Eliminating Adult Dental Benefits in Medi-Cal:
An Analysis of Impact

Introduction
In 2009, California eliminated non-emergency
dental services for adults in its Medicaid program,
Medi-Cal. The California HealthCare Foundation
commissioned this issue brief to understand
the impact of this policy change on Medi-Cal
beneficiaries and the program’s dental providers.
Looking at the year before and the year after
the cuts were implemented — fiscal year (FY)
2008–09 and FY 2009–10 — this analysis
focused on the following broad questions:

- How did the cuts affect dental expenditures?
  Were the expected savings to the state
  achieved?
- How did dental utilization change for both
  adults and children after the cuts were
  enacted?
- How did dental provider practices change
  after the cuts were enacted?

Looking at certified, continuously enrolled
Medi-Cal beneficiaries who were not enrolled in
dental managed care plans, the study found that in
the first year after the cuts:

- Spending on adult dental benefits decreased.
- Spending on dental ambulatory care sensitive
  conditions (ACSCs) increased, though there is
  not sufficient evidence to claim that the
  increased spending was caused by limitations
  on adult access to preventive dental care.
- Adults in the blind and disabled aid
categories were overrepresented among ACSC

The findings presented here are based on only
two years of data, and while it is too early to
say conclusively what the long term health and
budgetary impacts of this policy change will
be, the findings provide information on some
initial outcomes and raise questions for future
consideration regarding the oral health needs and
access to care of Medi-Cal beneficiaries.

Background
Most dental services for adults are considered
optional benefits in the federal Medicaid program,
meaning that states are not required to include
them in their Medicaid plans. Traditionally,
California covered non-emergency adult dental
services in its Medi-Cal program, one of only a
few states to do so. However, driven by budget
considerations, California eliminated these services
as a Medi-Cal benefit for most adults effective
July 2009. The Department of Healthcare
Services (DHCS) estimated that FY 2009–10
savings associated with the dental cuts would be
approximately $190 million, $97.5 million of
which would be from the state General Fund.

- Decreased expenditures for Federally Required
  Adult Dental Services (FRADS) suggest
  that providers and/or beneficiaries may not
  understand that those services are still covered
  by Medi-Cal.
- Both expenditures on and utilization by
  children increased. Data do not indicate that
  the same children were seen more frequently.
The policy change raised a number of questions on the parts of beneficiaries, advocates, providers, and county and state administrators about the fiscal and human impact of these cuts. Many were concerned that some providers would drop out of the program entirely, limiting access for children and for those adults who remained eligible; children’s access might be affected by parents no longer seeking dental care for them; disabled beneficiaries would be more adversely affected; and the policy would not achieve the projected savings because the lack of access to dental care would increase costs elsewhere in Medi-Cal.

The benefits that were eliminated included basic diagnostic and preventive services, such as routine check-ups and services to prevent tooth decay; and restorative services such as fillings, gum treatments, crowns, root canals, and dentures. Certain federally mandated emergency services and services for the relief of pain and infection, such as tooth extractions, remained available after the cuts.3

The cuts applied to most adult Medi-Cal beneficiaries, with some exceptions. For example, benefits for pregnant beneficiaries age 21 and older and those who live in a licensed skilled nursing facility or licensed intermediate care facility were not affected by the cuts.4 Adult disabled beneficiaries were not exempted.

Findings

Expenditures

Expenditures for Adults Dropped

In the year following implementation of the cuts to adult dental benefits, total managed care (MC) and fee-for-service (FFS) dental expenditures dropped $246 million (Figure 1).5 Following the implementation of the cuts, expenditures for adult services dropped precipitously, to a low of $14.2 million in the last quarter of FY 2009–10 (Figure 2, page 3). The $246 million decrease in expenditures exceeded the projected savings of $190 million and represented a General Fund savings of approximately $123 million.6 The magnitude of this savings is attributable in part to a larger spending base in FY 2008–09. In the last quarter of FY 2008–09 — after the cuts were enacted but before they took effect — FFS dental expenditures peaked at $114 million, a 33% increase over the previous quarter (Figure 2). This raised the overall level of spending for FY 2008–09 to $932 million (Figure 1).7 Following the implementation of the cuts, FFS expenditures for adult services dropped

![Figure 1. Total FFS and MC Dental Expenditures, All Eligibles, FY08–09 and FY09–10](image-url)
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Precipitously, to a low of $14.2 million in the last quarter of FY 2009–10 (Figure 2).

**Expenditures for Children Continued to Rise**

While adult dental spending fell, spending for continuously eligible children increased by 21% after adult benefits were cut. This was due to several factors: an increase in the number of children eligible for services (8%), an increase in the number of eligible children using services (12%), and an increase in expenditures per beneficiary (8%). Figure 2 tracks expenditures for adults and for children by quarter over the two years of the study period. Expenditures for children were on an upward trend even before the cuts were implemented, and continued to rise after enactment.

**Ambulatory Care Sensitive Conditions**

**Expenditures Rose**

Traditionally, ACSCs are defined as those conditions that can be managed effectively on an outpatient basis. Hospital and emergency department admission rates for ACSCs therefore can serve as markers for impaired access to and/or sub-optimal quality of primary care. In the case of oral health care, spending on dental ACSCs — measured not by hospital care exclusively, but as services provided anywhere outside a dental office — can signal a loss of access to appropriate preventive dental care.

Accordingly, this study looked at expenditures for dental ACSCs to identify possible access problems in the wake of the cuts. (Dental ACSCs are captured by medical, not dental, claims, so are not affected by the dental cuts.)

The research found that spending on treatment for ACSCs for continuously eligible beneficiaries was $31 million in FY 2008–09 and $36 million in FY 2009–10. (Comparable figures for all beneficiaries with FFS dental coverage in non-dental office settings increased from $45 million in FY 2008–09 to $49 million in FY 2009–10.) These increased expenditures offset a small portion of the overall savings attributed to the benefits cuts. In both fiscal years
approximately 80% of the total spending for dental ACSCs was for inpatient hospital and ER services.

The increase in dental ACSC expenditures can be attributed entirely to increased expenditures for the population enrolled in Medi-Cal through blind/disabled aid codes. Per-person, ACSC-related hospital and ER expenditures for blind and disabled adults were three times higher than those for other adults in FY 2008–09, and 3.6 times higher in FY 2009–10 (Figure 3).

**Federally Required Adult Dental Services Expenditures Dropped**

The federal Medicaid program does require that some dental services, primarily emergency services, be provided to adults. Dental extractions and tooth removals of various kinds, along with related diagnostic services such as x-rays and exams, are the most common of these FRADS. Although beneficiary eligibility for FRADS was not affected by the July 2009 state policy changes, California expenditures for these services dropped by more than half between FY 2008–09 and FY 2009–10. Dental extractions and removals comprised more than half of total expenditures (Figure 4). The reduction in Medi-Cal expenditures for selected FRADS may be attributable to reduced need, or to a lack of understanding by beneficiaries and providers that these services were still covered.

**Figure 3. ACSC Dental FFS Expenditures Per Adult, Blind/Disabled vs. Non, FY08–09 and FY09–10**

<table>
<thead>
<tr>
<th>EXPENDITURES PER ADULT</th>
<th>FY08–09</th>
<th>FY09–10</th>
</tr>
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<tbody>
<tr>
<td>Blind/Disabled</td>
<td>$2,601</td>
<td>$3,307</td>
</tr>
<tr>
<td>Non-Blind/Disabled</td>
<td>$873</td>
<td>$927</td>
</tr>
</tbody>
</table>

Source: CDHCS MIS/DSS Medi-Cal Claims Data, FY08 – 09 and FY09 – 10 (based on date of service).

**Figure 4. Expenditures for Selected FRADS, Dental FFS Beneficiaries, FY08–09 through FY09–10**

- **Surgical removal of erupted tooth**
- **Extraction, erupted tooth or exposed root (elevation and/or forceps removal)**
- **Removal of impacted tooth – partially bony**
- **Palliative (emergency) treatment of dental pain – minor procedure**
- **Removal of impacted tooth – completely bony**
- **Other**

<table>
<thead>
<tr>
<th>TOP 5 FRADS AND OTHER EXPENDITURES (IN MILLIONS)</th>
<th>FY08–09</th>
<th>FY09–10</th>
</tr>
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<tr>
<td>$48.3</td>
<td>$22.3</td>
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</table>

Source: CDHCS MIS/DSS Medi-Cal Claims Data, FY08 – 09 and FY09 – 10 (based on date of service).
Clinic Dental Expenditures for Adults and Children Rose

The number of adults using dental services at clinics with dental claims reimbursed by Medi-Cal fell by approximately half after the cuts. However, among adults using dental services still covered by Medi-Cal in FY 2009–10, the percentage of beneficiaries seeking care at clinics increased by approximately 4%. Data on the number of Medi-Cal recipients who sought care at clinics and who were uninsured for the purposes of reimbursement for dental services were not available.

The proportion of expenditures for clinic dental services increased by approximately 3.4% for both adults and children. Total expenditures for clinics fell from $65 million to $19 million for adults before and after the cuts; however, for children they increased from $60 to $87 million. For children, the proportion of expenditures for clinics and specific procedure categories remained relatively stable before and after the cuts.

Utilization

Utilization by Adults Dropped

As expected, the percentage of adult beneficiaries receiving dental services decreased significantly after the cuts: unique users fell from 35% of beneficiaries in FY 2008–09 to 12% in FY 2009–10. Most of the adults using services in FY 2009–10 were those living in long term care settings and thus exempt from the cuts, or had authorization to complete care that had been initiated prior to the cuts.

The number of adult beneficiaries using dental services decreased across all procedure categories after the cuts. Among those still using services in FY 2009–10, a greater percentage than in the previous year used services in the Adjunctive General Services procedure category. This is consistent with expectations since this category includes procedures for treating dental conditions such as the emergency treatment of dental pain and services related to oral surgery such as anesthesia.

Utilization by Children Remained Relatively Stable, with Increases in Youngest Age Groups

The percentage of eligible children receiving any dental services during a given year in FY 2008–09 and FY 2009–10 remained essentially constant at 46 to 47% of beneficiaries (Figure 5). However, examination of quarterly data across the two fiscal years show a trend toward increased utilization by children under age six that, as with expenditures for all children, began prior to the implementation of the adult dental cuts and continued throughout the study period (Figure 6).11

![Figure 5. Adult and Child FFS Beneficiaries Receiving Dental Services, FY08–09 and FY09–10](image-url)
among this age group did not have a major impact on the overall rate of child utilization. Children ages six to 20, who represent the overwhelming majority of users, had essentially constant rates of utilization per quarter — almost 20% — across the study period (Figure 6).

A comparison between quarterly and annual data did not suggest that the same children were being seen more frequently in FY 2009–10 relative to FY 2008–09, however, data at a more chronologically granular level (e.g., by day or by month) could potentially reveal evidence of more frequent visits by the same children.

**Utilization by Blind/Disabled Adults Dropped, but They Used More Services**

Both before and after the 2009 cuts, adults in the blind and disabled aid categories used dental services more than adults in other aid categories (13.6% versus 9.2% in FY 2009–10). However, utilization by adults in blind and disabled aid categories showed a greater percentage drop after the cuts than utilization of non-blind/disabled adults (Figure 7). In combination with the finding cited earlier regarding ACSC spending for this

**Figure 7. Adult FFS Beneficiaries Using Dental Services, by Aid Code Type, FY08–09 and FY09–10**

Source: CDHCS MIS/DSS Medi-Cal Claims Data, FY08–09 and FY09–10 (based on date of service).
population, this finding raises concerns about the possible disproportionate impact of the cuts on blind and disabled beneficiaries.

**Providers**

**Fewer Dentists Provided Denti-Cal Services**

Medi-Cal classifies dental providers as “rendering providers” (individual dentists who actually provide the services) and “billing providers” (who may be rendering providers as well but may instead be a larger entity that employs multiple rendering providers). In FY 2008–09 approximately 10,500 rendering providers and 6,200 billing providers actively served beneficiaries in the Denti-Cal program. In FY 2009-10 these numbers dropped to approximately 9,500 and 5,600, respectively. Of the 53 counties that had 100 or more rendering providers in FY 2008–09, all lost providers in FY 2009–10, with decreases ranging from –7 to –34%. The unweighted average of the provider decreases in these counties was 20%. Some of the counties with the highest rates of decrease were Sacramento (–26%), San Diego (–29%), and San Francisco (–31%).

**Many Providers Who Remained Active Saw More Children**

While the number of rendering providers decreased after the cuts, many of those providers who remained in the program saw more patients, most of them children. Figure 8 shows the number of providers with patient loads greater than 50 in both fiscal years who either increased or decreased the number of patients they saw over the study period.

In addition, per-child expenditures increased in FY 2009–10. Among providers who saw 50 or more children in both years, per-child expenditures increased by an average of $7.22. A small number of providers (72) saw larger increases, averaging $100 or more per child.

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**Figure 8. Providers Who Increased or Decreased the Number of Unique Beneficiaries Treated, FY09–10 through FY08–09**

![Figure 8. Providers Who Increased or Decreased the Number of Unique Beneficiaries Treated, FY09–10 through FY08–09](source)

Sources: CDHCS MIS/DSS Medi-Cal Claims Data, FY08–09 and FY09–10 (based on date of service), and Delta Dental Provider Data for FY08–09 and FY09–10.
Conclusions
This paper reports on preliminary findings regarding the impact of the cuts to adult Denti-Cal benefits, and has some important limitations. In particular, the study only covered a single year after most adult benefits were eliminated. During this time, some portion of the Medi-Cal population continued to receive care that was authorized and initiated prior to July 1, 2009. In addition, repercussions from poor oral health are for the most part gradual, and so whatever adverse impacts the elimination of dental services might have on beneficiaries will likely become evident with the passage of time.

Monitoring and evaluating the dental utilization and expenditures of various Medi-Cal populations over time will be critical to shaping rational oral health policy decisions in California.

About the Study
This study employed an observational, quasi-experimental design, comparing data on comparable groups in FY 2008–09 and FY 2009–10 (one year before and one year after cuts were implemented on July 1, 2009). Descriptive statistics for various subpopulations based on age, aid code, and other beneficiary characteristics were used to assess differences in utilization and expenditures before and after the reduction of adult dental benefits. While a randomized controlled trial study design would have been preferable, the nature of public policy rarely makes this study design possible.

The study cohorts in both time periods included certified, continuously enrolled Medi-Cal beneficiaries who were not enrolled in dental managed care plans.13–15 Data sources included Medi-Cal eligibility and claims data based on the start date of service for eight quarters from July 1, 2008 through June 30, 2010 (FY 2008–09 and FY 2009–10) for beneficiaries eligible to receive FFS dental services; clinic and provider data from Delta Dental; and clinic lists from CPCA and Delta Dental. DHCS staff and other stakeholders worked with the Principal Investigator to review methods and data specifications for analysis.

Limitations of the study included the short time period — covering only the year before and the year after cuts were implemented — as well as potentially confounding issues such as adults’ continued use of dental services paid for out-of-pocket or through other sources and the impact of dental service loss on beneficiaries’ overall health including exacerbation of chronic conditions.

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**ENDNOTES**


2. The FY 2009-10 estimated savings associated with the dental cuts was $189,604,000. California Department of Health Care Services, Medi-Cal Program Regular Policy Change Index, 37 (November 2009). Estimate confirmed by correspondence with the Chief of Denti-Cal on October 18, 2011.

3. For more information on eliminated services, see “Elimination of Most Adult Dental Services,” Denti-Cal Bulletin, 25 (22) (May 2009), www.denti-cal.ca.gov.


5. This analysis of dental expenditures includes both fee-for-service and managed care expenditures. It also includes data on dental expenditures for all certified beneficiaries receiving dental services through fee-for-service arrangements, including both beneficiaries who were continuously eligible and those who were not. Most subsequent analyses include only those beneficiaries who are continuously eligible. Dental managed care expenditures are based on a monthly capitation payment paid to plans based on enrollment. The data captured is based on a June 7, 2011 correspondence with the Department of Health Care Services, Medi-Cal Dental Services.

6. This calculation does not take into account the increased Federal Medical Assistance Percentages per recommendations from the Dental Division. The Federal Medical Assistance Percentages is the share of Medicaid expenditures paid by the federal government. The American Recovery and Reinvestment Act of 2009 increased California’s Federal Medical Assistance Percentages from 50% to 61.59%, meaning that the federal government paid about 62 cents for every dollar of Medi-Cal services used. The Federal Medical Assistance Percentages increase was effective from October 1, 2008 through December 31, 2010.

7. This includes dental services provided in clinics, which are not captured as dental claims but rather as medical claims. In order to capture data for dental services provided in community clinics, researchers extracted data from Electronic Data Service fee-for-service claims where the vendor type was a federally funded clinic (vendor code 77) and indicated a dental encounter (procedure code 00003). Additionally, to ensure that all clinics were surveyed, the list of federally funded clinics was supplemented with a list of non-federally funded fee-for-service dental clinics (including dental school clinics) provided by Delta Dental.

8. For this study, ambulatory care sensitive conditions were identified based on medical claims with diagnosis codes 520.0-529.9 for oral health conditions. Emily F. Shortridge, PhD, MPH, MPP and Jonathan R. Moore, “Use of Emergency Departments for Conditions Related to Poor Oral Health Care.” This study was funded under a cooperative agreement with the Health Resources and Services Administration, Office of Rural Health Policy, Department of Health and Human Services, Grant Number 1U1CRH03715.

9. Nearly all (97%) of this increase was due to an increase in per person expenditures — mostly for inpatient care — rather than an increase in beneficiaries.

10. For this study, the Medi-Cal Dental Services Division provided a subset of Federally Required Adult Dental Services, identified as emergency Federally Required Adult Dental Services, to capture those dental services that reflected emergency care. (See Methodology for a list of the emergency Federally Required Adult Dental Services.) Because x-rays can be associated with either Federally Required Adult Dental Services or non-Federally Required Adult Dental Services services, they were excluded from this analysis.
11. Annual calculations are higher than quarterly numbers since there are a larger number of Medi-Cal beneficiaries who go to the dentist at any time during the year than who go at any time during a quarter. At the same time, the denominators for both proportions will be similar since the quarterly denominators represent the number of unique Medi-Cal eligibles during a given quarter and the annual denominators represent the number of unique Medi-Cal eligibles during a given year. The denominator for the year will be slightly higher but comparable.

12. Includes providers serving continuously eligible beneficiaries only. These data do not include Medi-Cal providers who did not provide services to beneficiaries.

13. “Continuously enrolled” means enrolled in Medi-Cal for 11 to 12 months in a given fiscal year.

14. There are two exceptions: the analysis of total annual expenditures and the analysis of total expenditures for ambulatory care sensitive conditions. While utilization measures were based on data for beneficiaries who were not in dental managed care plans, the analysis of total expenditures attempted to capture all dental expenditures (i.e., FFS and MC) to better understand the overall budget impact.

15. Approximately 94% of the Medi-Cal population with dental coverage are not in managed care plans.