CHCS Center for Health Care Strategies, Inc.

Catalyzing Improvements in Oral Health Care:

Best Practices from the State Action for Oral Health Access Initiative

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About the Center for Health Care Strategies

The Center for Health Care Strategies (CHCS) is a national non-profit organization devoted to improving the quality of health services for beneficiaries served by publicly financed care, especially those with chronic illnesses and disabilities. CHCS advances its mission by working directly with state and federal agencies, health plans, and providers to design and implement cost-effective strategies to improve health care quality.

The State Action for Oral Health Access initiative, launched in 2002 by the Robert Wood Johnson Foundation, was designed to address the disparities in access to dental services for low-income children and adults. The initiative, managed by CHCS, funded six states – Arizona, Oregon, Pennsylvania, Rhode Island, South Carolina, and Vermont – to develop programs to improve the oral health delivery system. This report highlights the successes, challenges, and results of these state efforts to eliminate disparities in oral health care and improve the lives of millions of Americans.

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Most important, CHCS honors the six state grantees whose projects have demonstrated – clearly and significantly – that efforts to improve access to oral health services for Medicaid and State Children's Health Insurance Program recipients can be successful. Finally, we acknowledge the 13 state teams that participated in the Purchasing Institute. Their commitment to improving dental access for vulnerable populations is commendable.

Introduction

Oral health is a window that reflects how Medicaid, as well as the broader U.S. health care system, is meeting the needs of all Americans. In many ways, the widespread lack of access to oral health services reflects the challenges facing Medicaid of providing quality health services for its 55 million beneficiaries. Although Medicaid is the largest single purchaser of health care for children and provides a comprehensive Early and Periodic Screening, Diagnosis and Treatment (EPSDT) benefit, Medicaid is not fulfilling its obligation of oral health care coverage. Approximately 80 percent of dental caries (tooth decay) is concentrated in 25 percent of U.S. children – mostly low-income children – with even higher levels of caries found in African-American and Hispanic children.[1] In most states, less than one in four Medicaid children had an annual dental visit – leading to the unenviable statistic that dental care is now the most common unmet treatment need in children.[2]

The consequences of severe untreated dental disease, in children and adults, are devastating. People live in pain, suffer from poor self-esteem, and face complications with other systemic diseases, such as diabetes, stroke, heart disease, and pre-term births. The economic and social impact of poor dental care is evident in missed school days and employee absenteeism. The health care impact also can be traced through increased spending for avoidable services. These services include emergency room visits due to untreated disease, operating room procedures for dental conditions that were not treated at an earlier stage, or hospital inpatient stays when dental infections expand into systemic infections that require IVs (intravenous solutions) and antibiotics.

In 2002, six states, as laboratories for innovation, took on the challenge of improving the access and quality of oral health services. Arizona, Oregon, Pennsylvania, Rhode Island, South Carolina, and Vermont – recipients of up to $1 million grants under the Robert Wood Johnson Foundation's *State Action for Oral Health Access* (SAOHA) initiative – have gained considerable momentum in improving access to oral health care. This report highlights their successes, challenges, and results; and perhaps more importantly, illustrates their commitment to undertaking a complex problem during a tumultuous period of major budgetary, political, and programmatic changes affecting every statehouse in America.

State Action for Oral Health Access: Overview and Accomplishments

The *State Action for Oral Health Access* initiative was launched in 2002 by the Robert Wood Johnson Foundation to address the disparities in access to dental services for low-income children and adults. The initiative was managed by the Center for Health Care Strategies (CHCS). Under the initiative, six states developed programs to address the multi-faceted challenges of improving the oral health delivery system. In addition to the grantee states, 13 states attended a *CHCS Purchasing Institute: Best Practices for Oral Health Access* in October 2005, to spread the accomplishments and lessons learned from the SAOHA grantees. Strategies implemented by the SAOHA states for improving access to oral health care included:

- Developing state financing and purchasing strategies;
- Broadening the provider network;
- Expanding the dental safety net;
- Creating a dental home; and
- Enhancing consumer and provider education.

The program strategies were designed to overcome many of the barriers state Medicaid agencies face in building an oral health care program, including the structure and amount of dental reimbursement rates, the supply and mal-distribution of dentists participating in Medicaid, the under-use of allied dental professionals, the lack of a dental home focused on routine prevention and wellness, the dearth of performance measures, and the paucity of consumer education regarding the importance of oral health.

In addition to the programmatic barriers, the SAOHA states faced major challenges in overcoming long-standing fissures between different state agencies and different fields of medicine. By focusing on prevention and health outcomes, the SAOHA grantees built bridges between Medicaid and the public health department; by better understanding market-based rate setting and administrative hassles, Medicaid and the private dental community worked together; and by connecting oral health to overall physical health, states facilitated linkages between dentists, primary care, and specialty providers. Overcoming these political and organizational silos is a significant accomplishment of the SAOHA program and signals to other states that such partnerships are vital keys to success.

CHCS Purchasing Institute on Best Practices for Oral Health Access

In October 2005, CHCS offered state Medicaid agencies a competitive opportunity to attend a *Purchasing Institute on Best Practices for Oral Health Access*. The three-day Purchasing Institute invited SAOHA grantees and other states that had developed innovative oral health programs to share best practices. Guest speakers also presented on oral health policy, evidence-based dental medicine, and collaborative coalitions.

Thirteen state teams included California, Georgia, Hawaii, Idaho, Illinois, Iowa, Michigan, Minnesota, New Mexico, Utah, Virginia, Washington, and Wisconsin. Each team brought at least four state officials representing public health, maternal and child health, special health care needs, or Head Start, and a member of the practicing dental community to participate in the sessions. Each state completed an action plan to improve oral health access and received six months of technical assistance following the Purchasing Institute.

The Purchasing Institute reinforced for state Medicaid officials the need to work with their dental community and other stakeholders to identify mutual measurable outcomes to improve oral health efforts. The following state team action plans provide an example of state activities and corresponding measures to address oral health access issues.

ILLINOIS ACTION PLAN

Overall Aim: Increase oral health services (diagnostic, preventive, and restorative) to Medicaid and SCHIP children, birth through 13, by 14 percent.
Measure: Percentage of children, birth through 13, continuously eligible and who received at least one dental service visit per year.
Objective 1: Increase percentage of children, ages seven through nine, who receive at least one sealant by 20 percent over two years.
Objective 2: Enter into seven new clinic grant agreements.
Objective 3: Increase the percentage of children, birth through age four, who receive preventive care.

VIRGINIA ACTION PLAN

Overall Aim: Increase utilization of dental services by FAMIS and FAMIS Plus enrollees from 27 percent in state fiscal year 2004 to 40 percent by fiscal year 2010.
Measure: Percentage of enrolled recipients, ages three to 21, who received dental care at least one time during a 12-month period.
Objective 1: Implement effective case management services.
Objective 2: Increase number of participating dental specialists.
Objective 3: Increase utilization of dental services by pregnant women, under age 21, enrolled in FAMIS and FAMIS Plus.

Measuring Oral Health Services Performance

The State Action for Oral Health Access initiative developed a performance measurement data set to track improvement in access to oral health services by the Medicaid and SCHIP population. Performance measurement, which is the quantitative assessment of health care processes and outcomes for which an individual practitioner, provider organization, health plan, or state is accountable, has taken on considerable momentum in various sectors of the U.S. health care system.[3] However, tracking oral health performance measures for Medicaid and SCHIP beneficiaries is limited to administrative data that measure the number of visits and/or types of procedures per visit. The SAOHA program used available administrative data, but was limited to codes related to enrollment and/or service utilization.

Prior to initiating its measurement and evaluation strategy for SAOHA, CHCS worked with a national advisory group to gather the administrative, license, and enrollment data for oral health and beneficiaries available at the state level. As a result, the grantees developed and reported on the following set of performance measures:

1. *Baseline and Post-Intervention Utilization Measures:* States reported utilization measures from claims data in three categories; diagnostic/screening, prevention, and treatment, by age, gender and product line (Medicaid and SCHIP).

   Significant improvement in utilization was seen in several measures. Four of the SAOHA states significantly improved their provision of oral health preventive services for the Medicaid population in all age categories (under six, six-14, 15-20, over 20 years). One of those four states significantly improved utilization in "all services." One SAOHA state significantly improved its diagnostic, prevention, and treatment services for children under six years, while two other states were able to improve two of the three types of services for children under six years, and two SAOHA states significantly improved their diagnostic, prevention, and treatment services for beneficiaries six – 14 years.

Results: Improving Oral Health Access

Through targeted program interventions and creative approaches, access to oral health care improved in some of the SAOHA states over the three-year grant period. Pre- and post-evaluation measures show that:

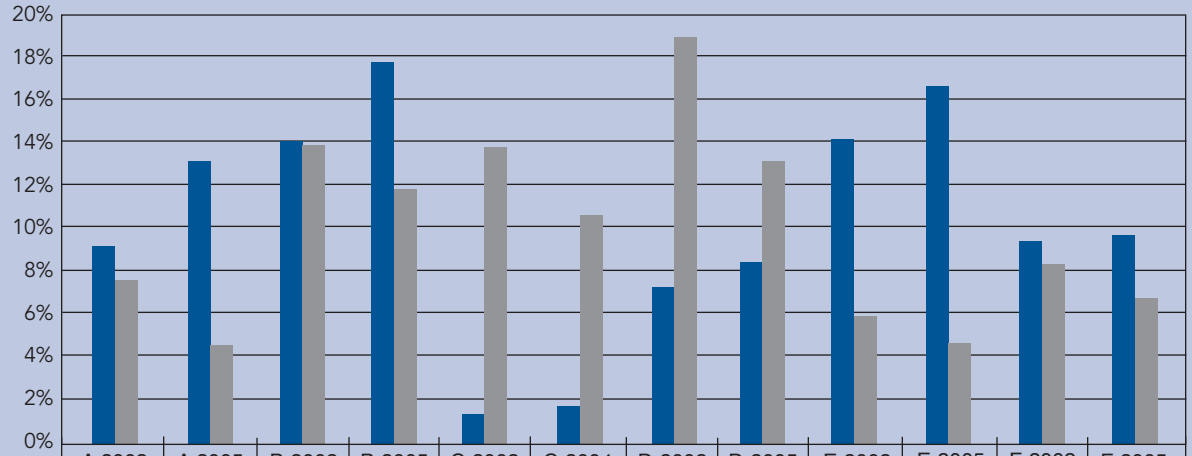
- **Five of the states** significantly increased the percentage of enrolled children under the age of six receiving dental care.
- **Four of the states** significantly reduced the percentage of children (out of those receiving dental care) who had one or more teeth extracted during the study period.
- **Four of the states** significantly improved preventive oral health services for the Medicaid population in all age categories (under six, six-14, 15-20, over 20 years).
- **One state** significantly improved its diagnostic, prevention, and treatment services for children under six, while two other states improved two of the three types of services for children under six years.
- **Two states** significantly improved diagnostic, prevention, and treatment services for beneficiaries six – 14 years.
- **One state** significantly improved the "all services" utilization for all age groups.

2. *Pilot Measures:* Pilot measures reflected each grantee's unique interventions. States collected such measures as the number of: general dentists participating in a pediatric dental training program; pregnant women who kept their dental appointments; and trained expanded function dental assistants who were added to dentists' practices in rural areas to provide additional workforce capacity.

3. *Common Measures:* Common measures were collected across all grantees and included utilization measures (see above), dentist licensure information, dentist participation in the Medicaid dental program, and enrollment information. The common measures results demonstrated that five of the SAOHA states significantly increased the percentage of enrolled children under the age of six receiving dental care.

In addition, states collected a proxy measure for unmet need, which was developed by the SAOHA states and national experts – the number of children under age six who had at least one tooth extracted within a year. This measure was developed to address a growing concern that young children suffer needlessly due to unaddressed dental caries. In fact, more than 40 percent of young children in the U.S have tooth decay by the time they reach kindergarten.[4] Many children insured by Medicaid and SCHIP were not receiving consistent access to preventive services and are treated episodically. The proxy measure of unmet need was used to assess the validity of those observations and to evaluate the success each grantee had in addressing the issue of childhood caries. Four of the SAOHA states significantly reduced the percentage of children receiving care who had one or more teeth extracted in the study period (Figure 1).

Figure 1. Proxy Measure for Unmet Need: Percentage of Enrolled Recipients under Age Six with at Least One Tooth Extraction (2002/03 - 2004/05)



	A 2003	A 2005	B 2002	B 2005	C 2002	C 2004	D 2002	D 2005	E 2002	E 2005	F 2002	F 2005
% of enrolled < 6yr recipients	8.9 %	13.1 %	14.0 %	17.7 %	1.4 %	1.8 %	7.3 %	8.5 %	14.1 %	16.6 %	9.4 %	9.7 %
% of recipients < 6yr old that had at least one tooth extraction	7.7 %	4.4 %	13.8 %	11.8 %	13.9 %	10.4 %	18.6 %	13.2 %	5.8 %	4.7 %	8.3 %	7.0 %

Note: The SAOHA states were each assigned a letter as part of this measurement exercise.

State Action for Oral Health Access Strategies

The SAOHA grantees developed and implemented a variety of successful interventions to improve access to oral health services for Medicaid beneficiaries. These fall under five broad categories:

1. Developing Value-Based Purchasing Strategies
2. Broadening the Provider Network
3. Expanding the Dental Safety Net
4. Creating a Dental Home
5. Enhancing Consumer and Provider Education

What follows are brief case studies of state activities to craft, pilot, and launch significant improvements in dental care for the nation's most vulnerable citizens.

Developing Value-Based Purchasing Strategies

During the 1990s, many state Medicaid agencies evolved from being administrators of providers for the Medicaid program to being purchasers of health care services. Thus, states moved from viewing their primary role as determining eligibility and paying claims to focusing on defining outcomes and creating accountability from new forms of contractors (e.g., managed care or disease management organizations). Although this paradigm shift occurred for physical and behavioral health services, states still functioned as "administrators of the dental providers" for oral health care benefits.

However, over the past few years, one SAOHA grantee – Rhode Island – followed states such as Michigan and Tennessee in developing new mechanisms for purchasing the dental benefit, which included contracting with dental benefit managers, streamlining administrative functions, and defining clear performance standards. This change facilitated the development of dental performance measures, beyond those required by the federal Centers for Medicare and Medicaid Services under the EPSDT program, and spurred the development of skilled contractors focused on improving dental care. Two other SAOHA grantees – Arizona and Vermont – took significant steps toward designing improved administrative and financial solutions to improve the quality of Medicaid dental care.

"This focus on prevention, powered by a new delivery system, will not only yield short- and long-term savings for the state's dental program, but it will enable us to dramatically improve care. And, unless you change the delivery system, you cannot improve care."

— Tricia Leddy, former Administrator of the Center for Child and Family Health, Rhode Island Department of Human Services

Rhode Island: Dental Benefits Manager Program

While children enrolled in RIte Care, Rhode Island's Medicaid managed care program, are entitled to comprehensive dental benefits under EPSDT, less than half of the children enrolled in RIte Care (44 percent) receive any type of dental care at all. In 2005:

- Thirty-nine percent of children received diagnostic services;
- Thirty-six percent of children received preventive services; and
- Twenty-one percent received treatment services.[5]

A primary reason for this lack of access is the absence of a coordinated dental delivery system that is held accountable for the

care of its patients. Rhode Island currently provides dental care to Medical Assistance (Medicaid) recipients on a fee-for-service basis.

In order to revamp how it provided dental care to its Medicaid beneficiaries, particularly infants and young children, Rhode Island transitioned from functioning simply as a payer of services to becoming a purchaser of a new oral health delivery system. Rhode Island launched this new delivery system – a Dental Benefits Manager (DBM) program – on July 1, 2006. Under this new system of care, the Department of Human Services contracts with one or more partners – the DBMs – on a pre-paid, capitated basis. The DBMs are charged with:

- Increasing reimbursement rates (potentially up to approximately 90 percent or greater of average Rhode Island PPO commercial payments) paid to private dentists, so that they no longer will be paid less than what it costs them to provide dental services. This would mark the first increase in reimbursement rates for dental procedures since 1992.
- Ensuring that there are enough dentists who participate in the network, therefore increasing the number of providers who see children enrolled in the program.
- Assisting members with finding dentists, securing transportation to their appointments, and providing interpreter services, if necessary.

The DBM program will emphasize preventive care (e.g., periodic dental examinations, teeth cleanings, and counseling on oral health care) to improve health outcomes and reduce the need for high-cost dental procedures such as restorative treatment and oral surgery. Included in this new dental benefit system is the establishment of oral health indicators (Table 1) that monitor the progress of each beneficiary in the program to demonstrate the value of providing preventive care and to document potential savings.

In order to keep the program "budget neutral" Rhode Island will initially enroll approximately 30,000 children, from newborn to age six. Though this first group of enrollees is small, comprising only 24 percent of the total population of children on RI Medical Assistance, kids will not age out once they are in the program. The state plans to add 5,000 children per year into the program and could ultimately expand to include more children and pregnant women if the Rhode Island General Assembly appropriates additional funds for Medical Assistance dental care.

Table 1. Rhode Island Medicaid Oral Health Indicators

Indicators	Type of Measure
Dental Visits by Type of Visit	Process
Provision of Preventive Care Services	Process
Barriers to Obtaining Dental Care	Process
Unmet Need for Dental Services	Outcome
Dental Problems and Dental Service Utilization	Outcome
Hospital and ED Use for Dental Disease/Problems	Outcome

Arizona: Revamping the Oral Health Infrastructure to Improve Dental Care

Arizona has undertaken an ambitious project to introduce administrative and financial reforms into the state's oral health care program. The mandate for change in Arizona is particularly acute, given that dental care for many of its Medicaid recipients, especially children under age three, has lagged substantially below national standards. According to its own "report card," *Evaluating Managed Care Performance: Arizona's Approach*, the state cites several areas where oral health services for low-income children fall short of federal Healthy People 2010 objectives:

"If you don't encourage kids to come in periodically when they are younger, it becomes more costly to treat them as they get older."

— Robert Birdwell, DDS, Dental Director, Arizona Health Care Cost Containment System

- Thirty-six percent of children age two and older use the Medicaid oral health system, compared to the Healthy People 2010 target of 56 percent;
- Twenty-five percent of children and adolescent enrollees receive preventive dental services, compared to the Healthy People 2010 target of 57 percent; and
- Twenty-eight percent of children on Medicaid, ages 6-8, have received at least one dental sealant on molar teeth, compared to the Healthy People 2010 target of 50 percent.[6]

Challenged by the imperative to turn these numbers around, Arizona embarked on a series of initiatives, several funded by SAOHA, to improve access to dental care and ensure that Medicaid recipients receive routine preventive services. The importance placed on these efforts by Arizona Medicaid – the Arizona Health Care Cost Containment System (AHCCCS) – was clearly evident in its creation of the role of Dental Director in 2005 and the hiring of a dentist to fill that critical position.

The initial charge for Dr. Robert Birdwell, DDS, Arizona Medicaid's first Dental Director, was to conduct a comprehensive assessment of the state's oral health infrastructure, in particular examining existing Medicaid policies, dental utilization, and the performance of the eight managed care plans in AHCCCS. During this assessment, the state found that its dental policies were too open-ended. For example, Arizona did not have a requirement that standardized how many dental visits each plan should allow per year. Following the assessment, the state changed that policy, requiring the plans to allow each child two visits per year, at which the patient would receive a thorough dental examination and necessary preventive services, such as fluoride treatments and cleanings.

In many cases, the state found that most physicians were not referring children to a dentist until age three. Given that the Medicaid population has a disproportionate amount of dental disease, the state's policy was changed to encourage physicians to begin referrals at age one. The message has been communicated to the state's managed care organizations and the plans, in turn, are beginning to relay that "encouragement" to contracted physicians.

Along with reviewing existing Medicaid dental policies to enhance, streamline, and standardize where appropriate, the state also evaluated its oral health data collection and reporting practices. The development of a data warehouse, which was launched in January 2006, has enabled state Medicaid officials to analyze utilization at each AHCCCS health plan and assess the types and quality of services each

one provides. The state intends to use data warehouse reports to regularly share best practices in utilization and prevention among the health plans.

Arizona also has begun to identify opportunities to introduce cost-efficiencies and more simplified management practices into the state's Medicaid dental program. These efforts, currently underway, include:

- Standardizing at least a minimum number of dental benefits that are offered across the health plans, though plans can expand those benefits or add others if they choose.
- Establishing a consistent policy on prior authorization to simplify procedures for providers (e.g., while one plan asks for a prior authorization for procedures over $1,000, others may ask for a prior authorization for procedures over $5,000).
- Reviewing the current fee schedule for dental services and developing minimal costs for each. AHCCCS would provide this matrix to each plan and would update it regularly.
- Examining reimbursement rates to make them more competitive in rural areas of the state.

Part of the success of the revamped AHCCCS oral health program is due to creative partnerships with the Section of Oral Health, Department of Health Services; the Arizona Dental Association; the Arizona Academy of Pediatric Dentistry; the Association for Community Health Centers; and the new Arizona School of Dentistry, among other stakeholders. Their buy-in, leadership, and operational input were critical to furthering the program.

Vermont: Crafting an Economic Model to Develop Financing Strategies

Although Vermont nationally has the highest percentage of dentists (45 percent) who see Medicaid patients, the state continues to identify strategies to increase access, by overcoming non-financial obstacles (e.g., location and distribution of dentists and poor oral health literacy among Medicaid recipients) as well as pinpointing potential changes to the existing Medicaid fee schedule.[7] In 2005, the Vermont Department of Health, partnering with the Vermont State Dental Society, surveyed 384 Medicaid dentists on issues such as reimbursement, administrative procedures, and case management. Findings from the approximately 40 percent of dentists who responded include:

- While a reimbursement rate of 80 percent of current office charges would be a "reasonable" payment for Medicaid patients, expanding the practice to accommodate additional Medicaid patients would most likely raise the rate to 90 percent – which is the average commercial rate. Current Medicaid fees average 54 percent.
- The majority of dentists supported the modes of billing support offered by the state, which include: ADA codes, the universal billing form, electronic claim submission, and a toll-free hotline.
- Most dentists would like to see a decrease in Medicaid payment time (the average in Vermont is 17.5 days), though that duration is comparable to the 18 days it typically takes to process and pay a commercial claim.
- Many dentists would like to remove all prior authorizations, except for the most costly procedures (e.g., dentures and orthodontics) and advocated removing coverage exclusions such as dentures for the elderly.

- There was only moderate interest in a case management system to help patients find dentists who take Medicaid.[8]

In addition to the survey, the Department of Health created two tools to help gauge dental practice capacity: an assessment tool that helps dental offices measure staffing, costs, and utilization as well as software that enables dentists to conduct "What if?" scenarios. For instance, using the software, dentists can assess the financial impact on their practices of taking on more patients or expanding their practices (e.g., hiring additional dental assistants or dental hygienists). These tools were sent in first quarter 2006 to every dentist in the state, and the information gleaned from them will further inform the development of the economic model.

Broadening the Provider Network

Recent snapshots of the national dental workforce indicate two alarming trends:

- A continuing sharp decline in the dentist-to-population ratio – with an expected 20 percent more people than available practicing dentists by 2020.[9]
- An aging dental workforce, with 35 percent of all dentists now over age 55. By 2014, the number retiring is expected to exceed those entering the field.[10]

The ramifications of these trends are even more palpable for children and adults with already poor access to routine dental care. For instance, since 1998, the number of Health Professional Shortage Areas (which require one dentist for every 4,000 people) nationally has doubled. In addition, only 56 percent of federally funded community and migrant health centers, which serve as a safety net for the nation's most economically disadvantaged, have the capacity to offer dental services – either by a practicing dentist or even a dental hygienist or dental assistant.[11]

With a dwindling oral health workforce, several states are seeking to expand the number of practicing dentists who treat low-income kids and adults as well as engage Expanded Function Dental Assistants (EFDA) and dental hygienists to enhance the ability of dental practices, urban and rural clinics, and other safety-net health providers to see more patients.

Pennsylvania: Expanding the Dental Workforce

Pennsylvania currently has 67 dental health professional shortage areas, in counties affecting more than 1.5 million people. Of these 67 areas, 49 do not have enough dentists to see low-income patients. Exacerbating this access issue is the aging of dentists, with 1,000 more dentists between ages 40-50 than those between ages 30-40, and retirement rates are expected to increase in the next several years.[12]

The state decided to pursue a new training program for expanded function dental assistants to revitalize the dental workforce, especially in rural and inner city areas. Currently engaged by dental practices in several states, EFDAs supplement and support dentists by performing basic dental procedures that enable the dentists to see more patients. These procedures typically include: providing sealants for children's molars, taking impressions for and constructing temporary crowns and bridges, and restoring teeth with amalgam and other composite materials after the decay has been removed by the dentist. A dentist must oversee procedures done by EFDAs. In Pennsylvania, EFDAs are

required to complete at least 200 hours of training, for which they must qualify by having at least two years experience as a dental assistant.[13] Approximately 2,000 EFDAs are temporarily certified in Pennsylvania and, though EFDAs have been practicing in the state for years, they are not formally recognized by the State Dental Board and only can receive temporary certificates. In the next several years, full licensure should be available through the support of the Medicaid program.

Pennsylvania's EFDA initiative has been in place since 2004, when the state awarded grants of $357,000 each to two academic institutions to implement the training – Harcum Junior College, in the Philadelphia suburb of Bryn Mawr, and Luzerne County Community College, in the North Central Pennsylvania town of Nanticoke. While Harcum is focusing its efforts on underserved urban areas, such as Altoona, Lancaster, Reading, and York, Luzerne has established training classes in the more rural communities of Berwick, New Berlin, Lawrenceville, State College, and Williamsport.

Both Harcum and Luzerne are partnering with safety-net clinics in their respective areas to expose students to a practical work environment and lay the groundwork for potential employment at those dental facilities. Both colleges graduated their first classes of trained EFDAs and are ahead of estimated targets. To date, Harcum has trained 60 EFDAs, exceeding its goal of 50, and is on a pace to train more than 100 new EFDAs by summer 2006. This influx of newly trained EFDAs will represent a five percent increase in EFDAs statewide. Luzerne, which launched its first training class in August 2005, plans to graduate at least 25 students in summer 2006.

Yet, while the EFDA training classes have garnered interest from students, a considerable number of dentists remain unclear or, in some cases, are skeptical, about how EFDAs can benefit their practices. To help dentists become more comfortable with integrating EFDAs into their offices, Harcum and Luzerne launched continuing education sessions led by dentists who are experienced in working with EFDAs. The Harcum and Luzerne continuing education sessions were each attended by more than 150 dentists, and those dentists have begun to hire EFDA graduates.

"The Pennsylvania EFDA Association will help dental ancillaries find opportunities in the oral health workforce and it will give them a voice."

— Lesley Best, Director, Bureau of Chronic Diseases and Injury Prevention, Pennsylvania Department of Health

Harcum and Luzerne have taken steps to sustain their projects beyond the SAOHA grant period. Harcum has forged a relationship with the Temple University School of Dentistry to integrate the training of EFDA students with dental students at a Philadelphia health clinic that serves low-income families. In addition, Harcum recently received a $25,000 grant from the Philadelphia Foundation to train EFDAs in underserved Philadelphia neighborhoods. Harcum also is considering expanding its training to sites in Scranton and in Western Pennsylvania. Luzerne intends to continue offering training at its existing clinical sites and may explore additional locations for training in North Central Pennsylvania.

Along with expanding its training, Harcum created, as part of its SAOHA grant, the Pennsylvania EFDA Association. The new organization, which already has more than 90 members, is open to all EFDAs. One of its first projects will be to push for full licensing for EFDAs, which will be instrumental in institutionalizing the role that

EFDAs can play in enhancing the ability of dental practices and clinics to serve those in need.

South Carolina: Training Dentists and Physicians to Treat Children in Need

Many dental schools do not prepare general dentists to provide care for infants and toddlers and, in particular, those children with special health care needs. Exacerbating this paucity of training is a shortage of pediatric dentists in underserved – typically rural – areas. Consider these statistics:

- Approximately 1,700 dentists are employed in South Carolina. Of these dentists, only 364 work in the state's 31 rural counties, while 1,520 work in the state's 15 urban counties.
- While the urban counties have approximately 53 dentists per 100,000 people, in the rural counties there only are 31 dentists per 100,000 people.[14]

To address this shortage and expand the corps of providers who could treat infants and young children, South Carolina developed an initiative to train general dentists to treat pediatric patients and those with special needs. Through the training program, which is coordinated by the Medical University of South Carolina's College of Dental Medicine (MUSC) and Palmetto Health Richland Dental Clinics, the state is attempting to raise the level of awareness among general dentists and other medical professionals by showing them the data on cavities and pointing out critical needs to them.

Along with attempting to increase the number of dental providers who see young children, the state is using the training sessions to communicate to physicians and dentists the importance of referring children for their first dental exam at age one, as opposed to age three, four, or five, which is the more common practice. Beginning in 2003, MUSC has conducted one training each year, covering topics such as Pediatric Dentistry for General Dentists and Infant Oral Health 101. In 2005, Palmetto Richland led its first training session, which included a clinical component in which parents and children under age two received a medical and dental history, an oral exam, a risk assessment, oral health education and guidance, and a dental caries prevention plan. Since the inception of the training initiative, attendance among participating dentists at both centers increased from 17 in 2003 to more than 92 in 2005. In addition, 71 percent of dentists surveyed after the sessions say they valued the training, with many of them attending the sessions each year.

"The training enhanced the skills of these dentists, and they have gone on to do some remarkable things for these children."

— Lisa Waddell, MD, MPH, Deputy Commissioner for Health Services, South Carolina Department of Health and Environmental Control

As a result of the training, more general dentists in rural dental practices have increased their capacity to see children age four and younger. Out of 14 dentists who participated in the training during the first year, 13 saw more than 50 children and extended their practices to children less than four years old. Several dentists used the training to expand opportunities for access in their communities. For instance, in Hampton County, located in the rural southern tip of the state, one dentist partnered with a local elementary school to open a dental clinic on site. She provides services such as preventive and restorative dental care to students. In another rural area, Orangeburg County, a group of

dentists opened a dental clinic at a Head Start facility. The dentists treat children, including those with special needs, who previously had to travel more than an hour-and-a-half for a dental visit.

Increasing the Number of Dental Hygienists in Rural Arizona

Like South Carolina, Arizona has an unequal distribution of dental providers, a group that includes dental hygienists and dental assistants. Most providers practice in or near the urban communities of Phoenix, Tucson, and Flagstaff – leaving a substantial swath of the state underserved or not served at all. According to *Healthy Arizona 2010: Collaborating for a Healthier Future*, Arizona's dentist-to-population ratio is lower than the U.S. average. The state has one dentist per every 2,250 people while the national average is one dentist per every 1,740 people – a difference of 510 people per dentist.[15] Compounding this poor, or at best, uneven access to dental services has been the low supply of practicing dentists in the state – a trend that state dental officials believe may be diminishing since the opening of Arizona's first dental school, the Arizona School of Dentistry and Oral Health, in 2004.

Faced with this unequal distribution of providers, along with the overall shortage in the dental workforce, Arizona launched an effort to increase the number of Registered Dental Hygienists (RDH) in rural portions of the state. An impetus for this focus on hygienists was the passage of legislation in 2003, enabling hygienists to form an "affiliated practice" with dentists in rural areas of the state.[16] Under the parameters of an affiliated practice, using mutually agreed upon dental protocols, hygienists can provide services at clinics in underserved counties, without the direct supervision of a dentist. These services include providing varnishes to children under age three.

To educate dentists and hygienists about how affiliated practices work, Arizona created an informational web site (www.arizonasmiles.org) that went live in March 2006. The site will eventually contain continuing education classes to help hygienists meet the requirements for working in an affiliated practice. Since the launch of the site, many hygienists have inquired about affiliated practices and said they were not even aware that such an option existed.

Along with the affiliated practice approach, the state also funded a dental hygiene program at Mohave County Community College, in Northwest Arizona. Of the 16 students who graduated from its first class in 2005, 13 plan to remain in their communities and work at local dental practices or clinics.

Expanding the Dental Safety Net

According to a recent survey from The Commonwealth Fund, nearly 45 million people lack health insurance, and only 35 percent of those uninsured individuals had a dental exam in the past year.[17] Many uninsured and underinsured children and adults live in low-income rural and urban areas where access to dental services is difficult, or even non-existent. In addition, though Federally Qualified Health Centers (FQHC) and Community Health Centers (CHC) often serve as a safety net for basic health services in low-income or underserved areas, less than one-third of CHCs provide dental care.

To address these challenges, the SAOHA grantees forged creative partnerships with CHCs, FQHCs, and other public health facilities to expand the dental safety net. For example, Rhode Island reached out to school-based health clinics, CHCs, and hospital dental centers to expand the capacity of those groups to provide dental

care to low-income children and their families. In South Carolina, a broad coalition of state health organizations designed an integrated network that, among other features, linked medical and dental providers through a patient navigator – crafting a connection that, in many cases, never existed prior to this effort. Each of these projects has yielded increases in dental appointments and in preventive dental care visits, thus beginning to demonstrate real expansions of the oral health safety net.

Rhode Island: Building Capacity to Improve the Dental Safety Net for Low-Income Urban and Rural Communities

The dental safety net in Rhode Island is composed of eight Federally Qualified Health Centers, two hospital-based dental centers, and a dental hygiene clinic. In addition, children in six elementary schools throughout the state have access to periodic dental care through the Providence Smiles program, a mobile dental team that provides examinations, cleanings, sealants, and oral health education in the schools.[18] Yet, even though the state has a safety-net dental infrastructure, this system is often strained under the twin burdens of dental workforce shortages and lack of presence in typically underserved communities.

To address these capacity issues, and expand opportunities for the state's poorest children and families to access dental care, the state, in partnership with the Rhode Island Foundation, invited organizations to apply for funds to:

- Increase the supply of dentists, dental hygienists, and dental assistants by increasing the number of graduates from training programs in the state.
- Increase the capacity of dental safety net providers that serve low-income or underserved children and adults.
- Expand school-based dental screening, examination, and treatment services (the "Providence Smiles" model) to the state's other core cities.

In 2004, Rhode Island awarded 18-month "performance-based capacity grants," totaling $737,308, to 14 programs at 11 organizations. Highlights from several of these projects follow:

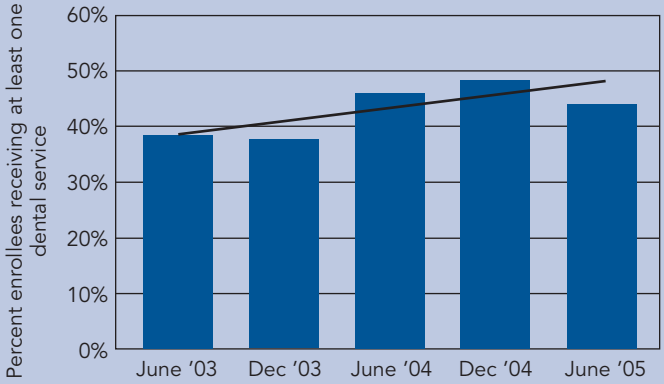
Strengthening the Workforce

- An eight-week internship program will train individuals participating in Rhode Island's welfare program to become dental assistants. Developed jointly by the Rhode Island Department of Human Services, the Rhode Island Dental Association, the Rhode Island Foundation, and Rhode Island College, the program enrolled its first class of five interns in February 2006. The interns are paid a stipend during training, and they may be hired by the dentists volunteering in the program.
- Two new residency programs were established at the Joseph Samuels Dental Center at Rhode Island Hospital and at St. Joseph Hospital's Pediatric Dental Center. Two general practice dentists, who will focus on treating children with special needs, will graduate from the Rhode Island Hospital program each year, with the first residency beginning in July 2006. The St. Joseph's program, which initially started with two pediatric dental residents per year, has doubled its size to four per year, in part due to the $80,000 grant it received from the state. Two dental residents at St. Joseph's provided more than 1,700 dental visits to Rhode Island children between July 2004 and June 2005.

Expanding Services in the Community

- The Providence Community Health Center opened a new dental clinic in May 2005 that specializes in the treatment of children under the age of 18 as well as pregnant women. The clinic has bilingual (Spanish/English) dental staff. Dental students from Boston University are scheduled to begin working at the clinic in spring 2007. In its first four months of operation, more than 1,100 children and women received dental care.
- Thundermist Health Center opened a dental center in West Warwick. Since its opening in March 2004, Thundermist has treated more than 1,500 dental patients, three-quarters of whom had incomes at or below 150 percent of the federal poverty level. Approximately 66 percent of patients had Medical Assistance and 29 percent were uninsured. Nearly one-third of patients served were children and over half of those children had at least four cavities.

Figure 2. RiteCare Enrollees Receiving at Least One Dental Service



Bringing Dental Care to the Schools

- St. Joseph Health Services expanded its Pawtucket Smiles program from three elementary schools to six. During the 2004-2005 school year, the program provided 2,758 dental exams and 1,249 dental cleanings and fluoride treatments. In addition, more than 400 children received dental sealants.
- Thundermist Health Center in Woonsocket launched a program that provided dental care to children in schools and at community organizations. During its first year of operation, Thundermist provided dental services in five elementary schools, one middle school, four Head Start sites, one community based organization, and four sites of the Northern Rhode Island Collaborative, which is a school that serves children with special needs. Thundermist provided dental care to 781 children at these sites, more than half (54 percent) of whom required more intensive follow-up dental services.

As Rhode Island works to revitalize its oral health care program, expanding the capacity of the dental safety net is paramount. The initial results of these projects have been fruitful. However, as depicted in Figure 2, capacity in Rhode Island's safety-net centers peaked at the end of 2004, with a subsequent decline in private dentists accepting new patients leading to a decrease in total services available to meet demand in the first six months of 2005. Rhode Island Medicaid officials believe that the implementation of the Dental Benefits Manager program will turn around those declines and expand the capacity of dental clinics to provide care for children and their families.

South Carolina: Expanding the Safety Net through an Integrated Oral Health Network

In a 2002 needs assessment of children's oral health, conducted 20 years after its previous evaluation, the South Carolina Department of Health and Environmental Control (DHEC) found a dental care environment in which many kids were underserved or not served at all, and in which

children from poorer households consistently fared worse than their more affluent peers. The assessment, which targeted children in kindergarten through third grade, found that:

- Lower-income children had a higher caries history (55 percent) than higher-income children (47 percent);
- Lower-income children had a higher proportion of untreated tooth decay (35 percent) than higher-income children (28 percent); and
- Lower-income children had a higher need for early dental care (23 percent) than higher-income children (18 percent).[19]

The assessment also revealed significant geographic disparities in access to oral health care – with most dentists practicing in the state's few metropolitan areas and the children most in need living in rural communities, where dentists are few and far between.

As a means to improve the standard of dental care and expand the dental safety net, South Carolina crafted an oral health infrastructure with a tangible presence in all areas of the state. This integrated network became the centerpiece of South Carolina's More Smiling Faces in Beautiful Places initiative, a statewide partnership to improve oral health access for the state's children, from birth to age six, including those with special needs.

To build this network, DHEC forged a coalition of health organizations throughout the state and created a steering committee to help shape the initiative. Members of this steering committee included: Family Connection of South Carolina; Head Start; the South Carolina Dental Association; the South Carolina Department of Education; and the South Carolina Rural Health Access Program, among other stakeholders. The broad representation on the Steering Committee enabled the group to craft a series of projects that engaged dentists, physicians, nurse practitioners, dental hygienists, public and private health providers, community health centers, and churches. The Steering Committee initially piloted these projects in six predominantly rural counties (Chesterfield, Hampton, Greenwood, Marion, Marlboro, and McCormick) and recently expanded them into three additional counties.

"Our message of the importance of dental care for children is now being integrated into pediatric and family medicine. We are starting to get them to change their practices."

— Christine Veschusio, School Dental Program Coordinator, South Carolina Department of Health and Environmental Control

Among these projects, two initiatives were developed to expand access to the dental safety net by creating direct links between medical and dental providers that either did not previously exist or were used sporadically at best.

Integrating Oral Health Promotion and Disease Prevention into Physicians' Offices

Drawing from existing curricula and resources from organizations such as the National Maternal and Child Oral Health Resource Center, the American Academy of Pediatrics, and the American Academy of Pediatric Dentistry, South Carolina designed an oral health training program for physicians and their staff. The training was conducted by dentists affiliated with the Palmetto Richland Dental Clinic, as well as by Dr. Rocky Napier, Pediatric Dentist Mentor, and Christine Veschusio, School Dental Program Coordinator, South Carolina Department of Health, and Environmental Control, in small-group sessions held throughout the six pilot counties. Since the training began in 2004, 74

physicians, nurse practitioners, physician assistants, and registered nurses have participated.

Creating a Patient Navigator System

This system of care begins in the doctor's office – the child's medical home – where the patient undergoes an oral health risk assessment and is referred to a local dental provider. If the child is at medium to high risk for dental disease, a patient navigator works with the provider to ensure that the child receives preventive or restorative treatment. The patient navigator also will arrange transportation for the child and his parent, if necessary. In its two years of operation, the patient navigator system in South Carolina has begun to yield results, with increases in the number of children who receive a dental appointment (56 percent) and in the number who actually show up for that visit (65 percent).

Through these initiatives, which coalesce the often disparate disciplines of medical and dental care into a more integrated approach, South Carolina has begun to stretch the oral health safety net to accommodate kids who previously would not have had access to preventive and restorative treatment.

Creating a Dental Home

States and providers have begun to apply the concept of a "medical home" to oral health. A medical home is the central place where primary care is provided and ensures that health care services are accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally-competent.[20] The concept of a "dental home" in oral health implies that Medicaid consumers have a usual source of comprehensive oral health care from dental professionals who address not only their diagnosis and treatment needs, but also provide and/or coordinate basic preventive and/or specialty services.[21]

Several SAOHA grantees developed dental home programs to better link Medicaid consumers to a "primary" dentist and to promote early detection and prevention of oral health diseases, particularly in pregnant women and young children. Studies of programs initiating early dental care show improved health outcomes and long-term cost savings.[22]

Oregon: A Dental Home for Pregnant Mothers and their Children

According to the Oregon Department of Health Services, children from low-income families are 2.5 times more likely to have untreated dental disease compared to kids from higher economic strata.[23] Furthermore, access to pediatric dentists who can educate mothers about proper oral care for themselves and their children – as a means to prevent the onset of cavities or further decay – is inadequate due to a decreasing number of dentists in the state, particularly in rural areas.

"We had no system to reduce cavities for kids, and we had no system for reaching out to pregnant mothers to teach them how to reduce the possibility of cavities in their kids."

— Michael Shirtcliff, DMD, President and Dental Director, Advantage Dental Plan and Northwest Dental Services

Faced with high rates of dental caries and unabating increases in dental infections, especially among young children, Oregon crafted a comprehensive program aimed at intervening early in the child's life, even before they are born, to prevent the onset of painful and crippling dental disease. The central idea behind the Early Childhood Caries Prevention (ECCP) Project is to educate and treat pregnant women to prevent dental infection in their children.

While projects developed in the more urban parts of the state built upon or refined existing education and prevention activities, the challenge in rural Klamath County, abutting the California border in southern Oregon, was to first develop a dental support structure to reach out to pregnant mothers.

The Klamath County initiative was catalyzed by a broader prevention campaign – Project Prevention – led by Oregon Health Plan, the state's Medicaid managed care program. As part of Project Prevention, steering committees throughout the state, composed primarily of medical and dental professionals and county and local community health officials, identified topics for prevention efforts. The Klamath County steering committee identified smoking cessation, asthma, diabetes, and early childhood caries prevention.

Shortly after the steering committee announced its target areas, a group of dentists and physicians, as well as representatives from the Klamath County Health Department; a regional hospital; the Oregon Institute of Technology (OIT), which houses a Registered Dental Hygienist School; WIC; Head Start; and other local health officials formed an oral health coalition to assess the state of pediatric dental care in Klamath County and set goals for their projects. The agreed-upon goal was bold: to ensure that 100 percent of two-year-olds in Medicaid families in Klamath County have no cavities.

The coalition developed a program with three components:

- Create a dental home for pregnant mothers and their children, at which the dentist would regularly educate the mothers about proper dental care and treat their existing cavities or other infections, thereby significantly lessening the risk of their children inheriting dental disease.
- Provide pregnant mothers with fluoride toothpaste and toothbrushes, to be used daily before bedtime.
- Conduct home visits with the women to assess their current state of care, to gauge their level of risk for passing on dental caries to their newborn children, to schedule a first (and subsequent) visit with the dentist, and to monitor the progress of the women and their children, once born, at regular intervals.

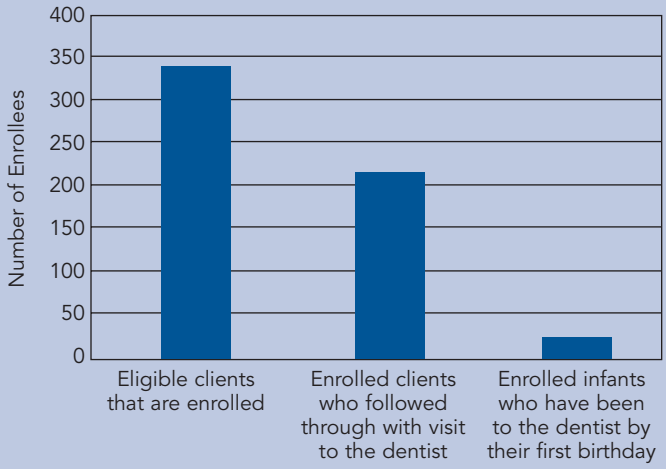
While reaching eligible women was initially a challenge, due in large part to women's sensitivities to letting an oral health worker into their homes, the project now has established WIC as its coordinating "hub." All new pregnant WIC clients are recruited into ECCP by the project's Oral Health Services Coordinator, who is based in the WIC office. Some of those women may choose not to participate in the program, because they already have a dentist whom they visit regularly. For those who agree to participate, the Oral Health Services Coordinator leads them through a series of education sessions on topics such as the importance of a dental visit and cavity prevention, and makes an appointment for them at OIT's dental hygiene school for an oral health assessment, including x-rays, teeth cleaning, and chlorhexadine therapy (to reduce pathogens found in plaque). Following two sessions at OIT, project staff send the assessment and x-ray results to the mother's assigned dental office.

When the mother delivers, she is given Xylitol gum through the WIC office and is asked to chew the gum daily until the child is six months old (Xylitol sugar, when

mixed with chewing gum, can suppress the pathogens that lead to dental caries). At that point, the child is assigned to the same dental home as the mother to receive fluoride varnish every six months after the first tooth erupts. Along with the routine dental visits, WIC nurses conduct home visits to monitor progress when the child is six weeks, six months, one year, and two years old.

Since the project launched in 2004, it has enrolled approximately 339 eligible women, three-quarters or 220 of whom have visited their assigned dentist (Figure 3). Twenty-five babies have made a first visit to their dental home. The project currently is examining ways to address possible barriers to enrollment. Nonetheless, participation in the project will most likely increase through more aggressive promotion. To facilitate this publicity, the project recently received funding from Lockheed Martin to produce public service announcements for radio and television.

Figure 3. Klamath County, Oregon
24 Months Post-Intervention, December 2005



As critical as recruiting pregnant mothers into the project has been the need to recruit and train dentists. Driving this effort was the need to puncture myths about treating poor kids with cavities. For instance, many dentists argue that they should not see kids until they are 30-months old, typically the time when all 20 of the child's teeth have erupted – even though professional organizations such as the American Academy of Pediatric Dentists argue that seeing a child within six months of the eruption of the first tooth, or by 12 months of age, is appropriate. When the Klamath County project leaders brought six-or 12-month-old children who had received preventive dental care into the training sessions, many dentists were relieved that they would not always have to treat a two-year-old with a mouth full of cavities. Thus far, 28 dentists are involved in the project and more than 300 dentists and their staff have been trained in the dental home model. Going forward, the ECCP dental home model will be expanded into an additional 20 rural counties.

"We have taken steps to drastically change the standard of care in Oregon. Our goal is to institutionalize this approach in dental offices, so that no newborn child will have to suffer the pain of tooth decay as they grow up."

— Michael Shirtcliff

Vermont: Expanding Tooth Tutor, a Successful Dental Home Program

From its inception as a pilot project in 1997, the Tooth Tutor program has emerged as the central conduit to provide Vermont's children with access to a dental home. The need for such a program in Vermont was made obvious by the fact that 30 percent of children, many from families on Medicaid, did not have a regular dental home. In addition, these children, typically in grades one-three, experienced the highest rates of primary and permanent tooth decay in the state – approximately 80 percent of all cases.[24]

The Tooth Tutor concept was based on the Washington State ABCD dental home program, in which Medicaid newborns,

infants, toddlers, and preschoolers are matched with local dentists. Vermont adapted that model to reach school-age children, in kindergarten through sixth grade, by contracting with a dental hygienist to coordinate oral health education and prevention activities and oversee referrals to dental homes. Although Tooth Tutor is aimed at all children, regardless of socioeconomic status, many of those who benefit come from families who are on Dr. Dynasaur, the state's Medicaid program for pregnant women and children up to age 18.

In the program, schools contract with a local dental hygienist, whom they select from a list provided by the Vermont Department of Health, Dental Services. The hygienist is paid for by EPSDT. Working closely with the school's principal, nurse, and teachers, the dental hygienist develops an oral health prevention curriculum and provides classroom instruction on topics such as proper brushing and flossing, the link between oral health and the students' total health, and the importance of regular dental check-ups. The hygienist also screens students for cavities, tooth decay, and other conditions, meets with parents to discuss the child's dental health, and places the family in a community dental practice – the dental home – for the student's routine examinations and treatment. Dental hygienists have become the foundation of the Tooth Tutor program, and have served as advocates for the promotion of the children's oral health care as well as for the sustainability of the program.

Tooth Tutor is now a statewide program, due in large part to SAOHA funding, and has made significant progress in reaching out to children and linking them with a dental home. The program's success makes it easier to get continued funding, primarily through EPSDT Medicaid matches, to sustain the program and to expand into new districts. Since its inception, the program has doubled the number of participating schools, increasing from 60 schools in 1997 to 120 (45 percent of the state's 264 elementary schools) in 2006. In addition, more than 92 percent of the students targeted by Tooth Tutor have a dental home and 91 percent of those children are visiting the dentist regularly. Given these marked improvements in oral health access, the state has recommended the continuation and expansion of the program.

Enhancing Consumer and Provider Education

The practice of social marketing, the goal of which is to induce a significant behavioral change by the target audiences, has found currency in the health professions. Rather than simply lead with a strategy and hope that particular audiences act accordingly, organizations that practice social marketing inform their approach and develop their messages from the ground up – at first listening to and then integrating critical input from whom they ultimately seek to motivate. Among the SAOHA grantees, three states – Vermont, South Carolina, and Arizona – conducted effective social marketing campaigns, achieving significant results in reaching their desired audiences and, even more importantly, effecting real changes in behavior. Two of these states, Vermont and South Carolina, were recognized by Oral Health America, in its 2005 *A for Effort* report card, for changing perceptions of oral health.[25]

Vermont: Fostering Oral Health Awareness through Dr. Dynasaur

Vermont was cited by Oral Health America for crafting a social marketing campaign – "Smile Vermont" – aimed at families in the state's Medicaid dental insurance program, Dr. Dynasaur. The campaign focused on building increased awareness of preventive dental practices for children, motivating calls for an oral health information packet, and encouraging families with children on Dr. Dynasaur to participate in their school's Tooth Tutor program and schedule an appointment with a dentist. The campaign had a clear, simple message – "visit your dentist every six months" – and communicated it across a variety of media (print ads, television ads, and radio ads) as well as through an 800 number to call and a website to access for more information on oral health prevention.

To guide the social marketing campaign, Vermont conducted six focus groups with Dr. Dynasaur parents and caregivers to more deeply understand their beliefs, attitudes, and behaviors around oral health care, learn about specific barriers they have to seeking and keeping dental appointments, and find out how and where they prefer to receive information. Among the key findings from the groups were:

- Parents and caregivers may not be able to define good oral health care for children, especially if they never had it.
- Parents and caregivers believe they and their children are discriminated against, provided substandard care, and are stigmatized because they are members of the publicly financed Dr. Dynasaur program.
- Multiple factors negatively affect making and keeping appointments including: lack of knowledge, difficulty finding a provider, inconvenient appointment times, long travel distances, unreliable transportation, fear of unexpected costs, concern about perceived mistreatment, and family crises.
- Many parents and caregivers are unaware of what is covered, what is not, how to resolve problems, or what support services are available to them.
- Most parents and caregivers feel they have no choice of provider, because there is only one accepting new Medicaid patients.

Following the focus groups, Vermont, along with a communications firm it engaged for the campaign, synthesized the findings, crafted the unifying message stressing the importance of regular dental check-ups, and, in June 2004 launched a three-month paid media campaign on cable television, local radio stations, and in community newspapers. In addition, the state opened the 800 number and website for parents who sought information on dental health, and created family events, such as ice skating and bowling parties, to further disseminate the message. Vermont resumed the campaign in January 2005 and concluded its efforts in December of that year.

What Vermont learned from the campaign was that the advertisements, though well-done and run consistently, did not alone affect a behavioral change from the parents. Rather, it was the vehicles that promoted direct interaction with the state and dentists – the toll-free hotline, the website, and the family events – that impelled parents to learn more about preventive dental care for their children and make appointments with dentists. According to the "Smile Vermont" post-campaign survey, parents who called the hotline, visited the website, or attended an event were more likely – 99 percent of the time – to say they were knowledgeable about the importance of a dental visit every

six months; cleaning teeth when the first tooth appears; not giving children a bottle in bed; talking to the dentist about sealants; and using mouth guards when playing sports.[26]

South Carolina: Building Bridges Through Community Outreach

South Carolina's social marketing campaign illustrates the power of forging a sustained alliance with a vital, trusted, and enduring institution in a community to effectively articulate important messages. In designing its outreach campaign, the South Carolina Department of Health and Environmental Control recognized the powerful role played by the African Methodist Episcopal (AME) church in many rural areas of the state and forged a partnership with that organization to provide lay oral health education in those communities. The outreach effort, which began in 2003 and has been implemented in the six target counties as well as in several additional counties, was awarded an "A" by Oral Health America in its report card.

Driving DHEC's efforts were the patient navigators, who conducted dental health education sessions with more than 110 congregations, through venues such as vacation bible schools, church youth events, summer meal programs, and dental health fairs. At the events, dental hygienists and dentists volunteered their time to conduct screenings for children, after which the patient navigator worked with parents who received referrals to ensure that the appointments were scheduled and kept. More than 85 percent of the families kept their scheduled appointments. In addition, DHEC created a Building Bridges oral health toolkit, containing basic oral health information, dental care tips for parents and children, an animal puppet with tooth brushing instructions, and activity sheets for kids, which patient navigators distributed at the events.

Along with working directly with pastors of the AME congregations, DHEC linked with the church's Women's Missionary Society (WMS), co-sponsoring a Dental Health Summit for 125 of its members in 2005. At the Summit, DHEC and AME officials discussed the importance of oral health as part of a child's total health and provided the WMS participants with the Building Bridges toolkit as well as a lay oral health curriculum. Following the Summit, the WMS used the curriculum to integrate oral health care into health fairs, school rallies, prenatal classes, church school conventions, and at child care centers. At one child care center, each child was given a dental health plan to take home and complete with their parents. The center reported that more than two-thirds of the children returned the plans.

Conclusion

Given the incidence of oral health diseases in low-income and minority Americans, Medicaid can and should do better. The six SAOHA grantees offer promising strategies to help other states develop comprehensive oral health solutions. As we look forward to the changing oral health clinical and political landscape, state Medicaid and public health programs should consider the following:

- How can states apply chronic disease management principles, such as risk-assessment, targeted risk-based interventions, and evidence-based guidelines to oral health care?
- How can states use data to better assess risk and treatment needs?
- How will states tailor oral health benefit packages and co-payments as a result of the Deficit Reduction Act of 2006?[27]
- Will states use more comprehensive measures to evaluate the impact of programs on access, quality, and efficiency of care?

Medicaid programs have begun to embrace the idea of becoming better purchasers of dental services and better supporters of a more holistic view of primary care; however, as the science of oral health advances, so too must state Medicaid programs. Oral health research is redefining caries as an infectious, transmittable, as well as a complex, chronic disease. Managing chronic disease requires an enhanced approach to care delivery – one focused on better assessing risk, developing targeted risk-based interventions, and developing and adhering to evidence-based practices. Strategic approaches, informed by an extensive focus on data, can help purchasers better identify and target interventions and better measure outcomes.

Medicaid can transform itself into being a leader of purchasing and delivering high quality oral health care. To do so, it must embrace the problem, implement new programs, and measure results. In doing so, Medicaid can succeed in eliminating disparities in oral health care and improve the lives of millions of Americans.

Endnotes

1 U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*, 2000.

2 Ibid.

3 Crall J, Szlyk CI, and Schneider, D. "Pediatric Oral Health Performance Measurement: Current Capabilities and Future Direction." *Journal of Public Health Dentistry*. 59(3):136-41, Summer 1999.

4 Pierce KM, Rozier RG, and Vann WR Jr. "Accuracy of Pediatric Primary Care Providers' Screening and Referral for Early Childhood Caries." *Pediatrics* 2002;109(5). Available at: http//www.pediatrics.org/cgi/content/full/109/5/e82.

5 Rhode Island Department of Human Services. Closing the Gap: *Improving Access to Dental Care in Rhode Island,* 2006.

6 Arizona Department of Health Services, Office of Oral Health. *Evaluating Managed Care Performance: Arizona's Approach*, May 2005.

7 Interview with Denis Barton, Director, Office of Rural Health and Primary Care, Vermont Department of Health, April 17, 2006.

8 Vermont Department of Oral Health. *Dental Survey Report*, December 2005.

9 Crall J. Children's Dental Health Project. Pediatric Oral Health Interface Background Paper: Delivery System and Financing Issues. 2003.

10 Gordon D. *Where Have All the Dentists Gone*. National Conference of State Legislatures Rural Health Brief, April 2004. www.ncsl.org/programs/health/ruraldent.htm.

11 *Oral Health Care: Can Access to Services be Improved?* Center On an Aging Society Issue Brief, Number 6. Georgetown University, Washington, DC, April 2004. ihcrp.georgetown.edu/agingsociety/pubhtml/oralhealth/oralhealth.html.

12 Commonwealth of Pennsylvania Department of Health. *Oral Health Strategic Plan for Pennsylvania*, November 2002.

13 Interview with Howard Tolchinsky, State Public Health Dentist, Pennsylvania, March 6, 2006.

14 Ali MY and Lala R. *South Carolina Oral Health Needs Assessment*, 2003. South Carolina Department of Health and Environmental Control. www.scdhec.net/health/mch/oral/docs/burden.pdf.

15 Arizona Department of Health Services, Division of Public Health Services. *Health Arizona 2010 Program: Collaborating for a Healthier Future*, March 2001. www.azdhs.gov/phs/healthyaz2010/frntprt.pdf.

16 State of Arizona. HB2194. 2003.

17 The Commonwealth Fund. *Gaps in Health Insurance: An All-American Problem*, Biennial Health Insurance Survey, April 2006.

18 Rhode Island Department of Human Services. *Closing the Gap: Improving Access to Dental Care in Rhode Island,* 2006.

19 Ali, op.cit.

20 American Academy of Pediatrics, Medical Home Initiatives for Children with Special Needs Project Advisory Committee. "The Medical Home." *Pediatrics*. 2002;110:184-186.

21 American Academy of Pediatrics. *Policy Statement*. Volume III, Number 5. Pp: 1113-1116, May 2003.

22 Savage MF, Lee JY, Kotch JB, and Vann, WF Jr. "Early Preventive Dental Visits: Effects on Subsequent Utilization and Costs." *Pediatrics* 2004: 114: 418-423.

23 Oregon Department of Human Services. Oral (Dental Health) Program. *Dental Sealants*. www.oregon.gov/DHS/ph/oralhealth/programs/sealants.shtml. Accessed March 31, 2006.

24 Association of State and Territorial Dental Directors. Dental Public Health Activities and Practices. *Tooth Tutor Dental Access Program*. www.astdd.org/bestpractices/pdf/DES51001VTtoothtutor.pdf. Accessed April 5, 2006.

25 Oral Health America. *A for Effort: Making the Grade in Oral Health*, February 2005.

26 Vermont Department of Health. *A Post-Campaign Survey of the Oral Health Knowledge, Attitudes, Behaviors and Beliefs of Vermont Parents,* 2005.

27 Public Law No: 109-171.

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