

Issue Brief

February 2014

Dental Care Access for Children in California: Institutionalized Inequality

by Edward Schor, MD, Lucile Packard Foundation for Children's Health

Introduction

Oral health, too often neglected in discussions of children's health and health care access, is the single greatest unmet need for health services among children. In California, the disparity in oral health between poor and affluent children is among the worst in the US.

The consequences are severe, both for the children and for our society. Nearly half a million children a year miss school due to a toothache or other oral health problems. School performance by children with poor oral health suffers by comparison to their peers.

This disparity reflects the shortcomings in our social safety net of publicly funded health care services. Dental insurance coverage is less available than medical insurance. Even when children have dental insurance, finding a dentist who is willing to see them, especially for children with public insurance, is difficult. Children from low-income families and those living in rural communities have special difficulty accessing dental care.

Understanding the scope of oral health problems among children in California and the system of care that is available to them can help practitioners and policymakers design approaches to improving access to, and quality of, pediatric dental care.

Use of Dental Care by Children

Data on dental care use by children in California varies markedly depending on its source, but shortfalls in dental care are evident in all studies. In general, trend data show that the state has made little progress in affording access to dental care for children from low-income families.ⁱ In the decade of 2000-2009, according to various research studies, the proportion of children enrolled in Medi-Cal who received dental care may have risen slightly (depending on the source of data) but by 2009 it had increased to only 38.9%.ⁱⁱ

Rates of dental services utilization by children reported by the State of California were substantially higher than those reported by other researchers. The state reported that in 2009 49.2% of children – still less than half – had a dental visit.

More recently, data from a 2011-12 survey based on parent report found that 69.7% of California children ages 1-17 with public insurance had a preventive dental care visit during the previous year. In comparison, 83.4% of children with private insurance and 46.4% of uninsured children had a preventive visit during that timeframe.ⁱⁱⁱ In general, it is expected that utilization data based on parent recollection and reporting will be higher than the actual rate, and data based on billing claims will be lower.

Children with special health care needs (CSHCN) in California, as identified by a number of criteria, had higher rates of preventive dental care than other children (83.1% vs. 77.5%), as reported by parents.^{iv} These rates are not substantially different from those reported nationally by parents of CSHCN.^v

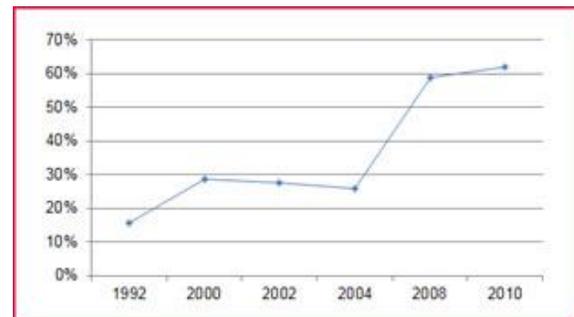
Measures of untreated dental decay present a somewhat less optimistic picture of the dental health of children in California than rates of dental care access. One analysis of a 2005 survey found that nearly 25% of children in California have never been to a dentist.^{vi} A 2011-12 survey found that 10.3% of children ages 2 to 11 and 1.4% of children ages 12-17 had never had a dental visit.^{vii} Survey data from 2007 found that overall 23.5% of California children had decayed teeth or cavities within the past six months; 30.2% of uninsured children, 27.8% of publicly insured children and 16.8% of children with private health insurance had an oral health problem in the previous 12 months.^{viii}

Public Health Approaches

Children's oral health can be improved and their need for professional care reduced through a variety of public health approaches. Fluoridation of drinking water is perhaps the most cost-effective way to reduce dental caries. California mandated fluoridation in 1998, and in 2000 approximately 28.7% of people in the state were receiving fluoridated water.^{ix} Since that time, additional legislation was enacted^x, and as of 2010, 62.5% of the population in California is using fluoridated water, which ranks the state 37th nationally.^{xi} Numerous localities have rejected opportunities to fund fluoridation and continue to provide unfluoridated water. In

addition, reliance on alternative sources of water (e.g., bottled water) in communities where public fluoridation is present can reduce its potential impact.

Percent of California Population Provided with Fluoridated Water



Source: Water Fluoridation Statistics, U.S. Centers for Disease Control and Prevention

The public is generally unaware that tooth decay is an infectious disease that often is transmitted from mothers to their infants. The disease is typically established in the first few years of a child's life, with teeth being susceptible to decay soon after they first appear in the mouth. Thus, one goal of public health policy should be to improve the oral health of pregnant women.^{xii} Pregnant women with Medi-Cal insurance generally have coverage for dental care, though their rate of utilization of that service is not known.

Associations between obesity and oral health have been noted by many researchers. It seems most likely that both conditions share some common origins related to poverty, nutritional habits and other health behaviors. Public health efforts to improve food choices, along with encouraging good health behaviors such as exercise for weight management and maintaining good oral hygiene for tooth decay prevention, have been shown to have positive effects for children.

Oral Health Care

Although fluoridation of drinking water can reduce dental caries by about 25%, access to appropriate and timely oral health care, especially preventive care, is essential to substantially reducing caries and tooth decay. Medical and dental health professionals can promote good oral hygiene by teaching and encouraging parents to make wise decisions about their children's food and to regularly floss and brush teeth. Professional evaluation of oral health should be part of well child care in the doctor's office, and regular preventive dental care should begin in early childhood.

Application of fluoride varnish and dental sealants has been shown to be an effective preventive service for children. In addition, regular appointments to clean children's teeth are recommended. When oral health problems are identified early, appropriate treatment can minimize their consequences.

Access to Dental Care for Children in California

In California, the gap between the oral health of children from low income families compared to that of children from more affluent families is worse than any other state except Nevada. Children with publicly financed insurance are more likely to have oral health problems not only when compared to those who are privately insured, but also when compared to those without health insurance^{xiii}; perhaps uninsured families have fewer risk factors contributing to poor oral health or they may be paying out-of-pocket for dental care.

Insurance Coverage

Private dental insurance is less frequently offered by employers than health insurance. Medicaid/Medi-Cal is nearly unique among health care financing programs in that it covers both medical and dental care for children, applying the same eligibility criteria. Healthy Families – California's SCHIP program – covered dental care through contracts with four dental health care plans until recently, when the program enrollees were incorporated into Medi-Cal and were required to obtain their dental care through Denti-Cal providers.

Medi-Cal provides coverage for dental services in most of the state through the Denti-Cal program, which pays dental care providers on a fee-for-service basis. In Los Angeles and Sacramento counties, Medi-Cal executes contracts with managed care plans to provide dental care, but these contracts appear to have reduced rather than increased access. Targeted attention by the state's Department of Health Care Services led to improved utilization of these plans between 2011 and 2012.

In 2009, dental care for adults, except for those developmentally disabled or living in nursing homes, was deleted from Medi-Cal benefits. Dental benefits will be partially restored May 1, 2014, to provide basic oral health services. Parents, especially mothers, usually are responsible for making appointments for care. When parents have a regular source of dental care, so do children. Consequently, the loss of adult dental benefits may have the unintended consequence of reducing of the number of children accessing dental care as well.

Under the Affordable Care Act, dental insurance will be available through the state's new health

insurance marketplace, but currently dental plans are sold separately from health insurance policies and thus are not eligible for subsidies. This policy of separating coverage has made some stand-alone dental plans unaffordable. Fortunately, California plans to include dental coverage as part of health insurance plans purchased through the marketplace starting in 2015. Medical insurers may see this change as an opportunity to increase the provision of some aspects of preventive dental services within medical care settings, and to coordinate dental care with other health care services.

Access to Dentists

California has about 31,520 dentists licensed to practice in the state, about 26,465 of whom are in active practice; about 450 full-time equivalent dentists work in community clinics, generally in underserved areas.^{xiv} Compared to other states, California has more dentists per capita. Specialists in children's oral health are much less available. The California Society of Pediatric Dentistry claims slightly more than 700 members statewide to serve about 9 million children ages 0-18 years.

The distribution of dentists in the state, however, is uneven, and many communities do not have enough dentists available to meet the need. The federal government designates certain communities as dental health professional shortage areas, based on a ratio of the number of people who live in those areas and the number of dentists available locally to serve them. Just fewer than 4 percent (3.9%) of Californians live in these shortage areas, and it is estimated that it would take approximately 388 additional dentists serving in these areas to alleviate the shortage.^{xv}

Federally qualified health centers (FQHCs) are the dental safety net for many low-income families. Dental care is available in about three-quarters of FQHCs, but many of these clinics have difficulty recruiting sufficient numbers of dentists to meet existing needs. Federal law allows FQHCs to contract with private dentists to provide services to clinic patients at fair market rates,^{xvi} though few clinics in California have taken advantage of this option. In addition, many counties and county First 5 programs support dental clinics that serve low-income families, including their children. These clinics usually apply income eligibility ceilings, accept Medi-Cal (Denti-Cal), and offer a sliding fee scale for self-pay patients. Other safety net providers include dental schools and dental training programs, and non-FQHC community clinics. The total number of individuals served by these dental safety net providers in the state is not known.

Even where the number of dentists is adequate to serve the population, children, especially those whose dental care is paid for by the state, have a hard time obtaining dental care. A 2012 report supported by Liberty Dental Plan and Health Net found that over half of California dentists do not accept children as patients until they are at least 3 years old, and 90% of general dentists report that it is somewhat or very difficult to refer Denti-Cal funded children to pediatric dentists.^{xvii}

This study found that only about one-quarter of dentists in California participate in Denti-Cal, and most of them limit Denti-Cal enrollees to a small (5-15%) proportion of their practice. The participation of dentists in the Denti-Cal program has been declining; 40 percent of California dentists reported accepting Denti-Cal

patients in 2003, but in 2007 participation was down to 24% of private practice dentists. By comparison, nearly 57% of physicians in California are accepting new Medi-Cal patients.^{xviii} More than half of the dentists reported that if Denti-Cal reimbursement were

Only about one-quarter of dentists in California participate in Denti-Cal, and most of them limit Denti-Cal enrollees to a small (5-15%) proportion of their practice.

raised to be more comparable to market-based rates, they would be at least somewhat likely to serve those children. However, additional barriers, including the

need for interpreters, distance to a dental office, and limited office hours, are likely to remain. Recent reductions in the rates paid by Denti-Cal are likely to aggravate problems with access to dental care.

Children with special health care needs require more frequent use of medical services and, in general, are more likely to obtain them. The same holds true for dental care. In California, although 31% of children with public insurance were reported as not having had preventive dental care in the past year, 17% of children with special health care needs did not receive preventive care – a number that still is high, though about equal to the proportion of children with private health insurance who did not have a preventive visit.

On the other hand, perhaps because they have more oral health problems, children with special health care needs were more likely to have had unmet dental care needs than other children (6.5% vs. 2.6%).^{xix} As previously noted, rates based on parent reports tend to present a more favorable health picture than those obtained from more objective sources.

Finances of Dental Care

Nationally, state Medicaid programs pay dentists 60.5% of dentists' median retail fees for equivalent services. California Medi-Cal/Denti-Cal pays slightly more than half that rate, reimbursing dentists at 32.8% of retail fees. The California Denti-Cal fee schedule lists a preventive dental visit for a child at \$30, though this can be augmented substantially by applying fluoride varnish or dental sealants at the same visit. Recently, these fees were cut by 10 percent. For comparison, the Medi-Cal rate for a pediatric well child visit for a school age child is \$47.13; less for preschool children and more for adolescents. These rates also can be higher when various screenings and immunizations are provided. Although market-based fees vary, Medi-Cal generally reimburses about one-third of the retail rate for pediatric office visits.

In general, health care professionals in the US are well-paid compared to their peers in other countries, and well above the median income of US families. Data on professional salaries vary by source and by the location and type of practice. In 2012 the Bureau of Labor Statistics reported that the annual mean wage for a general dentist was \$163,240, and for a dental hygienist was \$70,700. A survey conducted by National Salary Trend found that on average pediatric dentists could expect to earn \$193,000 a year. For comparison, general pediatricians had a mean income of \$167,640, and nurse practitioners averaged \$91,450, though pediatric nurse practitioners likely earned somewhat less.^{xx} Unfortunately, since Medi-Cal (Denti-Cal) reimburses dental care providers at rates well below usual/retail charges, as well as below other states' Medicaid programs, there is little financial incentive for serving children covered

by that public program, especially when a private paying patient can be seen in their stead.

Health Homes

The American Academy of Pediatrics has long advocated for the creation of medical homes for children, especially those with chronic health problems. Originally, medical homes were primary care practices that were accessible, family-centered, coordinated, comprehensive, continuous, compassionate and culturally effective. The definition has evolved into a concept in which team-based care integrates, or at least coordinates, the variety of resources on which children's health and well-being depend. When mental or behavioral health services or oral health services are included, especially when they involve co-location of mental health or dental professionals, the model of care is referred to as a health home. There are organizational, professional, financial and administrative hurdles to creating health homes, but there is strong policy support in some states to achieving them in the hope of improving quality and reducing costs.

Direct Access to Dental Hygienists

The shortage of dentists in California able and willing to serve children, especially children covered by Denti-Cal, is a serious barrier to improving access to oral health care and to improving the oral health of children. In 2007, legislation was passed that allowed dental hygienists working in federally qualified health centers to bill Medi-Cal (Denti-Cal) for their services, thus allowing dentists to focus on other services requiring their advanced skills. Still, low reimbursement rates limit the potential impact of this option. Another potential, partial solution to this problem advanced by the American Dental Hygiene Association is to train

advanced dental hygiene practitioners who would provide diagnostic, preventive, restorative and therapeutic services.^{xxi} Such advanced practice dental hygienists might practice within or affiliated with a dental practice or, as has been done in Colorado since 1987, practice independently, especially in underserved areas and in schools. Alternatively, these hygienists could practice within pediatric offices.

Pilot projects testing expanded roles for dental hygienists began in California in the early 1980s, and their success led to enactment of supportive legislation to expand the role of dental hygienists. Today, dental hygienists who have a baccalaureate degree (or the equivalent) and have completed an approved continuing education course and passed a state licensure examination can practice independently in underserved settings, including hospitals, homes, residential care facilities and other public health settings. They must have a dentist with whom they can consult and to whom they can make referrals, but generally can practice independently. These registered dental hygienists in alternative practices have played an important role in expanding oral health services in these new venues of practice and thus are improving access to care.^{xxii} On a related note, in 2013, dental hygienists in alternative practices were allowed to operate mobile dental clinics in areas with poor access to services. Whether alternative practices are able to provide comprehensive care for high risk children or simply serve as a bandage to cover up substantial systemic problems remains to be seen.

California's gap in oral health status between children from rich and poor families is nearly the most profound in the country.

Dental Therapists

Dentists have long employed allied providers such as dental assistants and hygienists to increase the efficiencies of their practices. Another type of allied provider is a dental therapist who is trained to deliver routine dental care, including education, prevention and restorative services. Several Commonwealth countries (i.e., Great Britain, Canada and New Zealand) have decades of experience using dental therapists. In the US, dental health aide therapists have been working in Alaska with underserved indigenous communities and in Minnesota in underserved areas and safety-net settings. The program in Alaska, which provides a two-year training program, has been extensively studied and has enhanced access to dental care and dental health in often isolated tribal communities.

A study by researchers at the University of Connecticut examined the potential impact of dental therapists on services provided by federally qualified health centers. They found modest cost saving and increases in capacity, and greater potential gains in school-based programs.^{xxiii} The study suggested that expansion of such programs could raise Medicaid-enrolled children's utilization rate by nearly 20 percent. However, in states such as California, where fewer than half of low-income children receive dental services, it will take more than a 200% improvement, statewide, to reach all of them.

In California in 2012, a Senate bill (SB 694) was introduced that would have authorized a

project to explore new workforce training and delivery models with the goal of providing oral health care to underserved children. The legislation, which was not enacted, was supported by the California Dental Hygienists' Association and by child advocates, but strongly opposed by the dental community. Legislation that has the potential to modify the scope of professional practice, regardless of the profession, typically stirs considerable interest in maintaining the status quo, regardless of documented shortcomings of existing systems and approaches.

Discussion

Dental caries remain the most prevalent, treatable chronic disease of childhood; early childhood caries are on the rise, and dental care represents the greatest unmet health care need. Depending on the data source, children in California may be only slightly less likely to receive dental care, including preventive dental care, than other children in the US, but the gap in oral health status between children from rich and poor families is nearly the most profound in the country.

Children without health insurance in California and elsewhere are equally unlikely to access dental care; however, probably because of the state's low reimbursement rates, California's children who have publicly funded dental insurance are less likely than similarly insured children in other states to see a dentist. This reflects the institutionalization of barriers to better dental access and better oral health.

Fluoridation has significantly reduced the likelihood that children will develop cavities,

California lags behind other states in taking full advantage of auxiliary oral health care providers such as dental hygienists and dental therapists.

but over a third of California's population is not provided with fluoridated water. Despite California having the nation's highest ratio of dentists to population, large numbers of children do not receive regular dental care.

This problem with access reflects a maldistribution of dentists within the state, reluctance of general dentists to see young children, and the very high proportion of dentists who do not accept public insurance due to low fees.

California also lags behind other states in taking full advantage of auxiliary oral health care providers such as dental hygienists and dental therapists whose services, if expanded, could greatly improve children's access to care. The reluctance on the part of the state government to invest more funds in children's health and dental care, and inter-professional disagreements about modifying scope of practice laws, augur poorly for overcoming access problems in the near future. The mandated inclusion of pediatric dental coverage in health insurance plans offered through the state's marketplace will likely increase dental care for a portion of children, though not necessarily for those at highest risk.

Recommendations for Policymakers

Numerous actions could be taken to improve the oral health of children in California, many of which would require regulatory and/or statutory changes by the state. The following list summarizes them:

- More actively educate the public, especially parents, about the value and availability of professional preventive dental care and importance of good personal oral health behaviors.
- Tailor public dental health educational programs to address barriers created by low health literacy, culture, and poverty.
- Continue to actively promote fluoridation of drinking water.
- Incentivize child health care providers to perform oral health screenings and apply fluoride varnish during well child care visits, and encourage routine assessment and referral for other preventive dental services.
- Enhance school-based preventive dental services by dental hygienists and others including screening, cleaning, application of fluoride varnish and dental sealants, preventive education, and structured referral processes for children needing additional services.
- Provide incentives for health homes that integrate dental care and other child health care services.
- Allow more independent practice by dental hygienists and encourage the creation of programs to train dental therapists.

- Educate general dentists in the provision of care for young children.
- Increase dental services in FQHCs by facilitating contracting with private dental care providers.
- Integrate dental insurance into medical insurance, especially within managed care systems, to facilitate referrals and access, and to potentially address the barriers created by low reimbursement rates for children's dental care.
- Increase reimbursement for dental health care providers.
- In partnership with key stakeholder groups, establish statewide goals for oral health and

oral health care access and implement the strategies above to achieve them.

- Standardize measuring and monitoring of oral health and oral health services and regularly report data publicly.

Edward Schor, MD, is senior vice president at the Lucile Packard Foundation for Children's Health.

For the most recent available data on children's dental health in California, visit <http://www.kidsdata.org/topic/50/dental-care/summary>

ⁱ Exhibit B. Percentage of Low-Income Children Receiving Dental Services, State By State. Medicaid Utilization for Children Ages 1-18, Federal Fiscal Years 2000-2009. The State of Children's Dental Health: Making Coverage Matter. Pew Center on States, May, 2011.

ⁱⁱ Hakim RB, Babish JD, Davis AC. State of dental care among Medicaid-enrolled children in the United States. *Pediatrics*, 2012; 130(1):5-14

ⁱⁱⁱ 2011/12 National Survey of Children's Health

^{iv} 2007 National Survey of Children's Health

^v QuickStats: Percent of children aged 2-17 years with a dental visit in the past year, by age group and health status – National Health Interview Survey, United States, 2011. *Morbidity and Mortality Weekly Report*. August 2, 2013/62(30):615-615

^{vi} Pourat N, Finocchio L. Racial and ethnic disparities in dental care for publicly insured children. *Health Affairs*, 2010;

^{vii} Child dental care in California. Kidsdata.org based on the California Health Interview Survey, 2011-2012.

<http://www.kidsdata.org/topic/50/dental-care/summary> (accessed 8/15/13)

^{viii} 2011/2012 National Survey of Children's Health

^{ix} 2000 Water Fluoridation Statistics. Centers for Disease Control and Prevention.

<http://www.cdc.gov/fluoridation/statistics/2000stats.htm> (accessed 8/15/13)

^x In 1995 AB 733, the Fluoridation Act, provided for fluoridation of water systems with 10,000 service connections or more. In 2004 additional legislation (SB96) was enacted to help deal with legal issue arising from efforts to fluoridate public systems.

^{xi} 2010 Water Fluoridation Statistics. Centers for Disease Control and Prevention.

<http://www.cdc.gov/fluoridation/statistics/2010stats.htm> (accessed 8/15/13)

^{xii} Strategies for Sustaining and Enhancing Prevention of Childhood Tooth Decay During Challenging Times. Trend Notes. National Oral Health Policy Center. Washington, DC. April, 2010.

^{xiii} How SKH, Fryer AK, McCarthy D, Schoen C, Schor EL. Securing a healthy future: The Commonwealth Fund state scorecard on child health system performance, 2011. February, 2011; The Commonwealth Fund, NY.

^{xiv} Pourat N, Nicholson F. Distribution and characteristics of dentists licensed to practice in California, 2008. UCLA Health Policy Fact Sheet. UCLA Center for Health Policy Research. June 2009.

- ^{xv} US Department of Health and Human Services, Health Resources and Services Administration, Designated HPSA Statistics Report, Table 4, Health Professional Shortage Areas by State, Detail for Dental Care Regardless of Metropolitan/Non-Metropolitan Status as of December 6, 2010.
- ^{xvi} Partnering California's Health Centers with Private Dentists: Why and How? A Care Delivery Innovation for California FQHCs: A Companion to the FQHC Handbook. Children's Dental Health Project. Washington, DC.
- ^{xvii} 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
- ^{xviii} US Centers for Disease Control and Prevention (as cited by California Budget Project).
- ^{xix} Data Resource Center. Data from 2011/2012 National Survey of Children's Health and 1009/10 National Survey of Children with Special Health Care Needs.
- ^{xx} May 2012 National Occupational Employment and Wage Estimates. US Department of Labor, Bureau of Labor Statistics. http://www.bls.gov/oes/current/oes_nat.htm#29-0000 (accessed 8/15/13)
- ^{xxi} Policy Manual. American Dental Hygienists' Association. Chicago, IL., July 30, 2012
- ^{xxii} Mertz E, Glassman P. Alternative practice dental hygiene in California: Past, present and future. Journal of California Dental Association. 2011; 39(1):37-46
- ^{xxiii} Expanding the Dental Safety Net: A first look at how dental therapists can help. The Pew Center on States. The Pew Charitable Trusts. July 2012.

ABOUT THE FOUNDATION: The Lucile Packard Foundation for Children's Health works in alignment with Lucile Packard Children's Hospital and the child health programs of Stanford University. The mission of the Foundation is to elevate the priority of children's health care through leadership and direct investment. The Foundation is a public charity, founded in 1997.

CONTACT: The Lucile Packard Foundation for Children's Health, 400 Hamilton Avenue, Suite 340, Palo Alto, CA 94301
cshcn@lpfch.org (650) 497-8365