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Report to Congressional Requesters

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ORAL HEALTH

Dental Disease Is a Chronic Problem Among Low-Income Populations

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Contents

Abbreviations

ADA	American Dental Association
AHRQ	Agency for Healthcare Research and Quality
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control and Prevention
EPSDT	Early and Periodic Screening, Diagnostic, and Treatment
HCFA	Health Care Financing Administration
HHS	Department of Health and Human Services
MEPS	Medical Expenditures Panel Survey
NHIS	National Health Interview Survey
NHANES III	National Health and Nutrition Examination Survey III
SCHIP	State Children's Health Insurance Program
SMRF	State Medicaid Resource File

United States General Accounting Office
Washington, D.C. 20548

Health, Education, and
Human Services Division

B-283914

April 12, 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

The dental health of most Americans has improved significantly since the 1960s. There is growing concern, however, that low-income and other vulnerable populations continue to have high levels of dental disease. Dental problems not only affect health and well-being but also contribute to lower productivity in the workplace and increased absenteeism at school. This continued vulnerability is a matter of concern to the federal government and the states, which jointly fund Medicaid, a program that pays for health care—including dental care—for low-income and disabled persons. Gauging the extent of efforts to address the problem through Medicaid and related programs has been difficult, because the implementation of these programs differs from state to state. To explore these issues in more depth, you asked us to report on (1) the dental health status of Medicaid beneficiaries and other vulnerable populations and (2) the extent to which these groups have dental coverage and use dental services. At your request, we are also conducting a second study in which we will identify major barriers to dental care and assess federal and state efforts to overcome them.

To respond to your request, we analyzed dental health and data on the use of dental health care from four national health surveys and surveyed Medicaid and related programs state by state. We also analyzed Medicaid payment data for dental services. Appendix I explains our methodology. We conducted our work from October 1999 to February 2000 in accordance with generally accepted government auditing standards.

Results in Brief

Dental disease is a chronic problem among many low-income and vulnerable populations. Our analysis of the most recent national health surveys (1994-97) showed that relative to more affluent segments of the population, low-income populations had a disproportionate level of dental

disease. For example, poor children had five times more untreated dental caries (cavities) than children in higher-income families, and poor adults were much more likely to have lost six or more teeth to decay and gum disease than higher-income adults. Minority populations also faced high levels of dental disease. Dental problems result in pain, infection, and millions of lost school days and workdays each year.

Although every state Medicaid program offers dental coverage for children and most programs cover adults eligible for Medicaid, use of dental services by low-income people is low. States are required to provide comprehensive dental benefits for children enrolled in Medicaid, and the State Children's Health Insurance Program (SCHIP) provides variable but often substantial levels of dental coverage to eligible low-income children in all but two states. Adult dental services, although optional under Medicaid, are covered to some extent in about two-thirds of the states. The availability of coverage does not, however, bridge the income gap to equalize the likelihood of visiting a dentist. For example, our analysis of 1995 Medicaid claims data showed that only 29 percent of enrolled adults had visited the dentist in the preceding year, less than half the rate of higher-income adults. National survey data also showed that in 1996 poor children and adults visited the dentist at about half the rate of their higher-income counterparts—numbers that had stayed relatively unchanged since 1977.

Background

Medicaid is the largest public program of health care insurance for low-income people. As a joint federal and state program, it finances health care coverage for about 40 million people, over half of whom are children. Nationwide, combined federal and state expenditures were $177 billion 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, in 1967 the Congress created the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) service within Medicaid to help ensure that children receive needed medical and dental care. Under EPSDT, the states must provide comprehensive medical and dental services for all enrolled children, even if the services are not normally covered by a state's Medicaid program. While EPSDT requires the states to provide certain care for children, many services for adults, such as dental care, are optional under state Medicaid programs.

Although Medicaid covers low-income people, only about half of those living in poverty were eligible for Medicaid in 1996, according to the Congressional Research Service. This is largely because of eligibility restrictions that make benefits available only to certain low-income categories, such as families with children and the aged, blind, and disabled.[1] While the Congress expanded eligibility for pregnant women and children several times beginning in 1984, the states can expand coverage to these populations beyond federal requirements. To expand health coverage to children whose families have incomes that are low, but not low enough to qualify for Medicaid, in 1997 the Congress created SCHIP as title XXI of the Social Security Act. In return for an enhanced federal matching share, states can expand coverage to low-income children in families earning up to 200 percent of the federal poverty level.[2] 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. Coverage of dental services is not mandatory for children under SCHIP as it is in Medicaid, but if a state elects a Medicaid expansion, it must offer the same comprehensive benefit package, including dental services, that is required under EPSDT. By September 1999, nearly two million children were enrolled in the 53 operational programs. Fifty-six states and territories had SCHIP programs that the Health Care Financing Administration (HCFA) had approved; three had not begun enrollment.

[1]For example, by law, the states must provide Medicaid eligibility to pregnant women, to infants, and to children up to age 6 whose family income is up to 133 percent of the federal poverty level and children aged 6 to 15 whose family income is up to 100 percent of the federal poverty level. Many adults do not qualify for Medicaid unless they are aged, blind, or disabled.

[2]Under Medicaid, the federal government will match a state's contribution from 50 to 77 percent in fiscal year 2000, depending on the state's average income level. Under SCHIP, the states are eligible for an enhanced federal matching share of 65 to 84 percent. SCHIP allows states with Medicaid 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.

The federal government collects information on the nation's dental health through several nationwide health surveys. The surveys are designed for different purposes and thus have different strengths and weaknesses. For example, dental information in the Centers for Disease Control and Prevention's (CDC) National Health and Nutrition Examination Survey III (NHANES III) included examinations that dentists performed. The survey provided a representative sample of dental health nationwide, but the results could not be narrowed to the state level. In contrast, data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) can be examined at the state level, but not all states have conducted the oral health module, and the survey relies on self-reported data that are likely to overlook some conditions such as untreated tooth decay. We examined data from a combination of surveys conducted by CDC and the Department of Health and Human Services' (HHS) Agency for Healthcare Research and Quality (AHRQ) in order to minimize individual survey limitations (see table 1).[3]

Table 1: Four National Health Surveys With Dental Data, 1988-97

Survey	Data used in study	Description
National Health and Nutrition Examination Survey III (NHANES III), CDC	1988-94	A nationally representative survey of the prevalence, trends, and risk factors for selected diseases. Oral assessments were conducted by dentist examiners.
National Health Interview Survey (NHIS), CDC	1994	A broad, nationally representative survey that monitors trends in illness and disability and tracks progress toward national health objectives.
Medical Expenditures Panel Survey (MEPS), AHRQ	1996	A nationally representative survey of health care use, expenditures, sources of payment, and insurance coverage. Data are collected through in-person, telephone, and mailed surveys. Providers are contacted to verify and supplement reported events.
Behavioral Risk Factor Surveillance System (BRFSS), CDC	1995-97	A state-based random telephone survey of the prevalence of major behavioral risks associated with premature morbidity and mortality among adults. Provides state-specific estimates.

Note: Dental questions vary from year to year within surveys. We used the most recent survey data available for our analyses.

Recognizing the importance of good oral health, HHS established oral health goals as part of its departmentwide Healthy People 2000 initiative.

[3]Formerly the Agency for Health Care Policy and Research (AHCPR).

HHS set goals, such as reducing untreated caries in children and increasing regular dental visits by adults, for the population in general and some minority groups. Interim assessments showed that progress toward these goals was mixed, with poor and minority groups being furthest from reaching them. HHS established a new set of oral health goals in its Healthy People 2010 initiative, announced in January 2000.

In April 1997, the Secretary of HHS commissioned the first Surgeon General's Report on Oral Health. Under the direction of the National Institute of Dental and Craniofacial Research, the study will examine the relationships between oral health and general health and well-being. Highlights are expected to include the determinants of oral health, the effects of oral health on daily living, leading-edge technologies, preventive approaches, and community-based interventions to improve oral health. The report's publication is planned for spring 2000.

Oral health includes prevention or elimination of a number of diseases and conditions that occur in the mouth, such as gum disease and oral cancer. Many factors can affect an individual's oral health, including personal behavior such as oral hygiene and diet, as well as environmental factors, such as community water fluoridation. We used tooth decay as a key indicator for our work because it is the most common oral disease, data are readily available, and it can be a sentinel condition for dental care.

Dental Disease Is a Chronic Problem for Low-Income People

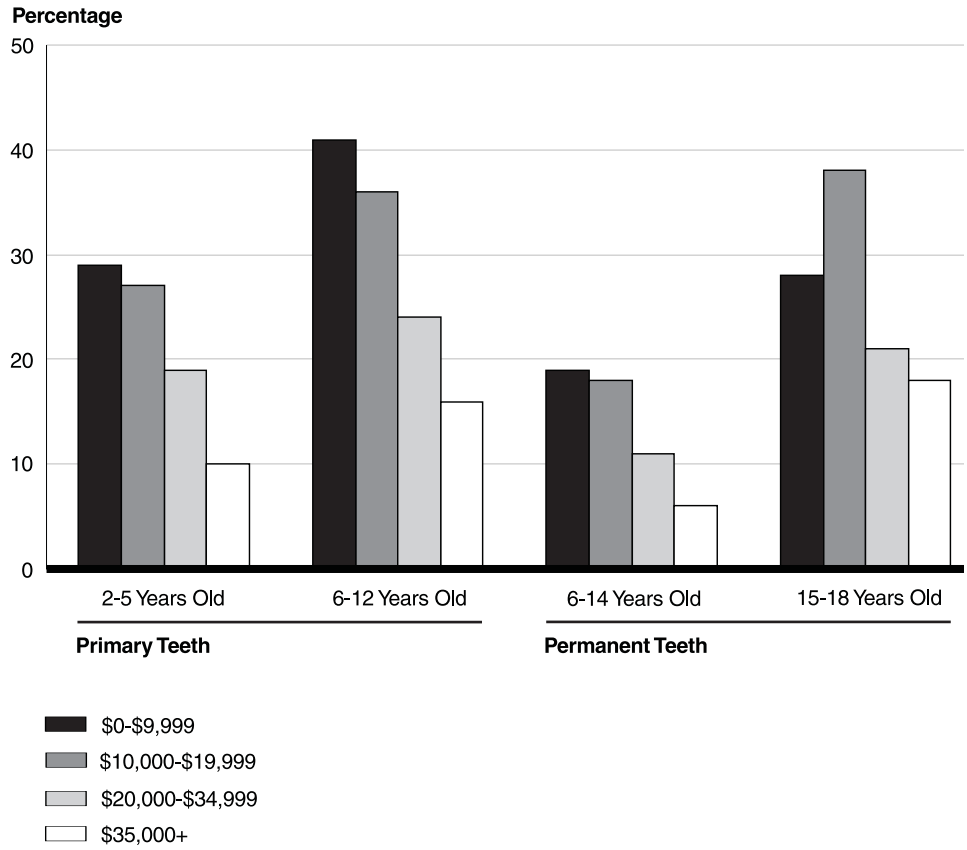
Poor oral health afflicts many low-income and other vulnerable populations. Analysis of key dental health indicators—including untreated tooth decay and restricted activity days for children and untreated tooth decay and tooth loss for adults—showed large disparities between low-income groups and their higher-income counterparts. Many vulnerable populations, including homeless people, minorities, and some rural residents, face similar problems.

Low-Income Children Suffer From Poor Dental Health

Tooth decay, the most common chronic childhood disease, is most prevalent among poor children. About 25 percent of all children have untreated caries in their permanent teeth. Eighty percent of untreated caries in permanent teeth are found in roughly 25 percent of children who are 5 to 17 years old, mostly from low-income and other vulnerable groups. Left untreated, the pain and infection caused by tooth decay can lead to problems in eating, speaking, and attending to learning.

Our analyses of national survey data show that the prevalence of untreated caries in the lowest income group was much greater than that in the highest income group for children of all ages. For example, among children aged 2 through 5 who had family incomes below $10,000, nearly one in three had at least one decayed tooth that had not been treated. In contrast, only 1 in 10 preschool children whose family incomes were $35,000 or higher had untreated caries. As shown in figure 1, these income-based disparities generally hold for untreated caries in both children's primary (baby) teeth and permanent teeth across all age groups.

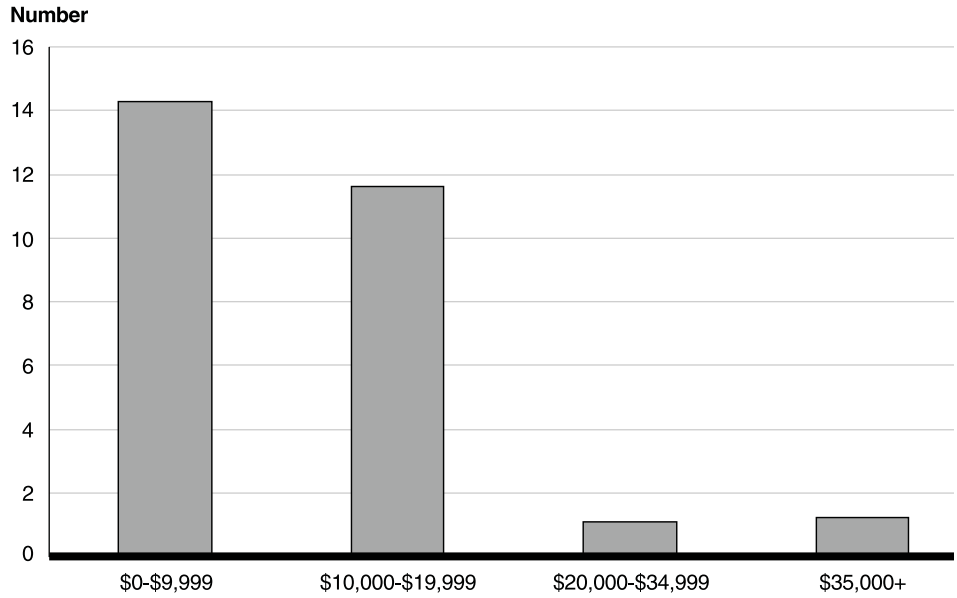
Figure 1: Percentage of Children With Untreated Caries by Family Income



Source: NHANES III, CDC, 1988-94.

Another key indicator of dental health is the number of missed activity days, such as days of school or work, because of dental problems.[4] Surveys show that missed activity days are concentrated in low-income groups. Poor children suffer nearly 12 times more restricted-activity days, such as missing school, than higher-income children as a result of dental problems (see figure 2).

Figure 2: Restricted Activity Days per 100 Children Because of Dental Problems by Family Income



Source: NHIS, CDC, 1994.

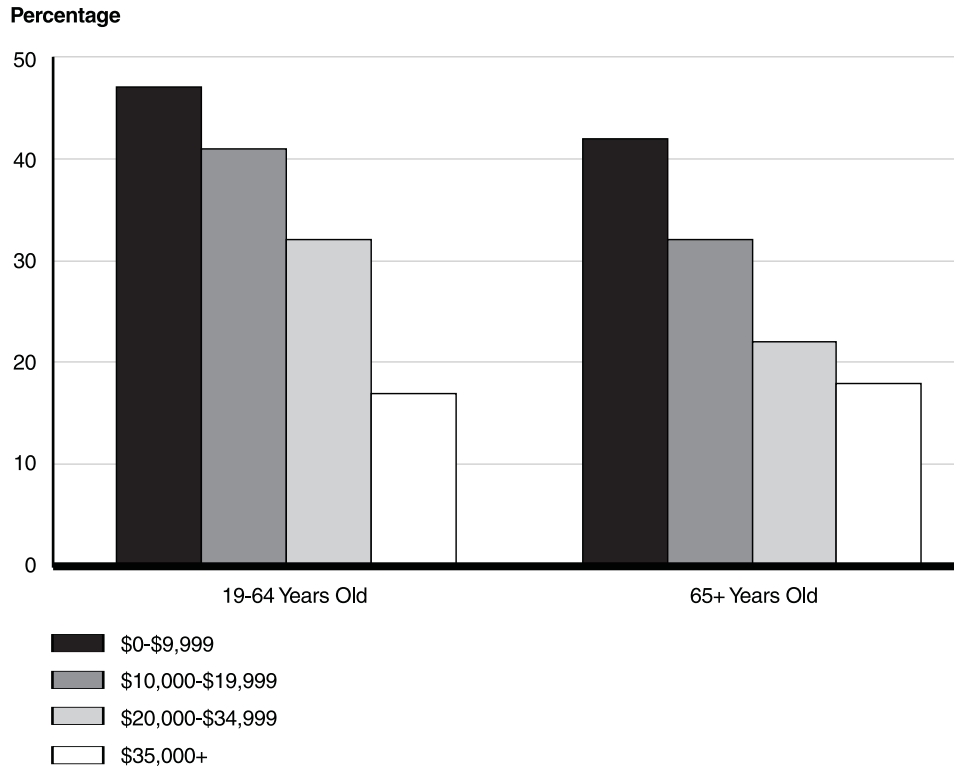
Low-Income Adults Have Poor Dental Health

Poor oral health and dental disease often continue from childhood into adulthood because tooth decay and periodontal disease are progressive

[4]A National Institute of Dental Research study of 1989 NHIS data found that children missed about 52 million school hours (more than 8 million school days) and adults missed more than 20 million work days because of dental treatment or problems in 1989. However, missed days from dental problems alone cannot be disaggregated from the total. More current estimates are not available

and cumulative throughout life. Low-income adults have more untreated caries and suffer from greater tooth loss because of decay or gum disease than their higher-income counterparts. For example, among adults aged 19 to 64 who had family incomes of less than $10,000, nearly one in two had at least one decayed tooth that had not been treated. In contrast, only one in six adults whose incomes were $35,000 or more had untreated caries (see figure 3).

Figure 3: Percentage of Adults With Untreated Caries by Family Income



Source: NHANES III, CDC, 1988-94.

Another important marker of dental health is tooth loss from decay or gum disease. Left untreated, caries and gum disease eventually lead to tooth loss. Our analysis of CDC survey data shows that low-income adults suffer more severe tooth loss than their wealthier counterparts. For example, adults in families earning less than $15,000 per year were more than 2-1/2

times as likely to have lost six or more teeth from decay or gum disease as adults in families earning $35,000 or more (see table 2).

Table 2: Percentage of Adults With Tooth Loss From Decay or Gum Disease by Family Income

Number of teeth lost	Less than $15,000	$15,000-$34,999	$35,000 or more
None	34%	40%	51%
1-5	30	33	34
6 or more	34	25	13
Other or no response	2	2	1

Note: Columns may not total 100 percent because of rounding.

Source: BRFSS, CDC, 1995-97.

Other Vulnerable Populations Have Poor Dental Health

The same characteristics of poor dental health can be seen in various populations that are generally considered to be at higher risk for dental problems or may have a disproportionate number of persons living in low-income situations. Health surveys consistently show that minority groups have higher levels of unmet dental health needs. Recognizing this disparity, HHS has set specific goals for some minority groups as part of its departmentwide initiatives. Further, in planning for its Healthy People 2010 initiative, HHS reported that minorities, particularly Native Americans, experience significantly greater levels of untreated tooth decay (see table 3).

Table 3: Percentage of Selected Ethnic Groups With Untreated Tooth Decay

	Age in years			
Group	**2 to 4**	**6 to 8**	**15**	**35 to 44**
Total	16%	29%	20%	27%
Native American	68	69	66	[a]
Asian and Pacific Islander	30	71	[a]	[a]
African American	22	36	29	46
Mexican American	24	43	27	34
White	11	26	195	24

[a]Data not statistically reliable.

Source: HHS, Healthy People 2010 Conference Report: Oral Health Survey of Native Americans, Indian Health Service service areas, 1999; California data for Asian and Pacific Islander, 1994; all other, NHANES III, CDC, 1994.

Among the most vulnerable low-income populations are homeless people. For millions of homeless men, women, and children, maintaining personal hygiene in general is a challenge, and finding a place to practice routine good oral hygiene may be nearly impossible for some. Homeless persons have more grossly decayed and missing teeth than even low-income persons who live in stable housing. Homeless children are more likely to never have visited a dentist. One-third of homeless families responding to a 1999 survey reported their children had never visited a dentist, and 17 percent reported that their children had needed to see a dentist in the preceding year but were unable to do so.[5] For homeless adults, the survey found 54 percent had not seen a dentist in at least 2 years, and 46 percent reported they needed to see a dentist in the preceding year but were not able to do so.

The Use of Dental Care by the Poor Is Low Despite the Availability of Coverage

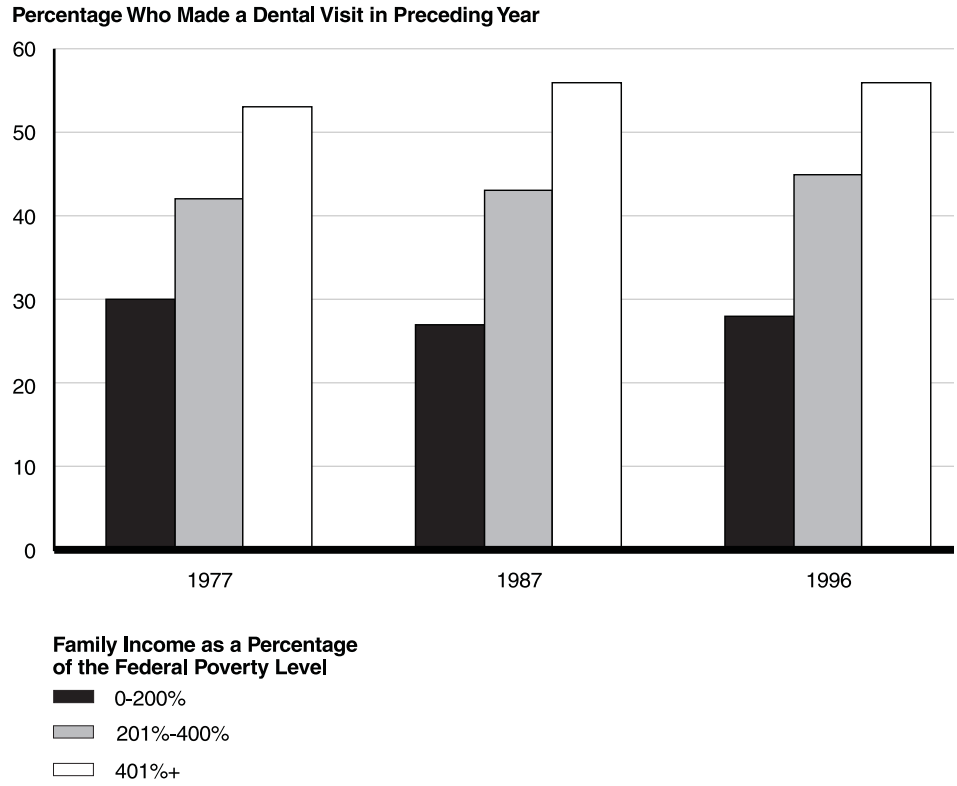
While the states offer comprehensive dental coverage to most low-income children and some adults, the use of dental care is low. In response to our survey, state Medicaid agencies reported comprehensive dental coverage for children but more limited coverage for adults. Our analysis of two key markers of the use of dental care—the rate of dental visits in the past year for children and adults and the use of sealants for children—showed that

[5]Interagency Council on the Homeless, *Homelessness: Programs and the People They Serve* (Dec. 1999)

low-income populations use dental services at a much lower rate than more affluent groups. Our comparison of state Medicaid coverage for adults and rates of dental visits showed a small increase in use as coverage increased.

National surveys have shown little improvement in the use of dental care among low-income populations over the past two decades. In 1996, persons in low-income groups made dental visits at about half the rate of their higher-income counterparts, a finding similar to survey results in 1977 and 1987 (see figure 4).

Figure 4: Percentage of Population Who Made a Dental Visit in the Preceding Year:1977, 1987, and 1996



Note: The federal poverty level for a family of four was $6,191 in 1977, $11,611 in 1987, and $16,036 in 1996.

Source: AHRQ unpublished data: National Medical Care Expenditure Survey, 1977; National Medical Expenditure Survey, 1987; MEPS, 1996.

Under Medicaid, Children Have Comprehensive Dental Coverage, but Adults' Coverage Varies

Under EPSDT, all states are required to provide comprehensive dental services to enrolled children. While the states have considerable flexibility in the benefits packages they can offer under SCHIP, all but Colorado and Delaware offer substantial dental coverage. Adult dental coverage is optional under Medicaid, but about two-thirds of the states indicated that they cover some dental services. However, many impose considerable limitations. (See table 4.)

Table 4: Number of States That Provide Dental Coverage for Children and Adults

Category of services (typical service)	Children		Adult
	EPSDT	SCHIP	Medicaid
Emergency	51	49	42
Preventive (prophylaxis, sealants)	51	49	27
Diagnostic (clinical oral evaluations)	51	49	32
Routine restorative (amalgam, resin restoratives)	51	49	29
More complex (crowns, bridges, dentures)	51	43	30

Source: GAO Jan. 2000 survey of 50 state Medicaid and SCHIP agencies and the District of Columbia.

Although the states offer comprehensive dental coverage to all enrolled children and many adults, a significant gap exists between the number who are eligible and the number who are enrolled. An estimated 4.7 million uninsured children were eligible for Medicaid but not enrolled in 1996. While comparable estimates are not available for adults, a 1999 HCFA-sponsored study estimated that, nationwide, 46 percent of the persons who were potentially eligible were not enrolled in Medicaid.

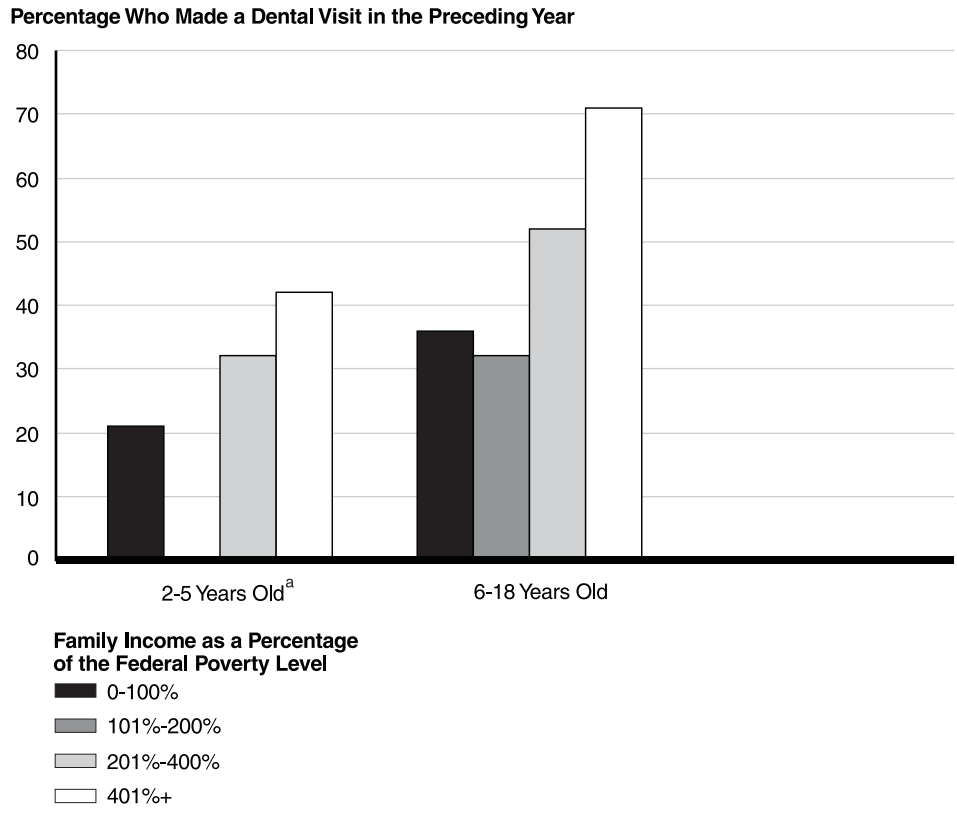
Most Poor Children and Adults Do Not Receive Regular Dental Care

Having poor oral health and armed with Medicaid or SCHIP dental coverage, poor people might be expected to make substantial use of dental services. However, they often do not receive the care they need. Our analysis of national surveys shows that low-income children and adults do not visit the dentist as often as their higher-income counterparts. A separate analysis of Medicaid billing data for 1995 confirms the low use of dental care in Medicaid's fee-for-service programs in the 27 states where data were available. We could not, however, determine from either the survey or billing data the extent to which low use was the result of individuals' not seeking dental care or a lack of available dental services.

Most Children of Low-Income Families Do Not Visit the Dentist Regularly

National survey data from 1996 show that low-income children were largely not receiving regular dental care. For example, about 36 percent of 6-to-18-year-olds living at or below the federal poverty level had visited a dentist in the preceding year compared with about 71 percent living in families with incomes higher than 400 percent of the federal poverty level. At all ages, children in the highest income group were about twice as likely to have made a dental visit as children at or below the federal poverty level (see figure 5).

Figure 5: Percentage of Children Who Made a Dental Visit in the Preceding Year by Family Income



[a]Data insufficient for the 101 to 200 percent category.

Note: The federal poverty level for a family of four was $16,036 in 1996.

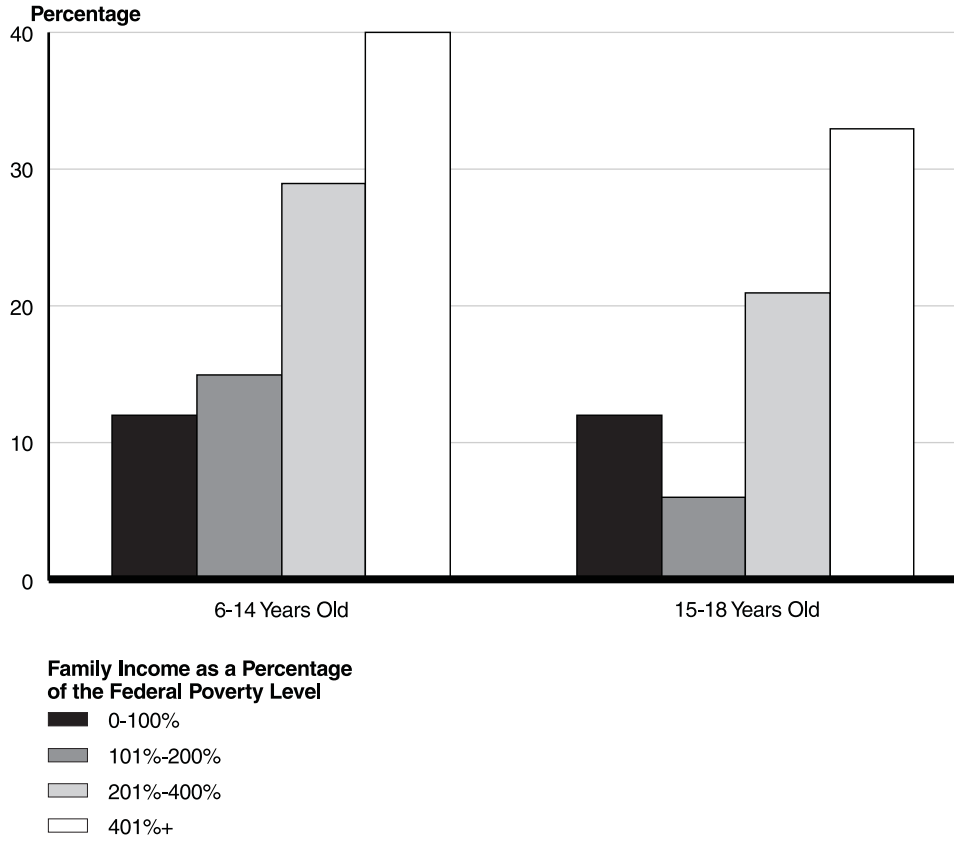
Source: MEPS, AHRQ unpublished data, 1996.

Although the large number of eligible recipients not enrolled in Medicaid or SCHIP explains part of the absence of dental care, it is not the only reason. Children enrolled in Medicaid, as a subset of all low-income children described above, also show low use of dental care. We analyzed data from HCFA's State Medicaid Resource File to assess the extent to which individual state Medicaid programs had been billed for dental care for children. This analysis of 1995 data (the most recent available) from 27 state Medicaid programs showed that only about one in three children (34 percent) enrolled in Medicaid fee-for-service plans had visited the dentist in the preceding year.[6]

Another indicator of the use of dental care by children is the use of sealants on permanent teeth. Sealants are plastic-like coatings that can dramatically reduce the likelihood of caries. HHS established a Healthy People 2000 goal of having at least 50 percent of children with sealants on permanent molars. Our analysis showed that none of the income groups had achieved this goal and that the poorest children were furthest away. For example, only 12 percent of children aged 6 to 14 living at or below the federal poverty level had at least one sealant—roughly one-third the incidence of children in higher-income families (see figure 6).

[6]HCFA's State Medicaid Resource File contains Medicaid fee-for-service information on eligibility, billing claims, and utilization for states that participate in the Medicaid Statistical Information System. Billing data are limited to the extent that they do not provide information on provided services for which no reimbursement was sought. This analysis does not include information on children who may have made a dental visit under a managed care plan, because such data are not available.

Figure 6: Percentage of Children With at Least One Sealant by Family Income

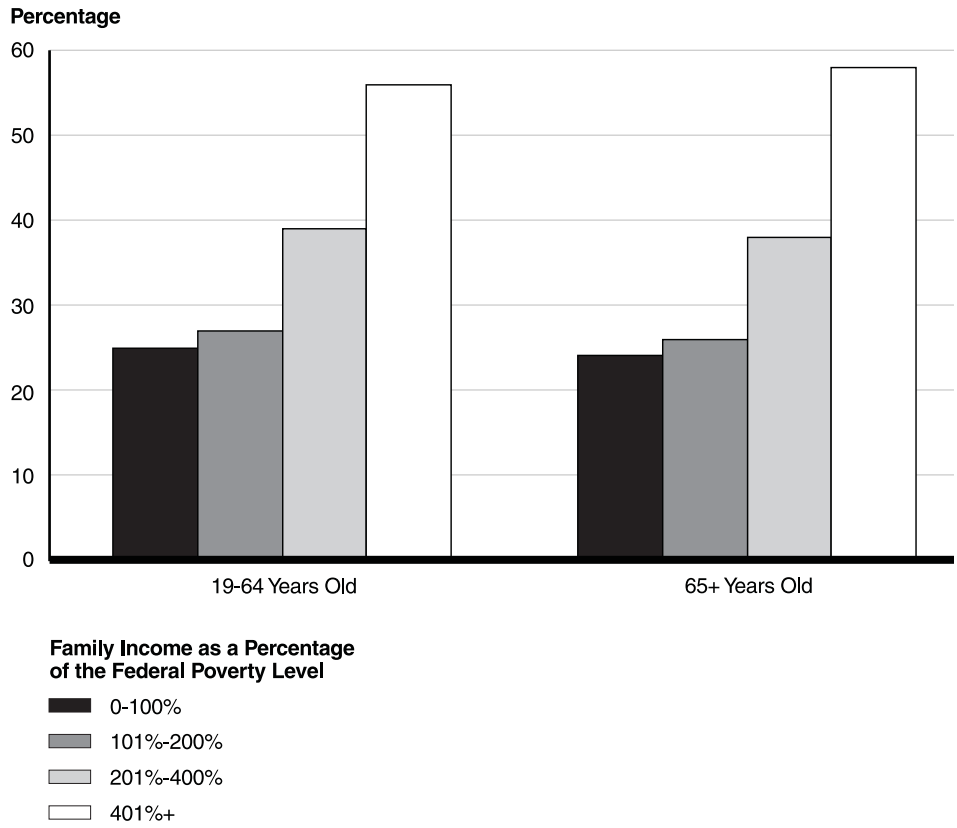


Source: NHANES III, CDC, 1988-94.

Most Low-Income Adults Do Not Visit the Dentist Regularly

Low-income adults also make fewer visits to dentists than their higher-income counterparts. Adults living at or below the federal poverty level are less than half as likely to have seen a dentist in the past year as adults earning more than four times the poverty level (see figure 7).

Figure 7: Percentage of Adults Who Made a Dental Visit in the Preceding Year by Family Income



Note: The federal poverty level for a family of four was $16,036 in 1996.

Source: MEPS, AHRQ unpublished data, 1996.

Our analysis of Medicaid payment data also shows low utilization by enrolled adults. Dental claims billed to Medicaid in 1995 for the 18 states that cover adult dental services show that only 29 percent of adults enrolled in Medicaid fee-for-service had visited the dentist in the preceding year.[7] In comparison, nationwide AHRQ data for 1996 showed that 44 percent of adults aged 19 to 64 had made a dental visit in the preceding year. Our analysis was limited to fee-for-service encounters because

[7]Of the 27 states that submitted billing data to HCFA in 1995, 9 did not cover adult dental services or covered only emergency services. Our analysis was limited to adults who were enrolled in Medicaid for a full year and who presumably had no other source of insurance.

consistent and reliable data for Medicaid beneficiaries enrolled in managed care plans were not available.

In general, residents of rural areas are slightly less likely to have visited a dentist in the past year than urban residents. While access to dental care is a persistent problem for residents of many rural areas, our analysis of national data for all nonmetropolitan counties shows, in general, these residents just slightly behind metropolitan area residents in dental visits (see table 5).

Table 5: Percentage of Residents Making a Dental Visit in 1996 by Metropolitan Area and Income

	Family income as a % of the federal poverty level		
Area	**0-200%**	**201%-400%**	**401% or more**
Central metropolitan counties	29%	43%	58%
Other metropolitan counties	29	49	57
Nonmetropolitan counties adjacent to metropolitan areas	29	41	58
Nonmetropolitan counties not adjacent to metropolitan areas	22	47	53

Note: The federal poverty level for a family of four was $16,036 in 1996.

Source: MEPS, AHRQ unpublished data, 1996.

The Use of Dental Services Varies by State

The rates at which dental services are used vary significantly for all income groups among the states. CDC survey data show that the proportion of adults who made a dental visit in the preceding year ranged from a low of 33 percent in Arkansas to a high of 61 percent in Hawaii for those with less than $15,000 annual family income.[8] Higher income groups show similar variations of between 66 and 83 percent. Within states, utilization was not uniform among income groups. For example, Alaska had one of the higher

[8]National data from AHRQ's survey cannot be analyzed state by state. Instead, we used CDC's state-based BRFSS. Because the two surveys differ in their purpose, survey questions, and protocols, they yield somewhat different results, but important trends and disparities remain. Of note, MEPS gathers income and family size data that can be expressed as a percentage of the federal poverty level. BRFSS gathers income data only in broad categories that cannot be correlated with federal poverty levels.

rates for the low-income group (55 percent) but one of the lower rates for the highest income group (69 percent). Conversely, Kentucky had one of the lowest rates for the low-income group (35 percent) but one of the highest rates for the highest income group (79 percent). Appendix I contains data for all 46 states that reported data from the optional BRFSS oral health module.

To determine whether Medicaid coverage affected the variation among states, we compared rates for the use of dental services for the 27 states reporting Medicaid payment data. Our analysis of HCFA's 1995 fee-for-service payment data showed wide variations between states for both children and adults. For children enrolled in Medicaid, the proportion who made a dental visit in the preceding year ranged from a low of 22 percent in Delaware to a high of 58 percent in Vermont. By comparison, in states that cover partial or full adult dental care under Medicaid, adults' use of dental care was generally much lower, ranging from less than 6 percent in Colorado to 46 percent in Iowa. While Medicaid's policy of mandatory dental coverage for children and optional coverage for adults may explain these differences, it does not explain the wide variation among states for children. Appendix I contains data for all 27 states that submitted payment data to HCFA in 1995.

Concluding Observations

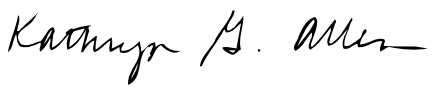
Dental disease is a chronic problem among low-income populations. Key markers of dental health and the use of services for dental problems, such as untreated caries and lost teeth, show that low-income populations bear a disproportionate level of dental disease and make fewer dental visits. Disparities exist despite coverage of dental services under Medicaid and SCHIP programs. The poor oral health and relatively low use of dental care even among Medicaid enrollees suggest that barriers other than access to insurance coverage contribute to the problems faced by low-income populations. Frequently cited barriers include a shortage of dentists in some areas, unwillingness of dentists to participate in Medicaid, low Medicaid reimbursement rates and the program's administrative burden, and unresolved patient education issues. In a subsequent report, we will examine these barriers in more detail, as well as federal and state initiatives to address them.

Agency Comments

We provided a draft of this report to HHS for comment. HHS concurred with our findings and reiterated its commitment to eliminating dental access disparities and promote oral health, particularly for disadvantaged

populations. It also delineated a wide array of initiatives that are planned or under way by its various component agencies, including intra- and interagency collaborative strategies, to help address concerns about oral health disparities. HHS also provided technical comments, which we incorporated where appropriate. HHS's comments are included in full in appendix III.

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, and others who are interested. We will make copies available to others upon request. This report was prepared under the direction of Frank Pasquier, Assistant Director. Other individuals 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.



Kathryn G. Allen
Associate Director, Health Financing
and Public Health Issues

Scope and Methodology

To determine the oral health status and use of dental care of Medicaid and other low-income populations, we analyzed data by income group, age, urban and rural locations, and insurance status from several nationally representative health surveys, including

- National Health and Nutrition Examination Survey III (NHANES III), Centers for Disease Control and Prevention (CDC), 1988-94;
- National Health Interview Survey (NHIS), CDC, 1994;
- Medical Expenditures Panel Survey (MEPS), Agency for Healthcare Research and Quality (AHRQ), 1996; and
- Behavioral Risk Factor Surveillance System (BRFSS), CDC, 1995-97.

Data from the different surveys we examined produce somewhat different results for similar questions.[1] Differences in survey design, collection methods, timing, and other factors affect survey results. Important trends and disparities were, nevertheless, consistent across all four surveys. Differences in survey design also affect our ability to compare results between surveys. For example, some surveys ask for specific income levels and family size and thus can be converted to federal poverty levels, while others ask for income only in general categories that cannot be expressed in terms of poverty level.

To determine which dental benefits were covered by state Medicaid and the State Children's Health Insurance Programs (SCHIP), we analyzed data from the American Dental Association (ADA) and the Health Care Financing Administration (HCFA). We also surveyed each state Medicaid agency to complete and update data on dental coverage under state Medicaid and SCHIP.

To assess available data on state Medicaid dental care for children and adults covered by fee-for-service arrangements, we analyzed HCFA's State Medicaid Resource File (SMRF). This database provides summarized information on Medicaid eligibility, claims, and utilization for states that participate in the Medicaid Statistical Information System. To facilitate research, HCFA has adjusted and reformatted the data and added service and eligibility codes. The data are arranged in five separate research files: Drug Claims, Inpatient Claims, Long-Term Care Claims, Other Ambulatory

[1]See Mark D. Macek and others, "A Comparison of Dental Utilization Estimates From Three National Surveys," abstract, Association for Health Services Research, Washington D.C., June 28, 1999.

Claims, and Person Summary. Claims information is not available for children and adults in Medicaid managed care arrangements, and reliable data on health care services provided to managed care enrollees were not available at the time of our review.

We used the Person Summary and the Other Ambulatory Claims files to determine the percentage of children aged 0 to 18 and adults aged 19 to 64 who had received dental services in 1995. The Person Summary file contains characteristics such as date of birth and dates of coverage for each person covered by Medicaid during the year. The Other Ambulatory Claims file contains records for dental services received. Our analysis was limited to 1995 data from the 27 states that provided data to HCFA for that year. According to HCFA officials, 1995 is the most recent year for which reliable claims data are available.

We performed separate analyses for children aged 0-18 and adults aged 19-64. We limited our analysis to children and adults for whom the data indicated that they were covered by Medicaid for the entire year in order to make sure that we did not include beneficiaries who may have switched to, and received care from, a managed care plan during the year.

Other than making these control checks, we did not independently verify the SMRF data because (1) HCFA's process for modifying the data includes quality control phases in which the data are analyzed with a number of statistical tools and crosswalks and (2) the data originated at the state level and the benefit of tracking them back to their source would not have outweighed the considerable cost and staff resources that this would have entailed. These data represent the most current and complete data available on state-level billing within Medicaid fee-for-service programs.

State Data Tables

Table 6: Percentage of Adults Who Made a Dental Visit in the Preceding Year by Annual Family Income

State	Less than $15,000	$15,000-$34,999	$35,000 or more
Alabama	43%	62%	77%
Alaska	55	67	69
Arizona	55	61	74
Arkansas	33	58	66
California	45	58	71
Colorado	43	56	73
Connecticut	46	65	81
Florida	51	62	74
Georgia	45	63	74
Hawaii	61	72	80
Idaho	42	57	75
Illinois	41	61	74
Indiana	48	58	74
Iowa	47	58	70
Kansas	45	55	76
Kentucky	35	56	79
Louisiana	40	57	72
Maine	38	58	77
Maryland	46	62	70
Massachusetts	54	60	73
Michigan	43	66	81
Mississippi	35	56	73
Missouri	42	56	70
Montana	53	63	75
Nebraska	44	65	80
Nevada	42	49	72
New Hampshire	49	67	80
New Jersey	53	61	78
New Mexico	45	63	77
New York	53	64	79
North Dakota	49	63	77
Ohio	43	61	83
Oklahoma	41	57	77
Oregon	54	64	77

Continued

State	Less than $15,000	$15,000-$34,999	$35,000 or more
Pennsylvania	48	61	79
Rhode Island	49	61	69
South Dakota	56	68	83
Tennessee	37	58	78
Texas	37	54	71
Utah	55	66	78
Vermont	55	64	77
Virginia	41	60	76
Washington	46	63	70
West Virginia	34	54	76
Wisconsin	60	66	78
Wyoming	51	60	70

Continued from Previous Page

Note: Dental data not available for Delaware, Minnesotta, North Carolina, and South Carolina.

Source: BRFSS, CDC, 1995-97.

Table 7: Medicaid Coverage of Adult Dental Care

State	Full	Partial[a]	None[b]
Alabama			X
Alaska			X
Arizona		X	
Arkansas			X
California	X		
Colorado		X	
Connecticut	X		
Delaware			X
District of Columbia			X
Florida		X	
Georgia			X
Hawaii			X
Idaho		X	
Illinois		X	
Indiana	X		
Iowa	X		
Kansas			X
Kentucky		X	
Louisiana		X	
Maine	X		
Maryland			X
Massachusetts	X		
Michigan	X		
Minnesota	X		
Mississippi			X
Missouri		X	
Montana		X	
Nebraska		X	
Nevada			X
New Hampshire			X
New Jersey	X		
New Mexico	X		
New York	X		
North Carolina		X	
North Dakota	X		

Continued

State	Full	Partial[a]	None[b]
Ohio		X	
Oklahoma			X
Oregon		X	
Pennsylvania	X		
Rhode Island		X	
South Carolina			X
South Dakota		X	
Tennessee			X
Texas			X
Utah		X	
Vermont		X	
Virginia		X	
Washington	X		
West Virginia			X
Wisconsin	X		
Wyoming			X

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[a]States do not cover particular services (preventive, diagnostic, restorative, or more complex), or they impose other limitations on coverage, such as a $475 annual ceiling.

[b]None or emergency services only.

Source: GAO survey of state Medicaid and SCHIP agencies, Jan. 2000.

Table 8: Percentage of Medicaid Fee-for-Service Recipients Who Made a Dental Visit in the Preceding Year

State	Children	Adults
Weighted average	33.5%	29.0%
Alabama	29.1	[a]
Alaska	45.1	[a]
Arkansas	36.8	[a]
California	31.8	34.5
Colorado	32.4	5.6
Delaware	21.8	[a]
Florida	33.7	11.5
Georgia	36.2	[a]
Indiana	26.0	24.2
Iowa	47.9	45.7
Kansas	38.9	[a]
Kentucky	34.3	23.1
Maine	41.4	10.0
Michigan	39.4	30.6
Mississippi	32.0	[a]
Missouri	27.1	25.7
Montana	35.8	35.4
New Hampshire	56.1	[a]
New Jersey	33.8	28.2
North Dakota	37.2	35.3
Pennsylvania	38.4	22.6
Rhode Island	28.6	26.6
Utah	30.7	34.8
Vermont	58.3	42.7
Washington	35.0	31.9
Wisconsin	26.5	32.6
Wyoming	40.1	[a]

[a]State does not provide dental coverage for adults or provides only emergency care.

Source: SMRF, HCFA, 1995.

Comments From the Department of Health and Human Services

DEPARTMENT OF HEALTH & HUMAN SERVICES Office of Inspector General

Washington, D.C. 20201

MAR 31 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: Dental Disease Is a Chronic Problem Among 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: Dental Disease Is a Chronic Problem Among 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. The Department shares GAO's concerns about ensuring adequate oral health care to the low-income population. The GAO report provides valuable information to Federal and State policymakers on the challenges faced in implementing programs to promote oral health. We look forward to working with GAO on this and other issues in the future. In general, we concur with GAO's findings.

As GAO notes in their report, the oral health of most Americans has substantially improved over the last several decades. Most Americans can avail themselves of the most advanced dental services in the world and the overall health status of Americans has never been better. Yet, concerns about oral health and dental access disparities, especially among disadvantaged and low-income populations, have caused the Department to engage in a wide array of activities designed to eliminate those inequities.

Two important oral health-focused documents will provide the Department with a clear road map for our activities over the next decade. The first document is the upcoming Report of the Surgeon General on Oral Health in America. As GAO is aware, some months ago, the Surgeon General began development of an historic, detailed examination of the oral health status of the Nation. The Department expects to release that report in the next few months, and anticipates that the report will confirm the great strides the Department has made in bettering the Nation's oral health, as well as highlight the need for additional efforts to include all Americans in those gains.

Although the entire human life span will be addressed in the Surgeon General's report, we are especially concerned about children's oral health and access to dental services. To better address the needs of this important population, the Surgeon General convened, on March 19 through 21, a Workshop on Children and Oral Health, and will be convening a major national conference on children's oral health issues in June. The results of both the workshop and conference will help to further inform the Department and the public as to appropriate responses necessary if all children are to have improved oral health.

1

Also, the Department has just released a second document which will direct our attention toward addressing oral health disparities: the Year 2010 Health Objectives for the Nation. This document notes the substantial gains accrued in oral health, while focusing the Department on the additional work required to assure that disadvantaged populations achieve the same health improvements as the general population.

While the Surgeon General's report and the Year 2010 Health Objectives for the Nation are critically important initiatives, the Department has not been idle in developing other efforts which will help to address concerns about oral health disparities. This response provides brief summaries of specific departmental disparity-related oral health activities, both underway and planned, as well as coordinated, intra- and interagency collaborative strategies.

To further coordination between Federal and nonfederal efforts, the Department's Office of the Secretary is developing an initiative designed to engage the nonfederal sector in joining with the Department in addressing oral health issues. Specifically, we will be convening the Secretary's Oral Health Leadership Meeting to include representatives of foundations, businesses, the health professions, academe and State governments. The purpose of the meeting will be to raise awareness of disparities in oral health care status and access in the United States, charge the nonfederal sector to play a key role in problem solving, and encourage the nonfederal sector to form an ongoing "Oral Health Working Group," which will develop new strategies. Additionally, the Office of the Secretary will be sponsoring a "Federal Partnership Workshop on Children and Oral Health" which will foster intra-agency and inter-departmental cooperation in seeking ways to eliminate oral health disparities among children.

Department Activities Directed Toward Reducing Oral Health Disparities

The Department of Health and Human Services sponsors a wide variety of programs intended to help reduce or eliminate disparities in dental access and oral health status. These activities include newly implemented initiatives (that is, in the last 2 or 3 years) that either have no prior programmatic history or consist of significant expansions of existing programs, and activities that are planned, but not yet implemented. No attempt has been made to inventory or list the entire array of the Department's pre-existing, ongoing, and wide-ranging oral health-related activities. Several operating divisions administer the Department's programs:

Administration for Children and Families (ACF)

The ACF is responsible for Federal programs which promote the economic and social well-being of families, children, individuals, and communities. In 1999, a partnership between Head Start, the Health Resources and Services Administration (HRSA), the Health Care Financing Administration (HCFA) and the Department of Agriculture's Supplemental Food Program for Women, Infants, and Children (WIC) was formed with the intent of working together to improve the oral health status of young children.

This partnership commissioned three scientific papers about current evidence-based oral health practices and recommended guidelines related to nutrition and oral health, prevention of caries, and access to care. These papers were the focus of a September 1999 Head Start and Partners Forum on Oral Health that was held in Washington, DC. Head Start staff and parents, representatives from WIC, ACF's Child Care, ACF's regional offices, regional HCFA/HRSA oral health teams, Head Start training and technical assistance providers and various child advocacy groups participated in the Forum and provided feedback to the paper's authors about the feasibility and cultural appropriateness of implementing the recommended guidelines locally. Another goal of the Forum was to have this event replicated at the regional, State, and local level. Follow-up activities include:

- Publishing the papers in the Journal of Public Health Dentistry in the fall of 2000 issue. A special edition of the Head Start Bulletin will focus on the Forum, and will include reactions from participants, summaries of the information presented at the Forum, and a list of oral health resources.

- Sponsoring a national oral health education campaign at the annual meeting of the National Head Start Association in Washington, D.C. from April 26 to 29 of 2000. This campaign will disseminate key information presented at the Forum that can be implemented in Head Start programs and in the homes of Head Start children. Products of the education campaign will be fact sheets, newsletters, buttons, and other written materials.

- Forming partnerships between the HCFA-HRSA oral health team and ACF. Other regional activities include State surveys to determine access to care, meetings with State dental associations, establishing health round tables or oral health committees, replicating the Forum on a State level or disseminating information to Head Start programs about dental resources.

- Establishing a Head Start and Partners Forum on Oral Health Listserve. The Listserve will allow regional ACF, HCFA, HRSA and WIC representatives and

Head Start training and technical assistance providers to share information and strategies related to improving access to care.

Agency for Healthcare Research and Quality (AHRQ)

The AHRQ was established in 1989 as the Agency for Health Care Policy and Research. The AHRQ is the lead agency charged with supporting research designed to improve the quality of health care, reduce its cost, and broaden access to essential services. The AHRQ's broad programs of research bring practical, science-based information to medical practitioners and to consumers and other health care purchasers. Current activities include:

- Supporting activities at the University of North Carolina evidence-based practice center. Evidence reports requested by the National Institutes of Health's (NIH) National Institute of Dental and Craniofacial Research (NIDCR) will synthesize research knowledge on critical dental and oral health issues.

- Increasing collaborative health services research on oral health issues. The AHRQ will work with NIDCR to explore possible opportunities for expanding the field of dental health services research, including possible training opportunities with the NIDCR-supported evidence-based practice center, continuation of the dental scholar program with the American Association of Dental Schools, and expansion of training opportunities through NIDCR and AHRQ-supported National Research Service Award programs.

- Conducting and promoting health services research. One grant at the University of Maryland is evaluating adult Maryland Medicaid patients' patterns of hospital emergency department use for the treatment of mouth pain and infections associated with teeth and periodontal tissue. Another grant is looking at dental coverage, among other benefits, as a factor in demand for employer-based health insurance. The AHRQ also participated in a children's dental health expert panel meeting held at the National Committee on Quality Assurance in 1999.

Centers for Disease Control and Prevention (CDC)

The CDC's mission is to promote health and quality of life by preventing and controlling disease, injury, and disability. The CDC has implemented a number of important initiatives relevant to improving the Nation's oral health and eliminating disparities in low income, minority and disadvantaged populations. These include:

- Monitoring the Nation's oral health. Periodic assessment of oral health is

essential to determine oral health status, trends in oral disease, and access to oral health preventive and restorative services; to evaluate prevention and control interventions; and to target limited resources. The CDC continues to work on validating less resource-intensive methods to accomplish these goals, for example, through funding development of training materials such as the Basic Screening Surveys: An Approach to Monitoring Community Oral Health.

- Supporting surveillance systems. The CDC collects, analyzes, and disseminates data related to oral health through several national and State-based mechanisms, for example, National Health and Nutrition Examination Survey, National Health Interview Survey, National Nursing Home Survey, Behavioral Risk Factor Surveillance Systems, Youth Risk Behavioral Survey, Pregnancy Risk Assessment Monitoring System, Water Fluoridation Reporting System, Association of State and Territorial Dental Directors Annual Synopsis of State Dental Program, and the National Oral Health Surveillance System.

- Serving as co-lead agency (with NIH and HRSA) for Oral Health Objectives of Healthy People 2010. Data collection for monitoring progress toward objectives is a fundamental component of this 10-year disease prevention and health promotion activity of the Department. Six of 17 oral health objectives for 2010 are related to building the capacity or infrastructure of oral health programs within State or local health agencies.

- Increasing access to preventive dental services through school-based or school-linked approaches. It is known that high-risk children are more likely to receive dental sealants, if they can be provided through school-based or school-linked settings. The CDC's focus has been to improve collaboration between State departments of education and health, and encourage development of oral health education, promotion, and service delivery plans and models to improve the oral health of school-aged children within programs tailored to meet local circumstances.

- Improving access to high quality community water fluoridation. This strategy remains the most cost-effective caries prevention measure–one that reaches everyone without additional effort, regardless of income. Community water fluoridation has been a CDC responsibility for almost 25 years and efforts continue, both to assure its routine quality and to extend it to populations that could benefit.

- Supporting development of Medicaid managed care dental specifications. In collaboration with George Washington University, Center for Health Services and

Health Policy Research, CDC has funded the development of sample purchasing specifications for Medicaid pediatric dental and oral health services. These specifications are designed to function as one of many tools that purchasers employ to develop and oversee managed dental services for pediatric and adolescent Medicaid beneficiaries and are optional for State policymakers.

- Funding demonstration projects and applied research focused on special populations. A variety of data collection and analysis, health communication, or intervention projects have been supported and largely funded through CDC's prevention research centers, or other CDC cooperative agreements with organizations (for example, American Association of Health Plans, Association of Teachers of Preventive Medicine). These projects should help identify strategies for reaching groups that still suffer disproportionate levels of preventable oral disease.

HCFA and HRSA joint activities:

The HCFA is responsible for the administration of Medicaid, the State Children's Health Insurance Program (SCHIP) and the Medicare program. (While some Medicare managed care programs include limited dental services, as a rule, dental services are excluded from Medicare coverage; hence HCFA's oral health activities have been focused primarily on Medicaid and SCHIP). In Medicaid, comprehensive dental services for children are a required component of the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) service, while dental services for adults are not required to be covered by State Medicaid agencies. Similarly, dental services are optional services in SCHIP, although, to date, all but two States and Territories have included substantial dental benefits for most children under SCHIP.

The HRSA directs national health programs which improve the health of the Nation by assuring quality health care to underserved, vulnerable and special-need populations and by promoting appropriate health professions workforce capacity and practice, particularly in primary care and public health.

Given the overlapping areas of interest between HCFA and HRSA, a partnership in addressing oral health and dental access disparities recently has evolved and continues to grow. Both HCFA and HRSA recognize that resolving barriers to oral health access in Medicaid and SCHIP must begin with the understanding that Medicaid and SCHIP are programs that rely upon a Federal-State partnership; the Federal Government provides broad guidelines under which States implement individual programs. Because States manage their own programs, both HCFA and HRSA believe that solutions to oral health disparity problems in Medicaid and SCHIP will most likely be found at the local and

State levels. Both HCFA and HRSA seek to provide the resources, guidance and technical assistance necessary to enable States and localities to better address their local oral health concerns. Some joint activities include:

- Co-sponsoring a national leadership conference. The HCFA, HRSA, and the National Center for Education in Maternal and Child Health, in July 1998, cosponsored a first-ever national leadership conference which brought together State Medicaid directors and the dental profession to discuss longstanding concerns about the ability of Medicaid-enrolled children to access dental services. The conference was designed to begin a dialogue which would break down communication barriers that had been inhibiting successful problem solving.

- Establishing the HCFA/HRSA Oral Health Initiative (OHI). Subsequent to the initial leadership conference in 1998, HCFA and HRSA entered into this collaborative effort which proposes to coordinate dental activities across HCFA and HRSA, partner with other public and private agencies, and promote integration of new science and technologies into programs managed by HCFA and HRSA.

- Collaborating with the private sector. The American Dental Association (ADA), in August 1999, demonstrated the commitment of the dental profession towards addressing Medicaid access issues, by continuing HCFA and HRSA efforts to provide a national forum for stakeholders on Medicaid and SCHIP dental issues. The ADA's leadership conference added State legislators to the process, and continued the dialogue between the dental community and State Medicaid agencies.

- Sponsoring regional OHI team training. Regional HRSA and HCFA OHI teams will be meeting with HCFA and HRSA central office staff to discuss new activities being added to the OHI and to consider strategies about future directions.

- Supporting State dental "summits"/workshops. These State-based meetings provide the opportunity for State level players to meet with each other on a face-to-face basis to address the oral health access problems in their specific States and to develop State-specific strategies and implementation plans to overcome existing dental access barriers.

- Promoting best practices. Providing additional opportunities for State dental program officials to share common dental concerns and potential "best practices" by initiating and supporting an electronic listserve which, for the first time,

7

connects (since January 1999) Medicaid program officials in each State with each other, with other State health officials, and with Federal OHI teams.

Activities lead primarily by HCFA in support of the OHI:

- Building a HCFA oral health infrastructure. In the past 2 years, HCFA has identified staff in each Region to serve as Medicaid dental coordinators, with responsibility for offering programmatic guidance and technical assistance aimed at facilitating States' efforts to eliminate dental access barriers. These individuals, along with their regional counterparts at HRSA and pediatric dentists identified by the American Academy of Pediatric Dentistry, now make up OHI teams which can work together with the States.

- Strengthening the oral health infrastructure in State Medicaid agencies. Many State Medicaid dental program managers have multiple responsibilities besides management of dental programs and have little opportunity to acquire up-to-date information about the delivery of oral health services. The HCFA is supporting efforts of State Medicaid dental officials to meet together as a group and to join with HCFA/HRSA OHI teams in sharing common problems and potential solutions to oral health access problems.

- Developing a new grant demonstration project. This new grant demonstration project seeks innovative ways to manage early dental decay in young children. In collaboration with the CDC, HRSA, and the Indian Health Service (IHS), HCFA will attempt to demonstrate new techniques for managing tooth decay in very young children. The project, initially limited to one or two States, will focus on such innovative areas as individual risk assessment, fluoride varnish application, use of multiple provider types, and therapies which might avoid the need for general anesthesia in repairing a young child's dentition. This project is expected to start by the end of Fiscal Year (FY) 2000.

- Evaluating the quality of dental services. The HCFA is supporting an ongoing project with the National Committee for Quality Assurance which is focused on identifying state-of-the-art performance measures for pediatric dental care in Medicaid and SCHIP managed care settings. The HCFA has also changed its EPSDT/State reporting system, effective April 1, 2000, to better identify the major categories of dental services (prevention versus treatment versus diagnostic) being provided.

- Assessing, clarifying, and revising regulatory policies and guidance. The HCFA may make revisions to existing guidance when such revisions, in keeping with

statute, may facilitate provision of oral health care:

-- Issuing a contract in FY 2000 to revise and update HCFA's "EPSDT/Medicaid Dental Guide," which supplements the programmatic policy guidance provided by HCFA's State Medicaid manual. The Guide will offer States and stakeholders additional information about modern dental care delivery systems for children.

-- Requesting that the Medicaid Maternal and Child Health Technical Advisory Group (TAG) focus on oral health for the next year(s). The TAG will be assessing several HCFA policies to see if they might recommend revamping some of these policies to make them more dentally "friendly."

Activities lead primarily by HRSA in support of the OHI:

- Developing an OHI home page "State toolbox." The HRSA is developing a dedicated web page designed to provide information useful to States, Medicaid officials, advocates, dental societies and other stakeholders interested in stimulating Medicaid reform or improving Medicaid dental performance. The State toolbox has the potential of providing States information to address State-specific issues as attempts are made to enhance oral health infrastructure and increase access to oral health care for States' most vulnerable populations. Activities contained in the State toolbox include:

  -- Providing actuarial models for State financing of dental care for children under Medicaid and SCHIP. Three studies/models for pricing Medicaid/SCHIP dental services will be provided on-line for States to review and/or download: PricewaterhouseCoopers model by the Reforming States Group; TowersPerrin model by the American Academy of Pediatrics; and the ADA model.

  -- Providing geographic mapping software. Interactive software is being developed for use in conjunction with databases to map the geographic distribution of dental health resources at the county level, such as dentists' locations, fluoridation, and socioeconomic characteristics of populations. This visual display will assist States in planning/targeting the need for and distribution of dental resources.

  -- Providing workforce models. University-based centers working with State agencies are doing research and analysis which will help address State workforce issues regarding general health and dental health manpower

needs and distribution. States will receive assistance in understanding manpower needs and distribution.

-- Disseminating policy briefs. Various papers describing state-of-the-art services and systems, and current State legislative activity will be included in the State toolbox. States are able to access current information helpful to their individual needs in response to planning and implementation of specific programs.

- Establishing a dental public health infrastructure in States. This program seeks to assist States to establish or reconstruct their State health agency dental public health infrastructure by detailing Federal dentists to needy States and providing technical assistance. A State-level dental public health infrastructure is a critical and essential element in establishing and evaluating systems of oral health in States.

- Expanding Community/Migrant Health Center dental programs. This effort was designed to help promote and increase access to oral health services to populations served by Bureau of Primary Health Care (BPHC) supported programs. It targets communities where there is an identified shortage of providers that treat low-income and disadvantaged populations, in particular, migrant, homeless and at-risk minority populations.

- Creating an oral health primary care effectiveness review module. This document will serve as program review criteria for oral health programs in the Bureau of Primary Health Care funded health centers. The guidance will incorporate the BPHC/HRSA theme of 100 percent access and 0 percent disparity and provide a foundation for developing and/or expanding the capacity to serve more patients.

- Expanding the National Health Service Corps (NHSC) Scholarship program. In an effort to increase access to oral health services, the NHSC is piloting a 2-year program to award 20 to 30 dental student scholarships. The pilot is an effort to increase the number of under-represented minorities, as well as culturally competent individuals available to serve in underserved communities. Educational Partnership Agreements between HRSA and 17 dental schools have been signed.

- Conducting a dental Medicaid managed care workshop. The HRSA is planning to conduct State-level case studies on dental Medicaid managed care to evaluate the impact of Medicaid managed care on the availability of dental services as it relates to providers, patients, payers and plans. A workshop is planned to showcase the

case studies and to discuss key issues identified in the case studies.

- Funding of State oral health systems grants. This program will assist in building a service and support system infrastructure at the State and community level to increase access to oral health services for children enrolled in SCHIP and Medicaid. By bringing organizations representing key services systems together with Maternal and Child Health (MCH), Medicaid, SCHIP, and other health and human services programs, the opportunity to build comprehensive systems of health care, including oral health care, is possible in meeting the health needs of children and their families.

- Promoting fluoridation. The State planning and fluoridation systems development grant initiative is in its final year of funding and is designed to complement Title V MCH services block grants to combine the efforts of both State MCH and oral health programs, and to offer opportunities that will maximize oral health disease prevention. The purpose of this grant is to assist States and communities to develop implementation plans for the purpose of establishing and sustaining a community water fluoridation infrastructure.

- Promoting school sealant programs. Sealants are highly effective in preventing decay to the fissures of teeth, but they are widely underutilized. This grant has been developed to establish new dental sealant programs. Goals of the grant are to increase the utilization of dental sealants, reduce the incidence of pit and fissure decay, reduce the amount of untreated dental disease through referrals, and encourage system linkages between sealant programs and the Medicaid and SCHIP programs.

- Establishing health education programs (leadership centers). The purpose of leadership centers is to provide post-doctoral training for dentists in pediatrics and public health to become leaders in addressing access to dental services for underserved and special needs populations. This area of activity reflects the need to advance the oral health of special needs populations and children of especially high risk in underserved populations (Medicaid/SCHIP) by eliminating access disparities and increasing the number of oral health providers capable and available to serve these populations.

- Establishing an oral health policy center. The purpose of this proposed center is to enhance communication between the Maternal and Child Health Bureau (MCHB) and various governmental, professional, and private organizations representing leaders and policymakers concerned with issues influencing maternal and child health. Specifically, this program is designed to facilitate analysis and

11

dissemination of new information about maternal and child health to policy and decision-makers in a format that will be most useful to them when developing MCH policies and programs in the private and public sectors at local, State and national levels.

IHS

The IHS is the principal Federal health care provider and health advocate for approximately 1.5 million American Indians and Alaska Natives, and their goal is to assure that comprehensive, culturally acceptable personal and public health services are available and accessible. In 1999, the Director of IHS, developed an oral health initiative with the goal of increasing access to care and improving the oral health status of the American Indian and Alaska Native people by increasing access to essential treatment and preventive oral health services. Recent activities which may positively impact on improving oral health and dental access include:

- Approving a special salary rate for dentists hired as civil servants that is more competitive with the private sector.
- Completing the data collection phase of a national survey of oral health status and treatment needs for IHS and tribal dental clinic users.
- Implementing an interagency agreement with CDC to improve access to community water fluoridation for Native Americans.

The IHS currently plans additional activities which they believe will further ameliorate the disparities which now exist for Native American people. These activities include:

- Implementing four tribal clinical and preventive support centers to help build a public health infrastructure.
- Distributing additional funds to 12 selected IHS programs to enhance access to dental care and improve the oral health of their service populations. These programs will become models of "best practices" for other programs and address the Healthy People 2010 oral health objectives as well as the Government Performance and Results Act objectives for the IHS dental program.
- Distributing a report on effective community and clinic-based strategies from an early childhood caries (ECC) demonstration project, and expand the demonstration in up to 100 programs to reduce prevalence of ECC among Native American preschool children.

- Increasing resource commitments to recruiting dentists for IHS and tribal programs, including hiring a full-time dental recruiter to replace the incumbent who is retiring.

- Implementing a National Council on Oral Health to assist in addressing the challenges in delivering oral health care that confront the IHS, tribal and urban programs.

- Completing data analysis of the Oral Health Status and Treatment Needs Survey and distributing a national report. The report will be used to inform Tribes and the Congress of the oral health status and treatment needs of Indian people.

- Demonstrating increased access to fluoridated community water supplies in two regions/areas as a result of an interagency agreement with CDC. The demonstration will be expanded to 10 additional regions/areas in FY 2001.

NIH's NIDCR

The NIDCR supports a wide range of activities that address disparities in oral health among diverse populations in the United States. These activities include a range of basic, translational, clinical and epidemiologic research to document and understand the factors involved in the existing disparities in oral health as well as to support the development, testing and evaluation of interventions to reduce oral health disparities. Selected activities supported by the NIDCR include:

- Supporting grants and research supplements directed toward understanding the reasons for health disparities as well as four regional centers on minority oral health. These centers emphasize the importance of expanding the diversity of qualified investigators knowledge in state-of-the-science approaches to biomedical and behavioral research. Each of these regional centers is partnered with a nonminority academic research center. The research partners work collaboratively both on discipline-specific projects, as well as on innovative interdisciplinary projects along the full spectrum of research settings--laboratory, clinic, and community--with the goal of a clearer understanding of the sources and consequences of minority and nonminority oral health disparities, as well as the diversity of oral health disparities among minority groups themselves. These efforts are designed to advance the science base for primary, secondary and tertiary preventive interventions to promote the development of healthy individuals and families within healthy communities with equity.

13

- Developing a major initiative for centers for research to reduce oral health disparities. The NIDCR, with support from multiple Department operating divisions, has solicited grants for development of major centers whose research efforts will be directed at reducing health disparities among children and their care-givers. This is one of many activities aimed at reducing oral health disparities. Multiple awards up to $1.5 million each are expected to be made depending on availability of funds.

- Initiating and funding (with participation from CDC) a data resource center. The goals of this 5-year project include the generation of a catalog of existing databases which are relevant to oral health, the acquisition of a number of the more important databases, and the establishment of a web site based query system to make this data available to researchers. Among other functions, this resource should facilitate research into oral health disparities and the progress which is being made toward meeting the Healthy People 2010 Oral Health Objectives by a range of diverse populations.

- Supporting and directing the oral health component of surveys such as the National Health and Nutrition Examination Survey. This ongoing national study analyzes trends and factors associated with oral diseases in children and adults and factors associated with exploring the reasons for health disparities.

- Convening workshops to assess the state of the science for specific diseases. A prime example is the Workshop on Developing Criteria for Diagnosing Early Childhood Caries. This workshop, held in April 1999, convened a group of experts to review current methods of diagnosing dental caries in primary teeth and to develop case definitions and diagnostic criteria for dental caries in preschool-aged children for use in research.

- Sponsoring a Consensus Development Conference on Diagnosis and Management of Dental Caries Throughout Life. The NIDCR and the NIH Office of Medical Applications of Research plan to convene this consensus development conference in 2001. The purpose of this evidence-based conference is to evaluate scientific information and develop a consensus statement that advances the understanding of diagnosis and management of dental caries.

- Developing a national oral health curriculum for young children. Together with the NIH Office of Science Education, the NIDCR is developing the first materials in the Nation explicitly linked with the National Science Education

Standards for the United States. The curriculum will teach children in Grades 1 and 2 essential concepts related to oral health, how to prevent tooth decay and stay healthy by maintaining a healthy mouth. Companion materials for parents are being developed that reinforce the message of oral health as key to overall health and how to prevent oral diseases. The NIDCR has just completed a field-testing phase; materials are expected to be finalized by the fall of 2000.

- Collaborating with academia and the private sector to advance science-based practices. Since 1991, NIDCR has promoted the use of science-based knowledge in clinical practice through its science transfer program called "Scientific Frontiers in Clinical Dentistry." This program is especially designed to bring the latest science that has implications for clinical practice to health professionals and promote the use of science-based, appropriate treatment practices by the profession. The most recent program was held in partnership with the Delta Dental Fund of Michigan and the University of Michigan in January 2000.

- Funding an evidence-based practice center. Together with AHRQ, the NIDCR is funding an evidence-based practice center to develop systematic reviews of relevant clinical oral, dental and craniofacial diseases and disorders. These systematic reviews of literature use rigorous, comprehensive and explicit methods, and the results will be used to inform NIH/NIDCR activities such as workshops, symposia and consensus development conferences.

- Developing a recent blueprint for research training and career development has highlighted the need to increase a more diverse workforce; an initiative is in place to address this issue.

- Serving as a lead agency for the development of the Surgeon General's Report on Oral Health and the Surgeon General's Conference on Children's Oral Health, as well as a major supporter of the Surgeon General's Workshop on Children's Oral Health.

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