Dental Visits for Medicaid Children: Analysis and Policy Recommendations

A June 2012 paper by analysts at the Centers for Medicare and Medicaid Services (CMS) reports that the percentage of children in Medicaid who received at least one dental visit in a year increased from 28.4% to 33.0% between the years 2002 and 2007. This 16% relative increase marks a substantial improvement in Medicaid’s performance nationally—to the credit of policymakers, advocates, and care providers.

Additional federal data show that the improvements continued throughout the last decade to reach more than 40% of children in 2010 (Chart below). Notably, this percentage increase occurred even as the numbers of children enrolled in Medicaid climbed significantly. By 2009, roughly 13 million of the 33 million children enrolled in Medicaid and Medicaid CHIP-expansion programs experienced at least one dental visit. However, more than half of beneficiaries did not receive care and ongoing disparities with private coverage persist. The gap between public and private coverage remained largely unchanged with about 20% more privately insured children obtaining dental care in a year than children with Medicaid or CHIP coverage.

<table>
<thead>
<tr>
<th>Year</th>
<th>% Children Enrolled with a Dental Visit</th>
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<tbody>
<tr>
<td>1993</td>
<td>21.4%</td>
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<tr>
<td>1994</td>
<td>27.1%</td>
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<td>1995</td>
<td>30.0%</td>
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<td>1996</td>
<td>32.0%</td>
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<tr>
<td>1997</td>
<td>34.4%</td>
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<tr>
<td>1998</td>
<td>36.0%</td>
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<tr>
<td>1999</td>
<td>38.0%</td>
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<td>2000</td>
<td>40.2%</td>
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<td>2009</td>
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<td>2010</td>
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CMS’ analysis showed that Medicaid performance in 2007 varied widely across states with their differences in populations covered, program design, payment rates, reporting adequacies, composition of dental providers, and administration—from a reported low of 12% in Nevada to a high of 49% in Vermont. The percentage change between 2002 and 2007 also varied widely across states—showing an increase in the majority of states and a decline or no change in eight states (CA, GA, FL, HI, NV, ND, OR, RI).

### EXPLAINING INCREASED DENTAL SERVICES TO CHILDREN IN MEDICAID

After flat performance throughout the 1990’s, Medicaid dental services began to tick upward steadily starting in 2000 even as the numbers of enrolled children increased from 17 million in 1991 to 27 million in 2002, to 33 million in 2010. Among potential explanations for this improvement are:

- **Increased advocacy, awareness, and policy action:** The Children’s Dental Health Project, in partnership with dental, children’s health, and public health advocacy organizations led a concerted effort beginning in 1997 to raise the level of attention and policy formulation on Medicaid’s dental programs. As a result, major dental provisions were enacted in the 2002 Healthcare Safety Net Improvement Act (PL107-251), the 2009 Children’s Health Insurance Program Reauthorization Act (PL111-3), and the 2010 Affordable Care Act (PL111-148). Between 2002 and 2012, seven targeted Congressional hearings and 13 GAO studies investigated dental issues for children with a primary focus on access to care in Medicaid, spurred in part by a Medicaid-eligible child’s death from complications of a dental abscess. A number of states improved their dental Medicaid program administration (some in response to class action lawsuits) often through contracting to third parties, raising fees, and simplifying eligibility verification and claims processing.

- **CHIP enactment:** With passage of the Children’s Health Insurance Program in 1997, the majority of states elected to cover children of higher income “working-poor” families by enrolling them in Medicaid. The June 2012 CMS study reports that all but 7 of 44 states that established CHIP expansions in Medicaid experienced an increased likelihood of children receiving dental care in 2007. Since higher income families are more likely to use dental care regardless of coverage, the inclusion of CHIP families may have increased demand for services. However, as reported by GAO, demand for dental services by Medicaid beneficiaries far outstrips supply so CHIP is unlikely to have contributed meaningfully to the increase.

- **Increased supply of dental providers:** Between 2002 and 2009, there was little change in the supply of dental providers with the exception of a greater percentage of dentists trained in the specialty of pediatric dentistry. During that period, no dental schools closed and as many as 12 were inaugurated or planned with only one new school graduating dentists beginning by 2007. By contrast, the numbers of pediatric dentistry training programs nearly doubled from 39 to 76 and the numbers of first year trainees increased 55% from 247 to 382 thereby enhancing the availability of specialists able to manage the complex clinical presentations of

Three states with highly regarded early intervention programs showed dramatically high rates of care for children under age three.

The paper’s authors credit Primary Care Case Management administration with generally better performance than state-managed fee-for-service administration and note that expansions under CHIP have a positive influence on dental utilization. With few exceptions, state-level analyses show no significant differences in utilization by race or ethnicity, suggesting that income and lack of available Medicaid providers influence utilization more than does a child’s race or ethnicity.

Three states with highly regarded early intervention programs—North Carolina with its “Into the Mouths of Babes” program, Washington with its “Access to Baby and Child Dentistry (ABCD)” program, and Iowa with its “Hawk-I” dental home initiative—showed dramatically high rates of care for children under age 3 (30% in NC, 21% in WA, and 20% in IA compared to national average across all states and the District of Columbia of 8%).

The proportion of total US dental care expenditures that go toward care of Medicaid beneficiaries is disproportionately low relative to their numbers. Eight percent of total US dental expenditures ($102 billion in 2009) were consumed to care of all children and adults in Medicaid who comprised 20% of the population. Among children alone, the disparity is greater with only an estimated 5% of total US dental expenditures committed to the care of the 41% of US children who are enrolled in Medicaid.
affected children. However, only a small percentage of these specialists practice in facilities or programs that specifically target care of children in Medicaid. Between 1999 and 2009, the percentage of children that pediatric dentist report caring for who have public insurance increased from 12.9% to 19.4%.^7^

**Enhanced dental safety net:** Components of the dental safety net have been variously described^8^ but generally assume all non-private dental access points including hospitals; dental schools; hygiene programs; federally qualified, community, and school based health centers; and voluntary free care programs. The two largest components of this safety net are Federally Qualified Health Centers (FQHCs) and School-Based Health Centers (SBHCs), both of which have grown with federal support.

**Advent of “DMO Medicaid Practices”:** Relatively new to care of children in Medicaid are Medicaid-predominant general practices affiliated with Dental Management Organizations (DMOs) which are expanding dramatically in numbers and locations. By 2009, industry observers note that there were at least 300 locations across the country dedicated to care of children in Medicaid that were managed by the five largest DMOs and that there were at least 10 additional smaller DMOs contributing to the care of these children. The majority are managed by for-profit organizations, sometimes through publicly held companies. The underlying business concept has been controversial amongst policymakers and practicing dentists who raise concerns about perverse incentives to over treat. Yet these same perverse incentives exist across all dental provider types as virtually all dental care in the US is paid on a fee-for-service quantity-of-care basis. Concern has also been raised about the quality of care being provided in these DMOs because of their ownership or management by entrepreneurs many of whom are not dentists. However, the legal, ethical, and moral responsibility for providing quality care rests not with any employer but with the licensed dentist. Unlike some of the other dental delivery sectors, the largest and best managed of the DMOs utilize rigorous metrics that seek to identify and address practitioners who over treat. There is an urgent and profound need to develop and implement quality metrics across all provider types to ensure that care provided is both necessary and comprehensive. In general the business model for these Medicaid DMOs succeeds financially because they are able to reduce operating costs by locating in economically depressed areas (where real estate and employee costs are low), purchasing in bulk (to avail themselves of quantity discounts), and providing flexible scheduling that recognizes the impediments that many low income families face with transportation and work arrangements.

Five to 5.5 million more children in Medicaid obtained dental care in 2009 than in 2002. Based on trends in the delivery system over that time, these expanded numbers may be attributable to modest increases in the contributions of safety net providers, moderate increases in the contributions of private pediatric dentists, and substantial increases in DMO-affiliated practices.

**WHERE DID THE 13 MILLION CHILDREN IN MEDICAID IN 2009 OBTAIN THEIR CARE?**

Overall, only a small proportion of dentists contribute meaningfully to the care of children in Medicaid – either in their private practices or through employment in safety net facilities, training programs, or DMOs. Although there is a widely recognized paucity of dental providers, identifying those types that do provide substantial treatment makes it possible to develop policy options that further encourage and expand access. This section of the policy brief seeks to describe the allocation of care across private and safety net facilities and programs in order to gain a better understanding of where care is delivered and to determine policies that can potentially expand care further.

**Estimated Sources of Dental Care to Children in Medicaid, 2009**

Contributions of each sector can be estimated from a variety of public and proprietary data sources but there is little “hard data” to report. Provider types include private practice pediatric dentists and general dentists, FQHCs, SBHCs, community clinics, dental training sites, and DMO-affiliated Medicaid practices. The graphic below provides best estimates of the contribution of each provider type to care of children in Medicaid in 2009. Calculations and assumptions utilized to derive these proportions are described below.
► Private practice pediatric dentists: Pediatric dentists comprise less than 5% of all actively practicing private primary-care dentists yet they contribute disproportionately large volumes of care to children in Medicaid. Between 1998 and 2009, the proportion of pediatric dentists’ patients with public coverage increased from 12.9% to 19.4% compared to only 6.7% for general dentists in 2008. Given that there were 5,344 active pediatric dentists in private practice providing an average of 5,066 visits annually and factoring the mix of patients by insurance status (weighted average of 2.5 visits/child based on MEPS data), each pediatric dentist in 2009 would have cared for, on average, 2139 children of whom 19.4% were in Medicaid/CHIP for an average Medicaid/CHIP child population per pediatric dentist of 415 children. Thus, pediatric dentists served approximately 2.2 million of the 13 million enrolled children with a visit in 2009. This estimate is consistent with the American Academy of Pediatric Dentistry’s report that pediatric dentists currently provide an estimated 4.66 million dental visits to children with public coverage. Using MEPS data to convert Medicaid child patient visits to unique patients (1.94 visits per child), the Academy’s estimation is equivalent to approximately 2.4 million unique children served.

3.8 million to 5.0 million children in Medicaid in 2009.

► Traditional Safety Net Sites: The dental safety net is small relative to private dentistry and varies significantly in capacity by state. For example, for children and adults in Medicaid, California reports that 9% received dental care in FQHCs while Connecticut’s dental safety net provided care to 28% of Medicaid patients.

- Federally Qualified Health Centers: In 2009, 3.4 million people received dental care in FQHCs and approximately one-third of FQHC patients were children, the majority in Medicaid. Thus FQHC’s contributed care to an estimated 1.0 - 1.1 million of the children in Medicaid in 2009.

- School-Based Health Centers: While there is growing federal and foundation interest in school-based and school-linked dental care, only an estimated 230 centers employ professional dental personnel at least part time. School-based health center authorities from the National Assembly on School-Based Health Care estimate that approximately 250,000 unique children in Medicaid were served by these sites in 2009 and that the numbers are now increasing at a modest but positive rate.

- Community Health Centers and Van Programs: The availability of non-FQHC health centers and mobile dental programs that offer dental care varies widely across the US by locale and state. No firm data are available on their contribution to children in Medicaid.

Taken together, an estimated 1.3 million Medicaid enrolled children were seen in traditional safety-net sites in 2009. This estimate is consistent with an Illinois state report (“[the state’s safety net clinics] represent a small proportion of dental care”) and with overview assessments of the dental safety net capacity but is at variance with a Connecticut report that its extensive community and school based healthcare programs account for 28% of services provided to children in Medicaid. The Connecticut analysts, however, note that “even if [the safety net] is expanded,...the majority of low-income patients would need to obtain care in private practices to reduce access disparities.”

There is an urgent and profound need to develop and implement quality metrics across all provider types to ensure that care provided is both necessary and comprehensive.
► **Dental Trainees:** Although not all dental schools accept Medicaid payment, the nation’s approximately 60 dental schools contribute modestly to the care of children in Medicaid through their training programs. While pre-doctoral students treat few children in the course of their education, the 763 pediatric dentistry specialty trainees in 2009 contributed meaningfully relative to their size. Assuming the same level of Medicaid productivity among these trainees as among practicing pediatric dentists, pediatric dental training programs may account for care to 300,000 to 400,000 of the 13 million receiving care in a year. With the addition of dental student contributions, advanced education in general dentistry trainees, and dental hygiene programs, roughly 0.5 million children are estimated to be served by dental education and training programs.

► **Dental management organizations:** Over the last decade, a number of general dentistry practices providing dental services primarily to children in Medicaid under the administrative umbrella of dental management organizations (DMOs) have been instituted or expanded locally, regionally, and nationally. Among the largest three, Kool Smiles reports having treated 507,470 children in Medicaid in 2009 (increasing to 812,415 in 2010); Small Smiles reports having treated approximately 488,000; and Reach Out HealthCare America 380,000. Industry observers estimate that these three DMOs provide care to one-third to one-half of all children in Medicaid served by DMO-affiliated practices. DMO-affiliated practices conservatively provided care to 2.8 million children in 2009. Although Medicaid DMOs are not active in all states in states in which they operate, they may account for a much higher percentage of children treated. For example, one DMO reported that in five states it alone provides from 7.8% to 25.6% (average 15.0%) of all care provided to children in Medicaid based on analyses of state-level claims data.

► **Unattributed:** After conservatively estimating sources of care for the 13 million children in Medicaid who received dental care in 2009, the source for nearly two million remains unattributed.

**POLICY RECOMMENDATIONS**

The finding that the numbers and percentages of children receiving dental care in Medicaid are both increasing while the majority of enrolled children do not receive any dental care in a year, suggests a number of opportunities for policy improvements.

1. **Continue governmental effort to reach more children in Medicaid with comprehensive dental care:** Findings suggest that Congress, federal and state Medicaid officials, and the Medicaid and CHIP Payment and Access Commission need to continue and expand their efforts to achieve adequate levels of care for children in Medicaid. This finding is consistent with GAO’s November 2010 report, “Efforts under way to improve children’s access to dental services, but sustained attention needed to address ongoing concerns” that encourages additional policymaker attention to oral healthcare for enrolled children.

2. **Develop and apply uniform measures of accountability and quality across all sources of care:** Although sources of dental care vary considerably in size, financing, organization, and management, care for children should meet high levels of professional quality and accountability regardless of the setting in which care is obtained. Needed is the development of standardized metrics for use across all delivery sources that ensure appropriate, comprehensive, and effective dental care while identifying and eliminating waste, fraud, and abuse. Employed dentists who provide care to children in Medicaid, whether employed in the traditional safety net, as trainees, by DMOs or by private practices, retain their legal, ethical and moral responsibility as licensed healthcare professionals to provide quality care regardless of their employers’ policies or procedures. It is also incumbent upon organizations and individuals that employ dentists to care for children in Medicaid to establish policies and procedures that promote quality care and that scrupulously monitor employed dentists’ performance.

3. **Promote growth of the most responsive sectors:** Relative to their size and numbers, the most substantial providers of care to children in Medicaid are pediatric dentists, traditional safety net providers, and dental management organizations. Targeted supports to continue expansions of these providers holds promise to further increase access to care.
POLICY RECOMMENDATIONS CONTINUED

4. Broaden the participation of general dentists in private practice: Because of the large numbers and wide distribution of general dentists, marginal increases in general dentists’ participation in Medicaid can significantly increase the availability of care to children in Medicaid. Among recognized methods of increased general dentists’ participation in Medicaid are contracting with FQHCs as authorized by CHIPRA, expanding HRSA’s “Grants to States to Expand Oral Health Workforce” program, and provided incentivized continuing education in care of young children as in WA State’s ABCD program.

5. Expand early intervention programs by replicating successful models: Three substantially different approaches to increasing early intervention—WA State’s “ABCD” program that provides higher fees to dentists trained in early childhood oral health care, NC’s “Into the Mouths of Babes” program that promotes fluoride varnish applications and referral between primary care medical providers and dentists, and the IA “Hawk-I” dental home initiative that facilitates care coordination and parental education—have all been shown to increase the numbers of young children who receive timely preventive and oral health promoting care. Each responds to the American Academy of Pediatric Dentistry, American Academy of Pediatrics, and Bright Futures call for early preventive intervention. Each has strong potential for improving oral health at reduced costs with enhanced patient experience.

6. Promote disease management approaches that complement surgical repair: Caries science has established principles for the prevention and suppression of caries through pharmaco-behavioral management focused on dietary control and regular use of age- and risk-appropriate fluoride products. Caries management demonstrations, as called for in CHIPRA and the Affordable Care Act, are needed to encourage science- and technology-transfer from laboratory to clinical settings. Only through effective disease reductions that markedly impact the Medicaid child population’s disease burden of preventable tooth decay can better oral health at lower cost be achieved.

ACKNOWLEDGMENTS

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REFERENCES


2 Data source is the annual “Medicaid 416” reporting system that details state-specific numbers of enrolled children and numbers that receive dental visits of various types (e.g. any, preventive, reparative) for children enrolled at any point in time during the year. The reliability of Medicaid 416 reports has been challenged by GAO and others because of missing data and inaccurate reporting. These reports generally underestimate actual utilization. Nonetheless, this brief relies on Medicaid 416 filings as the best and only available annual data source on dental utilization and notes that the 416 findings comport well with the CMS analysts’ more definitive findings for 2007 and with findings from the 2007 Medical Expenditure Panel Survey (Utilization rates reported by these sources are 33% by the CMS analysts, 35% by 416 measures, and 36% by MEPS).

3 Medical Panel Expenditure Data obtained from the NIDCR/CDC Dental, Oral, and Craniofacial Data Resource Center at http://drc.hhs.gov/


5 American Dental Association Surveys of Dental Education

6 American Dental Association Survey of Dental Practice, Pediatric Dentists


9 American Dental Associations Surveys of Dental Practice

10 AAPD Statement for the Record to the Senate Subcommittee on Primary Care and Aging, February 29, 2012 available at http://www.aapd.org/assets/1/7/4757.pdf


16 Edelstein op cit


19 Beazoglou et al, op cit

The Children’s Dental Health Project (CDHP) is a national non-profit organization that creates and advances innovative policy solutions and programs to achieve oral health for all children so that they can reach their full potentials. CDHP partners broadly with professionals, policy makers, and advocates to forge and promote research-driven solutions that support prevention and ensure equity in oral health for all children.