49	$39.46
20605	$54.66	$37.97
20606	$87.83	$45.05
20610	$65.60	$45.79
20611	$100.45	$52.87
20612	$66.79	$54.36
20615	$273.15	$168.65
20650	$229.56	$104.24
20660	$259.76	$126.58

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
20661	$553.40	$197.69
20662	$480.11	$193.97
20663	$514.85	$168.65
20664	$946.96	$357.04
20665	$116.76	$61.06
20670	$432.82	$115.79
20680	$688.78	$151.90
20690	$645.24	$168.65
20692	$1,220.65	$265.82
20693	$489.26	$281.46
20694	$472.20	$200.67
20696	$1,310.15	$739.02
20697	$2,315.58	$1,065.15
20802	$2,601.85	$2,305.65
20805	$3,573.68	$3,176.46
20808	$4,358.23	$3,521.96
20822	$1,956.87	$1,908.78
20824	$2,200.61	$2,345.12
20827	$1,981.96	$2,048.39
20838	$2,629.50	$2,554.72
20900	$471.57	$192.85
20902	$309.58	$273.27
20910	$453.02	$211.84
20912	$529.11	$446.76
20920	$433.62	$181.68
20922	$666.94	$281.46
20924	$554.36	$435.22
20926	$471.49	$367.46
20931	$119.66	$83.77
20937	$179.98	$129.56
20938	$197.37	$139.61
20955	$2,729.80	$2,319.06
20956	$2,872.59	$1,992.55
20957	$2,668.18	$1,954.20

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
20962	$2,306.76	$2,276.99
20969	$3,014.91	$2,396.50
20970	$3,150.34	$2,465.37
20972	$2,574.00	$2,223.00
20973	$2,858.18	$2,549.88
20974	$85.33	$41.70
20979	$57.78	$10.80
20982	$3,498.48	$3,678.13
20983	$8,458.89	$342.89
20985	$158.46	$110.95
21010	$814.43	$421.82
21011	$389.68	$269.92
21012	$371.01	$281.09
21013	$575.23	$414.37
21014	$570.52	$432.61
21015	$776.98	$493.67
21016	$1,115.27	$860.01
21025	$999.38	$295.98
21029	$855.72	$446.76
21030	$586.91	$201.41
21031	$449.67	$208.12
21032	$457.20	$207.37
21034	$1,457.24	$444.90
21040	$591.44	$186.15
21044	$966.98	$339.91
21045	$1,352.27	$845.49
21046	$1,248.44	$413.55
21047	$1,453.52	$598.23
21048	$1,279.24	$428.51
21049	$1,330.17	$563.21
21050	$929.96	$701.04
21060	$880.83	$670.14
21070	$675.64	$421.82
21073	$437.68	$276.25
21100	$1,178.34	$153.02
21110	$920.86	$330.97
21116	$166.67	$137.01
21120	$748.63	$744.60
21121	$913.84	$670.14
21122	$731.58	$744.60
21123	$1,041.18	$744.60

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
21127	$5,138.50	$953.09
21137	$823.18	$670.14
21138	$983.60	$819.06
21139	$1,041.26	$819.06
21141	$1,476.63	$1,039.46
21142	$1,547.97	$1,077.81
21143	$1,557.09	$1,120.62
21145	$1,727.35	$927.77
21146	$1,695.45	$1,016.75
21147	$1,918.49	$1,116.90
21150	$1,847.40	$1,230.82
21151	$2,240.11	$1,011.91
21154	$2,279.78	$1,096.42
21155	$2,382.70	$1,096.42
21159	$2,726.04	$1,349.22
21160	$3,481.48	$1,349.22
21172	$2,011.39	$1,349.22
21175	$2,363.67	$1,475.80
21179	$1,606.92	$1,257.26
21180	$1,686.68	$1,265.08
21181	$810.34	$744.60
21182	$2,110.29	$1,475.80
21183	$2,520.10	$1,475.80
21184	$2,312.87	$1,475.80
21188	$1,776.82	$1,218.17
21193	$1,330.62	$893.52
21194	$1,577.89	$1,116.90
21195	$1,483.05	$927.77
21196	$1,642.12	$1,042.44
21198	$1,298.23	$443.04
21199	$1,170.81	$893.89
21206	$1,305.96	$1,116.90
21208	$2,172.91	$619.51
21209	$915.69	$477.29
21210	$2,645.73	$744.60
21215	$4,751.38	$744.60
21230	$781.00	$670.14
21235	$812.93	$505.96
21240	$1,238.51	$883.84
21242	$1,135.06	$832.46
21243	$1,875.13	$1,180.19

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
21244	$1,188.18	$786.67
21245	$1,239.26	$794.49
21246	$957.92	$713.70
21247	$1,702.60	$1,238.64
21248	$1,245.14	$637.75
21249	$1,697.31	$1,013.40
21255	$1,539.83	$1,116.90
21256	$1,330.23	$1,116.90
21260	$1,541.39	$790.39
21261	$2,304.95	$1,661.20
21263	$2,131.48	$1,555.84
21267	$1,752.55	$1,434.10
21268	$1,908.00	$1,590.09
21270	$1,075.70	$589.35
21275	$915.85	$892.03
21280	$629.48	$391.66
21282	$423.39	$385.70
21295	$201.97	$231.20
21296	$482.77	$322.41
21310	$151.39	$51.38
21315	$315.88	$79.30
21320	$291.66	$126.58
21325	$534.96	$168.65
21330	$636.40	$353.69
21335	$808.65	$632.91
21336	$722.80	$237.53
21337	$456.75	$130.68
21338	$811.37	$482.13
21339	$862.64	$554.73
21340	$828.81	$741.25
21343	$1,337.35	$813.10
21344	$1,529.25	$713.33
21345	$904.96	$295.23
21346	$1,012.38	$505.96
21347	$1,262.00	$973.94
21348	$1,320.25	$465.75
21355	$481.49	$128.82
21356	$562.82	$276.25
21360	$595.52	$295.23
21365	$1,218.65	$548.03
21366	$1,263.33	$555.10

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
21385	$752.85	$505.96
21386	$762.29	$505.96
21387	$785.09	$505.96
21390	$875.38	$590.47
21395	$1,096.80	$709.98
21400	$217.97	$203.28
21401	$499.92	$261.73
21406	$571.31	$522.34
21407	$711.38	$521.22
21408	$957.91	$470.59
21421	$859.67	$295.23
21422	$746.89	$488.46
21423	$903.32	$527.55
21431	$830.22	$295.23
21432	$725.71	$505.96
21433	$1,892.98	$1,334.70
21435	$1,379.96	$959.20
21436	$2,247.56	$1,074.46
21440	$667.04	$132.91
21445	$879.16	$210.72
21451	$873.38	$379.00
21452	$696.20	$332.84
21453	$1,047.28	$337.30
21454	$659.84	$369.69
21461	$2,487.60	$595.68
21462	$2,632.29	$604.24
21465	$1,059.44	$505.96
21470	$1,327.77	$950.00
21480	$112.84	$70.74
21485	$807.18	$244.97
21490	$1,008.79	$680.56
21495	$798.91	$210.72
21497	$847.09	$266.57
21501	$508.37	$255.40
21502	$577.14	$258.38
21510	$486.10	$436.71
21550	$296.78	$74.46
21552	$484.45	$370.07
21554	$793.10	$605.36
21555	$462.32	$330.97
21556	$578.53	$399.11

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
21557	$1,039.90	$669.02
21558	$1,456.04	$1,132.16
21600	$612.04	$272.15
21610	$1,276.11	$446.39
21615	$663.03	$637.01
21616	$808.93	$687.27
21620	$548.25	$559.94
21627	$590.44	$732.31
21630	$1,308.94	$1,211.46
21632	$1,301.12	$1,114.67
21685	$1,100.47	$423.54
21700	$398.19	$421.82
21705	$588.18	$505.96
21720	$497.57	$337.30
21725	$573.81	$379.37
21740	$1,096.62	$1,078.18
21750	$733.98	$811.24
21811	$651.77	$514.89
21812	$780.88	$616.90
21813	$1,016.24	$840.28
21820	$156.76	$115.79
21825	$588.00	$630.30
21920	$289.64	$76.69
21925	$493.78	$269.17
21930	$522.57	$371.18
21931	$508.79	$386.08
21932	$716.22	$554.35
21933	$796.29	$609.08
21935	$1,108.14	$835.44
21936	$1,519.60	$1,174.98
22010	$1,033.08	$663.81
22015	$1,001.28	$658.23
22100	$946.79	$480.27
22101	$926.43	$497.02
22102	$862.63	$382.72
22103	$149.70	$118.76
22110	$1,132.60	$620.25
22112	$1,079.35	$625.09
22114	$1,084.72	$540.58
22116	$151.23	$116.90
22206	$2,627.43	$1,723.38

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
22207	$2,579.65	$1,702.16
22208	$624.69	$430.01
22210	$1,927.80	$1,048.02
22212	$1,606.91	$1,033.88
22214	$1,612.53	$970.96
22216	$389.82	$306.78
22220	$1,728.54	$1,065.15
22222	$1,692.68	$954.95
22224	$1,716.38	$1,013.40
22226	$388.86	$304.54
22305	$210.75	$124.35
22310	$336.19	$137.01
22315	$970.98	$397.99
22318	$1,761.56	$976.54
22319	$1,948.82	$1,104.24
22325	$1,555.85	$725.61
22326	$1,606.42	$1,011.91
22327	$1,623.66	$1,011.91
22328	$301.63	$234.92
22505	$138.91	$104.24
22510	$2,028.57	$393.89
22511	$2,010.11	$370.07
22512	$1,126.65	$181.68
22513	$8,531.35	$466.86
22514	$8,525.22	$435.62
22515	$5,167.72	$195.09
22532	$1,918.99	$823.71
22533	$1,793.01	$780.26
22534	$386.67	$207.00
22548	$2,113.54	$1,368.20
22551	$1,843.62	$1,422.88
22552	$426.96	$328.77
22554	$1,357.59	$1,083.39
22556	$1,797.60	$1,284.44
22558	$1,663.91	$1,209.60
22585	$353.15	$282.95
22586	$1,974.55	$1,224.12
22590	$1,702.95	$1,193.97
22595	$1,626.35	$1,125.09
22600	$1,394.79	$956.07
22610	$1,369.16	$943.78

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
22612	$1,717.88	$1,192.48
22614	$419.51	$327.62
22630	$1,690.26	$1,124.72
22632	$343.13	$266.19
22633	$1,997.42	$1,514.84
22634	$532.39	$402.53
22800	$1,466.30	$1,034.62
22802	$2,267.96	$1,689.87
22804	$2,618.37	$1,835.44
22808	$1,980.60	$1,258.37
22810	$2,186.59	$1,366.34
22812	$2,562.06	$1,653.01
22818	$2,354.45	$1,720.03
22819	$2,947.24	$1,928.89
22830	$882.76	$668.65
22840	$815.58	$367.83
22842	$818.31	$409.90
22843	$874.86	$511.54
22844	$1,058.84	$625.09
22845	$782.40	$357.78
22846	$812.77	$472.45
22847	$889.86	$524.57
22848	$386.85	$342.14
22849	$1,404.24	$718.54
22850	$785.77	$530.90
22851	$436.93	$382.35
22852	$754.28	$534.25
22855	$1,196.85	$481.01
22856	$1,748.54	$1,231.20
22857	$2,098.04	$927.39
22858	$535.61	$422.80
22861	$2,179.43	$1,492.55
22862	$2,105.30	$1,143.15
22864	$2,203.97	$1,366.34
22865	$2,224.88	$1,111.28
22900	$610.98	$403.95
22901	$717.38	$543.19
22902	$485.39	$357.41
22903	$474.94	$362.25
22904	$1,128.49	$844.00
22905	$1,428.36	$1,094.93

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
23000	$657.04	$253.16
23020	$751.45	$463.89
23030	$494.62	$280.71
23031	$481.19	$138.50
23035	$738.67	$762.47
23040	$784.86	$463.89
23044	$620.47	$463.89
23065	$240.97	$84.14
23066	$623.70	$186.52
23071	$455.76	$344.38
23073	$751.66	$568.50
23075	$521.67	$121.00
23076	$588.08	$488.83
23077	$1,236.75	$936.71
23078	$1,548.49	$1,138.87
23100	$545.93	$446.39
23101	$497.49	$431.87
23105	$696.66	$618.02
23106	$538.94	$618.02
23107	$719.68	$463.89
23120	$640.25	$358.52
23125	$772.92	$618.76
23130	$667.79	$358.52
23140	$582.29	$253.91
23145	$757.69	$379.37
23146	$678.09	$379.37
23150	$716.93	$400.59
23155	$864.21	$527.18
23156	$737.63	$527.18
23170	$606.22	$280.34
23172	$619.16	$267.31
23174	$819.07	$607.22
23180	$726.25	$388.31
23182	$712.07	$412.88
23184	$801.69	$405.43
23190	$620.84	$295.23
23195	$819.58	$640.73
23200	$1,607.24	$833.21
23210	$1,920.85	$827.25
23220	$2,101.82	$948.62
23330	$268.10	$111.69

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
23333	$496.05	$393.89
23334	$1,170.94	$922.19
23335	$1,389.75	$1,096.80
23350	$147.55	$172.37
23395	$1,398.79	$944.53
23397	$1,237.91	$957.93
23400	$1,055.61	$900.22
23405	$681.62	$320.55
23406	$837.41	$374.16
23410	$895.88	$590.47
23412	$928.71	$590.47
23415	$760.72	$336.56
23420	$1,055.89	$759.12
23430	$814.22	$505.96
23440	$822.34	$505.96
23450	$1,026.57	$716.68
23455	$1,085.82	$801.19
23460	$1,184.30	$843.26
23462	$1,150.62	$843.26
23465	$1,209.68	$716.68
23466	$1,219.92	$870.07
23470	$1,306.85	$843.26
23473	$1,763.95	$1,356.29
23474	$1,904.51	$1,463.51
23480	$893.04	$421.82
23485	$1,036.99	$548.03
23490	$917.03	$774.76
23491	$1,100.26	$916.23
23500	$241.86	$92.93
23505	$389.18	$151.15
23515	$786.63	$379.37
23520	$247.84	$178.70
23525	$415.95	$142.59
23530	$601.08	$421.82
23532	$678.63	$489.57
23540	$248.13	$192.11
23545	$376.99	$131.79
23550	$616.31	$478.03
23552	$714.93	$536.11
23570	$256.48	$95.79
23575	$440.10	$162.32

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
23585	$1,066.46	$505.96
23600	$362.74	$137.73
23605	$510.63	$215.93
23615	$964.14	$505.96
23616	$1,348.96	$1,173.49
23620	$298.95	$229.34
23625	$417.46	$210.72
23630	$853.22	$484.73
23650	$345.31	$140.27
23655	$440.46	$146.69
23660	$635.48	$478.03
23665	$467.63	$194.71
23670	$953.93	$505.96
23675	$605.39	$237.90
23680	$1,010.55	$590.47
23700	$214.72	$96.43
23800	$1,115.13	$843.26
23802	$1,374.05	$843.26
23900	$1,506.45	$1,011.91
23920	$1,220.79	$759.12
23921	$513.69	$337.30
23930	$393.89	$162.32
23931	$324.72	$113.92
23935	$554.71	$542.07
24000	$521.89	$372.30
24006	$770.14	$404.32
24065	$287.77	$121.74
24066	$696.85	$220.03
24071	$441.26	$334.70
24073	$750.32	$572.23
24075	$547.22	$337.30
24076	$591.67	$337.30
24079	$1,428.02	$1,051.38
24100	$458.39	$372.30
24101	$548.17	$400.97
24102	$672.87	$521.22
24105	$387.30	$202.53
24110	$634.43	$400.59
24115	$803.37	$527.18
24116	$937.60	$527.18
24120	$578.75	$337.30

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
24125	$672.05	$421.82
24126	$708.68	$421.82
24130	$556.33	$337.30
24134	$813.56	$778.48
24136	$687.01	$481.38
24138	$736.08	$526.80
24140	$763.60	$411.02
24145	$646.35	$304.17
24147	$680.56	$297.84
24149	$1,282.47	$813.85
24150	$1,689.29	$911.02
24152	$1,445.63	$630.68
24155	$917.06	$675.35
24160	$1,373.86	$278.48
24164	$796.04	$214.07
24200	$231.54	$110.57
24201	$608.50	$383.47
24220	$180.76	$204.39
24300	$464.77	$301.94
24301	$817.10	$613.18
24305	$630.76	$278.48
24310	$516.56	$226.36
24320	$850.21	$669.77
24330	$782.20	$337.30
24331	$855.75	$337.30
24332	$668.59	$411.02
24340	$669.19	$521.22
24341	$818.18	$449.74
24342	$844.94	$627.70
24343	$772.87	$544.67
24344	$1,193.63	$818.69
24345	$769.71	$544.67
24346	$1,193.02	$818.69
24357	$471.85	$316.08
24358	$571.86	$371.93
24359	$719.27	$472.82
24360	$963.21	$707.37
24361	$1,083.23	$855.92
24365	$693.61	$537.60
24366	$741.05	$463.89
24370	$1,683.05	$1,285.55

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
24371	$1,933.20	$1,478.78
24400	$889.54	$505.96
24410	$1,149.56	$590.47
24420	$1,071.46	$733.80
24430	$1,148.95	$716.68
24435	$1,174.27	$843.26
24470	$617.07	$295.23
24495	$711.53	$580.42
24498	$942.40	$766.19
24500	$397.19	$176.90
24505	$549.92	$269.17
24515	$955.12	$463.89
24516	$936.02	$562.92
24530	$421.44	$198.98
24535	$673.91	$300.82
24538	$811.79	$421.82
24545	$1,011.64	$421.82
24546	$1,130.41	$661.58
24560	$355.71	$165.99
24565	$582.89	$259.87
24566	$785.55	$319.06
24575	$797.95	$379.37
24576	$377.74	$303.05
24577	$598.32	$269.17
24579	$911.61	$379.37
24582	$883.36	$348.85
24586	$1,177.43	$835.07
24587	$1,175.80	$879.74
24600	$399.16	$221.73
24605	$515.68	$173.12
24615	$776.06	$505.96
24620	$600.24	$228.96
24635	$735.87	$575.95
24640	$149.94	$113.55
24650	$291.00	$149.31
24655	$479.91	$231.20
24665	$713.63	$337.30
24666	$800.23	$463.89
24670	$322.96	$154.54
24675	$500.13	$239.76
24685	$716.05	$337.30

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
24800	$903.72	$649.29
24802	$1,064.51	$674.61
24900	$796.01	$421.82
24920	$796.37	$379.37
24925	$598.03	$261.35
24930	$835.22	$421.82
24931	$869.70	$560.68
24935	$1,198.61	$950.48
25000	$372.46	$185.41
25001	$377.41	$251.30
25020	$635.91	$498.14
25023	$1,205.72	$485.48
25024	$840.37	$578.18
25025	$1,308.78	$931.87
25028	$578.99	$455.70
25031	$394.16	$409.90
25035	$632.11	$362.25
25040	$614.21	$263.96
25065	$285.67	$77.44
25066	$394.39	$189.87
25071	$463.08	$351.08
25073	$580.36	$439.31
25075	$534.36	$328.37
25076	$564.80	$171.76
25077	$959.04	$744.97
25078	$1,258.13	$919.58
25085	$492.25	$337.30
25100	$379.06	$210.72
25101	$442.68	$286.67
25105	$528.62	$337.30
25107	$674.75	$316.08
25109	$588.48	$422.29
25110	$375.97	$190.25
25111	$353.05	$210.72
25112	$423.81	$210.72
25115	$828.33	$421.82
25116	$657.22	$421.82
25118	$419.12	$372.30
25119	$541.72	$421.82
25120	$544.35	$317.94
25125	$633.08	$421.82

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
25126	$648.29	$421.82
25130	$489.97	$210.72
25135	$604.43	$295.23
25136	$535.19	$295.23
25145	$565.42	$603.13
25150	$618.20	$300.45
25151	$636.33	$353.31
25170	$1,604.85	$897.24
25210	$534.28	$295.23
25215	$674.50	$421.82
25230	$473.99	$210.72
25240	$469.19	$253.16
25246	$182.12	$182.05
25248	$454.14	$465.75
25250	$574.68	$295.23
25251	$780.15	$388.68
25259	$461.21	$298.21
25260	$689.57	$373.79
25263	$679.71	$395.01
25265	$814.60	$560.68
25270	$536.13	$325.39
25272	$603.83	$352.94
25274	$724.25	$400.22
25275	$733.50	$525.32
25280	$615.92	$348.85
25290	$478.28	$340.28
25295	$572.32	$333.95
25300	$744.94	$337.30
25301	$701.76	$337.30
25310	$677.76	$400.59
25312	$779.89	$429.63
25315	$838.47	$505.96
25316	$993.50	$1,147.43
25320	$1,080.45	$691.73
25332	$916.81	$777.36
25335	$875.80	$825.39
25337	$972.02	$396.87
25350	$735.32	$421.82
25355	$818.40	$505.96
25360	$713.51	$421.82
25365	$991.74	$590.47

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
25370	$1,095.78	$505.96
25375	$1,035.21	$759.12
25390	$838.37	$463.89
25391	$1,081.68	$581.90
25392	$942.97	$649.29
25393	$1,234.21	$733.80
25394	$847.96	$612.43
25400	$874.70	$590.47
25405	$1,127.06	$716.68
25415	$1,045.49	$843.26
25420	$1,266.17	$969.84
25425	$1,046.33	$618.02
25426	$1,219.50	$733.80
25430	$798.03	$543.93
25431	$856.05	$534.25
25440	$834.88	$590.47
25441	$1,020.68	$844.38
25442	$879.25	$385.70
25443	$851.15	$404.69
25444	$899.15	$404.69
25445	$786.58	$404.69
25446	$1,271.64	$999.25
25447	$903.58	$667.91
25449	$1,123.69	$993.67
25450	$564.55	$344.01
25455	$667.61	$359.64
25490	$783.40	$822.41
25491	$805.31	$829.11
25492	$983.63	$984.36
25500	$303.30	$148.06
25505	$554.51	$251.67
25515	$730.93	$337.30
25520	$613.23	$323.90
25525	$856.20	$629.93
25526	$1,036.63	$669.77
25530	$292.10	$142.50
25535	$538.38	$247.21
25545	$681.84	$337.30
25560	$308.42	$148.97
25565	$571.16	$265.82
25574	$734.63	$480.64

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
25575	$982.29	$505.96
25600	$365.69	$157.38
25605	$599.74	$271.41
25606	$725.59	$519.98
25607	$803.50	$579.28
25608	$898.99	$659.88
25609	$1,141.64	$841.01
25622	$337.94	$156.37
25624	$525.36	$236.04
25628	$786.90	$554.35
25630	$337.53	$163.65
25635	$470.79	$230.45
25645	$619.12	$265.08
25650	$354.16	$310.87
25651	$532.45	$320.18
25652	$682.17	$474.68
25660	$447.60	$167.91
25670	$661.63	$337.30
25671	$581.13	$392.78
25675	$477.77	$229.71
25676	$684.57	$337.30
25680	$517.56	$253.16
25685	$797.35	$505.96
25690	$521.96	$231.94
25695	$690.34	$349.96
25800	$797.94	$505.96
25805	$919.04	$720.77
25810	$946.31	$673.12
25820	$674.30	$505.96
25825	$829.40	$607.59
25830	$1,042.27	$418.09
25900	$772.28	$379.37
25905	$695.53	$393.15
25907	$632.49	$367.09
25909	$745.98	$385.33
25915	$1,280.83	$1,179.82
25920	$757.67	$337.30
25922	$624.21	$274.01
25924	$660.80	$337.30
25927	$894.93	$421.82
25929	$643.68	$266.94

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
25931	$723.35	$421.82
26010	$298.45	$104.62
26011	$440.46	$141.85
26020	$476.93	$256.14
26025	$463.76	$260.24
26030	$538.54	$541.70
26034	$588.71	$317.57
26035	$935.39	$818.32
26037	$618.86	$310.50
26040	$343.61	$226.73
26045	$513.54	$289.28
26055	$631.14	$210.72
26060	$292.30	$157.86
26070	$344.84	$224.50
26075	$365.68	$234.92
26080	$429.71	$252.42
26100	$366.67	$210.72
26105	$366.41	$241.62
26110	$353.69	$228.22
26111	$457.04	$343.26
26113	$599.77	$451.97
26115	$563.91	$177.96
26116	$577.04	$287.04
26117	$817.57	$686.89
26118	$1,144.59	$878.26
26121	$652.65	$351.08
26123	$911.74	$421.82
26125	$295.52	$210.72
26130	$506.95	$421.82
26135	$600.76	$359.64
26140	$551.90	$329.86
26145	$559.51	$421.82
26160	$647.14	$164.18
26170	$444.44	$209.23
26180	$486.18	$221.15
26185	$599.16	$283.32
26200	$493.05	$288.90
26205	$657.39	$346.98
26210	$485.17	$285.93
26215	$615.04	$332.84
26230	$545.21	$297.84

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
26235	$539.87	$285.18
26236	$483.79	$265.82
26250	$1,176.76	$505.96
26260	$874.75	$421.82
26262	$686.65	$421.82
26320	$381.25	$295.23
26340	$373.15	$229.34
26341	$109.70	$63.49
26350	$783.52	$376.40
26352	$896.97	$581.90
26356	$967.28	$433.36
26357	$941.18	$441.55
26358	$1,042.87	$598.66
26370	$830.01	$405.81
26372	$961.61	$581.90
26373	$924.61	$422.93
26390	$910.73	$396.87
26392	$1,054.68	$539.84
26410	$623.51	$298.58
26412	$747.02	$351.82
26415	$837.42	$708.49
26416	$781.97	$562.55
26418	$638.86	$293.00
26420	$774.70	$399.11
26426	$548.13	$338.05
26428	$825.91	$463.89
26432	$549.94	$250.56
26433	$584.28	$507.07
26434	$708.34	$303.80
26437	$682.02	$554.35
26440	$682.49	$340.28
26442	$1,055.04	$423.68
26445	$637.43	$323.90
26449	$761.78	$716.31
26450	$448.23	$182.05
26455	$441.65	$210.72
26460	$433.15	$172.00
26471	$672.81	$295.23
26474	$660.10	$286.67
26476	$636.22	$337.30
26477	$637.52	$337.30

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
26478	$679.79	$337.30
26479	$672.41	$337.30
26480	$825.82	$383.47
26483	$922.35	$463.89
26485	$884.52	$430.01
26489	$996.14	$463.89
26490	$857.27	$400.59
26492	$950.89	$463.89
26494	$860.15	$505.96
26496	$933.37	$783.69
26497	$942.61	$421.82
26498	$1,238.83	$632.54
26499	$904.51	$421.82
26500	$681.47	$309.01
26502	$761.78	$337.30
26508	$703.30	$349.96
26510	$651.95	$593.82
26516	$764.16	$332.46
26517	$897.36	$442.66
26518	$899.40	$527.18
26520	$716.92	$345.12
26525	$717.48	$347.73
26530	$586.79	$405.06
26531	$682.09	$424.42
26535	$461.69	$337.30
26536	$783.26	$404.69
26540	$718.16	$421.82
26541	$872.31	$497.39
26542	$740.10	$421.82
26545	$753.59	$337.30
26546	$1,082.82	$521.96
26548	$828.18	$370.44
26550	$1,674.24	$1,230.45
26551	$3,071.84	$2,463.88
26553	$3,539.61	$2,437.45
26554	$3,569.18	$2,846.61
26555	$1,458.47	$1,214.07
26556	$3,679.81	$2,579.67
26560	$614.38	$400.59
26561	$1,011.81	$505.96
26562	$1,457.92	$757.63

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
26565	$739.56	$337.30
26567	$743.77	$323.16
26568	$984.14	$842.89
26580	$1,589.51	$1,061.80
26590	$1,454.39	$1,102.38
26593	$658.35	$558.45
26600	$327.18	$138.83
26605	$356.59	$183.17
26607	$498.80	$406.55
26608	$523.76	$233.43
26615	$632.10	$295.23
26641	$404.79	$207.00
26645	$463.97	$230.08
26650	$526.07	$253.16
26665	$691.52	$421.82
26670	$372.78	$201.41
26675	$496.56	$221.52
26676	$550.45	$231.20
26685	$632.39	$255.03
26686	$680.58	$521.96
26700	$353.44	$139.24
26705	$459.72	$203.65
26706	$482.74	$178.33
26715	$627.77	$253.16
26720	$220.35	$73.68
26725	$371.68	$135.52
26727	$515.50	$218.17
26735	$653.76	$229.34
26740	$255.46	$88.61
26742	$405.31	$215.19
26746	$810.13	$225.61
26750	$203.87	$81.85
26755	$346.35	$128.07
26756	$460.43	$365.23
26765	$551.07	$180.57
26770	$302.38	$124.72
26775	$422.55	$192.85
26776	$487.04	$207.00
26785	$601.20	$181.68
26820	$857.76	$421.82
26841	$793.35	$338.42

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
26842	$855.59	$421.82
26843	$805.94	$360.39
26844	$884.46	$421.82
26850	$755.25	$329.11
26852	$866.01	$377.51
26860	$621.43	$265.45
26861	$111.31	$93.08
26862	$792.53	$352.94
26863	$247.14	$126.58
26910	$784.28	$339.91
26951	$717.75	$261.35
26952	$705.45	$310.87
26990	$682.97	$675.35
26991	$778.70	$299.70
26992	$1,044.80	$970.59
27000	$455.69	$213.33
27001	$585.83	$249.81
27003	$650.48	$337.30
27005	$788.28	$330.23
27006	$801.71	$337.68
27025	$996.79	$421.82
27027	$977.88	$649.66
27030	$1,016.61	$590.47
27033	$1,056.20	$590.47
27035	$1,247.01	$716.68
27036	$1,098.77	$736.78
27040	$385.75	$136.63
27041	$749.04	$303.80
27043	$508.51	$385.70
27045	$811.61	$611.69
27047	$514.88	$513.77
27048	$662.54	$438.57
27049	$1,453.06	$837.30
27050	$422.33	$253.16
27052	$630.78	$521.22
27054	$747.53	$744.60
27057	$1,099.72	$720.03
27059	$1,960.72	$1,488.08
27060	$506.78	$210.72
27062	$499.99	$205.51
27065	$560.21	$236.41

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
27066	$883.77	$400.59
27067	$1,115.43	$938.20
27070	$924.44	$466.86
27071	$1,000.40	$505.96
27075	$2,268.69	$1,090.09
27076	$2,733.66	$1,320.18
27077	$3,070.79	$1,408.04
27078	$2,234.91	$915.49
27080	$558.46	$253.16
27086	$326.99	$107.97
27087	$681.67	$539.46
27090	$903.87	$590.47
27091	$1,733.44	$675.72
27093	$212.77	$201.41
27095	$274.26	$206.63
27096	$181.33	$293.74
27097	$733.42	$597.54
27098	$729.87	$603.87
27100	$892.52	$632.54
27105	$943.86	$674.61
27110	$1,052.20	$759.12
27111	$979.48	$699.92
27120	$1,411.61	$1,011.91
27122	$1,194.81	$843.26
27125	$1,232.24	$1,042.44
27130	$1,471.40	$1,489.20
27134	$2,075.07	$1,600.15
27137	$1,597.51	$1,237.90
27140	$973.20	$505.96
27146	$1,397.28	$1,011.91
27147	$1,596.77	$1,186.89
27151	$1,723.35	$1,058.82
27156	$1,860.94	$1,265.08
27161	$1,320.56	$843.26
27165	$1,494.54	$1,011.91
27170	$1,276.24	$949.74
27175	$726.21	$526.06
27176	$979.22	$819.06
27177	$1,211.62	$837.30
27178	$999.60	$819.06
27179	$1,061.52	$674.61

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
27181	$1,047.20	$893.52
27185	$662.63	$297.84
27187	$1,078.63	$846.98
27193	$514.43	$210.35
27194	$768.99	$326.13
27200	$199.66	$145.20
27202	$578.02	$983.99
27215	$677.70	$635.52
27216	$1,002.88	$465.00
27217	$941.73	$728.59
27218	$1,297.64	$818.32
27220	$580.06	$424.05
27222	$1,061.56	$388.31
27226	$1,148.18	$811.99
27227	$1,798.99	$977.29
27228	$2,049.04	$1,033.88
27232	$813.92	$400.59
27235	$989.41	$819.06
27236	$1,300.80	$902.46
27238	$503.99	$244.91
27240	$1,040.39	$400.59
27244	$1,338.30	$843.26
27245	$1,338.03	$934.10
27246	$421.50	$370.07
27248	$807.49	$344.75
27250	$190.98	$220.95
27252	$824.20	$315.71
27253	$1,022.51	$716.68
27254	$1,376.30	$1,011.91
27256	$325.28	$149.77
27257	$394.15	$166.05
27258	$1,206.74	$716.68
27259	$1,686.53	$1,229.33
27265	$436.43	$348.10
27266	$634.54	$461.28
27267	$476.19	$307.89
27268	$581.52	$378.63
27269	$1,345.48	$897.62
27275	$199.14	$92.33
27279	$754.31	$486.66
27280	$1,467.66	$590.47

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
27282	$899.62	$760.61
27284	$1,687.55	$966.12
27286	$1,777.84	$1,037.60
27290	$1,743.91	$1,223.01
27295	$1,361.65	$1,011.91
27301	$743.12	$352.20
27303	$695.09	$690.99
27305	$527.12	$253.16
27306	$391.43	$196.57
27307	$504.70	$223.75
27310	$797.31	$505.96
27323	$303.28	$125.84
27324	$435.55	$193.22
27325	$597.80	$438.77
27326	$566.74	$391.45
27327	$512.38	$384.59
27328	$673.82	$386.45
27329	$1,120.83	$892.40
27330	$459.06	$446.76
27331	$520.05	$446.76
27332	$699.75	$523.83
27333	$640.67	$521.22
27334	$745.82	$632.91
27335	$831.89	$645.94
27337	$454.26	$345.12
27339	$816.39	$618.76
27340	$409.27	$210.72
27345	$526.63	$337.30
27347	$580.18	$274.76
27350	$711.17	$505.96
27355	$657.01	$463.89
27356	$802.72	$463.89
27357	$887.04	$590.47
27358	$299.37	$168.65
27360	$928.81	$464.63
27364	$1,687.68	$1,284.81
27365	$2,242.88	$1,027.55
27370	$176.24	$201.79
27372	$677.16	$238.64
27380	$650.85	$463.89
27381	$869.34	$695.83

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
27385	$631.81	$514.52
27386	$905.45	$675.72
27390	$491.14	$253.16
27391	$630.49	$337.30
27392	$775.80	$505.96
27393	$554.29	$253.16
27394	$699.23	$337.30
27395	$956.50	$505.96
27396	$672.43	$595.68
27397	$982.95	$674.61
27400	$757.43	$606.10
27403	$698.57	$540.21
27405	$736.12	$576.32
27407	$846.04	$650.78
27409	$1,036.98	$759.12
27412	$1,795.35	$834.48
27415	$1,490.56	$686.26
27416	$1,063.81	$704.39
27418	$902.88	$674.61
27420	$810.95	$610.94
27422	$808.69	$618.39
27424	$815.38	$632.91
27425	$492.10	$337.30
27428	$1,214.14	$851.08
27429	$1,358.37	$959.79
27430	$806.29	$605.36
27435	$881.08	$590.47
27437	$720.34	$558.45
27438	$915.30	$753.16
27440	$869.18	$632.54
27441	$896.08	$744.60
27442	$946.02	$893.52
27443	$878.38	$776.99
27447	$1,470.99	$1,489.20
27448	$844.87	$711.47
27450	$1,099.23	$801.19
27454	$1,412.48	$843.26
27455	$1,024.48	$505.96
27457	$1,028.89	$590.47
27465	$1,341.61	$843.26
27466	$1,281.59	$1,028.66

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
27468	$1,336.88	$1,489.20
27470	$1,278.56	$843.26
27472	$1,371.83	$969.84
27475	$721.85	$552.12
27477	$796.74	$628.07
27479	$856.96	$754.65
27485	$730.79	$463.89
27487	$1,906.95	$1,428.52
27488	$1,305.94	$843.26
27496	$593.41	$256.14
27497	$632.64	$312.73
27498	$704.41	$356.66
27499	$761.60	$411.02
27500	$569.17	$345.13
27501	$550.29	$358.52
27502	$830.33	$357.78
27503	$873.85	$466.86
27506	$1,454.53	$801.19
27507	$1,056.23	$809.01
27508	$577.13	$257.26
27509	$704.09	$293.00
27510	$742.45	$337.30
27511	$1,081.14	$800.82
27513	$1,343.61	$902.46
27514	$1,048.74	$843.26
27516	$560.33	$494.04
27517	$734.77	$328.74
27519	$967.25	$699.92
27520	$358.88	$176.52
27524	$820.38	$505.96
27530	$336.42	$201.34
27532	$673.77	$250.19
27535	$973.93	$593.82
27536	$1,294.41	$590.47
27538	$521.34	$453.83
27540	$882.53	$590.47
27550	$555.00	$257.37
27552	$683.73	$262.84
27556	$949.65	$632.54
27557	$1,135.52	$632.54
27558	$1,289.59	$859.64

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
27560	$398.88	$201.79
27562	$513.24	$190.62
27566	$970.43	$505.96
27570	$166.39	$77.81
27580	$1,562.07	$843.26
27590	$867.40	$611.32
27591	$1,048.21	$843.26
27592	$740.25	$590.47
27594	$554.37	$263.96
27596	$786.34	$706.63
27598	$785.82	$590.47
27600	$448.07	$231.20
27601	$484.23	$433.73
27602	$532.74	$295.23
27603	$590.07	$599.40
27604	$554.70	$234.18
27605	$386.67	$176.47
27606	$309.33	$218.17
27607	$662.82	$409.16
27610	$711.84	$379.37
27612	$610.70	$421.82
27613	$283.46	$132.91
27614	$645.81	$262.47
27615	$1,107.88	$864.85
27616	$1,375.06	$1,051.38
27618	$502.00	$497.39
27619	$512.64	$368.95
27620	$498.93	$379.37
27625	$641.10	$505.96
27626	$675.86	$548.03
27630	$631.29	$259.12
27632	$451.16	$341.40
27634	$746.00	$554.73
27635	$642.96	$421.82
27637	$819.34	$548.03
27638	$832.69	$463.89
27640	$908.77	$505.96
27641	$730.06	$505.96
27645	$1,923.46	$1,011.91
27646	$1,667.20	$931.49
27647	$1,112.93	$730.08

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
27648	$186.65	$160.09
27650	$723.31	$463.89
27652	$746.95	$590.10
27654	$775.63	$590.47
27656	$715.38	$286.67
27658	$410.89	$288.53
27659	$528.58	$337.30
27664	$398.15	$243.48
27665	$453.54	$316.46
27675	$533.65	$278.48
27676	$659.89	$291.14
27680	$471.74	$220.40
27681	$595.76	$253.16
27685	$745.41	$295.23
27686	$610.77	$295.23
27687	$498.91	$328.74
27690	$691.60	$337.30
27691	$820.49	$421.82
27692	$112.86	$84.14
27695	$522.32	$421.82
27696	$609.03	$557.33
27698	$701.14	$584.51
27700	$650.22	$555.10
27702	$1,052.22	$927.77
27703	$1,207.11	$915.11
27704	$631.63	$516.75
27705	$828.38	$505.96
27707	$445.47	$295.23
27709	$1,268.89	$590.47
27712	$1,199.14	$759.12
27715	$1,164.20	$901.34
27720	$953.75	$759.12
27722	$957.07	$766.19
27724	$1,371.53	$927.77
27726	$1,051.04	$669.77
27727	$1,128.00	$868.20
27730	$622.95	$505.96
27732	$444.85	$326.13
27734	$715.94	$545.42
27740	$772.36	$759.12
27742	$848.94	$830.23

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
27745	$823.76	$704.39
27750	$384.17	$184.99
27752	$590.69	$272.52
27756	$627.27	$505.96
27758	$970.43	$548.03
27759	$1,086.52	$722.26
27760	$370.85	$176.93
27762	$523.45	$252.05
27766	$669.54	$379.37
27767	$312.74	$190.99
27768	$483.79	$291.88
27769	$795.92	$501.86
27780	$341.06	$130.37
27781	$466.01	$419.58
27784	$782.59	$337.30
27786	$351.71	$173.92
27788	$464.59	$220.77
27792	$714.40	$379.37
27808	$372.38	$352.20
27810	$514.30	$250.56
27814	$843.28	$505.96
27816	$355.90	$182.97
27818	$532.45	$260.24
27822	$920.65	$785.55
27823	$1,043.05	$840.28
27824	$346.96	$189.87
27825	$597.41	$330.23
27826	$910.68	$743.11
27827	$1,180.71	$904.32
27828	$1,411.44	$965.37
27829	$750.58	$546.54
27830	$420.46	$370.81
27831	$429.99	$315.34
27832	$826.09	$337.30
27840	$403.74	$170.32
27842	$542.60	$191.36
27846	$792.43	$505.96
27848	$884.36	$677.59
27860	$192.02	$93.82
27870	$1,122.93	$716.68
27871	$747.36	$621.37

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
27880	$993.70	$505.96
27881	$949.02	$560.68
27882	$653.23	$442.66
27884	$629.81	$583.77
27886	$719.42	$621.00
27888	$745.47	$505.96
27889	$704.78	$505.96
27892	$603.20	$259.12
27893	$660.80	$253.16
27894	$928.42	$337.30
28001	$313.70	$123.23
28002	$496.48	$206.25
28003	$791.13	$557.33
28005	$635.00	$570.36
28008	$488.78	$183.92
28010	$259.15	$148.18
28011	$358.64	$193.22
28020	$612.96	$253.16
28022	$554.13	$189.87
28024	$524.15	$186.89
28035	$595.67	$370.81
28039	$575.54	$405.91
28041	$507.26	$371.56
28043	$454.20	$301.94
28046	$797.79	$659.72
28047	$1,163.49	$774.76
28050	$482.88	$253.16
28052	$509.88	$168.28
28054	$447.12	$160.09
28055	$412.62	$335.18
28060	$587.07	$253.16
28062	$661.88	$483.25
28070	$604.54	$253.16
28072	$574.89	$200.67
28080	$596.50	$164.18
28086	$622.34	$295.23
28088	$510.34	$231.94
28090	$535.28	$183.92
28092	$482.76	$182.43
28100	$687.36	$253.54
28102	$662.26	$295.23

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
28103	$431.18	$351.45
28104	$598.16	$205.88
28106	$509.89	$237.16
28107	$633.81	$395.38
28108	$501.58	$170.14
28110	$528.23	$187.64
28111	$558.12	$328.74
28112	$556.63	$198.81
28113	$670.73	$203.28
28114	$1,206.22	$505.96
28116	$847.08	$295.23
28118	$671.11	$295.23
28119	$595.52	$295.23
28120	$763.54	$276.99
28122	$675.27	$276.62
28124	$541.37	$208.86
28126	$451.77	$168.28
28130	$703.72	$421.82
28140	$670.23	$253.16
28150	$486.19	$187.27
28153	$469.53	$320.55
28160	$480.72	$175.35
28171	$923.79	$562.55
28173	$832.11	$572.23
28175	$537.12	$431.12
28190	$294.23	$123.98
28192	$535.06	$366.72
28193	$599.54	$218.54
28200	$556.61	$253.16
28202	$672.99	$337.30
28208	$538.86	$183.17
28210	$646.18	$251.30
28220	$511.11	$210.72
28222	$572.68	$253.16
28225	$467.26	$164.18
28226	$689.47	$183.17
28230	$494.76	$180.19
28232	$442.68	$167.91
28234	$467.39	$170.14
28238	$754.35	$328.74
28240	$502.24	$179.82

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
28250	$657.10	$253.16
28260	$770.26	$370.81
28261	$1,092.60	$421.82
28262	$1,627.89	$649.29
28264	$1,115.96	$505.96
28270	$558.21	$197.32
28272	$449.86	$165.67
28280	$587.20	$206.25
28285	$605.85	$202.53
28286	$514.16	$192.85
28288	$686.29	$201.04
28289	$823.85	$319.43
28290	$667.79	$227.85
28292	$889.65	$295.23
28293	$1,186.83	$309.01
28294	$864.79	$400.59
28296	$803.51	$400.59
28297	$912.45	$400.59
28298	$813.63	$295.23
28299	$1,003.13	$552.49
28300	$713.55	$400.59
28302	$780.48	$378.63
28304	$926.69	$337.30
28305	$729.09	$426.66
28306	$695.63	$295.23
28307	$771.40	$464.63
28308	$642.59	$236.04
28309	$988.31	$736.04
28310	$621.26	$215.19
28312	$580.41	$196.20
28313	$599.80	$398.73
28315	$546.41	$190.62
28320	$668.28	$591.21
28322	$887.59	$271.41
28340	$652.57	$476.17
28341	$754.78	$536.11
28344	$530.11	$320.18
28345	$591.02	$414.00
28360	$1,003.92	$892.40
28400	$278.96	$161.90
28405	$436.56	$418.47

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
28406	$576.15	$454.58
28415	$1,208.52	$919.95
28420	$1,368.34	$934.47
28430	$265.86	$287.04
28435	$354.48	$180.94
28436	$497.24	$395.01
28445	$1,159.17	$421.82
28446	$1,316.74	$867.46
28450	$242.76	$144.42
28455	$323.75	$145.57
28456	$357.51	$134.40
28465	$684.90	$491.06
28470	$246.32	$138.66
28475	$286.37	$154.88
28476	$393.72	$157.11
28485	$579.57	$469.47
28490	$164.96	$57.06
28495	$200.83	$65.90
28496	$505.55	$158.97
28505	$750.02	$385.33
28510	$139.58	$52.47
28515	$182.23	$61.80
28525	$641.60	$350.33
28530	$130.36	$165.30
28531	$398.11	$276.99
28540	$232.84	$110.20
28545	$327.29	$106.85
28546	$640.00	$141.47
28555	$986.13	$285.55
28570	$250.93	$118.39
28575	$407.12	$124.35
28576	$430.12	$175.35
28585	$955.20	$421.82
28600	$245.83	$131.05
28605	$364.80	$154.50
28606	$435.64	$325.76
28615	$868.25	$567.01
28630	$175.28	$61.06
28635	$195.74	$84.51
28636	$322.94	$148.55
28645	$739.92	$210.72

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
28660	$130.07	$89.72
28665	$171.00	$89.72
28666	$206.07	$196.57
28675	$661.45	$250.56
28705	$1,363.24	$769.54
28715	$1,026.95	$597.91
28725	$852.33	$421.82
28730	$803.70	$463.89
28735	$854.76	$590.47
28737	$755.64	$379.37
28740	$951.19	$379.37
28750	$916.30	$299.33
28755	$578.28	$205.51
28760	$888.66	$261.35
28800	$594.04	$421.82
28805	$796.93	$421.82
28810	$473.07	$253.16
28820	$640.05	$228.22
28825	$611.67	$202.53
28890	$364.28	$296.72
29000	$320.57	$216.68
29010	$266.90	$213.33
29015	$320.54	$201.41
29035	$218.97	$244.97
29040	$252.99	$192.11
29044	$321.06	$304.91
29046	$271.99	$310.13
29049	$93.19	$121.00
29055	$250.42	$201.79
29058	$135.69	$138.12
29065	$107.53	$92.70
29075	$97.09	$82.65
29085	$106.85	$83.40
29086	$88.65	$46.54
29105	$98.08	$66.27
29125	$72.80	$52.87
29126	$86.22	$64.41
29130	$45.21	$22.34
29131	$56.55	$33.51
29200	$32.77	$35.00
29240	$31.95	$35.74

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
29260	$32.07	$28.29
29280	$32.49	$52.12
29305	$277.69	$247.58
29325	$304.65	$205.14
29345	$151.37	$121.37
29355	$155.93	$128.07
29358	$179.65	$137.75
29365	$136.75	$103.13
29405	$91.50	$85.26
29425	$87.93	$83.40
29435	$129.63	$130.68
29440	$48.66	$50.63
29445	$148.69	$136.63
29450	$157.95	$68.88
29505	$93.86	$68.88
29515	$80.26	$56.59
29520	$34.83	$30.16
29530	$31.81	$29.78
29540	$28.51	$17.50
29550	$20.97	$16.75
29580	$58.60	$27.18
29581	$70.93	$77.81
29582	$80.42	$12.83
29583	$49.93	$9.39
29584	$80.42	$12.83
29700	$70.18	$22.71
29705	$73.81	$29.04
29710	$134.73	$49.52
29720	$95.39	$90.10
29730	$71.52	$28.29
29740	$109.67	$72.97
29750	$97.91	$62.17
29800	$560.36	$383.10
29804	$709.07	$460.91
29805	$517.94	$301.19
29806	$1,156.19	$846.24
29807	$1,128.70	$823.16
29819	$641.09	$295.23
29820	$586.03	$383.10
29821	$640.41	$418.84
29822	$622.92	$407.30

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
29823	$679.58	$444.15
29824	$732.95	$517.50
29825	$634.37	$414.74
29826	$189.39	$421.82
29827	$1,153.87	$493.96
29828	$996.41	$666.79
29830	$497.61	$386.82
29834	$534.06	$411.02
29835	$553.44	$357.04
29836	$624.51	$410.65
29837	$573.66	$374.91
29838	$642.60	$419.95
29840	$496.70	$267.31
29843	$531.04	$363.74
29844	$544.12	$374.91
29845	$631.63	$455.70
29846	$570.03	$537.60
29847	$585.51	$431.50
29848	$561.28	$250.56
29850	$675.98	$482.50
29851	$963.46	$638.12
29855	$854.37	$638.12
29856	$1,084.97	$683.54
29860	$722.16	$390.92
29861	$786.72	$568.87
29862	$884.71	$606.48
29863	$884.43	$586.00
29866	$1,137.11	$493.43
29867	$1,374.77	$600.48
29868	$1,741.55	$845.74
29870	$653.07	$278.48
29871	$564.00	$337.30
29873	$578.57	$197.24
29874	$588.23	$456.07
29875	$543.16	$446.76
29876	$719.49	$521.22
29877	$681.47	$477.29
29879	$724.53	$511.54
29880	$616.52	$551.00
29881	$594.49	$551.00
29882	$765.13	$558.45

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
29883	$918.36	$583.39
29884	$674.77	$577.07
29885	$821.71	$618.02
29886	$697.27	$500.74
29887	$815.85	$618.02
29888	$1,073.84	$674.61
29889	$1,331.35	$674.61
29891	$742.03	$542.81
29892	$639.26	$566.64
29893	$693.30	$315.34
29894	$548.78	$421.82
29895	$522.95	$357.04
29897	$555.33	$402.08
29898	$619.60	$415.86
29899	$1,128.25	$738.27
29900	$506.54	$331.35
29901	$585.67	$406.55
29902	$618.96	$435.96
29904	$697.45	$450.11
29905	$750.23	$485.11
29906	$788.69	$511.17
29907	$956.47	$623.60
29914	$1,086.13	$868.08
29915	$1,105.16	$884.40
29916	$1,106.80	$884.40
33010	$127.92	$54.73
33011	$128.60	$55.10
33015	$550.19	$744.60
33020	$944.02	$773.64
33025	$856.16	$774.76
33030	$2,138.08	$1,173.49
33031	$2,637.71	$1,350.33
33050	$1,073.00	$699.92
33120	$2,237.36	$1,861.50
33130	$1,477.54	$877.14
33202	$832.05	$669.98
33203	$862.84	$688.59
33206	$497.81	$744.60
33207	$529.71	$744.60
33208	$573.05	$744.60
33210	$190.61	$260.61

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
33211	$194.91	$175.35
33212	$360.12	$295.23
33213	$375.08	$355.92
33214	$528.12	$396.87
33215	$334.04	$151.18
33216	$414.19	$446.76
33217	$405.81	$314.22
33218	$433.96	$210.72
33220	$434.33	$295.23
33221	$403.08	$291.26
33222	$379.02	$307.52
33223	$453.71	$369.32
33224	$550.41	$279.60
33225	$499.21	$258.35
33226	$527.86	$268.82
33227	$378.49	$278.10
33228	$394.70	$289.79
33229	$416.11	$301.48
33230	$427.46	$312.84
33231	$445.04	$324.53
33233	$264.47	$155.62
33234	$535.22	$266.19
33235	$698.94	$323.53
33236	$843.43	$451.97
33237	$906.07	$676.84
33238	$1,005.09	$755.02
33240	$407.56	$383.84
33241	$248.27	$150.04
33243	$1,466.64	$896.13
33244	$936.21	$546.16
33249	$996.90	$895.01
33250	$1,565.81	$1,531.27
33251	$1,737.66	$1,645.19
33254	$1,469.84	$1,165.85
33255	$1,733.30	$1,403.67
33256	$2,087.18	$1,674.29
33257	$627.65	$460.91
33258	$703.66	$519.73
33259	$908.75	$679.08
33261	$1,754.16	$1,237.90
33262	$415.62	$301.74

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
33263	$431.82	$313.43
33264	$449.94	$325.13
33265	$1,459.00	$1,165.85
33266	$1,974.00	$1,592.63
33270	$639.21	$508.93
33271	$539.33	$428.89
33272	$379.49	$316.08
33273	$441.44	$344.75
33282	$259.23	$269.92
33284	$229.82	$211.84
33300	$2,611.41	$1,011.91
33305	$4,363.24	$1,223.01
33310	$1,259.35	$1,011.91
33315	$2,040.00	$1,489.20
33320	$1,138.51	$699.92
33321	$1,320.24	$1,236.41
33322	$1,487.75	$1,223.01
33330	$1,525.88	$1,223.01
33335	$2,002.29	$1,724.87
33361	$1,447.41	$1,078.93
33362	$1,581.00	$1,180.19
33363	$1,643.90	$1,222.26
33364	$1,721.52	$1,302.31
33365	$1,895.14	$1,418.46
33366	$2,049.73	$1,607.22
33367	$665.10	$496.28
33368	$792.25	$601.64
33369	$1,047.11	$794.49
33400	$2,432.34	$1,861.50
33401	$1,549.38	$1,198.43
33403	$1,589.35	$1,247.58
33404	$1,880.05	$1,915.48
33405	$2,423.40	$1,935.96
33406	$3,069.69	$1,841.02
33410	$2,707.63	$1,481.38
33412	$3,374.08	$2,204.76
33413	$3,462.10	$1,822.41
33414	$2,305.05	$1,561.80
33415	$2,166.39	$1,399.85
33416	$2,171.95	$1,399.85
33417	$1,794.13	$1,399.85

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
33418	$1,926.71	$1,594.56
33419	$452.38	$372.67
33420	$1,560.08	$1,191.36
33422	$1,791.75	$1,539.09
33425	$2,918.06	$1,935.96
33426	$2,544.36	$1,935.96
33427	$2,608.37	$1,905.80
33430	$2,987.73	$1,935.96
33460	$2,599.54	$1,861.50
33463	$3,296.27	$1,287.41
33464	$2,608.19	$1,379.00
33465	$2,941.25	$1,935.96
33468	$2,626.49	$1,889.05
33470	$1,395.68	$1,191.36
33471	$1,492.46	$1,125.46
33474	$2,337.73	$1,861.50
33475	$2,489.19	$1,458.67
33476	$1,639.24	$1,376.39
33478	$1,693.09	$1,653.01
33496	$1,786.53	$1,692.85
33500	$1,679.96	$1,488.46
33501	$1,214.51	$1,090.84
33502	$1,377.00	$1,349.22
33503	$1,432.66	$1,223.01
33504	$1,579.50	$1,861.50
33505	$2,207.97	$1,351.45
33506	$2,201.27	$1,351.45
33507	$1,849.15	$1,441.55
33508	$17.14	$12.51
33510	$2,065.05	$1,811.98
33511	$2,269.23	$1,993.67
33512	$2,577.34	$2,171.63
33513	$2,651.05	$2,349.21
33514	$2,790.33	$2,525.68
33516	$2,907.79	$2,703.27
33517	$198.96	$177.21
33518	$437.31	$354.80
33519	$578.34	$532.02
33521	$693.51	$709.23
33522	$778.11	$886.82
33523	$885.29	$1,064.41

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
33530	$558.79	$577.44
33533	$1,997.41	$1,871.92
33534	$2,349.08	$2,104.98
33535	$2,617.90	$2,337.67
33536	$2,821.68	$2,571.10
33542	$2,802.86	$1,961.28
33545	$3,302.04	$2,337.30
33548	$3,162.67	$1,900.96
33572	$244.87	$274.01
33600	$1,849.04	$1,510.42
33602	$1,795.18	$1,458.67
33606	$2,010.01	$1,561.80
33608	$1,936.28	$1,599.03
33610	$1,909.67	$1,561.80
33611	$2,213.93	$1,663.44
33612	$2,149.37	$1,709.60
33615	$2,144.43	$1,626.21
33617	$2,322.38	$1,715.19
33619	$2,929.64	$1,886.44
33620	$1,770.70	$1,396.60
33621	$1,003.88	$753.64
33622	$3,903.84	$2,949.86
33641	$1,761.01	$1,712.58
33645	$1,857.93	$1,399.85
33660	$1,886.39	$1,861.50
33665	$2,054.08	$1,740.87
33670	$2,113.17	$1,854.05
33675	$2,116.47	$1,899.46
33676	$2,297.28	$1,919.95
33677	$2,386.31	$1,995.53
33681	$1,979.84	$1,399.85
33684	$2,142.76	$1,730.82
33688	$2,019.35	$1,563.66
33690	$1,296.16	$1,011.91
33692	$2,223.66	$1,861.50
33694	$2,213.93	$1,861.50
33697	$2,205.02	$1,715.19
33702	$1,663.97	$1,861.50
33710	$2,328.68	$1,861.50
33720	$1,664.72	$1,616.90
33722	$1,746.30	$1,458.67

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
33724	$1,654.16	$1,327.25
33726	$2,181.59	$1,750.18
33730	$2,153.30	$1,861.50
33732	$1,774.08	$1,443.41
33735	$1,398.37	$1,265.08
33736	$1,516.18	$1,061.43
33737	$1,463.42	$1,414.74
33750	$1,358.21	$1,145.19
33755	$1,420.49	$1,120.62
33762	$1,448.08	$1,155.62
33764	$1,420.49	$1,186.89
33766	$1,432.76	$1,265.08
33767	$1,528.83	$1,247.58
33768	$444.53	$354.80
33770	$2,405.21	$1,706.25
33771	$2,477.40	$1,662.69
33774	$1,936.47	$1,750.93
33775	$2,096.47	$1,854.05
33776	$2,215.74	$1,939.68
33777	$2,143.02	$1,939.68
33778	$2,663.70	$1,985.85
33779	$2,644.05	$1,976.91
33780	$2,537.04	$2,099.77
33781	$2,630.69	$2,099.77
33782	$3,456.93	$2,671.62
33783	$3,967.95	$2,886.81
33786	$2,438.76	$1,854.05
33788	$1,734.34	$1,223.01
33800	$1,063.79	$916.97
33802	$1,171.09	$843.26
33803	$1,237.63	$1,048.02
33813	$1,397.10	$1,011.91
33814	$1,641.30	$1,861.50
33820	$1,045.46	$699.92
33822	$1,152.49	$946.01
33824	$1,272.40	$1,340.28
33840	$1,336.25	$1,489.20
33845	$1,439.05	$1,399.85
33851	$1,371.54	$1,475.05
33852	$1,506.49	$1,399.85
33853	$1,971.19	$1,614.29

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
33860	$3,425.48	$1,921.81
33863	$3,356.54	$2,027.55
33864	$3,431.42	$2,453.83
33870	$2,688.74	$2,472.07
33875	$2,934.28	$1,749.81
33877	$3,880.85	$2,317.94
33880	$1,933.86	$1,494.41
33881	$1,661.87	$1,285.18
33883	$1,206.84	$949.74
33884	$437.62	$349.96
33886	$1,041.73	$821.29
33889	$841.71	$697.69
33891	$1,032.55	$891.29
33910	$2,808.25	$1,433.73
33915	$1,352.64	$1,105.73
33916	$4,483.55	$1,433.73
33917	$1,570.41	$1,247.58
33920	$2,050.54	$1,638.49
33922	$1,496.28	$1,198.43
33924	$304.82	$258.38
33925	$1,843.11	$1,473.56
33926	$2,746.67	$1,984.36
33935	$5,349.67	$3,418.83
33967	$276.46	$216.68
33968	$35.99	$26.81
33970	$377.75	$465.38
33971	$765.38	$657.48
33973	$547.99	$459.79
33974	$958.58	$535.37
33975	$1,402.11	$1,039.46
33976	$1,704.79	$1,404.69
33977	$1,206.51	$908.78
33978	$1,425.43	$1,039.46
33979	$2,077.52	$1,039.46
33980	$1,905.67	$1,039.46
33990	$468.50	$351.08
33991	$682.33	$511.54
33992	$220.44	$166.05
33993	$193.60	$145.94
34001	$1,053.07	$590.47
34051	$1,065.94	$590.47

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
34101	$652.97	$521.22
34111	$650.93	$521.22
34151	$1,512.08	$821.67
34201	$1,115.08	$521.22
34203	$1,035.03	$590.47
34401	$1,569.77	$505.96
34421	$792.61	$505.96
34451	$1,555.03	$744.60
34471	$1,162.00	$618.02
34490	$661.70	$618.02
34501	$1,061.71	$651.15
34502	$1,655.41	$1,309.01
34510	$1,290.93	$801.56
34520	$1,082.41	$744.60
34530	$1,194.12	$632.54
34800	$1,221.55	$1,028.29
34802	$1,348.36	$820.55
34803	$1,391.83	$848.10
34804	$1,345.73	$1,134.40
34805	$1,287.71	$699.21
34806	$107.09	$80.04
34808	$221.85	$194.71
34812	$361.82	$318.69
34813	$253.60	$226.36
34820	$527.82	$460.16
34825	$755.99	$615.78
34826	$220.50	$194.71
34830	$1,898.45	$1,599.03
34831	$2,040.17	$1,728.22
34832	$2,031.81	$1,728.22
34833	$654.23	$376.12
34834	$293.52	$171.99
34900	$970.29	$526.32
35001	$1,213.60	$1,042.44
35002	$1,223.07	$1,097.17
35005	$1,186.43	$930.38
35021	$1,352.12	$1,116.90
35022	$1,513.83	$1,257.26
35081	$1,886.65	$1,489.20
35082	$2,369.67	$1,610.94
35091	$1,930.33	$1,501.11

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
35092	$2,800.62	$2,004.84
35102	$2,040.43	$1,489.20
35103	$2,422.38	$1,675.35
35111	$1,656.18	$893.52
35112	$1,997.67	$999.63
35121	$1,773.29	$1,255.02
35122	$2,326.23	$1,715.56
35131	$1,501.72	$1,191.36
35132	$1,755.61	$1,189.50
35141	$1,197.81	$1,042.44
35142	$1,431.11	$1,769.91
35151	$1,343.88	$1,042.44
35152	$1,507.32	$930.75
35180	$1,028.55	$1,042.44
35182	$1,921.04	$909.16
35188	$1,276.99	$785.55
35189	$1,651.02	$988.08
35190	$826.93	$637.75
35201	$1,030.62	$1,042.44
35206	$842.17	$513.03
35207	$829.19	$609.83
35211	$1,481.81	$1,358.52
35216	$2,202.88	$1,095.31
35221	$1,567.90	$1,265.82
35226	$902.11	$532.02
35231	$1,330.14	$1,042.44
35236	$1,062.59	$1,042.44
35241	$1,499.65	$1,769.91
35246	$1,694.57	$1,422.93
35251	$1,830.73	$841.77
35256	$1,102.80	$1,191.36
35261	$1,148.28	$1,191.36
35266	$944.68	$555.10
35271	$1,477.22	$1,358.15
35276	$1,564.31	$1,346.61
35281	$1,747.08	$1,265.82
35286	$1,014.68	$1,042.44
35301	$1,225.87	$1,116.90
35302	$1,218.56	$986.66
35303	$1,348.75	$1,084.02
35304	$1,389.06	$1,127.65

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
35305	$1,329.97	$1,084.02
35306	$491.25	$404.77
35311	$1,566.18	$1,223.75
35321	$964.54	$1,116.90
35331	$1,567.34	$1,489.20
35341	$1,477.65	$1,489.20
35351	$1,383.92	$1,191.36
35355	$1,120.41	$1,191.36
35361	$1,656.08	$1,191.36
35363	$1,892.69	$1,193.59
35371	$888.75	$1,042.44
35372	$1,063.28	$1,042.44
35390	$171.01	$146.69
35400	$159.83	$140.73
35450	$542.76	$503.72
35452	$365.72	$266.94
35458	$530.50	$455.70
35460	$338.06	$223.75
35471	$2,931.40	$372.30
35472	$2,112.80	$255.40
35475	$1,790.26	$2,023.45
35476	$1,646.80	$1,528.66
35501	$1,611.92	$1,116.90
35506	$1,371.93	$1,116.90
35508	$1,460.95	$1,191.36
35509	$1,518.96	$1,191.36
35510	$1,324.82	$735.09
35511	$1,206.72	$833.95
35512	$1,314.47	$720.13
35515	$1,592.97	$909.16
35516	$1,314.15	$1,116.90
35518	$1,249.75	$1,116.90
35521	$1,332.17	$1,116.90
35522	$1,307.37	$698.27
35523	$1,391.84	$1,007.44
35525	$1,240.00	$664.56
35526	$1,839.13	$1,191.36
35531	$2,184.58	$1,230.82
35533	$1,613.45	$1,122.48
35535	$2,060.42	$1,488.46
35536	$1,817.47	$1,191.36

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
35537	$2,366.04	$1,905.66
35538	$2,525.50	$2,128.57
35539	$2,363.11	$2,000.44
35540	$2,636.46	$2,229.40
35556	$1,518.29	$1,059.94
35558	$1,338.75	$1,042.44
35560	$1,850.11	$1,191.36
35563	$1,436.93	$1,191.36
35565	$1,434.65	$1,116.90
35566	$1,808.68	$1,121.74
35570	$1,644.95	$1,151.90
35571	$1,440.62	$1,191.36
35572	$371.41	$219.37
35583	$1,568.32	$1,121.74
35585	$1,817.99	$1,433.73
35587	$1,479.46	$1,191.36
35600	$271.83	$238.27
35601	$1,517.05	$937.82
35606	$1,271.02	$914.74
35612	$1,161.62	$779.60
35616	$1,188.09	$1,116.90
35621	$1,190.20	$1,116.90
35623	$1,416.62	$715.56
35626	$1,702.10	$1,191.36
35631	$1,998.68	$1,191.36
35632	$1,942.10	$1,413.62
35633	$2,165.94	$1,526.06
35634	$1,902.21	$1,383.47
35636	$1,724.44	$1,191.36
35637	$1,869.17	$1,518.26
35638	$1,908.72	$1,542.28
35642	$1,066.06	$863.74
35645	$1,105.00	$863.74
35646	$1,859.26	$1,252.42
35647	$1,685.71	$1,298.21
35650	$1,172.46	$1,116.90
35654	$1,483.80	$1,489.20
35656	$1,177.37	$805.28
35661	$1,178.68	$711.09
35663	$1,362.32	$893.52
35666	$1,377.61	$877.14

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
35671	$1,215.85	$967.98
35681	$86.17	$190.62
35682	$379.50	$376.02
35683	$441.48	$432.61
35685	$213.41	$179.82
35686	$172.59	$148.55
35691	$1,039.05	$1,026.06
35693	$888.18	$719.66
35694	$1,067.58	$829.48
35695	$1,136.51	$829.48
35697	$158.32	$99.11
35700	$164.31	$143.34
35701	$624.40	$372.30
35721	$498.53	$337.30
35741	$564.21	$325.39
35761	$429.78	$266.94
35800	$779.62	$396.87
35820	$2,149.26	$609.46
35840	$1,281.67	$502.98
35860	$912.74	$310.87
35870	$1,340.62	$1,089.72
35875	$647.64	$290.39
35876	$1,025.05	$646.31
35879	$1,001.74	$648.17
35881	$1,106.56	$709.23
35883	$1,309.13	$1,111.69
35884	$1,333.82	$1,180.34
35901	$515.77	$459.05
35903	$618.97	$496.28
35905	$1,812.76	$714.44
35907	$2,063.64	$735.29
36000	$29.06	$26.06
36002	$179.36	$156.37
36005	$374.15	$287.42
36010	$573.52	$84.51
36011	$959.22	$80.79
36012	$989.46	$113.55
36013	$906.42	$80.79
36014	$933.80	$97.17
36015	$1,000.37	$113.55
36100	$567.95	$186.15

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
36120	$483.78	$186.15
36140	$500.24	$84.51
36147	$962.00	$698.43
36148	$301.78	$220.77
36160	$565.27	$111.69
36200	$711.06	$148.92
36215	$1,291.26	$180.19
36216	$1,364.07	$218.91
36217	$2,261.21	$262.84
36218	$219.36	$43.19
36221	$1,259.23	$173.86
36222	$1,505.83	$237.90
36223	$1,764.41	$256.89
36224	$2,081.70	$280.71
36225	$1,724.51	$255.77
36226	$2,113.53	$281.46
36227	$281.27	$88.61
36228	$1,397.20	$181.31
36245	$1,576.00	$202.90
36246	$1,011.38	$243.48
36247	$1,812.23	$289.65
36248	$174.25	$46.17
36251	$1,636.15	$227.71
36252	$1,764.92	$296.54
36253	$2,617.08	$316.27
36254	$2,528.49	$341.19
36260	$677.37	$595.68
36261	$435.99	$269.92
36262	$334.70	$223.38
36400	$32.79	$16.75
36405	$29.24	$17.87
36406	$18.36	$23.45
36410	$18.77	$10.80
36420	$56.22	$42.07
36425	$42.94	$59.94
36440	$62.47	$35.37
36450	$125.88	$130.68
36455	$133.77	$115.79
36460	$371.19	$309.75
36470	$168.64	$67.39
36471	$194.70	$83.40

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
36475	$1,766.84	$1,989.03
36476	$332.00	$381.54
36478	$1,380.13	$1,829.93
36479	$345.74	$385.33
36481	$2,353.09	$291.14
36500	$196.19	$113.92
36510	$100.53	$25.69
36511	$102.23	$78.93
36512	$103.05	$77.44
36513	$104.90	$80.42
36514	$621.50	$496.65
36516	$2,427.03	$1,987.71
36522	$1,629.53	$1,328.37
36555	$288.15	$86.50
36556	$260.27	$74.21
36557	$1,146.27	$138.41
36558	$890.57	$135.63
36560	$1,534.14	$262.29
36561	$1,341.69	$260.00
36563	$1,515.67	$318.69
36565	$1,101.37	$208.43
36566	$6,342.14	$217.74
36568	$343.30	$68.56
36569	$284.14	$57.52
36570	$1,329.10	$338.42
36571	$1,494.99	$303.70
36575	$191.65	$45.64
36576	$435.88	$114.88
36578	$588.86	$147.24
36580	$245.11	$71.87
36581	$883.26	$174.93
36582	$1,259.68	$330.28
36583	$1,565.31	$204.77
36584	$234.17	$63.30
36585	$1,321.71	$417.87
36589	$181.10	$135.89
36590	$324.28	$160.09
36593	$35.94	$33.51
36595	$667.94	$728.03
36596	$152.09	$167.29
36597	$143.00	$44.68

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
36598	$125.79	$110.57
36600	$35.37	$12.66
36620	$54.59	$42.07
36625	$111.08	$59.20
36640	$130.30	$84.51
36660	$69.12	$31.65
36680	$62.31	$52.12
36800	$133.01	$126.58
36810	$233.60	$335.07
36815	$156.84	$223.38
36818	$754.39	$407.16
36819	$796.04	$543.93
36820	$795.00	$668.65
36821	$722.61	$434.47
36825	$872.49	$618.02
36830	$726.62	$581.90
36831	$672.03	$352.94
36832	$824.97	$618.02
36833	$884.33	$545.42
36835	$539.13	$618.02
36838	$1,236.66	$685.72
36870	$2,124.56	$1,232.31
37140	$2,456.18	$1,191.36
37145	$2,300.26	$1,191.36
37160	$2,362.91	$1,191.36
37180	$2,197.21	$1,191.36
37181	$2,487.64	$1,234.55
37182	$910.84	$544.88
37183	$6,898.93	$249.86
37184	$2,615.71	$2,635.14
37185	$826.11	$857.41
37186	$1,586.69	$1,782.57
37187	$2,373.60	$2,565.52
37188	$2,053.31	$2,222.26
37191	$3,061.74	$196.27
37192	$1,773.68	$303.47
37193	$1,836.66	$303.15
37197	$1,747.10	$253.54
37200	$239.97	$137.75
37211	$430.42	$253.54
37212	$379.04	$288.90

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
37213	$267.40	$201.41
37214	$146.60	$119.51
37215	$1,081.54	$612.43
37217	$1,181.97	$948.62
37218	$888.46	$708.86
37220	$3,652.76	$353.38
37221	$5,399.48	$431.69
37222	$1,015.87	$160.31
37223	$3,011.67	$182.32
37224	$4,439.32	$389.49
37225	$12,845.38	$524.00
37226	$10,560.46	$441.08
37227	$17,360.81	$632.81
37228	$6,319.05	$475.25
37229	$12,647.73	$613.25
37230	$9,646.68	$594.57
37231	$15,577.89	$646.18
37232	$1,396.46	$171.77
37233	$1,675.25	$283.11
37234	$4,513.06	$235.68
37235	$4,740.29	$334.50
37236	$4,774.88	$392.40
37237	$2,860.20	$182.80
37238	$4,889.14	$275.13
37239	$2,364.31	$127.33
37241	$5,550.22	$383.47
37242	$8,945.82	$428.15
37243	$11,369.53	$510.05
37244	$7,890.53	$595.31
37500	$830.26	$338.93
37565	$791.46	$264.33
37600	$769.02	$372.30
37605	$860.66	$372.30
37606	$633.56	$372.30
37607	$410.74	$272.52
37609	$346.31	$151.15
37617	$1,437.83	$772.89
37619	$1,757.15	$1,327.61
37650	$552.50	$521.22
37660	$1,240.14	$595.68
37700	$274.27	$202.53

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
37718	$477.30	$338.79
37722	$521.98	$398.36
37735	$750.20	$447.13
37760	$668.68	$421.82
37761	$602.22	$478.78
37765	$724.70	$230.41
37766	$858.89	$288.49
37780	$279.17	$122.49
37785	$395.97	$188.38
56405	$118.67	$90.70
56420	$133.42	$62.83
56440	$196.40	$202.68
56441	$156.64	$75.50
56442	$52.19	$87.11
56501	$143.29	$80.06
56515	$245.98	$122.62
56605	$89.62	$58.78
56606	$40.76	$34.96
56620	$563.04	$608.04
56625	$676.20	$760.05
56630	$994.35	$1,013.40
56631	$1,268.48	$1,479.06
56632	$1,475.60	$1,447.14
56633	$1,298.76	$1,166.93
56634	$1,397.67	$1,525.67
56637	$1,613.04	$1,555.57
56640	$1,620.81	$1,317.42
56700	$201.55	$137.82
56740	$323.19	$243.22
56800	$259.09	$243.22
56805	$1,242.41	$884.70
56810	$279.75	$248.28
56820	$122.04	$125.61
56821	$160.61	$162.50
57000	$203.03	$202.68
57010	$467.37	$229.54
57020	$99.84	$51.18
57061	$125.05	$58.78
57065	$211.41	$93.23
57100	$96.90	$41.04
57105	$148.81	$97.79

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
57106	$533.31	$295.41
57107	$1,553.26	$1,021.51
57109	$1,847.12	$1,250.54
57110	$955.86	$709.38
57111	$1,721.39	$1,253.07
57112	$1,973.29	$1,334.65
57120	$547.96	$608.04
57130	$192.09	$162.14
57135	$208.26	$137.82
57150	$49.28	$25.34
57155	$476.35	$321.75
57156	$218.00	$86.82
57160	$83.61	$37.50
57170	$65.68	$38.00
57180	$154.21	$64.35
57200	$327.22	$183.93
57210	$396.23	$147.28
57220	$344.92	$354.69
57230	$425.19	$354.69
57240	$720.02	$430.70
57250	$724.26	$354.69
57260	$890.97	$608.04
57265	$974.89	$709.38
57267	$272.90	$168.73
57268	$521.94	$456.03
57270	$856.20	$709.38
57280	$1,019.93	$715.97
57282	$540.01	$350.13
57283	$738.30	$364.43
57284	$872.89	$813.25
57285	$720.72	$499.10
57287	$734.33	$596.89
57288	$769.95	$775.25
57289	$791.35	$597.91
57291	$665.34	$378.00
57292	$881.25	$639.96
57295	$514.12	$390.16
57296	$1,013.16	$791.04
57300	$605.87	$734.72
57305	$1,000.37	$912.06
57307	$1,150.13	$1,013.40

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
57308	$709.48	$644.52
57310	$501.79	$734.72
57311	$572.10	$431.71
57320	$578.09	$734.72
57330	$800.56	$648.07
57335	$1,219.32	$887.74
57400	$144.36	$60.30
57410	$116.12	$74.99
57415	$173.30	$94.25
57420	$127.68	$136.26
57421	$170.98	$136.30
57423	$974.45	$688.10
57425	$1,036.83	$510.57
57426	$904.83	$713.94
57452	$118.49	$51.68
57454	$165.15	$86.14
57455	$154.97	$79.55
57456	$146.34	$74.99
57460	$312.88	$186.97
57461	$352.21	$282.23
57500	$141.79	$40.54
57505	$112.04	$50.67
57510	$142.02	$84.62
57511	$157.88	$71.95
57513	$157.58	$219.91
57520	$334.09	$257.91
57522	$285.65	$224.47
57530	$375.16	$263.48
57531	$1,948.14	$1,517.06
57540	$837.13	$608.04
57545	$902.02	$666.82
57550	$439.05	$608.04
57555	$643.47	$734.72
57556	$609.40	$734.72
57558	$135.33	$202.68
57700	$344.91	$304.02
57720	$332.02	$304.02
57800	$65.96	$34.46
58100	$118.52	$41.04
58110	$51.69	$43.07
58120	$280.47	$222.95

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
58140	$985.45	$709.38
58145	$588.88	$372.93
58146	$1,227.20	$604.02
58150	$1,082.75	$810.72
58152	$1,332.99	$967.80
58180	$1,029.46	$810.72
58200	$1,460.65	$1,037.21
58210	$1,968.48	$1,520.10
58240	$3,109.06	$1,822.60
58260	$883.33	$810.72
58262	$985.15	$807.68
58263	$1,056.20	$862.40
58267	$1,125.23	$1,053.94
58270	$941.18	$881.66
58275	$1,051.19	$912.06
58280	$1,119.92	$912.06
58285	$1,422.79	$1,216.08
58290	$1,226.46	$598.46
58291	$1,324.25	$656.64
58292	$1,397.88	$698.39
58293	$1,452.45	$726.76
58294	$1,300.02	$640.16
58300	$78.86	$168.22
58301	$103.23	$48.64
58340	$133.46	$185.45
58346	$486.39	$343.04
58350	$105.71	$57.26
58353	$1,146.97	$1,067.62
58356	$2,147.48	$2,334.87
58520	$900.52	$608.04
58541	$766.96	$710.90
58542	$875.72	$787.41
58543	$885.95	$800.08
58544	$964.60	$865.95
58545	$963.76	$472.04
58546	$1,196.54	$380.03
58548	$2,028.92	$1,513.51
58550	$943.22	$584.73
58552	$1,055.52	$616.65
58553	$1,211.46	$710.39
58554	$1,416.90	$776.26

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
58555	$343.56	$161.13
58558	$444.02	$175.32
58559	$363.72	$262.98
58560	$410.52	$274.63
58561	$581.09	$380.53
58562	$457.70	$182.41
58563	$1,900.91	$1,699.98
58565	$2,125.32	$737.76
58570	$832.78	$682.52
58571	$957.61	$748.40
58572	$1,088.44	$846.70
58573	$1,294.28	$956.65
58600	$390.81	$757.51
58605	$354.48	$442.02
58611	$82.06	$49.61
58615	$261.27	$557.40
58660	$719.53	$280.71
58661	$692.73	$488.97
58662	$757.93	$305.66
58670	$392.30	$421.39
58671	$391.61	$445.92
58700	$834.97	$608.04
58720	$787.60	$608.04
58740	$943.77	$709.38
58800	$343.51	$229.54
58805	$434.34	$608.04
58820	$336.88	$229.54
58822	$798.23	$608.04
58900	$488.85	$608.04
58920	$810.76	$608.04
58925	$798.82	$608.04
58940	$564.69	$608.04
58943	$1,255.34	$894.83
58950	$1,207.37	$755.49
58951	$1,550.23	$1,047.86
58952	$1,753.30	$1,190.75
58953	$2,167.11	$1,540.37
58954	$2,354.11	$1,674.14
58956	$1,475.47	$748.90
58957	$1,694.83	$1,222.52
58958	$1,862.52	$1,352.81

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
58960	$1,040.29	$725.09
59000	$138.42	$57.26
59001	$191.62	$139.85
59012	$215.91	$149.98
59015	$167.84	$110.97
59020	$78.71	$50.67
59025	$52.89	$22.80
59030	$109.46	$57.26
59050	$53.75	$81.07
59051	$44.62	$74.48
59070	$435.48	$331.38
59072	$511.61	$284.26
59074	$416.86	$314.15
59076	$511.61	$284.26
59100	$856.52	$709.38
59120	$847.11	$709.38
59121	$848.86	$709.38
59130	$990.32	$693.17
59135	$909.61	$841.12
59136	$912.48	$841.12
59140	$435.94	$297.94
59150	$822.14	$385.09
59151	$796.97	$397.25
59160	$220.32	$202.68
59300	$210.21	$22.71
59320	$162.86	$106.91
59325	$258.55	$219.91
59350	$283.74	$699.25
59400	$2,240.30	$1,390.14
59409	$864.22	$544.28
59414	$97.22	$88.91
59510	$2,479.96	$1,390.97
59514	$972.29	$544.72
59525	$512.47	$239.09
59610	$2,349.32	$1,390.14
59612	$971.54	$544.28
59618	$2,512.10	$1,390.97
59620	$998.07	$544.72
59812	$343.20	$168.65
59820	$411.70	$168.65
59821	$413.99	$168.65

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
59830	$468.28	$316.46
59840	$234.40	$250.85
59841	$410.74	$354.43
59850	$382.89	$328.06
59851	$407.92	$328.06
59852	$555.38	$729.71
59855	$444.36	$283.61
59856	$520.91	$409.04
59857	$566.40	$825.02
59870	$509.94	$304.02
59871	$142.87	$134.78
61000	$123.14	$84.51
61001	$92.18	$59.20
61020	$108.99	$84.51
61026	$112.36	$130.31
61050	$93.50	$75.95
61055	$130.47	$141.47
61070	$62.99	$130.68
61105	$496.78	$295.23
61107	$335.63	$312.73
61108	$983.36	$505.96
61120	$805.90	$421.82
61140	$1,362.98	$805.28
61150	$1,438.61	$955.69
61151	$1,074.51	$379.75
61154	$1,370.65	$967.98
61156	$1,337.35	$967.98
61210	$392.79	$280.34
61215	$553.40	$210.72
61250	$880.82	$548.03
61253	$894.29	$730.82
61304	$1,766.33	$1,265.82
61305	$2,148.88	$1,489.20
61312	$2,229.07	$1,180.56
61313	$2,132.14	$1,180.56
61314	$1,958.63	$1,180.56
61315	$2,217.89	$1,180.56
61316	$93.47	$62.00
61320	$2,040.01	$1,180.56
61321	$2,251.48	$1,180.56
61322	$2,548.88	$916.97

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
61323	$2,572.29	$1,048.40
61330	$1,786.42	$1,096.42
61332	$1,973.99	$1,662.69
61333	$2,026.91	$1,485.85
61340	$1,537.86	$674.61
61343	$2,352.96	$871.55
61345	$2,181.36	$807.89
61450	$2,060.58	$1,180.56
61458	$2,151.70	$1,433.73
61460	$2,263.40	$1,433.73
61480	$1,760.54	$1,415.11
61500	$1,426.89	$676.57
61501	$1,249.56	$953.09
61510	$2,346.72	$1,433.73
61512	$2,728.25	$1,433.73
61514	$2,038.24	$1,369.69
61516	$1,990.31	$1,347.35
61517	$93.51	$43.24
61518	$2,952.92	$1,686.52
61519	$3,133.89	$1,686.52
61520	$4,033.33	$1,686.52
61521	$3,365.40	$1,686.52
61522	$2,323.68	$1,607.59
61524	$2,217.30	$1,520.47
61526	$3,915.04	$1,686.52
61530	$3,300.13	$1,686.52
61531	$1,311.71	$939.69
61533	$1,631.86	$1,161.20
61534	$1,750.53	$1,193.97
61535	$1,075.61	$698.06
61536	$2,769.68	$2,030.52
61537	$2,630.61	$900.05
61538	$2,857.39	$1,474.68
61539	$2,515.79	$1,602.38
61540	$2,347.53	$1,084.59
61541	$2,310.46	$1,642.22
61543	$2,280.82	$1,577.44
61544	$2,045.60	$1,265.08
61545	$3,420.45	$1,274.38
61546	$2,479.74	$1,433.73
61548	$1,689.93	$1,469.84

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
61550	$1,055.94	$893.52
61552	$1,262.01	$1,116.90
61556	$1,702.54	$1,016.38
61557	$1,724.02	$1,011.91
61558	$2,022.82	$1,265.08
61559	$2,287.35	$1,770.29
61563	$2,045.26	$811.99
61564	$2,490.69	$1,260.61
61566	$2,406.77	$1,078.45
61567	$2,754.96	$1,212.55
61570	$2,002.09	$1,302.31
61571	$2,130.97	$1,414.74
61575	$2,334.61	$1,860.76
61576	$3,959.66	$2,953.46
61580	$2,743.98	$1,496.65
61581	$2,934.79	$1,698.43
61582	$3,166.23	$1,540.95
61583	$3,123.94	$1,758.00
61584	$3,086.64	$1,701.78
61585	$3,481.87	$1,906.18
61586	$2,633.32	$1,351.82
61590	$3,325.78	$2,072.59
61591	$3,378.82	$2,173.86
61592	$3,427.65	$1,969.09
61595	$2,581.80	$1,455.32
61596	$2,673.76	$1,770.29
61597	$3,032.11	$1,870.81
61598	$3,071.07	$1,645.19
61600	$2,343.23	$1,262.10
61601	$2,622.69	$1,354.43
61605	$2,391.04	$1,431.49
61606	$3,218.82	$1,918.09
61607	$2,944.18	$1,790.39
61608	$3,496.90	$2,081.53
61610	$1,678.48	$1,211.84
61611	$419.75	$303.42
61612	$1,577.34	$909.16
61613	$3,482.98	$2,040.58
61615	$2,499.43	$1,573.71
61616	$3,600.82	$2,138.12
61618	$1,400.15	$804.91

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
61619	$1,561.62	$1,009.31
61623	$607.15	$300.07
61624	$1,217.48	$834.70
61626	$928.32	$678.33
61680	$2,403.14	$1,675.72
61682	$4,437.02	$3,268.05
61684	$3,054.26	$2,179.07
61686	$4,786.34	$3,445.64
61690	$2,324.53	$1,679.45
61692	$3,896.58	$2,739.76
61697	$4,511.31	$2,790.02
61698	$4,940.04	$2,685.40
61700	$3,635.97	$1,686.52
61702	$4,285.65	$1,686.52
61703	$1,466.26	$1,007.82
61705	$2,757.84	$1,896.50
61708	$2,305.37	$1,733.80
61710	$2,311.47	$1,382.72
61711	$2,776.93	$1,610.94
61720	$1,370.15	$1,414.74
61735	$1,691.57	$1,414.74
61750	$1,509.96	$1,042.44
61751	$1,489.10	$1,209.98
61760	$1,701.84	$991.43
61781	$250.88	$194.40
61782	$190.94	$161.44
61783	$248.35	$194.40
61790	$952.54	$554.73
61791	$1,151.96	$893.52
61796	$1,093.87	$531.27
61797	$235.08	$143.34
61798	$1,485.95	$531.27
61799	$324.00	$198.06
61800	$165.80	$101.64
61867	$2,442.02	$798.58
61868	$532.00	$264.71
61880	$621.63	$389.43
61885	$563.95	$388.31
61886	$922.22	$378.63
61888	$428.11	$304.54
62000	$1,113.44	$670.14

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
62005	$1,337.11	$893.52
62010	$1,643.67	$1,079.67
62100	$1,716.65	$1,219.28
62115	$1,423.14	$843.26
62117	$1,780.20	$1,472.82
62120	$1,840.15	$1,117.27
62121	$1,741.61	$1,185.40
62140	$1,114.23	$757.63
62141	$1,226.25	$839.16
62142	$958.77	$617.65
62143	$1,119.03	$744.60
62145	$1,516.18	$1,265.82
62146	$1,336.29	$895.38
62147	$1,527.11	$1,049.14
62148	$135.54	$70.36
62160	$202.76	$102.38
62161	$1,634.86	$688.01
62162	$2,025.35	$895.38
62163	$1,211.18	$553.24
62164	$2,232.42	$962.77
62165	$1,667.78	$746.09
62180	$1,714.96	$1,191.36
62190	$953.96	$967.98
62192	$1,051.96	$967.98
62194	$502.99	$372.30
62200	$1,478.70	$1,191.36
62201	$1,303.02	$1,191.36
62220	$1,109.22	$967.98
62223	$1,133.52	$967.98
62225	$572.04	$372.30
62230	$909.06	$744.60
62252	$94.66	$72.60
62256	$649.76	$405.43
62258	$1,212.41	$497.39
62263	$740.91	$284.44
62264	$473.80	$190.99
62267	$277.13	$116.53
62268	$282.88	$320.18
62269	$294.07	$372.30
62270	$178.84	$81.91
62272	$227.58	$82.28

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
62273	$192.67	$75.95
62280	$344.42	$123.60
62281	$267.99	$107.22
62282	$330.93	$134.40
62284	$205.78	$88.61
62287	$624.20	$744.60
62290	$376.48	$127.70
62291	$373.69	$128.44
62292	$643.70	$462.02
62294	$867.73	$616.90
62302	$271.29	$108.34
62303	$282.41	$109.83
62310	$272.26	$137.38
62311	$252.17	$139.24
62318	$259.81	$142.59
62319	$187.61	$139.61
62350	$438.45	$260.98
62351	$944.45	$385.70
62355	$296.53	$217.42
62360	$341.53	$83.40
62361	$393.85	$200.30
62362	$422.46	$262.10
62365	$325.82	$216.31
62367	$45.99	$21.97
62368	$63.08	$34.25
62369	$137.59	$29.52
62370	$143.82	$39.44
63001	$1,335.99	$1,191.36
63003	$1,331.53	$1,191.36
63005	$1,275.87	$967.98
63011	$1,186.38	$819.06
63012	$1,285.66	$1,042.44
63015	$1,597.46	$1,191.36
63016	$1,634.68	$1,168.65
63017	$1,351.74	$1,028.29
63020	$1,255.15	$967.98
63030	$1,050.77	$893.52
63035	$205.22	$197.32
63040	$1,501.53	$1,072.60
63045	$1,390.71	$959.42
63046	$1,320.64	$994.79

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
63047	$1,194.56	$912.88
63048	$226.54	$205.51
63050	$1,608.80	$764.67
63051	$1,844.68	$874.12
63055	$1,749.39	$1,319.80
63056	$1,598.30	$1,136.26
63057	$342.79	$303.05
63064	$1,902.57	$1,349.22
63066	$220.61	$195.46
63075	$1,462.77	$978.40
63076	$263.85	$209.60
63077	$1,616.94	$1,202.16
63078	$208.62	$195.09
63081	$1,893.68	$1,348.47
63082	$285.06	$271.03
63085	$2,053.18	$1,506.70
63086	$203.42	$202.16
63087	$2,586.29	$1,915.48
63088	$278.02	$266.19
63090	$2,111.79	$1,527.92
63091	$190.59	$180.19
63101	$2,487.84	$1,089.29
63102	$2,449.35	$1,089.29
63103	$314.09	$134.51
63170	$1,717.54	$1,133.65
63172	$1,493.87	$1,038.34
63173	$1,838.60	$1,255.40
63180	$1,603.60	$1,414.74
63182	$1,493.57	$1,144.45
63185	$1,230.42	$1,042.44
63190	$1,367.51	$1,041.32
63191	$1,463.26	$1,020.85
63194	$1,724.04	$1,191.36
63195	$1,656.09	$1,191.36
63196	$1,533.93	$1,191.36
63197	$1,844.01	$1,191.36
63198	$1,805.72	$1,489.20
63199	$1,894.56	$1,489.20
63200	$1,648.56	$1,245.34
63250	$3,011.56	$2,092.70
63251	$3,249.48	$2,188.75

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
63252	$3,245.99	$2,319.43
63265	$1,794.45	$1,356.66
63266	$1,844.63	$1,327.62
63267	$1,477.02	$1,126.58
63268	$1,541.63	$1,182.05
63270	$2,229.76	$1,460.53
63271	$2,214.40	$1,581.16
63272	$2,027.04	$1,373.79
63273	$1,999.51	$1,327.99
63275	$1,930.11	$1,458.30
63276	$1,916.32	$1,275.50
63277	$1,669.58	$1,137.00
63278	$1,713.53	$1,121.37
63280	$2,265.33	$1,539.46
63281	$2,238.81	$1,519.36
63282	$2,109.95	$1,439.31
63283	$2,028.92	$699.92
63285	$2,805.49	$1,937.45
63286	$2,766.03	$2,043.93
63287	$2,949.01	$1,981.38
63290	$2,956.48	$2,002.23
63295	$354.29	$189.88
63300	$1,973.18	$1,389.42
63301	$2,362.41	$1,469.10
63302	$2,328.33	$1,482.50
63303	$2,471.05	$1,715.19
63304	$2,502.82	$1,698.06
63305	$2,602.62	$1,804.54
63306	$2,495.84	$1,772.89
63307	$2,489.02	$1,720.03
63308	$345.58	$293.74
63600	$998.24	$893.52
63610	$464.21	$231.94
63615	$1,060.21	$759.12
63620	$1,202.55	$531.27
63621	$270.39	$164.93
63650	$1,522.00	$436.34
63655	$896.54	$776.62
63661	$652.17	$479.89
63662	$904.59	$581.53
63663	$888.07	$698.43

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
63664	$931.59	$605.36
63685	$401.47	$378.26
63688	$404.47	$302.68
63700	$1,270.80	$843.26
63702	$1,388.32	$843.26
63704	$1,782.09	$1,011.91
63706	$1,839.73	$1,011.91
63707	$996.24	$1,116.90
63709	$1,190.83	$1,116.90
63710	$1,173.53	$841.40
63740	$1,019.65	$967.98
63741	$732.76	$774.38
63744	$727.62	$421.82
63746	$654.02	$372.30
64400	$141.96	$56.59
64402	$144.14	$91.21
64405	$112.18	$62.92
64408	$112.58	$66.27
64410	$136.11	$66.64
64413	$140.43	$68.13
64415	$130.83	$72.23
64416	$83.96	$106.85
64417	$144.02	$65.15
64418	$163.28	$60.68
64420	$125.56	$59.57
64421	$168.05	$84.51
64425	$145.38	$68.88
64430	$154.36	$69.99
64435	$151.23	$72.97
64445	$151.25	$78.56
64446	$84.37	$99.40
64447	$132.81	$49.14
64448	$75.75	$91.73
64449	$89.71	$91.62
64450	$89.52	$49.14
64455	$52.20	$28.29
64479	$264.85	$154.50
64480	$126.30	$140.36
64483	$248.01	$143.34
64484	$97.87	$133.28
64490	$214.15	$160.83

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
64491	$104.37	$79.67
64492	$104.78	$80.79
64493	$195.02	$144.45
64494	$96.49	$72.97
64495	$96.90	$74.09
64505	$115.22	$60.68
64508	$66.90	$51.38
64510	$142.84	$60.68
64517	$202.64	$158.18
64520	$211.21	$83.77
64530	$215.52	$140.36
64553	$232.73	$142.22
64566	$144.87	$117.65
64568	$710.31	$549.90
64569	$845.23	$505.46
64570	$703.52	$439.94
64575	$348.78	$272.90
64585	$274.58	$123.60
64590	$296.00	$135.14
64595	$277.12	$108.34
64600	$435.99	$113.55
64605	$829.61	$158.97
64610	$816.12	$205.14
64611	$128.32	$85.92
64612	$145.27	$83.40
64615	$154.35	$103.87
64616	$135.77	$90.47
64617	$215.11	$98.29
64620	$224.88	$99.40
64630	$254.87	$98.29
64632	$94.09	$51.01
64633	$477.07	$199.38
64634	$216.41	$58.95
64635	$471.68	$195.34
64636	$197.15	$51.31
64640	$149.80	$125.47
64642	$154.86	$91.21
64643	$101.03	$60.68
64644	$178.47	$60.68
64645	$124.62	$69.25
64646	$163.85	$98.66

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
64647	$193.61	$113.92
64650	$85.98	$51.01
64653	$106.62	$58.45
64680	$348.97	$118.02
64681	$382.75	$395.66
64702	$549.23	$202.53
64704	$349.98	$297.84
64708	$545.34	$446.76
64712	$626.16	$443.78
64713	$785.17	$631.76
64714	$696.37	$504.84
64716	$592.30	$398.73
64718	$649.68	$446.76
64719	$439.20	$296.35
64721	$472.80	$316.83
64726	$301.88	$202.53
64727	$198.03	$176.10
64732	$411.56	$263.59
64734	$455.54	$276.62
64736	$437.83	$260.61
64738	$463.72	$372.30
64740	$505.03	$372.30
64742	$538.54	$379.75
64744	$532.41	$295.23
64746	$484.45	$210.72
64755	$987.14	$590.47
64760	$546.74	$521.22
64763	$548.38	$253.16
64766	$655.90	$421.82
64771	$656.09	$295.23
64772	$610.68	$405.43
64774	$455.11	$152.64
64776	$429.40	$153.02
64778	$154.44	$80.42
64782	$495.38	$253.16
64783	$239.73	$208.86
64784	$796.43	$421.82
64786	$1,162.97	$900.22
64787	$262.66	$230.45
64788	$436.13	$253.16
64790	$906.78	$603.87

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
64792	$1,283.87	$782.57
64795	$206.67	$159.34
64802	$731.49	$539.84
64804	$1,061.90	$744.60
64809	$1,086.82	$744.60
64818	$661.50	$558.45
64820	$790.87	$397.24
64821	$755.60	$515.64
64822	$755.60	$515.64
64823	$857.84	$594.56
64831	$751.10	$282.58
64832	$365.29	$153.02
64834	$807.77	$337.30
64835	$878.05	$421.82
64836	$881.05	$505.96
64837	$403.85	$350.33
64840	$1,094.01	$708.11
64856	$1,101.88	$505.96
64857	$1,147.29	$781.46
64858	$1,230.35	$958.67
64861	$1,431.04	$1,096.80
64862	$1,640.53	$1,102.01
64864	$963.29	$677.96
64865	$1,241.39	$832.46
64866	$1,269.19	$967.98
64868	$1,116.67	$967.98
64872	$131.45	$113.55
64874	$185.25	$166.42
64876	$191.04	$174.24
64885	$1,256.73	$696.57
64886	$1,424.59	$830.60
64890	$1,192.03	$647.80
64891	$1,273.03	$616.90
64892	$1,140.12	$599.03
64893	$1,239.57	$694.34
64895	$1,450.89	$768.80
64896	$1,568.82	$875.28
64897	$1,359.31	$731.94
64898	$1,478.77	$791.88
64901	$605.93	$479.52
64902	$713.49	$557.71

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
64905	$1,122.20	$526.06
64907	$1,471.53	$689.87
64910	$902.72	$574.84
64911	$1,109.01	$699.20
70010	$65.96	$173.47
70015	$171.20	$89.01
70030	$31.16	$26.01
70100	$36.89	$25.10
70110	$42.38	$36.06
70120	$38.12	$25.98
70130	$61.23	$45.84
70134	$57.67	$45.84
70140	$33.14	$25.98
70150	$46.46	$38.20
70160	$36.51	$24.79
70190	$40.06	$25.98
70200	$47.20	$38.58
70210	$33.22	$21.62
70220	$41.97	$35.76
70240	$33.55	$21.62
70250	$40.36	$25.98
70260	$50.94	$42.98
70300	$16.61	$8.63
70310	$41.49	$17.30
70320	$59.37	$34.61
70328	$34.42	$24.45
70330	$53.12	$38.09
70332	$91.04	$68.00
70350	$21.96	$17.30
70355	$22.67	$18.72
70360	$31.57	$17.30
70370	$89.31	$38.09
70380	$40.63	$27.70
70390	$106.78	$41.33
70450	$130.45	$165.86
70460	$181.91	$216.71
70470	$216.21	$230.16
70480	$264.34	$212.01
70481	$313.21	$230.16
70482	$342.03	$230.16
70486	$158.03	$208.72

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
70487	$189.73	$230.16
70488	$231.44	$230.16
70490	$217.41	$212.01
70491	$266.28	$230.16
70492	$315.00	$230.16
70496	$332.33	$508.52
70498	$331.10	$522.23
70540	$409.12	$421.04
70542	$457.32	$472.38
70543	$558.98	$597.22
70544	$447.72	$450.91
70545	$441.96	$450.91
70546	$684.15	$721.48
70547	$449.37	$450.91
70548	$472.01	$450.91
70549	$688.27	$723.51
70551	$259.71	$439.07
70552	$361.45	$489.84
70553	$426.13	$594.39
71010	$24.95	$17.30
71015	$31.01	$25.98
71020	$30.97	$25.98
71021	$37.77	$25.98
71022	$46.67	$25.98
71030	$46.53	$34.61
71034	$93.83	$43.28
71035	$36.89	$27.39
71100	$36.73	$28.54
71101	$40.51	$35.72
71110	$41.89	$36.94
71111	$53.49	$48.36
71120	$33.10	$25.98
71130	$40.44	$25.98
71250	$204.16	$212.35
71260	$259.56	$253.53
71270	$311.98	$253.53
71275	$338.23	$310.26
71550	$472.09	$484.11
71551	$521.80	$529.49
71552	$659.96	$695.24
71555	$451.22	$435.67

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
72020	$24.65	$17.30
72040	$37.14	$25.98
72050	$50.23	$43.28
72052	$63.21	$53.56
72070	$37.97	$30.29
72072	$38.79	$33.96
72074	$44.14	$40.30
72080	$34.26	$30.29
72100	$39.20	$30.29
72110	$54.76	$45.57
72114	$70.37	$60.09
72120	$45.38	$34.61
72125	$208.49	$215.64
72126	$259.22	$253.53
72127	$307.61	$253.53
72128	$203.82	$212.39
72129	$259.64	$253.53
72130	$309.67	$253.53
72131	$203.00	$211.78
72132	$258.81	$253.53
72133	$307.06	$253.53
72141	$252.16	$391.86
72142	$367.48	$497.21
72146	$252.16	$394.99
72147	$363.51	$442.89
72148	$250.92	$390.06
72149	$362.95	$485.48
72156	$428.19	$592.86
72157	$429.01	$554.74
72158	$427.37	$583.81
72159	$473.77	$470.97
72170	$35.69	$21.62
72190	$42.95	$31.55
72191	$344.72	$414.36
72192	$163.95	$204.64
72193	$256.16	$249.41
72194	$295.87	$253.53
72195	$426.80	$436.01
72196	$467.86	$484.22
72197	$574.46	$610.02
72198	$455.24	$432.12

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
72200	$31.99	$21.62
72202	$36.85	$30.56
72220	$31.57	$26.32
72240	$108.80	$107.61
72255	$108.25	$99.55
72265	$102.53	$93.25
72270	$140.90	$141.72
72275	$130.12	$79.72
72285	$126.48	$119.49
72295	$110.21	$106.27
73000	$30.79	$20.78
73010	$33.63	$24.79
73020	$25.48	$17.30
73030	$32.36	$25.98
73040	$113.01	$50.69
73050	$39.69	$30.29
73060	$32.44	$20.78
73070	$30.42	$20.78
73080	$34.87	$25.98
73085	$109.57	$71.82
73090	$28.73	$20.78
73092	$30.38	$20.78
73100	$32.44	$17.30
73110	$39.81	$25.14
73115	$120.69	$41.14
73120	$29.14	$17.30
73130	$34.46	$25.14
73140	$35.44	$15.59
73200	$202.59	$208.69
73201	$252.46	$250.74
73202	$315.63	$304.84
73206	$370.39	$366.22
73218	$415.29	$433.07
73219	$460.20	$477.08
73220	$568.04	$390.48
73221	$266.66	$390.48
73222	$429.74	$446.44
73223	$532.22	$572.58
73225	$460.45	$430.97
73525	$114.51	$75.29
73560	$34.91	$19.02

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
73562	$40.18	$23.38
73564	$44.14	$27.70
73565	$40.26	$19.02
73580	$130.57	$69.22
73590	$32.02	$20.78
73592	$31.20	$20.78
73600	$33.67	$19.02
73610	$34.87	$25.14
73615	$118.36	$75.29
73620	$29.14	$17.30
73630	$32.40	$24.22
73650	$30.38	$19.02
73660	$31.73	$15.59
73700	$202.59	$208.99
73701	$256.16	$250.74
73702	$311.92	$304.84
73706	$398.57	$405.80
73718	$415.29	$427.27
73719	$459.79	$478.30
73720	$571.33	$390.48
73721	$267.08	$390.48
73722	$433.85	$456.60
73723	$534.28	$573.19
73725	$455.98	$433.57
74000	$26.18	$17.30
74010	$39.57	$25.98
74020	$41.74	$32.05
74022	$49.78	$43.66
74150	$167.53	$208.42
74160	$261.09	$253.53
74170	$297.08	$253.53
74174	$439.25	$506.87
74175	$346.47	$440.60
74176	$223.82	$195.24
74177	$351.55	$311.37
74178	$399.10	$395.37
74181	$378.63	$387.92
74182	$516.86	$529.49
74183	$575.29	$611.58
74185	$457.71	$458.40
74210	$87.92	$38.09

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
74220	$100.14	$38.09
74230	$145.57	$51.91
74240	$127.51	$60.59
74241	$132.86	$65.74
74245	$194.03	$76.13
74246	$143.98	$69.22
74247	$159.62	$75.29
74249	$208.44	$82.21
74250	$117.81	$60.59
74251	$480.76	$39.16
74260	$405.89	$53.21
74270	$170.74	$51.91
74280	$241.33	$62.84
74290	$79.43	$38.43
74400	$124.73	$65.74
74410	$122.67	$86.52
74415	$155.61	$99.32
74430	$41.96	$38.09
74440	$92.10	$38.09
74455	$92.56	$60.59
74485	$104.09	$96.07
74710	$40.65	$33.92
74740	$84.54	$46.72
75600	$226.55	$223.01
75605	$155.36	$166.40
75625	$154.52	$167.51
75630	$189.14	$195.51
75635	$429.12	$451.60
75658	$187.18	$190.39
75705	$271.12	$240.70
75710	$184.02	$187.03
75716	$211.06	$219.46
75726	$168.41	$185.92
75731	$194.90	$180.00
75733	$207.82	$215.98
75736	$181.15	$183.59
75741	$169.80	$171.37
75743	$189.41	$194.67
75746	$171.29	$179.20
75756	$187.99	$194.74
75774	$100.12	$119.76

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
75791	$367.69	$278.33
75809	$112.87	$24.83
75820	$130.48	$61.12
75822	$154.58	$93.82
75825	$152.46	$160.94
75827	$155.20	$164.22
75842	$202.71	$195.47
75870	$166.63	$164.53
75885	$177.38	$176.60
75901	$203.37	$99.36
75902	$81.48	$70.17
75962	$160.19	$162.27
75964	$100.66	$104.59
75966	$192.00	$195.55
75978	$158.13	$166.02
75984	$119.98	$67.73
75989	$134.59	$116.89
76000	$53.66	$27.96
76010	$29.06	$24.41
76080	$61.54	$41.79
76098	$18.44	$16.35
76100	$103.92	$57.11
76101	$149.49	$87.86
76102	$198.61	$110.78
76120	$94.84	$52.72
76380	$164.79	$160.13
76506	$135.01	$62.23
76510	$191.54	$149.44
76511	$113.78	$54.82
76512	$103.90	$66.43
76513	$107.88	$66.43
76514	$16.75	$10.12
76516	$89.00	$54.82
76519	$95.18	$54.82
76529	$89.71	$58.75
76536	$132.69	$59.74
76604	$99.79	$69.14
76641	$121.59	$97.68
76642	$99.55	$80.07
76700	$138.98	$83.20
76705	$103.75	$60.74

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
76770	$128.55	$80.72
76775	$64.68	$60.47
76776	$179.11	$110.40
76800	$157.83	$80.98
76801	$138.81	$78.42
76802	$71.65	$60.55
76805	$160.90	$94.32
76810	$104.27	$87.86
76811	$202.85	$170.64
76812	$232.42	$119.18
76813	$135.44	$113.03
76814	$89.80	$71.93
76815	$95.14	$62.95
76816	$130.16	$51.84
76817	$109.84	$82.17
76820	$52.50	$38.73
76821	$104.95	$88.39
76825	$314.53	$81.48
76826	$186.66	$59.55
76827	$85.68	$57.57
76828	$59.67	$34.00
76830	$139.04	$67.65
76831	$134.66	$75.52
76856	$124.63	$67.65
76857	$53.05	$42.21
76870	$75.42	$65.44
76872	$106.39	$67.65
76873	$188.50	$107.95
76881	$130.36	$105.10
76882	$39.51	$26.25
76885	$166.43	$76.09
76886	$120.52	$67.81
76937	$35.18	$28.15
76942	$67.48	$66.93
76946	$36.23	$30.98
76965	$99.03	$89.46
76970	$106.29	$43.43
77001	$79.60	$73.80
77002	$105.04	$66.51
77003	$96.30	$56.88
77011	$252.68	$326.84

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
77012	$139.24	$130.57
77014	$132.65	$128.39
77021	$459.99	$375.96
77051	$9.23	$9.47
77052	$9.23	$9.47
77053	$65.68	$56.96
77054	$86.60	$77.62
77055	$100.30	$68.76
77056	$129.13	$85.80
77057	$91.65	$71.70
77058	$615.24	$638.78
77059	$611.94	$650.97
77063	$61.45	$49.32
77071	$53.39	$24.56
77072	$25.73	$19.67
77073	$40.10	$34.61
77074	$72.19	$56.42
77075	$98.60	$79.34
77076	$107.71	$63.60
77077	$41.59	$37.28
77080	$46.69	$51.23
77081	$31.38	$25.56
77085	$63.86	$50.80
77086	$40.22	$32.13
77261	$81.38	$134.85
77262	$121.35	$145.92
77263	$177.11	$210.10
77280	$314.12	$80.14
77285	$495.67	$127.02
77290	$591.38	$155.89
77293	$532.41	$414.46
77295	$550.14	$440.52
77300	$74.40	$59.63
77301	$2,231.29	$1,237.18
77306	$167.12	$128.69
77307	$322.05	$251.14
77316	$212.68	$166.29
77317	$276.85	$217.44
77318	$398.20	$313.40
77321	$103.44	$86.56
77331	$69.99	$53.40

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
77332	$93.80	$53.63
77333	$57.75	$46.60
77334	$171.74	$129.80
77336	$91.22	$55.08
77338	$570.17	$427.61
77370	$139.92	$95.19
77372	$1,243.96	$806.21
77373	$1,581.40	$1,517.88
77401	$27.85	$32.93
77417	$12.62	$57.30
77427	$199.12	$114.37
77431	$109.63	$79.34
77432	$446.95	$284.32
77435	$674.51	$543.09
77469	$346.72	$248.27
77470	$171.81	$151.20
77600	$481.29	$169.38
77610	$1,142.92	$169.38
77615	$1,224.38	$227.48
77750	$408.74	$135.04
77761	$434.38	$322.48
77762	$575.77	$427.42
77763	$813.01	$603.48
77778	$869.53	$718.96
77789	$133.84	$40.68
77790	$17.15	$79.38
78013	$226.75	$190.85
78014	$287.03	$220.11
78015	$260.43	$80.91
78016	$330.80	$109.48
78018	$370.56	$129.80
78020	$97.13	$29.22
78070	$355.29	$96.11
78071	$423.29	$326.76
78072	$487.87	$457.48
78075	$508.95	$217.82
78102	$200.38	$93.25
78110	$111.08	$34.61
78111	$113.85	$52.41
78120	$110.93	$51.91
78121	$120.31	$70.52

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
78122	$114.45	$93.25
78130	$198.08	$86.52
78135	$418.91	$129.80
78140	$160.20	$86.52
78185	$251.75	$86.52
78190	$465.32	$131.26
78191	$198.08	$149.17
78195	$420.68	$189.55
78201	$222.77	$77.89
78202	$239.38	$120.14
78205	$249.98	$202.19
78206	$405.84	$247.15
78215	$230.66	$86.52
78216	$147.60	$113.80
78226	$394.08	$298.01
78227	$535.21	$408.54
78230	$166.88	$60.59
78231	$153.15	$70.17
78232	$115.75	$86.52
78258	$262.07	$129.35
78261	$294.38	$108.14
78262	$289.62	$108.14
78264	$397.38	$108.14
78270	$119.69	$43.28
78271	$106.51	$43.28
78272	$114.06	$48.97
78278	$413.55	$129.80
78290	$396.79	$108.14
78291	$297.75	$141.11
78300	$213.54	$80.91
78305	$272.69	$112.92
78306	$298.10	$141.03
78315	$410.96	$131.10
78320	$268.16	$215.41
78445	$207.34	$120.83
78451	$402.41	$201.93
78452	$558.73	$348.12
78453	$359.58	$176.60
78454	$517.56	$168.31
78456	$373.72	$148.64
78457	$221.18	$69.22

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
78458	$196.27	$94.32
78466	$224.94	$87.52
78468	$233.16	$115.98
78472	$270.04	$167.77
78473	$339.07	$250.82
78481	$204.04	$160.75
78483	$281.98	$241.46
78494	$263.46	$225.72
78496	$50.31	$56.54
78579	$221.34	$157.94
78580	$283.48	$112.50
78582	$396.62	$290.92
78597	$238.70	$177.59
78598	$364.01	$273.78
78600	$219.74	$117.35
78601	$253.64	$137.79
78605	$235.86	$134.12
78606	$393.80	$159.18
78610	$208.08	$40.22
78630	$402.55	$169.19
78635	$403.38	$149.36
78645	$384.19	$149.36
78650	$391.85	$147.95
78660	$213.22	$86.52
78700	$203.79	$77.89
78701	$250.16	$119.83
78707	$273.83	$192.95
78708	$202.16	$155.59
78709	$428.91	$182.63
78725	$127.90	$77.01
78730	$90.53	$65.86
78740	$258.49	$67.50
78761	$246.54	$86.52
78800	$225.45	$89.12
78801	$308.38	$132.40
78802	$385.38	$154.90
78804	$674.66	$189.70
78805	$214.76	$107.30
78806	$395.26	$173.05
78808	$52.80	$40.19
79005	$151.68	$119.11

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
79101	$158.20	$135.19
79200	$177.70	$103.83
79403	$214.95	$168.04
92002	$90.00	$37.15
92004	$163.97	$39.44
92012	$94.64	$37.15
92014	$136.86	$39.44
92015	$21.28	$8.01
92018	$158.00	$47.88
92019	$77.74	$43.10
92020	$29.29	$19.21
92025	$42.40	$26.82
92060	$72.36	$33.78
92071	$41.38	$32.04
92072	$148.15	$101.93
92081	$37.65	$32.95
92082	$53.73	$22.14
92083	$72.28	$30.51
92100	$89.96	$28.93
92132	$38.69	$26.44
92133	$48.81	$39.33
92134	$50.04	$32.25
92136	$102.18	$67.14
92140	$70.90	$23.95
92225	$29.66	$46.44
92226	$27.39	$39.86
92227	$16.74	$10.72
92228	$38.20	$26.66
92230	$64.74	$46.44
92235	$123.76	$81.73
92240	$291.29	$73.99
92250	$89.39	$42.13
92260	$20.48	$32.80
92265	$88.07	$42.24
92270	$102.48	$33.29
92275	$167.71	$44.53
92283	$63.28	$16.79
92284	$70.00	$20.39
92502	$106.56	$61.76
92504	$34.15	$16.65
92507	$86.01	$29.72

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
92508	$25.74	$2.46
92511	$127.96	$41.79
92512	$68.09	$24.58
92516	$79.82	$19.65
92520	$84.31	$30.13
92521	$120.87	$74.98
92522	$100.59	$64.11
92523	$211.61	$130.58
92524	$97.29	$62.08
92526	$94.09	$33.82
92540	$111.43	$82.13
92541	$26.15	$14.57
92542	$30.22	$13.93
92544	$18.01	$13.93
92545	$16.44	$13.93
92546	$118.24	$13.93
92547	$7.00	$13.93
92550	$23.05	$17.67
92551	$13.86	$10.20
92552	$36.09	$7.65
92553	$43.09	$20.40
92555	$27.03	$11.20
92556	$43.09	$27.00
92557	$40.86	$40.86
92561	$43.77	$17.44
92562	$53.79	$7.70
92563	$35.68	$7.16
92564	$32.38	$9.07
92565	$18.38	$9.29
92568	$17.11	$9.28
92570	$34.88	$26.84
92571	$31.56	$9.53
92572	$41.44	$2.08
92575	$83.70	$7.44
92576	$41.44	$12.07
92577	$19.21	$13.61
92579	$45.54	$25.43
92582	$78.35	$38.06
92585	$155.16	$123.15
92586	$98.94	$66.49
92587	$23.46	$41.00

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
92588	$35.85	$51.26
92597	$78.06	$81.89
92601	$153.68	$114.93
92602	$98.07	$80.56
92603	$165.98	$77.32
92604	$98.56	$52.68
92605	$100.00	$34.76
92606	$90.13	$34.76
92607	$138.60	$95.97
92608	$58.18	$18.80
92609	$121.87	$51.95
92610	$93.28	$48.78
92611	$94.75	$39.95
92612	$210.86	$114.92
92613	$41.24	$33.73
92614	$163.92	$85.70
92615	$36.49	$28.26
92616	$233.84	$118.42
92617	$45.19	$37.47
92618	$36.41	$27.54
92620	$102.79	$40.75
92621	$24.42	$10.11
92625	$76.30	$40.07
92626	$97.97	$20.05
92627	$24.50	$20.05
92920	$580.73	$435.12
92924	$689.74	$517.26
92928	$644.58	$483.05
92933	$720.99	$540.15
92937	$644.20	$482.46
92941	$722.42	$541.18
92943	$722.15	$541.18
92950	$333.69	$115.00
92953	$11.99	$20.40
92960	$229.08	$122.46
92961	$278.47	$172.78
92970	$200.72	$188.49
92971	$107.85	$79.24
92973	$188.48	$146.71
92974	$172.05	$159.17
92975	$415.39	$336.79

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
92977	$70.19	$249.43
92986	$1,429.19	$965.88
92987	$1,474.81	$1,043.85
92990	$1,164.84	$819.02
92997	$697.56	$544.81
92998	$343.88	$283.71
93000	$18.81	$28.70
93005	$9.74	$16.40
93010	$9.07	$12.30
93015	$85.01	$95.91
93016	$23.89	$24.57
93017	$45.56	$52.50
93018	$15.56	$18.84
93024	$124.66	$104.53
93025	$181.76	$233.28
93040	$13.95	$13.07
93041	$6.44	$5.13
93042	$7.50	$8.53
93224	$103.20	$110.84
93225	$30.74	$29.82
93226	$43.91	$55.94
93227	$28.56	$25.08
93228	$28.00	$21.55
93229	$843.15	$674.96
93260	$73.91	$59.05
93261	$67.08	$54.13
93268	$235.77	$141.44
93270	$10.56	$29.82
93271	$197.89	$79.80
93272	$27.32	$21.75
93278	$33.73	$26.91
93279	$54.67	$48.79
93280	$63.94	$57.91
93281	$74.95	$67.69
93282	$68.97	$62.35
93283	$89.48	$75.90
93284	$98.82	$88.93
93285	$46.53	$42.23
93286	$30.24	$23.84
93287	$39.80	$31.19
93288	$40.71	$38.02

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
93289	$71.58	$58.20
93290	$34.12	$27.40
93291	$39.88	$36.33
93292	$35.77	$36.62
93293	$60.22	$52.81
93294	$36.41	$31.34
93295	$72.30	$56.76
93296	$29.91	$33.96
93297	$28.41	$21.55
93298	$28.41	$25.27
93303	$270.99	$152.65
93304	$177.65	$83.48
93306	$258.64	$239.76
93307	$147.34	$150.10
93308	$142.42	$75.05
93312	$343.88	$155.74
93320	$61.36	$76.57
93321	$30.97	$38.94
93325	$29.37	$77.88
93350	$273.25	$96.12
93351	$306.82	$247.29
93352	$38.49	$34.77
93355	$241.92	$193.26
93451	$895.91	$698.63
93452	$998.50	$762.86
93453	$1,286.84	$998.44
93454	$1,013.13	$787.65
93455	$1,179.59	$919.49
93456	$1,268.54	$985.01
93457	$1,434.22	$1,116.74
93458	$1,214.84	$950.01
93459	$1,341.51	$1,048.57
93460	$1,437.31	$1,120.29
93461	$1,645.62	$1,285.59
93462	$223.03	$165.14
93463	$106.01	$87.95
93464	$311.16	$224.81
93503	$137.37	$126.98
93505	$861.39	$237.76
93563	$62.65	$46.90
93564	$65.15	$47.63

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
93565	$48.96	$36.03
93566	$194.01	$154.69
93567	$158.16	$93.20
93568	$173.35	$93.20
93580	$1,042.52	$603.92
93581	$1,417.39	$760.72
93582	$711.26	$565.26
93583	$804.25	$503.21
93613	$424.21	$312.54
93642	$465.87	$524.85
93644	$309.84	$260.64
93650	$644.74	$715.71
93653	$905.23	$659.46
93654	$1,205.73	$880.22
93655	$452.62	$329.80
93656	$1,206.48	$880.47
93657	$452.47	$329.97
93702	$125.43	$105.13
93724	$293.56	$274.98
93750	$60.02	$44.29
95812	$400.43	$81.82
95813	$483.51	$111.34
95816	$416.08	$75.58
95819	$476.46	$65.01
95822	$428.84	$65.01
95827	$805.65	$115.16
95829	$2,159.81	$222.48
95830	$277.49	$79.34
95831	$33.88	$14.86
95832	$32.47	$14.86
95833	$41.10	$52.48
95834	$56.78	$52.48
95851	$20.64	$14.86
95852	$18.37	$8.18
95857	$60.35	$29.72
95860	$137.57	$65.60
95861	$192.22	$98.40
95863	$239.10	$111.45
95864	$270.03	$164.00
95865	$160.12	$99.84
95866	$149.88	$66.47

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
95867	$106.12	$48.23
95868	$148.63	$81.41
95869	$106.40	$26.24
95870	$106.40	$20.25
95872	$214.80	$73.25
95873	$84.04	$24.49
95874	$83.49	$24.83
95875	$139.89	$51.18
95885	$66.69	$49.84
95886	$102.28	$76.84
95887	$90.93	$68.83
95905	$81.04	$70.80
95907	$106.39	$82.81
95908	$132.03	$102.19
95909	$160.96	$122.34
95910	$214.57	$160.95
95911	$258.85	$194.55
95912	$288.58	$227.53
95913	$329.60	$263.45
95924	$164.84	$128.82
95925	$178.32	$84.75
95926	$157.33	$123.15
95927	$162.54	$123.15
95928	$254.28	$153.15
95929	$256.05	$159.69
95930	$148.89	$34.44
95937	$91.58	$22.29
95938	$393.20	$267.67
95939	$571.89	$415.54
95940	$35.23	$27.05
95950	$377.88	$178.09
95953	$476.53	$250.77
95955	$247.01	$111.16
95956	$1,892.69	$490.44
95957	$357.23	$116.35
95958	$645.23	$247.26
95970	$76.72	$19.79
95971	$54.41	$33.72
95972	$63.66	$64.73
95974	$226.61	$128.70
95975	$121.72	$74.70
Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
95978	$272.24	$180.40
95979	$117.83	$83.24
95990	$106.20	$49.52
95991	$137.35	$72.81

Table 81: Primary Care Services

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
99201	$48.05	$22.90
99202	$81.68	$34.30
99203	$117.46	$57.20
99204	$178.38	$68.90
99205	$223.07	$82.70
99211	$22.21	$12.00
99212	$47.78	$18.10
99213	$79.60	$24.00
99214	$117.04	$37.50
99215	$157.17	$57.20
99221	$107.52	$34.30
99222	$145.71	$73.20
99223	$215.84	$80.10
99231	$41.87	$27.50
99232	$76.85	$37.80
99233	$110.80	$45.80
99238	$77.84	$37.60
99239	$115.19	$53.40
99241	$52.09	$30.60
99242	$97.36	$47.20
99243	$133.11	$59.50
99244	$198.05	$81.40

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
99245	$241.07	$102.20
99251	$52.05	$27.86
99252	$79.71	$32.46
99253	$122.65	$46.44
99254	$178.32	$65.01
99255	$214.77	$86.25
99281	$22.37	$15.18
99282	$43.58	$19.20
99283	$65.09	$44.60
99284	$123.38	$53.83
99285	$181.87	$108.08
99291	$295.89	$121.60
99292	$130.93	$58.90
99304	$98.23	$37.80
99305	$139.76	$46.90
99306	$177.99	$72.10
99307	$48.19	$13.70
99308	$74.60	$27.50
99309	$98.31	$40.00
99310	$145.79	$52.00
99315	$78.66	$38.40
99316	$113.40	$46.60
99324	$59.27	$37.40
99325	$86.08	$51.50
99326	$148.67	$68.80
99327	$198.64	$80.00
99328	$231.83	$80.00
99334	$64.80	$19.50
99335	$102.04	$35.50
99336	$144.12	$42.30
99337	$206.12	$42.30
99341	$58.86	$41.20
99342	$84.43	$43.80

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
99343	$138.36	$62.90
99344	$194.69	$68.60
99345	$235.93	$94.30
99347	$59.31	$22.40
99348	$89.90	$34.30
99349	$137.22	$46.00
99350	$190.14	$80.10
99354	$107.32	$52.30
99355	$104.17	$49.90
99356	$98.37	$42.20
99357	$97.55	$39.40
99360	$65.53	$25.50
99366	$45.89	$30.54
99368	$39.43	$18.98
99381	$120.47	$45.33
99382	$125.85	$47.13
99383	$131.08	$54.83
99384	$147.73	$65.78
99391	$108.36	$34.69
99392	$115.53	$37.39
99393	$115.12	$43.85
99394	$126.14	$54.83
99401	$39.69	$7.16
99460	$102.76	$47.20
99461	$100.15	$72.80
99462	$44.58	$25.20
99464	$75.72	$59.20
99465	$163.27	$122.00
99466	$244.01	$193.96
99467	$124.20	$96.79
99477	$382.16	$265.48
90471	$28.42	$4.46

Table 82: Behavioral Health Services

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
90785	$14.62	$3.88
90791	$139.02	$128.08
90792	$153.67	$103.25
90832	$67.11	$52.87
90833	$69.44	$34.49
90834	$89.16	$67.16
90836	$88.17	$56.02
90837	$134.08	$98.02
90838	$116.27	$90.57
90839	$139.75	$38.01
90840	$66.70	$18.98
90846	$108.30	$51.00

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
90847	$112.03	$51.00
90853	$27.05	$3.47
90870	$194.64	$75.77
90880	$107.62	$52.11
96116	$99.16	$56.20
96118	$105.35	$56.20
96120	$53.43	$56.20
96127	$6.03	$4.81
96150	$22.87	$18.03
96151	$21.71	$7.16
96152	$20.97	$16.51
96153	$4.82	$5.81
96154	$20.60	$16.21

Table 83: Pre- and Post- Natal Services

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
36460	$371.19	$309.75
59000	$138.42	$57.26
59001	$191.62	$139.85
59012	$215.91	$149.98
59020	$78.71	$50.67
59025	$52.89	$22.80
59409	$864.22	$544.28
59514	$972.29	$544.72
59525	$512.47	$239.09
59612	$971.54	$544.28
59620	$998.07	$544.72
76801	$138.81	$78.42
76802	$71.65	$60.55
76805	$160.90	$94.32

Procedure Code	2016 Medicare Rate	July 2016 Medi-Cal Rate
76810	$104.27	$87.86
76811	$202.85	$170.64
76812	$232.42	$119.18
76813	$135.44	$113.03
76814	$89.80	$71.93
76815	$95.14	$62.95
76816	$130.16	$51.84
76817	$109.84	$82.17
76820	$52.50	$38.73
76821	$104.95	$88.39
76825	$314.53	$81.48
76826	$186.66	$59.55
76827	$85.68	$57.57
76828	$59.67	$34.00

Works Cited

[1] https://www.ssa.gov/OP_Home/ssact/title19/1902.htm
[2] "Medicaid Program; Methods for Assuring Access to Covered Medicaid Services; Final Rule," 80 Fed. Reg. 67576, November 2, 2015.
[3] 42 C.F.R. § 447.203(b).
[4] 42 C.F.R. §§ 447.203(b)(1), (b)(4).
[5] 42 C.F.R. §§ 447.203(b)(7),
[6] http://www.dhcs.ca.gov/services/medi-cal/Pages/default.aspx
[7] http://www.dhcs.ca.gov/dataandstats/statistics/Documents/Fast_Facts_Feb2016_ADA_Tables.pdf
[8] Watkins, J. 2014. 2011 Medi-Cal Birth Statistics. California Department of Health Care Services. Sacramento, CA. June 2014. Compiled by Cris DeMorais, Chief.
http://www.dhcs.ca.gov/dataandstats/statistics/Documents/22_Birth_Report_2011.pdf
[9] Research and Analytic Studies Division. January 2016. Proportion of California Population Certified Eligible for Medi-Cal By County and Age Group – September 2015. Medi-Cal Statistical Brief. California Department of Health Care Services. http://www.dhcs.ca.gov/dataandstats/statistics/Documents/Medi-Cal_Penetration_Brief_ADA.PDF
[10] http://www.dhcs.ca.gov/dataandstats/statistics/Documents/Medi-Cal_Penetration_Brief_ADA.PDF
[11] http://www.dhcs.ca.gov/services/medi-cal/Pages/DoYouQualifyForMedi-Cal.aspx
[12] http://www.dhcs.ca.gov/formsandpubs/publications/Documents/PUB68.pdf
[13] http://www.dhcs.ca.gov/services/medi-cal/Pages/Medi-Cal_EHB_Benefits.aspx
[14] "Medicaid Program; Methods for Assuring Access to Covered Medicaid Services; Final Rule," 80 Fed. Reg. 67576, 67582, November 2, 2015.
[15] *DHCS Medi-Cal Managed Care Division SPD Monitoring Dashboard* (2013, January). Retrieved from http://www.dhcs.ca.gov/individuals/Documents/MMCD_SPD/ChartsRptsData/SPD_Dashboard_Jan2013.pdf
[16] http://www.dhcs.ca.gov/services/Documents/SPDsRuralExpansionCounties.pdf
[17] Centers for Medicare & Medicaid Services (CMS). (2012, December). *Approval Letter for a Bridge to Reform: California's Medicaid Section 1115 Waiver*. Retrieved from http://www.dhcs.ca.gov/provgovpart/Documents/1115amendapprovallet12312012.pdf
[18] https://www.cms.gov/Regulations-and-Guidance/Legislation/EMTALA/
[19] https://www.medicare.gov/sign-up-change-plans/decide-how-to-get-medicare/whats-medicare/what-is-medicare.html
[20] Social Security Act § 1902(a)(25), 42 U.S.C. § 1396a(a)(25).
[21] Bloom B, Cohen RA. Young adults seeking medical care: Do race and ethnicity matter? NCHS data brief, no 55. Hyattsvilee, MD: National Center for Health Statistics. 2011.
[22] Gulley, S., Rasch, E., Chan, L. (2014). *Difference, Disparity & Disability: A comparison of health insurance coverage and health services use on the basis of race/ethnicity among U.S. adults with disabilities, 2006-2008.* Med Care.
[23] Rask, K., Williams, M., Parker, R., McNagny, S. (1994). *Obstacles Predicting Lack of a Regular Provider and Delays in Seeking Care for Patients at an Urban Public Hospital.* Journal of the American Medical Association. http://jama.ama-assn.org/content/271/24/1931.abstract
[24] Kullgren, J., McLaughlin, C., Mitra, N., Armstrong, K. (February 2012). *Nonfinancial Barriers and Access to Care for U.S. Adults.* Health Services Research. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3393009/
[25] Vaidya, V., Partha, G., Karmakar, M. (February, 2012). *Gender Differences in Utilization of Preventive Care Services in the United States.* Journal of Women's Health.

[26] National Academy of Science, Institute of Medicine. (1993). *Access to Health Care in America*. Committee on Monitoring Access to Personal Health Care Services. http://www.nap.edu/openbook.php?record_id=2009

[27] Institute of Medicine. (2002). *Care Without Coverage: Too Little, Too Late.* The National Academies of Sciences, Engineering, and Medicine, Health and Medicine Division. http://www.iom.edu/Reports/2002/Care-Without-Coverage-Too-Little-Too-Late.aspx

[28] Agency for Healthcare Research and Quality. *The Safety Net Monitoring Initiative*. http://archive.ahrq.gov/data/safetynet/

[29]Dal Paz, MR et al (2009). *Handbook on Monitoring and Evaluation of Human Resources for Health*. Geneva, World Health Organization. http://apps.who.int/iris/bitstream/10665/44097/1/9789241547703_eng.pdf

[30] Blumenthal, D., Abrams, M.,Nuzum, R. (June 2015). *The Affordable Care Act at 5 Years.* New England Journal of Medicine. http://www.nejm.org/doi/full/10.1056/NEJMhpr1503614?af=R&rss=currentIssue

[31] Glied, S., Ma, S. (February 2015). *How Will the Affordable Care Act Affect the Use of Health Care Services?* The Commonwealth Fund. http://www.commonwealthfund.org/~/media/files/publications/issue-brief/2015/feb/1804_glied_how_will_aca_affect_use_hlt_care_svcs_ib_v2.pdf?la=en

[32] Blumenthal, D. (June 2015).

[33] Medicaid and Children's Health Insurance Program (CHIP) Payment and Access Commission. (March 2011). *Report to the Congress on Medicaid and CHIP*. http://www.macpac.gov/publication

[34] Shi, L., Starfield, B. (2001). *The Effect of Primary Care Physician Supply and Income Inequality on Mortality Among Blacks and Whites in U.S. Metropolitan Areas*. American Journal of Public Health. http://ajph.aphapublications.org/cgi/reprint/91/8/1246.pdf

[35] Felt-Lisk, S., McHugh, M., Thomas, M. (June 2004). *Examining Access to Specialty Care for California's Uninsured.* California Healthcare Foundation, Mathematica Policy Research, Inc. http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/PDF%20A/PDF%20AccessToSpecialtyCareForCalifUninsuredReport.pdf

[36] Bisgaier, J., Rhodes, K. (2011). *Auditing Access to Specialty Care for Children with Public Insurance.* New England Journal of Medicine. http://www.nejm.org/doi/full/10.1056/NEJMsa1013285#t=articleTop

[37] Bisgaier, J. (2011).

[38] Lishner, D., Richardson, M., Levine, P., Patrick, D. (1996). *Access to Primary Health Care Among Persons With Disabilities in Rural Areas: A Summary of the Literature.* Journal of Rural Health. http://onlinelibrary.wiley.com/doi/10.1111/j.1748-0361.1996.tb00772.x/abstract

[39] Rosenblatt, R., Hart, L.G. (2000). *Physicians and Rural America*. National Institutes of Health, National Center for Biotechnology Information. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1071163/

[40] Rural Health Information Hub. (2015) *Rural Healthcare Workforce*. https://www.ruralhealthinfo.org/topics/health-care-workforce

[41] Rural Health Information Hub. (2014) *Healthcare Access in Rural Communities*. https://www.ruralhealthinfo.org/topics/health-care-workforce

[42] Reschovsky, J., Staiti, A. (2005). *Physician Incomes in Rural and Urban America*. Center for Studying Health System Change. http://www.hschange.com/CONTENT/725/

[43] Rural Health Information Hub (2015).

[44] United States Department of Health and Human Services, National Center for Health Workforce Analysis. *Distribution of U.S. Health Care Providers Residing in Urban and Rural Areas*. http://bhpr.hrsa.gov/healthworkforce/supplydemand/nchwafactsheet.pdf

[45] Petterson, S., Phillips, R., Bazemore, A., Koinis, G. (2013). *Unequal Distribution of the U.S. Primary Care Workforce.* The Robert Graham Center. http://www.graham-center.org/rgc/publications-reports/publications/one-pagers/unequal-distribution-2013.html

[47] United States Department of Health and Human Services, National Center for Health Workforce Analysis.

[48] Rosenblatt, R. (2000).

[49] Reschovsky, J. (2005).

[50] Grumbach, K., Vranizan, K., Bindman, A. (1997). *Physician Supply and Access to Care in Urban Communities.* Health Affairs. http://content.healthaffairs.org/content/16/1/71.full.pdf

[51] Petterson, S. (2013).

[52] Ziller, E., Lenardson, J. (2009). *Rural-Urban Differences in Health Care Access Vary Across Measures.* University of Southern Maine, Muskie School of Public Service, Maine Rural Health Research Center. https://muskie.usm.maine.edu/Publications/rural/pb/Rural-Urban-Health-Care-Access.pdf

[53] Coffman, J., Quinn, B., Brown, T., Scheffler, R. (June 2004). *Is There a Doctor in the House? An Examination of the Physician Workforce in California over the Past 25 Years.* Petris School of Public Health at the University of California-Berkeley. http://healthforce.ucsf.edu/sites/healthforce.ucsf.edu/files/publication-pdf/IsThereDoctorHouse.pdf

[54] Cunningham, P., Nichols, L. (2005). *The Effects of Medicaid Reimbursement on Access to Care of Medicaid Enrollees: A Community Perspective.* Medical Care Research and Review. http://new.chpre.org/journal-the-effects-of-medicaid-reimbursement-on-access-to-care-of-medicaid-enrollees-a-community-perspective/

[55] Boukus, E., Cassil, A., O'Malley, A. (2009). *A Snapshot of U.S. Physicians: Key Findings from the 2008 Health Tracking Study Physician Survey.* Center for Studying Health System Change. http://www.hschange.com/CONTENT/1078/

[56] Bricklin-Small, D., Thorsness, R. (September 2012). *Implementing the Medicaid Primary Care Rate Increase to Improve Access to Care.* Center for Health Care Strategies, Inc. http://www.chcs.org/media/Implementing_the_Medicaid_Primary_Care_Rate_Increase__092812.pdf

[57] Polsky, D., Richards, M., Basseyn, S., Wissoker, D., Kenney, G., Zuckerman, S., Rhodes, K. (2015). *Appointment Availability After Increases in Medicaid Payments for Primary Care.* New England Journal of Medicine. http://www.nejm.org/doi/full/10.1056/nejmsa1413299

[58] Cossman, J., Ritchie, J., Cosby, A. (November 2006). *Medicaid Reimbursement and Access to Physicians: Does Lower Reimbursement Mean Less Access to Care?* Journal of the Mississippi State Medical Association. https://www.researchgate.net/publication/5901707_Medicaid_reimbursement_and_access_to_physicians_does_lower_reimbursement_mean_less_access_to_care

[59] Polsky, D. (2015).

[60] Blumenthal, D. (June 2015).

[61] Cunningham, P., May, J. (2006). *Medicaid Patients Increasingly Concentrated Among Physicians.* Center for Studying Health System Change. http://www.hschange.com/CONTENT/866/

[62] Kushel, M., Gupta, R., Gee, L., Haas, J. (January 2006). *Housing Instability and Food Insecurity as Barriers to Health Care Among Low-Income Americans.* Journal of General Internal Medicine. http://onlinelibrary.wiley.com/doi/10.1111/j.1525-1497.2005.00278.x/full

[63] DeVoe, J., Baez, A., Angier, H., Krois, L., Edlund, C., Carney, P. (November/December 2007). *Insurance + Access ≠ Health Care: Typology of Barriers to Health Care Access for Low-Income Families.* Annals of Family Medicine. http://www.annfammed.org/content/5/6/511.full.pdf+html

[64] Hall, A., Lemak, C., Steingraber, H., Shaffer, S. (2008). *Expanding the Definition of Access: It Isn't Just About Health Insurance.* Journal of Health Care for the Poor and Underserved.

[65] Kullgren, J., McLaughlin, C., Mitra, N., Armstrong, K. (February 2012). *Nonfinancial Barriers and Access to Care for U.S. Adults.* Health Services Research. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3393009/

[66] Kushel, M. (January 2006).

[67] Kullgren, J. (February 2012).

[68] Hall, A. (2008).

[69] Baker, D., Stevens, C., Brook R. (1996). *Determinants of Emergency Department Use: Are Race and Ethnicity Important?* Annals of Emergency Medicine. http://www.annemergmed.com/article/S0196-0644(96)70093-8/abstract

[70] Rask, K., Williams, M., Parker, R., McNagny, S. (1994). *Obstacles Predicting Lack of a Regular Provider and Delays in Seeking Care for Patients at an Urban Public Hospital.* Journal of the American Medical Association. http://jama.ama-assn.org/content/271/24/1931.abstract

[71] Kullgren, J. (February 2012).

[72] Andersen, R. (1995). *Revisiting the Behavioral Model and Access to Medical Care: Does It Matter?* Journal of Health and Social Behavior. http://mph.ufl.edu/files/2012/01/session6april2RevisitingBehavioralModel.pdf

[73] Medicaid and Children's Health Insurance Program (CHIP) Payment and Access Commission. (March 2011).
[74]
http://www.chcf.org/~/media/MEDIA%20LIBRARY%20Files/PDF/PDF%20M/PDF%20MonitoringAccessMediCal.pdf

[75] Bollman, D. L. (ed.). (2011). Perinatal Services Guidelines for Care: A Compilation of Current Standards – 2011. California Department of Public Health, Maternal Child and Adolescent Health Division. Retrieved from http://www.cdph.ca.gov/programs/rppc/Documents/MO-RPPC-PerinatalServicesGuidelines-CompilationofStandards-2011.pdf

[76] U.S Department of Health and Human Services. (2015a).

[77] Callaghan, W.M., MacDorman, M.F., Rasmussen, S.A., Qin, C., Lackritz, E.M. (2006, October 1). The Contribution of Preterm Birth to Infant Mortality Rates in the United States. *Pediatrics, 118*(4): 1566-1573. Retrieved from http://pediatrics.aappublications.org/content/118/4/1566.abstract

[78] Russell, R.B., Green, N.S., Steiner, C.A., Meikle, S., Howse, J.L., Poschman, K., Dias, T., Potetz. L., Davidoff, M.J., Damus, K., Petrini, J.R. (2007, July). Cost of Hospitalization for Preterm and Low Birthweight Infants in the United States. *Pediatrics, 120*(1): e1-e9. http://www.ncbi.nlm.nih.gov/pubmed/17606536

[79] MacDorman, M.F., Mathews, T.J. (2009, November). Behind International Rankings of Infant Mortality: How the United States Compares with Europe. *Centers for Disease Control and Prevention, National Center for Health Statistics, 23*. Retrieved from http://www.cdc.gov/nchs/data/databriefs/db23.pdf

[80] Behrman, R.E., Butler, A.S., ed. (2006, July 13). Preterm Birth: Causes, Consequences, and Prevention. *Institute of Medicine of the National Academies.* Retrieved from http://www.iom.edu/Reports/2006/Preterm-Birth-Causes-Consequences-and-Prevention.aspx

[81] U.S. Department of Government Affairs. (2006, November). *Routine Prenatal Care and Testing*. American Congress of Obstetricians and Gynecologists. Retrieved from http://www.acog.org/~/media/Districts/District%20VIII%20Junior%20Fellows/jfpc.pdf?dmc=1&ts=20130604T1844124564 on 12/13/2013.

[82] U.S. Department of Government Affairs. (2011, January). *Maternity Care: By the Numbers*. American Congress of Obstetricians and Gynecologists. Retrieved from http://www.acog.org/~/media/Departments/Government%20Relations%20and%20Outreach/momsMCBTH.pdf?dmc=1&ts=20130506T1441345650 on 12/13/2013.

[83] Wardlaw, et.al. (2004).

[84] Chandra, A., Martinez, G., Mosher, W., Abama, J., Jones, J. (2005, December). Fertility, Family Planning, and Reproductive Health of U.S. Women: Data from the 2002 National Survey of Family Growth. *National Center for Health Statistics, Vol. 23* (Issue 25).

[85] Epstein, A., Newhouse, J. (Summer 1998). Impact of Medicaid Expansion on Early Prenatal Care and Health Outcomes. *Health Care Financing Review, Vol. 19* (Issue 4): 85-99.

[86] Wardlaw, et.al. (2004)

[87] Alexander, G., Kotelchuck, M. (2001, August). Assessing the Role of and Effectiveness of Prenatal Care: History, Challenges, and Directions for Future Research. *Public Health Reports, Vol. 116*: 306-316.

[88] Alexander and Kotelchuck. (2001, August)

[89] Cook, C., Gohn-Baub, E., Selig, K., Wedge, B. (1999, March). Access Barriers and the Use of Prenatal Care by Low-Income, Inner-City Women. *Social Work, Vol. 44* (Issue 2): 129-139.