WITHOUT CHANGE IT'S THE SAME OLD DRILL

Improving Access to Denti-Cal Services for California Children Through Dentist Participation

BARBARA AVED ASSOCIATES

OCTOBER 2012

TABLE OF CONTENTS

List of Figures and Tables

Figures

Tables

List of Tables and Figures, Cont.

Tables in Appendices

I. EXECUTIVE SUMMARY

"It is important to understand the provider-related barriers, because they are potentially more modifiable through health policy than patient related ones." – Rhodes KV, Bisgaier J.

"We give them [families] a list of dentists' names—which may not even be up to date—then hope they can find someone willing to take their child." — Medi-Cal outreach worker

Introduction

A key aim of California's Medicaid (Medi-Cal) dental program* is to provide a dental care system for children who depend on Medi-Cal to meet their health care needs. But California faces a continuing challenge of achieving and maintaining an adequate level of participation among private practice dentists. Primarily as a result of low reimbursement rates, burdensome enrollment and claims submission processes, and patient compliance issues only about one-quarter of general dentists in the state participate in Medi-Cal.

California Medi-Cal rates for dental services lag behind nearly every state. Increasing investments in Medicaid is difficult during tight fiscal times, but some states have shown that it is possible to make improvements with limited dollars. States that have increased dentists' participation in Medicaid have maximized the extent to which their Medicaid requirements and utilization mirror those of commercial insurance. Persistent low fees—and additional provider rate decreases—are likely to result in a continuing shrinkage of the private practice dental provider network in California.

This study, carried out by BARBARA AVED ASSOCIATES, examines the challenges in the Medi-Cal Dental fee-for-service (FFS) program ("Denti-Cal"), the extent of private practice dentist's participation and the factors that account for their willingness to participate. It also provides additional information from claims review and research concerning access to dental care for children with Medi-Cal in California.

Methods

We used Denti-Cal claims data, a dentist survey, key informant interviews and existing research to examine Medi-Cal's capacity to serve eligible children. The availability and organization of the state data largely determined the extent of our ability to reach conclusions in some of the study areas.

Key Findings

Of the dentists surveyed in this study:

* The fee-for-service (FFS) component of the dental program is referred to as Denti-Cal. Medi-Cal dental managed care, limited to 2 counties in California, is not called Denti-Cal.

- 24.8% participate in the Denti-Cal program.
- The number one reason for not accepting Medi-Cal is low reimbursement, reported by 97% of non-participants.
- If reimbursement rates—and administrative processes—in Denti-Cal were to improve, close to 80% of general dentists and 65% of pediatric dentists indicate it is at least somewhat likely they would take children with Medi-Cal, regardless of current participation in the program.
- Those who accept Medi-Cal see a low volume. More than one-third (38%) of general dentists report 15% or fewer Medi-Cal children in their practice; more than half (56%) of pediatric dentists indicate 5% or less is Medi-Cal.
- 54% of general dentists do not accept children until they are at least 3 years old, inconsistent with the recommendations of professional dental organizations to begin dental visits at age 1.
- 90% of general dentists said it was very or somewhat difficult to find a pediatric dentist to take Medi-Cal problem referrals.
- Wait times dentists reported for Medi-Cal patient appointments were typically under 2 weeks; half of the pediatric dentists indicated a 2-3 week wait for a treatment visit.
- Most of the 24.8% who accept Medi-Cal report they do so without restriction, for the most part, and some say have the capacity to see more.
- The characteristics of private practice dentists less likely to accept Medi-Cal patients are dentists who are in practice for more than 20 years; in solo practice; male; and White, non-Hispanic—information that might be useful in tailoring recruitment efforts.

Denti-Cal claims data show:

- Access to specialty dental services is a problem according to ratios of specialists-to-enrolled children.
- 82% participating in Medi-Cal program served fewer than 100 new children with Medi-Cal in 2011.
- High frequency of restorative and endodontic services may indicate a lack of preventative services for children.
- Claims for dental sealants—a proven strategy to prevent decay—were not submitted in expected numbers given that children with Medi-Cal are at higher risk for decay than children in the general population.
- The high submissions of claims for extractions suggest that the children's teeth were unsalvageable at the time of the visit.

Other data and previous studies show:

- California lags behind 39 other states in utilization of *any* dental services and behind 37 states in the percentage of children receiving *preventive* dental services under states' reports of the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Medicaid benefit.

- Close to half (48%) of all children with Medi-Cal (which includes more than EPSDT), did not make a dental visit in 2011; two-thirds of 3-year olds and younger with Medi-Cal did not see a dentist in 2011.
- California's Denti-Cal reimbursement rates are nearly the lowest in the nation.
- The number of dentists participating in the Denti-Cal program has declined over the last 5 years.
- Medi-Cal beneficiaries use the hospital emergency department for dental services at higher rates than privately insured children.
- Community Health Centers throughout the state report a high level of need for dental services as well as long waits for appointments.
- Quality measures for the Medi-Cal fee-for-service *dental* program, unlike the Medi-Cal *medical* program, have not been established except for one measure of dental utilization.

Recommendations

The following recommendations are tied to the study findings and directed to government agencies and policymakers, funders and purchasers, professional groups, advocacy organizations and others willing to commit to and continue working toward increased improvements in children's oral health in California.

1. Streamline and expedite the Medi-Cal dental provider enrollment process. Specifically address the issues and concerns that cause current providers the most dissatisfaction and potential providers the reluctance to participate.

2. Simplify the administrative processes associated with submitting claims to reduce the burden on providers and lower administrative costs.

3. Raise Medi-Cal dental fee-for-service rates; these rates form the basis of capitation rates in the Medi-Cal dental managed care program as well. More equitable rates will encourage more dentists to participate.

4. Recruit more dental providers into the Medi-Cal dental program taking into consideration not only geographic and specialty gaps but also the personal and business characteristics of dentists more likely to participate.

5. Adopt more quality measures for the Denti-Cal program, similar to the dental managed care program, and similar to other states.

6. Monitor Denti-Cal utilization rates, provider participation and providers-to-eligibles ratios, especially for the dental specialties that serve children, and especially during and after the transition of Healthy Families to Medi-Cal when a drop in providers accepting Medi-Cal could occur.

7. Monitor Denti-Cal claims for utilization patterns linked to over utilization and patient safety and implement program strategies to reduce the concerns. High restorative and endodontic services may be an indicator of a lack of early access to dental care.

8. Sponsor more trainings for general dentists to increase their comfort and skill level in seeing more children “by the first tooth or first birthday” and monitor utilization for improvement.

9. Expand outreach and education activities to families on the availability and importance of early, regular dental services for young children. Include sensitive messaging about the importance of patient responsibility for keeping appointments.

10. Make Denti-Cal provider and claims information more easily accessible and in more usable formats. Key data such as unique client identifier data (without breaching privacy) needs to be available to better assess and monitor utilization and appropriateness of care.

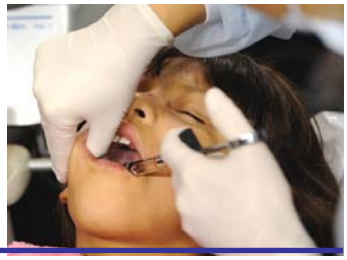
11. Collect EPSDT dental data from federally funded clinics that allow more accurate reporting of utilization rates and does not result in an undercount. Most other states are able to report these data.

12. Support the collection of more recent and consistent CHIS (California Health Information Survey) data on oral health. An example would be asking about current insurance coverage (last reported for 2007).

13. Identify a “legislative champion(s)” who is willing to be visible in taking on a leadership role for oral health issues, convey preventive oral health messages through various media, educate other legislators about oral health issues and concerns, and carry legislation.

14. Examine more closely the reasons why more parents do not fully utilize Medi-Cal dental benefits for their children, and apply the findings to program improvements.

15. Outreach to pregnant women (particularly those pregnancies covered by Medi-Cal) to educate the women about getting a dental visit for themselves and make them aware of the age 1 visit for the child.



II. INTRODUCTION

"Searching for providers and arranging a dental appointment where choices are limited leaves caregivers discouraged and exhausted." –Mofidi M, et al.

As a major purchaser of dental care, California has the ability to buy value through its Medicaid program from both the private practice and publicly-supported dental sectors but is faced with the challenge of providing network adequacy to serve thousands of covered children. Access to medical and dental services through Medicaid (Medi-Cal in California) for children should, in practice, be equivalent—but research demonstrates that greater barriers exist for dental services.

An analysis of data from 2,491 Medicaid-eligible children 2 to 16 years of age who participated in the 1999–2004 National Health and Nutrition Examination Survey showed that having Medicaid insurance improved use of medical services, but did not improve the use of dental services.[1] A California study of low-income children that documented wide disparities in access and use of health care found the largest disparities in use were in dental care.[2] In a 5-state study of parents' perceptions about access to primary care, access to dentists and specialists was more problematic than for medical care.[3]

Dental disease—the single most chronic disease of childhood—more so than asthma[4]—is among the top reasons that keeps children out of school, and affects their overall health and well-being.[5] Regular dental care, optimally starting with the first tooth or the first birthday, is essential to good oral and overall general health. While having any form of dental insurance significantly increases a child's odds of seeing a dentist on a regular basis,[6] children covered by Medicaid have less access and use dental care less frequently than children with private insurance[7]—and experience a disproportionately higher prevalence of dental disease that can require costly care.[8]

Dentist participation in Medicaid has been a recurrent problem in California as well as in the U.S.[9] In 2007, only 24% of the state's private practice dentists accepted Medi-Cal dental reimbursement, down from 40% in 2003.[10] This proportion has not changed, as we report in this study. A shortage of dentists who will accept Medicaid patients is one of the most frequently cited reasons for states' failure to deliver dental services to poor children.[11]

It is well established that reimbursement levels influence providers' decisions about whether to accept public insurance. Numerous studies on access to dental care for Medicaid-insured children have been completed. Dentists consistently provide 3 major reasons for their lack of participation in Medicaid: low reimbursement rates, burdensome paperwork, and broken appointments.[12,13] Extensive literature provides evidence that raising Medicaid fees and streamlining the program to narrow the inequity gap with private payers positively influences both dentists' willingness to participate in state Medicaid programs and Medicaid patients' access to oral health care. Persistent low fees—and the threat of an additional provider rate decrease in California—are likely to result in a continuing shrinkage of the private practice dental provider network available to serve children with Medi-Cal.

STUDY PURPOSE

This study examines the challenges in the Medi-Cal Dental fee-for-service (FFS) program, and the extent of private practice dentist's participation and factors that account for their willingness to accept patients with Denti-Cal in their practices. It also provides additional information concerning access to dental care for low-income children. We believe the results of this study will assist state decision makers as they sort through the anticipated greater numbers of beneficiaries into Medi-Cal and increasing demand for services.

STUDY TEAM

BARBARA AVED ASSOCIATES (BAA), a Sacramento-based consulting firm with experience in evaluation of oral health programs carried out this study. The consultant team included Barbara M. Aved, RN, PhD, MBA, who designed and directed the project. Mechele Small Haggard, MBA, Larry S. Meyers, PhD, and Elita L. Burmas, MA, researcher consultants with BAA, participated in the dentist survey and performed some of the data analysis. John H. Howard, BS, also provided research assistance and data entry. Ronald Inge, DDS, Vice-President Professional Services/Dental Director, Washington Dental Service, and Executive Director of The Institute for Oral Health, analyzed Denti-Cal provider and claims data. Various team members participated in preparing this report.

ACKNOWLEDGEMENTS

Funding for this study was made possible by LIBERTY Dental Plan and Health Net which provide comprehensive dental services to children with Medi-Cal and other enrollees throughout California. We especially thank John Carvelli, Edward Bynum, and Sean O'Brien who offered initial suggestions about the project but made clear our independence and control in study design, execution, interpretation of findings and recommendations.

Department of Health Care Services (DHCS) Medi-Cal Dental Services Division staff worked with us to define data requirements and provided data as they were able or permitted to. We are particularly indebted to Jon Chin, Acting Chief of the Division, and Susan Bryant and Shirley Chan for their help. Gary Nelson, DDS, and Bob Isman, DDS, Dental Consultants with Delta Dental and DHCS, respectively, made helpful suggestions about the dentist survey, and agreeably tolerated numerous questions with patience and resources.

Several oral health experts, healthcare executives and consumer advocates participated in interviews and offered perspectives about Denti-Cal and ways to improve provider participation; they are acknowledged in Attachment 1. In particular, Gayle Mathe, RDH, of the California Dental Association, was as always generous with information and ideas. Two anonymous, independent reviewers of an earlier version of this report provided useful suggestions and contributed to its improvement.

We also wish to especially thank staff from local and regional dental societies—in Orange, San Joaquin and Santa Clara Counties—who graciously facilitated our access to private practice dentists by hosting the dentist survey on their websites and sending a letter of introduction to members.

BACKGROUND

The Medicaid (Medi-Cal in California) program was designed to provide health care for all indigent and medically indigent people. Although states differ in eligibility rules (for instance, California eliminated most adult Denti-Cal services in 2009, affecting nearly 3 million people) and expenditures for services provided, amendments to the Medicaid program in 1968 required all states to include dental care for individuals under age 21 as part of the Early and Periodic Screening, Diagnostic, and Treatment Service (EPSDT) program[14]

About half (44.6%) of California children ages 0-17 are covered by public insurance, primarily Medi-Cal and the Children's Health Insurance Program (CHIP).[15] The number of Medi-Cal-enrolled children reached approximately 3 million* in June 2011, a 2.0% change in enrollment from June 2010.[16] Having *coverage* for dental services is not the same as having *access* to dental care, however.

Medi-Cal is expected to grow by 900,000 children with the state's elimination of the Healthy Families program (HFP), which provides low-cost insurance for children and teens. HFP, administered by the Managed Risk Medical Insurance Board, currently serves over 863,000 children with health, dental, and vision coverage. The transition of enrollees to Medi-Cal will occur in four phases beginning in 2013. Dental services will transition at the same time as the medical coverage transition. The state also expects to enroll additional children into Medi-Cal when national health reform takes effect in 2014. All of these children will be eligible for dental benefits—benefits which are limited by inadequate provider capacity in most counties. According to the American Dental Association, less than 2% of U.S. dentists work full-time in safety net settings: the vast majority works in private practice, which means that the private practice community "is the greatest provider of hands-on care to safety net populations, and will be for the foreseeable future."[17] Private practice dental provider participation in Medicaid is low in most states. A Government Accounting Office analysis of dental workforce data showed that 25 of 39 states reported fewer than half of the dentists in their states treated any Medicaid patients during the previous year, California included.[18]

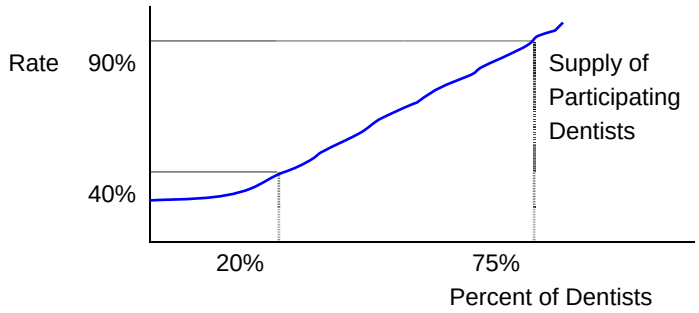
Most dentists who accept Medi-Cal are low-volume providers of children with Medi-Cal. Based on 2008 claims data for California from the National Oral Health Surveillance System (the most recent year reported for California), of California's 23,318 dentists in active practice in California in 2008, 11,894 (51%) submitted at least one Medi-Cal claim during that year. Of the dentists with at least one paid Medi-Cal claim, only 33% had paid claims of over $10,000 and only 17% saw more than 100 new children with Medi-Cal,[19] making clear that only a small percentage of the dentists serving Medi-Cal beneficiaries provide most of the care.

Not all dentists who accept Medi-Cal do so without imposing limitations, however. A survey of California pediatric dentists[20] (with a 70% response rate) indicated that while 45% reported participating in Medi-Cal, two-thirds of the dentists placed some restriction on their participation (e.g., limitation on the number accepted). Non participants' reasons for disinterest in participating echoed the main 3 reasons from other dentist surveys: low Medi-Cal rates, broken patient appointments, and program issues (mainly denial of payment).

* This figure is a point-in-time count and the number can vary month to month.

Dentists' willingness to partake in any payment system is positively related to the reimbursement level. The economic modeling illustrated in Figure 1 below illustrates the effect of reimbursement on dentist participation. The higher the reimbursement rate, the greater the number willing to participate. What happens to providers in response to *inadequate* reimbursement levels is clearly a reduction in the quantity of dentists participating (supply).

Figure 1. Reimbursement and Dentist Participation Model



Source: Donald R. House, PhD

Dentists' willingness to participate in Medicaid has been shown to be largely influenced by rate levels,[21] and California's Denti-Cal rates are among the lowest in the nation – significantly below the fees charged by most dentists.[22] This has resulted in a shrinking private practice provider network over the last 5 years (while the number of eligibles has been rising). Reimbursement level is positively associated with utilization of services. Children in states with higher Medicaid reimbursements got more dental care than those in states with lower payment rates between 2000 and 2008.[23]

The challenge for California in improving the oral health of children with Medi-Cal—children who bear a disproportionate burden of dental disease—and ensuring dental benefits are accessible is to find the balance point between an adequate supply of participating providers at a price the state can afford.

III. METHODS

"If a dentist is busy seeing a group of well reimbursed patients, why would he or she load up with a bunch of poorly reimbursed patients?."—State policymaker not from California

"We're trying to work with our local dentists to see these kids [with Medi-Cal] but can't find many who want to be in Medi-Cal." – Orange County pediatrician

DATA AND DATA SOURCES

We used Denti-Cal claims, procedures and encounters data, a dentist survey, key informant interviews and existing research to examine Medi-Cal's capacity to serve existing eligible children. The availability and organization of the state Denti-Cal data largely determined the extent of our ability to reach conclusions in some of the study areas.

The primary questions the study sought to answer included the following:

- Who is serving the Medi-Cal population and at what levels?
- What are the main reasons for unwillingness of private practice dental practices to take or restrict the number of children with Medi-Cal, and what would it take to increase their likelihood of participating?
- To what extent do children with Medi-Cal utilize the emergency department for dental conditions considered preventable?
- How do practices that accept Medi-Cal successfully offset any negative aspects of the program?
- What is the fee-for-service (FFS) complaint/grievance system for families when they experience access or quality problems, how many use it (on their own and with help from advocates), and with what results?
- What performance requirements are there for FFS providers concerning quality and cost containment?

Data Analysis

The primary data used in the analysis of access to care was Denti-Cal paid claims data from rendering providers provided by Delta Dental of California. These data provided information on dentists' claims and the number of Medi-Cal children receiving services. The data were from 2011 Calendar Year FFS claims using 2011 Date of Service. The Department of Health Care Services (DHCS) provided data on monthly total numbers of Medi-Cal beneficiaries. We used these data to examine provider availability, the ratio of enrolled children to rendering providers, type of services provided and the ratio of prevention to treatment and other services. The data we requested required a tremendous query by DHCS and Delta Dental, and to make it more manageable the claims data were broken down by quarter.

Two sets of commercial utilization data were used for the comparison: a general population which includes adults and children and a child-only commercial plan data set. Commercial dental benefits plans were used to compare government-sponsored dental benefits plans to private dental benefits plans. The general population commercial dental benefits plan has a national data base of over 2 million members. The child-only plan has a limited membership of 1,613 members and was used for comparison because it was the only child-only commercial plan we were aware of or had access to.

The data on utilization for children with Medi-Cal was from FY 2010-11. We also accessed data from the 2009 California Health Interview Survey (CHIS) to examine dental service utilization among California children at various income levels. CHIS data are a key source of population-based data about social and health behaviors, and the largest state health survey in the U.S., which provides a valuable supplement to existing data from public programs. Other "benchmark" data sources, such as industry and national Medicaid data, were also reviewed.

Collecting primary data from parents (e.g., conducting focus groups) was not within the scope of the present study. However, to present a consumer perspective and experience, we reviewed the literature for representative studies and talked with advocacy organizations about parents and other caregivers' perceptions and satisfaction with accessing Medi-Cal dental services for their children. DHCS provided what data it had relative to formal complaints, grievances and hearings processes related to dental services.

2007-2011 discharge data from the Office of Statewide Health Planning and Development for California facilities was used to examine emergency department (ED) use by children with an oral condition as the primary diagnosis. Our primary purpose was to use ED visits as a proxy measure for access to preventive services and to see how well Medi-Cal as a payer was keeping children out of the ED.

Interviews

Key informants were identified as local and state opinion leaders, policy makers, dental experts, providers, and advocates. We spoke with representative contracting Medi-Cal *medical* managed care health plans, local First 5 commissions, dental societies, consumer advocate organizations and several dentists—some of whom currently or formerly took children with Medi-Cal—to learn about their views, experience and recommendations about the Medi-Cal dental program.

Dentist Survey

A sample of diverse counties was targeted for focus in this review to stand in for a statewide survey. The counties were identified by size, geography and characteristics as those considered reflective of the state as a whole and met the selection criteria shown in Table 1 below. A random selection of about 2,000 general and pediatric dentist members of three local dental societies was invited to voluntarily participate in a written survey. One of the dental societies covered 3 counties, resulting in a 5-county dentist sample. Because approximately 80% of the dentists in California are members of their local dental society,[24] the survey was expected to reach the majority of dentists in active practice in those communities.

Table 1. Target Counties and Selection Criteria for Dentist Survey

County Areas	*Rationale for Selection*
▪ Orange County ▪ Santa Clara County ▪ San Joaquin/Calaveras/ Tuolumne Counties	▪ Urban/mostly urban county where Medi-Cal dental is the FFS system. ▪ Validation of a utilization problem (ages 0-20 utilization rates lower than statewide average). ▪ Very few community clinics with dental services. ▪ Demographics that generally mirror the CA population. ▪ Willingness of local organizations to be supportive of the study.

Mailing lists of general and pediatric dentists in active practice were obtained from the dental societies and names were randomly chosen until a proportion relative to membership size was achieved for Orange and Santa Clara Counties. An exception was made to oversample for the 3-county group to ensure an adequate sample size. Each dentist received a letter with the survey explaining the purpose of the study and inviting them to access the survey online or complete and return it by fax or in an enclosed envelope. The dental societies hosted the survey on their websites and sent or posted an introductory email to members in anticipation of receiving the survey by mail. The survey occurred between June 25, 2012 and July 15, 2012.

In order to encourage participation, a $10 Starbucks gift card was offered to dentists who completed the survey. The completed online and hard copy surveys were reviewed for usability, cleaned and coded. The data were entered into Excel spreadsheets, imported into IBM SPSS version 19.0, and analyzed.

Definitions

Eligibles	The number of individuals already covered by (enrolled in) Medi-Cal (not the number of individuals in a county whose family income would *make them eligible* to be covered) whether or not they ever used a dental service.
User	A Medi-Cal beneficiary who used at least one dental service during the year. A user is a recipient of one or more procedures.
Utilization Rate[25]	The percent of eligible children who used at least one dental service in the year.
Encounters	The number of dental visits a child made. (Multiple procedures can be provided during a single encounter.)
Procedure	The type of dental service provided, e.g., a dental sealant.
Denti-Cal Claim	A claim (bill) can be for a single procedure or multiple procedures spread over multiple visits.

Definitions, cont.

Medi-Cal Dental Program	This terminology refers to the *overall* Medi-Cal dental services program administered by the Department of Health Care Services (DHCS). It includes both a *fee for service* (FFS) and a managed care component.
Denti-Cal	The term *Denti-Cal* refers only to the FFS component.*
Beneficiary/Member	All children covered by Medi-Cal FFS or managed care are called beneficiaries. Beneficiaries enrolled in a dental managed care plan are called members of that plan.
Rendering Provider	The person or entity that provided the service or treatment. The Billing Provider is the provider that will receive payment, and may also be the rendering provider.

STUDY LIMITATIONS

To get the broadest picture of access, the dentist survey focused on urban/mostly urban areas of California as this represents the majority of where the population lives and receives services. Consequently, the study does not capture the challenges of access that are unique to rural areas. Although consistent with findings from earlier studies, findings from our dentist survey are based on a sample population. It is possible that inviting all dentists in the state to participate in a survey rather than focusing on target counties might have yielded additional information about provider participation in Medi-Cal, though we think this is unlikely as the results of our sample mirror others' findings. Finally, the scope of the study did not include an analysis of the availability of dental services provided in community clinics, which in some cases serve as the safety net and fill the gap for the poor in accessing dental care, as these clinics have their own reimbursement model.

Data Limitations

Although DHCS was responsive to our various requests for data, there were some reports that could not be generated or information provided. For example, we hoped to use as one of the proxies for provider availability billing thresholds (e.g., providers who billed at least $10K/year), but we were not given access to paid claims data. Similarly, the amount paid per procedure was not available to us.

HIPAA regulations and Department policy did not allow Medi-Cal to provide information that could identify a beneficiary so DHCS was not able to provide any type of unique patient identifier. When we then asked for a pivot table showing how many unique patients were seen by rendering providers to know how many children each of those providers saw we were told that the amount of data was too great to manipulate and an accurate pivot table would be difficult to produce, so one was not provided. While we could answer questions about age groups with birth year, we needed more information on unique patients such as patient *date of birth* to more accurately answer questions about how many individual children had been seen.

* DHCS administers Denti-Cal through a contract with Delta Dental of California. It administers the dental managed care program by contracting with Knox-Keene-licensed dental managed care plans.

Since unique patient information was not available the decision was made to evaluate the incidences of care provided in the program as reported through specific CDT (Current Dental Terminology) procedure codes. Each report of a procedure registered a single incident. Procedure codes were grouped in accordance with the categories outlined in the CDT manual. The number of incidences in each category was calculated as a percentage of the total incidences. These percentages were then compared to the percentage utilization found in a commercial dental benefits plan as the type of plan does not determine a dentist's approach to practice (or multiple practices). Most practices rely on revenue from commercial and private paying patients to supplement their participation in Medicaid.

The major CDT categories used in this evaluation and analysis were: 1) Diagnostic; 2) Radiographs/Diagnostic Imaging; 3) Preventive; 4) Restorative (Direct Restorations and Indirect Restorations); 5) Endodontics; 6) Periodontics; 7) Prosthodontics (removable); 8) Oral and Maxillofacial Surgery; 9) Orthodontics; 10) Adjunctive General Services.

IV. FINDINGS

"A major driver of dental-related hospital ED visits is a failure by states to ensure that disadvantaged people have access to routine preventive care from dentists and other providers."—PEW Center on the States, 2012

"The process for a dentist to sign up for Denti-Cal is not enrollment friendly"—Dentist practicing in Santa Clara County

A. ADEQUACY OF THE MEDI-CAL DENTAL PROGRAM

Coverage of dental care for children and adolescents with Medicaid is required, although states have wide latitude in setting payment rates for all providers including dentists.

OVERVIEW OF THE DENTI-CAL PROGRAM

States generally provide Medicaid dental services through two delivery and financing systems—fee-for-service and managed care. While FFS reimbursement is most common, in 2008/09, 21 states reported that they used dental managed care programs to deliver Medicaid dental services.[26] California mainly administers its Medicaid dental program through a FFS system except in 2 counties. In Sacramento County, beneficiaries in most aid codes are mandatorily assigned to one of 4 Geographic Managed Care (GMC) dental plans that contract with DHCS. In Los Angeles County, beneficiaries have a choice of receiving dental care through 8 Prepaid Health Plans (PHP) as well as the FFS system. "Denti-Cal" refers only to the *FFS system* and not to the dental managed care system.

The Medi-Cal Dental Services Division (which administers Denti-Cal and the Dental Managed Care Program) is responsible for administering comprehensive dental services for all children entitled to Medi-Cal benefits. DHCS maintains a Dental Outreach unit to educate Medi-Cal beneficiaries on the benefits available, how to locate a provider and the importance of oral health. The unit also works with providers, clinics, hospitals and surgery centers to encourage participation and reduce provider drop out, and acknowledges a little slippage recently.[27]

As a purchaser of services, the Medi-Cal program is responsible for "oversight and monitoring of access to program services, quality of care delivered to enrollees, availability and timeliness of appropriate levels of care, and internal structural systems established by contracted health plans," according to the Quality Strategies it publishes.[28] These strategies apply only with regard to Medi-Cal *medical* services, however, as "quality strategies" have not been applied to Medi-Cal's *dental* program, nor have quality indicators (except for one measure of dental utilization) been established for dental services at this time. The Baseline Quality Report for Medi-Cal Managed Care published in April 2012 does not contain any reference to dental care.[29]

Scope of Benefits

Under federal law, EPSDT services must be provided to any Medicaid beneficiary under age 21. EPSDT scope of benefits are published in the Denti-Cal Manual of Criteria, a 114-page manual describing the coverage of services and schedule of maximum allowance for diagnostic, preventive, restorative and other dental care procedures listed in the CDT (Current Dental Terminology) Codes. EPSDT dental services for children must minimally include: relief of pain and infections; restoration of teeth; and maintenance of dental health. The EPSDT program makes clear "though oral screening may be part of a physical exam, it does not substitute for a dental examination performed by a dentist; a referral to a dentist is required for every child."[30] Medically necessary dental services must also be provided as part of EPSDT services.

Medi-Cal enrolled children may need dental services that are not part of the scope of benefits found within the Manual of Criteria. Denti-Cal covers these services, too. In California, these services are called EPSDT Supplemental Services or "EPSDT-SS."

Services that are included in the Medi-Cal Dental Program's scope of benefits are not chargeable to the Medi-Cal dental beneficiary. However, beneficiaries (or their family) are responsible for any Share-of-Cost amount if applicable.

Provider Requirements

According to published information for potential Medi-Cal dental providers,[31] providers seeking enrollment in the program must be licensed and accredited according to the specific laws and regulations that apply to their service/provider type. To be eligible for reimbursement for services provided to Medi-Cal recipients, providers must submit a complete application package, specific to their provider type which includes completion of forms in the *Medi-Cal Provider Application* and *Medi-Cal Disclosure Statement*.

Timeframes for processing an application package vary but within 180 days the applicant is notified in writing whether the application is approved, incomplete, referred for a comprehensive review and background check, or denied. DHCS is aware that the application/credentialing process has significant efficiency issues and many providers wishing to participate have expressed concerns about the process.

The required application documents are generally limited to the dental practice business requirements. For example, provider enrollment regulations (California Code of Regulations, Title 22, Section 51000 et.seq. and Section 51200.01) list the application criteria, which include having an established place of business, proof of professional liability insurance coverage, a copy of a driver's license or state-issued identification card, and a copy of the applicant's dental license. There are no special performance requirements when signing on as a FFS provider as there are in the Medi-Cal dental managed care program, such as ensuring access to referrals for pediatric specialty services when needed by Medi-Cal patients, and no quality measures. While dental providers are expected to meet "accepted standards of dental practice," and utilization rates are monitored by the program *on an overall basis*, the primary focus of the Medi-Cal Surveillance and Utilization unit is investigation of potential fraud and abuse and financial recovery. Denti-Cal handbooks and periodic provider bulletins provide detailed instructions regarding covered benefits, billing instructions and procedures, fee schedules, and helpful hints for complying with program requirements.

Provider Rates

DHCS supports outreach and recruitment efforts to enroll dental providers in Medi-Cal but the number of rendering providers has declined over the last 5 years (while the number of eligibles has risen). The relationship between equitable fees and successful recruitment is apparent, but there are no current plans to increase Denti-Cal FFS fees.[32] In fact, the state would hope to decrease the fees further,[33] similar to other states looking for ways to address budget shortfalls.

Historical Overview

In California, the 1990 Clark v. Kizer case set a precedent for the court's use of dentist participation and level of reimbursement to determine the adequacy of states' Medicaid dental programs. According to a historical overview of the case by the National Academy for State Health Policy,[34] the court order required California to "increase provider rates to 80% of the average amount billed for 56 common procedures and develop a plan to increase beneficiary utilization in underserved areas. While California initially enacted these rate increases and conducted a provider and beneficiary outreach program, after 1 year the state persuaded the court to eliminate the 80% requirement and restore utilization controls on root canal procedures. Through the late 1990s and early 2000s, state budget deficits led the state to backtrack on some of its dental reforms. California decreased spending on dental reimbursement and further tightened utilization controls."[35]

Current Conditions

Federal approval is required when states wish to reduce Medicaid benefits. On October 27, 2011, the U.S. Centers for Medicare and Medicaid Services (CMS) approved a California proposal to reduce Medi-Cal reimbursements to dental providers by 10% in the 2012 fiscal year, retroactive to June 1, 2011. Despite the already extremely low Medi-Cal dental rates in the state, and a DHCS analysis that contained assumptions and data to justify the proposal that many advocates questioned, CMS accepted and approved California's request. On December 14, 2011, DHCS implemented the 10% payment reduction for dental services. About a month later, however, on January 31, 2012, in response to legal action taken by a coalition of advocates, the U.S. District Court issued a preliminary injunction prohibiting DHCS from applying the 10% payment reduction to dental claims rendered for services on or after this date.[36]

The U.S. District Judge ruled "the state failed to demonstrate that the rate reductions are consistent with efficiency, economy, quality of care and equality of access to care required under federal law."[37] She acknowledged California's $17.2 billion deficit and unresolved budget but explained that the state "accepted federal funds for Medi-Cal and is bound to use them to provide quality health care to low-income residents." California has filed an appeal to this decision and the reduction continues to be on hold.

The coalition also sued CMS claiming the agency, under the Administrative Procedures Act, abused its discretion in approving the reductions. Both the state and CMS appealed the injunction. Oral argument on the appeal was heard on October 10, 2011, and it will likely be a few months before there is a decision.

California, largely in response to state budget crises, has an up-and-down record of setting Medi-Cal dental rates according to historical data complied by the California Dental Association (Table 2).

Table 2. Major Denti-Cal Changes, 2002-2012

Year	Example of Action/Event
2002	▪ Reduced benefits for beneficiaries 21 and older – one prophylaxis/year and no periodic examinations (Assembly Bill 442)
2003	▪ Rate reduction for subgingival curettage and root planing (-$82) ▪ Requires submission of pre-treatment X-rays when 4 or more restorations are completed in any 12-month period
2004	▪ Attempted 5% reduction in Medi-Cal provider rates. Court proceedings delayed implementation until January 2006. Reduction repealed shortly after implementation. (Senate Bill 857)
2005	▪ Reduced provider payment rates by 5 percent. (AB 1735) ▪ Adult capped at $1800 per 12-mo. calendar year. Effective 1/1/06; sunset 1/1/09 (AB 131)
2006	▪ 5% rate reduction rescinded (SB 912)
2008	▪ 10% reduction in provider rates, effective July 1. (AbX3 5) ▪ 10% reduction blocked due to litigation brought by patients' and providers' groups. Court reverses reduction on dates of service after August 18 ▪ Increase in the maximum allowance for topical application of fluoride for children 0-5, from $8.00 to $18.00.
2009	▪ The Children's Treatment Program (CTP) to be terminated on June 30, 2009 due to cutbacks in the California Healthcare for Indigents Program/Rural Health Services Program funding. CTP reimbursed Denti-Cal providers for follow-up treatment for any newly diagnosed condition detected as part of a Child Health and Disability Prevention Health Assessment. ▪ Elimination of adult dental benefits. Federal Medicaid program classifies adult dental care as an optional program, funded at the discretion of the state.
2011	▪ 10% reduction in provider rates, effective June 1, 2011, adopted. (AB 97) Cuts were approved by the federal government in October, with cuts taking effect in December. Litigation filed to challenge the cuts.
2012	▪ Court issues injunction on January 31 to end 10 percent provider rate cuts, pending outcome of formal trial challenging the reductions.

Source: California Dental Association, August 2012.
Note: this chart represents a partial list of events.

Examples of the inequity between Medi-Cal dental rates and private insurance rates can be seen in Table 3, and range from a few dollars to significant differences in reimbursement levels.

Table 3. Differences in Dental Provider Rates for Selected Services, 2012

	Medi-Cal Fee	Private Practice Office Fee
Comprehensive oral evaluation	$25.00	$81.00
Periodic oral evaluation	$15.00	$58.00
Prophy (cleaning)	$30.00	$80.00
Fluoride varnish	$8.00	$10.00
4 Bite-wing x-rays	$18.00	$71.00

Based on Section 5 of the Manual of Criteria and Schedule of Maximum Benefits for Denti-Cal, http://www.denti-cal.ca.gov/provsrvcs/manuals/handbook2/handbook.pdf#page=297.

ROLE OF MEDI-CAL MEDICAL MANAGED CARE PLANS FOR DENTAL

Medi-Cal beneficiaries in 30 of California's 58 most populous counties receive *medical* services through enrollment in 3 major types of Medi-Cal managed care models: 1) County Organized Health System (COHS), where there is one health plan run by a public agency and governed by an independent board; 2) the Geographic Managed Care (GMC) system which requires beneficiaries to enroll in one of many commercial health maintenance organizations (HMOs) operating in a county; and 3) the Two–Plan Model, where DHSC contracts with only 2 managed-care plans, one locally developed and operated, the other a commercial HMO.[38]

Dental services are "carved out" and plans' responsibilities for dental care are limited in the DHCS contracts with Medi-Cal managed care plans.[39] *Dental screening/oral health assessment* for children under age 21 is required, as part of the plans' EPSDT requirement. Topical application of fluoride for children under 6 years of age (up to 3 times in a 12-month period) is also a covered plan benefit, as of June 2006.

The child's primary care provider (PCP) is responsible for making an annual referral to a dentist "beginning at age 3 or earlier if conditions warrant." * Medi-Cal managed care plans report they have similar problems as consumers in the FFS system in locating a Medi-Cal dentist,[40] though several plans reported to us they receive few complaints from families about dental access. The PCP is also responsible for referring children to a dental specialist when there is a medical need to do so. Plans are expected to monitor the performance of PCPs in complying with EPSDT requirements, but dental is not specifically called out. Some plans report providing training to their high-volume PCPs on pediatric dental issues to increase awareness of children's oral health issues.

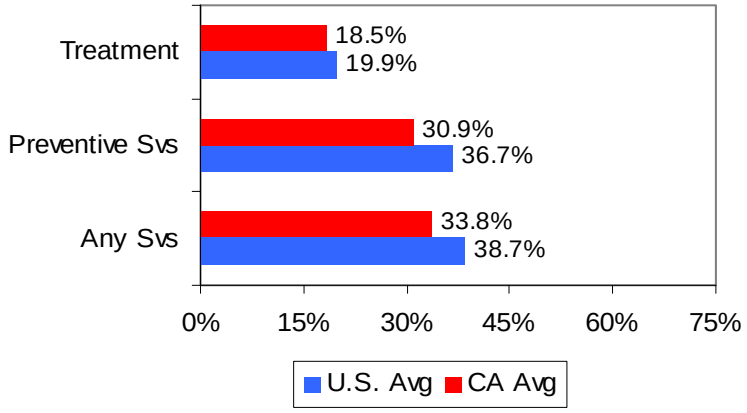
The managed care plans also have to "cover and ensure the provision of covered medical services related to dental services that are not provided by dentists or anesthesiologists."[41] This means that the plans have to pay for the prescription drugs, lab work, and pre-admission physical examinations required for admission to an inpatient hospital or an inpatient or outpatient dental surgery center, which also includes facility fees and anesthesia services. Having to pick up the tab for expensive restorative treatment would seem to serve as an incentive for plans to monitor access and utilization of early and regular preventive dental services.

UTILIZATION RATES

Regular dental care, optimally starting with the first tooth or the first birthday, is essential to good oral health. The ultimate objective of Medicaid dental programs is clearly improvement in the oral health of Medicaid children.[42] Utilization rates are associated with oral health status,[43] and are dependent on a sufficient delivery system that includes access to private practice providers. States report the provision of Medicaid dental services to children through annual EPSDT data (form CMS-416), which allows state by state comparisons. These data show that utilization of dental services by California children, measured by a dental visit within the last year, lags *behind* the national average for preventive, treatment and other dental services (Figure 2). California is in 40th place (rank 1 is best) with regard to the proportion of children receiving *any* dental services, and 38th in the proportion receiving *preventive* dental services. Neither the U.S. nor California meets the Healthy People 2020 utilization target of 49%.[44] (See Attachment 2, Table A-3 for state-by-state utilization.)

* The scheduling of the first dental visit in the contract language is inconsistent with statements of the American Dental Association and American Academy of Pediatric Dentists which recommends the visit occurs by the "first tooth or first birthday."

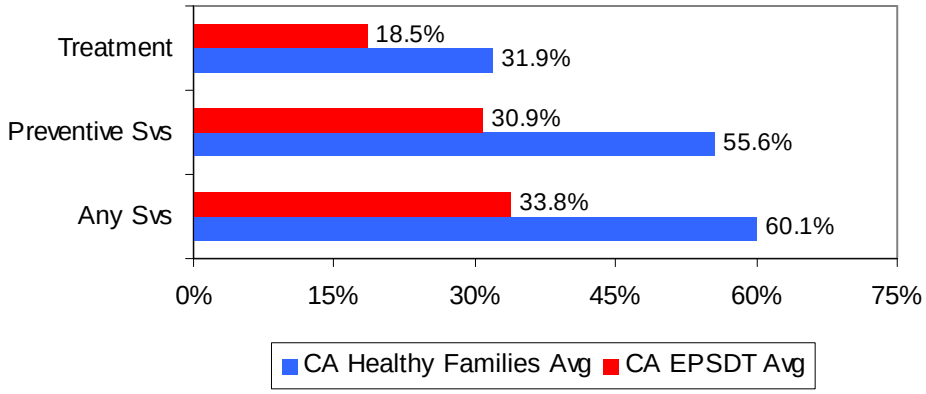
Figure 2. Children Receiving Dental Services in the EPSDT Program, U.S. and California Averages, Ages 0-20, 2010



Source: Medicaid, 2010, Annual EPSDT Participation Report, Form CMS-416, FFY 2010-11

The Medi-Cal dental utilization rates for EPSDT services compare poorly with the utilization rates for the Healthy Families Program (HFP) as well (Figure 3). Although the Medi-Cal data include 1-year old children and HFP data do not, which would skew the Medi-Cal rates downward, the rates for EPSDT children with Medi-Cal are clearly lower for receipt of any type of dental services, including preventive services and treatment services.

Figure 3. Children Receiving Dental Services, CA EPSDT and CA Healthy Families Program, 2010



Sources: Medicaid, 2010 Annual EPSDT Participation Report, Form CMS-416, FFY 2010-11, and 2010 Dental Quality Report, California Healthy Families Program.
(Note: EPSDT includes ages 0-20, HFP includes ages 2-18)

EPSDT dental data may not fully represent the utilization picture in California, however. Because of the way federally funded clinics report to the state (for instance, they do not report procedure codes), DHCS is unable to report the number of children seen in these clinics who received preventive or treatment or other dental measures used on the CMS-416 form. DHCS estimates that this results in a 10%-15% undercount. Most other states are able to report these data.

There are other important differences in the populations of EPSDT children and all children with Medi-Cal that account for differences in reported utilization rates. For example, the federal government defines a child's age for EPSDT a little differently than DHCS for Medi-Cal, and it looks at only EPSDT children, all of whom are eligible for full-scope Medi-Cal coverage. DHCS utilization data for Medi-Cal FFS dental uses the same aid codes (categories of eligibility) as those eligible for dental managed care, which includes some children in limited scope aid codes. Using as a more fair picture of Medi-Cal utilization, the FFS data show slightly more than half (52.2%) of children received a dental service Calendar Year 2011 (Table 4). The percentage receiving dental care was particularly low for children age 3 years and younger. Utilization increased significantly by the time children were 5 years old when two-thirds had made a dental visit during the year[45] (See Attachment 2, Tables A-1 and A-2 for county-by-county utilization.)

Table 4. Utilization of Medi-Cal FFS Dental Services, Children Ages 0-20, 2011

	Ages 0-3	Ages 4-5	Ages 0-20
Fee for Service Utilization	31.1%	66.4%	52.2%

Source: Department of Health Care Services, Medi-Cal Dental Services Division, August 2, 2012.
Note: Statewide Fee-for-Service figures count individuals in the same aid codes (categories of eligibility) as those enrolled in the dental managed care plans, and who were continuously enrolled in FFS for at least 11 months during Calendar Year 2011.

Having any form of dental insurance makes a difference in use of dental services. According to the California Health Interview Survey (CHIS)—a key source of highly representative population-based data about social and health behaviors—about 88% of young children in 2009 in families living at >250% of the federal poverty level (which would exclude children with no-cost Medi-Cal) with private and public insurance made a dental visit in the last year (Table 5).

Table 5. Time Since Last Dental Visit, Children Ages 2-11, Living at >250% Federal Poverty Level with any Insurance

Time	
Did not make a dental visit	10.5%
6 months ago or less	76.8%
Between 6 months and 1 year ago	10.8%
Between 1 and 2 years ago	1.6%
More than 2 years ago	0.3%

Source: 2009 California Health Interview Survey

The responsibility for protecting children's oral health and improving utilization rates requires that parents and other caregivers are adequately informed about the value of early and regular dental care, and encouraged and supported in accessing services. The 2009 CHIS asked parents whose children ages 1-18 had not visited a dentist in the past year the main reason for their child

not seeing a dentist. Table 6 shows the response of the parents with incomes at 133% of poverty or under whose children likely were enrolled or qualified or will qualify for Medi-Cal dental benefits under health reform. Just over one-third of the parents responded that "there was no reason to go/no problem," while another one-quarter perceived their child as being "not old enough" to visit a dentist. The remainder reported not having insurance or being able to afford dental care (16%) or gave other answers.[46]

Table 6. Main Reasons Parents Reported for No Dental Visit

Reason	
No reason to go/no problem	34.7%
Child perceived as not old enough	25.0%
No insurance/can't afford dental care	16.0%
Other	24.3%

Source: 2009 California Health Interview Survey.

PRIVATE DENTAL PRACTICE PARTICIPATION IN MEDI-CAL

Current and Potential Participation

Dentist Survey Sample

We received a total of 322 timely and usable surveys in response to our survey of private practice general and pediatric dentists, representing a final response rate of 16.2%. The percentage received from general dentists (83.3%) and pediatric dentists (16.7%), was generally equivalent to the proportion of surveys that had been sent to each group. Online responses constituted 14.6% of the total usable surveys.

There was little difference in surveyed characteristics between the 2 types of dentists except for the number of years in practice (Table 7). The dentists tended to be in a solo practice setting (about two-thirds of the sample), male, and predominantly White, non-Hispanic or Asian/Pacific Islander. Pediatric dentists tended to be in practice for 10 years or less*, while the general dentists had been in practice for 21 or more years. The characteristics of this sample of general practice dentists are consistent with other surveys of private practices in California[47] with regard to race/ethnicity and gender, and the California Dental Association Membership Database,[48] although a slightly higher proportion of our sample has been in practice longer.

Table 7. Personal and Business Characteristics of the Dentist Survey Respondents

Characteristics	General Practice		Pediatric Practice	
Total Number of Survey Respondents	276		46	
Number of Years in Practice	*n*	*%*	*n*	*%*
1 - 10 years	54	20.7%	20	46.5%
11 - 20 years	71	27.2%	11	25.6%
21 or more years	136	52.1%	12	27.9%
Size of Practice	*n*	*%*	*n*	*%*
Solo	175	66.3%	26	60.5%
Small Group	75	28.4%	15	34.9%
Large Group/Clinic	14	5.3%	2	4.7%
Gender	*n*	*%*	*n*	*%*
Female	89	34.2%	19	41.3%
Male	171	65.8%	27	58.7%
Race/Ethnicity	*n*	*%*	*n*	*%*
African American	4	1.5%	3	6.7%
Asian/Pacific Islander	93	35.6%	24	53.3%
American Indian	3	1.1%	-	-
Hispanic	15	5.7%	2	4.4%
White, non-Hispanic	127	48.7%	13	28.9%
Other	19	7.3%	3	6.7%

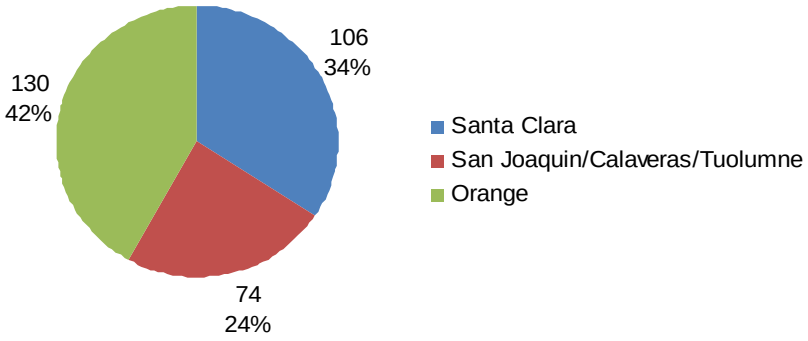
* Years in practice and years since dental school graduation are used to mean the same thing in most surveys.

The dentist survey was designed to be anonymous except if the respondent wished to be mailed a gift card incentive for completing it. Over half (56%) of the general practice dentists and 43% of pediatric dentists provided identifying information for that purpose. Identifying oneself on the survey was not associated with accepting Medi-Cal.

Geographical Representation of the Practices

The dentists' response rate for both general and pediatric dentists was generally in the same proportion as the surveys that had been mailed to each area (Figure 4), with Orange County constituting the largest percentage (42%) of responses, followed by Santa Clara County (34%) and the 3-county San Joaquin County group (24%).

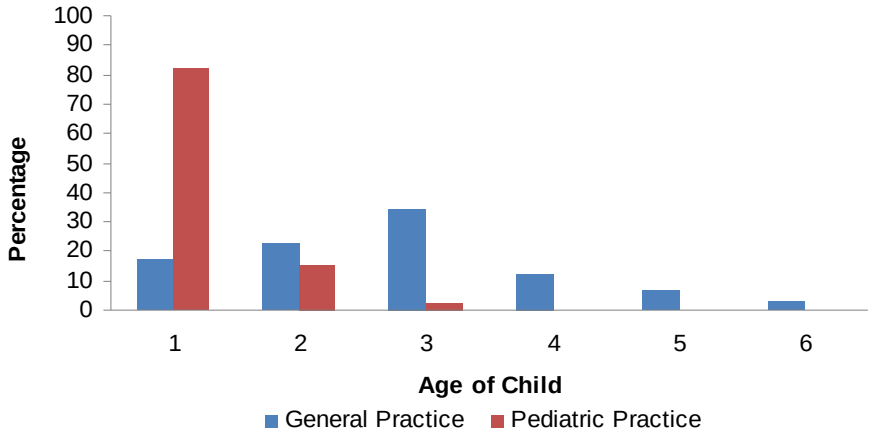
Figure 4. Dentist Survey Participants Who Reported County of Practice (n=310)



Age at First Visit

Despite the American Academy of Pediatric Dentistry and American Academy of Pediatrics policy statements on "first dental visit at the first tooth or first birthday," approximately 58% of the general dentists in the survey reported they start seeing children at age 3 or older (Figure 5). About 18% and 22%, respectively, began seeing children at ages 1 and 2. Not unexpectedly, of the pediatric dentists 82.2% reported they saw children at the recommended age 1.

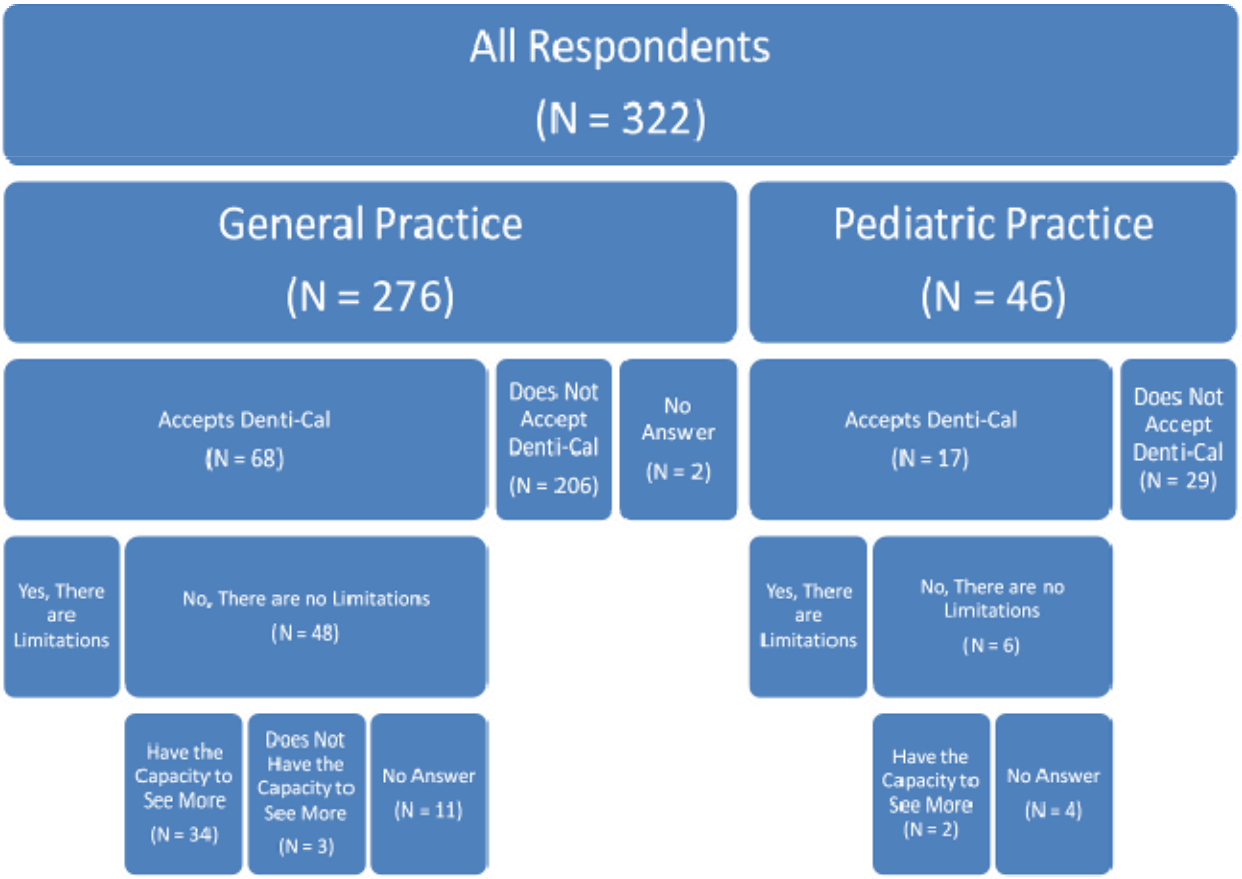
Figure 5. Age When Child is First Seen



Participation in Medi-Cal

Figure 6 below* presents a hierarchy that summarizes the level, conditions, and capacities dentists reported relative to participation in the Medi-Cal dental program. The details about these factors—practice capacity, limitations, likeliness to participate—follow in the next several pages.

Figure 6. Summary of Dentists' Responses about Participation in the Medi-Cal Dental Program



The majority of the respondents—three-quarters of the general dentists and close to two-thirds of the pediatric dentists—do not accept Medi-Cal in their practices.

Table 8. Percentage of Dentists Who Reported Participating in Medi-Cal

	General Practice (*N* = 274)		Pediatric Practice (*N* = 46)		Full Sample (*N* = 320)	
	n	**%**	***n***	**%**	***n***	**%**
Yes, Accepts Medi-Cal	68	24.8%	17	37.0%	85	26.8%
No, Doesn't Accept Medi-Cal	206	75.2%	29	63.0%	235	73.2%

* Note that the boxes "Yes, there are limitations" in Figure 6 do not contain numbers because respondents could describe more than one "yes" factor.

What are Dentists' Primary Reasons for Not Taking Medi-Cal?

The most important reason dentists cited for not accepting children with Medi-Cal was the reimbursement rate, reported by two-thirds (65%) of all dentists. Also relatively important reasons were difficulty getting payment, complex paperwork, and broken patient appointments. Of importance but to a lesser degree to respondents was patient follow-through and compliance with recommendations and referrals. This pattern is also descriptive of the general practice and pediatric dentists when examined individually. Tables 9 and 10 display these results in different ways.

Table 9 shows the dentists' reasons for not accepting Medi-Cal listed in the order they appeared in the survey. (Because we anticipated "reimbursement rate" would rank in high importance, it was placed in the middle of the response choices.) The figures in the table show the number of times the reason for not accepting Medi-Cal was ranked 1, 2, 3 and so forth on a scale of 1-10 with "1" being the most important. For example, for the first reason (patient follow through), 6 respondents rated it with a "1," 12 respondents rated it "2," 9 respondents rated it "3," 21 respondents rated it "4," and 36 respondents rated it "5." Since 36 is the highest count for the item, we have highlighted it in green.

Table 9. Reasons Dentists Gave for Not Accepting Medi-Cal by Rankings

All Dentists (*N* = 168)	Most Important 1	2	3	4	5	6	7	8	9	Least Important 10
Patient follow-through/compliance with recommendations and referrals (*n* = 92)	6	12	9	21	36	4	2	1	1	-
Broken appointments (*n* = 116)	11	25	23	38	13	6	-	-	-	-
Complex paperwork/administrative requirements (*n* = 116)	21	23	44	20	6	1	-	1	-	-
Difficulty getting payment (back and forth with claims issues) (*n* = 116)	18	51	21	11	14	-	-	-	1	-
Reimbursement rate (*n* = 163)	106	22	25	2	6	1	-	-	-	1
Dentist is willing; staff is not willing to take Denti-Cal (*n* = 39)	2	-	2	-	-	7	14	7	7	-
Staff is willing; dentist is not willing to take Denti-Cal (*n* = 38)	-	1	-	2	1	10	10	12	2	-
Language issues (i.e., not being able to communicate effectively) (*n* = 50)	-	2	1	5	2	15	8	12	5	-
Competition with larger offices or clinics hurt us (*n* = 43)	1	-	1	1	3	5	6	4	21	1
Other (*n* = 16)	3	-	1	4	-	1	2	-	-	5

Table 10 below shows the reasons for not accepting Medi-Cal listed in order of importance based on means we calculated from the rankings given by the respondents. If one or more of the rankings were not used by a respondent, we substituted the average. For example, if a respondent did not use rankings of 9 and 10, we gave the two unranked reasons a "9.5" each.

Table 10. Reasons Dentists Gave for Not Accepting Medi-Cal in Order of Importance

Full Dentist Sample (*N* = 168)	*MEAN**	*SD***
Reimbursement rate	1.85	1.47
Difficulty getting payment for services rendered (back and forth with claims issues)	3.79	2.08
Complex paperwork/administrative requirements	3.91	2.00
Broken appointments	4.25	1.82
Patient follow-through/compliance with recommendations and referrals	5.25	1.78
Language issues (i.e., not being able to communicate effectively)	6.90	1.20
Staff is willing; dentist is not willing to take Denti-Cal	7.12	1.04
Dentist is willing; staff is not willing to take Denti-Cal	7.13	1.22
Competition with larger offices or clinics hurt us	7.25	1.23
Other	7.56	1.78

*Means are based on a scale of 1-10, with "1" being the most important reason.
** SD = Standard deviation.

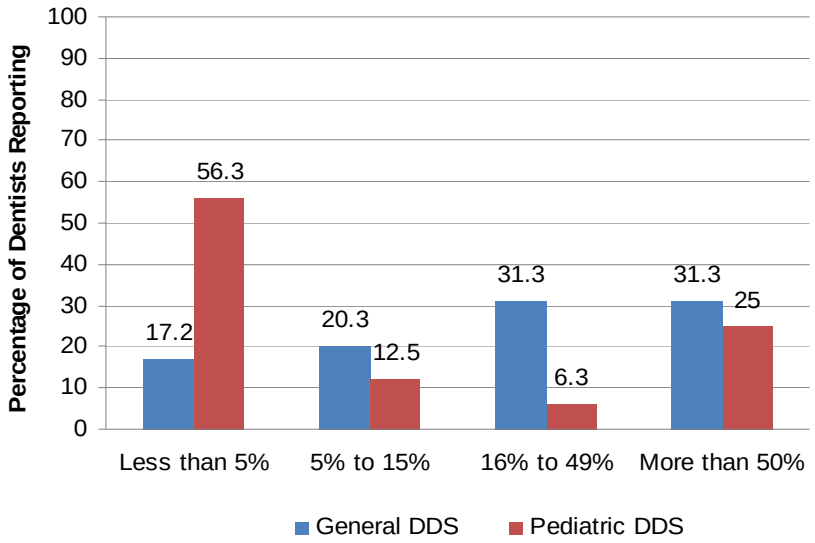
Although some respondents indicated there were "Other" reasons for not accepting Medi-Cal, very few answered "what." Among the other reasons provided for not accepting Medi-Cal as stated by dentists were:

- small offices/not enough patients;
- no emphasis on saving teeth;
- an entitlement attitude on the part of patients;
- damage to the office by patients;
- already-high office overhead makes low fees impossible;
- previous negative audit experience involving court;
- not possible to deliver high enough quality of care under the Medi-Cal dental program.

What Proportion of Practices are Made up of Medi-Cal?

Medi-Cal generally makes up a small proportion of a dentist's practice. Of the 26.8% of dentists accepting Medi-Cal, more than one-third (37.5%) of general dentists had 15% or fewer children with Medi-Cal in their practice. For pediatric dentists, the proportion was even lower: more than half (56.3%) indicated that Medi-Cal made up less than 5% of their practice. However, close to one-third of the general dentists and one-quarter of the pediatric dentists in the largest-practice sizes reported that they saw 50% or more Medi-Cal patients (Figure 7).

Figure 7. Percentage of Children in Dental Practice With Medi-Cal



What Limitations do Medi-Cal Providers Impose?

Of the dentists who accept Medi-Cal, most indicated they placed no limitations or restrictions in their practice for seeing children with Medi-Cal. A few with restrictions commented that the children were given appointments only if they were referred by another source such as a school nurse or other dentist (Table 11).

Table 11. Limitations/Restrictions for Seeing Children with Medi-Cal

Limitations (in practices already accepting Denti-Cal)	General Practice	Pediatric Practice
	n	*n*
None; no restrictions or limitations unique to this population.	48	6
We accept only xx Denti-Cal per month (limit the # of Denti-Cal patients).	8	4
We appoint them on specific days/times of the week.	3	-
We appoint them in specific offices in our multi-location practice.	-	-
We appoint them only if the child was previously an insured patient.	1	1
We appoint them only if they were referred by another healthcare professional	3	3
Other	9	1

Note: respondents could select more than one factor; percentages were not computed because of this. No comments were reported for when the respondent checked "other" on the survey.

What is Current Provider Interest and Capacity to See More Children?

Approximately three-quarters of the proportion of general dentists who accept children with Medi-Cal indicated they would like to see more; the reverse was true for pediatric dentists. Of the general dentists who indicated an interest in having more children with Medi-Cal, almost 90% said that they had the capacity to do so (Table 12).

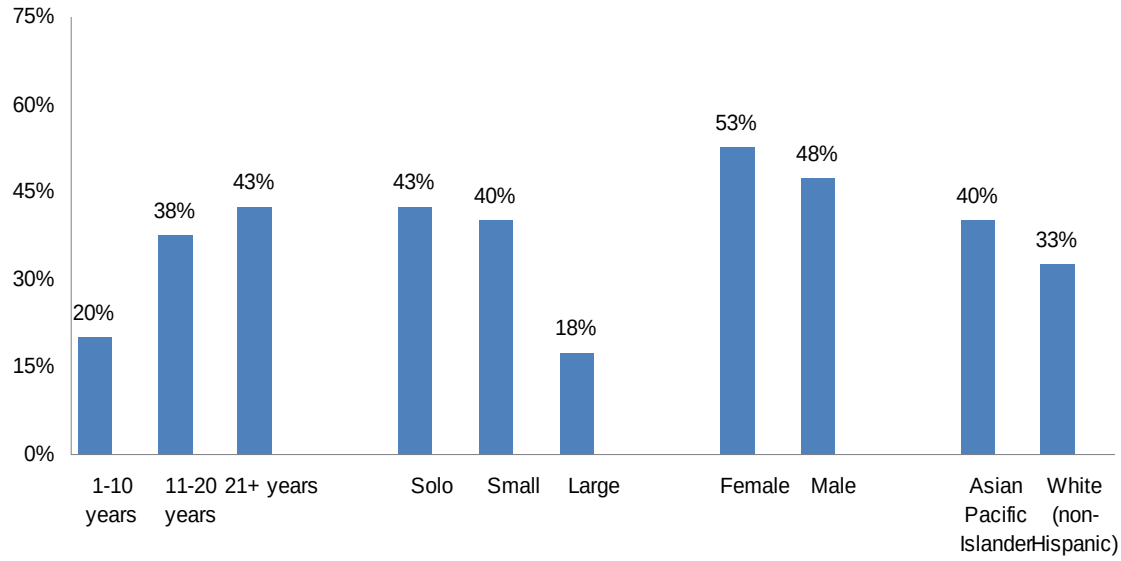
Table 12. Current Provider Interest and Capacity

Would you like to see more Denti-Cal children in your practice?	General Practice (*N* = 66)		Pediatric Practice (*N* = 16)	
	n	%	*n*	%
Yes	48	72.7%	4	25.0%
No	18	27.3%	12	75.0%
If yes, do you have the capacity to see more?				
Yes	41	89.1%	4	100%
No	5	10.9%	-	

Characteristics of Dentists with Capacity and Interest

Of the general dentists who would a) want to see more Medi-Cal children and b) have the capacity to do so, most tended to be in practice for more than 10 years, work in solo and small-group practices, and be Asian/Pacific Islanders. There appeared to be little difference between females and males (Figure 8).

Figure 8. Characteristics of General Practices Wanting to See More Medi-Cal Children with the Capacity to do so



Imposition of Limitations in Practices with Capacity and Interest

Cross analysis shows that, generally, for dentists taking Medi-Cal, if they place no limitations on seeing Medi-Cal children then they have the capacity to see more. There were not enough responses from the pediatric dentists to determine a pattern among these factors.

Age of Child First Seen by Dentists with Capacity and Interest

Almost 30% of the 68 general dentists reporting they take Medi-Cal with the capacity to see more (41 of the 68) see children by the time they are one year old, and close to 20% of them see children by the time they are two years old. Over half (53%), however, do not accept children in their practice until they are 3 years old or older (Table 13).

Table 13. Age Accepted for First Visit by Medi-Cal Providers with More Capacity

	General Practice (*N* = 41)	
Child's Age	***n***	**%**
1	12	29.3%
2	7	17.1%
3	14	34.1%
4	2	4.9%
5	3	7.3%
6	3	7.3%

What is the Typical Wait Time for an Appointment?

Typical appointment wait times were reported by current Medi-Cal dental providers to mostly be less than 2 weeks for both routine and treatment visits. Only about 10% of the general dentists indicated an appointment for a preventive service could take 3-4 weeks or more (Figures 9A. and 9B.).

Figure 9-A. Typical Wait Time for an Appointment: Prevention

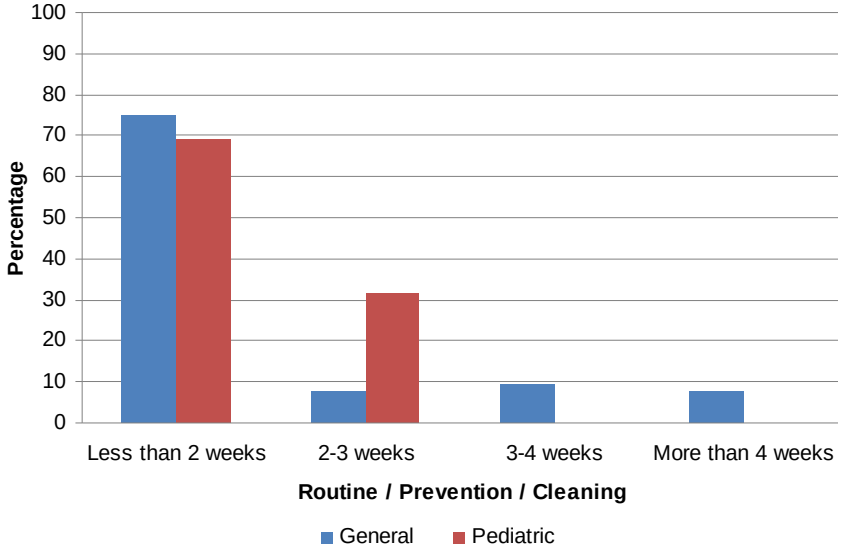
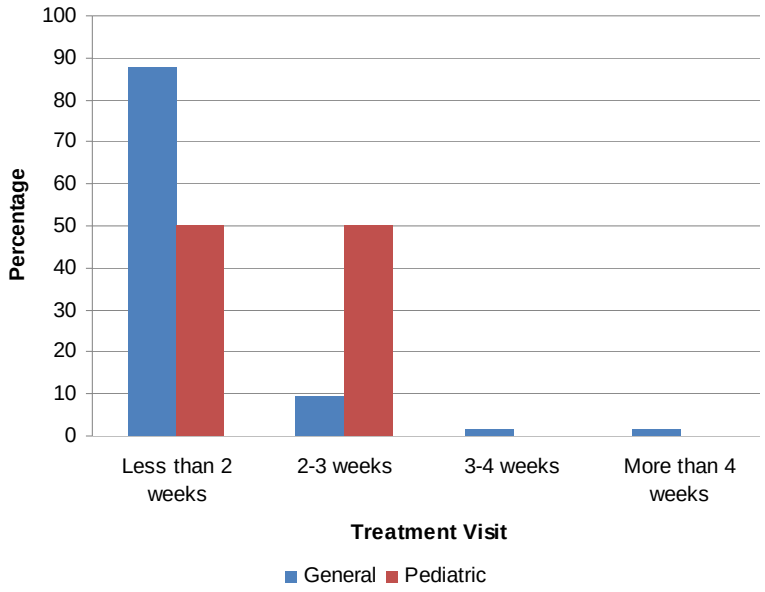


Figure 9-B. Typical Wait Time for an Appointment: Treatment



How do Current Providers Overcome Program Challenges?

We asked how current successful Medi-Cal dental providers might have minimized the administrative or beneficiary challenges typically associated with the program. The most frequently reported way of overcoming challenges was with staff having much experience, primarily in "knowing how to bill" (Table 14). The next most-frequently cited ways of overcoming challenges with the program were not solutions, per se, but simply statements that 1) the dentist "just does it for charity," 2) "try to attempt more treatment per visit," and 3) the "system does not work" (this latter feeling was more strongly expressed by the pediatric dentists).

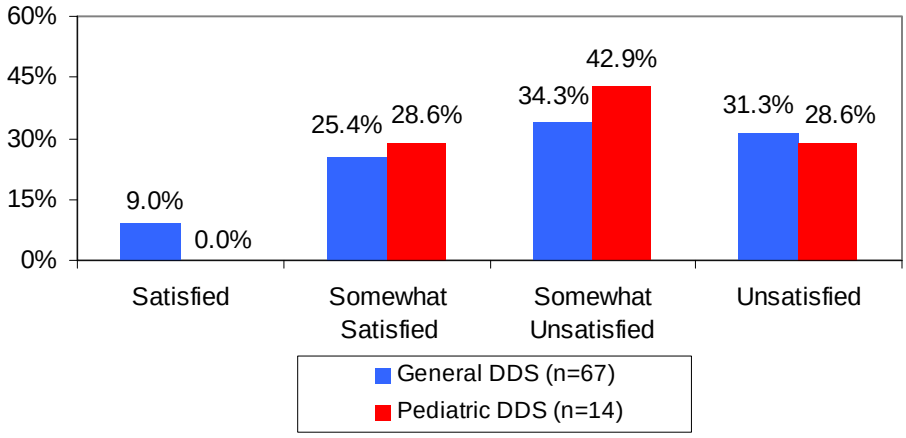
Table 14. Providers' Solutions to Overcoming Challenges with the Denti-Cal Program

	General Practice (*N* = 43)		Pediatric Practice (*N* = 14)		Full Sample (*N* = 57)	
	n	**%**	***n***	**%**	***n***	**%**
"We schedule them on specific day."	1	2.3%	-	-	1	1.8%
"We give reminder calls about appointments."	2	4.7%	-	-	2	3.5%
"We have lots of experience (billing, etc.)."	18	41.9%	5	35.7%	23	40.4%
"We just do it as charity for the child."	10	23.3%	1	7.1%	11	19.3%
"It is NOT successful. It does NOT work."	11	25.6%	6	42.9%	17	29.8%
Other	1	2.3%	2	14.3%	3	5.3%

How Satisfied are Current Providers with the Program?

While about one-third of the general dentists and one-quarter of the pediatric dentists were satisfied or somewhat satisfied with the Medi-Cal dental program, the clear majority of both groups, 65% and 71%, respectively, reported being dissatisfied (Figure 10). On a scale of 1 to 4, with 1 meaning "unsatisfied" and 4 meaning "satisfied," general dentists scored an overall average of 2.1 and pediatric dentists 2.0.

Figure 10. Provider Satisfaction Level



Just over half of both groups of dentists offered written comments related to their satisfaction level. Of the 46 remarks, one was positive: “Denti-Cal pays well and on time.” The remainder of the respondents’ comments, in order of frequency mention, was negative and is summarized as:

- Reimbursement too low
- Problems getting treatment authorization
- Difficult to bill
- Excessive documentation and other administrative requirements
- Payment is slow
- Constant change in benefits and policies
- Too different from private insurance
- No standardized billing forms or codes
- Back-and-forth hassles with credentialing process
- Services are needed for the elderly as well as children

What Would it Take to Induce More Providers to Participate in Medi-Cal, and How Likely Would they be to Sign up?

Various things can influence the decision about accepting Medi-Cal. The major factor dentists reported that would encourage them to participate in Medi-Cal was receiving more reimbursement; this was followed by having patients be more conscientious in keeping their appointments and being more compliant with providers’ oral health recommendations (Table 15). Sixty-three of the respondents indicated that “nothing would encourage me to participate more.”

Table 15. What Would Encourage Dentists to Participate (or Participate More) in Medi-Cal

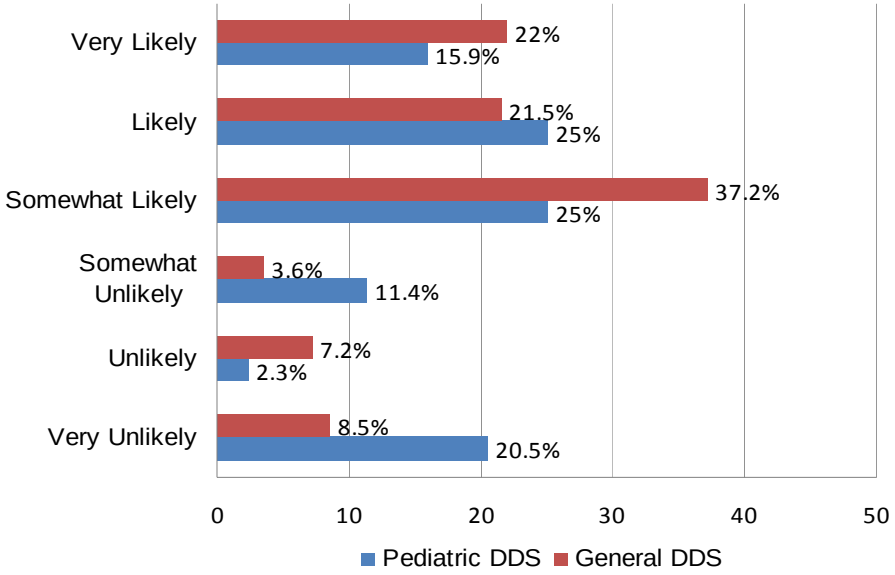
	General DDS	Pediatric DDS
	n	*n*
Having higher reimbursement.	200	34
Having a third party make sure parents keep appointments/follow-up for their children.	107	17
Nothing would encourage me to participate more.	54	9
Making the credentialing process easier to become a Medi-Cal provider.	47	9
Other	37	4
Contracting with a local community clinic as a Denti-Cal provider.	25	4
Training for the provider:		
Billing-related training	9	2
Dental Skills-related training	3	-
Other type of training	1	-

Note. Respondents could select more than one factor; percentages were not computed because of this.

Of the "other" comments regarding inducements to participate, 47.2% focused on one or another aspect of the administration of the program (e.g., excessive paperwork, restrictive policies) and 22.2% reiterated rate and reimbursement concerns. A handful of both general and pediatric dentists indicated patient/family attitudes were a problem with comments such as "not treating us with respect as a doctor" and "not appreciating something they get for free."

If any of the factors in above Table 15 were to occur, approximately 80% of the general dentists and 65% of the pediatric dentists indicated that it was at least somewhat likely they would take any or more children with Medi-Cal (Figure 11).

Figure 11. Likelihood of Taking Any or More Medi-Cal if Certain Improvements Occurred



What are the Characteristics of Providers/Practices More Likely to Take Medi-Cal?

To determine if there was a relationship between any of the business and personal characteristics of the dentists and acceptance of Medi-Cal—which could have implications for recruiting more dentists into Medi-Cal—chi square analysis was used to examine the differences between obtained and expected frequencies.

Statistically significant relationships *were* found between all of the variables and acceptance of Medi-Cal although the relationship between them was not strong. Dentists are proportionally less likely to accept Medi-Cal (the rows shaded in red in Table 16) who are:

- In practice for more than 20 years (chi square = 4.686, N = 259, p = .035, Cramer's V^2 = .0182)
- In solo practice (chi square = 26.25, N = 262, p < .001, Cramer's V^2 = .10)
- Male (chi square = 5.12, N = 258, p = .032, Cramer's V^2 = .02)
- White, Non-Hispanic (chi square = 6.08, N = 218, p = .019, Cramer's V^2 = .03)

Table 16. Factors Influencing Provider Likelihood to Participate in Medi-Cal

Factor	Did Factor Influence DDS Acceptance of Medi-Cal?
Years in Practice	
1 to 10 years	Did not matter (not statistically significant)
11 to 20 years	Did not matter (not statistically significant)
21 or more years	Less likely to accept
Size of Practice	
Solo	Less likely to accept
Small Group	More likely to accept
Large Group	More likely to accept
Gender	
Female	More likely to accept
Male	Less likely to accept
Race/Ethnicity	
Asian/Pacific Islander	More likely to accept
White, non-Hispanic	Less likely to accept

Note: Data in this table are based on the full sample of dentist respondents.

How Difficult is it for a Generalist to Refer to a Specialist?

Difficulty in finding a referral source to a specialist willing to accept Medi-Cal, particularly pediatric and oral surgery, has been mentioned in previous dentist surveys as the main reason for unsuccessful referrals.[49] The general dentists who responded to this survey reported it was very difficult to find a specialist who will take Medi-Cal. When they could find a specialist that office was within 20 miles almost half of the time and within 50 miles about 87% of the time (Table 17).

Table 17. General Dentists' Experience with Referrals to Specialists

How difficult is it finding a specialist who will take Denti-Cal?	General Practice (*N* = 66)	
	n	**%**
Very Difficult	40	60.6%
Somewhat Difficult	19	28.8%
Not Difficult	7	10.6%
How far do you have to refer a child for specialty care?	General Practice (*N* = 62)	
	n	**%**
Less than 20 miles	30	48.4%
20 - 50 miles	24	38.7%
51 - 100 miles	7	11.3%
More than 100 miles	1	1.6%

What Sedation Services are Available in and to Pediatric Practices?

Pediatric dentists were asked about in-office capacity for sedation and general anesthesia for treating children and the level of difficult finding a hospital or surgery center that allowed them to treat children under general anesthesia. Fifteen of the 17 pediatric respondents that accept Medi-Cal answered this question (Table 18). Most (80%) of those pediatric dentists offer in-office sedation services but only about one-third (35.7%) offers in-office general anesthesia. Almost three-quarters of them find it somewhat difficult or very difficult to find a facility that allows scheduling operating room time for dental cases.

Table 18. Sedation Capacity of Pediatric Practices (N=15)

	Pediatric Offices	
Does your office offer in-office sedation?	*n*	*%*
Yes	12	80.0%
No	3	20.0%
Does your office offer in-office general anesthesia?	*n*	*%*
Yes	5	35.7%
No	9	64.3%
How difficult is it to find an anesthesia facility?	*n*	*%*
Very Difficult	2	13.3%
Somewhat Difficult	9	60.0%
Not Difficult	4	26.7%

What is Providers' Experience with Healthy Families?

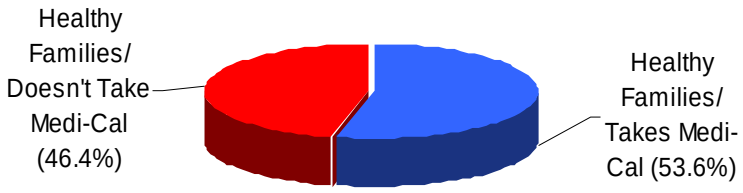
Approximately one-quarter of general dentists and almost two-thirds of pediatric dentists were Healthy Families Program (HFP) providers. The most common form of payment to them by the dental plans was being paid on a fee-for-service basis (Table 19).

Table 19. Participation in Healthy Families and Payment Method

	General Dentists (*N* = 261)		Pediatric Dentists (*N* = 43)	
Healthy Families Providers	*n*	%	*n*	**%**
	72	26.1%	26	60.5%
How are you paid by the plans?				
On a fee-for-service basis	49	68.1%	17	65.4%
A monthly capitation payment for each enrolled member	7	9.7%	1	3.8%
A "hybrid" of both fee-for-service and monthly capitation	14	19.4%	8	30.8%

About half (53.6%) of the HFP providers also took Medi-Cal patients (Figure 12).

Figure 12. Acceptance of Medi-Cal by Healthy Families Providers



When dentists who had previously been a HFP provider were asked why they were no longer participating in that program, 80% said it was because the reimbursement level was too low; the remainder had confusion about the fee schedule and administrative requirements or went to a new practice that didn't participate in the program.

We also wanted to learn if changes to the Medi-Cal reimbursement structure might be important to dentists. The survey asked, regardless of whether a dentist was a current Medi-Cal provider, how they would *want* to be paid if they were to take any or more Medi-Cal children, assuming no change in rates. Most of the dentists appear to be reasonably satisfied with the current reimbursement method (Table 20). Approximately two-thirds of general dentists and about half of pediatric dentists would prefer to bill Medi-Cal directly as in the current FFS system; about 21% and 33%, respectively, of the dentist groups would want to be paid via a hybrid method, i.e., combination of capitation + FFS supplements.

Table 20. Dentists' Preferred Payment Method for Participating in Medi-Cal

	General Dentists (*N* = 224)		Pediatric Dentists (*N* = 39)	
	n	%	*n*	%
Bill Medi-Cal FFS directly as in current system	150	67.0%	20	51.3%
Receive FFS payment via another entity*	21	9.4%	6	15.4%
Receive a monthly capitation payment for each patient	5	2.2%	-	-
Receive a "hybrid" payment of both combined	48	21.4%	13	33.3%

* Examples given in the survey were "such as a dental managed care plan or a community dental clinic."

What Else Did Dentists Have to Say About the Medi-Cal Dental Program?

Survey respondents were offered an opportunity to add any written comments they wished to make about the Medi-Cal dental program. About 1 in 6 of the total sample provided comments; choosing to add a comment did not seem to be related to practice or personal characteristics, geographic area, or whether a respondent had completed the survey in hard copy or online, or had given their name to receive the incentive. Most of the comments were short statements ("reimbursement too low," "charge patients something"), but some dentists gave lengthy explanations. A representative sample of system- and patient-related comments is summarized in Table 21 on the next page. The ratio of Denti-Cal program to patient-related comments was about 4:1.

Table 21. Comments about the Medi-Cal Dental Program from Dentist Survey Respondents

System Related	▪ The program needs credibility and transparency for assurance that we're all practicing under the same standards. ▪ Make the claim process simple and straightforward; quit denying claims for stupid, little reasons and obscure criteria. ▪ I wonder if the claims are even evaluated by a dental licensee. ▪ I would rather treat some people for nothing than jump through all the hoops Denti-Cal makes you go through. ▪ The Denti-Cal system is an abusive government program that does not care about the patients or the providers. ▪ Denti-Cal treats us like criminals in their attitude; if only they'd treat us with respect and like we're doing the right thing for kids. ▪ I could treat many more children if the whole program was more streamlined. ▪ The process to sign up [to become a Denti-Cal provider] is not enrollment friendly ▪ The documentation requirements for billing are appalling. ▪ I treated Denti-Cal patients until it cost more to file a claim than amount received. ▪ I [quit because I] don't want to be associated with those who are fraudulently billing. ▪ In spite of difficulties with Denti-Cal reimbursement, etc., I feel honored to serve. I just wish it were a bit more "realistic." ▪ The pediatric-specific rates for sedation/general anesthesia are way too discouraging. ▪ Treatment restrictions are not consistent with quality of care. ▪ The state has no concept for what it takes to treat patients with kindness and compassion or what it takes for providers to provide care. The legislature should be enrolled in the program and see if they want treatment to be rendered that way and then they are in a position to comment. ▪ It will take a very major change in the Denti-Cal system to gain the support of many private providers in solo practices; the system has been difficult to earn a living with. ▪ I am currently very selective about the Denti-Cal children I will see. That would continue unless reimbursement went up to a minimum of 75% of UCR [usual customary rates]. [Authors' note: others said "up to 85%" and "within 25%-30%" of UCR] ▪ I have chosen this current patient profile for my professional practice life. If I wished to see more of those [Denti-Cal] patients, as in the past, I would serve them; I already did that for 15 years. A young dentist can do it now. ▪ I have no faith in any program run by the state; too much money wasted on consultants and administration. No sense for me to spend $3 to earn $2 so I instead volunteer at a free clinic occasionally. ▪ I still keep a copy of the enrollment form they [Denti-Cal] returned to me, marked with red tape over areas where I had supplied insufficient information. I use it as a reminder of how government can kill business initiative and any charitable activity. ▪ No, I haven't stopped seeing these {Denti-Cal} kids, and I won't, but it's a losing proposition ▪ Delinquent payment and inequitable rates – what more do you need to know?
Patient Related	▪ I used to work in a 90% Denti-Cal office before starting my own practice. The problem was not access to care but the willingness to go and get the care. There were available DDSs and appointments every day. You can put 1 million new DDSs out there but this population does not feel the need to go to a DDS until there is a problem. ▪ Change the attitude of the recipients and the politicians. [These patients] are taxing the system. ▪ There is no incentive for recipients to come to appointments. If there was even a little responsibility it might help, e.g., a $5.00 fee refunded when treatment is completed. A fee for a failed appointment after two previously failed appointments is reasonable. ▪ It's not the program, it's the patients' parents, sorry. Parents are very demanding. ▪ Educate the parents as a requirement to qualify for such programs to reduce neglect and increase dental health instead of seeking treatment when they hurt.

Denti-Cal Providers-to-Eligibles Ratios

What do Claims Data Tell Us About Where Dental Providers are Relative to the Eligible Children? What about the Specialists?

The number of dentists participating in the Denti-Cal program has been declining over the last 5 years (Table 22). While the dentist-to-patient ratio of 1:328 in CY 2011, which includes both general and specialist dentists, is within acceptable industry standards,[50] this ratio camouflages the important issue of provider distribution and access *within* California counties, particularly for specialty care which is generally less available than general dental care.

Table 22. Medi-Cal Eligibles (Number of Children Enrolled) and Dental Provider Ratio

	Eligibles	Rendering Providers	Eligibles-to-Rendering Provider (Inclusive of Dental Specialists)
FY 2008-09	1,687,852	9,100	185
FY 2009-10	1,924,129	8,786	219
CY 2011	2,585,137	7,878	328

Source: Medi-Cal Dental Services Division.

Individual dentists can provide service from multiple locations, referred to as "access points." Looking at access points rather than individual providers is a more positive view of coverage and the method used for determining provider availability in commercial networks. The Denti-Cal claims data indicate there are approximately 2 points of access per provider. This means that, on average, Denti-Cal dentists work in 2 offices (from which claims are submitted). The number of access points noted in the Denti-Cal claims data compares favorably to the ratio found in commercial dental networks providing a level of support to the results from the claims data. The comparison commercial state network shows 1.5 locations per dentist. And, the largest national commercial dental network features 1.9 locations per dentist. Neither unique dentists nor dentist-points-of-access can speak to whether the dentists work part-time or full-time, however.

As shown in Table 23, the ratio of general dentist access points to eligible children in Denti-Cal is 1:178, within industry standards. From there, however, the ratios vary significantly for pediatric and other dental specialties. (See Attachment 2, Table A-4, for dentist points of access and ratios to eligibles by type of dentist by California counties.)

Table 23. Dentist Points of Access and Ratios of Eligibles, by Dentist Type, 2011

	Number of DDS Point of Access With a Claim Submitted in 2011							Ratio of Eligibles to DDS Points of Access						
Eligibles	GP	PED	OS	ENDO	ORTH	PERIO	PROS	GP	PED	OS	ENDO	ORTH	PERIO	PROS
2,585,137	14,533	519	17	21	2,034	32	32	178	4,981	152,067	123,102	1,271	80,786	80,786

Source: Department of Health Care Services, Medi-Cal Dental Services Division, August 23, 2012. Data calculation by study authors.
Note: Dental claims submitted by rendering providers.

Levels of Care

What do Denti-Cal Claims Tell us About Service Volume and Utilization of Services? How Do the Service Ratios Compare to Commercial Dental Coverage for Children?

The intent of the following analysis was to evaluate the delivery of care to enrollees in the Denti-Cal program in 2011. In the absence of unique patient identifiers and information related to claims payment in the DHCS data, we used the incidence of a comprehensive exam, Code D0150, as the proxy indicator of a unique child accessing care for the first time. In 2011, based on claims submitted by rendering dental providers and applying that indicator, 632,692 (24.5%) of the 2,585,137 eligible children in the Denti-Cal program accessed care for the first time. This proportion of children who received this service is somewhat lower than the percentage reported for California children receiving any dental services in the EPSDT program (see page 19).

Looking at the rendering providers who submitted at least 1 claim for a comprehensive exam (D0150) in 2011, we identified a total of 9,801 dentists who recorded 1 or more comprehensive exams. The number of new patients per rendering dental provider varied greatly (Table 24). The greatest majority (82.1%) of dentists participating in the Medi-Cal program appeared to serve fewer than 100 new children with Medi-Cal. The proportion who saw more than 100 children with Medi-Cal (17.9%) is consistent with the 2008 claims data for California from the National Oral Health Surveillance System which showed only 17% saw more than 100 children with Medi-Cal.[51]

Table 24. Medi-Cal Patient Volume of Rendering Dental Providers, 2011

Number of New Patients	Rendering Dentists	
	n	Percent
1-100	8,043	82.1%
101-200	965	9.9%
201-500	660	6.7%
501-1000	120	1.2%
1001-2000	10	0.1%
>2000	3	.03%
Total	9,801	100%

The analysis of Denti-Cal claims submitted in CY 2011 is compared below to the percentage frequency found in commercial dental benefits plans. As explained earlier in this report, we evaluated the incidences of care provided in the program as reported through specific CDT (Current Dental Terminology) procedure codes. Procedure codes were grouped in accordance with the major categories outline in the CDT manual. In addition to individual data displays, a summary table of the major categories of care is included at the end of this discussion.

In 2011, the Denti-Cal program recorded a total of 10,069,987 submissions of incidences of care. The comparison general population commercial plan recorded 11,895,175 submissions and the child-only plan recorded 11,397 submissions of incidences of care.

Diagnostic Services: Oral Examinations

In 2011, the Denti-Cal program recorded 1,734,384 incidences of diagnostic services. The vast majority of these incidences were for procedure code D0120 – periodic oral evaluation and procedure D0150 – comprehensive oral evaluation. Diagnostic services represented 17% of all recorded incidences in the program (Table 25). This compares very favorably to a child-only commercial plan in which diagnostic services represented 16.5% of total submissions for that year. In the general population of a commercial dental benefits plan diagnostic services made up 21% of all submissions.

Table 25. Clinical Oral Services Submissions as a Percent of Total Category Claim Submissions, 2011

CDT Code	Payer		
	Denti-Cal	Commercial Plan	
		Child-Only	General Population
D0120 D0150	17%	16.5%	21.0%

Source: Medi-Cal Dental Services Division, August 23, 2012. Data calculation by study authors.

Diagnostic Services: Radiographic/Diagnostic Imaging

There are 5 primary radiographic codes that are utilized as diagnostic aids for radiographic/ diagnostic imaging: 1) D0210 – intraoral – complete series; 2) D0220 – intraoral – periapical first film; 3) D0230 – periapical each additional film; 4) D0272 – bitewings – 2 films; 5) D0274 – bitewings – 4 films. Table 26 displays the percentage of Denti-Cal claims submissions for each of these 5 billing codes and compares them to the commercial plan for adult and child-only populations.

In 2011, the Denti-Cal program recorded 3,606,771 incidences of radiographic/diagnostic imaging. The incidence submission of radiographic/diagnostic imaging in the Denti-Cal program was 36% of total submissions. This is more than double the percentage of submissions in the child-only plan at 17% and significantly higher than the submission rate of 21% in the general population.

Submission of D0210 in the Denti-Cal program mirrored the percentage submission in the child-only commercial plan at 2% compared to 6% in the general population of a commercial plan (Table 26). The percentage of submission of D0220 in the Denti-Cal program at 15% was less than the percentage of submissions in the child-only plan (19%) and the general population (24%).

A significant variance in submission percentage was noted for D0230. In the Denti-Cal program, D0230 represented 37% of the submissions in this category as compared to 18% in the child-only and 17% in the general population. These numbers suggest that more additional films (x-rays) are being taken to aid in diagnosis in the Denti-Cal program than in commercial plans. The higher rate of submissions for D0230 in the Denti-Cal program raises concerns over patient safety concerning radiation exposure.

Table 26. Radiographic/Diagnostic Imaging as a Percent of Total Category Claim Submissions, 2011

CDT Code	Payer		
	Denti-Cal	Commercial Plan	
		Child-Only	General Population
D0210	2%	2%	6%
D0220	15%	19%	24%
D0230	37%	18%	17%
D0272	20%	24%	9%
D0274	11%	22%	33%
D0350	11%	0.1%	0.3%

Source: Medi-Cal Dental Services Division, August 23, 2012. Data calculation by study authors.

D0272 represented 20% of the submissions in the Denti-Cal program for this category compared to 24% for the child only plan and 9% for the general population. From a clinical perspective 2 bitewing radiographs may be more appropriate than 4 bitewing radiographs for younger children.

In the Denti-Cal program, D0274 represents only 11% of submissions in this category compared to 22% for the child-only plan and 33% for the general population. This relatively large difference in submissions of D0274 may have an impact on the ability to adequately diagnose an oral problem in older children.

An anomaly was discovered in the data with regards to the submissions of D0350 – oral/facial photographic images. In the Denti-Cal program, D0350 represented 11% of the submissions in this category compared to 0.1% in the child-only plan and 0.3% in the general population. Aside from usage in orthodontics, photographs have little diagnostic value. The high frequency of submissions for photographs may be related to the program requirement to preauthorize certain procedures in the Denti-Cal program.

Part of the reason for the higher number of radiographic claims in Denti-Cal is because the program creates the situation and contradicts itself in the process. The program manual states that the lowest number of radiographs (x-rays) needed to provide the diagnosis shall be taken. In another section it states that a maximum of 20 periapical radiographs may be taken and paid in a 12-month period without submission to demonstrate medical necessity. Then in another section it states that the first 3 fillings provided to a patient do not require radiographs but the fourth filling on the same patient does require a radiograph. Furthermore, if the fourth filling is on the same claim as the first 3 fillings then a radiograph is required for all 4 fillings. These requirements support the over submission of radiographs.

Preventive Services

In 2011, the Denti-Cal program recorded 2,155,524 incidences of preventive services. Preventive services represented 21% of total submissions in Denti-Cal. This proportion is equal to the percentage of submissions in the child-only plan at 21% but less than the percentage of submissions in the general population, which represented 26%.

The majority of preventive services submissions in the Denti-Cal program were recorded under procedure code D1201 – topical application of fluoride (including prophylaxis) – child. It must be noted that procedure code D1201 was deleted from the CDT code set with the issuance of the updated CDT code manual in 2007. It was determined that D1201 represented 2 clinically distinct procedures. In 2007, D1120 – prophylaxis – child and D1203 topical application of fluoride – child replaced D1201 as the appropriate means of reporting the services rendered. The implications of the Denti-Cal program continuing to utilize the deleted code D1201 are that the recorded incidences of preventive services are understated in comparison to data sets which recognize the appropriate codes. D1201 represented 57% of submissions in the preventive services category in the Denti-Cal program. The combined submission percentage in the preventive services category for child prophylaxis and fluoride application in the child-only plan was 48% and 27% in the general population (Table 27).

Table 27. Preventive Services (Topical Fluoride) as a Percent of Total Category Claim Submissions, 2011

CDT Code	Payer		
	Denti-Cal	Commercial Plan	
		Child-Only	General Population
D1201	57%	N/A	N/A
Child prophylaxis and fluoride application	N/A	48%	27%

Source: Medi-Cal Dental Services Division, August 23, 2012. Data calculation by study authors.

Given that the majority of children in the Denti-Cal program are considered to be at higher risk for decay than the general child population, it would not be unreasonable to expect a significant percentage of submissions of code D1351 – sealant – per tooth. The data reveal that submissions of D1351 in the Denti-Cal program represent 14% of the submissions under the preventive services category (Table 28). This compares unfavorably to the percentage of submissions in the preventive services category for the child-only plan at 20% of submissions. The general population has a relatively low submission percentage (6%) of D1351 due to the disproportionate numbers of adults in the plan.

Table 28. Preventive Services (Sealants) as a Percent of Total Category Claim Submissions, 2011

CDT Code	Payer		
	Denti-Cal	Commercial Plan	
		Child-Only	General Population
D1351	14%	20%	6%

Source: Medi-Cal Dental Services Division, August 23, 2012. Data calculation by study authors.

Restorative: Direct Restorations

Direct restorations are defined as restorations (e.g., fillings) that are placed by a dentist to fill the void in a tooth created by decay. In 2011, the Denti-Cal program recorded 1,414,624 incidences of direct restorations. The incidences of direct restorations represented 14% of total submissions for the program. By comparison, direct restorations represent 11% and 10.5% of total submissions in the child-only plan and the general population, respectively (Table 29). The majority of submissions in this category are 2 codes: 1) D2140 – amalgam – 1 surface, primary or permanent; 2) D2150 – amalgam – 2 surface, primary or permanent. The submission of these 2 codes represents 60% of the submissions in this category compared to 6% of submissions in the child-only plan and 11% of submissions in the general population. No other single direct restoration code submission accounted for a significant percentage that was higher than the comparison plans.

Table 29. Direct Restorations as a Percent of Total Category Claim Submissions, 2011

CDT Code	Payer		
	Denti-Cal	Commercial Plan	
		Child-Only	General Population
Direct Restorations (e.g. fillings), multiple codes	14%	11%	10.5%

Source: Medi-Cal Dental Services Division, August 23, 2012. Data calculation by study authors.
Note: D2140/D2150 represents 60% of the claims in this category

It is important to note that a shift in the type of restoration material has occurred in the commercial environment. Resin-based composite restorations – direct, account for significantly more submissions than amalgam restorations. In the child-only plan and the general population codes D2391 – resin-based composite – 1 surface posterior and D2392 – resin-based composite – 2 surface posterior account for 63% and 54%, respectively, of total submissions in this category. This is in comparison to 0.7% of submissions in the Denti-Cal program for each code, D2391 and D2394. The data suggest that composite restorations are more favored in the commercial plans at about the same frequency as amalgam restorations in the Denti-Cal program.

Restorative: Indirect Restorations

Indirect restorations are defined as restorations that are fabricated outside the mouth prior to placement in the mouth by a dentist. In 2011, the Denti-Cal program recorded 178,500 incidences of indirect restorations. The submission of indirect restorations represented .02% of total submissions in the Denti-Cal program. This compares to 2% of total submissions in the child only plan and 4.2% of submissions in the general population. The data reveals relatively few crown procedure submissions in the Denti-Cal program with only D2751 – crown – porcelain fused to predominately base metal representing 5% of submissions in this category. By comparison the child-only plan had 5% of submissions and the general population had 3% of submissions for D2751 (Table 30). These data suggest that indirect crown restoration submissions occur at a similar frequency in both commercial plans and the Denti-Cal program.

Submissions in this category were dominated by a single code, D2930 – prefabricated stainless steel crown – primary tooth. D2930 represented 80% of the submissions in this category for the

Denti-Cal plan. This submission pattern is significantly higher than the child-only plan at 28% and the general population at 3%. The higher frequency of D2930 suggests that a greater number of teeth in the Denti-Cal program have been diagnosed for treatment after significant decay has occurred. This can also be supported by the high incidence of submissions for therapeutic pulpotomy, D3220.

Table 30. Indirect Restorations as a Percent of Total Category Claim Submissions, 2011

CDT Code	Payer		
	Denti-Cal	Commercial Plan	
		Child-Only	General Population
D2751	5%	5%	3%
D2930	80%	28%	3%

Source: Medi-Cal Dental Services Division, August 23, 2012. Data calculation by study authors.

Endodontic Services

In 2011, the Denti-Cal program recorded 206,040 incidences of endodontic services. The submission of incidences of endodontic services represented 2% of total submissions for the Denti-Cal program. This is in contrast to .75% of submissions in the child-only plan and 1.1% of submissions in the general population. In the Denti-Cal program submissions in this category are dominated by a single code, D3220 – therapeutic pulpotomy (excluding final restoration). D3220 represents 75% of the submissions in this category compared to 44% in the child-only plan and 6% in the general population (Table 31). The high incidence of D3220 corresponds to the high incidence of D2930 noted in the indirect restorations section. Therapeutic pulpotomy, D3220 is performed to save a tooth in which the decay has affected the nerve in the tooth and destroyed a significant amount of tooth structure. In this situation following D3220, the usual and appropriate service to restore the tooth is a stainless steel crown,D2930.

Table 31. Endodontic Services as a Percent of Total Category Claim Submissions, 2011

CDT Code	Payer		
	Denti-Cal	Commercial Plan	
		Child-Only	General Population
D3220	75%	44%	6%

Source: Medi-Cal Dental Services Division, August 23, 2012. Data calculation by study authors.

Periodontics

In 2011, the Denti-Cal program recorded 2629 incidences of periodontal services. Periodontal disease is primarily a disease found in adults. This is reflected in the number of submissions in the Denti-Cal program. Periodontal services represented .02% of the total submissions in the Denti-Cal program. Periodontal services represent .5% of submissions in the child-only plan suggesting a higher utilization of periodontal services in a commercial population. As expected

periodontal services have a much higher incidence of submission in the general population, 6%, due to the dominance of adults in the general population.

Prosthodontics (Removable)

In 2011, the Denti-Cal program recorded 730 incidences of removable prosthodontics services. Removable prosthodontics (dentures) are primarily provided to adults to replace missing teeth. For the population enrolled in the Denti-Cal program the submission incidence for prosthodontics services is very low, .007% of total submissions. Of the code submissions in this category, code D5211 – maxillary partial denture – resin base (including any conventional clasps, rests and teeth) represented 64% of the submissions. Maxillary partial denture – resin base is most often used to replace a missing anterior tooth to restore function and esthetics when a fixed partial denture is not an option under the program or due to the patient's age.

Oral and Maxillofacial Surgery

In 2011, the Denti-Cal program recorded 339,178 incidences of oral and maxillofacial surgery services. The submission of incidences of oral and maxillofacial surgery services represents 3.4% of total submissions for the program. This is in comparison to 5.1% in the child-only plan and 3.0% in the general population. The incidence of submissions for oral and maxillofacial surgery services is dominated by a single code, D7140 - extraction, erupted tooth or exposed root. D7140 represents 75% of all submissions in this category (Table 32). This is significantly higher than 24% of submissions in the child only plan and 33% of submissions in the general population for this category of services. The significantly higher percentage of D7140 suggests that teeth are being extracted at a more frequent rate in the Denti-Cal program than in commercial programs. This raises the questions as to whether or not some of these teeth might have been saved if other services had been applied.

Table 32. Oral and Maxillofacial Surgery as a Percent of Total Category Claim Submissions, 2011

CDT Code	Payer		
	Denti-Cal	Commercial Plan	
		Child-Only	General Population
D7140	75%	24%	33%

Source: Medi-Cal Dental Services Division, August 23, 2012. Data calculation by study authors.

Orthodontics

In 2011, the Denti-Cal program recorded 57,529 incidences of orthodontic services. The submission of incidences of orthodontic services represents 0.6% of the total submissions for the program. The frequency of submissions in the child-only plan was 12% and 3% in the general population. The significantly low number of orthodontic submissions can be contributed to the requirements that determine dental necessity for orthodontic treatment. There are no such requirements enforced in either the child-only plan or the general population.

Adjunctive General Services

In 2011, the Denti-Cal program recorded 362,600 incidences of adjunctive general services. The submission incidences of adjunctive general services represented 3.6% of the total submissions in the Denti-Cal program. In comparison, the submissions of adjunctive services in the child-only plan represented 3.7% of total submissions and represented 2.2% of total submissions in the general population.

Several codes in this category required more specific evaluation beginning with code D9110 – palliative (emergency) treatment of dental pain. In the Denti-Cal program, D9110 represented 5% of the submissions in this category (Table 33). In the child-only plan, D9110 represented 2% of submissions in the adjunctive general services category compared to 8% in the general population. In the Denti-Cal program codes D9220 – deep sedation/general anesthesia – first 30 minutes and D9221 – deep sedation/general anesthesia – each additional 15 minutes combine to represent 11% of the submissions in the adjunctive general services category. By comparison D9220 and D9221 represent 45% of the submissions in this category for the child-only plan and 25% of submissions in the general population. The discrepancy between the Denti-Cal program and both the child-only plan and the general population indicates a much higher frequency of the use of general anesthesia in commercial plans.

The reverse of this trend is observed with code D9230 – inhalation of nitrous oxide/analgesia, anxiolysis. In the Denti-Cal program, D9230 represents 40% of the submission in this category compared to 25% of submissions in the child-only plan and 24% of submissions in the general population. Another area of significant difference is in the submissions pattern for code D9430 – office visit for observation (during regular scheduled hours) – no other services performed. In the Denti-Cal program D9430 represented 20% of the submissions in the adjunctive services category. This was in stark contrast to 0.5% of submissions in the child-only plan and 1% of submissions in the general population. The high frequency of submissions for D9430 suggests that a significant number of children in the Denti-Cal program are being seen just for observation with no treatment being provided.

Table 33. Adjunctive General Services as a Percent of Total Category Claim Submissions, 2011

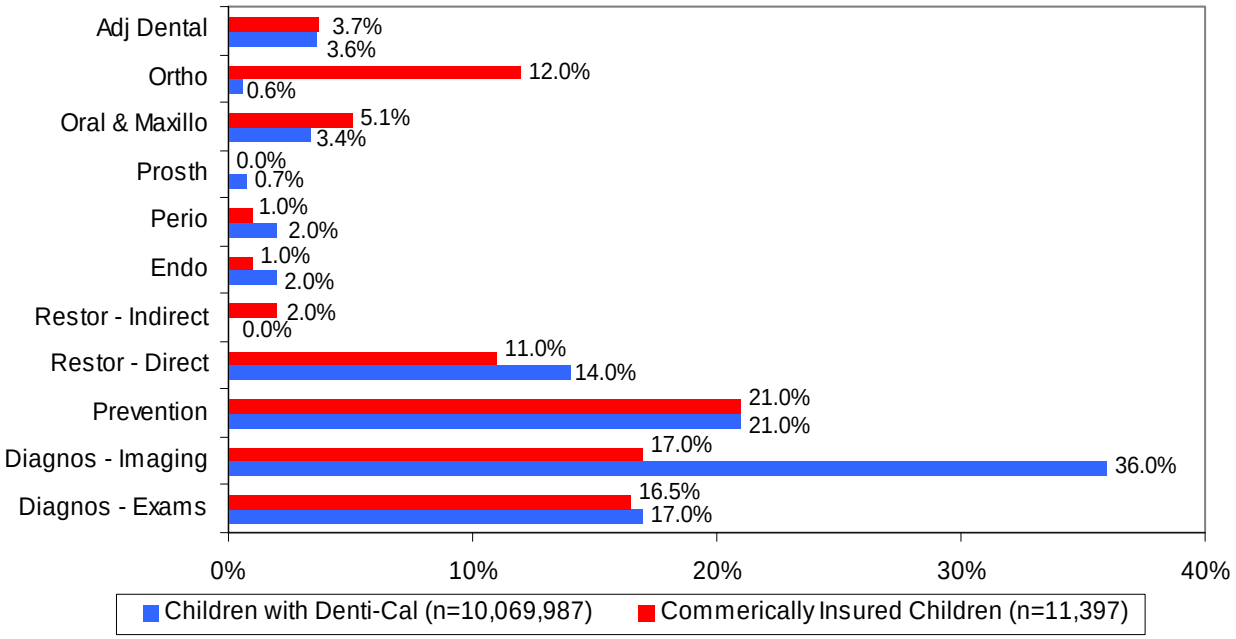
CDT Code	Payer		
	Denti-Cal	Commercial Plan	
		Child-Only	General Population
D9110	5%	2%	8%
D9220/D9221	11%	45%	25%
D9230	40%	25%	24%
D9430	20%	0.5%	1%

Source: Medi-Cal Dental Services Division, August 23, 2012. Data calculation by study authors.

Summary of Service Categories

By utilizing the categories of services outlined in the CDT manual a general overview of the frequency of submissions could be observed, and the delivery of care to enrollees in the Denti-Cal program in 2011 could be evaluated. Figure 13 below summarizes the percentage contribution of each category of care to the total number of claims submissions for Denti-Cal and the comparison commercially insured child population.

Figure 13. Percent of Total Claims Submission by Category of Care, Denti-Cal and Child-Only Commercial Insurance, 2011



Source: Medi-Cal Dental Services Division, August 23, 2012, and Washington Dental Service, 2011, Data calculation by study authors.

Several categories demonstrated very similar percentages of submissions by payers: Diagnostic – Clinical Oral Evaluations; Preventive; Direct Restorations, while others registered significant differences: Diagnostic - Radiographs/Diagnostic Imaging; Endodontics; Periodontics. These findings would suggest that by category the frequency of submissions the Denti-Cal program is similar to the frequency of submissions in commercial plans. Further suggesting that of those enrollees who do receive services under Denti-Cal, they receive those services at a similar frequency to those who receive services under a commercial plan.

Service Category Concerns

There are a few anomalies within categories that raise questions regarding the frequency of submissions for specific codes under the Denti-Cal program and the extent to which Denti-Cal policies may affect quality care compared to commercial child plans, a concern some dentists

expressed in the survey. In the category of preventive services, the continued use of code D1201—which is not allowed in the Denti-Cal billing manual—provides an inaccurate representation of services rendered under the program. By allowing the continued use of this code the Denti-Cal program supports inaccurate reporting of services by dentists. By not using the correct coding the Denti-Cal program may be subject to both under-reporting or over-reporting of services. The continued use of Code D1201 also sets the stage for a dentist to use prophylaxis paste with fluoride in it and get paid for it, which is against the Denti-Cal payment policy.

The frequency of submissions for code D0230 – intraoral - periapical each additional film – raises concerns regarding potential over-utilization as well as patient safety. In 2011, the Denti-Cal program recorded a ratio for the submissions of D0230 to code D0220 –intraoral – periapical first film of 2.4 to 1. By comparison the child only plan has a ratio of 0.96 to 1 and the general population has a ratio of 0.79 to 1. Sensitivity to ionizing radiation is highest at early ages.

Under the Denti-Cal program, D7140 – extraction, erupted tooth or exposed root, represented 75% of all submissions in the category of Oral and Maxillofacial Surgery. This is significantly higher than 24% of submissions in the child-only plan. The extraction of a tooth should only occur after other alternatives have been considered. The high frequency of submissions for extractions and the low submissions of endodontic codes (with the exception of D03220) and the low submission of crown codes questions whether other alternatives have been considered and the extent to which Denti-Cal policies may not be to the level of care of commercial insurance for children.

B. CONSUMER EXPERIENCE AND PERSPECTIVES

What do Parents Say About Medi-Cal Dental and Access to Services?

Consumer perspectives about the availability of private practice dentists who accept Medi-Cal varies in reported California studies among populations with similar socio-demographic characteristics. The studies cited below show about one-fifth to one-third of parents have reported difficulties in finding a private practice dentist who will see their child.

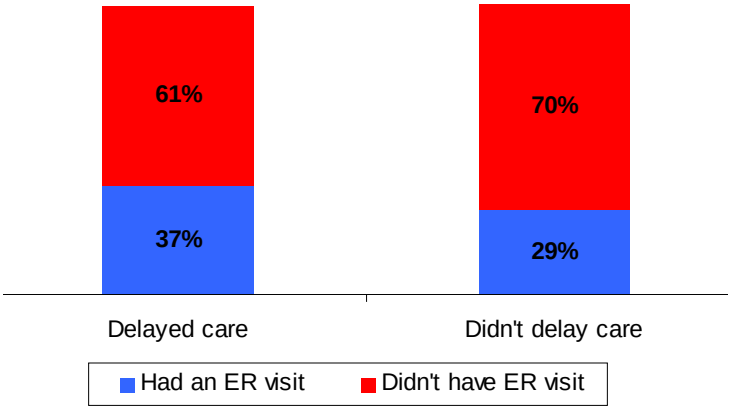
A 2011-2012 study[52] of Medi-Cal enrollees' perceptions about the Medi-Cal program supported by the California Healthcare Foundation (CHCF) found that most beneficiaries (90%) viewed Medi-Cal overall as very positive, believed it covered needed care (78%) and provided access to high quality care (69%). While this telephone survey (that used a probability sample provided by DHCS) primarily concerned *medical* services, respondents also answered 2 questions related to *dental* care services.

Asked about their experience finding dentists who accept Medi-Cal for their children, close to three-quarters of parents interviewed in the CHCF study reported they had an "easy" time; about one-quarter reported a "difficult" time; and the rest were "not sure." The largest majority (80%) of parents said they had not delayed dental care for their child in the past 12 months for reasons related to cost.

At our request the study authors provided some additional analyses to expand on the findings. Child age group, general versus specialist dental care, and services sought through FFS versus dental managed care—factors that might have shed important light on common access problem areas—were not collected in the interviews.

Delaying dental care due to cost, one of the areas asked about, was associated with higher visits to the emergency department when those two factors were broken out. Of those who delayed dental care for their child due to cost, 37% had an ED visit compared to 29% who did not delay care (Figure 14). This information supports the concerns above about use of the ED for dental conditions considered preventable.

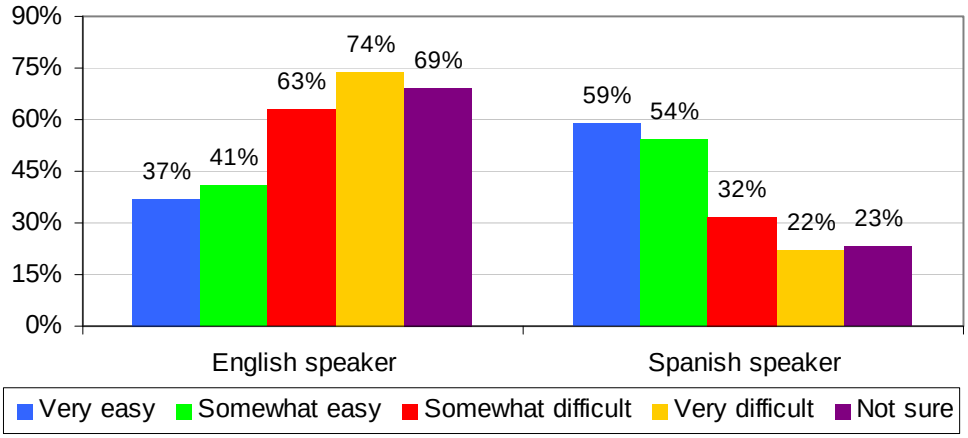
Figure 14. Parents' Report of Children's ED Experience and Delay/No Delay of Dental Care Due to Cost in the Last 12 Months (n=752)



Source: California Healthcare Foundation/Lake Research Partners. Medi-Cal Consumer Study, 2010-2011

This consumer survey also showed that overall, Spanish speakers reported having an easier time finding a dentist than English speakers. Close to 50% of parents who spoke only Spanish reported being it as "very easy" (Figure 15). This is an interesting finding as nationally and in California Hispanic children are more likely than White or African American children to have unmet dental needs and have not been to the dentist in the past year.[53,54]

Figure 15. Consumer Experience Finding a Denti-Cal Provider by Language Spoken (n=752)



Source: California Healthcare Foundation/Lake Research Partners. Medi-Cal Consumer Study, 2010-2011

The finding that Spanish-speaking parents reported having an easier time finding a dentist than English speakers may be a true reflection of these parents' experience or a manifestation of how they view their experiences as the finding was consistent with the other findings in this study relative to the Hispanic population. According to the study authors, Hispanics (who made up 67.3% of the study sample) are a population "who show a lot of gratitude for coverage, have a higher tolerance for hassles, generally rate things higher, and tend to report favorable perspectives about attitudes."[55] They suggest there may be different cultural expectations at play that influence how positively or negatively one views his or her experiences. Calling around to three dentists before finding a provider may be perceived hard to some, and not at all to others.

Other California studies suggest a higher proportion of parents with difficulties finding a private practice dental provider. The complexity of accessing dental care for low-income children in Los Angeles County was documented in a study of 5,790 dental offices and clinics in this county.[56] Of those whose insurance was Medi-Cal (43% of the children), parents reported that 15% of the children could not get needed dental care in the last year because the dentist did not accept their insurance. Parents also reported that 16% of their children had experienced a toothache in the last 6 months; and that 18% of their children needed dental care in the last year that was not accessible.

The LA study also found that children living in homes where English was not spoken at all were slightly more likely to have untreated dental caries than children who live in homes where English was the main or only language spoken (76% vs. 71%). Perceived barriers to care, similar to other Medicaid parents' experience, [57] included searching for providers, arranging an appointment where choices were severely limited, and finding transportation.

Our evaluation of a First 5 California Dental Initiative[58] included over 1,800 parents and staff from WIC and Head Start, and 1,646 primary care providers. Although staff reported more difficulty finding dentists for uninsured patients/those needing a sliding scale, they also reported difficulty for children with Medi-Cal. Primary care physicians indicated they had particular difficulty finding dentists to see the children who had special needs and who needed anesthesia. Of the one-quarter of parents who reported problems with finding a dentist, almost half cited not being able to find a dentist who accepted Medi-Cal as the main reason for not taking their child to a dentist in the last year.

In a countywide study of private practice dental practices[59] and parents' oral health attitudes and practices in Solano County,[60] 32% of parents, most of whom had Medi-Cal for their children, reported problems in finding a provider for their child. Although the majority said they had no problems, oral health was not always "on the radar" of these parents and the services were not always perceived as satisfactory once they had made the visit, generally because of perceptions about how they were treated or because of the child was "turned away" because of behavioral management issues common with young children.

The Children's Partnership recently documented a number of challenges faced by California families in accessing dental care in the traditional office-base dental care delivery system.[61] Their report suggests that the anticipated increase in children with Medi-Cal needing dental care creates a potential for an even greater mismatch between the current number and location of available providers and their ability to provide services for these children.

What do Parents Do When They Have Access or Quality Problems?

The extent to which parents are aware of or understand how to access this process is uncertain and varies. Research demonstrates that knowledge gaps among parents partially explain why some parents may be reticent to express concerns or seek recourse for a problem only informally through organizations such as family resource centers. Help in finding a dentist may also come from Promotores (volunteer or paid community health workers who are trusted members of the community) and Medi-Cal application assistants—the people on the front lines—when they become aware of access problems. In Orange County, for example, where The California Endowment has invested one of its Healthy Communities projects, outreach and education provided by Promotores seems to be making a difference in linking families with providers.

The Medi-Cal FFS dental program provides a formal process for beneficiaries (or their parents) to file complaints, lodge grievances and request a hearing for an appeal.

Formal Complaint and Grievance Process

The Department of Health Care Services, through its contract with Delta Dental, provides a toll-free Beneficiary Telephone Service Center (800-322-6384) for consumers with dental service-related concerns. An agent discusses the reason for the call and determines if a complaint packet is to be mailed out (if services have been rendered) or if the caller needs to be referred to another agency such as the Dental Board. If a complaint packet is mailed and returned by the consumer, a series of back-and-forth paperwork ensues: documents are requested, letters are drafted, provider and other records are reviewed, etc.

When Delta gets calls regarding access to care, they assist beneficiaries in finding a provider by researching and locating a provider in the area requested. If the phone representative is unsuccessful, he/she refers the caller to a supervisor who then calls providers and explains in detail the type services needed for the beneficiary. Once a provider is located, the beneficiary is called back and provided the information. If the supervisor is unsuccessful, he/she will work with the Outreach unit in locating a provider.

DHCS was not able to provide data on the *number* of formal complaints (# of cases) related to dental access or quality, the specific *type* of problems experienced (or perceived), and the resolution of the cases. According to DHCS, "while Delta has a formal complaint process, they are unable to track formal complaints from beneficiaries with regards to access to care, as the system does not have a 'code' that identifies this type of complaint.[62]

State Fair Hearing Appeal Process

A fair hearing—which must be completed in 30 days—is available if a person has applied for, received, or is currently receiving benefits/services from Medi-Cal and they have a complaint about how their benefits/services were handled, or services were denied or modified. A State Hearing is initiated when a Denti-Cal beneficiary or an Authorized Representative writes to or calls the Department of Social Services toll-free number. The process entails:

- Denti-Cal receiving the Hearing request and entering it in the State Hearing System.
- Analyzing the request by the Denti-Cal Hearing Analyst.
- Receiving additional information requested from the provider and making a determination, allowing or denying the case.
- Preparing a Position Statement, if the case is denied, and sending it to the State Hearing Analyst for approval and signature.
- Forwarding the Position Statement to the Department of Social Services and the beneficiary when the hearing is scheduled.
- Conducting the hearing, which the beneficiary attends either in person or via telephone, and making a final decision by an Administrative Law Judge.
- Forwarding the decision to Denti-Cal for review and follow-up if necessary.

Table 34 shows a count and the resolution for the State Hearing Appeal cases related to Medi-Cal FFS dental services for 2011. The bulk of the hearings are related to services not provided according to DHCS.

Table 34. State Hearing Appeal Cases Related to Dental Services, 2011.

Action	Count
Number of cases	750
Denied (Department decision upheld)	649
Granted	57
Dismissed	44

Source: Department of Health Care Services, Medi-Cal Dental Program, August 2012.

The following lists the most to the least-often denied categories of treatment in the State Hearing Process for the 649 denied cases in 2011 (individual counts were not available):[63]

1. Orthodontics
2. Extraction of third molars
3. Root Canal/Crowns
4. Scaling and Root Planing
5. 503A – Adult dental no longer a benefit of the program
6. Prosthodontics
7. Medical necessity
8. Other denied categories

What Role do Consumer Advocacy Organizations Play and What is Their Current Experience?

Health consumer advocacy organizations, including health rights hotlines, help consumers in securing health care coverage, seeking recourse for denied care, and in making referrals. In addition to direct assistance, they provide information and education such as information about anticipated changes in the health care system under federal health care reform. The Health Consumer Alliance (HCA) in California is a network of 9 consumer assistance programs operated by community-based legal services organizations and 2 statewide support organizations. HCA partners with the Department of Managed Care and provides "comprehensive, local, one-on-one assistance to individuals and families struggling to navigate the complex health care system."[64]

A 10-year old statewide analysis by HCA and the Health Rights Hotline polled information from all of its member organizations and documented 466 consumers' complaints (totaling 581 problems) accessing Medi-Cal dental services.[65] Denial of care was by far the biggest complaint, followed by delay and access problems. The data were not reported by age group, however, so the proportion involving children is unknown.

Health Rights Hotline (HRH) previously provided us with data concerning calls for assistance related to access and quality concerns about children's dental services in Sacramento County. Although most of those children were enrolled in Medi-Cal's dental managed care program, it was noted that in 2009 only 12 calls, or approximately 1%-2% of all calls to HRH, concerned dental issues for children age 0-20.[66] HRH reported a 55% decline in dental-related cases over the previous 5 years, and attributed the change as primarily due to staff reductions.

We contacted HCA and the National Health Law Program (which along with Western Center on Law and Poverty is part of HCA) for the present study to see what more recent dental-related consumer data they might have collected and/or published. They passed along our request to the HCA partners and we learned that recent studies or evaluations by these organizations concerning assistance for dental-related complaints, particularly for children, have not been conducted.[67] Although local projects may keep informal counts, no statewide repository of data exist that systematically documents complaints and resolutions regarding dental access issues.[68]

C. EMERGENCY DEPARTMENT USE FOR DENTAL CARE

Are Hospital Emergency Departments Being Used Unnecessarily for Dental Care?

As economic conditions show little improvement for many families, hospital emergency departments increasingly bear the burden of oral health emergencies, a large proportion of which are preventable. Going to an ED for non trauma-related dental care suggests poor access to community dental services. Without access to oral health care, dental diseases and conditions may go untreated, resulting in unnecessary ED use and in extreme situations hospitalization.[69]

A recent HRSA analysis of ED use for dental conditions in a sampling of states illustrates this situation.[70] The study found half of the "emergency" visits resulted from preventable conditions which, owing to the lack of regular dental care, deteriorated to the point where the patient was in sufficient pain to seek emergency care. More importantly, the study concluded that most of the patients did not receive *dental* care during these episodes. Patients were typically given antibiotics and pain relievers, which relieve the symptoms temporarily but without treatment will return, resulting in the same futile cycle.

Although ED visits related to oral conditions comprise a small percentage of all ED visits, in 2010 California children ages 0-18 made 19,766 visits to emergency departments due to one of the 10 primary diagnoses of an oral condition shown in Table 35.[71] Over half (51.3%) of these ED visits were made by children ages 0-5.

Table 35. Total California ED Visits for an Oral Condition Made by Children Ages 0-18, 2010

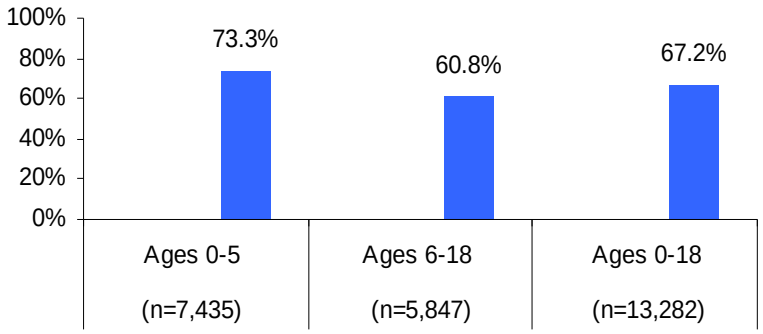
ICD-9CM Codes for Oral Conditions	Ages 0-5	Ages 6-18	Ages 0-18
520: Disorders of tooth development and eruption	1,312	76	1,388
521: Diseases of hard tissues of teeth*	507	1,019	1,526
522: Diseases of pulp and periapical tissues	819	2,005	2,824
523: Gingival and periodontal diseases	1,385	672	2,057
524: Dentofacial anomalies, including malocclusion	49	331	380
525: Other diseases and conditions of the teeth and supporting structures	884	2,481	3,365
526: Diseases of the jaws	48	305	353
527: Diseases of the salivary glands	414	584	998
528: Diseases of the oral soft tissues, excluding lesions specific for ging	4,557	1,982	6,539
529: Diseases and other conditions of the tongue	167	169	336
Total	*10,142*	*9,624*	*19,766*

Source: OSHPD
*Shaded rows are the ambulatory care sensitive (ACS) conditions considered preventable.

Just over two thirds statewide – as well as in the 5-county dentist survey counties – of the ED visits for oral conditions by children ages 0-18 were made for an *ambulatory care sensitive* (ACS) condition. ACS conditions are the conditions that are considered preventable, "reflecting conditions that could have been handled in an outpatient non-emergency setting if addressed

soon enough."[72] The highest percent of the ACS-related ED visits statewide and in the sample counties were made by children ages 0-5 (Figure 16).

Figure 16. Percent of Children's ED Visits for Oral Conditions Considered Preventable, 2010

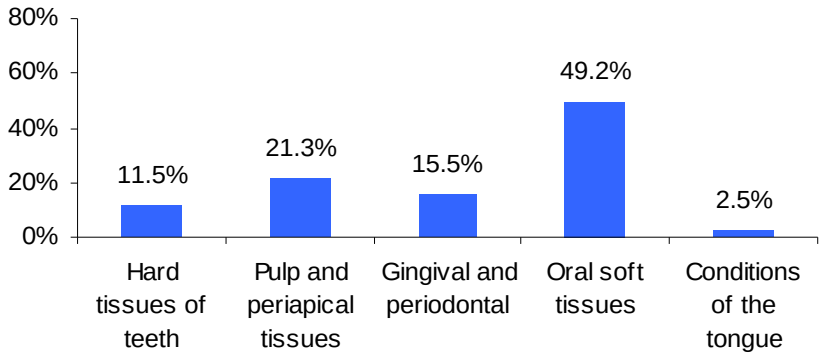


Source: Office of Statewide Health Planning and Development

What Type of Oral Conditions Took Children to an ED?

Inflammation due to infections and tooth pain were the most common reasons children ages 0-18 statewide and in the DDS survey counties visited the ED (Figure 17). Good preventive care could potentially have avoided the need for many of these ED visits.

Figure 17. Preventable ED Visits by Type of Oral Condition, Ages 0-18, 2010



Source: Office of Statewide Health Planning and Development

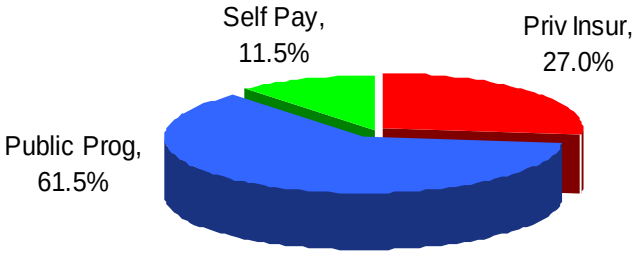
What Sources Paid for the ED Visits?

Evidence suggests that low-income families turn to emergency departments when their children have dental problems but cannot access regular care. The outlay to payers for this care can be significant. Children who are taken to hospital EDs for severe dental pain "can end up in a revolving door that costs Medicaid—and taxpayers—significantly more than preventive and primary care."[73] In a large study of the Minneapolis-St. Paul metropolitan area, with over 10,000

visits to EDs for dental-related problems, total charges reached nearly $5 million in 1 year. These expenses were mainly charged to public programs and were reimbursed at about 50%. In contrast, the population with commercial dental insurance rarely used hospital EDs for dental problems.[74] Medicaid expenditures for dental care in the ED have also been shown to be greater for treatment than the cost would have been to Medicaid for providing routine, preventive care.[75]

In California as well as nationally, Medi-Cal beneficiaries use the ED for dental services at higher rates than privately insured children. Public programs—which are nearly entirely represented by Medi-Cal—picked up the tab for the majority (61.5%) of the ED visits considered preventable (Figure 18).

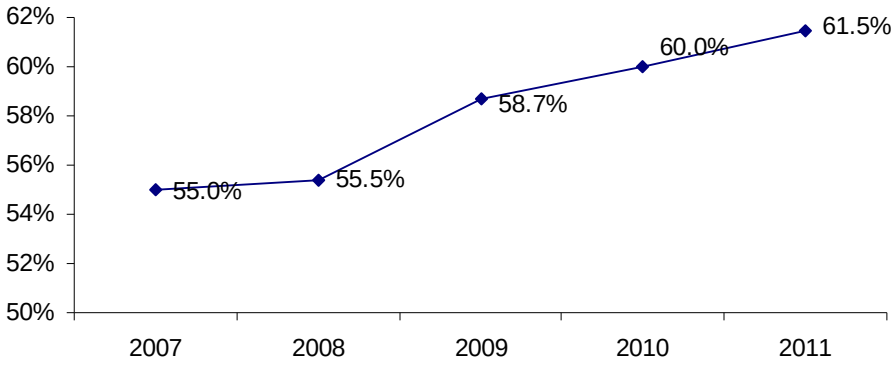
Figure 18. Percent of Preventable ED Visits by Payer Source, Ages 0-18, 2011.



Source: Office of Statewide Health Planning and Development

ED visits by children for preventable oral conditions that were paid for with public dollars have increased in California over the last 5 years. The proportion of ED visits for a preventable oral condition paid for by a public payer source (predominantly Medi-Cal) has risen each year between 2007 and 2011 (Figure 19). The disproportionately high percentage of ED visits covered by a government program suggests the need for increased prevention activities by families and caregivers and access to Denti-Cal providers for early and regular dental care.[76]

Figure 19. Percent of ED Visits with Public Payer Source, Children Ages 0-18, 2007-2011



Source: Office of Statewide Health Planning and Development

D. SAFETY NET RESOURCES

Low-income families who cannot find private practice dentists often turn to safety net providers. However, the safety net for dental care is considerably less extensive than the safety net for medical care and cannot make up for the gap in access. Also, dental care traditionally has not been a core focus of general safety net providers and their capacity is limited.[77] In many communities, advocates step in to cobble together a "system" of care.

Federally qualified health centers (FQHCs) and other community clinics are important safety net resources for low-income and immigrant populations. Sixteen percent of California's Medi-Cal population was served by a community health center in 2009, and payment to these organizations accounted for 1.7% of the state's total Medi-Cal expenses that year.[78] In FY 2010-11, DHCS reimbursed clinic organizations $118,435,385 for Denti-Cal services.[79] FQHCs and other community clinics are increasingly offering dental services, including preventive, restorative and emergency services. In 2010, dental services accounted for about 11% of community clinic and health center patient visits, according to the California Primary Care Association.[80]

With the early rollout of health reform (Patient Protection and Affordable Care Act) dollars, some FQHCs have received federal grants for expansion, mostly for capital costs. In Sonoma County, for example, Santa Rosa Community Health Center is opening a new 12-chair dental clinic for children, filling an access gap in a county with an extraordinarily low number of dentists willing to accept Medi-Cal.[81] Although the state's 118 health center organizations offered some level of preventive dental care (which could be limited to fluoride varnish only) at 78% of their 1,039 delivery sites in 2010,[82] health centers report that expansions to date do not approach the level of need, and wait times for appointments remain long.

Since 2000, First 5 County Commissions have focused on improving access to oral health care for young children, serving as a safety net for nearly 150,000 children a year across California. In 2011, 34 First 5 County Commissions invested $15.3 million toward oral health improvements focusing on access, provider training, and parent and child education. For example, in Orange County the Commission is in its 5th year of funding to support Pediatric Dental Residency programs at USC; 80% of the dentists trained through this program have committed to working with children ages 0-5 in Orange County. First 5 LA is investing nearly $7 million to support 17 new neighborhood clinics, partnerships to place dentists in WIC offices, mobile dental units, and a new challenge grant to make oral health care available in non-clinic settings.[83] First 5 San Joaquin County is working to promote the *ReThink Your Drink campaign* and the book *Potter the Otter: A Tale About Water*. These strategies aim to encourage children to drink water instead of sugary drinks and to educate families about the link between consumption of these drinks and health risks, and they are hoping to get local dentists involved.

Private grants and philanthropy have also stepped in in some places to fill gaps in dental care for low-income children. Because the need for a pediatric dental surgery resource for Medi-Cal children was so great in the Bay Area — the wait at UCSF and Oakland Children's is months long — First 5 Santa Clara and The Health Trust, along with a hospital partner, opened two Children's Dental Centers in Santa Clara County that will soon also provide the option of dental treatment under general anesthesia for children with Medi-Cal in the Bay Area.

E. OTHER STATES' STRATEGIES AND EXPERIENCE FOR IMPROVING ACCESS

In spite of the poor economy, states have taken significant steps to improve access by increasing dentists' willingness to treat children with Medicaid. The most common strategies address administrative challenges and increasing reimbursement rates.

More and more states are examining managed care as an approach to providing dental care services. Some states have begun to shift more of their Medicaid children into dental managed care systems, as California wishes to do, having first implemented the necessary rate increases and supplementary support activities to be able to see improvement in utilization rates. According to the federal General Accountability Office, in 2009, 21 states provided some coverage of Medicaid children's dental services through managed care contracts.[84] The reasons for this can vary, but cutting costs and providing dental homes for children—in addition to increasing utilization—are among the most commonly hoped-for outcomes of dental managed care.

As noted by the Pew Center's 2010 review of state dental policies,[85] increasing investments in Medicaid is difficult during tight fiscal times, but some states have shown that it is possible to make improvements with limited dollars. Improvements achieved by key states in recent years applied widely accepted strategies that have been demonstrated to improve utilization outcomes and include:

- Increase in provider rates (applicable to both FFS and managed care systems)
- Reduction of the administrative burden associated with Medicaid (including the provider enrollment/credentialing process)
- Outreach and support to beneficiaries regarding how to best access and utilize care
- Education of parents to better understand the importance of early and preventive care
- Education and training for providers (to increase clinical skills as well as comfort in managing the behavior of young children in the dental office)

These strategies recognize and address both system and patient barriers and are showing payoffs in Medicaid utilization rates in states such as Arizona, Rhode Island, Washington, South Carolina and Virginia.

V. CONCLUSIONS

"Now is the time to consider new ways to encourage more dentists to treat people with Medicaid."
—Dental Crisis in America, U.S. Senate Committee on Health, Education, Labor & Pensions, February 2012

Lack of access to publicly-supported dental care in California is the result of a multitude of factors and inadequacies including government policies and the supply of willing providers to name the most common. While solutions are available, the issues involved are complex and require shared goals and mutual willingness to move forward even in the face of the state's budget concerns and legislative priorities.

The dentists who responded to our survey mostly reflect the characteristics of dentists in active practice in California, and are similar to those of general dentists in private practice in California who have been surveyed recently about providing dental care to publically insured patients.[86] Private practice dentists express the same levels of satisfaction (which is generally dissatisfaction) and frustration and reasons for unwillingness to participate in Medi-Cal as in other state and national studies. When they do participate, it is generally in low patient volume as dental practices are, for the most part, small solo businesses that cannot afford a patient mix with a large share of poorly reimbursed care. These findings are also consistent with our earlier study of private practice dentists in Solano County.[87]

Dentists reported they are most likely to participate, though not by a significant margin, if certain improvements occurred: higher fees, streamlined or removal of burdensome program requirements and policies (especially denial of payment), and fewer broken patient appointments topped the list. That approximately 80% of general dentists and 65% of pediatric dentists indicated if any of these improvements were to be made it was at least somewhat likely they would take more children with Medi-Cal is encouraging.

While rate increases alone are not the only way to improve access to oral health services for children with Medi-Cal, results from this study provides evidence that dentists' acceptance of Medi-Cal patients would increase if Medi-Cal rates increase. Under a rate *reduction* scenario, the opposite would be expected to occur.

Unless the reimbursement rates improve—which without some sort of miracle they will not anytime soon—and the claims payments system is radically simplified, private practice dentists' participation in the Medi-Cal dental program in California is unlikely to change in any substantive way, regardless of the delivery model.

Persistent low fees—and additional provider rate decreases—are likely to result in a continuing shrinkage of the private practice dental provider network in California, which is especially worrisome when the number of Medi-Cal eligibles is expected to increase. It is important to note that 80% of the surveyed dentists no longer in the Healthy Families Program (HFP) dropped out because of low reimbursement. It remains to be seen whether current HFP providers will continue to contract to treat Medi-Cal children after the transition of HFP enrollees into Medi-Cal—so there are no disruptions in services or loss of private practice providers as a result of the transition—and what steps will be taken to constantly evaluate network capacity.

The results of this study also support the assertion that low Medi-Cal payment rates are associated with Medi-Cal children receiving less dental care than children covered by HFP and private insurance.

While the absence of unique enrollee data made the task of analyzing claims more challenging, a general overview of the frequency of submissions could be observed and comparisons made with children in commercial dental plans. Areas of concern that rose to the top signal a concern about early access to oral health care. These included: fewer dental sealants than would be expected (especially because children with Medi-Cal are at higher risk for decay than in the general child population) that suggests decay is present in these children at the time of their first visit; high submissions of therapeutic pulpotomy and stainless steel crowns that suggests decay has destroyed most of the tooth structure and damaged the nerve in the tooth; the high frequency of submissions for extractions that suggests that teeth are unsalvageable; and, the high frequency of submissions of a radiographic code that suggests over-utilization and also raises questions regarding patient safety.

Evidence suggests preventive dental visits for children can reduce the need for emergency and hospital-based dental care, reducing the cost of caries-related treatment. Reducing severe caries through early interventions could provide substantial cost savings to Medi-Cal.[88] Our review of emergency department data indicates the importance of monitoring whether children are making more frequent use of the ED to cope with dental problems, which could be expected if access to Medi-Cal dental providers continues to decrease. ED treatment of ambulatory care sensitive dental conditions (i.e., potentially preventable/avoidable with early intervention) is a useful measure for tracking dental access.

While, overall, large percentages of parents do not report difficulties in finding a private practice dentist who accepts Medi-Cal, up to one-third do. The proportion might even be higher if more parents understood the importance of early care and had experienced trying to access it through the private practice system. Importantly, with reduced government and advocate staffing, parents have fewer avenues to report access problems. The finding in the California Healthcare Foundation Medi-Cal satisfaction survey[89] that Spanish-speaking parents report having an easier time finding a dentist than English speakers has implications for follow up, particularly as Hispanics make up the greatest proportion of families whose children have Medi-Cal. If, according to the study authors, this finding may be a true reflection of these parents' experience or a manifestation of how they view their experiences, it would be valuable to study the factors and cultural experiences that influence these views.

Primary pediatric oral health is best delivered in a dental home where a dental professional provides comprehensive and continuous dental services. Ideally, this should be established by the time the child reaches her first birthday so that any evidence of Early Childhood Caries and other disease processes can be identified and addressed early with minimal or no restorative or surgical treatment.[90] The difficulty of self-navigating in the FFS program to find a provider does not promote the objective for every child with Medi-Cal having a dental home.

Because the demand for Medi-Cal coverage will only grow—from the transition of Healthy Families enrollees when that program is eliminated, expanded eligibility in health reform, and a sluggish economic recovery that leaves some children without coverage—implementing needed improvements in the Denti-Cal program is essential to creating more access to oral health services. Expecting sole private practice dentists to carry out any of the recommendations in this report is not practical.

VI. RECOMMENDATIONS

"Children needing urgent dental care are much less likely to obtain a dental appointment if they have public versus private insurance."—Dental audit study, Leonard Davis Institute of Health Economics

The following recommended actions, which are limited to those most closely tied to the findings in this study, are directed in full recognition of fiscal concerns, to government agencies and policymakers, funders and purchasers, professional groups, advocacy organizations and others willing to commit to and continue working toward increasing access to oral health services for children in the Medi-Cal program to ultimately improve children's oral health in California.

1. **Streamline and expedite the Medi-Cal dental provider enrollment process.**

   Specifically address the issues and concerns that cause current providers the most dissatisfaction and potential providers the reluctance to participate.

2. **Simplify the administrative processes associated with submitting claims.**

   Making things easier, while still requiring accountability, reduces the back-and-forth burden on providers and their office staff and lowers their administrative costs (it would save Medi-Cal money as well), which can make participation in Medi-Cal more attractive.

3. ***Raise* the rates in the Medi-Cal dental fee-for-service program. Do not implement rate reductions.**

   Medi-Cal rates form the basis for the capitation rates in the Medi-Cal dental managed care program as well, which is important if DHCS wishes to shift more beneficiaries from the FFS system into dental managed care and ensure an adequate provider network to serve enrolled children. A modest raise (e.g., 15%) would be seen as a clear signal that Early Childhood Caries is recognized by California as a preventable chronic disease of childhood that is an achievable goal to reduce. More equitable rates will encourage more dentists to provide services for eligible children.

4. **Recruit more dental providers into the Medi-Cal dental program.**

   Take into consideration not only geographic and specialty gaps but also the personal and business characteristics of dentists a little more likely to sign up. Genuine program improvements, however, are first necessary—with appropriate messaging to make providers aware of them—to attract small, private businesses like dental practices to want to participate.

5. **Adopt more quality measures for the Denti-Cal FFS program.**

   Quality measures can be related to service use, short- and long-term outcomes, patient satisfaction, etc., which can evaluate adherence to some evidence-based treatment guidelines, identify outliers, and answer access questions, similar to dental managed care programs and similar to what some other states have implemented.

6. **Monitor Denti-Cal utilization, dental provider participation and providers-to-eligibles ratios.**

   Maintain updated information through surveys and other means about dentist participation, including *volume of claims*, especially for the dental specialties that serve children, and especially during and after the transition of Healthy Families to Medi-Cal when a drop in providers accepting Medi-Cal could occur. It would not be sufficient to limit questions to "do you participate?" without also asking about distinctions such as imposition of restrictions ("what type?") and age of children first seen to get a true picture of access.

7. **Monitor Denti-Cal claims for utilization patterns linked to over utilization and patient safety and implement program strategies to reduce the concerns.**

   While claims associated with radiographs and extractions raised the most questions in our review, other services—and appropriate use of codes—should also be monitored more closely. High restorative and endodontic services may be an indicator of a lack of early access to dental care.

8. **Sponsor more trainings for general dentists to increase their comfort and skill level in seeing more or any young children and monitor utilization for improvement..**

   Our earlier evaluation of *First Smiles* and other studies demonstrates that attending a training (even a half-day) increases a general dentist's confidence and skills in serving children ages 1-3, and can result in more eligible children being seen for their first dental visit "by the first tooth or first birthday."

9. **Expand outreach and education activities to families on the availability and importance of early, regular dental services for young children.**

   In virtually every study of Medicaid/Medi-Cal provider participation, patient compliance issues—primarily broken appointments—is cited among the top 3 reasons for dissatisfaction and reluctance to participate. Studies have also demonstrated that if the stigma of being a Medicaid patient is removed the broken appointment level is the same as patients with private insurance. An example is the Michigan Medicaid program administered by Delta Dental of Michigan. There Medicaid patients had an ID card that said Delta Dental. The patients were treated with the same expectations of any patients and there was no missed appointment problem. While families served by the Denti-Cal program clearly experience personal barriers that contribute to challenges in making and keeping appointments, sensitive messaging in appropriate media and consumer material regarding the importance of patient responsibility should be addressed, in addition to supportive services such as case management that can help.

10. Improve State data capacity.

Make Denti-Cal provider and claims information more easily accessible, more timely, and in more usable formats. Key data such as unique client identifier data (without breaching privacy) needs to be available to better assess and monitor utilization and appropriateness of care.

11. Collect EPSDT dental data from federally funded clinics that allow more accurate reporting of utilization rates and does not result in an undercount.

Because federally funded clinics do not report procedure codes to the state, DHCS is unable to report the number of children seen in these clinics who received preventive or treatment or other dental measures used on the EPSDT CMS-416 form. DHCS estimates that this results in a 10%-15% undercount. Most other states are able to report these data.

12. Support the collection of more recent and consistent CHIS (California Health Information Survey) data related to oral health.

CHIS data are a valuable source of information about population knowledge, service use, insurance coverage, health behaviors and other important indicators. As funding has waned (and some funders have ceased contributing), and priorities changed, some oral health indicators are no longer collected, or they are re-worded (sometimes necessarily), making trending impossible. An example would be to once again ask about current insurance coverage (last reported for 2007).

13. Identify a "legislative champion(s)."

Some states have found a legislator—or key cabinet member—who is willing to be visible in taking on a leadership role for oral health issues, convey preventive oral health messages through various media, educate other legislators about oral health issues and concerns, and carry legislation.

14. Support a study to more closely examine the reasons more parents do not fully utilize Medi-Cal dental benefits for their children.

In general, the common barriers to accessing services are recognized—and various support services are in place to address them—but a carefully designed, comprehensive and representative study to drill down and ascertain reasons and the relative contribution of each factor can be valuable in designing more tailored improvement strategies.

15. Outreach to pregnant women (particularly those pregnancies covered by Medi-Cal) to educate the women about getting a dental visit for themselves and the age 1 visit for the child.

Good oral health and control of oral disease protects a woman's health and quality of life before and during pregnancy, and has the potential to reduce the transmission of pathogenic bacteria from mothers to their children. Yet many women do not seek—and are not advised to seek—dental care as part of their prenatal care, although pregnancy provides a "teachable moment" as well as being the only time some woman are eligible for dental benefits.

VII. APPENDICES

"Even if a state provides a fairly decent dental benefit in their Medicaid and SCHIP programs, that benefit is at risk of being cut based on the ever-changing state budget."—American Dental Society

Attachment 1: Individuals Interviewed and Contacted for Information

Attachment 2: Detailed Tables of Utilization and Access

Table A-1	Utilization (Percent) of Medi-Cal Dental Services by Age by County, CY 2011
Table A-2	Utilization (Percent) of Medi-Cal Dental Services by County Order of Highest Utilization, Children Ages 0-20, CY 2011
Table A-3	DDS Points of Access and Ratios to Eligibles, by Type of Dentist, California Counties
Table A-4	General DDS Points of Access and Ratios to Eligibles, in Descending Order of Access, California Counties
Table A-5	Pediatric DDS Points of Access and Ratios to Eligibles, in Descending Order of Access, California Counties

Attachment 3: Contact Information for this Study

Attachment 1

Individuals Interviewed/Contacted for Information

(in Alpha Order by First Name)

Name	Affiliation
Avo Makdessian Assoc Director Policy and Communications	First 5 Santa Clara
Bob Isman, DDS Dental Consultant	Medi-Cal Dental Services Division CA Department of Health Care Services
Charles Stirewalt, DDS Vice President of Dental Affairs	Smile Brands Inc.
Cheryl Miller, RN Administrator/Nursing Director	Children's Dental Surgery Center, Stockton Shepard Surgery Center, Santa Maria
Colleen Lee Executive Director	San Joaquin County Dental Society
Dale Bishop, MD Medical Director	Health Plan of San Joaquin
David Brody Chief Program Officer	First 5 Santa Clara
David Hurst CEO	Health Plan of San Joaquin
Gary Nelson, DDS, M.S. Former Dental Consultant, State Government Programs	Delta Dental of CA
Gayle Mathe, RDH, Policy Development Director	California Dental Association
Gloria Robertson Staff Analyst	Health Workforce Data Office of Statewide Health Planning & Development
Hugo von Bernath Research Analyst	Health Information Resource Center Office of Statewide Health Planning and Development
Jolene Smith CEO	First 5 Santa Clara
Jon Chin Acting Chief	Medi-Cal Dental Services Division CA Department of Health Care Services
Kathleen Cooper Executive Director	Santa Clara County Dental Society
Lani Shiff-Ross Executive Director	First 5 San Joaquin
Laura Petersen Executive Director	Orange County Dental Society
Matthew Woodruff Chief Operations Officer	Santa Clara Family Health Plan
Michael Lipman Vice President	Provider Operations Santa Clara Family Health Plan
Nancy Rimsha Directing Attorney	Legal Aid Society of Orange County
Petra Stanton Associate Director Health Center Policy & Services	California Primary Care Association
Richard Barnes, DDS	Private practice, Tulare County
Todd Hansen Chief Operating Officer	The Health Trust

Attachment 2

Table A-1. Utilization (Percent) of Medi-Cal Dental Services by Age by County, CY 2011

County	Ages 0-3	Ages 4-5	Ages 0-20
Dental Managed Care			
Los Angeles	12.7	35.8	24.5
Sacramento	15.9	42.4	31.3
Fee for Service			
Alameda	34.8	64.6	50.5
Alpine	57.1	20.0	21.6
Amador	23.0	45.8	38.1
Butte	30.7	57.2	46.3
Calaveras	23.2	46.4	40.9
Colusa	25.1	60.8	47.7
Contra Costa	26.0	60.1	44.7
Del Norte	36.6	65.2	49.1
El Dorado	27.6	58.6	44.1
Fresno	23.1	61.9	47.4
Glenn	41.3	72.8	55.7
Humboldt	20.0	53.0	39.1
Imperial	31.7	62.9	46.0
Inyo	30.3	57.7	47.2
Kern	34.1	73.2	54.5
Kings	27.5	56.8	45.3
Lake	35.5	61.7	47.7
Lassen	44.9	76.8	51.8
Los Angeles	34.5	72.0	57.1
Madera	28.5	63.5	49.4
Marin	63.4	78.5	64.8
Mariposa	20.3	45.8	43.5
Mendocino	32.9	61.8	51.1
Merced	22.4	57.7	44.9
Modoc	38.2	71.2	51.9
Mono	46.7	75.0	55.5
Monterey	51.2	79.0	62.6
Napa	41.0	67.0	52.4
Nevada	30.4	57.7	49.4
Orange	36.7	73.9	58.7
Placer	24.1	55.8	43.7
Plumas	45.7	63.4	53.9
Riverside	22.7	62.4	49.2
Sacramento	15.8	21.8	23.9
San Benito	33.6	63.3	50.0
San Bernardino	23.3	59.6	47.9
San Diego	41.0	70.9	54.8
San Francisco	43.4	64.9	54.5
San Joaquin	19.7	58.2	44.3
San Luis Obispo	42.3	68.3	53.9
San Mateo	32.5	65.0	51.7
Santa Barbara	29.4	69.5	52.4
Santa Clara	30.4	69.1	53.6
Santa Cruz	49.8	76.5	62.1
Shasta	21.4	53.9	42.0
Sierra	20.0	52.9	46.8
Siskiyou	22.8	54.3	39.7
Solano	23.1	54.6	40.8
Sonoma	39.7	67.4	51.9
Stanislaus	16.0	54.9	41.9
Sutter	24.3	62.9	47.7
Tehama	36.1	68.0	53.2
Trinity	15.9	43.6	34.7
Tulare	26.1	59.7	47.3
Tuolumne	28.6	62.1	48.0
Ventura	25.1	68.2	49.6
Yolo	27.8	66.8	47.4
Yuba	26.7	58.6	45.4
FFS Total	**31.1**	**66.4**	**52.2**

Source: Department of Health Care Services Medi-Cal Dental Division, August 2, 2012.
Notes: Rows shaded in yellow are the dentist survey sample counties.
1. Utilization Rate for managed care is calculated as the number of unduplicated users divided by the number of enrollees continuously enrolled in the same plan for at least 11 months during CY 2011.
2. Statewide FFS figures count individuals in the same aid codes as those enrolled in the dental managed care plans, and who were continuously enrolled in FFS for at least 11 mos. in CY 2011.
3. Data are based on less than 6 months of runout. Providers have up to 12 months to submit claims and it can take several additional months before all claim data are incorporated into the DHCS data warehouse.

Table A-2 Utilization (Percent) of Medi-Cal Dental Services by County Order of Highest Utilization, Children Ages 0-20, CY 2011

County	Ages 0-20 Utilz Rate
Fee-for-Service	
Marin	64.8
Monterey	62.6
Santa Cruz	62.1
Orange	58.7
Los Angeles	57.1
Glenn	55.7
Mono	55.5
San Diego	54.8
Kern	54.5
San Francisco	54.5
Plumas	53.9
San Luis Obispo	53.9
Santa Clara	53.6
Tehama	53.2
Napa	52.4
Santa Barbara	52.4
Statewide Average	**5.2.2**
Modoc	51.9
Sonoma	51.9
Lassen	51.8
San Mateo	51.7
Mendocino	51.1
Alameda	50.5
San Benito	50.0
Ventura	49.6
Madera	49.4
Nevada	49.4
Riverside	49.2
Del Norte	49.1
Tuolumne	48.0
San Bernardino	47.9
Colusa	47.7
Lake	47.7
Sutter	47.7
Fresno	47.4
Yolo	47.4
Tulare	47.3
Inyo	47.2
Sierra	46.8
Butte	46.3
Imperial	46.0
Yuba	45.4
Kings	45.3
Merced	44.9
Contra Costa	44.7
San Joaquin	44.3
El Dorado	44.1
Placer	43.7
Mariposa	43.5
Shasta	42.0
Stanislaus	41.9
Calaveras	40.9
Solano	40.8
Siskiyou	39.7
Humboldt	39.1
Amador	38.1
Trinity	34.7
Sacramento	23.9
Alpine	21.6

See source and notes for Table A-1 above.
Rows shaded in yellow are the dentist survey sample counties.

Table A-3. EPSDT Dental Services Utilization Reported by States, FFY 2010-11

Children Receiving Any Dental Svs		Children Receiving Preventive Dental Svs*	
In Utilization Order		In Utilization Order	
State	**2010-11**	**State**	**2010-11**
Texas	63.4%	Vermont	55.1%
New Hampshire	57.4%	New Hampshire	53.1%
Vermont	56.3%	Texas	51.6%
Washington	52.8%	South Carolina	50.0%
South Carolina	52.6%	Washington	48.6%
Massachusetts	51.4%	Massachusetts	47.6%
Hawaii	50.7%	Alabama	46.6%
Maryland	50.1%	Maryland	45.1%
Alabama	49.4%	Illinois	44.8%
Colorado	49.1%	Oklahoma	44.6%
Arizona	48.5%	Colorado	44.2%
Oklahoma	48.5%	Utah	43.9%
Illinois	48.4%	Virginia	43.7%
West Virginia	47.7%	Arkansas	43.6%
Arkansas	47.4%	Arizona	43.3%
Virginia	47.3%	Nebraska	43.3%
Nebraska	47.2%	New Mexico	43.3%
New Mexico	47.2%	Georgia	43.0%
Tennessee	46.6%	Tennessee	42.3%
Kentucky	46.3%	Ohio	42.1%
Georgia	46.2%	West Virginia	41.5%
Ohio	46.0%	North Carolina	41.2%
Alaska	45.4%	Wyoming	40.8%
Mississippi	45.1%	Kentucky	40.6%
District of Columbia	44.9%	Louisiana	40.5%
North Carolina	44.9%	Mississippi	40.4%
Utah	44.8%	Hawaii	39.4%
Louisiana	44.3%	Rhode Island	39.3%
New Jersey	43.4%	Delaware	38.8%
National Avg	**43.3%**	Alaska	38.7%
Delaware	42.5%	**National Avg**	**38.5%**
Iowa	42.4%	New Jersey	37.7%
Rhode Island	41.9%	Iowa	37.4%
Minnesota	41.4%	Minnesota	37.3%
South Dakota	41.4%	District of Columbia	37.0%
Wyoming	40.9%	South Dakota	37.0%
Maine	40.2%	Maine	35.9%
Pennsylvania	39.8%	Pennsylvania	35.2%
Oregon	39.5%	California	34.9%
Nevada	38.4%	New York	34.8%
California	38.1%	Oregon	34.0%
New York	37.8%	Nevada	33.9%
Montana	37.2%	Michigan	33.3%
North Dakota	36.1%	Montana	32.4%
Michigan	34.1%	Missouri	28.9%
Missouri	32.5%	North Dakota	28.4%
Indiana	31.5%	Indiana	27.8%
Wisconsin	24.5%	Wisconsin	21.9%
Florida	23.5%	Kansas	16.3%
Kansas	19.1%	Florida	14.2%
Idaho	7.4%	Idaho	6.3%
Connecticut	NA**	Connecticut	NA**

Annual EPSDT Participation Report, Form CMS-416, FFY 2010-11. Based on CMS reporting of children continuously eligible for at least 90 days during the Federal Fiscal Year.

http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Early-Periodic-Screening-Diagnosis-and-Treatment.html

* Preventive services measures rely on procedure codes being reported. Because California doesn't collect procedure code specific data from clinics and most other states do, California percentages will be somewhat artificially lower than other states' on these measures.

**Connecticut not reported.

Table A-4. DDS Points of Access and Ratios to Eligibles, by Type of Dentist, California Counties

County	Eligibles	Number of DDS Point of Access With a Claim Submitted in 2011							Ratio of Eligibles to DDS Points of Access						
		GP	PEDO	OS	ENDO	ORTHO	PERIO	PROSTH	GP	PEDO	OS	ENDO	ORTHO	PERIO	PROSTH
Alameda	85,893	439	13	0	3	55	0	0	196	6,607		28,631	1,562		
Alpine	74														
Amador	1,572														
Butte	18,446	68	8	0	0	9	0	0	271	2,306			2,050		
Calaveras	2,364	4	0	0	0	0	0	0	591						
Colusa	1,986	3	0	0	0	0	0	0	662						
Contra Costa	51,336	228	8	0	0	46	0	0	225	6,417			1,116		
Del Norte	2,831	3	0	0	0	0	0	0	944						
El Dorado	6,276	29	0	0	0	0	0	0	216						
Fresno	139,698	404	33	0	0	57	0	0	346	4,233			2,451		
Glenn	2,768	4	0	0	0	0	0	0	692						
Humboldt	8,997	10	0	0	0	6	0	0	900				1,500		
Imperial	22,385	47	2	0	0	11	0	0	476	11,193			2,035		
Inyo	1,263														
Kern	100,743	337	16	2	0	36	2	1	299	6,296	50,372		2,798	50,372	100,743
Kings	15,870	37	0	0	0	6	0	0	429				2,645		
Lake	6,117	7	0	0	0	2	0	0	874				3,059		
Lassen	1,763	6	0	0	0	0	0	0	294						
Los Angeles	724,224	5,741	181	11	10	703	13	19	126	4,001	65,839	72,422	1,030	55,710	38,117
Madera	19,784	38	0	0	0	7	0	0	521				2,826		
Marin	7,397	27	1	0	0	0	0	0	274	7,397					
Mariposa	996														
Mendocino	8,254	8	0	0	0	0	0	0	1,032						
Merced	36,879	78	6	0	0	20	0	0	473	6,147			1,844		
Modoc	690	1	0	0	0	0	0	0	690						
Mono	497	1	0	0	0	0	0	0	497						
Monterey	38,583	148	22	1	0	68	0	0	261	1,754	38,583		567		
Napa	6,311	21	0	1	0	5	0	0	301		6,311		1,262		
Nevada	3,737	9	0	0	0	4	0	0	415				934		
Orange	172,392	1,467	47	1	3	191	5	2	118	3,668	172,392	57,464	903	34,478	86,196
Placer	10,233	75	2	0	0	8	0	0	136	5,117			1,279		
Plumas	994	2	0	0	0	0	0	0	497						
Riverside	168,350	814	25	0	0	129	3	2	207	6,734			1,305	56,117	84,175
Sacramento	6,080	312	6	0	0	47	2	0	19	1,013			129	3,040	
San Benito	4,119	7	6	0	0	2	0	0	588	687			2,060		
San Bernardino	205,060	1,081	33	1	3	101	4	5	190	6,214	205,060	68,353	2,030	51,265	41,012
San Diego	134,648	758	27	0	0	150	1	2	178	4,987			898	134,648	67,324
San Francisco	31,213	194	16	0	2	26	1	1	161	1,951		15,607	1,201	31,213	31,213
San Joaquin	75,584	326	10	0	0	57	0	0	232	7,558			1,326		
San Luis Obispo	11,441	24	0	0	0	12	0	0	477				953		
San Mateo	24,448	93	2	0	0	19	0	0	263	12,224			1,287		
Santa Barbara	32,629	86	4	0	0	10	0	0	379	8,157			3,263		
Santa Clara	91,535	603	8	0	0	43	1	0	152	11,442			2,129	91,535	
Santa Cruz	15,816	56	5	0	0	20	0	0	282	3,163			791		

Table continues on next page

Table A-4., Cont.

County	Eligibles	Number of DDS Point of Access With a Claim Submitted in 2011							Ratio of Eligibles to DDS Points of Access						
		GP	PEDO	OS	ENDO	ORTHO	PERIO	PROSTH	GP	PEDO	OS	ENDO	ORTHO	PERIO	PROSTH
Shasta	13,830	63	4	0	0	10	0	0	220	3,458			1,383		
Sierra	126														
Siskiyou	3,404	8	0	0	0	0	0	0	426						
Solano	25,549	147	8	0	0	22	0	0	174	3,194			1,161		
Sonoma	22,246	73	5	0	0	38	0	0	305	4,449			585		
Stanislaus	55,893	164	11	0	0	36	0	0	341	5,081			1,553		
Sutter	9,165	42	3	0	0	11	0	0	218	3,055			833		
Tehama	6,720	4	0	0	0	0	0	0	1,680						
Trinity	882														
Tulare	75,038	165	3	0	0	32	0	0	455	25,013			2,345		
Tuolumne	2,648	8	0	0	0	0	0	0	331						
Ventura	48,548	230	4	0	0	30	0	0	211	12,137			1,618		
Yolo	10,737	33	0	0	0	5	0	0	325				2,147		
Yuba	8,075														
Grand Total	**2,585,137**	**14,533**	**519**	**17**	**21**	**2,034**	**32**	**32**	**178**	**4,981**	**152,067**	**123,102**	**1,271**	**80,786**	**80,786**

Source: Department of Health Care Services, Medi-Cal Dental Services Division, August 2012.
Note: Dental claims submitted by rendering providers.

Table A-5. General DDS Points of Access and Ratios to Eligibles, in Descending Order of Access, California Counties

County	Eligibles	Number of General DDS Point of Access (with Claims Submission in 2011)	Ratio of Eligibles to General DDS Points of Access
Tehama	6,720	4	1,680
Mendocino	8,254	8	1,032
Del Norte	2,831	3	944
Humboldt	8,997	10	900
Lake	6,117	7	874
Glenn	2,768	4	692
Modoc	690	1	690
Colusa	1,986	3	662
Calaveras	2,364	4	591
San Benito	4,119	7	588
Madera	19,784	38	521
Mono	497	1	497
Plumas	994	2	497
San Luis Obispo	11,441	24	477
Imperial	22,385	47	476
Merced	36,879	78	473
Tulare	75,038	165	455
Kings	15,870	37	429
Siskiyou	3,404	8	426
Nevada	3,737	9	415
Santa Barbara	32,629	86	379
Fresno	139,698	404	346
Stanislaus	55,893	164	341
Tuolumne	2,648	8	331
Yolo	10,737	33	325
Sonoma	22,246	73	305
Napa	6,311	21	301
Kern	100,743	337	299
Lassen	1,763	6	294
Santa Cruz	15,816	56	282
Marin	7,397	27	274
Butte	18,446	68	271
San Mateo	24,448	93	263
Monterey	38,583	148	261
San Joaquin	75,584	326	232
Contra Costa	51,336	228	225
Shasta	13,830	63	220
Sutter	9,165	42	218
El Dorado	6,276	29	216
Ventura	48,548	230	211
Riverside	168,350	814	207
Alameda	85,893	439	196
San Bernardino	205,060	1,081	190
San Diego	134,648	758	178
Solano	25,549	147	174
San Francisco	31,213	194	161
Santa Clara	91,535	603	152
Placer	10,233	75	136
Los Angeles	724,224	5,741	126
Orange	172,392	1,467	118
Sacramento	6,080	312	19
Alpine	74	0	0
Amador	1,572	0	0
Inyo	1,263	0	0
Mariposa	996	0	0
Sierra	126	0	0
Trinity	882	0	0
Yuba	8,075	0	0
Total	**2,585,137**	**14,533**	**178**

Source: Department of Health Care Services, Medi-Cal Dental Services Division, August 2012.
Rows shaded in yellow are the dentist survey sample counties.

Table A-6. Pediatric DDS Points of Access and Ratios to Eligibles, in Descending Order of Access, California Counties

County	Eligibles	Number of Pediatric DDS Point of Access (with Claims Submission in 2011)	Ratio of Eligibles to Pediatric DDS Points of Access
Tulare	75,038	3	25,013
San Mateo	24,448	2	12,224
Ventura	48,548	4	12,137
Santa Clara	91,535	8	11,442
Imperial	22,385	2	11,193
Santa Barbara	32,629	4	8,157
San Joaquin	75,584	10	7,558
Marin	7,397	1	7,397
Riverside	168,350	25	6,734
Alameda	85,893	13	6,607
Contra Costa	51,336	8	6,417
Kern	100,743	16	6,296
San Bernardino	205,060	33	6,214
Merced	36,879	6	6,147
Placer	10,233	2	5,117
Stanislaus	55,893	11	5,081
San Diego	134,648	27	4,987
Sonoma	22,246	5	4,449
Fresno	139,698	33	4,233
Los Angeles	724,224	181	4,001
Orange	172,392	47	3,668
Shasta	13,830	4	3,458
Solano	25,549	8	3,194
Santa Cruz	15,816	5	3,163
Sutter	9,165	3	3,055
Butte	18,446	8	2,306
San Francisco	31,213	16	1,951
Monterey	38,583	22	1,754
Sacramento	6,080	6	1,013
San Benito	4,119	6	687
Alpine	74	0	0
Amador	1,572	0	0
Calaveras	2,364	0	0
Colusa	1,986	0	0
Del Norte	2,831	0	0
El Dorado	6,276	0	0
Glenn	2,768	0	0
Humboldt	8,997	0	0
Inyo	1,263	0	0
Kings	15,870	0	0
Lake	6,117	0	0
Lassen	1,763	0	0
Madera	19,784	0	0
Mariposa	996	0	0
Mendocino	8,254	0	0
Modoc	690	0	0
Mono	497	0	0
Napa	6,311	0	0
Nevada	3,737	0	0
Plumas	994	0	0
San Luis Obispo	11,441	0	0
Sierra	126	0	0
Siskiyou	3,404	0	0
Tehama	6,720	0	0
Trinity	882	0	0
Tuolumne	2,648	0	0
Yolo	10,737	0	0
Yuba	8,075	0	0
Total	**2,585,137**	**519**	**4,981**

Source: Department of Health Care Services, Medi-Cal Dental Services Division, August 2012.
Rows shaded in yellow are the dentist survey sample counties.

Attachment 3

Contact Information for this Study

Barbara M. Aved, PhD, MBA, President
BARBARA AVED ASSOCIATES
916-428-2847
barbara@barbaraavedassociates.com

John Carvelli, Executive Vice President
LIBERTY Dental Plan
949-223-8928
jcarvelli@libertydentalplan.com

Sean O'Brien, Director of Dental Operations
Health Net
626-683-6246
sean.o'brien@healthnet.com

ENDNOTES

[1] Fisher MA, Mascarenhas AK. Does Medicaid improve utilization of medical and dental services and health outcomes for Medicaid-eligible children in the United States? *Comm Dent & Oral Epidem* August 2007;35(4):263–271.
[2] Guendelman S, Angulo V, Oman D. Access to health care for children and adolescents in working poor families: recent findings from California. *Medical Care*. January 2005;43(1)68-78.
[3] Hill I, Stockdale H, Evert M, Gifford K. Do access experiences affect parents' decisions to enroll their children in Medicaid and SCHIP? Findings from focus groups with parents. MCH Journal 2006;10(6):517-525.
[4] Oral Health in America: A Report of the Surgeon General. Rockville, MD: US Dept of Health and Human Services, National Institutes of Health, National Institute of Dental and Craniofacial Research; 2000:2.
[5] Blumenshire SL. Children's school performance: impact of general and oral health. *J Pub Health Dent* Spring 2008;68(2):82-87.
[6] Pourat N, Finocchio L. Racial and ethnic disparities in dental care for publicly insured children. *Health Affairs* July 2010 29:71356-1363.
[7] Decker SL. Medicaid payment levels to dentists and access to dental care among children and adolescents. *JAMA*. 2011;306(2):187-193.
[8] U.S. Department of Health and Human Services. Oral Health in America: A Report of the Surgeon General. Rockville, MD: US DHHS, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.
[9] Borchgrevink A, Synder A, Gehshan S. Increasing Access to Dental Care in Medicaid: Does Raising Provider Rates Work? Issue Brief, March 2008. California Healthcare Foundation.
[10] Pourat N, Nicholson G. *Distribution and Characteristics of Dentists Licensed to Practice in California, 2008*. Health Policy Fact Sheet. UCLA Center for Health Policy Research. Accessed August 26, 20102 at http://www.healthpolicy.ucla.edu/pubs/files/CA_Dentists_FS_061609.pdf.
[11] Office of Inspector General, U.S. Department of Health and Human Services. Children's dental services under Medicaid—Access and utilization. OEI-09-93-00240. San Francisco: Office of Evaluation and Inspections, April 1996.
[12] Kaye N, Pernice C. Dental Care in Medicaid Managed Care: Report From a 19-State Survey. Portland, Me: National Academy for State Health Policy; 1998.
[13] Hughes RJ et al. Dentists' participation and children's use of services in the Indiana dental Medicaid program and SCHIP: assessing the impact of increased fees and administrative changes. *JADA* April 2005;136(4):517-523.
[14] Wall TP. *Dental Medicaid – 2012*. Dental Health Policy Analysis Series. Chicago: American Dental Association, Health Policy Resources Center, 2012.
[15] Cohen RA, Martinez ME. Health Insurance Coverage, Early Release of Estimates from the National Health Interview Survey, 2011. Accessed August 21, 2012, http://www.cdc.gov/nchs/data/nhis/earlyrelease/Insur201206.pdf.
[16] Medicaid and the Uninsured. June 2011. Kaiser Commission on Medicaid Facts. http://www.kff.org/medicaid/upload/8050-05.pdf.
[17] *Breaking Down Barriers to Oral Health for all Americans: Repairing the Tattered Safety Net.*, A Statement from the American Dental Association. August 2011.
[18] U.S. General Accounting Office. Oral health—efforts underway to improve children's access to dental services, but sustained attention needed to address ongoing concerns. GAO-11-96. Washington, DC: U.S. General Accounting Office, November 2010.
[19] State Oral Health Profile, 2008. National Oral Health Surveillance System. Centers for Disease Control. Accessed July 2, 2012. http://apps.nccd.cdc.gov/nohss/bystate.asp?stateid=6.
[20] Morris PJ, Freed JR, Nguyen A, et al. Pediatric dentists' participation in the California Medicaid program. *Pediatr Dent* 2004;26(1):79-86.
[21] Borchgrevink A, Synder A, Gehshan S. Increasing Access to Dental Care in Medicaid: Does Raising Provider Rates Work? Issue Brief, March 2008. California Healthcare Foundation.
[22] *Denti-Cal Facts and Figures*, May 2010. California Healthcare Foundation. http://www.chcf.org/publications/2010/05/dentical-facts-and-figures#ixzz24VrLPNPD
[23] Decker SL. Medicaid payment levels to dentists and access to dental care among children and adolescents. *JAMA*. 2011;306(2):187-193.
[24] Personal communication with California Dental Society, May 29, 2012.
[25] For the purpose of comparison and standardization we used the HEDIS measure for annual dental visits which counts users and eligibles who've been continuously enrolled for at least 11 of the past 12 months.
[26] U.S. General Accounting Office. State and federal actions have been taken to improve children's access to dental services, but gaps remain. GAO-09-723. Washington, D.C., U.S. General Accounting Office, September 2009 in Wall TP. *Dental Medicaid – 2012*. Dental Health Policy Analysis Series. Chicago: American Dental Association, Health Policy Resources Center, 2012.
[27] Personal communication with Medi-Cal Dental Services Division staff, June 4, 2012.
[28] http://www.dhcs.ca.gov/dataandstats/reports/Documents/MMCD_Qual_Rpts/Studies_Quality_Strategy/2009_Quality_Strategy_12-14-09.pdf

[29] Medi-Cal Managed Care Program. Baseline Quality Report. April 2012. Accessed September 20, 2012 http://www.dhcs.ca.gov/dataandstats/reports/Documents/MMCD_Qual_Rpts/Studies_Quality_Strategy/QualityReport_April2012.pdf
[30] Dental Benefits for Children in Medicaid. Accessed October 3, 2012 http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Dental-Care.html
[31] Personal communication with Medi-Cal Dental Services Division. July 17, 2012.
[31] Medi-Cal Dental Program, Denti-Cal Bulletin, February 2012. Accessed September 17, 2012 http://www.denti-cal.ca.gov/provsrvcs/bulletins/Volume_28_Number_3.pdf
[31] www.cda.org/about_cda/news.../update_on_medi-cal_lawsuit
[31] Denti-Cal FAQs. Accessed September 17, 2012 http://www.denti-cal.ca.gov/WSI/Prov.jsp?fname=ProvFaqs
[32] Personal communication with Medi-Cal Dental Services Division. July 17, 2012.
[33] Robertson K. Judge blocks Medi-Cal rate cuts to providers. *Sacramento Business Journal*, Wednesday, February 1, 2012.
[34] Borchgrevink A, Snyder A, Gehshan S. The effects of Medical reimbursement rates on access to dental care. National Academy for State Health Policy, Washington, D.C., March 2008.
[35] Ibid.
[36] Medi-Cal Dental Program, Denti-Cal Bulletin, February 2012. Accessed September 17, 2012 http://www.denti-cal.ca.gov/provsrvcs/bulletins/Volume_28_Number_3.pdf
[37] www.cda.org/about_cda/news.../update_on_medi-cal_lawsuit
[38] Riner RM. Challenging the cost effectiveness of Medi-Cal managed care. *West J Emerg Med* May 2009;10(2):124e8.
[39] Medi-Cal Managed Care Boilerplate Contracts. Accessed September 18, 2012. http://www.dhcs.ca.gov/provgovpart/Pages/MMCDBoilerplateContracts.aspx.
[40] Confidential conversations with representatives of 3 large public Medi-Cal managed care plans, July-August 2012.
[41] Ibid.
[42] Wall TP. *Dental Medicaid – 2012*. Dental Health Policy Analysis Series. Chicago: American Dental Association, Health Policy Resources Center, 2012.
[43] Bailit H, et al. Does more generous dental insurance coverage improve oral health: a study of patient cost sharing. *JADA* 1985;110(5):701-707.
[44] http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx.
[45] Department of Health Care Services, Medi-Cal Dental Services Division, August 2, 2012. The relatively higher utilization rate for the 4-5 year-old age group may be attributed to Assembly Bill 1433 requiring a dental check-up by May 31 of a child's first year in public school, at kindergarten, or first grade; or the fact that many of these children are in Head Start preschools which also requires a dental exam.
[46] California Health Interview Survey, 2009. UCLA Center for Health Policy Research. Accessed July 22, 2012. http://www.chis.ucla.edu/
[47] Pourat N, Roby DH, Wyn R, Marcus M. Characteristics of dentists providing dental care to publicly insured patients. *J Pub Health Dent* Fall 2007;67(4):208-216.
[48] California Dental Association Membership Database 2006.
[49] Aved BM, Meyers L, Burmas E. *First 5 California Oral Health Education and Training Program: Final Evaluation Report*. Sacramento, CA. March 2008.
[50] The Department of Managed Health Care (DMHC) regulates and licenses managed care dental plans in the State. Dental plans are classified as "Specialized Health Care Plan Contracts" and are subject to the same licensing requirements as Full Service Health Plan Contracts. Although the DMHC does not mandate specific dentist-to-patient ratios, the DMHC generally applies the ratio of one primary care dentist per 2,000 patients in assessing dental provider capacity. This ratio is used as a guideline to evaluate dental provider access in the Healthy Families Program.
[51] State Oral Health Profile, 2008. National Oral Health Surveillance System. Centers for Disease Control. Accessed July 2, 2012. http://apps.nccd.cdc.gov/nohss/bystate.asp?stateid=6.
[52] *Medi-Cal at a Crossroads: What Enrollees Say About the Program*. California HealthCare Foundation. May 2012.
[53] Stewart DC, Ortega AN, Dausey D, Rosenheck R. Oral health and use of dental services among Hispanics. *J Pub Hlth Dent* 2002, **62**(2)**:**84-91.
[54] Dental Health Foundation *"Mommy, It Hurts To Chew: The California Smile Survey: An Oral Health Assessment of California's Kindergarten and 3rd Grade Children."* Oakland, California: Dental Health Foundation, 2006.
[55] Personal communication with study author, Lake Research Partners, June 12, 2012.
[55] Griffin, S. O., Gooch, B. F., Beltrán, E., Sutherland, J. N. and Barsley, R. (2000), Dental services, costs, and factors associated with hospitalization for Medicaid-eligible children, Louisiana 1996–97. *J Public Health Dent* 60:21–27.

[56] Mulligan R, Seirawan H. The Children's Dental Health Project of Los Angeles County. The Oral Health Baseline Needs Assessment of Underprivileged Children. October 2009. Los Angeles, CA: University of Southern California School of Dentistry.
[57] Mofidi M, Rozier RG, King RS. Problems with access to dental care for Medicaid-insured children: what caregivers think. *Am J Public Health.* 2002 January; 92(1): 53–58.

[58] Aved BM, Meyers L, Burmas E. *First 5 California Oral Health Education and Training Program: Final Evaluation Report*. Sacramento, CA. March 2008.
[59] Aved BM, Scheideman ER. *Solano County Dental Providers: Participation in Denti-Cal and Suggested* Strategies to Increase Provider Involvement. Sacramento, CA: Barbara Aved Associates, 2006.
[60] Aved BM, Fante-Garcia A. Solano County Dental Study: Low-Income Parents' Knowledge, Attitudes and Preventive Practices Concerning Oral Health. Sacramento, CA: Barbara Aved Associates, July 2006.
[61] Kattlove J. Expanding California's Dental Team To Care For Underserved Children: New Times, New Solutions. The Children's Partnership, December 2011.
[62] Personal communication with Medi-Cal Dental Program staff, August 6, 2012.
[63] Data provided to the author by the Medi-Cal Dental Program, August 6, 2012.
[64] http://healthconsumer.org/index.php?id=471&tx_ttnews[tt_news]=106&tx_ttnews[backPid]=390&cHash=d92605d602. Accessed September 10, 2012.
[65] Denti-Cal Denied: Consumers' Experience Accessing Dental Services in California's Medi-Cal Program. Health Consumer Alliance with the Health Rights Hotline. December 2002. Accessed September 2, 2012. http://www.healthconsumer.org/DentiCalRpt.pdf.
[66] Aved BM, Meehan D, Luomanen J. Sacramento Children Deserve Better: A Study of Geographic Managed Care Dental Services. Sacramento, CA: Barbara Aved Associates. July 2010.
[67] Personal communication with Lorraine E. Jones, Senior Attorney, National Health Law Program, July 26, 2012-August 1, 2012.
[68] Personal communication with Nancy Rimsha, Directing Attorney, Legal Aid Society of Orange County, Health Consumer Action Center, August 1, 2012.
[69] *Snapshot: Emergency Department Visits for Preventable Dental Conditions in California*. California Healthcare Foundation. 2009.
[70] Reported in *Breaking Down Barriers to Oral Health for all Americans: Repairing the Tattered Safety Net.*, A Statement from the American Dental Association. August 2011.
[71] The primary ICD-9 codes identified for oral conditions are 520-529; the subset of ACS conditions are based on ICD-9 codes 521-523 and 528-529. The number of unduplicated children making an ED visit for a preventable dental condition was not analyzed. According to OSHPD, more than 40% of children do not have a social security number at the time of the ED encounter and thus cannot be uniquely identified. Oral conditions as a secondary diagnosis were not analyzed due to small occurrences.
[72] *Prevention Quality Indicators*, AHRQ Quality Indicators, July 2004. Agency for Healthcare Research and Quality, Rockville, MD. Accessed July 22, 2012, www.qualityindicators.ahrq.gov/pqi_overview.html.
[73] *The Cost of Delay. State Dental Policies Fail One in Five Children.* The PEW Center on the States. Washington, D.C., February 2010.
[74] Davis EE, Deinard AS, Maiga EWH. Doctor, my tooth hurts: the costs of incomplete dental care in the emergency room. *J Pub Health Dent* 2010;70(3):205-210.
[75] Pettinato ES, Webb MD, Seale NS. A comparison of Medicaid reimbursement for non-definitive pediatric dental treatment in the emergency room versus periodic preventive care. *Pediatr Dent* 2000;22(6):463-468.
[76] Hospitals have electronic capacity to determine Medi-Cal eligibility at the time of the ED visit, and Medi-Cal can cover up to three months retroactive from the date of application. Thus it is possible that some visits Medi-Cal paid for could have been patients that were actually coded in the "self pay" (which includes uninsured) category at the time of the visit, hence potentially over-stating the implications of lack of access to preventive services. Instructions to hospitals by OSHPD for ED data reporting are not specific about coding payer source at time of visit. Some hospitals record the expected payer at the time of admission and some the *actual* payer.
[77] Felland LE, Lauer J, Cunningham PJ. Community Efforts to Expand Dental Services for Low-Income People, Brief No. 122, Center for Studying Health System Change, July 2008, accessed August 21, 2012.
[78] Health Centers and Medicaid. Fact Sheet, September 2011. National Association of Health Centers, accessed August 21, 2012. http://www.nachc.com/client/documents/MedicaidFS.pdf
[79] Financial information provided by Department of Health Care Services Medi-Cal Dental Services Division, June 15, 2012.
[80] Profile of Community Clinics and Health Centers. California Primary Care Clinic Association. Numbers are based on 2010 data submitted to the Office of Statewide Health Planning and Development.
[81] Personal communication with Delta Dental of California, August 8, 2012.
[82] California Health Center Fact Sheet, March 2012. National Association of Health Centers, accessed August 22, 2012, http://www.nachc.org/client/documents/research/CA11.pdf. Based on 2010 data as reported to the Bureau of Primary Health Care, HRSA, DHHS Uniform Data System.
[83] Kenney M, Executive Director, First 5 Association of California. Testimony to the Select Committee on Healthcare Workforce and Access to Care, March 15, 2012.
[84] U.S. General Accountability Office. State and federal actions have been taken to improve children's access to dental services, but gaps remain. GAO-09-723. Washington, D.C. U.S. General Accountability Office, September 2009.
[85] *The Cost of Delay. State Dental Policies Fail One in Five Children.* The PEW Center on the States. Washington, D.C., February 2010.

[86] Pourat N, Nicholson G. *Distribution and Characteristics of Dentists Licensed to Practice in California, 2008*. Health Policy Fact Sheet. UCLA Center for Health Policy Research. Accessed September 30, 20102. http://www.healthpolicy.ucla.edu/pubs/files/CA_Dentists_FS_061609.pdf.

[87] Aved BM, Scheideman ER. Solano County Dental Providers: Participation in Denti-Cal and Suggested Strategies to Increase Provider Involvement. Sacramento, CA: Barbara Aved Associates, 2006.

[89] *Medi-Cal at a Crossroads: What Enrollees Say About the Program*. California HealthCare Foundation. May 2012.

[90] Guide to Children's Dental Care in Medicaid. U.S. Department of Health and Human Services, October 2004. Accessed September 17, 2012. http://www.denti-cal.ca.gov/outreach/EPSDTDentalGuide.pdf