

November 2010

ORAL HEALTH

Efforts Under Way to Improve Children's Access to Dental Services, but Sustained Attention Needed to Address Ongoing Concerns





Highlights of GAO-11-96, a report to congressional committees

Why GAO Did This Study

The Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) required GAO to study children's access to dental care. GAO assessed (1) the extent to which dentists participate in Medicaid and the Children's Health Insurance Program (CHIP) and federal efforts to help families find participating dentists; (2) data on access for Medicaid and CHIP children in different states and in managed care; (3) federal efforts to improve access in underserved areas; and (4) how states and other countries have used mid-level dental providers to improve children's access. To do this, GAO (1) examined state reported dentist participation and the Department of Health and Human Services's (HHS) Insure Kids Now Web site for all 50 states and the District of Columbia and called a non-representative sample of dentists in four states; (2) reviewed national data on provision of Medicaid dental services and use of managed care; (3) interviewed HHS officials and assessed certain HHS dental programs; and (4) interviewed officials in eight states and four countries on the use of mid-level and other dental providers.

What GAO Recommends

GAO recommends that HHS take steps to improve its Insure Kids Now Web site and ensure that states gather complete and reliable data on Medicaid and CHIP dental services provided under managed care. HHS agreed with the recommendations, citing specific actions it would take.

View GAO-11-96 or key components. For more information, contact Katherine Iritani at (202) 512-7114 or iritanik@gao.gov.

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What GAO Found

Obtaining dental care for children in Medicaid and CHIP remains a challenge, as many states reported that most dentists in their state treat few or no Medicaid or CHIP patients. And, while HHS's Insure Kids Now Web site— which provides information on dentists who serve children enrolled in Medicaid and CHIP—has the potential to help families find dentists to treat their children, GAO found problems, such as incomplete and inaccurate information, that limited the Web site's ability to do so. For example, to test the accuracy of the information posted on the Web site, GAO called 188 dentists listed on the Web site in low-income urban and rural areas in four states representing varied geographic areas and levels of dental managed care and with high numbers of children in Medicaid. Of these 188 contacts, 26 had wrong or disconnected phone numbers listed, 23 were not taking new Medicaid or CHIP patients, and 47 were either not in practice or no longer performing routine exams.

Although improved since 2001, available national data show that in 2008, less than 37 percent of children in Medicaid received any dental services under that program and that several states reported rates of 30 percent or less. Further, although some data indicate that children in Medicaid managed care may receive less dental care than other children, comprehensive and reliable data on dental services under managed care continue to be unavailable despite long-standing concerns. Although HHS has not required states to report information on the provision of dental services under CHIP, CHIPRA requires states to begin reporting this information for fiscal year 2010.

Two programs that provide dental services to children and adults in underserved areas—HHS's Health Center and National Health Service Corps (NHSC) programs—have reported increases in the number of dentists and dental hygienists practicing in underserved areas, but the effect of recent initiatives to increase federal support for these and other oral health programs is not yet known. Despite these increases, both health centers and the NHSC program report continued need for additional dentists and other dental providers to treat children and adults in underserved areas.

Mid-level dental providers—providers who may perform intermediate restorative services, such as drilling and filling teeth, under remote supervision of a dentist—are in limited use in the United States. The only currently practicing mid-level dental providers in the United States serve Alaska Natives. Efforts to supplement the U.S. dental workforce with midlevel and other types of providers are under way. GAO interviewed officials from eight states with varied state laws related to dental providers. Some states have made efforts to increase children's access by reimbursing dental hygienists and primary care physicians for providing certain dental services. Some countries have long-standing programs that use mid-level dental providers, also known as dental therapists, who the countries report have improved children's access to dental services.

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Abbreviations

ASTDD	Association of State and Territorial Dental Directors
CHIP	Children's Health Insurance Program
CHIPRA	Children's Health Insurance Program Reauthorization Act of 2009
CMS	Centers for Medicare & Medicaid Services
EPSDT	Early and Periodic Screening, Diagnostic, and Treatment
FTE	full-time equivalent
HHS	Department of Health and Human Services
HIV	human immunodeficiency virus
HPSA	health professional shortage area
HRSA	Health Resources and Services Administration
NHSC	National Health Service Corps
OIG	Office of Inspector General
PPACA	Patient Protection and Affordable Care Act

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United States Government Accountability Office Washington, DC 20548

November 30, 2010

The Honorable Max Baucus Chairman The Honorable Charles E. Grassley Ranking Member Committee on Finance United States Senate

The Honorable Henry A. Waxman Chairman The Honorable Joe Barton Ranking Member Committee on Energy and Commerce House of Representatives

Since 2000, our reports as well as reports by the Surgeon General, congressional committees, and oral health researchers have underscored the high rates of dental disease and the challenges of providing dental services to children living in underserved areas and in low-income families. In particular, children with health care coverage under two joint federal-state programs for low-income children—Medicaid and the Children's Health Insurance Program (CHIP)—often have difficulty finding dental care even though dental services are a covered benefit.¹ For example we reported in 2000 that low-income and minority populations—including children in Medicaid and CHIP—had a disproportionately high level of dental disease. In a related report, we found that the major factor contributing to the low use of dental services among low-income persons was finding dentists to treat them, even in areas where dental care for the rest of the population was generally available.² We also reported that dentists generally cited low payment rates, administrative requirements,

¹Children in Medicaid are generally entitled to comprehensive dental services under the program's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit. And, beginning in October 2009, states were required to offer a package of dental benefits under their CHIP programs.

²See GAO, Oral Health: Dental Disease Is a Chronic Problem Among Low-Income Populations, GAO/HEHS-00-72 (Washington, D.C.: Apr. 12, 2000), GAO, Oral Health: Factors Contributing to Low Use of Dental Services by Low-Income Populations, GAO/HEHS-00-149 (Washington, D.C.: Sept. 11, 2000), and Related GAO Products at the end of this report.

and patient issues such as frequently missed appointments as reasons why they did not treat Medicaid patients. In 2008, we reported that the situation was largely unchanged. National survey data showed dental disease remained a significant problem for children in Medicaid—we estimated that 6.5 million children had untreated tooth decay and rates of dental disease among children in Medicaid had not decreased over time.³ National surveys also showed that only one in three children in Medicaid had visited a dentist in the prior year, compared to more than half of privately insured children. In a 2009 survey of state Medicaid programs, we found that identifying a dentist who accepted Medicaid remained the most frequently reported barrier to children seeking dental services. We also found that, of the 21 states that provided Medicaid dental services under managed care arrangements, more than half reported that managed care organizations in their states did not meet any, or only met some, of the state's dental access standards.⁴

Since 2009, a number of actions have been taken to address these challenges. For example, to help families find a dentist to treat children covered by Medicaid and CHIP, the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) required the Department of Health and Human Services (HHS) to post on its Insure Kids Now Web site a current and accurate list of dentists participating in state Medicaid and CHIP programs.⁵ In April 2010, HHS launched a departmentwide oral health initiative to expand oral health services, education, and research, including promoting access to oral health care and the effective delivery of services to underserved populations.

CHIPRA also required that we study and report on various aspects of children's access to dental services.⁶ This report discusses (1) the extent

⁶Pub. L. No. 111-3, § 501(f), 123 Stat. 88.

³We used national survey data from 1999 through 2004 to estimate the number of Medicaidenrolled children with untreated tooth decay. We also examined survey data for the 1988 through 1994 and 1999 through 2004 time periods and found that rates of dental disease had not decreased, although the data suggested the trends varied somewhat among different age groups. See GAO, *Medicaid: Extent of Dental Disease in Children Has Not Decreased, and Millions Are Estimated to Have Untreated Tooth Decay,* GAO-08-1121 (Washington, D.C.: Sept. 23, 2008).

⁴GAO, *Medicaid: State and Federal Actions Have Been Taken to Improve Children's Access to Dental Services, but Gaps Remain,* GAO-09-723 (Washington, D.C.: Sept. 30, 2009).

⁵Children's Health Insurance Program Reauthorization Act of 2009, Pub. L. No. 111-3, § 501(f), 123 Stat. 8, 88.

to which dentists participate in Medicaid and CHIP, and federal efforts to help families find dentists to treat children in these programs; (2) what is known about access for Medicaid and CHIP children in different states and in managed care; (3) federal efforts under way to improve access to dental services by children in underserved areas; and (4) how states and other countries have used mid-level dental providers to improve children's access to dental services.

To examine the extent to which dentists participate in Medicaid and CHIP, and federal efforts to help families find dentists to treat children in these programs, we (1) analyzed survey responses from states regarding dentists' participation in Medicaid and CHIP, gathered by the Association of State and Territorial Dental Directors (ASTDD), and (2) evaluated information posted on HHS's Insure Kids Now Web site about the dentists participating in Medicaid and CHIP. Specifically, we reviewed the information on the Web site for all 50 states and the District of Columbia to evaluate whether certain data elements specified as required in guidance from the Centers for Medicare & Medicaid Services (CMS)-the HHS agency that administers Medicaid at the federal level-were posted and whether the Web site was usable for a family seeking to identify a dentist for a child covered by Medicaid or CHIP. We also tested the accuracy of information posted to the Web site by calling a nongeneralizeable sample of 188 dentists' offices in low-income urban and rural areas in 4 states.⁷ We also reviewed relevant academic and association research on dental services for children with special health care needs.

To evaluate what is known about access for Medicaid and CHIP children in different states and in managed care, we reviewed documents and interviewed officials from CMS. We also (1) analyzed survey responses from states on the use of dental managed care in Medicaid, gathered by the American Dental Association; and (2) examined annual state reports on

 $^{^{7}}$ We selected 4 states that represented a variation in geography, use of managed care, and the number of children covered by Medicaid. Within each state we called the offices for at least 25 urban and 15 rural dentists in the areas with the largest number of children in poverty.

the provision of dental services under the Medicaid Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit.⁸

To identify federal efforts to improve children's access to dental services in underserved areas, we focused on two programs administered by HHS's Health Resources and Services Administration (HRSA)—the Health Center program and the National Health Service Corps (NHSC) program designed, in part, to support the provision of dental services in underserved areas. We also examined information regarding other recent efforts to improve access to care for children in underserved areas, including funding made available by the American Recovery and Reinvestment Act of 2009 (Recovery Act) and the Patient Protection and Affordable Care Act (PPACA).⁹

To determine how states have used mid-level dental providers to improve access to dental services for children, we examined laws, regulations, and practices related to mid-level and other dental providers and interviewed federal officials as well as officials in 8 selected states—Alabama, Alaska, California, Colorado, Minnesota, Mississippi, Oregon, and Washington—that have varying degrees of education, supervision, and scope-of-practice requirements for dental providers.¹⁰ We selected these states based on responses we obtained to a standard set of questions posed to oral health researchers, professional associations, and advocacy groups regarding states that use mid-level and other dental providers to expand access to dental services. We visited Alaska to interview state and tribal officials on efforts to expand access for Alaska Natives through the use of mid-level dental providers to improve access to dental services for children, we examined documents and interviewed officials from four countries—

¹⁰Our interviews with officials from HHS, states, academic institutions, professional associations, and advocacy groups found that there is no commonly-recognized definition of mid-level dental providers.

⁸Annual EPSDT reports contain information on children who are (1) in Medicaid and received EPSDT benefits and (2) in CHIP and received EPSDT benefits because they are part of a Medicaid expansion program.

⁹American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115; Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119 (2010). References to the Patient Protection and Affordable Care Act (PPACA) in this report refer to Pub. L. No. 111-148, as amended by the Health Care and Education Reconciliation Act of 2010, Pub. L. No. 111-152, 124 Stat. 1029.

Australia, Canada, New Zealand, and the United Kingdom. See appendix I for additional information on our scope and methodology.

We conducted this performance audit from August 2009 through November 2010 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

High rates of dental disease and low utilization of dental services by children in low-income families and the challenge of finding dentists to treat them are long-standing concerns. In 2000, the Surgeon General reported that tooth decay is the most common chronic childhood disease and described what the report called the silent epidemic of oral disease affecting the nation's poor children.¹¹ Left untreated, the pain and infections caused by tooth decay may lead to problems in eating, speaking, and learning. Tooth decay is almost completely preventable and the pain, dysfunction, or on extremely rare occasions, even death, resulting from dental disease can be avoided. The American Academy of Pediatric Dentistry recommends that each child see a dentist when his or her first tooth erupts and no later than the child's first birthday, with subsequent visits occurring at 6-month intervals or more frequently if recommended by a dentist.

Recognizing the importance of good oral health, HHS established oral health goals as part of its Healthy People 2000 and 2010 initiatives.¹² One objective of Healthy People 2010 was to increase the proportion of low-income children and adolescents under the age of 19 who receive any preventive dental service in the past year—including examination, x-ray, fluoride application, cleaning, or sealant application (a plastic material

¹¹U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, *Oral Health in America: A Report of the Surgeon General* (Rockville, Md.: 2000).

¹²HHS established Healthy People 2010 as a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats. See http://www.healthypeople.gov/About/ (accessed Aug. 3, 2010).

placed on molars to reduce the risk of tooth decay)—from 20 percent in 1996 to 66 percent in 2010.

Federal Programs That Promote Dental Services for Children	Medicaid, a joint federal and state program that provides health care coverage for certain low-income individuals and families, provided health coverage for over 30 million children under 21 in fiscal year 2008. ¹³ States operate their Medicaid programs within broad federal requirements and may contract with managed care organizations to provide Medicaid medical and dental benefits. Under federal law, state Medicaid programs must provide dental services, including diagnostic, preventive, and related treatment services for all eligible Medicaid enrollees under age 21 under the program's EPSDT benefit.
	Federal law also requires states to report annually on the provision of EPSDT services, including dental services, for children in Medicaid. The annual EPSDT participation report, Form CMS-416 (hereafter called the CMS 416), is the agency's primary tool for gathering data on the provision of dental services to children in state Medicaid programs. It captures data on the number of children who received any dental services, a preventive dental service, or a dental treatment service each year. Information on the CMS 416 is used to calculate a state's dental utilization rate—the percentage of children eligible for EPSDT who received any dental service in a given year.
	CHIP, which is also a joint federal and state program, expanded health coverage to children—approximately 7.7 million children in fiscal year 2009—whose families have incomes that are low, but not low enough to qualify for Medicaid. ¹⁴ States can administer their CHIP programs as (1) an expansion of their Medicaid programs, (2) a stand-alone program, or (3) a combination of Medicaid expansion and stand-alone. Although states have flexibility in establishing their CHIP benefit package, all states covered some dental services in 2009, according to CMS officials, though benefits varied. Children in CHIP programs that are administered as expansions of

¹³The 30 million children represent the fiscal year 2008 unduplicated annual enrollment (the total number of children, each child counted once, who were enrolled in Medicaid at any point in federal fiscal year 2008) reported by CMS.

¹⁴In February 2009, the Children's Health Insurance Program Reauthorization Act of 2009 renamed the State Children's Health Insurance Program (SCHIP) to the Children's Health Insurance Program (CHIP).

Medicaid programs are entitled to the same dental services under the EPSDT benefit as children in Medicaid.

CHIPRA expanded federal requirements for state CHIP programs to cover dental services. Specifically, CHIPRA required states to cover dental services in their CHIP programs beginning in October 2009 and gave states authority to use benchmark plans to define the benefit package or to supplement children's private health insurance with a dental coverage plan financed through CHIP.¹⁵ CHIPRA also required states to submit annual reports to CMS on the provision of dental and other services—similar to information provided by state Medicaid programs each year on their CMS 416 reports.¹⁶ States were previously required to submit annual CHIP reports, although these reports did not contain detailed information on the provision of dental services as required for Medicaid on the CMS 416.

To make it easier for families to find dentists to treat children covered by Medicaid and CHIP, CHIPRA also required that HHS post "a current and accurate list of all such dentists and providers within each State that provide dental services to children" under Medicaid or CHIP on its Insure Kids Now Web site. CHIPRA required the Secretary of HHS to post this list on the Web site by August 4, 2009, and ensure that the list is updated at least quarterly.¹⁷ In June 2009, CMS issued guidance specifying certain data elements required for each dentist listed on the Insure Kids Now Web site—including the dentist's name, address, telephone number, and specialty; whether the dentist accepts new Medicaid or CHIP patients; and whether the dentist can accommodate patients with special needs. HHS posts listings on the Insure Kids Now Web site by state and in some cases provides a link to such a list on an individual state's or managed care organization's Web site.

¹⁵Pub. L. No. 111-3, § 501, 123 Stat. 84. CHIPRA allowed states to provide dental coverage for children in the CHIP income range who have health insurance through an employer, but who lack dental coverage.

¹⁶Pub. L. No. 111-3, § 501(e), 123 Stat. 87.

¹⁷Pub. L. No. 111-3, § 501(f), 123 Stat. 88. HHS's Insure Kids Now Web site was established in 1999 to help parents and guardians find state Medicaid and CHIP program eligibility information. To improve access to information on dental providers participating in Medicaid and CHIP, in February 2009, CHIPRA required HHS to post a list of participating dentists within each state on the Insure Kids Now Web site and also provide such information through its toll-free hotline (1-877-KIDS-NOW).

To address the need for health services in underserved areas of the country, HHS's HRSA administers programs that support the provision of dental and other medical services in underserved areas. For example, under HRSA's Health Center program, health centers—which must be located in federally designated medically underserved areas or serve a federally designated medically underserved population—are required to provide pediatric dental screenings and preventive dental services, as well as emergency medical referrals, which may also result in the provision of dental services.¹⁸ Health centers must accept Medicaid and CHIP patients and treat everyone regardless of their ability to pay. HHS reported that in fiscal year 2009, over 1,100 health center grantees operated over 7,900 service delivery sites in every state and the District of Columbia, and provided health care services, including dental services, to approximately 19 million patients, about one-third of whom were children.

Another HRSA program, NHSC, offers scholarships and educational loan repayment for clinicians who agree to practice in underserved areas.¹⁹ NHSC awards scholarships to students entering certain health professions training programs, including dentistry, who agree to practice in underserved areas when their training is completed. NHSC also provides educational loan repayment for health care providers, including dentists and dental hygienists, who have completed their training and can begin serving in a shortage area. HRSA designates geographic areas, population groups, and facilities as dental health professional shortage areas (HPSAs) for purposes of placing dentists and dental hygienists through the NHSC program. These designations are based, in part, on the number of dentists in an area compared to the area's population.²⁰ As of July 13, 2010, HRSA

²⁰42 C.F.R. pt. 5, app. B (2009); 42 U.S.C. § 254e(a)(1).

¹⁸42 U.S.C. § 254b. Health centers are funded in part through grants under the Health Center program—administered by HRSA—and provide comprehensive primary care services for the medically underserved.

¹⁹42 U.S.C. § 254d. The NHSC scholarship program provides tuition, fees, and living stipends for students in primary care, including dentistry, in exchange for at least 2 years of service. 42 U.S.C. § 254l. The NHSC loan repayment program provides up to \$50,000 toward repayment of student loans for providers, including dentists and dental hygienists, in exchange for at least 2 years of service. 42 U.S.C. § 254l-1. HRSA also administers the State Loan Repayment program that provides matching grants to states to run their own loan repayment programs for health providers who agree to practice in underserved areas, which in some states includes awards for dentists and dental hygienists. 42 U.S.C. § 254 q-1.

	reported that there were 4,377 dental HPSAs in the United States ²¹ and estimated that it would take 7,008 full-time equivalent (FTE) dentists to remove these designations. ²² To be eligible for a NHSC provider, a site must be located in a HPSA of greatest shortage and meet other requirements, such as accepting Medicaid and CHIP patients and treating everyone regardless of their ability to pay. ²³ Providers can then choose where they wish to serve from a list of eligible sites, although providers who have received scholarships are limited to a narrower list of higher priority vacancies. ²⁴ According to HRSA, about half of all NHSC providers, which include dentists and hygienists, practice in health centers.
Dental Services and Dental Providers	Dental services cover a broad array of specialized procedures, from routine exams to complex restorative procedures. For this report, we grouped dental services into five main categories: (1) supportive, (2) preventive, (3) basic restorative, (4) intermediate restorative, and (5) advanced restorative dental procedures (see table 1).

²³To identify HPSAs of greatest shortage, HRSA scores each HPSA based on relative need. Only HPSAs meeting a certain threshold score are considered HPSAs of greatest need. This threshold may differ for scholarship recipients and loan repayment recipients in a given year.

²¹Of the 4,377 dental HPSAs, 790 were for geographic areas, 1,526 were for population groups, and 2,061 were facilities such as health centers that were designated as HPSAs. See http://bhpr.hrsa.gov/shortage/ (accessed July 14, 2010).

²²HRSA estimates the number of full-time equivalent dentists needed to remove HPSA designations by taking into account the actual level of service provided by a given dentist. For example, a HPSA needing a dentist working half-time to remove its HPSA designation would be estimated to need 0.5 FTE, although adjustments are made for a variety of factors, such as the number of dental hygienists and dental assistants.

 $^{^{24}}$ The number of choices available to scholarship recipients is provided for in statute: no more than twice the number of scholarship recipients who will be available for assignment during the year. For example, if there were 25 dentists who received NHSC scholarships available for service, NHSC would provide a list of no more than 50 vacancies for them. See 42 U.S.C. \S 254f-1(d)(2).

Table 1: Categories of Dental Services and Examples of Dental Procedures

Sup	portive	Preventive	Basic restorative	Intermediate restorative	Advanced restorative
•	Preparing a patient to be examined by a dentist Passing instruments to a dentist	 Examination and assessment Counseling Cleaning above and below gum line Fluoride application Sealant placement^a 	 Temporary fill Smoothing an restoration Administration anesthetic 	existing (drilling) • Tooth restoration	 Periodontal treatment (gums) Endodontic treatment (root canals)

Source: GAO.

^aDental sealants are plastic material that are commonly applied to the chewing surfaces of back teeth to reduce the risk of decay.

While a provider's specific scope of practice may vary by state, types of dental providers who may provide some or all of these services include:

- **Dentists**, who may perform the full range of dental procedures.²⁵
- **Mid-level dental providers**, often dental therapists, who may perform preventive, basic restorative, and intermediate restorative dental procedures under remote supervision of a licensed dentist.
- **Dental hygienists**, who generally perform preventive procedures, such as tooth cleaning, oral health education, and fluoride applications, as well as basic restorative procedures in certain states, under various supervisory agreements with a dentist.
- **Dental assistants**, who may provide supportive services and in some states certain preventive and basic restorative procedures under on-site supervision of a dentist.
- **Primary health care providers** (such as physicians and nurse practitioners) who may also perform certain preventive dental procedures, such as applying fluoride varnish, to children in some states.

²⁵In the United States, dentists are licensed to practice by the states and states are generally responsible for establishing education requirements and determining scope of practice of dental providers. They can obtain additional training in a dental specialty, such as pediatric dentistry or orthodontics.

Dental therapists, dental hygienists, and dental assistants work under various supervisory arrangements with a dentist. The type of supervision required for these providers may vary depending upon the state and the type of service provided. For this report, we categorized dental supervision as on-site, remote with prior knowledge and consent, remote with consultative agreement, or no supervision (see table 2).

Table 2: Types of Supervision for Other Dental Providers

Supervision type	Description		
On-site supervision	The dentist must be on-site when the dental provider performs services and examines the patient at any point before, during, or after the dental services are provided.		
Remote supervision with prior knowledge and consent	The dentist may be off-site but must have prior knowledge of and consent to the procedures, in some cases through a treatment plan.		
Remote supervision with consultative agreement	The dentist may be off-site but maintain a consultative role, for example through a signed collaborative agreement with another type of dental provider.		
No supervision	Dental provider may perform services without dentists' supervision.		
	Source: GAO.		
	Note: This table presents examples of the time of supervision, evengements that may exist betwee		

Note: This table presents examples of the type of supervisory arrangements that may exist between dentists and other dental providers, such as dental therapists and dental hygienists.

For Children in Medicaid and CHIP, Finding a Dentist Remains a Challenge, and HHS's Web Site to Help Locate Participating Dentists Was Not Always Complete or Accurate States continue to report low participation by dentists in Medicaid and CHIP. While HHS's Insure Kids Now Web site—which provides information on dentists who serve children enrolled in Medicaid and CHIP—has potential to help families find a dentist to treat children in these programs, we found problems such as incomplete or inaccurate information that limit its ability to do so. States Report Low Dentist Participation in Medicaid and CHIP, and Children with Special Health Care Needs Face Particular Difficulties While comprehensive nationwide data do not exist, available data suggest that problems with low dentist participation in Medicaid and CHIP persist. Additionally, among dentists who do participate in Medicaid, many may place limits on the number of Medicaid patients that they will treat. Most states responding to a 2009 ASTDD survey²⁶ reported low participation among dentists, although not all states responded completely. Our analysis shows that 25 of 39 states reported that fewer than half of the dentists in their states treated any Medicaid patients during the previous year.²⁷ Only one of 41 states reported that more than half of the state's dentists saw 100 or more Medicaid patients during the previous year (see table 3). Fewer states responding to the 2009 ASTDD survey provided data on dentists' participation in CHIP separately from data on participation in Medicaid and CHIP expansions, but the data reported separately for CHIP indicates that dentists' participation in CHIP is also low.

Table 3: State Reported Data on Dentists' Participation in Medicaid and CHIP

	State officials' responses to 2009 Association of State and Territorial Dental Directors (ASTDD) survey	
Level of Dentist Participation in Medicaid or CHIP	Medicaid or CHIP expansion ^a	CHIP only
States reporting more than half of the dentists in the state treat any patients	14 of 39 states (36%)	4 of 11 states (36%)
States reporting more than half of the dentists in the state treat 100 or more patients	1 of 41 states (2%)	0 of 12 states (0%)

Source: GAO analysis of ASTDD survey data.

Note: This table presents data collected by ASTDD in 2009. ASTDD sent its survey to dental directors in all states and the District of Columbia and received 45 responses. Information collected was for fiscal year 2008 (or the most recent available fiscal year).

^aStates have the option of administering their CHIP programs as expansions of their Medicaid programs.

²⁶ASTDD's annual survey, called the Synopses of State and Territorial Dental Public Health Programs, is conducted under a cooperative agreement with HHS's Centers for Disease Control and Prevention.

²⁷ASTDD sent the survey to dental directors in all states and the District of Columbia. However, not all states provided responses to the questions on the number of dentists treating children in Medicaid and CHIP. For example, 39 states reported how many dentists treated children in Medicaid (including children in CHIP programs that are Medicaid expansions) and 11 reported the number of dentists who treated children in a CHIP program separate from Medicaid. See http://apps.nccd.cdc.gov/synopses/ (accessed July 21, 2010). The results of the 2009 ASTDD survey indicating low levels of dentists' participation in Medicaid are consistent with findings we reported in 2000. We reported that 16 of 39 states responding to our inquiry indicated that more than half of the dentists in the state treated any Medicaid patients in 1999, but that none of the states reported that more than half of the dentists treated 100 or more Medicaid patients.²⁸

One group of children particularly affected by low levels of dentists' participation in Medicaid and CHIP are children with special health care needs. On its Web site, HRSA's Maternal and Child Health Bureau has defined children with special health care needs as "those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally." According to a March 2009 ASTDD evaluation of 17 state oral health programs, the most common barriers to dental services for children with special health care needs include low rates of dentists' participation in Medicaid and CHIP, difficulty locating dentists who accept children with special health care needs who have behavioral challenges, and the high cost of specialized care.²⁹ Studies have also cited the lack of training for dentists to accommodate children who have special treatment needs.³⁰ In response to the 2005–2006 National Survey of Children with Special Health Care Needs—a periodic survey sponsored by HRSA's Maternal and Child Health Bureau and carried out by the Centers for Disease Control and Prevention-parents (or guardians) of children with special health care needs reported that unmet dental care was the greatest health care need for these children and reported problems getting dental care at levels that exceeded those of healthy children. Unmet dental care for children with special heath care needs can also vary by diagnosis. For example, a study based on the 2005–2006 National Survey of Children with Special Health Care Needs found that children with Down's Syndrome were about twice

²⁸GAO/HEHS-00-149.

²⁹Association of State and Territorial Dental Directors, *ASTDD Support for State CSHCN Oral Health Forums, Action Plans And Follow-Up Activities; Interim Evaluation Summary* (March 2009).

³⁰Burton L. Edelstein, "Conceptual Frameworks for Understanding System Capacity in the Care of People with Special Health Care Needs," *Pediatric Dentistry*, Vol. 29, No. 2 (March/April 2007).

	as likely to have unmet dental needs as children with asthma. ³¹ The study also reported that the odds of having unmet dental care needs were 13 times greater for low-income children with more severe special health care needs compared with higher-income children without special health care needs. ³²
Information on HHS's Web Site to Help Locate Participating Dentists Was Not Always Complete or Accurate	To help families locate dentists near them to treat children in Medicaid or CHIP, CHIPRA required HHS to post information on participating dentists on its Insure Kids Now Web site. However, we found problems with the data available through the Web site—specifically that the listings available on the Web site or through links available from the Web site were not always complete and accurate. CHIPRA required HHS to post a current and accurate list of dentists participating in Medicaid or CHIP on the Web site by August 2009 and to ensure that the list is updated at least quarterly. In August 2010, officials from CMS—the agency within HHS responsible for implementation and that established the data elements that states should provide—described the Web site as a "work in progress" and reported that they are continually improving the site. Although we found that improvements were evident over a 6-month period, problems remained. Specifically, we found cases in which information posted on the Web site was not complete, not usable, or not accurate. Completeness . Our review of dentist listings for all 50 states and the District of Columbia in November 2009, 3 months after CHIPRA required HHS to post the list of participating dentists, found a variety of problems, including missing or incomplete information on dentists' telephone numbers and addresses, whether dentists accepted new Medicaid or CHIP patients, and whether dentists could accommodate children with special needs. Our second review of dentist listings in April 2010 for these data found some improvements had been made, but that problems with missing or incomplete information continued for some states (see table 4).

³¹The study found that overall, 8.9 percent of children with special health care needs who needed any dental care were unable to obtain it. Children with Down's Syndrome had the highest proportion of unmet dental care needs at 17.4 percent, and children with asthma the lowest at 8.6 percent. C.W. Lewis, "Dental Care and Children with Special Health Care Needs: A Population-Based Perspective," *Academic Pediatrics*. Vol. 9, No. 6: 420-426 (2009).

³²Specifically, the study noted that the adjusted odds of unmet dental care needs for severely affected, poor/low-income children with special health care needs were 13.4 times that of unaffected, higher-income children.

Table 4: Number of States Providing Missing or Incomplete Dentist Information through HHS's Insure Kids Now Web Site in November 2009 and April 2010

		Number of	states
Required data element missing or incomplete		November 2009	April 2010
Medicaid	Missing or incomplete contact information (i.e., name, address, telephone number) for some or all dentists	10	10
	Did not indicate for all dentists whether dentist accepts new patients	34	29
	Did not indicate for all dentists whether dentist can accommodate patients with special needs	40	37
CHIP	Missing or incomplete contact information (i.e., name, address, telephone number) for some or all dentists	17	14
	Did not indicate for all dentists whether dentist accepts new patients	34	29
	Did not indicate for all dentists whether dentist can accommodate patients with special needs	38	36

Source: GAO analysis of HHS's Insure Kids Now Web site for 50 states and the District of Columbia.

Note: This table presents the results of our review of the information posted on HHS's Insure Kids Now Web site in November 2009 and April 2010. Specifically, we examined each state's listing of dentists to determine if certain data elements, specified in CMS guidance as required, were present for all dentists in all Medicaid and CHIP programs operated by the state and recorded instances in which data were missing or incomplete for all or some dentists.

- **Usability**. In May 2010, we reviewed all state dentist listings on the Insure Kids Now Web site to determine whether families of a child in Medicaid or CHIP could reasonably use the site to find potential dentists near them and found that listings from 25 states and the District of Columbia had usability problems that prevented or hampered the search for a dentist participating in Medicaid or CHIP. For example, menu or search functions for 14 states did not work for a program or entire state—with no indication of when functions would be restored or how the user could obtain alternate assistance while it was unavailable. Other problems we encountered included broken or incorrect links (for example, one state link that took the user to an unrelated agency in another state) and confusing menus that could hinder the search. For example, seven states listed multiple health plans with similar names, some containing typographical errors and some that produced different provider listings, increasing the likelihood of selecting the wrong plan and generating an incorrect list of dentists.
- Accuracy. To check the accuracy of information on dentists posted on the Insure Kids Now Web site, in May 2010 we called the telephone number listed for 188 general dentists shown on HHS's Web site as practicing in

selected low-income urban and rural areas in four states³³ and found problems in about half (96) of the listings we checked, including dentists who were not accepting children in Medicaid or CHIP and wrong or disconnected telephone numbers (see table 5). We also asked respondents to tell us what the typical wait time would be for an appointment with the dentists. Of 92 dentists we called that reported that they accepted new Medicaid or CHIP patients under age 19, all but one reported that the wait time was the same for Medicaid or CHIP patients and privately insured patients.³⁴

Table 5: Errors in Dentist Listings on HHS's Insure Kids Now Web Site, May 2010

State (number of dentists whose offices we called)	Wrong or disconnected telephone number, percentage (number of errors)	Errors in other posted information, ^a percentage (number of errors)	Not accepting new Medicaid or CHIP children, percentage (number of errors)
California (40)	5% (2)	8% (3)	30% (12)
Georgia (45)	4% (2)	38% (17)	11% (5)
Illinois (56)	36% (20)	36% (20)	4% (2)
Vermont (47)	4% (2)	38% (18)	9% (4)

Source: GAO analysis.

Note: In May 2010, we called the telephone number listed on HHS's Insure Kids Now Web site for 188 dentists in California, Georgia, Illinois, and Vermont—states we selected because they provided variation in geography, use of Medicaid dental managed care, and the number of children covered by Medicaid. Within each state we identified 25 urban dentists and 15 rural dentists to call in the areas with the largest number of children in poverty. For a dentist in a group practice, a single telephone call could yield additional dentists; thus more dentists were called in some states. We accounted for each dentist separately, so an error such as a wrong telephone number for a dental clinic with multiple dentists would account for multiple errors.

^aOther errors included incorrect addresses (11) or dentists no longer in practice or not providing routine examinations (47).

In addition, while CMS issued guidance requiring states to indicate on the Web site whether a dentist could treat children with special needs, as of August 2010, CMS had not defined what capabilities dentists who serve children with special needs should have, and we found some confusion among dentists' offices regarding their ability to treat these children. For

³³The dentists were listed on the Insure Kids Now Web site as practicing in California, Georgia, Illinois, and Vermont. Our case study approach did not yield results that could be projected to entire states or managed care organizations.

³⁴One dentist reported that the wait time for a new Medicaid or CHIP child was 6 months, compared to 2 months for other new patients with private insurance. Twenty-three of the dentists we called who were otherwise treating children were not accepting any new Medicaid or CHIP patients.

example, several of the dentist offices we called indicated they were unsure whether they could serve children with special needs, while others indicated that they would try to serve them. Of the dentist offices that responded to questions about specific capabilities, nearly all (89 of 95) reported that their offices were wheelchair accessible, but few (6 of 74) reported that they could treat children requiring sedation—although a small number indicated that they would refer the patient to another dentist who could provide sedation.

Finally, we identified one dentist shown on a state's Insure Kids Now listing of dentists treating children enrolled in Medicaid or CHIP who was on HHS's register of excluded providers and should not have been allowed to receive reimbursement from either program.³⁵ We contacted the dentist's office on May 5, 2010 as part of our review of the accuracy of the information posted on the Web site and the dentist's office confirmed that the dentist was accepting new Medicaid patients. We also contacted the HHS Office of Inspector General (OIG), which administers the HHS exclusion program and HHS-OIG officials confirmed that the dentist had been excluded from participation in the Medicaid program and that the dentist had been reinstated effective May 13, 2010.³⁶

³⁵HHS may exclude providers from receiving payment from federally funded health care programs, including Medicare and Medicaid, for incidents such as conviction for programrelated fraud and patient abuse, license revocation or suspension, and default on Health Education Assistance Loans. See http://oig.hhs.gov/fraud/exclusions.asp (accessed July 20, 2010).

³⁶HHS-OIG officials told us that the dentist has been excluded from Medicaid in 1986 after pleading guilty to Medicaid fraud.

States Report	Although annual state reports on the CMS 416 indicate that the provision of dental services to children in Medicaid nationwide had improved between 2001 and 2008 (the most recent data available at the time of our review), overall utilization rates remained low. In addition, data to measure provision of dental services for some children, such as those in managed care programs or in CHIP, are limited.
Improvement in the	
Provision of Dental	
Services to Children	
in Medicaid, but Data	
to Monitor Service	
Provision under CHIP	
or Managed Care are	
Limited	

States Report Improvement in the Provision of Dental Services to Children in Medicaid between 2001 and 2008, but Utilization Remains Low According to data provided by states on annual CMS 416 reports, utilization of dental services among children in Medicaid had improved, but reported utilization rates still varied among states.³⁷ Nationwide, reported utilization of any Medicaid dental service increased—from 27 percent of children in federal fiscal year 2001 to 36 percent of children in federal fiscal year 2008—but despite this increase, no dental service utilization was reported for nearly two-thirds of Medicaid-enrolled children.³⁸ Overall, states also reported a higher proportion of children receiving preventive dental services than dental treatment services in both years (see fig. 1).

³⁷Children enrolled in CHIP programs that are expansions of the states' Medicaid programs are entitled to the Medicaid EPSDT benefit package and are included in the states CMS 416 reports, but are not identified separately as CHIP enrollees in the CMS 416.

³⁸We calculated and report the nationwide Medicaid dental utilization rate—that is, the percentage of total EPSDT-eligible Medicaid enrollees in the nation who received any dental service. CMS reports a national average of 37.7 percent in 2008 that is calculated by averaging the 51 state-utilization rates. We report the national utilization rate rather than the average rate because it accounts for differences in the number of enrollees in each state.





Source: GAO analysis of CMS 416 data.

Note: This figure represents national dental utilization rates calculated from data reported by states in their CMS 416 reports submitted for federal fiscal years 2001 and 2008 on the number of EPSDTeligible Medicaid-enrolled children who received a dental service during the fiscal year. Children enrolled in CHIP programs that are expansions of the states' Medicaid programs are entitled to the Medicaid EPSDT benefit package and are included in the states CMS 416 reports, but are not identified separately as CHIP enrollees.

Although the percentage of children nationwide in Medicaid who received any dental service increased, there continued to be wide variation among states in the percentage of children reported to have received any dental service, including eight states that reported dental utilization rates at 30 percent or less in fiscal year 2008 (see fig. 2). There was also wide variation among states in utilization rates for preventive and dental treatment services—see appendix II for a complete list of the utilization rates for any dental service, preventive dental services, and dental treatment services reported by states in their fiscal year 2008 CMS 416 reports.



Figure 2: Percentage of Children in Medicaid Receiving Any Dental Service, Fiscal Year 2008

Source: GAO analysis of CMS Form 416 data; Map Resources (map).

Note: This figure represents dental utilization rates calculated from data reported by states in their fiscal year 2008 CMS 416 reports (the most recent available at the time of our review) on the number of EPSDT-eligible Medicaid-enrolled children who received any dental service during the fiscal year. Nationwide, 36 percent of children in Medicaid received any dental service in fiscal year 2008. Children enrolled in CHIP programs that are expansions of the states' Medicaid programs are entitled to the Medicaid EPSDT benefit package and are included in the states' CMS 416 reports, but are not identified separately as CHIP enrollees. Dental utilization rates are rounded to the nearest whole percentage.

For Children in Managed Care and Children in CHIP, Data on the Provision of Dental Services Are Limited

Comprehensive and reliable data on dental utilization by children in Medicaid managed care programs and children in CHIP are not available. States do not distinguish between fee-for-service and managed care programs when reporting annual Medicaid data to CMS (using CMS 416).³⁹ A comparison of fiscal year 2008 CMS 416 data with available data on the proportion of children in Medicaid managed care in a given state suggests that children in Medicaid managed care plans may have lower dental utilization rates than children in fee-for-service programs. Our analysis of 2008 data on Medicaid managed care penetration rates from the American Dental Association found that 10 states provided dental services predominantly through dental managed care programs.⁴⁰ These 10 states reported that 34 percent of children covered by Medicaid received any dental service, compared to 41 percent of children reported by the 33 states that reimbursed exclusively under fee-for-service.

Questions about the provision of Medicaid dental services under managed care compared to fee-for-service payment arrangements are long-standing. In 2007, we reported that CMS had taken steps to improve the CMS 416 data, but that concerns remained about the completeness and sufficiency of the data for purposes of overseeing Medicaid dental services.⁴¹ In particular, we noted that the information could not be used to identify problems with specific delivery methods. Following our report, CMS officials had considered revising the CMS 416 to capture services delivered through managed care; however, as of August 2010, CMS officials did not have any plans to do so.

In addition, national data were not available on the provision of CHIP dental services, although CMS will require improved reporting per CHIPRA in 2011 for dental services provided in 2010. Although states must

⁴¹GAO, Medicaid: Concerns Remain about Sufficiency of Data for Oversight of Children's Dental Services, GAO-07-826T (Washington, D.C.: May 2, 2007).

³⁹In prior work, we found concerns that data on the provision of Medicaid services by managed care programs reported by states on their CMS 416s were not complete or reliable. See GAO, *Medicaid: Stronger Efforts Needed to Ensure Children's Access to Health Screening Services*, GAO-01-749 (Washington, D.C.: July 13, 2001). According to CMS officials, states have improved the quality of data gathered and reported on their CMS 416 reports.

⁴⁰See American Dental Association's *Medicaid Compendium Update* http://www.ada.org/2123.aspx (accessed Feb. 12, 2010). We considered states with 75 percent or more Medicaid-enrolled children in dental managed care as predominantly dental managed care states.

	assess the operation of their CHIP programs each federal fiscal year and report on the results of this assessment, ⁴² CMS had not required states to include specific information on the provision of CHIP dental services, such as required for Medicaid dental services in the CMS 416. However, beginning in fiscal year 2010, CHIPRA requires states to include information on CHIP dental services of the type contained in the CMS 416 in their annual CHIP reports and further requires the inclusion of information on the provision of CHIP dental services in managed care programs. ⁴³ According to CMS officials, a CMS work group is developing specific reporting requirements for CHIP dental services provided by states in fiscal year 2010, with the first reports due to CMS in 2011.
Federal Efforts to Improve Access to Dental Services for Children in Underserved Areas Are Under Way, but Effect Is Not Yet Known	Two HHS programs that provide dental services to children as well as adults in underserved areas—HRSA's Health Center and NHSC programs—have reported increases in the number of dentists and dental hygienists practicing in underserved areas, but the effect of recent initiatives to increase federal support for these and other oral health programs is not yet known. And despite these increases, some gaps may remain. For example, even with recent increases, both health centers and the NHSC program report continued need for additional dentists and dental hygienists to treat children and adults in underserved areas.
Health Center and NHSC Programs Report Recent Increases in the Number of Dentists and Dental Hygienists, but Full Effect of Federal Efforts Is Unknown	One federal effort to improve access to dental services in underserved areas is the Health Center program. To support the expansion of dental services in health centers, HRSA reported that it provided grant opportunities for health centers to expand oral health services, making 312 awards between 2002 and 2009 totaling \$56.4 million. The number of patients, including children, that HRSA reported as receiving dental services in health centers, the number of FTE dentists, and the number of FTE dental hygienists providing those services all increased by more than one-third between calendar years 2006 and 2009 (see fig. 3). ⁴⁴ In addition

 $^{^{42}}$ Social Security Act § 2108(a) (codified at 42 U.S.C. § 1397hh(a)).

⁴³Pub. L. No. 111-3, § 501(e), 123 Stat. 87.

 $^{^{44}}$ In addition to dentists, health centers employed 1,018 dental hygienist FTEs and over 4,800 FTEs for dental assistants, aides, and technicians in calendar year 2009.

to dental services required of health centers, such as pediatric dental screenings and preventive dental services, HRSA reported a 40 percent increase in the number of patients receiving restorative dental services over this period.⁴⁵ Despite these increases, an official with the National Association of Community Health Centers reported continued need for additional health centers and dental providers to practice in them to meet the needs of underserved areas.⁴⁶

⁴⁵HRSA reported that 942 health center grantees offered restorative dental services—either directly, through contracts, or through formal referral arrangements—as of June 2010.

⁴⁶We previously reported that 43 percent of medically underserved areas lacked a health center as of 2007. GAO, *Health Resources and Services Administration: Many Underserved Areas Lack a Health Center Site, and the Health Center Program Needs More Oversight*, GAO-08-723 (Washington, D.C.: Aug. 8, 2008). In August 2010, an official with the National Association of Community Health Centers told us that, although the number of underserved areas with a health center site increased since 2007, the change has not been significant and many underserved areas still lacked a health center to provide dental and other medical services.





Source: GAO analysis of HRSA data.

Note: This figure presents information HRSA reported on the number of FTE dental hygienists and dentists practicing in health centers for each calendar year and the total number of dental patients. HRSA reported the exact number of patients receiving dental services as follows: 2,577,003 in 2006, 2,808,418 in 2007, 3,071,085 in 2008, and 3,438,340 in 2009.

Another HHS program reporting an increase in the number of dentists and dental hygienists practicing in underserved areas is the NHSC. HRSA reported that 611 dentists and 70 dental hygienists were practicing in HPSAs through the NHSC scholarship and loan repayment programs at the end of fiscal year 2009.⁴⁷ This was at least 30 percent higher than the number of NHSC dentists and dental hygienists HRSA reported as practicing in HPSAs through the program at the end of the three preceding fiscal years (see fig. 4). Despite this increase, the NHSC reported vacancies

⁴⁷Of the 611 dentists and 70 dental hygienists in NHSC at the end of fiscal year 2009, 112 dentists and 13 hygienists were funded through the State Loan Repayment Program.

for 673 dentists and 192 dental hygienists to practice in dental HPSAs in August 2010.

Figure 4: Number of NHSC Dentists and Dental Hygienists Practicing in Shortage Areas, Fiscal Years 2006 through 2009

Number of NHSC dentists and dental hygienists 700



Source: GAO analysis of HRSA data.

Notes: This figure presents information HRSA reported on the number of dentists and dental hygienists practicing in shortage areas through the NHSC as of the end of each fiscal year.

In 2009, the Recovery Act provided appropriations for both the Health Center and NHSC programs, funding activities to improve access to services, including dental services for children, in underserved areas. For example, according to HRSA, Recovery Act funds were used to support NHSC loan repayment awards for 96 of the dentists and 20 of the dental hygienists practicing in HPSAs through the NHSC at the end of fiscal year 2009⁴⁸ as well as an additional 382 dentists and 105 dental hygienists who received NHSC loan repayment awards in fiscal year 2010. HHS also

⁴⁸These loan repayment awards made in fiscal year 2009 represent 16 percent of the 611 dentists and 29 percent of the 70 dental hygienists practicing in HPSAs through the NHSC at the end of fiscal year 2009.

indicated that it used funds made available through the Recovery Act to award more than 1,100 grants totaling approximately \$338 million to health centers to support efforts to increase the number of patients served.⁴⁹

Another recent statute—PPACA—authorized and in some cases appropriated funding for both the Health Center and NHSC programs. For example, in August 2010, HHS announced the availability of \$250 million in grants—from funds made available in PPACA—for new full-time service delivery sites that provide comprehensive primary and preventive health care services, including pediatric dental screenings and preventive dental services, for underserved and vulnerable populations under the Health Center program. The full effect of PPACA funding on children's access to dental services in underserved areas, however, remains to be seen. See appendix III for additional information on the funding made available to the NHSC and Health Center programs through the Recovery Act and PPACA.

HHS's Oral Health Initiative 2010 and Other HHS Programs May Improve Access to Dental Services for Children in Underserved Areas

In an effort to increase support for and expand the department's emphasis on access to oral health care, including access for underserved populations, HHS launched a departmentwide Oral Health Initiative in April 2010 to improve the nation's oral health by better coordinating federal programs. According to HHS, the initiative is intended to improve the effective delivery of services to underserved populations by creating and financing programs to emphasize oral health promotion and disease prevention, increase access to care, enhance the oral health workforce, and eliminate oral health disparities.⁵⁰ The initiative includes two new HHS efforts targeted at specific groups of children that, although too early to tell, may lead to improved access for children in underserved areas:

• HHS's Administration for Children and Families has started the Head Start Dental Homes Initiative, to establish a national network of dental homes for children in Head Start and Early Head Start. The Administration for

⁴⁹These grants for increased demand for services from health centers were awarded to fund activities such as adding new providers, expanding hours, or expanding existing health center services.

⁵⁰See Promoting and Enhancing the Oral Health of the Public: HHS Oral Health Initiative 2010 for a description of the agency's efforts under this initiative: http://www.hrsa.gov/publichealth/clinical/oralhealth/hhsinitiative.pdf (accessed June 16, 2010).

Children and Families Office of Head Start and the American Academy of Pediatric Dentistry define a dental home as comprehensive, continuously accessible, coordinated, and family-centered oral health care delivered to children by a licensed dentist.

• HHS's Indian Health Service has started the Early Childhood Caries Initiative to promote the prevention and early intervention of dental caries (tooth decay) for young American Indian and Alaska Native children—a population that experiences dental caries at a higher rate than the general U.S. population.⁵¹

In addition to the NHSC and Health Center programs, HHS administers, or has authority to administer, a number of other oral health programs. Although not all of these programs are targeted specifically to children in underserved areas, they may improve their access to dental services. Examples of such programs include: (1) the School-Based Dental Sealant Program, which was authorized by PPACA to expand grants for schoolbased dental sealant programs to all 50 states, territories, and Indian tribes and organizations;⁵² and (2) the State Oral Health Workforce Grant program which awards grants to states to address workforce issues, including those associated with dental HPSAs. See appendix IV for a list of these and other HHS programs that may improve access to dental services in underserved areas.

⁵¹The Early Childhood Caries Initiative activities include early oral health assessment by community partners such as Head Start, nurses, and physicians; fluoride varnish application by these community partners and dental teams; and the application of dental sealants on primary teeth for young children.

⁵²See Pub. L. No. 111-148, § 4102(b), 124 Stat. 551.

Use of Mid-Level Dental Providers Is Not Widespread in the United States, and Other Countries Have Used Them to Improve Children's Access to Dental Services	Mid-level dental providers—providers who can perform intermediate restorative procedures, such as drilling and filling a tooth, under remote supervision of a licensed dentist—are not widely licensed or certified to practice in the United States. Other countries, which have used mid-level dental providers for many years, reported that these providers deliver quality care and increase children's access to dental services.
Efforts Are Under Way to Use Mid-Level and Other Dental Providers to Improve Children's Access to Dental Services	Within the United States, experience with mid-level dental providers is limited to the Dental Health Aide Therapist program for Alaska Natives and the advanced dental therapy program in Minnesota. ⁵³ Efforts are under way to increase access to dental services through the use of dental therapists, dental hygienists, physicians, and other new dental provider models.
Dental Health Aide Therapist Program for Alaska Natives	The Dental Health Aide Therapist program in Alaska, the only mid-level dental provider program with providers practicing in the United States as of July 2010, began in 2003 in response to the extensive dental health needs of Alaska Natives and high dentist vacancy rates in rural Alaska. ⁵⁴ Dental health aide therapists (dental therapists) in Alaska are not licensed by the state; rather the program is authorized under the federal Community Health Aide Program for Alaska Natives. The 2-year training program is based on a long-standing dental therapy program in New Zealand. After completion of their training and preceptorship, dental therapists become certified and practice in their assigned villages under

⁵³For the purposes of this report, in the United States, mid-level providers are known as dental therapists in Alaska under the Dental Health Aide Therapist program and advanced dental therapists in Minnesota.

⁵⁴Alaska Native children had rates of dental caries (cavities) that were 2.5 times the U.S. average and Alaska tribes experienced dentist vacancy rates of 25 percent.

the remote consultative supervision of a dentist.⁵⁵ Services performed by dental therapists may include assessments and basic and intermediate restorative procedures. As of June 2010, 19 dental therapists were serving in rural Alaska native villages or completing their preceptorship with a supervising dentist.

Children are an important focus of the Dental Health Aide Therapist program. According to an official from the Alaska Native Tribal Health Consortium, about half of the patients seen by dental therapists under this program are children. For example, between 2006 and 2009, approximately 59 percent of encounters for one dental therapist were with children under 18 years old. Consortium officials also noted that Medicaid is a major payer for dental therapist services, indicating that dental therapists provide a substantial portion of their services to children under Medicaid.⁵⁶ Although limited research regarding the impact of this program has been completed, a 2008 study examining the quality of restorative procedures performed by dental therapists found that procedures provided by dental therapists do not differ from similar procedures performed by dentists.⁵⁷ In addition, in October 2010, a study of the Dental Health Aide Therapist program found that the five dental therapists who were included in the study performed well, operated safely, and were technically competent to perform procedures within their defined scope of practice. The study also noted that the patients of the dental therapists were generally very satisfied with the care they received from those therapists. The study assessed the quality of services and procedures provided by dental therapists using various methods including patient and oral health surveys, observations of clinical technical performance, medical chart audits, and facility evaluations.⁵⁸ See appendix V for more information on the Dental Health Aide Therapist program in Alaska.

⁵⁵Under standards of the Community Health Aide Program Certification Board, prior to certification, each dental therapist is required to complete a clinical preceptorship under the direct supervision of a dentist for a minimum of three months or 400 hours, whichever is longer.

⁵⁶Alaska Medicaid reimburses dental therapist services at the same encounter rate as services provided by a dentist.

⁵⁷K.A. Bolin, "Assessment of treatment provided by dental health aide therapists in Alaska; a pilot study," *Journal of the American Dental Association*, Vol. 139 (2008).

⁵⁸Scott Wetterhall MD, et al., *Evaluation of the Dental Health Aide Therapist Workforce Model in Alaska* (Research Triangle Park, N.C.: RTI International, October 2010).

Minnesota's Advanced Dental Therapist Program	In 2009, Minnesota authorized the certification of the advanced dental therapist and dental therapist positions to provide dental services to low-income, uninsured, and underserved patients. ⁵⁹ Advanced dental therapists are licensed dental therapists who, upon completion of additional education and experience, may become certified to perform a range of preventive, and basic and intermediate restorative procedures—including drilling and filling and non-surgical extractions of permanent teeth—under the remote consultative supervision of a dentist. They may also develop patient treatment plans with authorization by a consulting dentist. ⁶⁰
	Advanced dental therapy training is offered by Metropolitan State University as a master's degree program which prepares students with an existing dental hygiene license for licensure as a dental therapist and certification as an advanced dental therapist upon completion of 2,000 hours of dental therapy practice. ⁶¹ As of June 2010, certification requirements for advanced dental therapists had not yet been finalized, and there were no practicing advanced dental therapists. State officials anticipated that the first advanced dental therapists will graduate in 2011. Once licensed, advanced dental therapists are required to enter into consultative agreements—which outline any restrictions to their scope of practice—with licensed dentists to whom they will refer patients for services beyond their scope of practice. ⁶² Minnesota health officials anticipated that advanced dental therapists will be eligible to receive direct Medicaid and CHIP reimbursement, but payment arrangements had not been finalized as of June 2010.
Use of Dental Hygienists and Physicians in Selected States	Certain states have made efforts to increase children's access to dental services by allowing dental hygienists and primary care physicians to provide certain dental services without the on-site supervision of a dentist. In seven of the eight states we examined—Alaska, California, Colorado,

⁵⁹2009 Minn. Laws Ch. 95, Art. 3.

⁶¹The University of Minnesota School of Dentistry also offers a bachelor of science and a master's degree program which prepare students for licensure as dental therapists, but does not include the training required for advanced dental therapist certification.

 $^{62}\mbox{Licensed}$ dental therapists are also required to enter into consultative agreements.

⁶⁰In Minnesota, a dental therapist may perform a range of preventive and basic restorative procedures under remote consultative supervision of a dentist and intermediate restorative procedures under the on-site supervision of a dentist. Because of the on-site supervision requirement for intermediate restorative procedures, we do not consider Minnesota dental therapists as mid-level providers in this report.
Minnesota, Mississippi, Oregon, and Washington—dental hygienists may perform certain procedures, such as fluoride application, under remote or no supervision of a dentist; in some cases specifically to increase access for underserved populations.⁶³ For example, dental hygienists in California, Minnesota, Mississippi, Oregon, and Washington may practice in limited settings outside the private dental office under remote or no supervision of a dentist, increasing access to dental services for underserved populations, including children. Such practices are generally limited to settings such as schools or residential facilities and, in most cases, allow hygienists to provide only preventive services upon completion of additional training or clinical experience. Dental hygienists in these states increase the available locations for individuals to access certain preventive dental procedures. In addition, five of the eight states we studied—California, Colorado, Minnesota, Oregon, and Washington reported that they allow direct Medicaid and in some cases CHIP reimbursement to certain dental hygienists for providing some preventive dental services.⁶⁴ See appendix VI for additional information on the scope of practice and requirements for dental therapists, dental hygienists, and dental assistants in the eight states we examined.

In addition, many states have also engaged primary care medical providers—such as physicians—in the provision of children's dental services. A survey conducted in 2009 indicated that 34 state Medicaid programs reimburse primary care medical providers for providing preventive dental procedures, such as fluoride application, and this represents an increase of nine states from a similar study conducted in 2008.⁶⁵ To track the provision of dental services by physicians and dental hygienists to children covered by Medicaid, CMS officials reported that

⁶³Dental hygienists in Alabama may only perform dental procedures under the on-site supervision of a dentist. In addition to dental hygienists, dental assistants may provide a variety of services—depending on the state—including preventive and basic restorative procedures, however in general they require on-site supervision by a dentist.

⁶⁴In the remaining three states—Alabama, Alaska, and Mississippi—Medicaid covered services provided by dental hygienists are reimbursed through their supervising dentist.

⁶⁵Chris Cantrell, *Engaging Primary Care Medical Providers in Children's Oral Health* (Portland, Me.: National Academy for State Health Policy, September 2009). This study did not include a separate review of state CHIP reimbursement. According to officials from the Pew Center on the States, Children's Dental Campaign—the organization that funded the 2009 survey and monitors state Medicaid reimbursement policies—as of November 2010, 40 state Medicaid programs reimburse primary care medical providers for providing preventive dental procedures. Seven of the eight states we examined provided such reimbursement.

	they are in the process of revising the CMS 416 to collect information on the number of children receiving dental services—such as sealants and oral assessments—from these providers and expect states will use the revised forms in 2011.
Efforts to Train or Employ New Dental Providers	In addition to state initiatives, PPACA authorized demonstration projects to train or employ certain dental providers. In March 2010, PPACA authorized \$60 million to fund 15 demonstration projects to train or to employ "alternative dental health care providers" to increase access to dental services in rural and other underserved communities. PPACA defines alternative dental health care providers to include dental therapists, independent dental hygienists, advanced practice dental hygienists, primary care physicians, and any other health professionals that HHS determines appropriate. ⁶⁶ Entities eligible to apply for the demonstration grants include colleges, public-private partnerships, federally qualified health centers, Indian Health Service facilities, state or county public health clinics, and public hospital or health systems.
	Two professional organizations have also proposed new dental provider models to increase children's access to dental services.
•	The American Dental Association developed the position of a community dental health coordinator as a new type of dental provider who may provide oral health education as well as some preventive services (depending on the state dental practice laws) under the supervision of a dentist in communities with little access to dental care. The association has begun a community dental health coordinator pilot training program, and as of July 2010, there were 27 students in three locations in California, Oklahoma, and Pennsylvania. The training includes a 12-month online training program through Rio Salado College and a 6-month clinical internship. ⁶⁷ Officials from the American Dental Association told us they plan to train 18 additional community dental health coordinators by September 2012, and they anticipated all of these providers will serve in their home communities after the training program. The American Dental Association is currently designing an evaluation of the program ends in 2012.

 $^{^{66}}$ Pub. L. No. 111-148, § 5304, 124 Stat. 621. According to HRSA officials, as of June 2010, no funds had been appropriated specifically for these demonstration projects.

⁶⁷Rio Salado College is based in Tempe, Arizona.

•	The American Dental Hygienists' Association developed and proposed the advanced dental hygiene practitioner as a mid-level dental provider to work independently in a variety of settings to provide preventive and certain basic and intermediate restorative services—including procedures such as drilling and filling a tooth—to underserved populations. The model is similar to the advanced dental therapist position in Minnesota and proposes a master's degree curriculum that builds upon existing dental hygiene education programs. ⁶⁸
Other Countries Have Used Mid-Level Dental Providers to Improve Access to Dental Services	Mid-level dental providers—dental therapists—have been used by many countries to improve access to preventive and restorative dental services. In particular, New Zealand, the United Kingdom, Australia, and Canada have long-standing dental therapist programs. ⁶⁹ These countries have used dental therapists to staff school- and community-based dental programs aimed at improving access to dental services for children and other underserved populations, such as those in rural areas (see table 6). ⁷⁰ Since the mid-1990s, three of the four countries—New Zealand, the United Kingdom, and Australia—have combined their dental therapy and dental hygiene training programs. ⁷¹

⁷¹Graduates of the combined programs are generally known as oral health therapists and are trained to provide dental hygiene services such as preventive teeth cleaning in addition to dental therapy services such as intermediate restorative tooth drilling.

⁶⁸The model proposed by the American Dental Hygienists' Association describes the supervisory arrangement for the advanced dental hygiene practitioner as a collaborative partnership with dentists for referral and consultations.

⁶⁹The countries are presented in chronological order by the date that their dental therapy programs started; New Zealand has the oldest dental therapy program. The United Kingdom consists of the countries of England, Northern Ireland, Scotland, and Wales.

⁷⁰These countries have other types of dental providers; however dental therapists are the only providers practicing in these countries who provide preventive, basic restorative and intermediate restorative dental procedures under remote supervision of a dentist. For example, Australia has a provider called a dental prosthesist who diagnoses and creates denture prosthesis, but does not provide primary (preventive and restorative) dental services.

Table 6: Characteristics of Mid-Level Dental Providers in New Zealand, the United Kingdom, Australia, and Canada

Country (year program started) <i>Type of mid-level dental</i>			Years of post	Number licensed or
providerª	Scope of practice	Supervision	secondary education [®]	practicing (year)
New Zealand (1921)				
Dental therapist/ Oral	Preventive	Remote: consultative	3	730
health therapist	Restorative (basic and intermediate)			(2009)
United Kingdom (1959)				
Dental therapist/ Oral	Preventive	Remote:	3	1,480
health therapist	Restorative (basic and intermediate)	prior knowledge and consent		(2010)
Australia ^b (1966)				
Dental therapist/ Oral	Preventive	Remote: consultative	3	1,760
health therapist	 Restorative (basic and intermediate) 			(2005)
Canada (1972)				
Dental therapist	Preventive	Remote:	2	310°
	Restorative (basic and intermediate)	prior knowledge and consent		(2010)

Source: GAO analysis.

Note: In these countries, most dental therapists are paid through the government as salaried employees. However, some work in private practice and are then paid by their employers. The information in this table was obtained from interviews with health officials in the four countries, professional organizations, government reports, and published research. We did not conduct an independent review of the legal authorities for this information.

^aSince the mid-1990s, Australia, the United Kingdom, and New Zealand have combined their dental therapy and dental hygiene programs with many offered as a bachelor's degree. The required education for the combined degree is between 2 and 3 years and graduates are trained in both scopes of practice.

^bUntil July 2010, dental therapy registration differed among Australia's states with three states allowing dental therapists to provide services to adults. Australia implemented a national registration scheme in July 2010 that will require all states to have the same scope of practice.

[°]Approximately three-quarters of dental therapists (230 of 310) in Canada practice in Saskatchewan, the only province where they are registered providers and able to work in private practice.

Dental therapists in the four countries, including those trained in combined oral health therapy programs, can perform preventive and basic and intermediate restorative procedures for children and adults without the on-site supervision of a dentist in both the public and private sectors. New Zealand, Australia, and Canada also permit dental therapists to determine patient treatment plans providing they maintain a relationship with a dentist where they can refer patients for services beyond their scope of practice. See appendix VII for more information on the use of dental therapists in these countries.

Health officials from the four countries expressed no reservations about the quality of care provided by dental therapists. Although recent data on the quality of services provided by dental therapists in these countries are limited, a study published in 2009 on Australian dental therapists reported that the standard of restorative procedures performed by dental therapists was comparable to the standard expected of newly graduated dentists in that country.⁷²

Health officials from New Zealand, Australia, and Canada reported that the majority of dental therapists' patients are children and available research found that dental therapists providing care in school- or community-based programs were an important part of improving dental outcomes for children.⁷³ For example, a health official from New Zealand—where dental therapists provide dental services in school-based clinics-told us that nearly all children aged 5 to 12 (96 percent) were enrolled in the nation's publicly funded school-based dental program in 2009. The program aims to see all enrolled children annually (or more frequently in high-risk cases) and the official told us that available data indicated that decay rates are reduced for these children. A New Zealand national oral health survey, planned for publication in December 2010, was expected to provide a clearer picture of children's oral health status across the population. In addition, one academic dental therapy official told us that in 2010 between 40 and 70 percent of Australian children, depending on the state, obtained dental services through publicly funded school-based dental programs primarily staffed by dental therapists. A 2008 study in Australia found that, from 1977 to 2002, the number of decayed, missing, and filled teeth declined 37 percent for primary teeth in 6-year old children and 79 percent for permanent teeth in 12-year old children enrolled in school-based

⁷²The study examined 258 restorations on 80 adult patients six months after treatment. H. Calache, et. al, "The capacity of dental therapists to provide direct restorative care to adults," *Australian and New Zealand Journal of Public Health*, Vol. 33 (2009). An Australian official noted that the use of dental therapists is widely accepted and that because the programs are long-standing, few recent studies have been conducted. However, available research on the dental therapists in New Zealand (1951) and Canada (1974) showed that they provided restorative procedures that were similar in quality to restorative procedures provided by dentists.

⁷³Health officials from the United Kingdom reported that dental therapists have not had a major impact on children's access in the United Kingdom because patients must first see a dentist before being referred to a dental therapist.

programs.⁷⁴ A Canadian health official reported that dental therapists serving aboriginal children in rural provinces and territories since the 1970s have often been the only reliable source of dental care for those children, in part because dentists are difficult to retain in rural areas. In the Canadian province of Saskatchewan, research on the impact of the province's school-based dental program estimated that the program served over 80 percent of non-aboriginal children in the province from 1976 to 1980 and that lower incidence of dental caries could be demonstrated with increased exposure to the program.⁷⁵ An official from the Saskatchewan Dental Therapists Association—the dental therapy regulating authority in the province—also reported that dental therapists working in private practice in the province increase children's access to dental services because they can provide restorative services and free time for dentists to see more patients. Since 2004, Canada has piloted and expanded the use of dental therapists to provide preventive and restorative services to aboriginal children in a community-based dental program. As of May 2010, Canadian health officials were completing an evaluation of the program, which they expected to show improved dental outcomes.

Conclusions

In the decade that has passed since the Surgeon General described the silent epidemic of oral disease affecting children in low-income families, dental disease and access to dental services have remained a significant problem for these children—including those in Medicaid and CHIP. States report that nationwide, only 36 percent of children in Medicaid received any dental service in fiscal year 2008, far below HHS's Healthy People 2010 target of 66 percent for low-income children. States also continue to report low participation by dentists in Medicaid and CHIP. Recognizing this challenge, HHS has taken a number of steps to strengthen its dental programs, including its HHS Oral Health Initiative 2010, and recent legislation has authorized and in some cases appropriated funding specifically for programs that may help increase access to dental services

⁷⁴The number of decayed, missing, or filled teeth calculated for both primary (baby) and permanent (adult) teeth is a common measure for dental disease experience. See J.M. Armfield and A.J. Spencer, "Quarter of a century of change: caries experience in Australian children, 1977-2002," *Australian Dental Journal*, Vol. 53 (2008).

⁷⁵The Saskatchewan school-based dental program was staffed by dental therapists and in existence from 1974 to 1993. D.W. Lewis, *Performance of the Saskatchewan Health Dental Plan, 1974-1980,* (University of Toronto, Toronto, Ontario, 1981). Although enrollment in the program by aboriginal children was much lower, enrollment of and access for these children increased over the period of study.

	in underserved areas; but results of these efforts are yet to be seen. And while states report some improvement in the provision of Medicaid dental services between 2001 and 2008, CMS has not yet collected comprehensive data on utilization of dental services for children in Medicaid managed care programs and covered by CHIP. We have reported in the past that such gaps limit CMS's oversight of the provision of dental services for children, such as its ability to identify problems with specific service delivery methods.
	Providing complete and accurate information to help families with children in the Medicaid and CHIP programs find dental care is an important tool in improving access. The information that HHS is required to post on its Insure Kids Now Web site could provide a useful tool for connecting these children and their families with dentists who will treat them. However, we found problems that limit its ability to do so, such as incorrect, outdated, or incomplete information; links to state Web sites that were not working; and even a dentist taking Medicaid patients who had been excluded by HHS from participation in the program. Addressing these problems—such as providing alternative sources of information to assist users when the Web site is not functioning or taken offline for maintenance, or providing additional guidance on dentists' ability to serve children with special needs—could help make the site more useful to beneficiaries.
Recommendations for Executive Action	We are making several recommendations to enhance the provision of dental care to children covered by Medicaid and CHIP.
	First, to help ensure that HHS's Insure Kids Now Web site is a useful tool to help connect children covered by Medicaid and CHIP with participating dentists who will treat them, we recommend that the Secretary of HHS take the following actions:
•	Establish a process to periodically verify that the dentist lists posted by states on the Insure Kids Now Web site are complete, usable, and accurate, and ensure that states and participating dentists have a common understanding of what it means for a dentist to indicate he or she can treat children with special needs.
•	Provide alternate sources of information, such as HHS's toll-free 1-877- KIDS-NOW telephone number, on the Insure Kids Now Web site when a page or link from the Web site is not functioning or taken offline for maintenance.

	•	Require states to verify that dentists listed on the Insure Kids Now Web site have not been excluded from Medicaid and CHIP by the HHS-OIG, and periodically verify that excluded providers are not included on the lists posted by the states.
		Second, to strengthen CMS oversight of Medicaid and CHIP dental services provided by dental managed care programs, we recommend that the Administrator of CMS take steps to ensure that states gather comprehensive and reliable data on the provision of Medicaid and CHIP dental services by managed care programs.
Agency Comments		We provided a draft of this report for comment to HHS. HHS agreed with our recommendations and provided written comments, which we summarize below. The text of HHS's letter—which included comments from CMS, HRSA, and CDC—is reprinted in appendix VIII. HHS also provided technical comments, which we incorporated as appropriate.
		In commenting on our recommendation that steps should be taken to improve the Insure Kids Now Web site, CMS and HRSA concurred that more attention needs to be devoted to improve the accuracy of information submitted by the states. To that end, CMS and HRSA commented that they will undertake several actions:
	•	To address errors on the site, CMS stated that the agency will increase the type and frequency of checks performed and work with states to ensure that they submit data that are free of the types of problems we identified. HRSA commented that it will work with CMS to develop a plan to periodically analyze a sample of data provided by states to assess its accuracy.
	•	To ensure that providers that HHS has excluded from Medicaid and CHIP are not listed on the site, CMS commented that it will ensure states are aware that such providers must not be included in the data, and HRSA reported that it plans to cross-check listed providers against the HHS- OIG's database of excluded parties.
	•	CMS commented that it will ensure that there is a consistent understanding of what it means to be identified on the site as a dentist serving children with special needs.

CMS agreed with our recommendation that the agency take steps to ensure that states gather comprehensive and reliable data on the provision of Medicaid and CHIP dental services by managed care programs, noting that the agency is in the process of revising the CMS 416 to include more information about dental services provided to children in state Medicaid programs, including under managed care payment arrangements. CMS's comments do not specify whether the agency will require states to separately report utilization under managed care for children in Medicaid or CHIP, a step that we believe is necessary for effective oversight.

In addition, CDC commented that a statement in the introduction of our report regarding the prevalence of tooth decay and dental disease in children may be misleading. Although our statement accurately reflects information that we previously reported, we revised the language to clarify that the results of our analysis specifically refer to children enrolled in Medicaid.

We are sending copies of this report to the Secretary of Health and Human Services and other interested parties. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staff have any questions regarding this report, please contact me at (202) 512-7114 or iritanik@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix IX.

Kotherne Ditani

Katherine Iritani Acting Director, Health Care

Appendix I: Scope and Methodology

To address the objectives in our review—to examine (1) the extent to which dentists participate in Medicaid and the Children's Health Insurance Program (CHIP) and federal efforts to help families find dentists to treat children in these programs, (2) what is known about access for Medicaid and CHIP children in different states and in managed care, (3) federal efforts under way to improve access to dental services by children in underserved areas, and (4) how states and other countries have used midlevel dental providers to improve children's access to dental services—we interviewed appropriate officials from the Department of Health and Human Services (HHS), academic institutions, professional associations, states, and dental and children's advocacy groups; reviewed federal and state laws and regulations; obtained, reviewed, and determined the reliability of data; and reviewed relevant literature.

Specifically, to determine the extent to which dentists participate in Medicaid and CHIP and federal efforts to help families find dentists to treat children in these programs, we:

- Analyzed state reported data on the number of dentists in a state treating Medicaid and CHIP patients, including data from the 2009 Association of State and Territorial Dental Directors (ASTDD) survey¹ and one of our prior reports.²
- Reviewed articles in peer-reviewed journals and reports on access to dental services by children with special health care needs.
- Examined states' dentist listings on HHS's Insure Kids Now Web site, including whether listings were complete, usable, and accurate:

<u>Completeness</u>: To examine the completeness of the information on the Web site, we conducted two reviews—in November 2009 and in April 2010—to determine whether information CMS guidance had identified as required elements were present. We examined each state's listing of dentists to determine if certain elements listed as required in the Centers for Medicare & Medicaid Services' (CMS) June 2009 guidance were present

²GAO/HEHS-00-149.

¹ASTDD surveyed dental directors in all states and the District of Columbia. Respondents were asked to provide the most recent data available or data for the most recently completed fiscal year—generally 2008 data for the 2009 survey. See http://apps.nccd.cdc.gov/synopses/AboutV.asp (accessed July 21, 2010).

for all dentists in all Medicaid and CHIP programs operated by the state (states can have multiple dental plans within Medicaid and CHIP) and recorded instances in which data were missing or incomplete for all or some dentists. Specifically, we examined each state's listing for the presence of dentists' names, addresses, phone numbers, and specialties; whether they accepted new Medicaid or CHIP patients; and whether they could accommodate children with special needs.³

<u>Usability</u>: In May 2010, we conducted a review of the information available on the Insure Kids Now Web site for each of the 50 states and the District of Columbia. The purpose of this review was to determine whether families seeking a dentist to treat a child covered by Medicaid or CHIP could reasonably complete the task and, if not, what types of errors prevented the site from being usable, such as whether hyperlinks functioned as expected and linked pages contained appropriate information. We tested the drop-down menus on the Web site for the Medicaid and CHIP programs in each state, conducted a general search of dentists for each program, and searched for dentists in each state's capital city and in the District of Columbia.

<u>Accuracy</u>: To check the accuracy of information on dentists posted on the Insure Kids Now Web site, we selected a nongeneralizable sample of dentists listed on the Web site for four states (California, Georgia, Illinois, and Vermont) that provided variation in geography, managed care penetration for Medicaid (as reported by the American Dental Association), and number of children covered by Medicaid. We selected 25 urban dentists and 15 rural dentists listed on the Insure Kids Now Web site in each state. For urban dentists, we identified the urban county with the most children in poverty, the largest city in that county, and then the zip code within that city with the most children in poverty. We then searched for general dentists in the rural counties with the most children in poverty, excluding rural counties adjacent to major metropolitan areas.

³CHIPRA required that HHS post a complete and accurate list of dentists participating in state Medicaid and CHIP programs on the Insure Kids Now Web site by August 4, 2009. In June 2009, CMS issued guidance specifying certain data elements required for each dentist listed on the Insure Kids Now Web site, including the dentists' name, address, telephone number, and specialty; whether the dentist accepts new Medicaid or CHIP patients; and whether the dentist can accommodate patients with special needs.

⁴For all 4 states, HHS's Insure Kids Now Web site allowed the user to enter a zip code to identify dentists nearest to the selected zip code.

We limited our searches to dentists listed as accepting new Medicaid and CHIP patients. We used U.S. Census data and an urban/rural classification system developed by the U.S. Department of Agriculture (called Rural-Urban Continuum Codes) to identify the areas from which we selected dentists. In May 2010, we called the telephone number listed for the selected dentists and asked the person scheduling appointments if the listed dentist currently accepted new patients, including new patients enrolled in the state's Medicaid and CHIP programs. We also asked whether the dentist accommodated children with special health care needs—generally, and specifically with regard to wheelchair access and ability to treat children requiring sedation. Finally, we asked if the listed address was accurate and inquired about the next available appointment time. In the course of making calls we contacted more than 40 dentists in some states because some offices had multiple dentists listed on the Web site, resulting in a total of 188 dentists included in our calls.

• Reviewed the literature, including our past reports and peer-reviewed journals, on factors that impact dentists' decisions to participate in Medicaid and states' efforts to address barriers to dentists' participation.

To examine what is known about access for children in Medicaid and CHIP in different states, including for children in managed care, we examined dental utilization data on children covered by Medicaid, including those covered under Medicaid expansion programs, reported by states to CMS through the annual CMS 416 form. For each state and nationally, we calculated utilization rates reported for any dental service, preventive dental services, and dental treatment services. We calculated utilization rates for federal fiscal year 2001, the year after our first report on oral health, and federal fiscal year 2008, the most recent year for which data were available. In addition, we compared children's utilization of any dental service to data reported by the American Dental Association on the proportion of children in each state who receive their Medicaid dental benefits through managed care.

To identify federal efforts under way to improve access to dental services by children in underserved areas we interviewed cognizant HHS officials, including those from CMS and the Health Resources and Services Administration (HRSA), and obtained written responses from agency officials to specific questions about relevant programs. We obtained data on health center and National Health Service Corps (NHSC) dental provider numbers and HHS program funding levels from HHS officials and documents such as annual HRSA budget justifications. We also reviewed provisions in the Recovery Act and the Patient Protection and Affordable Care Act (PPACA) legislation and interviewed HHS officials to discuss legislative changes and funding authorized and in some cases appropriated for programs that promote dental services in underserved areas.

To determine how states and other countries have used mid-level dental providers to improve dental access for children, we examined laws, regulations, and practices in eight states and interviewed or obtained written responses from relevant officials in those eight states and four countries. To select those eight states for review, we used a standard set of questions posed to relevant officials from academic institutions, professional associations, and advocacy groups regarding states' dental practice laws, including practice of mid-level dental providers. Using the standard set of questions, we obtained responses on those states considered "expansive" and those considered "restrictive" in their laws governing the practice of dental providers. We assessed the responses and, to demonstrate the variation in state laws, selected eight states—Alabama, Alaska, California, Colorado, Minnesota, Mississippi, Oregon, and Washington. To obtain information on the selected states' use of dental providers other than dentists, we conducted interviews and obtained information from Medicaid and CHIP officials and dental boards in the selected states. Our interviews with officials revealed that there is no commonly recognized definition of mid-level dental providers, therefore we defined mid-level dental providers as providers who may perform intermediate restorative procedures, such as drilling and filling a tooth, under the remote supervision of a dentist. In addition, we defined scope of practice for the purposes of this report based on interviews and review of literature and state laws. To gather information on the only practicing midlevel dental providers in the United States, we conducted a site visit to Alaska. We interviewed state and tribal officials on the Alaska Dental Health Aide Therapist program administered by the Alaska Native Tribal Health Consortium and visited two clinics where dental therapists were training and practicing. To identify efforts related to new dental provider models, we reviewed policies and proposals by professional associations and interviewed officials from academic institutions, professional associations, HHS, and our selected states. To select countries for further review, we identified four countries that use mid-level providers, specifically dental therapists, and are comparable to the United States (identified as developed countries by the CIA World Factbook⁵ and with a

⁵*The World Factbook 2009.* Washington, D.C.: Central Intelligence Agency (2009). See https://www.cia.gov/library/publications/the-world-factbook/appendix/appendix-b.html#D (accessed Nov. 20, 2009).

similar percentage of children living in households with incomes below 50 percent of their country's median income). The four countries examined were Australia, Canada, New Zealand, and the United Kingdom. To obtain information on the selected countries' use of mid-level dental providers, we conducted a literature review and interviewed oral health experts and government health officials in each country.⁶

To verify the reliability of the data we used for all four objectives, including HRSA's health center data, ASTDD survey data, the American Dental Association's Medicaid managed care data, U.S. Census data, the U.S. Department of Agriculture's Rural-Urban Continuum Codes, the CMS 416 annual reports, and Alaska Dental Health Aide Therapist encounter data, we interviewed knowledgeable officials, reviewed relevant documentation, and compared the results of our analysis to published data, as appropriate. We determined that the data were sufficiently reliable for the purposes of our engagement.

We conducted this performance audit from August 2009 through November 2010 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

⁶We did not perform an independent review of laws and regulations of foreign jurisdictions, but relied on information provided by officials, government reports, and peer-reviewed research.

Appendix II: Medicaid Dental Utilization Rates for Fiscal Year 2008

States report annually to the Centers for Medicare & Medicaid Services (CMS) on the provision of certain covered services, including dental services. Specifically, services covered under Medicaid's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit are reported by states on an annual participation report, CMS 416. It captures data on the number of children who received any dental service, preventive dental service, or dental treatment service each year. We used this information to calculate state and national dental utilization rates—that is, the percentage of children eligible for EPSDT that received services in a given year (see table 7).

Table 7: Utilization of Any Dental Service, Preventive Dental Service, and Dental Treatment Service by Children in Medicaid, Ranked in Order, Fiscal Year 2008

State	Any dental service utilization	State	Preventive dental services utilization	State	Dental treatment services utilization
Idaho	56.1%	Vermont	49.9%	New Mexico	42.1%
Vermont	51.1%	Idaho	46.0%	West Virginia	41.5%
Texas	48.5%	Rhode Island	43.1%	Idaho	30.4%
New Hampshire	46.6%	New Hampshire	42.5%	Arkansas	29.9%
Nebraska	45.9%	South Carolina	42.4%	Hawaii	26.1%
Rhode Island	45.8%	Nebraska	41.6%	Massachusetts	25.1%
Iowa	45.8%	Texas	41.6%	Maine	25.1%
South Carolina	45.0%	Washington	41.4%	Texas	25.0%
Washington	45.0%	Massachusetts	40.3%	South Carolina	22.1%
Massachusetts	44.0%	North Carolina	39.9%	Nebraska	21.8%
North Carolina	43.8%	lowa	39.4%	Vermont	21.5%
New Mexico	42.9%	Georgia	38.5%	Kentucky	21.2%
Hawaii	42.1%	Alabama	38.4%	New Hampshire	21.1%
West Virginia	41.7%	New Mexico	38.2%	Rhode Island	20.7%
Georgia	41.7%	Indiana	37.1%	Virginia	20.5%
Alabama	41.6%	Hawaii	36.9%	Arizona	20.4%
Indiana	40.8%	Oklahoma	36.5%	Washington	20.4%
Oklahoma	39.2%	West Virginia	36.0%	Alaska	20.2%
Kansas	38.9%	Kansas	35.9%	Indiana	20.0%
Arizona	38.8%	Illinois	35.4%	Georgia	19.6%
Colorado	38.5%	Virginia	35.2%	North Carolina	19.2%
Mississippi	38.5%	South Dakota	34.6%	Colorado	19.1%
Virginia	38.4%	Utah	34.1%	Tennessee	19.0%

State	Any dental service utilization	State	Preventive dental services utilization	State	Dental treatment services utilization
South Dakota	38.4%	Maine	33.9%	lowa	19.0%
Illinois	38.4%	Tennessee	33.7%	Wyoming	18.9%
Kentucky	38.1%	Colorado	33.5%	Oklahoma	18.4%
Alaska	38.0%	Arizona	33.5%	New Jersey	18.0%
Tennessee	37.6%	Minnesota	32.7%	Kansas	17.9%
Maryland	37.2%	Wyoming	32.0%	Utah	17.7%
Connecticut	36.7%	Ohio	31.7%	Alabama	17.7%
Minnesota	36.7%	Mississippi	31.7%	Louisiana	17.2%
Wyoming	36.5%	Kentucky	31.6%	Minnesota	17.0%
Ohio	36.4%	Michigan	31.6%	Mississippi	16.6%
Maine	36.2%	Maryland	31.6%	Maryland	16.4%
Utah	35.0%	Arkansas	31.4%	Ohio	16.1%
District of Columbia	34.0%	Alaska	31.4%	Delaware	16.1%
Arkansas	33.6%	Connecticut	30.3%	California	16.0%
Delaware	33.4%	Delaware	30.1%	Oregon	15.8%
New Jersey	32.9%	District of Columbia	29.0%	Connecticut	15.4%
Oregon	32.8%	Louisiana	28.0%	New York	15.1%
Louisiana	32.5%	New Jersey	27.8%	South Dakota	14.8%
Michigan	32.4%	New York	27.6%	Illinois	14.7%
New York	32.1%	Oregon	27.6%	Michigan	13.6%
California	30.2%	Nevada	25.0%	District of Columbia	13.6%
Nevada	29.8%	California	24.5%	Montana	13.3%
North Dakota	29.1%	North Dakota	23.8%	Missouri	13.3%
Pennsylvania	26.9%	Pennsylvania	22.3%	Pennsylvania	12.9%
Montana	25.6%	Montana	22.1%	Nevada	11.7%
Missouri	24.7%	Missouri	21.9%	North Dakota	11.7%
Wisconsin	24.1%	Wisconsin	21.0%	Wisconsin	10.4%
Florida	20.9%	Florida	13.8%	Florida	7.8%
Nationwide	36.2%	Nationwide	31.5%	Nationwide	18.0%

Source: CMS Form 416 data for fiscal year 2008.

Note: This table represents dental utilization rates calculated from data reported by states in their fiscal year 2008 CMS 416 reports (the most recent available at the time of our review) on the number of EPSDT-eligible Medicaid-enrolled children who received any dental service during the fiscal year. Children enrolled in CHIP programs that are expansions of the states' Medicaid programs are entitled to the Medicaid EPSDT benefit package and are included in the states' CMS 416 reports, but are not identified separately as CHIP enrollees.

Appendix III: NHSC and Health Center Funding in the Recovery Act, PPACA, and Fiscal Year 2010 Appropriation

The Recovery Act appropriated \$500 million to address health professions workforce shortages through means such as scholarships and loan repayment awards, of which the Conference Committee directed \$300 million be provided to NHSC for recruitment and field activities.¹ HRSA plans to use these funds in fiscal years 2009 through 2011.² For the Health Center program, the Recovery Act appropriated \$2 billion for grants to benefit health centers—\$500 million for grants to support the delivery of patient services and \$1.5 billion for grants to support and improve health center infrastructure. According to HRSA, as of December 31, 2009, Recovery Act funds for health centers had provided support to over 550 full-time equivalent dental positions, including dentists, dental hygienists, and dental assistants, as well as dental aides, and dental technicians. HRSA reported that these positions have led to more than 575,000 dental visits to over 264,000 patients, including children, in underserved areas.

PPACA authorized and appropriated a total of \$1.5 billion for NHSC for fiscal years 2011 through 2015. According to HRSA, this funding will increase the number of dentists and dental hygienists participating in NHSC. However, the agency reported that the exact number of scholarship and loan repayment awards made using these funds will depend on the number of qualified applications the program receives.³ Additionally, PPACA authorized and appropriated \$9.5 billion for health centers through the Community Health Center Fund established by the Act as well as \$1.5 billion for construction and renovation of community health centers for fiscal years 2011 through 2015.⁴

¹H. R. Rep. No. 111-16, at 451 (2009) (Conf. Rep.).

²Seventy-five-million dollars of the amount appropriated for NHSC is to remain available through September 30, 2011.

³PPACA also authorized a total of approximately \$31 billion for health centers for fiscal years 2011 through 2015, with authorization for funding in subsequent years to reflect the growth in costs and the number of patients served. However, these amounts remain unavailable for expenditure until appropriated.

⁴PPACA established and authorized and appropriated funding to the Community Health Center Fund and directed amounts from this fund to be transferred to HHS to provide \$9.5 billion in enhanced funding for health centers and \$1.5 billion in enhanced funding for NHSC. It also authorized and appropriated \$1.5 billion for construction and renovation of community health centers. Pub. L. No. 111-148, § 10503, 124 Stat. 1004, as amended by Pub. L. No. 111-152, § 2303, 134 Stat. 1083.

Funds specifically provided for these programs in the Recovery Act and PPACA are in addition to the funds that may be specifically or generally available for the NHSC and Health Center programs through HHS's annual appropriations (see table 8).

 Table 8: Funding for National Health Service Corps and Health Center Programs

 Under the Recovery Act and PPACA, and the Fiscal Year 2010 Annual Appropriation

Legislation/Program	Funding (appropriated) (in millions)	Funding time frame (fiscal years)
Recovery Act		
National Health Service Corps	\$300 ^ª	2009-2011
Health Center	\$2,000	2009
PPACA		
National Health Service Corps	\$1,500	2011-2015
Health Center	\$11,000 [♭]	2011-2015
Fiscal Year 2010 Program Funding		
National Health Service Corps	\$142°	2010
Health Center	\$2,190°	2010

Source: GAO analysis.

Note: This table presents data from the American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 and H.R. Rep. No. 111-16 (2009) (Conf. Rep.); the Consolidated Appropriations Act, 2010, Pub. L. No. 111-17, Division D., Title II, 123 Stat. 3034 and H. R. Rep. No. 111-220 (2009) and S. Rep. No. 111-66 (2009); the Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119 (2010); and the Health Care and Education Reconciliation Act of 2010, Pub. L. No. 111-152, 124 Stat. 1029. Funding time frames represent the fiscal years during which funding detailed in the "Funding (appropriated)" column will be available for obligation. All amounts rounded to the nearest million.

^aBased on direction provided by the Conference Committee for the Recovery Act for specific use of the Act's appropriation to the Department of Health and Human Services. H.R. Rep. No. 111-16, at 451 (2009).

^bAs amended by the Health Care and Education Reconciliation Act of 2010. Pub. L. No 111-152, § 2303, 111 Stat.1029, 1083.

⁶Based on direction provided by the House and Senate Committees on Appropriations for specific use of the 2010 HRSA appropriation. H. R. Rep. No. 111-220, at 46, 49 (2009); S. Rep. No. 111-66, at 38, 40-41 (2009) (providing direction for HRSA appropriation contained in Consolidated Appropriations Act 2010, Pub. L. No. 111-117, Division D, Title II, 123 Stat. 3034, 3239 (2009)).

Appendix IV: Additional HHS Programs That May Improve Access to Dental Services in Underserved Areas

In addition to the NHSC and Health Center programs, HHS administers a number of programs that, while not targeted specifically to children in underserved areas, may nevertheless improve their access to dental services in underserved areas. These include programs that target the provision of oral health services to specific populations such as schoolchildren, as well as programs that support training of oral health providers or prioritize the training of dentists and dental hygienists that could serve in underserved areas (see table 9).

Table 9: HHS Programs that May Improve Access to Dental Services in Underserved Areas

	Prog	ram Type	
Program (Authority) <i>HHS Agency</i>	Supports the Provision of Dental Services	Oral Health Workforce Training and Support	Description
Children's Hospitals Graduate Medical Education (42 U.S.C. § 256e) HRSA		V	Provides support to freestanding children's hospitals to train medical residents, including dental residents and fellows. ^a
Grants for Training in General, Pediatric, and Public Health Dentistry (42 U.S.C. § 293k-2) HRSA		V	Awards grants to schools, hospitals, and other entities that plan, develop, operate, or participate in an approved professional training program that emphasizes training in general, pediatric, and public health dentistry. ^b
Health Professionals Student Loan Program (42 U.S.C. § 292q) HRSA		√	Awards loans to financially needy health professions students, including dental students.
Loans for Disadvantaged Students (42 U.S.C. § 292t) HRSA		√	Awards loans to health professions students from disadvantaged backgrounds, including dental students.
Ryan White Community-Based Dental Partnership and Ryan White Dental Reimbursement Programs [°] (42 U.S.C. § 300ff-111) <i>HRSA</i>	~	✓	Awards grants to accredited dental education programs to increase access to oral health services for people with human immunodeficiency virus (HIV) in underserved areas by: (1) increasing the number of dentists and dental hygienists with the capability of managing the oral health needs of HIV positive patients; and (2) defraying their unreimbursed costs associated with providing oral health care to people with HIV (applicable to the Dental Reimbursement program only).
Scholarships for Disadvantaged Students (42 U.S.C. § 293a) HRSA		V	Awards scholarships to health professions students from disadvantaged backgrounds, including dental and dental hygiene students.

	Prog	ram Type					
Program (Authority) HHS Agency	Supports the Provision of Dental Services	Oral Health Workforce Training and Support	- Description				
School-Based Dental Sealant Program (42 U.S.C. § 247b-14(c)) Centers for Disease Control and Prevention	✓		Expands grants for school-based dental sealant programs to provide dental sealants to target populations of children. ^d				
School-Based Health Centers (42 U.S.C. §§ 280h-4, 280h-5) <i>HRSA</i>	~		Authorizes HHS to award grants for the establishment of or for the operation of school-based health centers. Requires or authorizes HHS to give preference to applicants that serve a large population of Medicaid and CHIP children or that serve communities with high numbers of children and adolescents who are uninsured, underinsured, or enrolled in public health insurance programs. ^e				
State Oral Health Workforce Grants (42 U.S.C. § 256g) HRSA	4	4	Awards grants to states to address primarily workforce issues associated with dental HPSAs. [†]				
		analysis of statutes and HHS information provided by agency officia	mation, including grant guidance, summary information from HRSA and CDC Web				
	Note: This underserve may impro	table presents selected H ed areas. While not target	HS programs that may improve access to dental services in ed specifically to children in underserved areas, these programs upport of the provision of dental services to specific populations				
	Graduate hospitals t	Medical Education payme	09, 56 hospitals were funded through the Children's Hospitals nt program. According to HRSA, the program enables the al education, enhance research, and provide care for				
		ps with health centers as w	s includes giving priority to applicants that establish formal well as applicants that have a high rate of placing residents in				
	these two	grant programs—the Ryar	s support for institutions that may provide oral health services, n White Community-Based Dental Partnership Program and the Program—are specifically focused on funding for dental services				
	^d As of May 2010, 16 states had grants to operate school-based or linked dental sealant programs, which generally target schools with large populations of low-income children using the percentage of children eligible for federal free and reduced-cost lunch programs. The Patient Protection and Affordable Care Act (PPACA) authorized an expansion of the program to all 50 states, territories, and Indian tribes and organizations. Dental sealants are a plastic material applied to the chewing surface of back teeth that have been shown to prevent tooth decay.						
	^e PPACA provided for the establishment of this program and appropriated \$200 million over 4 years for the establishment of school-based health centers. PPACA also authorized such sums as may be necessary for grants for program operations over 5 years, although HRSA officials reported no funding had been appropriated specifically for this purpose as of October 2010.						

¹HRSA reported that, as of October 2010, a total of 30 states had 34 grants, with California, Florida, Kansas and Ohio having two grants each. Twenty-five of these 34 active, three-year, grants were awarded in fiscal year 2009 and nine more were awarded in fiscal year 2010. All 30 states may only use the funds received under these grants for the 13 legislatively-authorized activities including, but not limited to, loan forgiveness and repayment programs for dentists who agree to practice in dental HPSAs, programs to expand or establish oral health services and facilities in dental HPSAs, and community-based prevention services—see Social Security Act 340G(b) (codified at 42 U.S.C. 256g(b)). HRSA reported that it awarded \$10 million in grants in fiscal year 2009 and \$17.5 million in fiscal year 2010.

Appendix V: Dental Health Aide Therapist Program for Alaska Natives

Based on a 1999 oral health survey, the Indian Health Service issued a report detailing the extensive dental health needs and increasing dental vacancy rates within the Alaska Native population.¹ In order to meet the extensive dental health needs of the Alaska Native population, the Alaska Native Tribal Health Consortium (Consortium), a tribal organization managed by Alaska Native tribes through their respective regional health organizations, in collaboration with others, developed the Dental Health Aide Therapist program in 2003. This program selects individuals from rural Alaska communities to be trained and certified to practice under remote consultative supervision of dentists in the Alaska Tribal Health System. Dental health aide therapists (dental therapists) in this program in Alaska are not licensed by the state; rather the program is authorized under the federal Community Health Aide Program for Alaska Natives.

Under standards and procedures developed for this program, dental therapists must complete a 2-year training program, a 400-hour preceptorship under a dentist's supervision, and apply for certification in order to practice. Alaska's first dental therapists received their training from New Zealand's National School of Dentistry in Otago with the first dental therapists graduating in 2004. In 2007, the Consortium in partnership with the University of Washington opened the DENTEX training center and, in 2008, opened the Yuut Elitnaurivat Dental Training Clinic in partnership with the Yuut Elitnaurivat—People's Learning Center. These are the first Dental Health Aide Therapist training centers in the United States. As of March 2010, there were 13 dental therapy students enrolled in the training program.

Since 2005, dental therapists have practiced throughout Alaska. As of June 2010, 19 dental therapists had completed the 2-year training program. Of those 19, 10 dental therapists were trained in New Zealand and were certified and practicing in rural Alaska. Another five completed their preceptorships and were certified to begin practice. The remaining four dental therapists were completing their preceptorships. Figure 5 shows the areas and villages where the dental therapists were practicing or were scheduled to practice upon completion of their preceptorships. According to Consortium officials, the population of the communities where dental

¹U.S. Department of Health and Human Services, Indian Health Service, *An Oral Health Survey of American Indian and Alaska Native Patients: Findings, Regional Differences and National Comparisons* (Rockville, Md.).

therapists were practicing varies from under 100 to nearly 9,000 individuals.





Source: Alaska Native Tribal Health Consortium; MapInfo (map).

In general, dental therapists are based in a sub-regional clinic in an Alaska Native village and travel to surrounding villages to provide services.² For example, one dental therapist who has been practicing at a sub-regional clinic since 2006 estimated that he travels approximately two weeks per month to the surrounding villages to provide dental services. Travel for the dental therapists, particularly in the winter, is a challenge as there are limited roads to and from the villages and in many cases air travel is the only possible mode of transport. When traveling, dental therapists often bring their own supplies into the villages and in some cases have to pack a portable dental chair.

Dental therapists treat patients primarily in rural Alaska Native communities. Although these patients are typically Alaska Native or American Indian, services may be provided to other patients, for example when the program has capacity to provide the services to others without denying or diminishing care to Alaska Native or American Indian beneficiaries or there are limited health care resources in the area. Consortium officials stated that all the tribal organizations for regions employing dental therapists generally make services available to non-Native patients, except in larger communities, such as Anchorage, Fairbanks, Juneau, and Sitka.

According to Consortium officials, dental therapists often have an agreement with the schools in their communities to allow for students to receive services during school hours. Dental therapists are trained to focus on expectant mothers and pre-school and school-aged children. Consortium officials estimate that about half of patients treated by dental therapists are children. For example, encounter data for 2006 through 2009 for two practicing dental therapists suggest that, on average, 64 percent and 59 percent of their encounters were children, respectively.³

²The Alaska Tribal Health System operates using a four-tiered approach: (1) statewide services are provided in Anchorage, (2) regional services are provided at hubs within the various regions, (3) sub-regional clinics operate in some villages, and (4) small village clinics are where individuals obtain their primary health care.

³The 2009 encounter data for one dental therapist was only for a portion of that year.

Appendix VI: Types of Dental Providers, Excluding Dentists, in Eight Selected States

In the states we examined—Alabama, Alaska, California, Colorado, Minnesota, Mississippi, Oregon, and Washington—a variety of dental providers other than dentists, such as dental therapists and hygienists, may provide certain services with varying degrees of supervision. Supervision of other dental providers by a dentist may take many forms. For the purposes of this report, we categorized dental supervision as: (1) the dentist must be on-site during the procedure; (2) the dentist may be off-site (remote) but must have prior knowledge of and consent to the procedures, in some cases through a treatment plan; (3) the dentist may be off-site (remote) but maintain a consultative role, for example through a signed collaborative agreement; or (4) the dentist provides no supervision (none). In addition, within each state, there is a basic level of required education and experience for each category of provider, which may increase depending on the scope of practice authorized. For example, dental hygienists in Alaska may perform preventive and basic restorative procedures under a collaborative agreement if—in addition to graduating from dental hygiene school-they have completed 4,000 hours of clinical experience. All required education and experience is listed for each type of provider.

In the eight states we examined scope of practice, required supervision, education and experience, and reimbursement varied by state. Tables 10 through 17 present information on dental providers—other than dentists—authorized to practice in those eight states.

Table 10: Selected Types of Dental Providers in Alabama, June 2010

Type of dental provider	Sc	ope of practice ^a	Supervision required		quired education d experience	Licensed or certified	Direct Medicaid/CHIP reimbursement
Dental hygienist	•	Preventive Basic restorative	On-site	•	Approved dental hygiene school, college or state program	Yes	No
Dental assistant	•	Supportive Preventive Basic restorative	On-site	•	None	No	No

Source: GAO analysis of information from state dental practice acts, state dental boards, and state officials.

^aEach scope of practice category contains a variety of specified procedures. A provider may not be authorized to perform all procedures in a particular category.

Table 11: Selected Types of Dental Providers in Alaska, June 2010

Type of dental provider	Scope of practice ^a	Supervision required		Direct ensed Medicaid/CHIP certified reimbursement
Dental health aide therapist for Alaska Natives ^b	 Preventive Basic restorative Intermediate restorative 	Remote: consultative	 Two years post-secondary Yes training program⁶ Specified clinical experience 	d Yes
Dental hygienist	 Preventive Basic restorative 	Remote: consultative	 Dental hygiene program Yes Specified clinical experience 	s No
	 Preventive Basic restorative 	Remote: prior knowledge and consent	Dental hygiene program Yes	s No
	 Preventive Basic restorative Intermediate restorative[®] 	On-site	 Dental hygiene program Yes Specific instructional program 	s No
Dental assistant	 Supportive Preventive Basic restorative Intermediate restorative[®] 	On-site	 Specific instructional Yes program 	s No
	 Supportive Preventive^f 	On-site	None No	No

Source: GAO analysis of information from state dental practice acts, state dental boards, and state and tribal officials.

^aEach scope of practice category contains a variety of specified procedures. A provider may not be authorized to perform all procedures in a particular category.

^bThe Dental Health Aide Therapist program is authorized under the federal Community Health Aide Program for Alaska Natives, not the state.

[°]Dental health aide therapists are recruited from Alaska communities.

^dDental health aide therapists are not licensed by the state; rather they are certified by the Alaska Native Tribal Health Consortium as part of the federal Community Health Aide Program for Alaska Natives.

^eState regulations establishing specific restorative function requirements have not yet been established.

¹Dental assistants may perform certain preventive procedures such as coronal polishing, with appropriate certification which would require the completion of a specific instructional program. They may perform other preventive procedures such as the application of sealants with no additional training.

Table 12: Selected Types of Dental Providers in California, June 2010

Type of dental provider	Sc	ope of practice ^a	Supervision required		quired education d experience	Licensed or certified	Direct Medicaid/CHIP reimbursement
Dental hygienist	•	Preventive [limited settings] ^b	Remote: consultative	•	Dental hygiene program/ bachelor's degree	Yes°	Yes ^d
				•	Specified clinical experience		
				•	Approved post-licensure training		
	•	Preventive	On-site	•	Dental hygiene program	Yes ^e	No
	•	Basic restorative		•	Approved post-licensure training		
	•	Preventive	On-site	•	Dental hygiene program	Yes ^f	No
	•	Basic restorative		•	Specific instructional program		
	•	Preventive	Remote: prior knowledge and consent	•	Dental hygiene program	Yes'	No
Dental assistant	•	Supportive	On-site	•	Specific instructional program	Yes	No
	•	Preventive		•	Specified clinical experience		
	•	Basic restorative		•	Specified post-licensure training		
	٠	Supportive	On-site	•	Specific instructional program	Yes	No
	•	Preventive		•	Specified clinical experience		
	•	Supportive	On-site	٠	None	No	No
	•	Preventive					

Source: GAO analysis of information from state dental practice acts, state dental boards, and state officials.

^aEach scope of practice category contains a variety of specified procedures. A provider may not be authorized to perform all procedures in a particular category.

^bCertain dental hygienists may provide preventive services in specific settings, such as schools, homebound residences, and residential facilities under remote consultative dentist's supervision.

^cDental hygienists with this type of license are known as registered dental hygienists in alternative practice.

^dCalifornia CHIP does not contract with providers directly; the managed care plans reimburse providers. California Medicaid does reimburse certain licensed dental hygienists.

^eDental hygienists with this type of license are known as registered dental hygienists in extended function.

¹Dental hygienists with this type of license are known as registered dental hygienists.

Table 13: Selected Types of Dental Providers in Colorado, June 2010

Type of dental provider	Sc	cope of practice ^a	Supervision required		quired education d experience	Licensed or certified	Direct Medicaid/CHIP reimbursement	
Dental hygienist	•	Preventive	None	•	Dental hygiene program	Yes⁵	Yes℃	
	•	Preventive	Remote: prior knowledge	•	Dental hygiene	Yes	Yes°	
	•	Basic restorative	and consent		program			
Dental assistant	•	Supportive	On-site ^d	•	None	No	No	
	•	Preventive						
	•	Basic restorative						

Source: GAO analysis of information from state dental practice acts, state dental boards, and state officials.

^aEach scope of practice category contains a variety of specified procedures. A provider may not be authorized to perform all procedures in a particular category.

^bUnsupervised dental hygienists are known as independent dental hygienists and operate under the same license as other hygienists in the state.

^cDental hygienists may be paid directly for dental services under Medicaid. Under CHIP, only dental hygienists enrolled in a specific state program are paid directly for their services.

^dPerformance of some procedures may require prior knowledge and consent of a dentist, but not onsite supervision.

Table 14: Selected Types of Dental Providers in Minnesota, June 2010

Type of dental provider	Scope of practice [®]	Supervision required		quired education d experience	Licensed or certified	Direct Medicaid/CHIP reimbursement
Advanced dental therapist [limited setting] ^b	 Preventive Basic restorativ Intermediate restorative 	Remote: prior knowledge and consent°	•	Master's level program Specified clinical experience	Yes⁴	Not yet determined
Dental therapist [limited setting] ^b	 Preventive Basic restorativ Intermediate restorative 	On-site [®] /e	•	Bachelor's or Master's level program	Yes ^d	Not yet determined
Dental hygienist	 Preventive Basic restorative [limited setting] 	-	•	Dental hygiene program Specified clinical experience	Yes	Yes ^t
	 Preventive Basic restorative	On-site [®] /e	•	Dental hygiene program	Yes	No
Dental assistant	 Supportive Preventive Basic restorative 	On-site ^h	•	Specific instructional program	Yes	No
	Supportive	On-site	•	None	No	No

Source: GAO analysis of information from state dental practice acts, state dental boards, and state officials.

^aEach scope of practice category contains a variety of specified procedures. A provider may not be authorized to perform all procedures in a particular category.

^bAdvanced dental therapists and dental therapists are limited to practicing in settings that serve lowincome, uninsured, and underserved populations or in a dental health professional shortage area.

[°]Pursuant to a collaborative agreement with a dentist, advanced dental therapists may perform all the procedures of a dental therapist—including restorative drilling and filling—under remote supervision of a dentist, as well as develop treatment plans and nonsurgical extractions of permanent teeth under remote supervision.

^dLicensure for dental therapists and advanced dental therapists is the same. Advanced dental therapists require special certification which includes additional education, but specific requirements had not been finalized as of June 2010. As of June 2010, students were enrolled in advanced dental therapy and dental therapy training programs, but none were yet practicing.

^ePursuant to a collaborative agreement with a dentist, dental therapists may perform some preventive and basic restorative procedures off-site with prior knowledge and consent of a dentist, other procedures require on-site supervision.

¹Pursuant to a collaborative agreement with a dentist, dental hygienists may be authorized to provide services in a health care facility, program, or nonprofit organization. These services may result in direct-to-provider Medicaid reimbursement.

⁹Dental hygienists may perform certain preventive and basic restorative procedures without the dentist being present in the dental office if the procedures being performed are with prior knowledge and consent of a dentist; other procedures require on-site supervision.

^hRegistered dental assistants may perform certain preventive and basic restorative procedures without the dentist being present in the dental office if the procedures being performed are with prior knowledge and consent of a dentist; other procedures require on-site supervision.

Table 15: Selected Types of Dental Providers in Mississippi, June 2010

Type of dental provider	Scope of practi	Supervision ce [®] required		quired education d experience	Licensed or certified	Direct Medicaid/CHIP reimbursement
Dental hygienist	Preventive	On-site ^⁵	•	Dental hygiene program	Yes	No
Dental assistant	 Supportive 	On-site	•	None°	No	No
	• Preventive [°]					

Source: GAO analysis of information from state dental practice acts, state dental boards, and state officials.

^aEach scope of practice category contains a variety of specified procedures. A provider may not be authorized to perform all procedures in a particular category.

^bDental hygienists may provide preventive services outside a dental office under remote supervision through a consultative arrangement with a dentist when employed by the State Board of Health or public school boards. In addition, dental hygienists employed by the State Board of Health may apply fluoride in this context.

[°]Dental assistants must acquire a permit through the state board of dental examiners in order to take radiographs.

Table 16: Selected Types of Dental Providers in Oregon, June 2010

Type of dental provider	Sc	ope of practice ^a	Supervision required		quired education d experience	Licensed or certified	Direct Medicaid/CHIP reimbursement
Dental hygienist	•	Preventive [limited setting]⁵	None	•	Dental hygiene program Specified clinical experience and coursework or approved course of study including clinical experience	Yes	Yes
	•	Preventive Basic restorative	Remote: prior knowledge and consent	•	Dental hygiene program Specific instructional program	Yes	No
	•	Preventive Basic restorative	On-site	•	Dental hygiene program Specific instructional program	Yes	No
	•	Preventive	Remote: prior knowledge and consent	•	Dental hygiene program	Yes	No
Dental assistant	•	Supportive Preventive Basic restorative	On-site [°]	•	Specific instructional programs ^d	Yes	No
	•	Supportive	On-site	•	None	No	No

Source: GAO analysis of information from state dental practice acts, state dental boards, and state officials.

^aEach scope of practice category contains a variety of specified procedures. A provider may not be authorized to perform all procedures in a particular category.

^bDental hygienists can obtain permits to provide preventive services, including fluoride application, in limited settings such as schools and nursing homes without the supervision of a dentist. These services may result in direct-to-provider Medicaid reimbursement.

[°]Dental assistants may perform certain basic restorative procedures without the dentist being present in the dental office if the procedures being performed are with prior knowledge and consent of a dentist.

^dDental assistants in Oregon can obtain certification to perform various preventive and restorative services upon completion of specific instructional programs.

Table 17: Selected Types of Dental Providers in Washington, June 2010

Type of dental provider	Sc	ope of practice [®]	Supervision required		equired education and perience⁵	Licensed or certified	Direct Medicaid/CHIP reimbursement
Dental hygienist	•	Preventive	None	Dental hygiene program		Yes	Yes
		[limited setting] ^c		•	Specific instructional program		
	•	Preventive	Remote:	•	Dental hygiene program	Yes	No
		[limited setting] ^a	consultative	•	Specified clinical experience		
	•	Preventive	Remote: prior knowledge and consent	•	Dental hygiene program	Yes	No
	٠	Preventive	On-site	•	Dental hygiene program	Yes	No
	•	Basic restorative					
	•	Intermediate restorative [®]					
Dental assistant	•	Supportive	Remote: prior	•	Program-specific instructional	Yes ⁹	No
	•	Preventive	Preventive knowledge and [limited setting] ⁶ consent		program		
		[limited setting] ^t		•	Specified clinical experience		
	•	Supportive	On-site ^h	•	Specific instructional program	Yes ⁹	No
	•	Preventive			or comparable credential		
	•	Basic restorative					
	•	Supportive	On-site	•	None	Yes ⁹	No
	•	Preventive					
	•	Basic restorative					

Source: GAO analysis of information from state dental practice acts, state dental boards, and state officials.

^aEach scope of practice category contains a variety of specified procedures. A provider may not be authorized to perform all procedures in a particular category.

^bAll dental hygienists and dental assistants in Washington must complete AIDS education and training.

[°]Dental hygienists can become endorsed to administer sealants and fluoride varnishes and remove deposits and stains from the surfaces of teeth in school-based settings by completing a specified instructional program (hygienists licensed on or before April 19, 2001 were automatically endorsed). These services may result in direct-to-provider Medicaid reimbursement.

^dDental hygienists with at least two years clinical experience may provide preventive services in certain health-care facilities or senior centers under remote dentist's supervision. A consultative agreement with a dentist is required to provide these services in senior centers.

^eDental hygienists may place a restoration (filling) in a cavity prepared by a dentist.

¹Dental assistants can become endorsed to administer sealants and fluoride varnishes in schoolbased settings by completing a program-specific training program and 200 hours of clinical experience (assistants employed by a licensed Washington dentist on or before April 19, 2001 were not required to obtain an endorsement).

⁹All dental assistants in Washington must be registered or licensed to practice in the state. Dental assistants must meet limited requirements to become registered. Dental assistants must meet additional educational requirements to become licensed or endorsed to perform additional or preventive procedures under remote supervision.

^hLicensed dental assistants may perform certain preventive procedures without a dentist being present and with prior knowledge and consent of a dentist.

Appendix VII: Summary of Four Selected Countries' Use of Dental Therapists

Dental therapists practice in many countries around the world.¹ In particular, New Zealand, the United Kingdom, Australia, and Canada have long-standing dental therapy training programs originally aimed at improving access to dental services for children and other underserved populations. Below are brief descriptions of the dental therapist programs in these four countries.²

New Zealand

New Zealand began training dental therapists in 1921 to provide dental care to children through school-based clinics—known as the school dental service-in response to high rates of dental decay and a shortage of dentists.³ Since 2006, dental therapy and dental hygiene training have been combined into a single 3-year bachelor's degree granting program offered through two universities.⁴ Graduates of the combined programs can register as both a dental therapist and a dental hygienist.⁵ Registered dental therapists can work throughout the country to determine treatment plans and provide preventive and basic and intermediate restorative services-including procedures such as drilling and filling a tooth-for children and, in some cases, adults, under remote consultative supervision of a dentist.⁶ Dental therapists in New Zealand maintain a consultative relationship with a dentist and refer patients to a dentist for services beyond their scope of practice. Although dental therapists have been able to work in private practice since 2004, according to a 2007 study, the majority of dental therapists in the country work as salaried employees for District Health Boards to provide dental services to children through the

¹D.A. Nash, J.W. Friedman, T.B. Kardos, et al. "Dental Therapists: a global perspective," *International Dental Journal*, Vol. 58 (2008).

²The countries are presented in chronological order by the date their dental therapist program started.

³New Zealand pays for dental services for all children up to age 13, with most of the services provided by dental therapists in the school dental service.

⁴Historically, dental therapists were trained in a 2-year non-degree granting program.

⁵Dental therapists must be registered with the Dental Council of New Zealand—a selfregulating body for oral health professionals.

⁶Dental therapists register for general dental therapy scope practice which allows practice for children up to age 18. Dental therapists can register for additional scopes of practice including adult care, radiology, and crowns.

	school dental service in school- and community-based dental clinics. ⁷ An official from the New Zealand Ministry of Health estimated that in 2009, 96 percent of children aged five to 12 in the country were enrolled in the school dental service and therefore received dental care from dental therapists.
The United Kingdom	The United Kingdom established its first dental therapy training program in 1959 to meet a growing need for dental providers to staff school- and community-based dental programs. ⁸ Students were selected from across the United Kingdom and were expected to return to their home areas after training. The number of dental therapy training programs has expanded in recent years, and most are offered as 3-year combined dental therapy and dental hygiene programs. ⁹ Dental therapists in the United Kingdom must be registered with the General Dental Council to practice and registered dental therapists may provide preventive and basic and intermediate restorative services—including procedures such as drilling and filling a tooth—for children and adults under a treatment plan developed by a dentist. ¹⁰ Until 2002, dental therapists were restricted to salaried employment in the public sector. Since then, they have been able to work in independent practice, and since 2006, dental therapists have been permitted to own their own practice and employ other dental professionals. According to a 2007 survey of registered dental therapists; 50 percent worked in private practice, 31 percent worked in public dental
	⁷ K.M.S. Ayers, A. Meldrum, W.M. Thomson, J.T. Newton. "The working practices and career satisfaction of dental therapists in New Zealand," <i>Community Dental Health</i> , Vol. 24 (2007).
	⁸ The United Kingdom consists of the countries of England, Northern Ireland, Scotland, and Wales. Each country has a National Health Service administered by Departments of Health that are responsible for administering health care. Countries in the United Kingdom have had subsidized dental services since the 1920s—known as the salaried dental service or community dental service—for which dental therapists were originally trained to serve.
	⁹ Craduates of the combined programs can register as both a dental therapist and a dental

⁹Graduates of the combined programs can register as both a dental therapist and a dental hygienist. Historically, dental therapists were trained in 2-year hospital-based diploma programs, but since the 1990s programs have been offered through bachelor's degree granting programs.

¹⁰The General Dental Council is the regulating body for oral health professionals.

services, and 10 percent worked in both.¹¹ Overall, 39 percent of dental therapists reported spending most of their time treating children.¹² Australia Dental therapy training programs began in certain Australian states in 1966 and 1967 and expanded to all states and territories to train dental therapists to provide dental services to children through school-based dental programs—known as the school dental service.¹³ In 2010, there were nine dental therapy training programs in Australia, eight of which offered a combined 3-year dental therapy and dental hygiene bachelor's degree.¹⁴ In the past, Australia's eight states and territories were responsible for dental therapy registration, but as of July 1, 2010, Australia implemented a national registration and accreditation scheme requiring standard gualification for all dental therapists and oral health therapists registering after that date. Australian health officials reported that prior to national registration, dental therapists could generally provide primary oral health care including treatment planning, preventive and basic and intermediate restorative services-including procedures such as drilling and filling teeth for children under the remote consultative supervision of a dentist. Three Australian states-the Northern Territory, Victoria, and Western Australia—also allowed dental therapists to provide services to adults according to an Australian expert. Until recently, the majority of states and territories restricted employment of dental therapists to the public sector, however according to a 2005 national survey, 78 percent of dental therapists worked in the public sector-mostly as salaried employees of school- and community-based dental programs.¹⁵ In Western ¹¹The remaining dental therapists worked in hospitals, were teaching, or in a combination of positions. The National Health Service in each country contracts with independent dental practices-known as the general dental service-to provide services. Independent practices can be reimbursed by the National Health Service for dental services to children

¹³All eight Australian states and territories subsidize dental care for children age 5-12, with certain states also paying for care to younger or older children.

¹⁴Graduates of the combined programs are known as oral health therapists and can register as both a dental therapist and a dental hygienist. Historically, dental therapists were trained in 2-year non-bachelor degree granting programs.

¹⁵Australian Institute of Health and Welfare, Dental Statistics and Research Unit, *Dental Therapist Labour Force in Australia 2005* (Adelaide: Australia, July 2008).

up to age 18.

¹²J.H. Godson, J.S. Rowbotham, S.A. Williams, J.L. Csikar, S. Bradley, "Dental therapy in the United Kingdom: Part 2. a survey of reported working practices," *British Dental Journal*, Vol. 207 (2009).

Australia, however, which has always permitted dental therapists to work in private practice, about 55 percent of dental therapists worked in the public sector in 2005.

Canada

The first Canadian dental therapy training programs were established in the Northwest Territories and Saskatchewan in 1972 to increase access to dental services for rural and aboriginal populations with a focus on children.¹⁶ Dental therapy practice differs across Canadian provinces and territories.¹⁷ Dental therapy training is offered as a government funded 2-year program through the National School of Dental Therapy at the First Nations University, whose charter is to train dental therapists to treat aboriginal populations. Although the National School of Dental Therapy program is not accredited, graduates either become licensed by and practice in Saskatchewan or work for the federal government or aboriginal tribes. Canadian dental therapists may provide preventive and basic and intermediate restorative services-including procedures such as drilling and filling a tooth—for children and adults under a treatment plan provided by a dentist. As of May 2010, the majority of Canadian dental therapists worked in Saskatchewan where they must be licensed by the Saskatchewan Dental Therapists Association according to an association official.¹⁸ Most of the dental therapists in Saskatchewan work in private dental practices, although some are directly employed by the federal or provincial government or aboriginal tribes.¹⁹ In all other Canadian

¹⁸The Saskatchewan Dental Therapists Association is the self regulating body for dental therapists constituted under Saskatchewan law.

¹⁶Aboriginal populations in Canada are known as First Nations and Inuit. Health Canada the government department responsible for administering health care—pays for dental services to all aboriginal populations. Private practices and tribes can be reimbursed by Health Canada for services rendered to those populations.

¹⁷In the 1970s two provinces, Saskatchewan and later Manitoba, established school-based dental programs that utilized dental therapists to provide preventive and restorative dental services for children. The Saskatchewan program had high rates of enrollment and successfully reduced the rates of dental caries in children, and was privatized in 1987 and eliminated in 1993. Dental therapists that previously provided dental services in rural areas either moved to urban areas to work in private practice or lost their jobs according to a Canadian expert. D.W. Lewis, *Performance of the Saskatchewan Health Dental Plan, 1974-1980.* (Toronto: University of Toronto: 1981). The Manitoba program has also since been eliminated.

¹⁹According to a Canadian health official, 52 dental therapists were employed directly by Health Canada and 30 were employed by First Nations tribes which are funded by Health Canada.

provinces and territories except Ontario and Quebec, dental therapists are generally restricted to employment through the federal or territorial government or tribes to provide care to aboriginal populations living on reservations.²⁰

²⁰Dental therapists are not permitted to practice in Ontario or Quebec. In Manitoba, a number of dental therapists work in the private sector.

Appendix VIII: Comments from the Department of Health and Human Services

BUTTER CALL	DEPARTMENT OF HEALTH & HUMAN SERVICES	OFFICE OF THE SECRETARY
S LANDAR WAR		Assistant Secretary for Legislation Washington, DC 20201
	NOV 4 2010	
Katherine Iri Director, He	alth Care	
U.S. Govern 441 G Street Washington,		
Dear Ms. Irit	tani:	
entitled: "Or	comments on the U.S. Government Accountat ral Health: Efforts Underway to Improve Child ttention Needed to Address Ongoing Concerns'	dren's Access to Dental Services, but
The Departm	nent appreciates the opportunity to review this	correspondence before its publication.
	Sincerely,	
	Jon G. Erg	ma
	Jim R. Esquea	
Attachment		

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN
SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED: "ORAL HEALTH: EFFORTS UNDERWAY TO
IMPROVE CHILDREN'S ACCESS TO DENTAL SERVICES, BUT SUSTAINED
ATTENTION NEEDED TO ADDRESS ONGOING CONCERNS" (GAO-11-96)
The Department appreciates the opportunity to review and comment on this draft report.
CDC agrees in general with the report. However, based on data from the National Health and
Nutrition Examination Survey (NHANES) and citing a previous report, the GAO "estimated that
6.5 million children had untreated tooth decay, and rates of dental disease among younger children in Medicaid had increased." This statement may be misleading in light of more recent
analysis of NHANES data by CDC's National Center for Health Statistics.
This 2010 analysis reported that among poor young children (age 2-5 years) there has been no
change in rates of dental disease between 1988-94 and 1999-2004. Among poor children age 6-8
years, there has been an increase in caries experience. Among children age 2-5 years, however, the actual increase in caries seems to be significant only among the non-poor boys. Regarding
untreated tooth decay, only non-poor boys have shown an increase in untreated caries among all
2-8 year-old children between NHANES 1988-94 and 1999-2004. Rates of untreated tooth
decay for poor children age 2-8 years has remained unchanged.
These findings and others are published in: Dye BA, Arevalo O, Vargas CM. Trends in pediatric
dental caries by poverty status in the United States, 1988-1994 and 1999-2004. International
Journal of Pediatric Dentistry 2010; 20: 132-143.
It should also be noted that when reporting on caries experience or "dental disease" in young
children, these constructs include both treated and untreated caries. An increase in caries
experience could be driven by an increase in the dental fillings/restorations component while the
untreated disease component remained unchanged. An increase in the dental restoration component could indicate an increase in dental utilization, hence improvements in access to
dental care, especially for low income children. Healthy People 2010 has shown an increase in
utilization of preventive services among low income children age 2-19 years.
CDC appreciates the efforts that went into this report and looks forward to working with GAO
on this and other reports.
The GAO issued two recommendations for executive action. CMS concurs with each recommendation with the following comments:
GAO Recommendation
The Department of Health and Human Services should take steps to improve its Insure Kids Now Web site.
CMS Response
We agree with this recommendation and that improvement undertaken by States and the Federal
government, such as those identified in this report, is much needed. Under the current process, States submit the information on their participating dental providers to the IKN website through
States subjuint the information on their participating dental providers to the IK N website through

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN
SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO)
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IMPROVE CHILDREN'S ACCESS TO DENTAL SERVICES, BUT SUSTAINED ATTENTION NEEDED TO ADDRESS ONGOING CONCERNS" (GAO-11-96)
a download tool that was developed for this purpose or through another acceptable method. A contractor (working under a Health Resources and Services Administration (HRSA) contract but
in collaboration with CMS) then includes the information in a database that links to the dental
provider search engine. The data is subject to a screening process in which addresses are
matched against public records. However, evaluating the quality of those records has not been
part of the scope of the contractor's responsibilities.
The CMS will undertake the following approaches to address this concern:
First, to address the errors found on the Web site, the Department will increase the
frequency and type of quality checks performed on State-reported dental provider
information, and work with States to ensure they submit data that is complete, accurate and current. Specifically, we will follow up with States identified in the GAO report to
ensure that they correct existing information on the Web site. We will also continue the
process of requiring States to submit data on providers directly instead of providing links
to State Web sites. We will also ensure States are aware of their responsibility to not list
providers who have been excluded from participation under section 1128B of the Social Security Act: explore Federal options for cross checking lists of providers with the
Security Act; explore Federal options for cross checking lists of providers with the disenrolled provider database; and create a consistent understanding of what it means to
be identified as a dental provider able to serve a child with special needs.
We will consider additional ways, including regulatory guidance, to assure better information in implementing the provisions of CHIPRA, which may include specific
requirements, parameters and timeframes for public listings of eligible, enrolled providers who are providing care to Medicaid and CHIP children, including those with special
needs.
GAO Recommendation
The Administrator of CMS take steps to ensure that States gather comprehensive and reliable
data on the provision of Medicaid and CHIP dental services by managed care programs.
CMS Response
We agree with this recommendation. CMS is in the process of implementing major changes that
will improve collection of data related to dental services for children delivered through fee-for-
service or managed care payment arrangements. A revised CMS-416 form, which is CMS's
primary tool for gathering data on the provision of services to children in State Medicaid
programs, is in the final stages of the clearance process and will be released to States, along with written guidance, in the near future. This revised form has been expanded to include dental data
elements as required by CHIPRA. The instructions for completing the CMS-416 specify that
additional data reported on the form must include data for services delivered to individuals in
both fee-for-service or managed care arrangements. Several provisions of CHIPRA also
establish the foundation for CMS to build an infrastructure for a quality measures program in
2
2



GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED: "ORAL HEALTH: EFFORTS UNDERWAY TO IMPROVE CHILDREN'S ACCESS TO DENTAL SERVICES, BUT SUSTAINED ATTENTION NEEDED TO ADDRESS ONGOING CONCERNS" (GAO-11-96)
 Support opportunities for dental providers to receive incentive payments for meaningful use of electronic health record technology.
CMS is holding two technical assistance workshops for States to discuss CMS' dental goals and strategy. The first workshop, held on October 7, 2010 in conjunction with the National Academy for State Health Policy conference in New Orleans, Louisiana, was attended by 20 officials from CHIP or Medicaid programs, including several oral health directors. The second workshop will be held on November 10, 2010 in Arlington, Virginia following the annual conference of the National Association of State Medicaid Directors. CMS will hold a meeting with external stakeholders this year to identify areas where they may wish to support our efforts in improving access to oral health services. CMS will take feedback from all of these meetings into consideration as we finalize our oral health strategy.
The CMS' goals and dental strategy support the larger HHS Oral Health Initiative 2010 and the Department's comprehensive commitment to improved oral health. CMS is coordinating with other components of the Department on this important initiative as a member of the HHS Assistant Secretary for Health's Oral Health Coordinating Committee, which brings together fourteen agencies to direct the Department's oral health activities. In order to further the collaborative efforts on oral health, CMS has entered into a Memorandum of Understanding with HRSA and the Centers for Disease Control and Prevention.
the GAO on this and other issues.
HRSA has offered the following recommendations:
Under the Children's Health Insurance Program Reauthorization Act (CHIPRA), the Department of Health and Human Services (HHS) is required to post a list of oral health providers who provide services to eligible Medicaid and Children's Health Insurance Program (CHIP) children on the Insure Kids Now (IKN) web site. This list is to be updated on a quarterly basis. This initiative was a huge undertaking given that this is the first national list of any type of Medicaid and CHIP health care providers. Despite the challenges, HRSA, under an Interagency Agreement (IAA) with the Centers for Medicare and Medicaid Services (CMS), met all statutory deadlines outlined under CHIPRA and have developed an Oral Health Locator (Locator). This Locator provides information to Medicaid and CHIP enrollees on how to find dentists and other oral health providers that accept Medicaid and CHIP.
HRSA concurs with many of the findings and recommendations from the GAO report. HRSA has spent much effort in the past year working with states to improve the Locators capacity to accept and post data from states. It should be noted that while the law requires that the data on the IKN web site be updated on a quarterly basis, the system allows data to be updated on a daily basis ensuring that the most up-to-date information is available to enrollees.
4



GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED: "ORAL HEALTH: EFFORTS UNDERWAY TO IMPROVE CHILDREN'S ACCESS TO DENTAL SERVICES, BUT SUSTAINED ATTENTION NEEDED TO ADDRESS ONGOING CONCERNS" (GAO-11-96) check with CMS on the currency of the data provided, as the system was not developed to cross check data with OIG. 6

Appendix IX: GAO Contact and Staff Acknowledgments

GAO Contact	Katherine Iritani, (202) 512-7114 or iritanik@gao.gov
Staff Acknowledgments	In addition to the individual named above, Kim Yamane, Assistant Director; Rebecca Abela; Susannah Bloch; George Bogart; Alison Goetsch; Mollie Hertel; Anne Hopewell; Martha Kelly; Perry Parsons; Terry Saiki; Pauline Seretakis; and Suzanne Worth made key contributions to this report.

Related GAO Products

Medicaid Managed Care: CMS's Oversight of States' Rate Setting Needs Improvement. GAO-10-810. Washington, D.C.: August 4, 2010.

Medicaid: State and Federal Actions Have Been Taken to Improve Children's Access to Dental Services, but More Can Be Done. GAO-10-112T. Washington, D.C.: October 7, 2009.

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