
Dental Utilization in Eight Central California Children's Health Initiatives' Healthy Kids Programs

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Background

In April 2006, the California HealthCare Foundation (CHCF) awarded Diring & Associates, a Central California based health policy consulting firm, a grant to analyze dental utilization in Healthy Kids programs administered by eight Central California Children's Health Initiatives. The eight Central California counties that were the focus of this study were as follows:

Central Valley: Fresno, Kern, San Joaquin, Tulare, and Yolo;

Central Coast: San Luis Obispo, Santa Barbara and Santa Cruz.

Figure 1: Map of Central California study counties



Children's Health Initiatives (CHIs) are locally based programs established to ensure that all children have health coverage. The CHIs do extensive outreach and enrollment to maximize utilization of Medi-Cal and Healthy Families. For those children up to 300% of the federal poverty level who are not eligible for Healthy Families or Medi-Cal, the CHIs provide coverage in a plan called Healthy Kids. Healthy Kids coverage is very similar, if not identical, to Healthy Families, and includes medical, dental and vision

coverage. The dental plan for the Healthy Kids program in all of the study counties is Delta Dental of California. A brief description of Healthy Kids enrollment in each of the study counties is contained in Table I.

The research questions included:

1. What is the rate of utilization of dental services by children enrolled in the individual county Healthy Kids programs, as measured by at least one dental visit in past year, by age of child?
2. What are the types of dental services being utilized by children enrolled in the individual county Healthy Kids programs, by age of child?
3. Which participating dentists in each county are providing services to children enrolled in Healthy Kids, and what is the intensity of their participation?
4. What are the "best practices" for increasing utilization of dental services, particularly by young children, and the participation of dentists in children's coverage programs?

Methodology

In order to conduct the analysis, Diringer and Associates engaged in the following activities:

1. Obtained releases of information from each of the study CHIs.
2. Obtained electronic utilization reports of all adjudicated claims from the dental plan (Delta Dental) for the past six month period of December 27, 2006 to June 23, 2006 for each of the study Children’s Health Initiatives.
3. Obtained from dental plan (Delta Dental) lists of participating Healthy Kids providers (provider panel) for the months under review.
4. Obtained from state Department of Health Services beneficiary utilization data for dental services for period of July 2004 through June 2005, by county.
5. Obtained from the Managed Risk Medical Insurance Board (MRMIB) as summary of dental utilization for Healthy Families dental services statewide.
6. Obtained from each CHI, an unduplicated count of children enrolled for the period of January 2006 through June 26 broken down by age range of 0-5 and 6-18.
7. Imported electronic utilization reports for each CHI into SAS 9.1.2 to determine number of children who received any service, preventive services, and restorative services by age. Enrollment data were used to calculate utilization rates. Lists of providers were used to determine rates of provider participation.
8. Reviewed “best practices” in California and in other states on programs and methods to improve early and continuous use of dental services, how to increase participation of providers in children’s dental coverage programs, and how to encourage general dentists to see more children in their practices.
9. Prepared recommendations of “best practices” on increasing utilization of dental services.
10. Scheduled on-site presentation of findings to each participating Children’s Health Initiative and study session on potential methods and programs to improve utilization of dental services in fall 2006.

Table 1: Counties included in study

County	Date CHI Program Started	Number of Unique Children Enrolled During Study Period	Total number of children 0-5 enrolled June 2006	Total number of children 6-18 enrolled June 2006
Fresno	February 2006	838	169	668
Kern	January 05 for 0-5; November 05 for 6-18	1,008	265	743
San Joaquin	October 2003	2,838	523	2,048
Santa Barbara	December 2005	471	143	361
Santa Cruz	July 2004	1833	295	1,538
San Luis Obispo	September 2005	563	164	392
Tulare	March 2006	420	195	224
Yolo	January 2006	278	73	199

Benefits and limitations of data:

This report provides an early analysis of Healthy Kids dental utilization in the study CHIs. We present data on how many and which children are getting any services; the extent to which preventive services are being delivered; and which dentists are providing care to Healthy Kids enrollees. For many of the CHIs, this information is being provided early in the start-up of the program and gives the first glimpse on utilization allowing them to evaluate program performance.

For the purpose of this project, utilization was based on all claims adjudicated by Delta Dental of California during the six month period from December 27, 2005 to June 23, 2006. Adjudicated claims are those claims that have been acted upon by the dental plan – either paid or denied. Since providers have a period of time to bill for services, using adjudicated data provides a consistent dataset over time (while a dataset based on date of service changes on a daily basis). To calculate utilization rates, the number of **unique** children served for at least one month between January 1 and June 30, 2006 was used as the denominator.

There are a number of limitations in this study, as there are in all research projects. We examined only a six month period of January through June 2006, a period during which several of the CHIs were in their start-up phases. Children in CHIs that have been operational a longer period of time may have had more opportunity to see a dentist, and providers may have been more familiar with the programs.

The trade-off for providing early program data for a short period of time means that the results are not directly comparable to standard national data developed using HEDIS¹ measures. HEDIS requires that analysis be made only of those enrollees who have been continuously enrolled for a period of a year, with no more than one month break in enrollment. To be comparable to HEDIS, we would have needed to wait until all CHIs had been enrolling children for a least one year.

Use of the dental plan “adjudicated claims” data has other limitations. While it is the most accurate reflection of services for which dentists have billed the dental plan, it does not include services for which there was no billing either by the dentist, or perhaps by another provider such as a school-based screening or sealant program. In addition, unlike medical data, there are no diagnostic codes in dental data. Since the only data are for billed services, we do not know the extent of dental disease (treated or untreated) from the data.

¹ HEDIS is the health plan performance measurement of the National Committee for Quality Assurance, which establishes standardized measures for health plan quality. The only measure for dental plan quality is based upon whether an enrollee had a visit in the past year.

Key findings

1. *What are the rates of utilization of dental services by children enrolled in the individual county Healthy Kids programs, as measured by at least one dental visit in past year, by age of child?*

The percentage of enrolled children who received at least one dental service varied between counties ranging from 14.7% in Fresno County to 48.8% in Santa Cruz County with an average of 32.6% (Table 2, Figure 2).

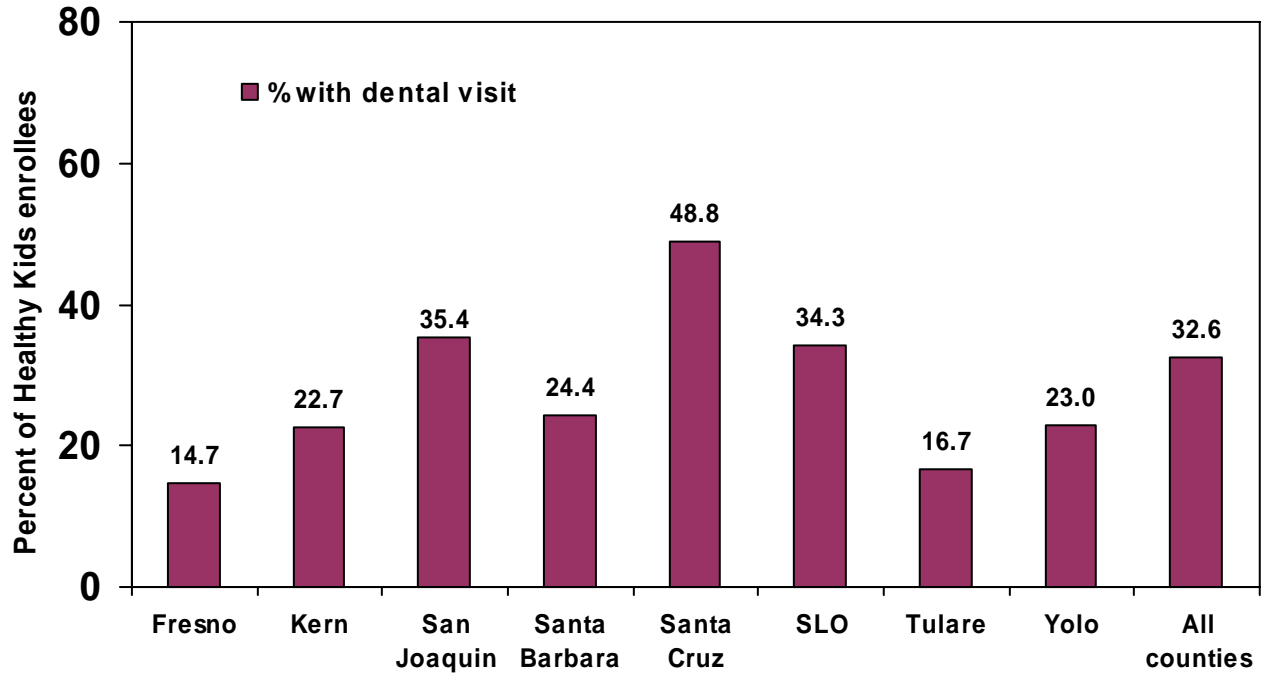
Table 2: Number of Healthy Kids Enrolled Children, Children with a Dental Visit, and Percent of Enrolled Children with a Dental Visit, by County

County	Number of Children Enrolled (by age in years)*			Number with a Dental Visit			% with a Dental Visit		
	0-5	6-18	Total	0-5	6-18	Total	0-5	6-18	Total
Fresno	169	668	838	17	106	123	10.1%	15.9%	14.7%
Kern	265	743	1008	96	133	229	36.2%	17.9%	22.7%
San Joaquin	523	2,048	2,838	183	821	1,004	35.0%	40.1%	35.4%
Santa Barbara	124	343	471	33	82	115	26.6%	23.9%	24.4%
Santa Cruz	295	1,538	1833	162	732	894	54.9%	47.6%	48.8%
San Luis Obispo	164	392	563	47	146	193	28.7%	37.2%	34.3%
Tulare	195	224	420	20	50	70	10.3%	22.3%	16.7%
Yolo	73	199	278	14	50	64	19.2%	25.1%	23.0%

Total=Number of unique children enrolled from 01/01/2006 to 06/30/2006

Each age group=Number of children enrolled by age in June 2006

Figure 2: Percent of Healthy Kids enrollees with a dental visit

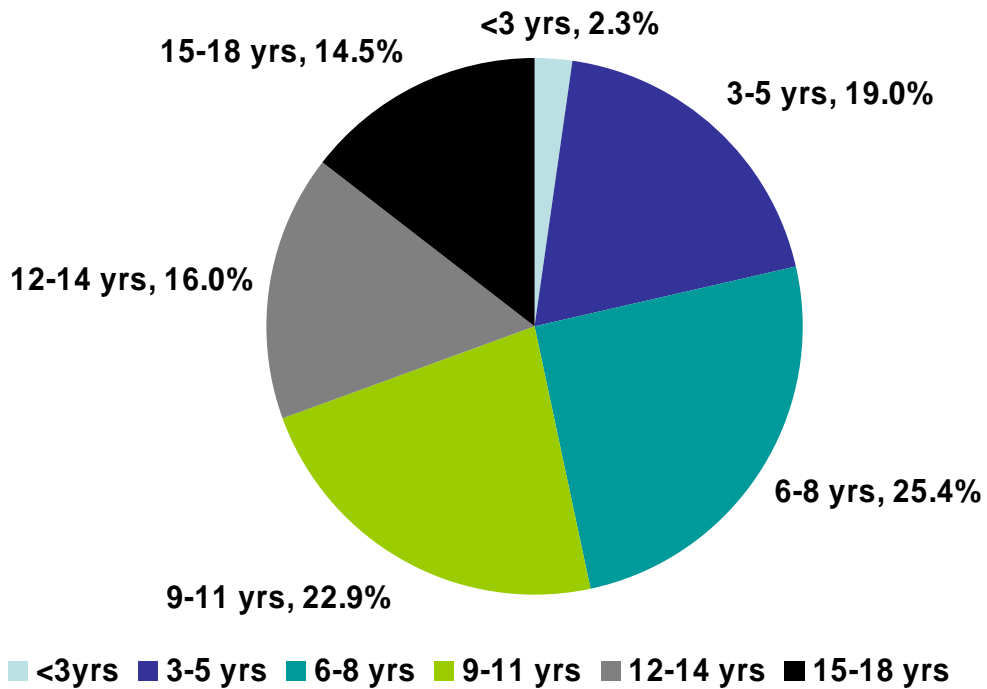


The percentage of children who received dental care within specific age groups is presented in Table 3 and Figure 3. Overall, only 2% of the children who received dental care were less than 3 years of age; 21% of services were provided to children under age 6 and 79% of services went to children 6 through 18 years.

Table 3: Percent of Healthy Kids Children who Received Dental Care, by Age Group, by County

County	< 3 Years	3-5 Years	6-8 Years	9-11 Years	12-14 Years	15-18 Years
Fresno	1.6	12.2	23.6	22.8	17.1	22.8
Kern	7.9	34.1	18.8	17.0	14.4	7.9
San Joaquin	1.1	17.1	26.0	24.5	17.3	13.9
Santa Barbara	0.0	28.7	27.0	25.2	11.3	7.8
Santa Cruz	2.2	15.9	24.9	22.4	16.7	17.9
San Luis Obispo	4.1	20.2	34.2	24.4	10.4	6.7
Tulare	1.4	27.1	20.0	21.4	18.6	11.4
Yolo	1.6	20.3	25.0	18.8	10.9	23.4
All Counties	2.3	19.0	25.4	22.9	16.0	14.5

Figure 3: Age Distribution of Healthy Kids Children Receiving Services



Although not directly comparable, the following utilization data are provided for reference:

- The percentage of children enrolled in **Healthy Families**, ages 4 through 18, who had an annual dental visit in 2004 was 54% overall, and 67% for those enrolled in Healthy Families coverage provided by Delta Dental.²
- For California children, ages 0 through 20, enrolled in **Medi-Cal** in from July 2004 to June 2005, the percentage with a visit was 40.7%; for children ages 0 through 5 years, the figure was 32.5% (Table 4).³
- When comparing Healthy Kids utilization to Medi-Cal utilization in individual counties
 - For 0-5 year olds: San Joaquin, Santa Cruz and San Luis Obispo Counties had better utilization for Healthy Kids than for Medi-Cal;
 - For older children (6-18 for Healthy Kids, and 6-20 for Medi-Cal): all counties except Kern and Santa Barbara Counties had better utilization for Healthy Kids than for Medi-Cal.
- In San Mateo County, 64% of children continuously enrolled in **Healthy Kids** for the year preceding July 30, 2005 had at least one dental service; 62% of the children ages 0 to 5 years, 70% of children ages 6 to 12 years, and 57% of children ages 13-18 had a visit.⁴
- The California Oral Health Needs Assessment (2005) found that 70% of children in kindergarten and 74% of third grade children had a dental visit in the past year.⁵
- Nationally, in 2002, 49% of children ages 2-17 years had an annual dental visit, while only 30% of low income children ages 2-19 (under 200% of federal poverty level) had an annual dental visits.⁶

² The Healthy Families data are not directly comparable to the data collected for Healthy Kids, since the Healthy Families measure calculates the percentage of enrolled members, ages 4 through 18, who were continuously enrolled during the measurement year and who had a least one dental visit during the measurement year. "Dental Plan Quality Measurement Report for Services Provided in 2004" www.mrmib.ca.gov/MRMIB/HFP/2004DentalRpt.pdf (accessed September 2006).

³ Data supplied by California Department of Health Services, Special run, December 2006.

⁴ Howell, E., et al., "Evaluation of the San Mateo County Children's Health Initiative: Third Annual Report," September 2006, <http://www.urban.org/url.cfm?ID=411365> (accessed November 2006).

⁵ Dental Health Foundation, "'Mommy, It Hurts to Chew'" The California Smile Survey An Oral Health Assessment of California's Kindergarten and 3rd Grade Children," February 2006, http://www.tdhf.org/topics/public/For%20web/DHF_2006_Report.pdf (accessed November 2006).

⁶ CDC, Healthy People 2010 Database - October, 2006 Edition, <http://wonder.cdc.gov/data2010/focus.htm> (accessed November 2006).

Figure 4: Percent of Healthy Kids (January to June 2006) and Medi-Cal (July 2004 to July 2005) Enrollees with a Dental Visit

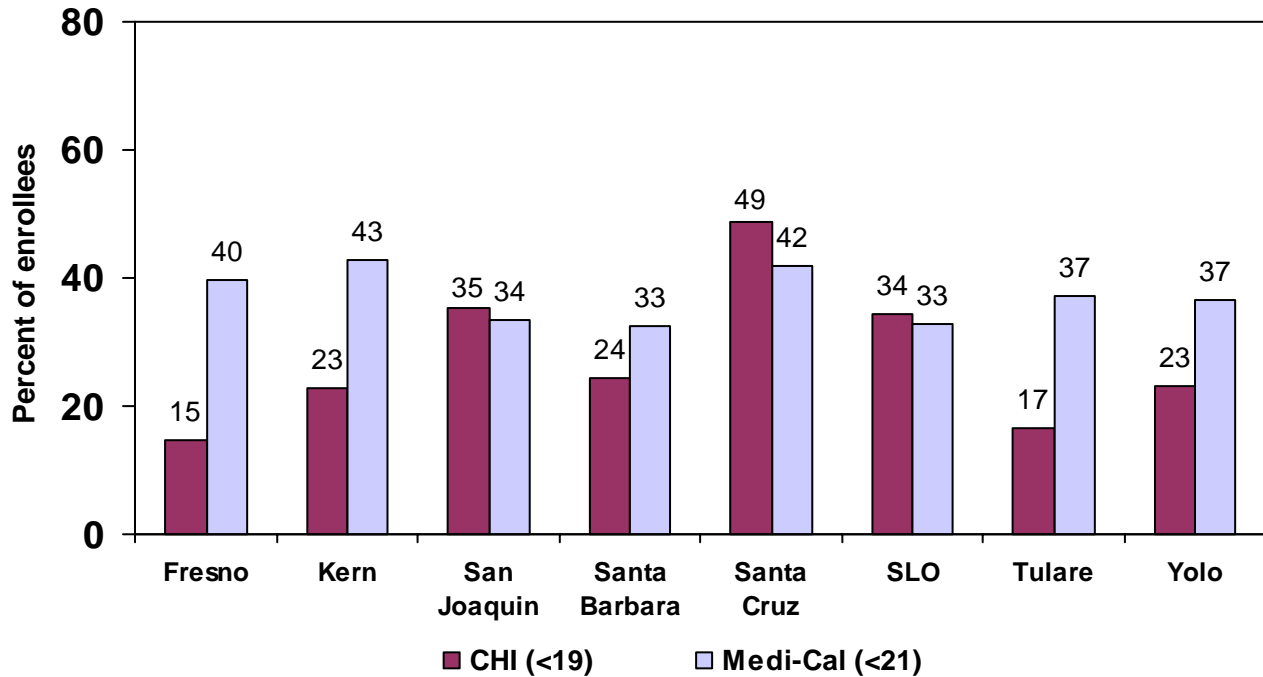


Table 4: Percent of Healthy Kids (January to June 2006) and Medi-Cal (July 2004 to June 2005) Enrolled Children with a Dental Visit, by County

County	Healthy Kids			Medi-Cal		
	0-5	6-18	Total	0-5	>6 ¹	Total
Fresno	10.1%	15.9%	14.7%	31.3	43.5	39.7
Kern	36.2%	17.9%	22.7%	37.2	45.3	42.7
San Joaquin	35.0%	40.1%	35.4%	23.8	38.1	33.5
Santa Barbara	26.6%	23.9%	24.4%	25.0	37.4	32.6
Santa Cruz	54.9%	47.6%	48.8%	34.2	46.5	41.8
San Luis Obispo	28.7%	37.2%	34.3%	24.0	37.8	32.9
Tulare	10.3%	22.3%	16.7%	29.3	41.2	37.2
Yolo	19.2%	25.1%	23.0%	25.7	41.5	36.5
California	NA	NA	NA	32.5	44.6	40.7

¹ Medi-Cal data is for 6-20 year olds

DISCUSSION

Overall, the percentage of Healthy Kids enrollees with a dental visit during the study period was less than the percentage of children with Healthy Families who received a dental visit within the past year. When compared to Medi-Cal utilization, Healthy Kids utilization for both age groups was substantially lower than Medi-Cal utilization in Fresno, Tulare and Yolo Counties. For older children, Healthy Kids utilization was substantially lower than Medi-Cal utilization in Kern and Santa Barbara Counties. The Healthy Kids programs in San Joaquin, San Luis Obispo and Santa Cruz Counties had higher utilization rates for the youngest age cohort, perhaps reflecting their efforts in targeting young children. Nevertheless, the percentage of Healthy Kids enrollees that had a visit is comparable to the national statistics which show that only 30% of low income children had annual dental visits.

It is not known if the low utilization is related to the newness of the programs and that parents were not familiar with them, or that there are other barriers to access. We cannot determine if parents are trying to access care or that they lack the knowledge about the need to access care. As shown below, there appears to be sufficient capacity in the provider network to treat children, yet children are not getting in to the offices. In the community presentations on the data, many of the participants felt that the low utilization was due to all three factors: start-up of the programs, parental knowledge on when and how to access care, and available providers.

The percentage of children under age 3 receiving services is extremely low and enforces the need of CHI programs to educate both parents and providers on the importance of finding a dental home and receiving dental care at a very young age. In fact, new clinical guidelines by the American Academy of Pediatric Dentistry and the American Academy of Pediatrics advise parents and caregivers to establish a dental home for higher risk children by 12 months of age.⁷

In general, the counties with the highest utilization rates (Santa Cruz, San Joaquin, and San Luis Obispo) had two things in common. First, the programs started earlier than the others and had substantial enrollment in 2005 which may have given parents more time to arrange dental care. Second, the programs are in counties with both non-profit dental clinic(s) plus one private provider who served a large number of children. Further discussion of provider patterns is contained below. In addition, the county with the highest utilization rates, Santa Cruz County, attributed its successes to a network of community-based outreach workers in schools, clinics and community agencies who educated parents when enrolling in programs and provided them with logistical support in making and keeping appointments.

⁷ American Academy of Pediatric Dentistry, Clinical Guideline on Infant Oral Health Care. www.aapd.org/media/Policies_Guidelines/G_InfantOralHealthCare.pdf; American Academy of Pediatrics, Oral Health Risk Assessment Timing and Establishment of the Dental Home. <http://aappolicy.aappublications.org/cgi/content/full/pediatrics.111/5/1113>. (Accessed November, 2006)

2. *What are the types of dental services being utilized by children enrolled in the individual county Healthy Kids programs, by age of child?*

Table 5 lists the percentage of children served that received diagnostic, preventive, and/or restorative dental services. Nearly all children who had a dental visit received diagnostic (88%) and preventive (83%) dental services and about half (49%) received some type of restorative dental care (fillings).

The percentage of children who had oral surgery (predominately extractions) ranged from 11% in Yolo County to 21% in San Luis Obispo County, with an average of 16%. This suggests that a large proportion of children have disease so severe that teeth must be extracted rather than restored.

In San Luis Obispo County, 43% of the children received “Adjunctive General” services; substantially higher than other counties. These services were predominately nitrous oxide administration suggesting that providers in San Luis Obispo County are more likely to use nitrous oxide sedation when providing care to children.

Table 5: Percent of Healthy Kids Children who Received Dental Care that Received Diagnostic, Preventive, and/or Restorative Care by County

Type of Care	Fresno	Kern	San Joaquin	Santa Barbara	Santa Cruz	SLO	Tulare	Yolo	TOTAL
Diagnostic	95.9%	92.1%	89.9%	98.3%	81.0%	90.7%	84.3%	87.5%	87.6%
Preventive	84.6%	78.6%	84.9%	95.7%	80.2%	86.0%	85.7%	67.2%	82.9%
Restorative	55.3%	54.6%	45.9%	36.5%	48.9%	53.4%	51.4%	62.5%	48.7%
Endodontics	14.6%	12.7%	10.1%	9.6%	8.6%	14.0%	15.7%	7.8%	10.4%
Oral Surgery	18.7%	17.5%	17.9%	11.3%	12.0%	20.7%	17.1%	10.9%	15.7%
Adjunctive General	4.1%	13.5%	5.2%	22.6%	18.5%	43.0%	8.6%	0.0%	13.7%

Dental sealants are a proven method for the prevention of decay on the chewing surfaces of molars. The first permanent molars erupt in most children at about 6 years of age. Of the 2,120 children age 6 years and older who received dental care, only 527 (25%) received dental sealants, ranging from 13% in Kern County to 33% in San Luis Obispo County (Table 6, Figure 4).

When looking at the entire population of Healthy Kids enrollees age 6 years and older, only 9% of children received sealants, ranging from 4% in Kern County to 16% in San Luis Obispo County (Table 7, Figure 5).

For reference, Healthy Families reported that in 2004, only 11% of enrollees received sealants overall, while 16% of Healthy Families children enrolled in Delta Dental

received sealants. The California Oral Health Needs Assessment found that 33% of third graders who had seen a dentist in the past year had sealants.

Table 6: Percent of Healthy Kids Children with a Dental Visit who Received Specific Preventive Services

Preventative Service	Fresno	Kern	San Joaquin	Santa Barbara	Santa Cruz	SLO	Tulare	Yolo	Total
Dental Sealants*	25.2	13.1	16.7	32.2	19.5	33.2	20.0	14.1	24.9
Topical Fluoride (with & w/o a cleaning)	43.9	72.5	68.4	73.9	61.2	75.1	72.9	40.6	65.4
Oral Hygiene Instruction	28.5	47.6	48.7	27.8	49.3	29.0	5.7	4.7	43.4
Teeth Cleaning	83.7	77.3	82.7	93.0	74.2	80.3	80.0	67.2	79.3

* Limited to children 6+ years of age

Table 7: Percent of Healthy Kids Enrolled Children who Received Specific Preventive Services

Preventative Service	Fresno	Kern	San Joaquin	Santa Barbara	Santa Cruz	SLO	Tulare	Yolo	Total
Dental Sealants*	4.6	4.0	8.2	10.8	11.3	16.3	6.3	4.5	8.6
Topical Fluoride (with & without a cleaning)	6.4	16.5	24.2	18.0	29.8	25.8	12.1	9.4	21.3
Oral Hygiene Instruction	4.2	10.8	17.2	6.8	24.1	9.9	1.0	1.1	14.2
Teeth Cleaning	12.3	17.6	29.2	22.7	36.2	27.5	13.3	15.5	25.9

* Limited to children 6+ years of age

Another proven method for preventing tooth decay is the application of topical fluoride. Of the 2,692 children who received at least one dental service, only 1,761 (65%) received a fluoride treatment. The overall percentage of enrollees who received a fluoride treatment was 21% ranging from 6.4% in Fresno County to 29.8% in Santa Cruz County.

Figure 5: Percent of Healthy Kids enrollees with a dental visit receiving sealants and topical fluoride

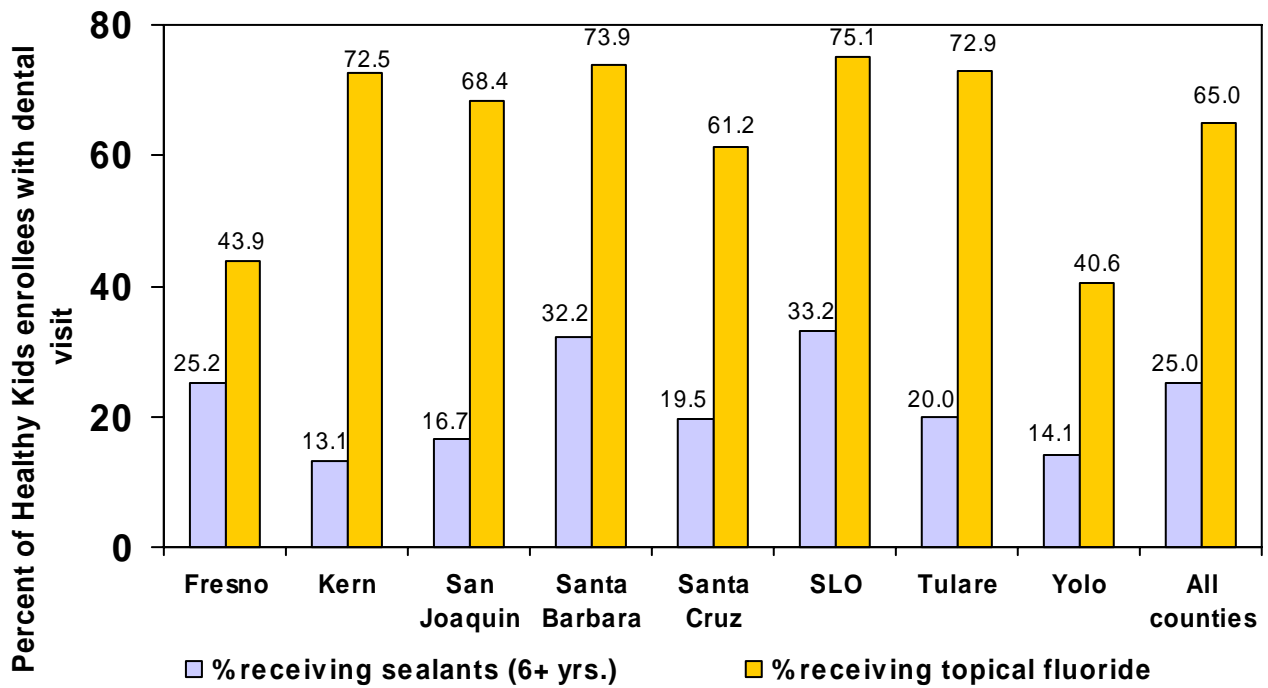
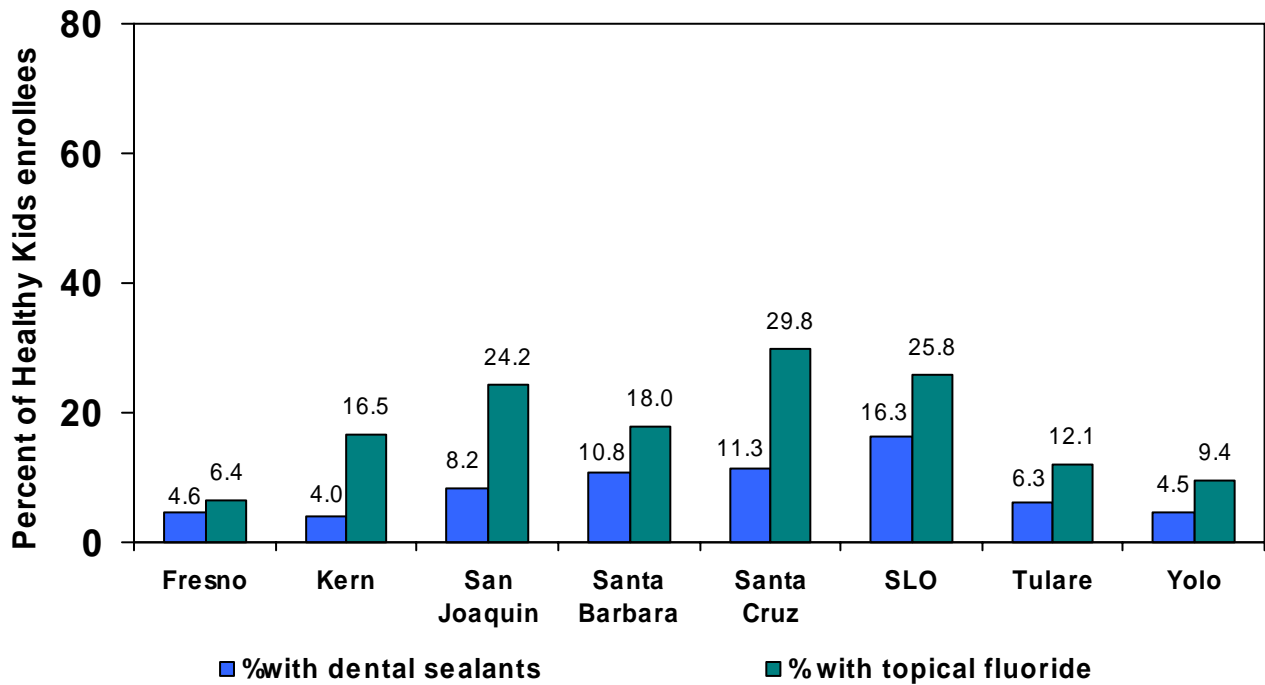


Figure 6: Percent of Healthy Kids enrollees receiving sealants and topical fluoride



DISCUSSION

There was great variability in terms of the percentage of children who received different types of services. Without further investigation it is difficult to determine whether the differences can be explained by practice styles (e.g. extractions v. restorations), availability of services (e.g. for oral surgery), or the severity of dental disease in enrollees in different counties.

Nonetheless, the data show large numbers of children who are having teeth extracted, indicating severe dental disease. Yet, not all children received preventive services. This may be because the child presented with a serious problem (e.g. toothache) which required immediate treatment, and follow-up preventive services were not provided during the study period.

Statewide, California ranks very low in the prevalence of children with dental sealants. The National Oral Health Surveillance System (NOHSS)⁸ ranked California 19th out of the 25 states in the surveillance system in terms of percentage of 3rd grade children with sealants. Given the efficacy of dental sealants in preventing disease, efforts should be made to increase the use of dental sealants in CHI enrollees in all counties.

Also, since most CHI enrollees would be considered high risk, efforts should be made to increase the application of topical fluoride; preferably fluoride varnish or 4-minute gels/foams.

3. Which participating dentists in each county are providing services to children enrolled in Healthy Kids, and what is the intensity of their participation?

The panel of dentists accepting Healthy Kids coverage for each county was obtained from Delta Dental. These are the providers who have a contract with Delta Dental to treat and bill for children in the Healthy Kids programs. Delta Dental uses the same panel for Healthy Kids as it does for Healthy Families.

The number of dentists in the panel, along with the number that provided care to CHI enrollees is provided in Table 8. The percentage of participating dentists who saw Healthy Kids enrollees ranges from 19% in Kern County to 100% in Santa Cruz County, with an average of 36% (Figure 7).

In Fresno, Kern, San Joaquin, Santa Barbara, Tulare, and Yolo counties, the largest single provider of care was a private dentist; while non-profit clinics were the largest providers in Santa Cruz and San Luis Obispo Counties. Overall, 68% of the dentists saw fewer than 10 children; although this percentage varied widely from 31% in Santa Cruz County to 93% in Fresno County (Table 9).

⁸ National Oral Health Surveillance System, accessed November, 2006; <http://www.cdc.gov/nohss/>.

Figure 7: Percent of Dentists Seeing Healthy Kids enrollees

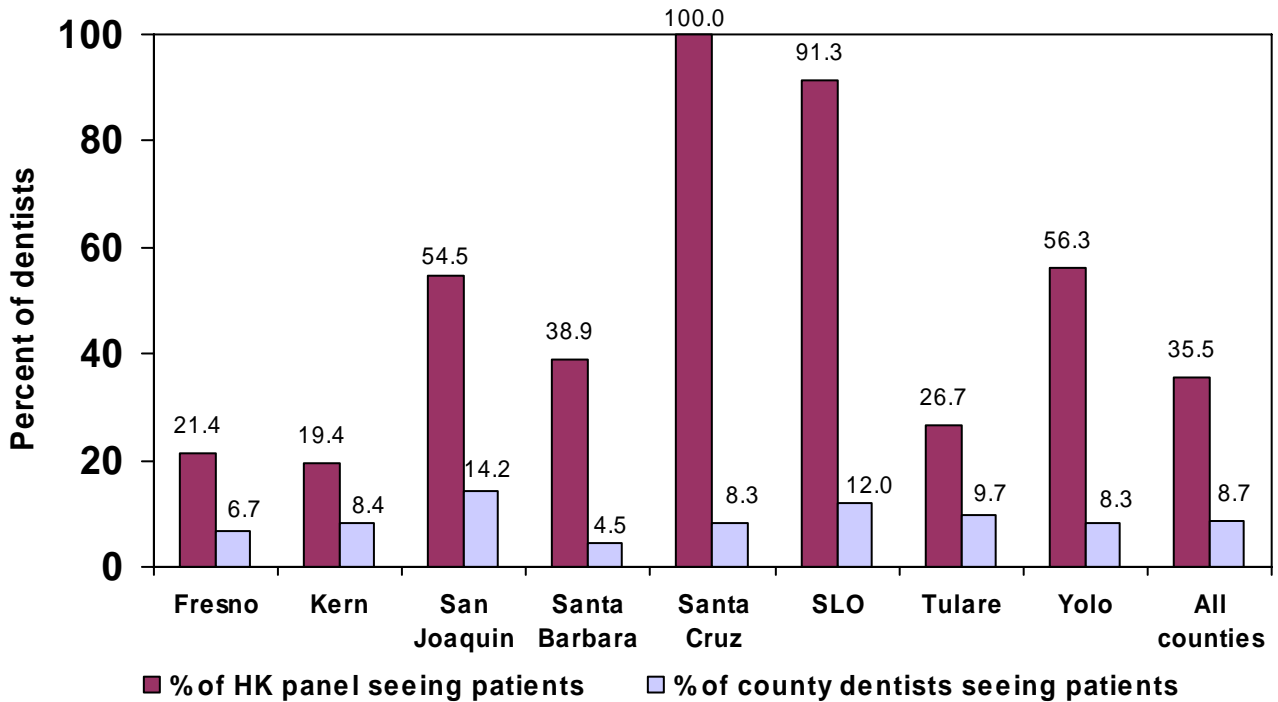


Table 8: Number of Dentists in Healthy Kids Panel and Number/Percent who Provided Care to CHI Enrollees, By County

County	Number of Dentists in Panel	Number Dentists that Served CHI	Percent that Served CHI
Fresno	140	30	21.4%
Kern	108	21	19.4%
San Joaquin	77	42	54.5%
Santa Barbara	36	14	38.9%
Santa Cruz	16	16	100.0%
San Luis Obispo	23	21	91.3%
Tulare	60	16	26.7%
Yolo	16	9	56.3%
All Counties	476	169	35.5%

Table 9: Percent and Number of Dentists who Served at Least 1 Healthy Kids Enrollee by Number and Percent of Children Seen, by County

Provided Care to	Fresno	Kern	San Joaquin	Santa Barbara	Santa Cruz	SLO	Tulare	Yolo	TOTAL
100+ Children	0.0%	0.0%	2.4%	0.0%	18.8%	0.0%	0.0%	0.0%	2.6%
75-99 Children	0.0%	4.8%	7.1%	0.0%	6.3%	4.8%	0.0%	0.0%	3.9%
50-74 Children	0.0%	0.0%	9.5%	0.0%	18.8%	4.8%	0.0%	0.0%	5.2%
25-49 Children	0.0%	9.5%	16.7%	7.1%	18.8%	0.0%	0.0%	11.1%	8.4%
20-24 Children	0.0%	4.8%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%
10-19 Children	6.7%	14.3%	16.7%	21.4%	6.3%	4.8%	18.8%	0.0%	11.0%
<10 Children	93.3%	66.7%	45.2%	71.4%	31.3%	85.7%	81.3%	88.9%	67.7%
# Dentists Seeing 1+	30	21	42	14	16	21	16	9	169
# Dentists Seeing 10+	2	7	23	4	11	3	3	1	54

Table 10 shows the number of licensed dentists in each county and the number that served CHI enrollees. The overall percentage of licensed dentists in each county that saw Healthy Kids enrollees is very low. The percentage ranged from 5% of licensed dentists in Santa Barbara County to 14% of licensed dentists in Kern County, with the average of 9% in the study counties.

Table 10: Estimated Number and Percent of Active General and Pediatric Dentists who Provided Care to Healthy Kids Enrollees, by County

County	Number of Dentists in County*+	Number of Offices that Served Healthy Kids	Percent that Served Healthy Kids
Fresno	449	30	6.7%
Kern	249	21	8.4%
San Joaquin	296	42	14.2%
Santa Barbara	310	14	4.5%
Santa Cruz	193	16	8.3%
San Luis Obispo	175	21	12.0%
Tulare	165	16	9.7%
Yolo	108	9	8.3%
All Counties	1945	169	8.7%

* Source: Pourat N, Roby D, Wyn R, Marcus M. "Is there a shortage of dental hygienists and assistants in California? Findings from the 2003 California dental survey." UCLA Center for Health Policy Research, November 2005. Accessed September, 2006; http://healthpolicy.ucla.edu/pubs/files/Dental_RT_050506.pdf.

+ Estimated number of dentists in active private practice providing general and pediatric care.

Participating dentists billed for 20,237 services, and were paid a total of \$655,584. The majority of providers (77%) were reimbursed less than \$5,000; 11% received between \$5,000 and \$9,999, while the remaining 12% were paid over \$10,000 (Table 11).

Reimbursement rates for Healthy Kids are the same as for Healthy Families, and are similar to Medi-Cal (Denti-Cal) reimbursement rates. However, billing documentation (e.g. x-rays) is less for Healthy Kids/Healthy Families than it is for Medi-Cal. Efforts by CHIs to increase reimbursement rates for Healthy Kids have been resisted by the plan, since they would create inequities with Healthy Families and make one program more preferable than another.

Table 11: Reimbursement of dentists for dental services

Amount of Reimbursement	Number of Providers	Percentage of Providers
≥ \$10,000	18	11.6%
\$5,000-9,999	17	11.0%
\$1,000-4,999	52	33.5%
< \$1,000	68	43.9%
TOTAL	155	100.0%

DISCUSSION

A low percentage of licensed dentists in each of the counties saw Healthy Kids enrollees. A small number of community clinics and large volume private providers see most of the children. Conversely, two-thirds of the dentists on the Healthy Kids panel saw fewer than 10 children.

Having a large panel size does not mean that these dentists will be seeing Healthy Kids enrollees. The county with the largest panel, Fresno County, had one of the lowest participation rates and, as shown in Table 2, had the lowest utilization rate. Conversely, Santa Cruz had the smallest panel size, but all the providers on the panel saw children, and Santa Cruz County had the highest percentage of children seeing a dentist. Similarly, in San Luis Obispo County, 21 of 23 participating providers saw Healthy Kids enrollees.

Santa Cruz County reported a number of factors that might have influenced the high participation of providers. First, they strategically kept their Healthy Kids panel small to protect the safety net clinics which had traditionally provided care to this previously uninsured population. Second, they had built good relationships with the private providers through health department outreach and community efforts on fluoridation. They are now developing programs to publicly acknowledge and thank the participating providers.

Non-profit clinics, often designated as federally qualified health centers (FQHCs), have a mission to serve low income populations and they saw a significant number of Healthy Kids enrollees. For Medi-Cal, data from the Department of Health Services showed great variation among the counties in the percent of children being seen in FQHCs. In San Luis Obispo, Santa Cruz and Tulare Counties, over 20% of all Medi-Cal children were seen in FQHCs. Conversely, in Fresno, Kern, San Joaquin, and Santa Barbara Counties fewer than 9% of children were seen in FQHCs.

While nonprofit clinics are major providers of care to low-income children, not all clinics provide dental services, and fewer provide services to children, particularly young

children. A recent survey of California clinics found that only approximately three out of 10 clinics provided dental services. Approximately half of the clinics with dental services were FQHCs.⁹ As a result of their status, FQHCs receive a more favorable reimbursement than other providers for Medi-Cal patients. However, Healthy Kids reimbursements are the same for all providers, regardless of status.

Private dentists were also important sources of care for children. In each of the counties, except Santa Cruz and San Luis Obispo, the provider seeing the largest number of children was a private dentist and not a community clinic. However, Santa Cruz and San Luis Obispo Counties also had private practices that saw a significant number of children.

Although not specifically part of the study, provider reimbursement does not seem to be a key factor in the limited number of children accessing care. The provider panels recruited by Delta Dental appear to be large enough on a county wide basis to serve the Healthy Kids population. Geographic access in the rural areas may be limited, for both Healthy Kids and privately insured populations. If anything, the providers already on the panel seem to be underutilized.

A recent study comparing the North Carolina Medicaid [Medi-Cal in California] and S-CHIP [Healthy Families in California] programs found that utilization was 22% higher (from 18% to 22%) in S-CHIP for children 1-5 years of age. One salient feature of the S-CHIP program was that they had raised reimbursement rates to nearly 100% of usual fees, from the Medicaid fees which varied from 44-62% of usual fees. A previous 23% rate increase in Medicaid had little effect on provider participation.¹⁰

The results suggest that concentrating on increasing the intensity of participation of dentists on the provider panel may result in more children being seen than merely trying to enlarge the pool of providers. Of course, geographic access is necessary and is more difficult to achieve in rural areas.

⁹ Glassman, P. and Subar, P., The California Community Clinic Oral Health Capacity Study; Report to The California Endowment, December 2005.

¹⁰ Brickhouse, T., Rozier, R., and Slade, G., "The Effect of Two Publicly Funded Insurance Programs on Use of Dental Services for Young Children," Health Services Research, December 2006.

4. *What are the “best practices” for increasing utilization of dental services, particularly by young children, and the participation of dentists in children’s coverage programs?*

Before making recommendations on how to increase the percentage of CHI enrollees that receive dental care, it is important to review barriers to dental care for low-income children. Following are the barriers to Medicaid dental care identified by the Children’s Dental Health Project.¹¹

1. **Provider participation:** Only 1-in-6 dentists participating in Medicaid receive \$10,000 or more in Medicaid payments per year. This indicates that few dentists participate substantially in the Medicaid program, making it difficult for enrollees to find a dentist who will accept Medicaid.
2. **Reimbursement rates:** The fees paid by the Medicaid program do not meet the aggregate cost of delivering the dental services. Medicaid reimbursement rates to dentists are significantly lower than non-Medicaid payments.
3. **Red tape:** Complex enrollment forms, nonstandard billing forms, excessive prior authorization requirements, slow payments, inefficient eligibility determination, and other administrative problems can discourage dentist participation.
4. **Broken appointments:** According to the American Dental Association, one-third of Medicaid dental appointments result in “no shows.” Broken appointments are common and profoundly problematic for dentists, resulting in significant down time and a financial loss. For the families of Medicaid-eligible children, a lack of reliable transportation to the dental office, difficulties arranging for child care or leave from work, or a lack of familiarity with the common behavioral structures of the dental delivery system often lead to broken appointments.
5. **Geographical barriers:** The dentist-to-population ratio is declining as fewer dentists graduate and the population grows. Not only is there competition for patients to get appointments with the short supply of dentists, but there is competition among states and communities to keep dentists practicing in their locale. Rural and low-income neighborhoods have particular scarcity – 38% of rural counties in the U.S. have no dentist.
6. **Personal behaviors:** The families of Medicaid- [Medi-Cal] and SCHIP-eligible [Healthy Families] children may not be familiar with the dental delivery system, making navigation of the system a challenge; they may not recognize the value of preventive dental care because of their own poor history of dental care; they may have inflexible workplaces that make it difficult to take time off to take their children to the dentist.

¹¹ Edenstein B., “Barriers to Medicaid dental care,” www.cdhp.org/Downloads/Factsheets/Factsheet1.pdf, Accessed September 2006.

7. Medicaid managed care: About 20 states have moved their Medicaid dental services, in whole or part, to managed care. Less than half of all practicing dentists in the U.S. participate in a managed care network, which significantly reduces the number of dentists willing to take Medicaid clients.

These seven barriers are very broad and may not fully represent why children enrolled in county CHI programs are not receiving dental care. Ideally, each CHI program should evaluate their local barriers to care. A survey of parents is one way to obtain barrier information. Survey results would help individual CHI programs target appropriate interventions. For example, if the majority of children are not going to the dentist because parents haven't scheduled an appointment, an access improvement program would target parents. If parents are trying to schedule appointments but can't find a dentist, the intervention would target providers.

Recommendations for improving access to dental care

Following are ways that other states/programs have increased access to dental care for low-income children.

- **Increase dental provider participation:** To increase provider participation, CHI programs must develop a good working relationship with local dentists. Ways to do this include:
 - Recruit a local dentist (preferably a private practice dentist) to serve on the CHI board or advisory committee.
 - Work with the local dental society to identify ways to increase the number of children served by each dentist on the CHI panel. One successful approach has been for the local dental society to conduct a “Take 10” campaign where each dentist agrees to take 10 new patients referred by a specific organization.
 - Contact dentists on the panel who have not served Healthy Kids children to find out why they are not participating.
 - Listen to the concerns of local dentists and try to address their concerns.
 - Take time to thank those dentists who provide care to a large number of children.

- **Work with medical providers:** Young children are more likely to receive medical care than dental care. Because of this, it is essential that CHI programs increase the extent to which physicians, nurses and physician assistants provide oral health screenings and referrals, especially for infants and toddlers.
 - Involving the medical profession is so vital to the oral health of young children that the American Academy of Pediatrics has released a policy that states “Every child should begin to receive oral health risk assessments by 6 months of age by a qualified pediatrician or a qualified pediatric health care professional.”
 - Send a list of participating dentists to local medical providers so that they can make direct referrals.
 - Develop a medical-dental network whereby dentists agree to take patients referred by specific medical providers.

- **Reduce broken appointments:** Eliminating broken appointments is essential in order to maintain dental providers in the panel. One successful approach to reducing broken appointments is to educate parents on the importance of attending scheduled appointments. Washington State’s Access to Baby and Child Dentistry (ABCD) program has produced several educational pamphlets for parents on dental office “Dos and Don’ts”.

- **Educate parents:** Many CHI parents do not understand the dental care system or the importance of regular dental care. Educating parents is a vital component in an access improvement campaign.
 - Develop and distribute a written list of dental providers.
 - Provide enrollees with a written guide on how to contact a dentist, make an appointment, and the importance of not missing appointments.
 - Have one-on-one conversations with parents to review written materials.
 - Send letters to parents reminding them to schedule a dental visit at least once a year.
 - Encourage parents to seek dental care for all of their children, regardless of age.
- **Develop/strengthen local dental safety net providers:** Become an advocate for dental safety net providers, including community health centers.

Conclusion

The Children's Health Initiatives in the eight study counties have provided dental coverage to nearly 2700 previously uninsured low income children. Many of these children have accessed dental services with this coverage, often to treat serious dental disease.

These data only cover the first few months of most of the CHIs and further investigation into the utilization of the coverage over a longer study period will yield more comprehensive information. However, it is obvious that coverage alone does not ensure the actual utilization of services or the receipt of appropriate preventive services. The tasks for the CHIs are to:

- ensure that parents are educated about the needs for early and continuous dental care for their children,
- minimize barriers to the receipt of that care,
- encourage dental providers to see young low-income children, and
- work with medical providers to refer children to dentists at a young age.

APPENDIX: PROMISING PROGRAMS

Several programs in California are attempting to educate both providers and parents on the need for early prevention, as well as increase the number of providers seeing young children in their practices. Among these projects are:

FIRST 5 CALIFORNIA ORAL HEALTH EDUCATION AND TRAINING PROJECT is a joint venture of the California Dental Association Foundation and the Dental Health Foundation. The project has three components:

- Dental and medical provider education and training to further increase preventive oral health services for young children
- Parent, caregiver and general community education to have a better understanding of the importance of oral health for young children
- Technical assistance to local and California First 5 Commissions.

Further information including curricula, resources and its evaluation may be obtained at: <http://www.first5oralhealth.org/>.

The PEDIATRIC ORAL HEALTH ACCESS PROGRAM is a joint venture of the California Dental Association Foundation (CDAF) and the California Society of Pediatric Dentistry. This program is designed to empower general dentists with the necessary skills to expand their practices to include children ages 0-12 and children with special needs (physical and developmental disabilities). At the completion of the no-cost training program, each participating dentist agrees to regularly treat young children in their practice and to provide free dental care to at least 20 uninsured children. More information may be accessed at: http://www.cdafoundation.org/programs_pohap.htm.

In addition, nationally a number of states have initiated outreach efforts to low-income children enrolled in their Medicaid programs to educate parents and encourage use of dental services. The ADA Report on Medicaid Utilization has summarized these efforts: http://www.ada.org/prof/advocacy/issues/medicaid_outreach.pdf.

EXAMPLES OF OUTREACH EFFORTS TO ENROLLED BENEFICIARIES

STATES	INNOVATIONS
Alaska, Nevada	Beneficiaries receive newsletters containing dental health information.
Texas	The state provides information about dental benefits during enrollment recertification and home visits and through telephone calls , with outreach staff using a detailed script to assure that they provide pertinent information.
Maine, Florida	In addition to periodic reminder mailings , parents or caregivers of children who have not had a dental visit in the previous year receive letters encouraging them to make an appointment.
New Hampshire, Utah, Virginia	New Hampshire automatically generates reminder notices to beneficiary families to schedule dental exams, based on the child’s age and the Medicaid EPSDT [CHDP] periodicity schedule. Utah and Virginia use a Medicaid Management Information System to automatically generate letters or telephone calls to parents of enrolled children, reminding them to schedule a dental appointment or that a child is overdue for an appointment.
South Dakota	The state includes questions about dental benefits in formal surveys sent to beneficiary families to help increase awareness of benefits and assess attitudes and experiences with dental care.
Michigan	In conjunction with the Michigan Dental Association, the state developed an educational publication , “Don’t Wait Until it Hurts,” to encourage beneficiaries to make dental appointments.

EXAMPLES OF METHODS USED TO INFORM NEW ENROLLEES OF AVAILABLE DENTAL SERVICES

STATES	INNOVATIONS
Indiana, Wyoming	States provide to eligible families a state Medicaid child benefit guide that emphasizes oral health and its importance to the overall health of the child.
Virginia, Washington	States distribute culturally sensitive, multilingual, age-specific brochures and posters on federally required dental Medicaid services and routine referral information for dental care.
Arizona, New Hampshire, Oklahoma	State staff and contractors call enrollees to welcome them and review dental coverage.
South Carolina	Medicaid staff visits beneficiaries to discuss dental coverage options and available services and assist in identifying local dentists through a toll-free phone line and direct referral sources from the state.
Kentucky	The Medicaid program uses county health departments to conduct face-to-face visits with new Medicaid beneficiaries to explain Medicaid services, including dental benefits.
Georgia, Montana	Reminder notices are placed on the beneficiaries’ Medicaid enrollment identification card or in the monthly letters accompanying identification card mailings alerting beneficiaries that they are entitled to and should schedule dental appointments.