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Oral Health Checkup:
Progress in Tough Fiscal Times?

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OVERVIEW — *Almost ten years after the surgeon general's report designating dental disease as the "silent epidemic," the nation continues to struggle with adequate access to and utilization of dental services. This is particularly true for low-income individuals, who experience more than twice the amount of untreated dental disease as their higher-income peers. This issue brief reviews sources of dental coverage for low-income children and adults and the challenges these programs face. It highlights some examples of state Medicaid initiatives to improve access and utilization for children and the progress of these initiatives. Finally, it examines the potential effects of the economy on dental coverage for low-income populations.*

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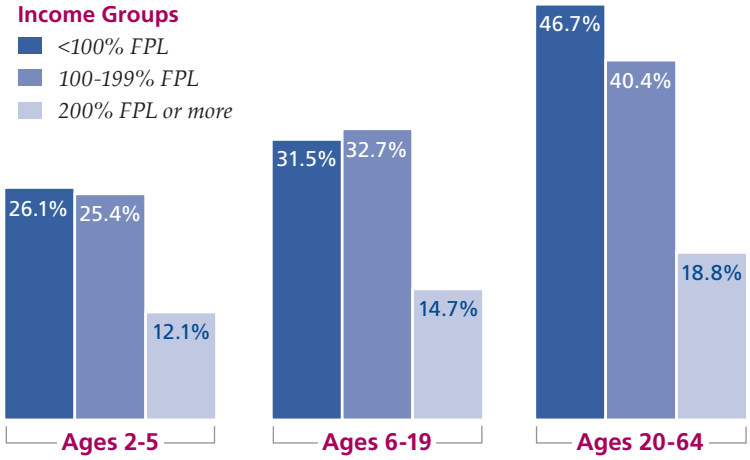
Lack of access to dental care among low-income populations in the United States has been a serious concern for many years. In 2007, the death of a 12-year-old Maryland boy from a brain infection that was caused by dental disease shined a spotlight on the rare but tragic consequences that can result from poor oral health. More recently, in August 2009, thousands lined up during the week that Remote Area Medical (RAM), an organization that usually offers its volunteer medical services in third-world countries and remote rural areas, offered free health care in Orange County, California. In the first three days alone, RAM provided 872 dental cleanings, filled 1,640 cavities, and pulled 706 teeth.[1] Similar events in Virginia and around the country have also drawn large crowds, often turning away hundreds because of the lack of capacity to serve everyone in need.

Nationwide, untreated tooth decay affects 19.5 percent of children ages 2 to 5 and almost 23 percent of children ages 6 to 19. However, untreated tooth decay is more than twice as prevalent among low-income children (those in families with incomes below 200 percent of the federal poverty level, or FPL) than among children with family incomes above 200 percent of the FPL (Figure 1, next page). Over 31 percent of low-income children ages 6 to 19 have untreated dental caries, as compared to about 15 percent of higher-income children. This disparity also is seen in the preschool age group, where approximately 26 percent of low-income children have untreated dental caries, as compared to 12 percent of higher-income children. The disparity in oral health between income groups is even more startling for adults. About 47 percent of adults ages 20 to 64 whose incomes are below the poverty level have untreated dental caries, as compared to 19 percent of adults with incomes above 200 percent of the FPL.[2] As a result, many children and adults suffer pain and experience difficulty eating, sleeping, speaking, learning, and attending school or work.[3]

A number of entities, including state Medicaid and CHIP programs, the American Dental Association (ADA), private foundations, and safety net programs, have attempted in recent years to improve

access to dental services, particularly for low-income children. Although these efforts have shown some success, dental disease still remains the most common illness among children and affects more than 40 percent of low-income adults.

FIGURE 1
Prevalence of Untreated Dental Caries, by Age and Income



Source: Centers for Disease Control and Prevention, "National Health and Nutrition Examination Survey." Data are for the period 2001 through 2004.

DENTAL COVERAGE FOR LOW-INCOME POPULATIONS

States are required to cover dental services for low-income children in Medicaid under the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit.[4] Dental services provided under EPSDT must include relief of pain and infections, restoration of teeth, and maintenance of dental health. States have flexibility to determine the frequency of dental examinations; however, each state must develop a periodicity schedule, in consultation with recognized dental organizations, that identifies when dental examinations should occur. A direct referral to a dentist is required when a child reaches an age specified in the periodicity schedule (usually between ages one and three). Referrals may also occur at other times, when medically necessary.

Medicaid coverage of dental services for parents of Medicaid-eligible children is optional, that is, states may choose whether or not to cover dental services for this group. (Low-income, childless adults generally are not eligible for Medicaid, unless they are pregnant, disabled, or elderly.) Twenty-two states provide no dental coverage for adults or limit that coverage to emergency or trauma services only.[5] Many other states place limits on the type and amount of dental services that are covered. For example, services may be limited to one examination and cleaning per year, or a cap may be placed on the dollar amount of services that will be covered in a given year. It is also important to recognize that most states set income limits for Medicaid eligibility at a much lower level for adults than for children.[6] This means that low-income adults are much less likely to have dental coverage than children of any income level or higher-income adults. Recent studies have found that 59 percent of nonelderly adults with incomes under 200 percent of the FPL have no dental coverage, as compared to 36 percent of higher-income adults, while 20 percent of all children lack coverage.[7]

Twenty-two states provide no dental coverage for adults or limit that coverage to emergency or trauma services only.

The Children's Health Insurance Program (CHIP) also provides dental coverage for children in families that have incomes too high to qualify for Medicaid and lack private insurance. As originally enacted, coverage of dental services in separate (non-Medicaid) CHIP programs was optional; however, all separate CHIP programs had chosen to cover dental services by 2008, and the Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009 now requires dental coverage that meets (at least) benchmark standards.[8] CHIPRA also provides states with an option to provide a supplemental dental benefit to low-income children enrolled in group health plans that do not cover dental services.

Some low-income individuals receive dental services through safety net programs, primarily community health centers (CHCs), which provide primary health care services to medically underserved communities and vulnerable populations. Over 38 percent of the populations served by CHCs are uninsured and another 35 percent have Medicaid coverage. More than 1,000 CHCs operate 6,000 service delivery sites, and about two-thirds of those sites provide dental services. In 2008, 3.1 million people received dental services from CHCs.[9]

CHALLENGES TO PROVISION OF ORAL HEALTH SERVICES

Adults with Medicaid are much less likely to have seen a dental professional than those with private coverage. According to the Centers for Disease Control and Prevention, 30 percent of adults under age 65 who are enrolled in Medicaid have seen a dental professional within the past six months, compared to 51 percent with private coverage.[10] Children fared better than adults on similar measures, but a gap still exists between those with Medicaid and those with private coverage: about 57 percent of children with Medicaid or other public insurance had seen a dental professional within the last six months, compared to 66.4 percent with private insurance.[11] Key challenges consistently identified as contributing to a lack of access to and utilization of dental services for low-income children and adults are low provider participation rates in Medicaid and patient noncompliance.[12]

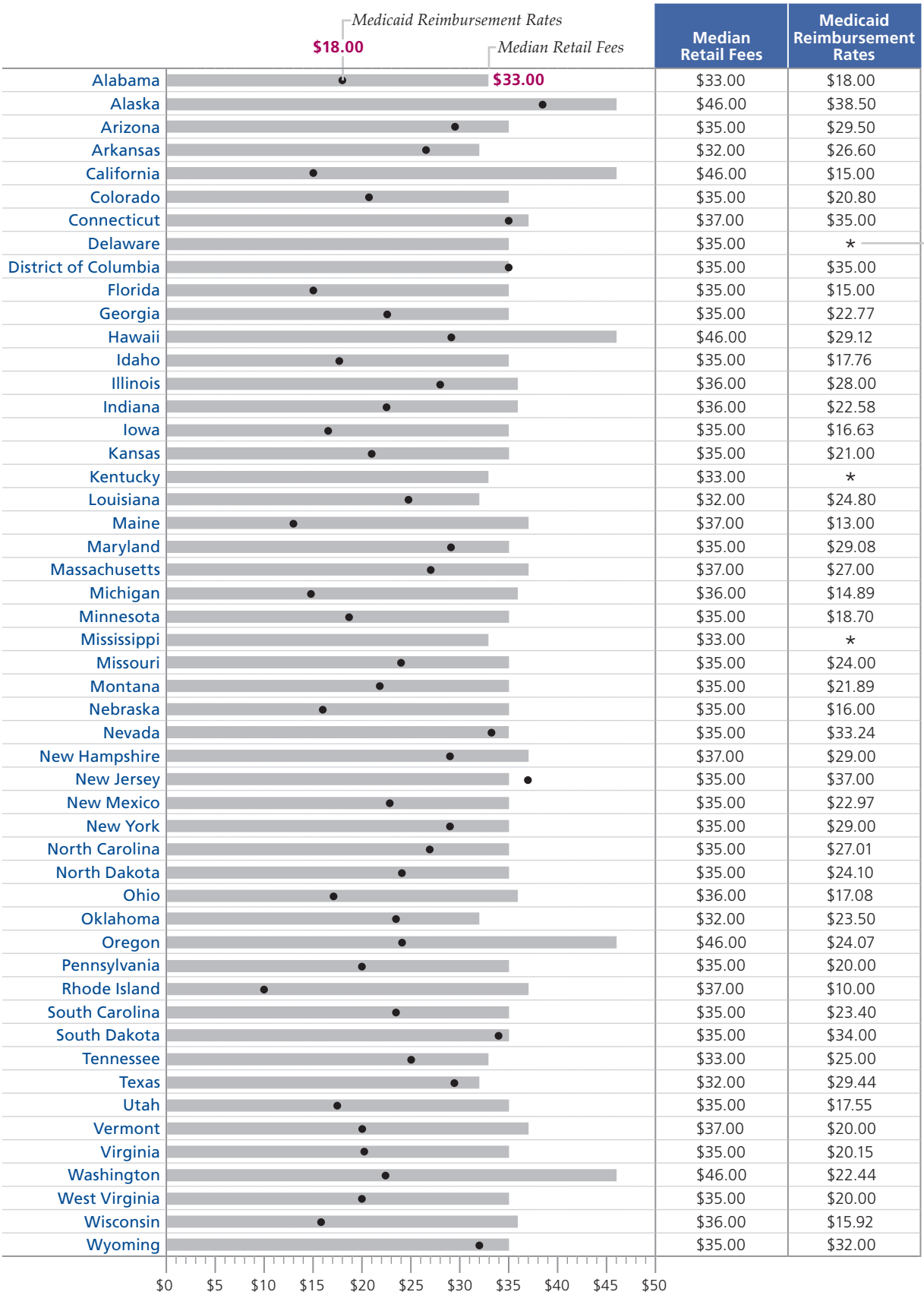
Provider Participation in Medicaid

Low reimbursement rates and burdensome administrative requirements are the primary reasons given by dentists for not participating in Medicaid. They argue that high levels of debt from dental school education and high overhead costs of private dental practice make it difficult to accept low Medicaid or CHIP reimbursement rates. (See Figure 2, next page for a comparison of Medicaid reimbursement rates and retail fees for oral examinations.) Medicaid also uses different reimbursement forms and administrative processes than the private insurance with which most dentists are familiar. Together, these reimbursement and administrative challenges can affect provider participation in Medicaid. In California, for example, only 40 percent of the state's private dentists accept Medicaid reimbursement, and the vast majority of these are general practitioners rather than pediatric dentists or specialists.[13]

Patient Noncompliance

Dentists additionally point out that the Medicaid patient base is more difficult to work with than the commercial population. Missed appointments and poor compliance following treatment regimens are often cited as reasons for not accepting Medicaid patients or for accepting only a limited number. However, patient noncompliance

FIGURE 2: Median Retail Fees and Medicaid Reimbursement Rates for Children's Periodic Oral Evaluation, by State



	Median Retail Fees	Medicaid Reimbursement Rates
Alabama	$33.00	$18.00
Alaska	$46.00	$38.50
Arizona	$35.00	$29.50
Arkansas	$32.00	$26.60
California	$46.00	$15.00
Colorado	$35.00	$20.80
Connecticut	$37.00	$35.00
Delaware	$35.00	*
District of Columbia	$35.00	$35.00
Florida	$35.00	$15.00
Georgia	$35.00	$22.77
Hawaii	$46.00	$29.12
Idaho	$35.00	$17.76
Illinois	$36.00	$28.00
Indiana	$36.00	$22.58
Iowa	$35.00	$16.63
Kansas	$35.00	$21.00
Kentucky	$33.00	*
Louisiana	$32.00	$24.80
Maine	$37.00	$13.00
Maryland	$35.00	$29.08
Massachusetts	$37.00	$27.00
Michigan	$36.00	$14.89
Minnesota	$35.00	$18.70
Mississippi	$33.00	*
Missouri	$35.00	$24.00
Montana	$35.00	$21.89
Nebraska	$35.00	$16.00
Nevada	$35.00	$33.24
New Hampshire	$37.00	$29.00
New Jersey	$35.00	$37.00
New Mexico	$35.00	$22.97
New York	$35.00	$29.00
North Carolina	$35.00	$27.01
North Dakota	$35.00	$24.10
Ohio	$36.00	$17.08
Oklahoma	$32.00	$23.50
Oregon	$46.00	$24.07
Pennsylvania	$35.00	$20.00
Rhode Island	$37.00	$10.00
South Carolina	$35.00	$23.40
South Dakota	$35.00	$34.00
Tennessee	$33.00	$25.00
Texas	$32.00	$29.44
Utah	$35.00	$17.55
Vermont	$37.00	$20.00
Virginia	$35.00	$20.15
Washington	$46.00	$22.44
West Virginia	$35.00	$20.00
Wisconsin	$36.00	$15.92
Wyoming	$35.00	$32.00

* *No data recorded*

Sources: American Dental Association, State Innovations to Improve Access to Oral Health, A Compendium Update (2008); available at www.ada.org/prof/advocacy/medicaid/medicaid-surveys.asp. *American Dental Association, Survey of Dental Fees (2007).*

among the low-income population is much more complex than simple avoidance. Low-income individuals may have difficulty getting time off from work or finding transportation or child care in order to keep dental appointments. Lack of knowledge about the importance of oral health care, especially for very young children, also contributes to low utilization, because families may think that dental care can be delayed until the child is older or permanent teeth have erupted. However, the American Academy of Pediatric Dentistry (AAPD) recommends that a child's first visit to the dentist occur when the first tooth erupts, and no later than 12 months of age, in order to establish a preventive oral health program; the American Academy of Pediatricians recommends that every child should have a dental home established by one year of age.

STATE INITIATIVES

States have been taking multipronged approaches to address the challenges of oral health access and utilization among low-income families. Critical to these strategies is partnering with a variety of other entities, such as foundations, the ADA, the AAPD, dental schools, dental management organizations, and primary care providers. Three areas recent initiatives have focused on are increasing Medicaid provider payment rates and simplifying administration to attract more participating dentists, expanding the pool of providers who deliver oral health services, and enhancing outreach and education for consumers. Several states using these approaches, sometimes in combination, have shown gains in access and utilization for low-income children. Examples of a few initiatives from states that are considered leaders in improving access and utilization for low-income children are described below.

- **Smile Alabama,** which began in 2000, uses a combination of increased payment rates, simplified administration, and consumer outreach to improve access to dental services for children under age 21. Under Smile Alabama, Medicaid reimbursement rates were raised to 100 percent of the Blue Cross/Blue Shield dental fee schedule. A partnership involving Alabama's fiscal agent, state officials, and the state dental association worked together to simplify and improve provider understanding of administrative procedures such as billing and preauthorization. The state also made a large investment, using private foundation funding for outreach activities. Informational outreach materials for families explain how to

care for babies' teeth, and a patient navigator contacts Medicaid patients to remind them of upcoming appointments and help with transportation or child-care problems. A recent report that calculated the effects of the Smile Alabama reforms found that the number of enrolled providers rose from 441 in 2000 to 778 in 2007, an increase of 76 percent.[14]

- **Alaska's Dental Health Aide Therapist Initiative** expands the pool of dental providers by training Alaska Native dental health professionals to practice dental therapy with dentist supervision. Through collaboration between the Alaska Native Tribal Health Consortium and the Physician Assistant Training Program at the University of Washington School of Medicine, each dental therapist completes a two-year program and is assigned to a dentist who oversees the dental therapist, sometimes via an established telemedicine/telehealth network. The focus of the program is on prevention, pain and infection relief, and basic restorative services. This unique program was designed in response to concerns over the extent and severity of oral diseases and the challenge of the remote geographic distribution of the underserved populations.[15] The first class graduated in 2008 and was certified to practice dental therapy in 2009.[16] Alaska is the only state using dental therapists and permitted by Congress to provide publicly funded reimbursement for their services.[17]
- **Michigan's Healthy Kids Dental** (HKD) program contracts with a private, managed care dental provider (Delta Dental) to provide services to Medicaid-eligible children in nonurban areas of the state. (Children in urban areas remain in fee-for-service Medicaid for dental services.) Approximately 86 percent of practicing dentists in Michigan participate with Delta Dental; these dentists cannot refuse to treat Medicaid beneficiaries, thus expanding the available pool of providers.[18] Increased reimbursement and simplified administration are also incorporated into the design of HKD. Providers in the Delta Dental network are reimbursed on a fixed fee schedule that is less than the "usual and customary" rates charged by dental providers but higher than the Medicaid fee schedule. The same administrative processes (for example, for billing) are used for the plan's commercial and Medicaid populations, which simplifies administration for the providers. Between 2000, when HKD was initiated, and 2005, the number of dental providers participating in Medicaid in Michigan rose from 769 to 1,926, an increase of more than 150 percent.[19] In addition, travel distance to a dentist in the HKD program has been cut in half.[20] The program now covers about 280,000 children in 61 of Michigan's 83 counties, and the state legislature last year voted to expand it statewide.[21]

- **New Jersey Smiles** is a Medicaid quality collaborative that involves the state Medicaid program, five Medicaid managed care health plans, Early Head Start/Head Start sites, and the University of Medicine and Dentistry of New Jersey. The regional collaborative began in fall 2007 and works directly with pediatric primary care providers and dentists in six urban areas in New Jersey to improve the integration of medical and oral health care and ultimately increase the number of children receiving EPSDT dental benefits. New Jersey Medicaid Health Plan Employer Data and Information Set (HEDIS) rates for 2006 showed only 43 percent of children ages four through six visited the dentist annually. Two of the New Jersey Smiles sites include direct coordination with Early Head Start/Head Start (EHS/HS) centers to establish a dental home for children from birth to age five.

  The five participating Medicaid managed care health plans work together to train high-volume primary care providers to care for young children and provide systematic oral health risk assessment, dental referrals, and parental anticipatory guidance; create the NJ Dental Corps, a cadre of safety net dentists, to provide dental homes and continuous preventive services for children in the six cities; and create a dental home for EHS/HS children with support from health plan care managers, EHS/HS staff and families, and the NJ Dental Corp. In addition, New Jersey's Medicaid agency is revising the dental periodicity schedule under EPSDT to focus on young children. The agency also is partnering directly with the state EHS/HS agency to implement the dental home pilot.

- **North Carolina's Into the Mouth of Babes** (IMB) and **Alabama's 1st Look** expand the pool of providers through the use of primary care providers to address oral health needs. These early prevention programs train primary care physicians to identify signs of oral disease, apply fluoride varnish, provide oral health education for families, and refer children to dentists when necessary. Before IMB's implementation, approximately one-third of counties in North Carolina did not have any available oral health services. There are now more than 425 participating primary care sites located throughout all the counties of the state.[22] IMB served more than 57,000 children in 2007.[23] An analysis by the University of North Carolina School of Public Health found that receiving four or more of the oral preventive procedures before age three reduced cavities in children by 40 percent.[24] Approximately 40 percent of children received IMB services as part of their well-child visits in 2008.

- **South Carolina** also uses a combination of simplified administration and increased reimbursement to increase access to oral health services. The state began working as far back as 1998 to streamline claims forms and reduce pre-authorizations in an effort to attract more dentists to its Medicaid program. Benefits are available to children up to age 21 and to adults in the mental retardation and developmental disabilities waiver program; benefits for other adults are limited to emergency services. The Medicaid agency worked closely with the state dental association to reach out to dentists and increased payment rates to the 75th percentile of commercial rates. A paper examining the effect of improved reimbursement rates reported that, by 2006, Doral Dental in South Carolina had enrolled 1,197, or 37 percent, of South Carolina's licensed dentists, an increase of 93 percent over the number participating in 2000.[25]
- The **Washington State Access to Baby and Child Dentistry** (ABCD) program focuses on improving access to oral health care for children from birth to age five through primary care physicians, outreach to families, and increased reimbursement rates for dentists. First established in 1995 as a pilot, the program has evolved over the years and now operates in 30 of the state's 39 counties.[26] A key feature of the program is collaboration between a wide variety of entities, including the state Medicaid agency, local health departments, the Washington Academy of Physicians, the Washington State Medical Association, and the Washington Dental Service Foundation—a nonprofit organization that has invested $1.6 million since 2001 to engage primary care providers in oral health.[27]

  The ABCD program has developed and made available a training curriculum on oral health screening, fluoride varnish application, and referral for primary care providers; physicians are reimbursed for providing these services. The University of Washington both trains dentists to work with young children and provides elective courses on oral health for medical students. Local health departments are charged with enrolling children in the ABCD program and linking them to trained dentists. Case managers work with families on the importance of appointments. The state also raised payment rates for certain dental procedures to the 75th percentile of the usual and customary rates.[28]

  Since 1995, the ABCD program has increased the percentage of young Medicaid children who receive dental care from 21 percent (40,000 children) to 38.7 percent (107,000 children).[29] Despite these efforts, the Washington State Smile Survey in 2005 found that the incidence of dental decay among low-income children ages three

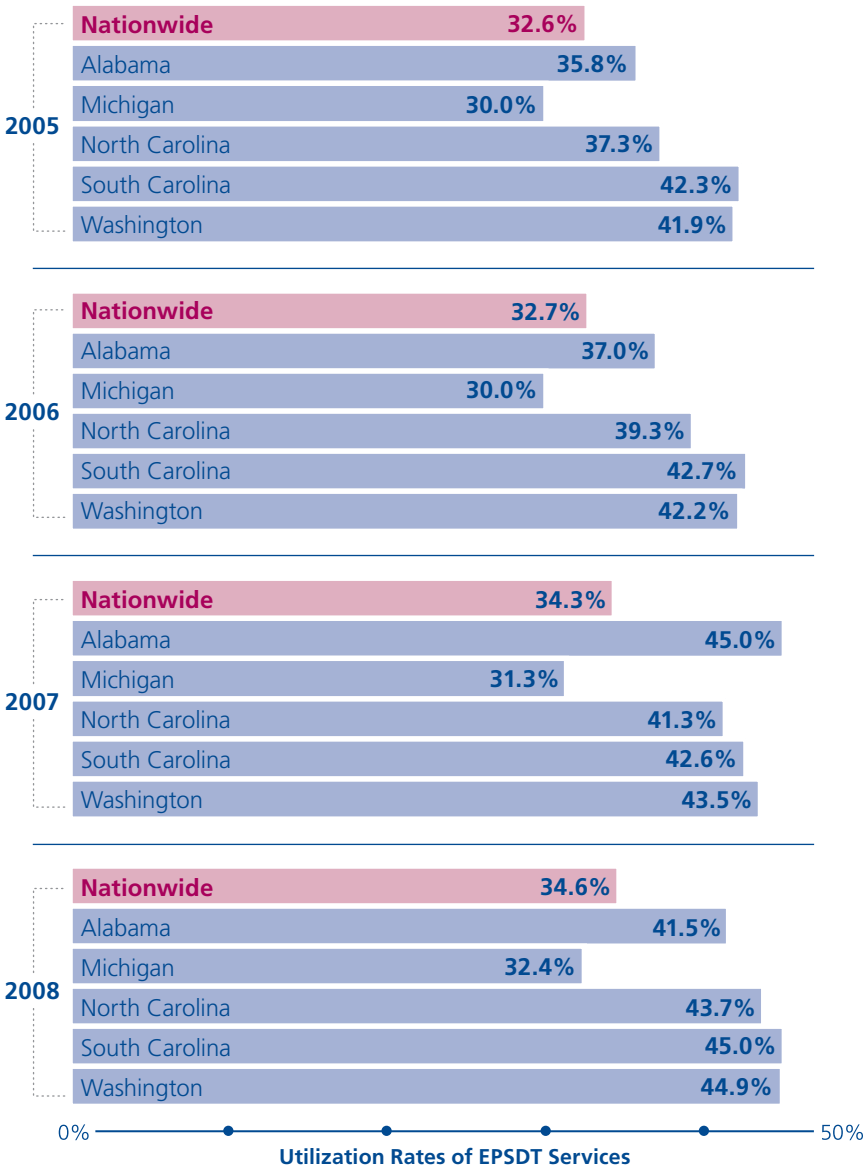
to five had increased from 41.5 percent in 2000 to 45 percent in 2005.[30] However, the rate of untreated dental decay among all children decreased from 26.7 percent to 25 percent over the same time period. It has been estimated that about 40 percent of the state's dentists participate in the ABCD program; however, this number may be declining because the state has not enacted another rate increase since 1995.[31]

IMPROVING RATES OF DENTAL UTILIZATION

These and other state initiatives have made slow but steady improvement in Medicaid dental utilization rates for children. The main source of data on children's utilization of dental services in Medicaid is federally required reports on EPSDT services, which permit comparisons across states and over time. States report information to the Centers for Medicare & Medicaid Services (CMS) annually on the number of children who are eligible for EPSDT and the number who used dental services within the year. The EPSDT data for five of the states highlighted above show that the percentage of children using dental services improved from 2005 to 2008 (Figure 3, next page). The largest gain was in North Carolina, where utilization increased by more than 6 percentage points. In 2008, Alabama, North Carolina, South Carolina, and Washington had dental utilization rates ranging from 41.5 percent (Alabama) to 45 percent (South Carolina), well above the national average of 34.6 percent.

Some analysts argue that a better way to measure dental utilization is by looking only at children who were enrolled in Medicaid for the full year, because there are more opportunities to influence the behavior of families whose children who are enrolled longer. For example, an analysis through the end of 2007 in Michigan shows that, for children who are enrolled for 12 continuous months, the proportion with at least one dental visit has increased in each successive year of the program, rising from 50 percent in 2001 to over 56 percent in 2007.[32] In contrast, the EPSDT data for all Medicaid-eligible children in Michigan (which includes those enrolled for only part of the year and those in fee-for-service) show the proportion of children receiving a dental service as considerably lower, only slightly more than 31 percent in 2007. (See text box, page 13, for a discussion of EPSDT data.)

FIGURE 3 | **Utilization Rates of EPSDT Services, Select States and Nationwide**



Source: Centers for Medicare & Medicaid Services (CMS), Annual EPSDT Participation Report Form CMS-416, state and national data; available at www.cms.hhs.gov/MedicaidEarlyPeriodicScrn/03_StateAgencyResponsibilities.asp.

FISCAL IMPACTS ON DENTAL SERVICES

Initiatives to improve children's access to dental services are becoming more prevalent. A recent national study found that 34 state Medicaid programs now reimburse primary care physicians for preventive oral health care for children.[33] In addition, almost all states have taken other steps to improve access for this population, such as examining claims and utilization data to monitor the provision of dental services, establishing access standards for managed care organizations, simplifying claims processing, increasing reimbursement rates, recruiting providers, and educating beneficiaries.[34] Despite these efforts, state initiatives continue to be hampered by many of the same long-standing barriers, including low participation by providers and beneficiaries; lack of funding—for example, to increase provider payment rates—is cited most frequently (by 44 states) as standing in the way of improved access to dental services.

The federal EPSDT requirement largely protects Medicaid-enrolled children from benefit cuts during times of state budget shortfalls. However, because they are optional, dental benefits for adults have no such protection and are vulnerable to Medicaid budget cuts. Furthermore, other state cost-cutting actions, such as reducing provider payment rates, often have a negative effect on access. For example, one study estimated that provider payment rates would need to cover at least 60 percent to 65 percent of dentists' usual charges to increase provider participation and patient utilization.[35] It is common for Medicaid reimbursement rates to be only about one-third to one-half of dentists' usual and customary rates.

As mentioned earlier, 22 states currently offer either no dental benefits for Medicaid adults or limit those benefits to emergency services. However, despite the poor economic climate, only two states

About EPSDT Data

CMS uses data from the CMS-416 form to monitor the provision of EPSDT services in state Medicaid programs. It is the only source of uniform data across all states for these services. However, the Government Accountability Office (GAO) has raised concerns about the sufficiency of the data for overseeing the provision of dental and other required EPSDT services. Problems cited by the GAO include challenges getting complete and accurate data, particularly for children in managed care settings, and inconsistencies in how states report the data. Although reporting has improved over time, GAO also found the form's usefulness for federal oversight purposes limited by the type of data requested. For example, it is not possible to identify rates of dental services delivered to children in managed care separately from rates of services provided under fee-for-service. The data also do not show whether children have received the recommended number of dental visits, nor do they capture factors such as the ability of beneficiaries to find dentists to treat them. CMS is planning revisions to the CMS-416 form that will be put into use for reports beginning in 2011. The revisions are designed to more accurately capture dental information and to incorporate new CHIPRA reporting requirements.

Source: James Cosgrove, Government Accountability Office, "Concerns Remain about the Sufficiency of Data for Oversight of Children's Dental Service," testimony before the Subcommittee on Domestic Policy, Committee on Oversight and Government Reform, GAO-07-826T, May 2, 2007; available at www.gao.gov/new.items/d07826t.pdf.

(Arizona and Nebraska) eliminated or reduced dental benefits for adults in 2009, while three others (Arkansas, Kansas, and Ohio) restored or expanded those benefits.[36] In fact, the general trend in states over the last few years has been to modestly expand adult dental benefits. In 2007, seven states restored or expanded adult dental benefits, while four states reduced or eliminated them; in 2008, four states added adult dental benefits, while none reduced them. However, this trend could easily reverse if unfavorable economic conditions continue and states are forced to make deeper cuts. Both California and Michigan have eliminated adult dental benefits in state fiscal year 2010, which began July 1, 2009. In Michigan, this cut has already had dire consequences for one woman with disabilities who died after dental coverage was eliminated and Medicaid would no longer pay for the hospitalization required to remove her infected teeth.[37] Further, Medicaid directors acknowledge continuing access problems for Medicaid beneficiaries, with 39 states reporting some or significant problems accessing dental care in 2008.

CONCLUSION

State initiatives for low-income children enrolled in public programs have shown that inroads can be made in improving access to and utilization of oral health services. Several factors have contributed to the success of these initiatives, including strong coalitions, training for providers, sufficient financing, and patient education. A strong coalition of groups, including state Medicaid agencies, dental and medical associations, safety net providers, and foundations have made significant changes in the willingness of providers to participate in Medicaid and in the availability of funding. Training of dental providers to care for very young children and of primary care physicians to deliver preventive oral health services and make referrals when needed has increased the number of children receiving oral health services. Improved reimbursement rates and streamlined administrative processes have helped to expand the pool of providers. Patient education and continuous enrollment of children have also contributed to better utilization of services. Still, the country has far to go to stem the epidemic of dental disease. Low-income children and adults continue to experience far more tooth decay and poorer access to services than their higher-income peers. While health reform has the potential to make further inroads into dental

access and utilization, fiscal realities are likely to continue to pose barriers for many individuals in need.

ENDNOTES

1. Courtney Perkes, "Long Lines at Nation's Biggest Free Health Clinic," *Orange County Register,* August 15, 2009; available at www.ocregister.com/articles/chavez-clinic-first-2530108-palacios-people#.

2. National Center for Health Statistics (NCHS), *Health, United States, 2008 with Chartbook,* "Table 77: Untreated dental caries, by selected characteristics: United States, 1971–1974, 1988–1994, and 2001–2004," March 2009; available at www.cdc.gov/nchs/data/hus/hus08.pdf#077.

3. For additional information, see Jennifer Ryan, "Improving Oral Health: Promise and Prospects," National Health Policy Forum, Background Paper, June 13, 2003; available at www.nhpf.org/library/details.cfm/2417.

4. Section 1905(r) of the Social Security Act requires state Medicaid programs to cover Early and Periodic Screening, Diagnostic and Treatment (EPSDT) services for children under age 21. The act also requires states to provide any service that may be covered under Medicaid when necessary to treat a defect, physical or mental illness, or condition identified by the screening process for eligible children, regardless of whether the service or item is otherwise included in the state's Medicaid plan.

5. Kaiser Family Foundation, "Benefits by Service: Dental Services (October 2008)," Medicaid Benefits: Online Database; available at http://medicaidbenefits.kff.org/service.jsp?gr=off&nt=on&so=0&tg=0&yr=4&cat=6&sv=6.

6. The average Medicaid income eligibility limit for adults across all states is 68 percent of the FPL, or approximately $14,994 per year for a family of four in 2009. Kaiser Commission on Medicaid and the Uninsured, "Low-Income Adults Under Age 65—Many are Poor, Sick, and Uninsured," Policy Brief, June 2009; available at www.kff.org/healthreform/upload/7914.pdf.

7. Jennifer Haley, Genevieve Kenney, and Jennifer Pelletier, "Access to Affordable Dental Care: Gaps for Low-Income Adults," Kaiser Commission on Medicaid and the Uninsured, July 2008, available at www.kff.org/medicaid/upload/7798.pdf; Julia Paradise, "*Oral Health Coverage and Care for Low-Income Children: The Role of Medicaid and CHIP,*" Kaiser Commission on Medicaid and the Uninsured, April 2009, p. 1, available at www.kff.org/medicaid/upload/7681-03.pdf.

8. Dental benchmark plans are defined as the federal employee children's dental coverage, state employee dependent dental coverage, or the coverage offered through the state's largest commercial dental plan(s).

9. Health Resources and Services Administration, "Primary Health Care: The Health Center Program"; available at http://bphc.hrsa.gov.

10. John R. Pleis, Jacqueline W. Lucas, and Brian W. Ward, "Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2008," NCHS, *Vital Health Statistics,* series 10, no. 242 (August 2009); available at www.cdc.gov/nchs/data/series/sr_10/sr10_242.pdf.

11. Barbara Bloom, Robin A. Cohen, and Gulnur Freeman, "Summary Health Statistics for U.S. Children: National Health Interview Survey, 2008," NCHS, *Vital Health Statistics*, series 10, no. 244 (August 2009), available at www.cdc.gov/nchs/data/series/sr_10/sr10_244.pdf.

12. For additional information on some of the major barriers to dental care see Ryan, "Improving Oral Health."

13. California HealthCare Foundation, "Denti-Cal Facts and Figures: A Look at California's Medicaid Dental Program," May 2007; available at www.chcf.org/topics/view.cfm?itemID=131431.

14. Alison Borchgrevink, Andrew Snyder, and Shelly Gehshan, "The Effects of Medicaid Reimbursement Rates on Access to Dental Care," National Academy of State Health Policy (NASHP), March 2008, p. vii; available at www.nashp.org/Files/CHCF_dental_rates.pdf.

15. The Indian Health Service has found that American Indian/Alaska Native children ages two to five had three times the untreated dental decay of two- to five-year-olds included in the third National Health and Nutrition Examination Survey (68 percent versus 19 percent). Indian Health Service, *The 1999 Oral Health Survey of American Indian and Alaska Native Dental Patients: Findings, Regional Differences and National Comparisons, 1999;* available at www.ihs.gov/MedicalPrograms/Dental/docs/survey.pdf.

16. The Alaska Native Tribal Health Consortium had previously sent students to a two-year dental therapy program in New Zealand.

17. Congress provided authority for this program exclusively for Alaska in the Indian Health Care Improvement Act of 1976.

18. Christine Farrell, Michigan Department of Community Health, "Insuring Bright Futures: Improving Access to Dental Care and Providing a Healthy Start for Children," testimony before the U.S. House Committee on Energy and Commerce, Subcommittee on Health, March 27, 2007; available at http://energycommerce.house.gov/images/stories/Documents/Hearings/PDF/110-he-hrg.032707.Farrell-testimony.pdf.

19. Borchgrevink, Snyder, and Gehshan, "Effects of Medicaid Reimbursement Rates."

20. Stephen A. Eklund, James L. Pittman, and Sarah J. Clark, "Michigan Medicaid's Healthy Kids Dental Program," *Journal of the American Dental Association*, 134 (November 2003): pp. 1509–1515.

21. Delta Dental, "House Panel Votes to Expand Healthy Kids Dental," news release, March 26, 2009; available at www.deltadentalmi.com/PublicWeb/appmanager/portal/desktop;jsessionid_corp=kFhQKQQYyptCqfJpXqF1C4hVdZyfqcD1xbfDxn0MJTJcNszv0Rh1!1593030389!NONE?_nfpb=true&portlet_NewsReleases_1_actionOverride=%2Fportlets%2FepContentEditor%2FonExpand&_windowLabel=portlet_NewsReleases_1&portlet_NewsReleases_1year=2009&portlet_NewsReleases_1title=Current+News&portlet_NewsReleases_1path=%2FBEA+Repository%2FDeltaDental%2FNewsroom%2FNewsReleases%2Fnews_releases_03272009102723_4&_pageLabel=bDD_bNR_pNewsRel.

22. Rebecca King, "Into the Mouth of Babes: The North Carolina Experience," presentation at a Webinar, "Keeping Kids Healthy—Engaging Medical Providers in Children's Dental Health," sponsored by the Pew Center on the States and NASHP, September 24, 2009; available at http://nashp.org/sites/default/files/webinars/King_Dental_09.pdf.

23. Andrew Snyder, "Increasing Access to Dental Care in Medicaid: Targeted Programs for Four Populations," NASHP, March 2009; available at www.nashp.org/files/Dental_Reimbursements.pdf.

24. North Carolina Department of Health and Human Services, "North Carolina Public Health: Working for a Healthier and Safer North Carolina," annual report, October 2008.

25. Borchgrevink, Snyder, and Gehshan, "Effects of Medicaid Reimbursement Rates," p. 7.

26. Washington Dental Service Foundation, "ABCD: Increasing Dental Access and Treatment for Very Young Children"; available at www.deltadentalwa.com/Guest/Public/AboutUs/WDS%20Foundation/Strategic%20Focus%20and%20Programs/Access%20to%20Baby%20and%20Child%20Dentistry.aspx.

27. Diane Riter, Russell Maier, and David Grossman, "Delivering Preventive Oral Health Services in Pediatric Primary Care: A Case Study," *Health Affairs*, 27, no. 8 (November/December 2008); available at www.maineaap.org/documents/DentalReport.pdf.

28. Reimbursement at the 75th percentile means that the Medicaid reimbursement rates for these procedures are as high as or higher than the usual charges of 75 percent of dentists.

29. Washington Dental Service Foundation, "ABCD."

30. Washington State Department of Health, "Washington State Smile Survey," March 2006; available at www.doh.wa.gov/cfh/Oral_Health/Documents/Smilesurvey/fs2005ss.pdf.

31. Borchgrevink, Snyder, and Gehshan, "Effects of Medicaid Reimbursement Rates," p. 7.

32. Jed Jacobson and Stephen Eklund, "Michigan's Medicaid Healthy Kids Dental Program," American Academy of Pediatrics, undated; available at www.aap.org/oralhealth/summit/michigan-medicaid-healthy-kids-dental-program.pdf.

33. Chris Cantrell, "Engaging Primary Care Medical Providers in Children's Oral Health," *State Health Policy Briefing*, NASHP, September 2009; available at www.nashp.org/files/EngagingPrimaryCareMedicalProvidersCOH.pdf.

34. U.S. Government Accountability Office, *State and Federal Actions Have Been Taken to Improve Children's Access to Dental Services, But Gaps Remain*, GAO-09-723, September 30, 2009; available at www.gao.gov/new.items/d09723.pdf.

35. Borchgrevink, Snyder, and Gehshan, "Effects of Medicaid Reimbursement Rates," p. 7

36. Vernon Smith *et al.*, "Headed for a Crunch: An Update on Medicaid Spending, Coverage and Policy Heading into an Economic Downturn: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2008 and 2009," Kaiser Commission on Medicaid and the Uninsured, September 2008, available at www.kff.org/medicaid/upload/7815.pdf ; Vernon Smith *et al.*, "Low Medicaid Spending Growth Amid Rebounding State Revenues: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2006 and 2007," Kaiser Commission on Medicaid and the Uninsured, October 2006, available at www.kff.org/medicaid/upload/7569.pdf.

37. Health Department of Northwest Michigan, news release, October 14, 2009; available at www.nwhealth.org/News%20Releases/NR%20DCN%20091014%20First%20dental%20death%20in%20Michigan%20due%20to%20MA%20cuts.html.