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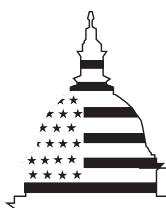
ORAL HEALTH

Factors Contributing to Low Use of Dental Services by Low-Income Populations



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Abbreviations

ADA	American Dental Association
EPSDT	Early and Periodic Screening, Diagnostic, and Treatment
HCFA	Health Care Financing Administration
HHS	Department of Health and Human Services
HRSA	Health Resources and Services Administration
IHS	Indian Health Service
NHSC	National Health Service Corps
SCHIP	State Children's Health Insurance Program

United States General Accounting Office
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Health, Education, and
Human Services Division

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September 11, 2000

The Honorable Jeff Bingaman
The Honorable Russell D. Feingold
United States Senate

The Honorable Thomas M. Barrett
The Honorable David R. Obey
House of Representatives

For many years, the federal government has taken steps to make dental care more available to low-income people. The primary vehicle has been Medicaid, a joint federal and state health financing program for more than 40 million people from low-income families and poor aged, blind, or disabled people. The State Children's Health Insurance Program (SCHIP) covers about 2 million additional low-income children who do not qualify for Medicaid. Still other programs support community and migrant health centers and other facilities and medical personnel in locations where low-income people live. These programs, although relatively small compared with Medicaid, extend health care services to many additional low-income and vulnerable populations.

Despite such efforts, the use of dental services remains low for many. In April 2000, responding in part to a request from you to study this issue, we reported that Medicaid and SCHIP beneficiaries and other low-income people have low rates of dental visits and high rates of dental disease relative to the rest of the population.[1] To help determine why, this report addresses (1) factors that explain low dental service use by Medicaid and SCHIP beneficiaries and (2) the role of other federal safety-net programs in improving access to dental care.

[1] *Oral Health: Dental Disease Is a Chronic Problem Among Low-Income Populations* (GAO/HEHS-00-72, Apr. 12, 2000).

To address these issues, we surveyed Medicaid and SCHIP programs in all 50 states and the District of Columbia.[2] We analyzed data on dentists' participation rates in the programs, the use of dental services, and Medicaid fees that might help quantify access problems. We supplemented this information with reviews of the Surgeon General's report on oral health and other studies and interviews with persons knowledgeable about the issues, including health services researchers, dental association representatives, and federal, state, and local health officials.[3] Appendix I gives details on our methodology. We conducted our work from December 1999 to July 2000 in accordance with generally accepted government auditing standards.

Results in Brief

While several factors contribute to the low use of dental services among low-income persons who have coverage for dental services, the major one is finding dentists to treat them. Some low-income people live in areas where dental providers are generally in short supply, but many others live in areas where dental care for the rest of the population is readily available. Dentists generally cite low payment rates, administrative requirements, and patient issues such as frequently missed appointments as the reasons why they do not treat more Medicaid patients. Although many states have taken action to address these concerns, use remains low. Raising Medicaid payment rates for dental services—a step 40 states have taken recently—appears to result in a marginal increase in use but not consistently. As expected, states that paid higher rates relative to the average fees dentists charge were more likely to report increases in dental utilization. While 20 states use managed care to provide some dental services for Medicaid patients, state officials reported mixed results in terms of the extent to which this approach improves access. And although states have not yet evaluated the access to dental services under SCHIP, the majority of states have modeled their SCHIP dental services on their Medicaid programs and management and therefore expect to find similar utilization issues. The impression of some officials in states that have departed from Medicaid in designing their SCHIP dental programs, such as using private insurance plans that pay higher rates, is that there are fewer access problems.

[2]We include the District of Columbia as a state in the rest of this report.

[3]Department of Health and Human Services (HHS), National Institutes of Health, National Institute of Dental and Craniofacial Research, *Oral Health in America: A Report of the Surgeon General* (Rockville, Md.: 2000).

The four other major federal programs that target services or providers to underserved or special populations with poor dental health—the Health Center program, National Health Service Corps (NHSC), Indian Health Service (IHS) dental program, and IHS loan repayment program—currently have a limited effect on increasing the access to dental services that low-income and vulnerable populations have. The Health Center program supports community and migrant health centers in medically underserved areas, while the IHS loan repayment program provides incentives for health professionals, including dentists, to practice in sites serving American Indians and Alaska Natives. However, these programs are not able to meet the dental needs of their target populations. NHSC was able to fill only one of every three vacant dentist positions in underserved areas in fiscal year 1999.

Background

While the dental health of most Americans has improved significantly since the 1960s, low-income populations continue to have high levels of dental disease. Analysis of key dental health indicators—including untreated tooth decay, restricted activity days because of pain and discomfort from dental problems, and tooth loss—showed large disparities between low-income groups and their higher-income counterparts. Other populations, such as homeless people, some minorities, and some rural residents, face similar problems. Low-income children and adults experience higher levels of dental disease and use dental care less frequently than higher-income people do. For example, in 1996, 28 percent of lower-income people reported making a dental visit in the preceding year, compared with 56 percent of higher-income people.[4]

[4]Data are from the Agency for Healthcare Research and Quality and are based on analysis of the Medical Expenditure Panel Survey of 1996. Figures are for people with family incomes at or below 200 percent of the federal poverty level and people with family incomes above 400 percent of the federal poverty level. In 1996, the federal poverty level for a family of four was $16,036.

Recognizing the importance of good oral health, in 1990 the Department of Health and Human Services (HHS) established oral health goals as part of its departmentwide Healthy People 2000 objectives. These included goals to reduce the proportion of children with untreated cavities and to increase the proportion of people who visit a dentist each year. Interim assessments showed that progress toward these goals was mixed, with low-income children and adults furthest from reaching them. For example, while one HHS goal was to reduce the proportion of children aged 6 to 8 who have untreated cavities to no more than 20 percent, 47 percent of poor children had untreated cavities in 1994, the most recent year for which data are available.[5] In January 2000, HHS established new oral health goals as part of its Healthy People 2010 initiative (see app. II). In addition, IHS recognized the large unmet oral health needs of American Indians and Alaska Natives and established oral health goals as part of its fiscal year 2000 performance plan. In general, American Indian and Alaska Native populations have oral health disease rates that are greater than that of the general U.S. population. For example, American Indian and Alaska Native children aged 2 to 4 years old have five times the rate of dental decay that all children have.

The disparities in oral health were highlighted in a recent Surgeon General's report. The report discussed the higher levels of oral diseases affecting vulnerable populations such as poor children, elderly persons, and members of many racial and ethnic minority groups. Individuals with disabilities and individuals with complex health problems may face additional barriers to dental care. The Surgeon General reported that the reasons for disparities in oral health are complex and in some cases are exacerbated by the lack of community programs such as fluoridated water supplies and other factors. More than a third of the U.S. population (about 100 million people) is without community water fluoridation, which is recommended as a cost-effective method of preventing cavities in children and adults, regardless of their socioeconomic status.

HHS' Health Care Financing Administration (HCFA) administers two joint federal and state programs—Medicaid and SCHIP—that provide health care insurance, including coverage for dental care, for low-income people.

[5]Data are for children with family incomes below the federal poverty level. In comparison, the data showed that about 29 percent of all children aged 6 to 8 and 16 percent of higher-income children had untreated cavities.

- Medicaid. This health care financing program for low-income families and poor aged, blind, and disabled people covered about 1 in 5 children and 1 in 16 nonelderly adults in 1998. The states operate their Medicaid programs within broad federal requirements and can elect to cover a range of optional populations and services, thereby creating programs that differ substantially from state to state. Despite this variation, some services are mandated under federal law. For instance, under Medicaid's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) service, the states must provide dental screening, diagnostic, preventive, and treatment services for all enrolled children, even if the services are not normally covered by a state's Medicaid program.[6] Adult dental services, in contrast, are optional under Medicaid. As shown in our April 2000 report, about two-thirds of the states covered adult dental services to some extent under Medicaid as of January 2000.
- SCHIP. Authorized in 1997, this program expands health care coverage to children whose families have incomes that are low but not low enough to qualify for Medicaid. States can cover low-income children in families with incomes up to 200 percent of the federal poverty level.[7] To implement SCHIP, the states have three options: They can expand their existing Medicaid program, develop a separate SCHIP program, or do some combination of both. If a state elects a Medicaid expansion for its SCHIP program, it must offer the same comprehensive benefit package, including dental services, that is required under EPSDT; otherwise, coverage of dental services is not mandatory for children under SCHIP as it is in Medicaid. Nearly all the states have chosen to offer dental coverage under SCHIP. As of January 2000, SCHIP provided a variable but often substantial level of dental coverage to eligible low-income children in all but two states. Colorado and Delaware have implemented stand-alone programs that do not cover dental services.

[6]Section 1905(r)(3) of the Social Security Act defines EPSDT services as including dental services that are (1) provided at intervals that meet reasonable standards of dental practice, (2) provided at other intervals as medically necessary to determine the existence of a suspected illness or condition, and (3) include relief of pain and infections, restoration of teeth, and maintenance of dental health.

[7]Under Medicaid, the federal government's share of covered expenditures range from 50 to 77 percent in fiscal year 2000, depending on a state's average per capita income level. Under SCHIP, the states are eligible for an enhanced federal matching share of 65 to 84 percent. SCHIP allows states that cover Medicaid beneficiaries with incomes that already approach or exceed 200 percent of the federal poverty level to expand eligibility to up to 50 percentage points above their existing Medicaid eligibility standards.

Despite the availability of insurance coverage through Medicaid, the low use of dental services by Medicaid beneficiaries is perceived as a significant pediatric health problem in many states. The Surgeon General's report cited the National Access to Care Survey, which found that more Medicaid beneficiaries reported problems obtaining dental care than medical care. The survey found that about 12 percent of the Medicaid population wanted but did not obtain dental care in 1994, while only 8 percent reported unmet medical wants.

Another vulnerable group—many of whom are covered by Medicaid—that experiences a disproportionate level of dental disease is people with physical, mental, and developmental disabilities. Disabled individuals often have special needs that create additional barriers to obtaining dental care. For example, some disabled individuals require intravenous sedation or general anesthesia during dental treatment. Treatment for wheelchair-bound patients and blind or deaf patients also requires special accommodations. Many disabled individuals have moved from institutional to community settings, and caretakers often report greater difficulty finding community dentists to treat them. One study using data from the 1994–95 National Health Interview Survey on Disability found that about 1 in every 12 children with special health care needs was unable to get needed dental care.[8] In addition, the Surgeon General's report cited localized studies and other unpublished data as evidence of poorer oral hygiene and increased levels of periodontal and dental disease among disabled populations.

In addition to Medicaid and SCHIP, the federal government administers other health care programs providing dental services or providers for low-income and vulnerable populations. The four federal programs we reviewed include programs that directly provide dental services or arrange for them to be provided and programs that provide incentives for dental professionals to treat poor and other vulnerable populations. Two are directed at people living in areas with shortages of health care services and are administered by HHS' Health Resources and Services Administration (HRSA). Two are targeted toward American Indians and Alaska Natives and are administered by IHS (see table 1).

[8]P. W. Newacheck and others, "Access to Health Care for Children with Special Health Care Needs," *Pediatrics*, Vol. 105, No. 4 (Apr. 2000), pp. 760-66.

Table 1: Four Selected Federal Programs That Provide Dental Services or Providers to Vulnerable Populations

Program	Description
HRSA programs targeting areas with shortages of health care services	
Health Centers[a]	Grant support for more than 3,000 sites that provide primary health care services in medically underserved areas. In 1998, more than 85 percent of health center users had incomes at or below 200 percent of the federal poverty level. Health centers are required to directly provide or arrange for dental screening for children and preventive dental services. Other dental services are optional. In 1998, health centers reported providing dental services to 1.2 million of 8.6 million health center users.
National Health Service Corps (NHSC)	Offers scholarships and educational loan repayments for health care professionals, such as physicians, nurse practitioners, and dentists, who agree to serve for specific periods in communities that have a shortage of health professionals. NHSC providers must accept Medicare and Medicaid patients and offer a sliding fee scale based on the patient's ability to pay. In 1999, NHSC placed 83 new dentists in underserved areas through its loan repayment program. At the end of fiscal year 1999, NHSC had 299 dentists and 7 dental hygienists practicing in 41 states, the Pacific Basin, and Puerto Rico.
IHS programs targeting American Indians and Alaska Natives	
IHS facilities	IHS and tribally managed dental programs operate in 269 IHS facilities. Additional dental services are provided through contract care purchased by IHS or tribes. Of the 1.5 million people in the IHS service population, about 335,000 received dental services in IHS and tribal facilities and through contract health services in 1999.
IHS loan repayment	Offers educational loan repayments for health care professionals, including dentists and dental hygienists, who agree to practice at priority sites designated by IHS and provide services to American Indians and Alaska Natives. In 1999, 11 of 173 new IHS loan repayment awards went to dentists.

[a]Includes community and migrant health centers, health care for homeless persons, and primary care for residents of public housing. These were combined under the Health Centers Consolidation Act of 1996, Pub. L. No. 104-299, 110 Stat. 3626.

Factors Affecting the Low Use of Dental Care and State Efforts to Address Them

While several factors influence the access low-income groups have to dental care, the primary one is limited dentist participation in Medicaid. States have taken various steps to improve access to dental care among Medicaid populations, including raising payment rates, streamlining administrative processes, and conducting outreach activities to both dentists and beneficiaries. Despite these steps, most states—including those reporting improvements in dental access—reported that low utilization remains a problem. Dental managed care and SCHIP offer opportunities for greater access for Medicaid and other low-income populations in some states, but limited data currently preclude an evaluation of their effectiveness.

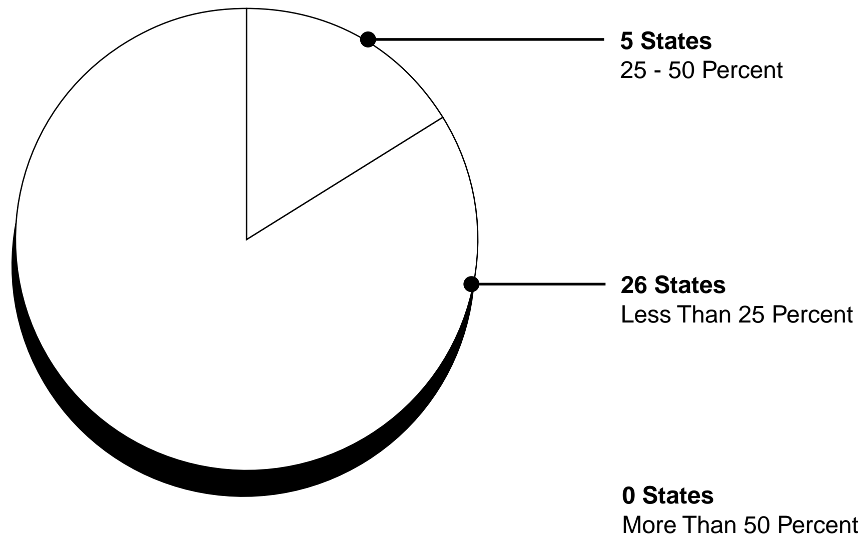
Low Rate of Dentist Participation in Medicaid

In the absence of HCFA or other data on dentist participation in state Medicaid programs, we surveyed Medicaid program officials in all 50 states and the District of Columbia. Of 39 states that provided information about dentists' participation in Medicaid, 23 reported that fewer than half of the states' dentists saw at least one Medicaid patient during 1999.[9] We also asked states for data on the number of dentists seeing at least 100 Medicaid patients in 1999.[10] Of the 31 states that could provide these data, none reported that more than half of their dentists saw 100 or more Medicaid patients in 1999, and most states reported that fewer than a fourth did so (see fig. 1).

[9]We collected data from state Medicaid agencies on the number of dentists treating Medicaid patients and calculated dentist participation rates from data from the American Dental Association (ADA) on the number of private practice dentists in each state. We asked for data for calendar year 1999, but some states could provide data only for fiscal year 1999. In those cases, we used the fiscal year data. See appendix I for details on our methodology.

[10]We used 100 patients as a measure of more substantial participation, because 100 patients represent roughly 10 percent of the patients a typical dentist sees in a year, about the same percentage that Medicaid patients represent in the general population. According to data from ADA's 1998 Survey of Dental Practice, dentists see, on average, an estimated 944 patients a year.

Figure 1: Percentage of Dentists Seeing at Least 100 Medicaid Patients in 31 States, 1999



Officials in some states reported that an overall shortage of dentists for the entire population in some areas makes it difficult to find dentists to treat Medicaid patients.[11] In other cases, however, there is an adequate supply of dentists, but few of them treat Medicaid patients. Dentists cite several reasons why they do not treat more Medicaid patients. These reasons generally fall into three categories: low Medicaid payment rates, administrative burden, and patient issues such as failing to keep scheduled appointments. Most state Medicaid programs have taken steps to address these problems, with mixed results.

[11]Although states point to an overall shortage of dentists, there is no agreed-upon dentist-to-population ratio for determining a minimum adequate supply of dentists.

Medicaid Payment Rates

Dentists cite as the primary reason for their not treating more Medicaid patients that payment rates are too low. To assess state Medicaid payment rates relative to the fees dentists charged, we compared 1999 state Medicaid payment rates with average regional fees dentists charged for 15 selected dental procedures. These procedures cover a broad spectrum of services, including preventive, diagnostic, restorative, endodontics (such as root canal), and surgical services.[12] For dentists, the fees they charge are fairly representative of the amounts they generally collect. According to a 1998 survey by the American Dental Association (ADA), dentists collect about 95 percent of the amount that they bill.

Our analysis showed that Medicaid payment rates are often well below dentists' normal fees. Only 13 states had Medicaid rates that exceeded two-thirds of the average regional fees dentists charged for most of the 15 procedures we examined, while four of these states—Delaware, Indiana, New Mexico, and South Carolina—paid more than 75 percent of the average regional fee for all procedures. All other states paid much lower fees for most of the procedures. For example, New Jersey paid 25 percent or less of the average regional fee charged for 12 of 14 covered procedures. See appendix III for additional information on state Medicaid fees for the procedures we examined.

Medicaid payment rates relative to the average regional fees also varied significantly within states for the different procedures. For example, Mississippi paid more than 150 percent of the average regional fee for periodic oral examinations while paying less than 40 percent of the regional average for root canals.

We also assessed the relationship of Medicaid fee increases to changes in access to dental care. Between January 1997 and January 2000, 40 states increased Medicaid payment rates for dental care at least once, while 9 states reported no rate increases.[13] The magnitude and frequency of rate

[12]We selected the 15 procedures in consultation with James Crall, Associate Dean of the University of Connecticut School of Dental Medicine, and other dental health researchers. All the procedure codes in our study are used to treat children and adolescents, and some procedure codes are used for adults as well. While using the average regional dental fee could be misleading if there are large state variations within a region, a comparison of the average regional fee with available fee data for six selected states indicates that it is, for the most part, a reasonable approximation for average state fees. See appendix I for additional information on our methodology.

[13]New York and Tennessee did not respond.

increases varied. For example, some states such as Iowa, Washington, and Wisconsin had frequent but small rate increases of 1 to 5 percent each year while others such as Maine, New Mexico, and North Carolina had one-time large increases of 40 to 50 percent. For the 40 states with rate increases, we asked Medicaid officials to assess their effect and to support their assessments with data on changes in dentist participation rates and dental utilization rates during the past 3 years. Of the 40 states with rate increases,

- 14 states reported increases in dentist participation or dental utilization,
- 15 states reported no increase in dentist participation or dental utilization, and
- 11 states indicated that either not enough time had elapsed or the state did not have reliable data on access changes to report an effect.

Most states that reported increases in dental utilization had only marginal increases, such as increases in dental utilization of less than 3 percentage points. For example, despite a 40 percent increase in dental fees in 1998, the dental utilization in Maine increased by only 2 percentage points in 1999. Further, some states reported increases in utilization, but their overall rates remained low. For example, Indiana's utilization increased by 6 percentage points from 1998 to 1999 following an increase in fees, yet its overall utilization rate after the increase was only 26 percent.

To determine whether the fee levels after the rate increases made a difference in a state's ability to improve access, we compared fee levels of states reporting improvement with those of the states reporting no improvement. We found that most of the states reporting improved utilization paid rates that were at least two-thirds of the average regional fees, while most of the states without improvement had lower payment rates (see table 2).

Table 2: Comparison of 29 States Reporting Increased Medicaid Payment Rates and the Effect on Dental Access

Procedures reimbursed at more than two-thirds of the average regional fee	States reporting improvements in access	States reporting no improvements in access
All 15 procedures[a]	6	0
Half or more but less than all	3	3
Fewer than half but more than none	4	11
None	1	1
Total	**14**	**15**

[a]Our analysis examined fees for 15 dental procedures after state fee increases. Some states did not cover all 15 procedures.

Some state officials reported that fee increases may not have improved dentists' participation or significantly increased the percentage of Medicaid beneficiaries receiving services but did help retain those already participating. In addition, officials in several states reporting improved access said that other efforts besides higher fees—such as outreach to recruit dentists—helped improve dentists' participation in Medicaid.

Medicaid Administrative Requirements

Dentists also report that their dissatisfaction with the administrative requirements of state Medicaid programs keeps them from seeing more Medicaid patients. Research has found that dentists fault unique Medicaid claim forms and codes, difficulties with claims handling, preauthorization requirements, slow Medicaid payments, and what they consider to be arbitrary denials of submitted claims. They also cite complicated rules and eligibility-verification processes for patients and provider enrollment. One survey of New Mexico dentists found that about one in three dentists cited excessive paperwork and about one in five dentists cited slow payment as reasons for not accepting Medicaid patients.[14]

Many states reported taking some steps to simplify administrative processes. For example, at least 24 states had simplified administrative processes by reducing prior authorization requirements or by adopting uniform claim forms and procedure codes developed by ADA. Some of these states are also taking steps to make more extensive use of electronic billing and payment.

[14]Senate Joint Memorial 21, State of New Mexico, Health Policy Commission, Oct. 1, 1999.

Patient Issues Affecting the Use of Dental Services and Dentists' Acceptance of Medicaid Patients

A number of factors related to the patients themselves also affect dental service use. As the Surgeon General noted, a lack of understanding and awareness of the importance of oral health and its relationship to general good health and well-being affects low use of dental services for many, regardless of income. Dental services are often considered deferrable and, as a result, patients might not practice good oral hygiene or follow the dentists' instructions until their dental problem becomes painful. In addition, parents' experience and attitudes about dental care may be a factor in the children's dental care use.[15]

Other factors affecting the use of dental care include characteristics that may be unique to or more prevalent in the Medicaid or low-income population. Issues that are a minor inconvenience for higher-income patients—such as getting time off from work to visit the dentist; arranging transportation to the dentist, especially in rural areas; or finding child care—can be major barriers for many low-income patients.

These issues may also contribute to a higher rate of broken appointments—a major concern among dentists. ADA reports that about one-third of Medicaid patients failed to keep appointments. And while comparable data for patients with private insurance are lacking, dentists perceive that the rate of broken appointments is significantly higher for Medicaid patients. According to an ADA survey, dentists report that "no-shows" result in average lost time to their practices of 45 minutes per appointment. While Medicaid prohibits charging for missed appointments to cover operating costs, dentists can bill private practice patients when they fail to show up for a scheduled appointment, thus minimizing the financial effect of the no-shows. The effect of missed appointments by Medicaid and other low-income patients appears to be less of a problem at public health clinics and community health centers, where officials report that walk-in patients and emergency cases generally fill any open appointment times.

Some states have undertaken efforts to educate patients on the importance of oral health and of keeping dental appointments. For example, Washington's Access to Baby and Child Dentistry program provides parents

[15]In a study of low-income children, mothers who had good oral health, less fear of the dentist, and a regular source of dental care were found to be more likely to take their children to the dentist. See P. Milgrom and others, "An Explanatory Model of the Dental Care Utilization of Low-Income Children," *Medical Care*, Vol. 36 (1998), pp. 554-66.

with basic education on oral health habits for their children, training on proper dental office protocol, and the importance of keeping scheduled appointments. Program officials report that dentists do not report having significant problems with no-shows for program participants. In addition, one study of this program found that these and other steps resulted in the use of dental services among program participants that was three times that of nonparticipants.

The Effect of Managed Care on Access Is Unclear

Many states provide dental care through Medicaid managed care arrangements, yet available data are insufficient to evaluate the effect of managed care on dental service access. State officials have differing opinions on whether managed care improves the use of dental care in their states.

Twenty states reported that they use managed care arrangements to provide dental care to some or all Medicaid enrollees—that is, the state contracts with managed care organizations that assume financial risk for providing needed dental care.[16] Seventeen states contract with managed care organizations that provide both medical and dental services, while three states contract with separate dental managed care organizations. Of the 20 states, managed dental care penetration ranges from less than 15 percent of Medicaid enrollees in 2 states to all Medicaid enrollees in 3 states. States also have established varying enrollment and eligibility requirements. For example, in one state dental managed care is mandatory for children and families while other adults remain in the Medicaid fee-for-service program. In another, dental managed care is mandatory in one county and optional in other areas. In several states, dental managed care programs are limited to major metropolitan areas or certain counties.

[16]We defined dental managed care as programs in which a managed care organization assumed the financial risk for providing needed dental care. We excluded programs in which the state contracted with a managed care organization for support functions, such as case management or fiscal intermediary activities, but the state remained responsible for paying for needed dental care.

All 20 states pay managed care organizations on a capitated basis—that is, they pay a set amount per enrollee each month and the managed care organizations assume the financial risk for providing dental services. This financial risk, however, is not conveyed to dentists in many instances. Most states have multiple managed care organizations that establish their own payment arrangements with participating dentists. In eight states, managed care organizations pay dentists on a fee-for-service basis only. In the 12 other states, managed care organizations pay dentists through a mix of fee-for-service and other payment methods.[17] Several states do not monitor reimbursement or fee arrangements between managed care organizations and their participating dentists and, thus, could not report how many dentists were covered by various payment plans.

Most of the 20 states have not collected sufficient, reliable data to measure the extent to which access to dental care has changed under managed care. Some states report better dental access under managed care, while others do not. Because of the lack of state data, we could not determine whether the use of dental services increased under managed care or the extent to which specific factors in managed care, such as payment rates or methods or plan structure, contributed to any improvement in the use of dental services. Officials in states such as Connecticut, Hawaii, Missouri, and Virginia believed access under dental managed care has improved but had not gathered utilization data to measure and document the improvement. State officials said contract requirements with managed care plans, such as maximum waiting times and provider network requirements, are intended to provide better access to dental services for managed care enrollees. In contrast, officials in six other states believed that dental service use under Medicaid managed care was the same as or lower than that under fee-for-service. For example, an Oklahoma official told us that access to dental care is worse under its managed care plans because dentists are dissatisfied with the managed care plans' low fees and slow payment.

A few states have collected sufficient utilization data to compare managed care programs with fee-for-service, but no clear trends emerge. For example, data for one county in California shows dental care use in managed care programs 12 percentage points lower than in fee-for-service programs. In contrast, a Minnesota study found utilization in managed care

[17]For example, some managed care organizations pay dentists on an adjusted fee-for-service basis; that is, dentists are paid according to a fee schedule, but the schedule is adjusted, based on the plan's overall expenditures.

programs 11 percentage points higher than in fee-for-service plans—37 percent versus 26 percent.

State Medicaid officials told us that some managed care organizations have had difficulty building dental networks, primarily because of low fees offered to dentists. As a result, several states are struggling to keep dental managed care programs viable, and three states—Illinois, Indiana, and Nebraska—have abandoned their dental managed care programs. Ohio Medicaid officials also reported that dentists are leaving the program because they consider dental payment rates to be low and administrative fees retained by the managed care organization to be excessive.

It Is Too Early to Evaluate Access to Dental Care Under SCHIP

Given the relatively recent start of many SCHIP programs, data on the effect they have had on access to dental care are even more limited than they are for Medicaid. Early impressions from state officials are that access under these programs also varies, with programs that resemble private insurance reporting fewer problems.

In 18 states where dental coverage for SCHIP children is provided through an expansion of Medicaid, SCHIP children face the same barriers other Medicaid children do. In addition, of the 33 states with stand-alone or combination SCHIP programs, 21 indicated that they use the same fee schedule and network of dental providers as Medicaid to provide dental care under SCHIP. Children covered under these programs are also likely to face a situation similar to the one for children covered by Medicaid.

Ten states reported that they implemented SCHIP dental programs that differ significantly from Medicaid.[18] In these states, SCHIP dental care is contracted with private insurers or the state's public employee health insurance. State officials reported that these programs generally paid dentists at private insurance market rates that were significantly higher than Medicaid rates and that they had administrative requirements similar to those of private insurance. While no state has conducted a comprehensive evaluation of dental access under SCHIP, officials in most of these states reported that they had experienced reports of few or no access problems for their SCHIP enrollees. In contrast, these 10 states

[18]In addition to these 10 states, California and Florida provided dental care under other arrangements that differ from Medicaid. However, they did not provide data on the rates paid or on dental access under SCHIP.

reported significant access problems for Medicaid beneficiaries. For example, according to a Medicaid official in one state, several dentists on a state task force indicated that they would select SCHIP patients over Medicaid patients. In addition, she said that several Medicaid patients reported that they had been turned away by a dentist who told them to come back only if they could get SCHIP coverage.

Other Federal Programs Have a Limited Ability to Meet the Dental Needs of the Poor

The four other federal programs we reviewed—Health Centers, NHSC, IHS Facilities, and IHS Loan Repayment—have relatively small capacity to provide dental care, especially when compared with the total number of Medicaid patients and other low-income or vulnerable people. The first two programs are designed to serve a broad spectrum of people who may be poor or who may be having difficulty obtaining health care services, while the two IHS programs are targeted at American Indians and Alaska Natives. In all four cases, the programs report difficulty in meeting the dental needs of their target populations. Recent initiatives to improve oral health services by these and other HHS programs are too new to evaluate.

Programs Are Not Able to Meet Identified Needs

The four programs use varying approaches to meeting the needs of their target populations but are not able to meet them. While all address health care needs in general as well as dental health needs, dental care has typically received a small portion of program resources relative to the needs of their target populations.

Health Centers

HHS and health center officials report that the demand for dental services significantly exceeds the centers' capacity to deliver it. In 1998, the latest year for which data were available at the time of our review, a little more than half of the nearly 700 health center grantees funded under this program had active dental programs.[19] About 1.2 million people—14 percent of the 8.6 million people who used the health centers nationwide—received center-based dental care in 1998. These included about 650,000 people receiving dental care at health centers in urban areas and about

[19]Of 357 urban and 329 rural health center grantees, 385 grantees reported either (1) providing dental services to at least 1,000 health center users or (2) having at least half of a full-time dentist working at the health center in 1998. Of these, 222 were in urban areas and 163 were in rural areas. Although the 686 health center grantees operated more than 3,000 sites in 1998, no data are available on the number of sites providing dental services.

550,000 people receiving dental services at health centers in rural areas. At the health centers where dental care is available, officials and studies report long waiting periods to get appointments. No national data are available on the extent to which (1) health centers with active dental programs are able to meet the dental care needs of center users or (2) patients of health centers without active dental programs receive needed dental care.

The ability to expand dental care through health centers is limited by several factors. HHS officials said that many health centers do not provide dental services because dental facilities and equipment are expensive, centers have difficulties recruiting and retaining dental providers, and centers have difficulty generating sufficient revenue to support a dental program.[20] A 1999 phone survey of health centers in Massachusetts identified three major factors that make it difficult for health centers to meet dental care needs—inadequate space, lack of dental providers, and lack of financial resources.[21] In addition, the head of the National Network for Oral Health Access, an association of dental providers practicing in health centers, said that even with funds to expand dental programs and buy new dental equipment, health centers still face difficulties recruiting dentists.

National Health Service Corps

The number of dentists with obligations to serve in NHSC falls short of meeting the total identified need. At the end of fiscal year 1999, NHSC had 299 dentists and 7 dental hygienists practicing in underserved areas in 41 states, the Pacific Basin, and Puerto Rico.[22] In fiscal year 1999, the program filled only 83 positions—35 in urban and 48 in rural areas—of the more than 260 vacant positions that were eligible for an NHSC dentist through its loan repayment program.[23] These vacancies were located in 228 areas of

[20]HRSA, which administers grants for the Health Center program, recommends a patient base of 3,000 to 5,000 for a dental program to be economically viable.

[21]Massachusetts Department of Public Health, *The Oral Health Crisis in Massachusetts: Report of the Special Legislative Commission on Oral Health* (Boston: Feb. 2000).

[22]For 257 dentists for whom data were available, 126 were practicing in urban areas and 131 were practicing in rural areas. Of the 7 dental hygienists, 3 were practicing in urban areas and 4 were practicing in rural areas.

[23]About 4 of every 10 vacancies eligible for NHSC loan repayment were located in urban areas.

the country that HHS had identified as needing dental providers. Of these 228 areas, nearly two-thirds (144 areas) did not get any NHSC providers.

According to HRSA officials, competing budget priorities have affected NHSC's ability to make headway in increasing the number of dental care professionals available in underserved areas. In March 2000, the Administrator of HRSA testified that HHS had not requested additional funding for NHSC for fiscal year 2001 because of competing priorities. NHSC officials noted that given the flat program funding, any increase in support for dental health providers would result in a reduction in support for primary care or behavioral and mental health providers.[24] They said that the allocation of funds among health disciplines is based on community demand and that the demand exceeds the program's capacity in every discipline.

Indian Health Service Facilities

According to IHS officials, about one-fourth of IHS' dentist positions at 269 IHS and tribal facilities were vacant in April 2000. Vacancies have been chronic at IHS facilities—in the past 5 years, at least 67 facilities have had one or more dentist positions vacant for at least a year. According to IHS officials, the primary reason for these vacancies is that IHS is unable to provide a competitive salary for new dentists. At IHS, the salary for a typical entry-level position for a dentist just out of dental school is about $50,000 to $60,000 per year. This is significantly lower than annual salaries offered in the private sector, which can start at more than $80,000.

The IHS' dental personnel shortages translate into a large unmet need for dental services among American Indians and Alaska Natives. IHS reports that only 24 percent of the eligible population had a dental visit in 1998. The personnel shortages have also reduced the scope of services that facilities are able to provide. According to IHS officials, available services have concentrated more on acute and emergency care, while routine and restorative care have dropped as a percentage of workload. Emergency services increased from one-fifth of the workload in 1990 to more than one-third of the workload in 1999.

[24]In fiscal year 1999, NHSC awarded new loan repayment awards totaling about $12.2 million to physicians; about $7.6 million to nurse practitioners, physician assistants, and nurse midwives; about $5.7 million to dentists and dental hygienists; and about $3.3 million to mental and behavioral health providers. In addition, NHSC awarded $28.2 million in new scholarships to physicians, nurse practitioners, physician assistants, and nurse midwives in fiscal year 1999. No scholarships were awarded to dental providers.

IHS Loan Repayment Program

The IHS loan repayment program has filled few of the many dental vacancies at IHS and other facilities serving American Indians and Alaska Natives. Since 1995, the program has placed an average of about 11 dentists and 1 dental hygienist each year. The average number of IHS dentist positions that were vacant each month during that time was between 46 and 91 (see table 3). IHS officials attribute the limited number of loan repayments for dentists to (1) static funding levels for the program and (2) competing priorities among other health professions that limited loan repayments to dentists to 10 percent of award funding. In fiscal year 2000, the portion of program funding allocated for dentists was increased to 15 percent.

Table 3: Average Number of Dentist Vacancies at IHS and Tribal Operated Facilities and IHS Loan Repayment Awards, Fiscal Years 1995-99

Fiscal year	Average number of vacancies per month	Number of IHS loan repayment awards
1995	46	20
1996	50	8
1997	53	8
1998	79	10
1999	91	11

Source: IHS dental program and IHS Loan Repayment Program.

It Is Too Early to Evaluate Recent HHS Initiatives to Increase Dental Service Use

In response to our April 2000 report on oral health, HHS provided information on various ongoing or planned initiatives to improve dental care for low-income and other populations.[25] Examples that relate specifically to issues raised in this report are shown in table 4. Because the majority of these initiatives are in the early stages or have yet to begin, it is too early to determine the effects they will have on improving access to dental care. However, because of their relatively small size, the efforts by the health centers, NHSC, and IHS, while valuable, are unlikely to meet the significant unmet dental needs of Medicaid and other low-income and vulnerable populations. In addition, it is unclear the extent to which the efforts of these programs and other efforts by HRSA and HCFA will address

[25]See GAO/HEHS-00-72, app. III.

the problems we identified, such as attracting dentists to treat Medicaid, SCHIP, and other vulnerable populations.

Table 4: Examples of HHS Actions Taken or Planned to Improve Dental Care Access

Type of action	Explanation
Improved coordination	Following a HCFA- and HRSA-sponsored national leadership conference on children's access to oral health services in July 1998, HCFA and HRSA established an oral health initiative that proposes to coordinate dental activities across both agencies, partner with other public and private agencies, and promote the integration of new science and technologies into programs that HCFA and HRSA manage.
Expansion of dental programs at health centers	Under the expansion, each health center receives about $170,000 to pay for equipment, other start-up costs, and operating costs. Between 1994 and 1998, 25 new dental programs were developed at health centers. In fiscal year 2000, HRSA plans to award about $1.6 million to establish oral health services at seven to nine health centers serving migrant and seasonal farmworkers and at four to seven health centers serving homeless persons.
Improved oversight	HRSA plans to use a new oral health module for its periodic evaluations of health centers. It has the potential to provide oversight to ensure that health centers are providing required dental services.
NHSC dental scholarships	After a 6-year hiatus, NHSC is piloting a program to award 10 to 20 dental student scholarships in fiscal year 2000. This project will work with specific dental schools that agree to terms such as (1) training the dental students in working with low-income and other vulnerable populations and (2) identifying and developing sites where the dentists can practice when they graduate.
Actuarial models for Medicaid and SCHIP and other information	HRSA is developing a Web page to provide information to states, Medicaid officials, and others on (1) actuarial models for state financing of dental care for children under Medicaid and SCHIP, (2) the geographic distribution of dental health resources at the county level, and (3) workforce models.
Medicaid managed care workshop	HRSA is planning to conduct state-level case studies on dental managed care to evaluate the effect of Medicaid managed care on the availability of dental services as it relates to providers, patients, payers, and plans.
IHS Oral Health Initiative	Started in 1999 by the Director of IHS, it focuses on improving the oral health status of the American Indian and Alaska Native populations through existing services and increasing resource commitments to recruiting dentists for IHS and tribal programs. This includes a $1 million allocation toward IHS loan repayment for dentists and a special salary rate for dentists hired as civil servants that is more competitive with the private sector.
Medicaid and SCHIP grant demonstration project	Under this 4-year demonstration project, HCFA will award grants to one or two states for innovative approaches for young Medicaid or SCHIP children that will result in improved oral health and cost savings.

Conclusions

Despite the availability of dental coverage through public programs such as Medicaid, SCHIP, and other HHS programs, access to dental services remains low for low-income populations. Structural issues that affect service use across all income levels—including the availability of dentists and the priority that individuals assign to preventive dental care—are often more pronounced for low-income populations. Despite federal and state

efforts to improve access to dental care for low-income or otherwise disadvantaged populations, difficulties remain. The experience of states working to attract more dentists to Medicaid by paying higher fees, streamlining administrative requirements, and providing patient education has resulted typically in some incremental improvements in access. The effects of dental managed care programs and expanded access for low-income children through SCHIP have yet to be determined. And while HHS finances safety-net programs that provide dental care and help place providers to serve low-income and uninsured persons and Native Americans, these programs are not able to fully respond to the sizable unmet needs of these populations. As the Surgeon General recognized in his recent report on oral health, this is a public health issue that requires the concerted and focused attention of many, especially the public and private sectors at federal, state, and local levels.

Agency Comments

In commenting on this report, HHS generally concurred with our findings and conclusions. It stated that the report communicates the oral health needs of low-income and other underserved populations and documents many of the barriers to care facing those populations.

HHS commented that our report could emphasize more the dental needs of residents of rural areas and low-income adults. Regarding residents of rural areas, data limitations prevented direct comparisons of the dental needs among residents of urban, suburban, and rural areas. HHS has noted these same kinds of limitations in the data. We acknowledged that some factors affecting dental access, such as lack of transportation, may be more difficult for rural residents, and we have modified the report to include additional data on the urban and rural location of health center grantees and NHSC health professionals providing dental care. Regarding low-income adults, with the exception of the discussions of SCHIP programs that specifically addressed the dental needs of children, we addressed the dental needs of low-income adults throughout the report. Although adult dental coverage is optional under Medicaid, as of January 2000, about two-thirds of the states covered adult dental services to some extent under Medicaid. In addition, regardless of insurance status, low-income adults can receive dental services at health centers and from NHSC dental health professionals.

HHS suggested that we expand our report to include more detail on all efforts that HHS and its partners have undertaken to address oral health issues rather than limiting our discussion to the programs we reviewed.

Our report highlighted examples of initiatives undertaken by HCFA, HRSA, and IHS dealing with the programs that we reviewed; it was not intended to be an exhaustive list of all HHS oral health activities.[26] HHS also questioned the basis for our statement that the efforts by the health centers, NHSC, and IHS, while valuable, appear to be limited in capacity and in their ability to significantly reduce the unmet need. Because of the large unmet need for dental services and the relatively small size of these programs, we believe it is unlikely that these programs will be able to meet that need. We revised the report to better reflect this view. Regarding the many initiatives HHS and its partners have under way and planned, it is too early to assess their effect on meeting unmet need for dental care.

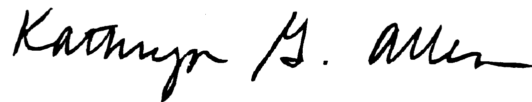
Finally, HHS commented on the relationship between Medicaid payments and dental access, noting the correlation we identified between increases in Medicaid payment rates—determined by each state individually—and dental service utilization. HHS suggested that while federal efforts are important, the states, local dental societies, and advocates must work together to determine payments that are affordable for states and feasible for practitioners. In addition to addressing this payment issue, our work suggests that while raising Medicaid payment rates for dental services appears to result in a marginal increase in utilization, this alone does not ensure significant increases in dental utilization. Other factors, such as administrative requirements, dentists' attitudes toward low-income patients, and patient behavior, also affect dentists' participation and service utilization for these populations.

HHS also provided technical comments that we incorporated where appropriate. HHS' comments are included as appendix IV.

As we agreed with your offices, unless you publicly announce the report's contents earlier, we plan no further distribution of it until 14 days from the date of this letter. We will then send copies to the Honorable Donna E. Shalala, Secretary of HHS; the Honorable Nancy-Ann Min DeParle, Administrator of HCFA; the Honorable Claude Earl Fox, Administrator of HRSA; and others who are interested. We will make copies available to others on request.

[26]For a more detailed list of planned or recently started HHS oral health activities, see GAO/HEHS-00-72, app. III.

This report was prepared under the direction of Frank Pasquier, Assistant Director. Others who made key contributions include Rashmi Agarwal, Sophia Ku, Terry Saiki, Stan Stenersen, and Kim Yamane. Please call me at (202) 512-7118 if you or your staff have any questions.



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Scope and Methodology

We reviewed studies about access to dental care conducted by researchers and by state task forces and surveyed Medicaid and State Children's Health Insurance Program (SCHIP) programs in all 50 states and the District of Columbia to determine dentists' participation in Medicaid, the use of dental services, and actions to address barriers to dental care for Medicaid beneficiaries. In addition, we analyzed dentist participation rates for each state's Medicaid program and compared each state's payment rates with average regional dental fees for selected dental procedures. We also analyzed data on other safety-net programs from the Health Resources and Services Administration (HRSA) and the Indian Health Service (IHS). Finally, we interviewed (1) officials at the Health Care Financing Administration (HCFA), HRSA, and IHS; (2) state and local health officials responsible for Medicaid, SCHIP, and dental public health programs; (3) health services researchers; (4) dental association representatives; and (5) dental providers. We performed our work from December 1999 to July 2000 in accordance with generally accepted government auditing standards.

Dentists' Participation Rates

To calculate dentists' participation rates for each state, we collected data from state Medicaid agencies on the number of dentists who saw at least one Medicaid patient and the number who saw at least 100 patients in 1996 and 1999. We divided these numbers by the total number of dentists in private practice for each state, using data published in the American Dental Association's (ADA) *Distribution of Dentists in the United States by Region and State, 1997*. ADA's 1997 survey was the most recent survey for which the data were available, and data from its earlier surveys indicate that the number of dentists in private practice in most states has not changed significantly from year to year.

Comparison of Fees for Selected Dental Procedures

To compare Medicaid fees with average fees dentists charge, we obtained state Medicaid fee data for 15 dental procedures and compared them with the average regional dental fees for 1999. The 15 procedures were proposed by James J. Crall, Department Head and Associate Dean of the University of Connecticut School of Dental Medicine and a recognized expert in the field of dental research, and were based on his work involving a separate analysis of Medicaid dental reimbursement rates. The 15 procedures represent a variety of diagnostic, preventive, restorative, and surgical procedures used to assess, prevent, and treat dental disease in children and adolescents. While some procedure codes in our sample, such as dental cleaning, were specifically for children, other procedure codes we

examined, such as periodic oral examination, crowns, and root canal treatments, are used for both children and adults. Several procedures—examinations, dental cleaning, fluoride application, and radiographs—are commonly provided at initial or periodic assessment visits. Others represent a broad range of services for treating basic to advanced dental disease, primarily dental caries (see table 5). We also consulted with HCFA's Chief Dental Officer and the Director of the Children's Dental Health Project of Washington, D.C., who agreed that the procedures selected were appropriate for our study.

Table 5: The Dental Procedures in Our Study

ADA code	Procedure
Diagnostic	
00110/00150	Initial/comprehensive oral examination
00120	Periodic oral examination
00210	Radiographs—complete series (including bitewings)
00272	Radiographs—bitewings—2 films
00330	Radiographs—panoramic film
Preventive	
01120	Dental cleaning—child
01203	Topical application of fluoride (excluding cleaning)
01351	Dental sealant—per tooth
Restorative	
02150	Metal filling—2 surfaces, permanent teeth
02331	Plastic filling—2 surfaces, front teeth
02751	Crown—porcelain fused predominately base metal
02930	Prefabricated stainless steel crown—primary teeth
Root canal treatment	
03220	Root canal treatment for primary teeth (excluding final restoration)
03310	Root canal therapy for front teeth (excluding final restoration)
Surgery	
07110	Extraction—single tooth

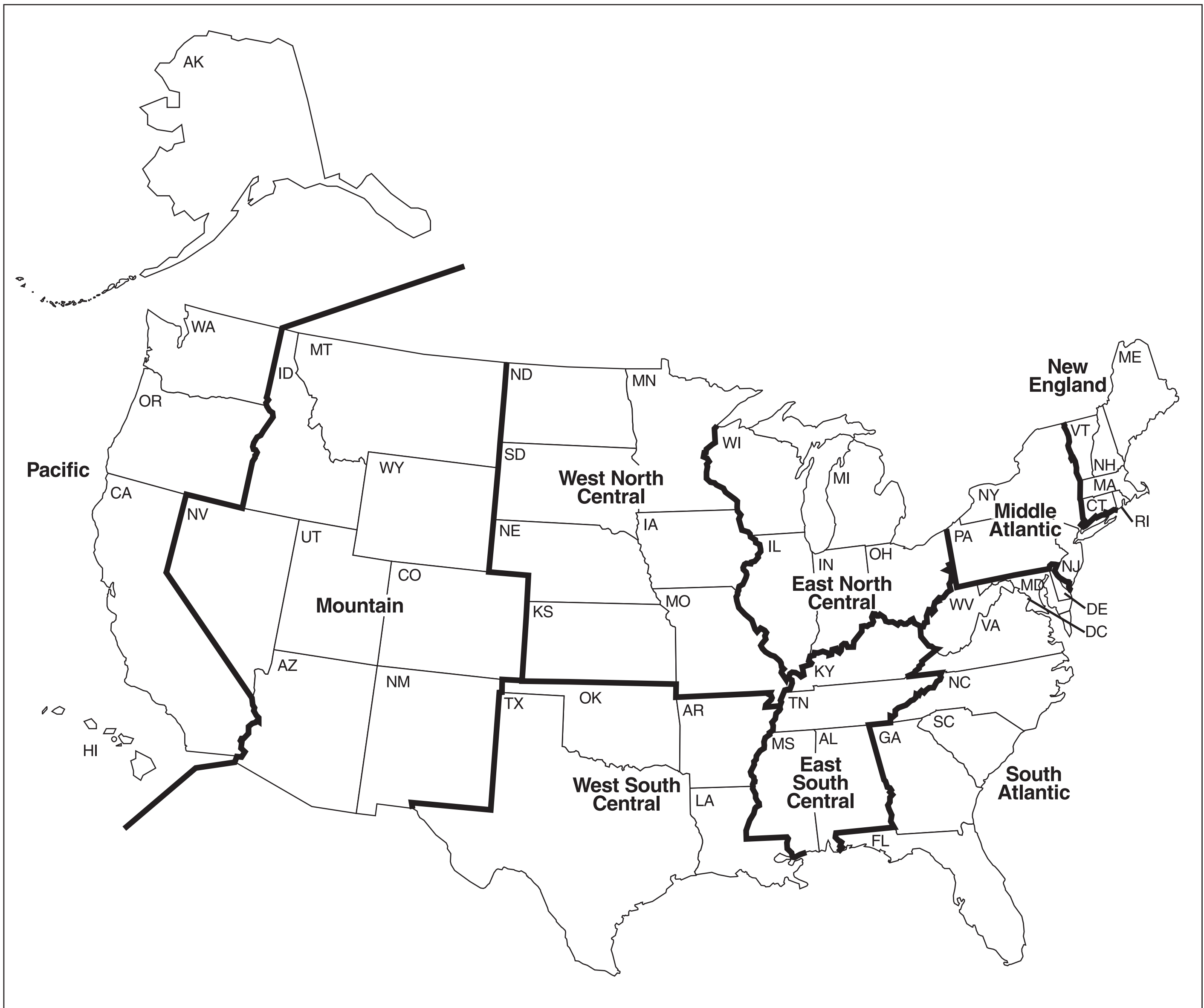
We verified data on the 1999 state Medicaid fees for the 15 procedures with information from fee schedules obtained from each state Medicaid program. For states that had more than one fee schedule (such as may occur in a state with multiple managed care plans providing dental care),

we used the fees for the plan with the most persons enrolled in Medicaid, to the extent possible. Some states, such as Hawaii and Oregon, did not provide fee schedules for the dental services provided under managed care. In these cases, we used the fee schedule that applies to the state's fee-for-service population. For procedures with separate fees for children and adults, we used the Medicaid fees for treating children.

The Determination of Average Regional Dental Fees

Because comparable data are not readily available on the dental fees dentists charge in each state, we used the regional mean fees from ADA's 1997 Survey of Dental Fees. The ADA survey collected fee data from dentists across nine geographic regions of the country and reported the mean fees for each dental procedure for each region (see fig. 2).

Figure 2: Distribution of States in the Nine Regions of ADA's Survey of Dental Fees



We adjusted the ADA fees for inflation, using the dental services component of the consumer price index to get a 1999 regional mean fee for each procedure (see table 6). While there are limitations to using regional

dental fees in lieu of state fees, a limited comparison of state fee data with the regional fees for six selected states shows that the regional fees are fairly representative of the state fees for these states. We compared each state's Medicaid fee with the inflation-adjusted regional mean fee for each procedure.

Table 6: Average Dental Fees for the 15 Procedures by Region, 1999

Procedure	New England	Middle Atlantic	South Atlantic	East South Central	East North Central	West North Central	West South Central	Mountain	Pacific
Diagnostic									
Initial/ comprehensive oral examination	$45	$41	$40	$32	$36	$32	$34	$44	$45
Periodic oral examination	25	28	24	20	23	21	21	26	32
Radiographs—complete series (including bitewings)	79	75	71	66	69	67	61	69	85
Radiographs—bitewings—2 films	27	22	22	20	21	20	20	22	32
Radiographs—panoramic film	74	65	62	55	63	57	53	60	71
Preventive									
Dental cleaning—child	41	40	37	32	33	30	34	36	52
Topical application of fluoride (excluding cleaning)	24	24	19	17	22	18	17	20	28
Dental sealant—per tooth	32	31	27	26	27	24	25	26	37
Restorative									
Metal filling—2 surfaces, permanent teeth	86	84	82	68	74	72	78	83	101
Plastic filling—2 surfaces, front teeth	101	98	97	79	87	88	93	100	135

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Procedure	New England	Middle Atlantic	South Atlantic	East South Central	East North Central	West North Central	West South Central	Mountain	Pacific
Crown—porcelain fused predominately base metal	670	630	577	482	553	517	549	516	636
Prefabricated stainless steel crown—primary teeth	160	155	141	119	139	131	120	133	148
Root canal treatment									
Root canal treatment for primary teeth (excluding final restoration)	101	96	99	73	87	79	78	91	97
Root canal therapy for front teeth (excluding final restoration)	412	390	376	324	337	316	341	348	405
Surgery									
Extraction—single tooth	87	88	77	60	71	67	71	75	94

Effect of State Medicaid Fee Increases on Access

Assessing the effect of state Medicaid fee increases on access to dental care is difficult. Medicaid fees are only one of many factors that affect dentists' decisions to treat Medicaid patients, so it is difficult to isolate their effect from others. In addition, changes in dentists' behavior in response to any payment increase may take time. Data limitations further complicate analysis. For example, comparable data were not readily available on the frequency of the provision of each of the 15 dental procedures. In addition, lack of comparable utilization data among states prevented a correlation analysis between 1999 Medicaid fees and dental utilization. As a result, we used a broad approach to assess the overall relationship of fee increases to dental access. First, we classified the states into states that reported a rate increase (40 states), states that reported no rate increase (9 states), and states that did not respond (2 states). We relied on data supplied by state officials on changes in dentist participation and dental utilization rates to group the 40 states that reported recent rate increases into three groups—states with some improvement in access, states with no improvement in access, and states that reported that it was too soon to tell or that they did not have reliable data. We then compared

the fee levels of "states with some improvement" with "states with no improvement" to see whether the fee levels appeared to make a difference. We tested the strength of the relationship between fee increases and access by using chi-square analysis.

Other Federal Safety-Net Programs

To assess other federal safety-net programs' abilities to meet the demand for dental care by their target populations, we interviewed officials at HRSA and IHS, reviewed documents, and analyzed data they provided. We also interviewed representatives of several national organizations representing health centers and dentists practicing at health centers.

For the Health Center program, we relied on national staffing and utilization information on health centers from HRSA's Uniform Data System for 1998, the most recent year for which data were available. The Uniform Data System information provides data for each health center grantee. While each grantee may operate multiple sites, data were not available on the dental care provided at specific health center sites. Because of known limitations with the disaggregated data in the Uniform Data System, we used results that were aggregated nationally. We used 0.5 full-time-equivalent dentists or 1,000 dental users as a threshold for an active dental program because that is what HRSA officials consider to be an active health center dental program.

Healthy People 2010 Oral Health Goals

Objective	2010 target	Baseline
Reduce the proportion of children and adolescents with dental caries experience in their primary or permanent teeth	2-4 years: 11% 6-8 years: 42% 15 years: 51%	2-4 years: 18% (1988-94) 6-8 years: 52% (1988-94) 15 years: 61% (1988-94)
Reduce the proportion of children, adolescents, and adults with untreated dental decay	2-4 years: 9% 6-8 years: 21% 15 years: 15% 35-44 years: 15%	2-4 years: 16% (1988-94) 6-8 years: 29% (1988-94) 15 years: 20% (1988-94) 35-44 years: 27% (1988-94)
Increase the proportion of adults who have never had a permanent tooth extracted because of dental caries or periodontal disease	42%	35-44 years: 31% (1988-94)
Reduce the proportion of older adults who have had all their natural teeth extracted	20%	65-74 years: 26% (1997)
Reduce periodontal disease in adults aged 35-44	Gingivitis: 41% Destructive periodontal disease: 14%	Gingivitis: 48% (1988-94) Destructive periodontal disease: 22% (1988-94)
Increase the proportion of oral and pharyngeal cancers detected at the earliest stage	50%	35% (stage I, localized) (1990-95)
Increase the proportion of adults who, in the past 12 months, report having had an examination to detect oral and pharyngeal cancer	35%	40+ years: 14% (1998)
Increase the proportion of children who have received dental sealants on their molars	8 years: 50% 14 years: 50%	8 years: 23% (1988-94) 14 years: 15% (1988-94)
Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water	75%	62% (1992)
Increase the proportion of children and adults who use the oral health system each year	83%	2+ years: 65% (1997)
Increase the proportion of long-term care residents who use the oral health care system each year	25%	19% (1997)
Increase the proportion of children and adolescents younger than 19 at or below 200 percent of the federal poverty level who received any preventive dental services during the past year	57%	20% (1996)
Increase the proportion of local health departments and community-based health centers, including community, migrant, and homeless health centers, that have an oral health component	75%	34% (1997)
Increase the number of states, including the District of Columbia, that have a system for recording and referring infants and children with cleft lips, cleft palates, and other craniofacial anomalies to craniofacial anomaly rehabilitative teams	All states and the District of Columbia	23 states and the District of Columbia (1997)
Increase the number of states, including the District of Columbia, that have an oral and craniofacial health surveillance system	All states and the District of Columbia	0 (1999)

Source: Healthy People 2010, Conference Edition, Oral Health, data as of November 30, 1999.

Medicaid Payment Rates as a Percentage of Average Regional Dental Fees for Selected Procedures, 1999

Region and state	Periodic oral examination	Dental cleaning—child	Metal filling—2 surfaces	Root canal treatment	Extraction—single tooth	Of 15 procedures[a]: Number for which Medicaid exceeded 2/3 of average regional fees	Of 15 procedures[a]: Range of Medicaid rates as % of average regional fees
New England							
Connecticut	67%	52%	48%	46%	46%	1	45%-67%
Maine	52	72	56	49	63	2	50-75
Massachusetts	36	46	47	30	52	0	30-64
New Hampshire	73	68	61	44	46	2	43-73
Rhode Island	40	53	43	58	45	1	40-77
Vermont	68	63	68	65	75	5	53-85
Middle Atlantic							
New Jersey	22	17	25	13	17	0	13-34
New York	36	38	32	26	28	0	24-59
Pennsylvania	62	55	60	52	51	2	27-82
South Atlantic							
Delaware[b]						15	
District of Columbia	42	55	23	22	33	0	22-55
Florida	63	38	50	51	35	1	35-63
Georgia	81	53	63	50	54	1	48-81
Maryland	59	66	49	71	50	3	37-73
North Carolina	96	57	80	68	58	7	49-96
South Carolina	93	85	92	88	81	15	81-99
Virginia	51	68	64	63	56	4	51-88
West Virginia	63	71	51	43	52	2	43-79
East South Central							
Alabama	66	50	66	64	56	1	45-84
Kentucky	96	87	61	37	48	4	37-96
Mississippi	157	107	61	37	68	10	37-157
Tennessee	67	56	51	49	46	2	33-72
East North Central							
Illinois	66	72	66	64	42	1	34-72
Indiana	87	103	98	109	101	14	87-109
Michigan	61	56	66	73	61	2	26-73
Ohio	73	60	73	73	73	13	48-86
Wisconsin	66	68	59	54	57	1	54-68

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Region and state	Periodic oral examination	Dental cleaning—child	Metal filling—2 surfaces	Root canal treatment	Extraction—single tooth	Of 15 procedures[a]: Number for which Medicaid exceeded 2/3 of average regional fees	Of 15 procedures[a]: Range of Medicaid rates as % of average regional fees
West North Central							
Iowa	56	56	52	47	35	1	35-70
Kansas	51	83	76	76	67	12	46-84
Minnesota	56	59	55	52	50	3	49-79
Missouri	72	61	44	25	27	1	25-72
Nebraska	70	56	77	57	74	6	39-83
North Dakota	88	81	77	78	74	15	72-90
South Dakota	73	57	58	47	49	2	47-73
West South Central							
Arkansas	[c]	69	65	58	59	8	45-97
Louisiana	61	27	42	42	40	0	27-61
Oklahoma	77	48	63	47	47	2	46-84
Texas	61	54	49	50	46	0	44-64
Mountain							
Arizona	106	118	85	88	90	15	67-118
Colorado	67	66	69	69	69	12	66-72
Idaho	67	77	67	55	57	5	55-78
Montana	63	64	75	55	56	4	35-75
Nevada	72	128	91	67	89	11	51-128
New Mexico	78	77	79	78	79	15	77-80
Utah	39	48	40	20	42	0	20-49
Wyoming	59	64	61	51	53	6	51-85
Pacific							
Alaska	97	93	94	100	82	13	63-106
California	29	68	47	18	48	1	17-68
Hawaii	47	29	27	37	29	0	27-53
Oregon	72	54	35	46	46	2	30-81
Washington	63	45	62	46	83	2	26-83

[a]Some states do not cover all 15 procedures.

[b]Delaware does not have a fee schedule. It pays 85 percent of billed charges by dentists for all covered procedures.

[c]This procedure is not covered in Arkansas' Medicaid fee schedule. These services may be billed under a different procedure code.

Comments From HHS

DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General

Washington, D.C. 20201

AUG 17 2000

Ms. Kathryn G. Allen
Associate Director, Health Financing and
Public Health Issues
United States General
Accounting Office
Washington, D.C. 20548

Dear Ms. Allen:

Enclosed are the Department's comments on your draft report, "Oral Health: Factors Contributing to Low Use of Dental Services by Low-Income Populations." The comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

The Department also provided extensive technical comments directly to your staff.

The Department appreciates the opportunity to comment on this draft report before its publication.

Sincerely,

Michael Mangano

for June Gibbs Brown
Inspector General

Enclosure

The Office of Inspector General (OIG) is transmitting the Department's response to this draft report in our capacity as the Department's designated focal point and coordinator for General Accounting Office reports. The OIG has not conducted an independent assessment of these comments and therefore expresses no opinion on them.

Comments of the Department of Health and Human Services on the General Accounting Office Draft Report, "Oral Health: Factors Contributing to Low Use of Dental Services by Low-Income Populations"

General Comments

The Department of Health and Human Services (Department) appreciates the opportunity to comment on the General Accounting Office's (GAO) draft report. In general we concur with GAO's findings and conclusions. The report convincingly communicates the oral health needs of low-income and other underserved populations, and documents many of the barriers to care facing those populations.

The report includes appropriate references to findings and conclusions of the Surgeon General's report on oral health in America. It is important to note these consistencies, as the Surgeon General's report serves as a more detailed reference to describe some of the contributory factors associated with low access to dental care and its implications.

The GAO report provides more discussion about the results of various efforts to improve access to dental care by increasing Medicaid reimbursement levels than has been available in the past. As such, in addition to organizing disparate program descriptions into a single, coherent reference document, GAO's report provides new information. However, we do not believe the analysis is as strong as it might be primarily because there is not a solid body of relevant health services research.

We appreciate GAO's noting, here and in their April 2000 report "Oral Health: Dental Disease is a Chronic Problem Among Low-Income Populations" (GAO/HEHS-00-72), the various and extensive array of current and future initiatives designed to enhance dental access and improve oral health in the Nation. The Department, however, suggests that GAO refine their report by:

- Pointing out that certain subsets of populations, particularly those living in rural and frontier America, face even more obstacles to care than their counterparts living in more urban and suburban areas of the United States.
- Recognizing all of the efforts that the Department and their partners are putting forth in this area.

Finally, we agree with GAO that it may be too early to determine if these activities and strategies will have the intended outcome. Given the early stage of these initiatives however, we question GAO's conclusion that the Department's efforts may be "...limited in capacity and in their ability to significantly reduce the unmet need." and the implication that efforts by the Department's Health Resources and Services Administration (HRSA), Health Care Financing Administration (HCFA), and Indian Health Service (IHS) will be unable to address the problems GAO identified. Rather, we are hopeful that these efforts will have a positive effect on access to dental services and on awareness in the dental community of the needs of low-income populations. The

basis of GAO's conclusion is not provided in their report. The report and GAO's conclusion would be strengthened by explaining the analytic strategy GAO used to match specific factors that contribute to low dental use by low-income persons (the main topic of the report), Federal and State efforts, and the gaps between them.

More could be said about specific underserved populations

The GAO draft report discusses some of the reasons that low-income populations in the United States have more dental disease and less dental care than the general population, as documented in GAO's April 2000 report. The report accurately depicts the oral health needs of low-income children and other underserved populations, and documents many of the access issues these populations are forced to confront, however, the report does not discuss the needs of low-income adults. Since it is known that the oral health and care experiences of mothers affects the care they seek for their children, the lack of attention to this issue is problematic for both the adult population and their children. The report also accurately reflects barriers to care for the American Indian and Alaska Native populations. However, the report does not point out that certain subsets of populations, particularly those living in rural and frontier America, face more obstacles to care than their counterparts living in urban and suburban areas of the United States. The problems of underserved rural populations, while similar to other underserved groups, are further compounded by factors such as geographic isolation; lack of mass transit options; and lack, in many cases, of community water supplies that could be fluoridated. Additionally, there is an even greater difficulty recruiting and retaining dentists in isolated communities than in similarly underserved urban communities. We recognize the lack of data pertaining to dental needs and work force issues for rural and frontier America. The Department's HRSA has taken steps to support analysis of existing data sources such as the National Health and Nutrition Examination Survey and the National Health Interview Survey to obtain information on rural areas as compared to their urban counterparts. However, it should be possible to break out some of the information contained in this draft report by urban/rural locations, in order to highlight the magnitude of the dental needs problem in the rural United States.

Many of the efforts of the Department and our partners are not recognized.

Although we appreciate that the intent of GAO's report is to describe major Federal efforts to provide dental services to vulnerable populations, GAO did not recognize other activities both on the Federal and State levels, that have the potential to improve access to dental services. The report highlights the activities of HRSA, HCFA, and IHS. However, the report does not mention important contributions that are being made by the Department's Centers for Disease Control and Prevention, Agency for Healthcare Research and Quality, Administration for Children and Families, and National Institutes of Health.

In response to GAO's April 2000 report, we provided comments, dated March 31, 2000, highlighting implemented and planned activities of the Department to improve dental care access for the underserved. The comments note that almost all of the Department's

operating divisions have programs that contribute to the Nation's dental health needs. These programs support, for example, collaborations between State departments of education and health for development of oral health education, promotion, and service delivery plans and models to improve the oral health of school-aged children by linking them to services within programs tailored to meet local circumstances. These activities are not referenced on Table 4 of GAO's report and would substantially add to the examples of Department efforts that are underway. We recommend that reference to those activities be made in GAO's report.

The newly created State Children's Health Insurance Program, together with the traditional Medicaid program are key to the Federal effort to secure proper health care services of all types for vulnerable populations. These programs, of course, are Federal/State partnerships that are largely administered by each State. The Department recognizes that our efforts, together with those of other Federal agencies are, therefore, only part of a series of steps that must occur if real improvement to access is to be achieved. As was noted in GAO's report, the primary reason cited by dentists for not treating children and adolescent Medicaid patients (and adults, in States where adult dental services are included as Medicaid benefits) is the significant gap between Medicaid payment rates and the amounts dentists charge for services. [In April of 1996, the Department's Office of Inspector General (OIG) issued a report entitled, "Children's Dental Services Under Medicaid: Access and Utilization," OEI-09-93-00240. The OIG findings were similar to the findings in GAO's current report on the issues of access under Medicaid]. The GAO noted a correlation between increases in Medicaid payment rates--determined by each State independently--and dentists' participation in and services provided by programs which seek to address the unmet oral health needs of low-income populations. We believe that while Federal efforts are important, States, local dental societies and advocates must work together to determine a payment schedule that is both affordable for States and feasible for practitioners. Short of that, it may be unrealistic that other actions will have the kind of impact necessary to correct unacceptable inequities in access to oral health services for low-income Americans.

The Department shares GAO's concerns of ensuring that low-income and underserved populations have adequate access to oral health care. We appreciate the effort that went into GAO's report and look forward to working with GAO on this and other issues.

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