

INCREASING ACCESS TO DENTAL CARE  
IN MEDICAID: TARGETED PROGRAMS FOR  
FOUR POPULATIONS

*Andrew Snyder*

MARCH 2009

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## EXECUTIVE SUMMARY

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Poor access to oral health care and low utilization of oral health services by publicly-insured people have been persistent problems that states and their Medicaid programs have grappled with for decades. However, there are groups of Medicaid enrollees – such as young children, pregnant women, people with developmental disabilities, and people living in rural areas – who face particular oral health challenges. These populations can benefit from interventions targeted specifically at their needs. This policy briefing, which is drawn from a literature review and interviews with stakeholders across the country, describes strategies that several states have used to better address the oral health needs of these groups by doing the following:<sup>1</sup>

- *Enhancing the training of dental professionals:* Dental education often does not adequately train dental students to meet the needs of pregnant women, young children, and people with developmental disabilities, which affects practicing dentists' confidence and willingness to care for these patients. States can use Medicaid's financial levers to complement dental education – for example, by tying providers' eligibility for incentive payments to participation in additional training on ways to manage the needs of people with developmental disabilities..
- *Broadening service delivery sites:* Dental offices are not the only place that oral health services can be provided. Some oral health services, particularly preventive services, can be provided in settings that are closer to where people live, work, and learn. Medicaid programs in more than half of states are using pediatricians' and family physicians' offices – which children utilize earlier and more often than dentists' offices – to provide basic oral health services. States such as Oregon are even experimenting with using WIC offices and having dental hygiene students visit pregnant women and new mothers to provide counseling, oral health education, and supplies.
- *Enhancing state contracts:* Medicaid managed care organizations have flexibility that fee-for-service Medicaid programs often do not, including the ability to negotiate payment arrangements for specialty services and to provide payment for services (such as oral health supplies) that would not ordinarily be reimbursable through Medicaid. States can also negotiate contract provisions that require their dental managed care contractors to ensure that network providers receive supplemental education.
- *Using existing safety net pathways:* States can make investments to foster the development of Federally Qualified Health Centers, community clinics that are obligated to provide care to underserved communities. These clinics can access enhanced reimbursements under Medicaid, without the need for legislative action to raise payment rates.

Targeted interventions represent an achievable step that can be made in a difficult fiscal environment. The programs are limited in scope, which contains their total cost. They are also aimed toward populations that are recognized as being of specific concern to policymakers, which can make the programs easier to build legislative and executive branch consensus around. If a state can't achieve comprehensive reform in one leap, targeted interventions can be effective incremental steps along the way.

What follows is a brief description of the oral health challenges faced by young children, pregnant women, people with developmental disabilities, and people in rural areas, and the responses of six states to those challenges. This study, funded by the California HealthCare Foundation, also examines ways that California's active and engaged state agencies (including Denti-Cal, the state's Medicaid dental program), dental association, and universities have explored these issues, and further steps the state might take to build on its efforts.

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## YOUNG CHILDREN

Even though the American Academy of Pediatric Dentistry's guidelines recommend that children be seen by a dentist by their first birthday, only 25.1 percent of children under six years of age saw a dentist in 2004.<sup>2</sup> This is attributable to several factors, including the scarcity of pediatric dental specialists --who account for less than three percent of all practicing dentists -- as well as the limited instruction that general dentists receive in methods for managing young children. Intervention during young childhood is important because cavity-causing bacteria can be established in an infant's mouth by the time his or her first tooth erupts -- between nine months and one year of age. For children at high risk of oral disease, this infection can quickly progress into rampant decay that can destroy a child's primary teeth soon after they emerge. Healthy baby teeth are crucial for children to make the transition from milk to solid food, for developing speech, and for the proper emergence of permanent teeth. Moreover, decay in primary teeth, particularly in molars (back teeth), is a predictor of decay in permanent teeth, because oral bacteria persist in the mouth as permanent teeth grow in.<sup>3</sup> Providing appropriate and timely preventive care can help eliminate unnecessary pain and avert future disease.

- **North Carolina's *Into the Mouths of Babes*** early prevention program for children under age three developed out of a local recognition that infants and toddlers received care in the medical office far earlier and far more often than in the dental office. This insight has developed into a multi-pronged effort to train physicians to identify the signs of oral disease, provide oral health education and preventive services like fluoride varnish, and provide appropriate referrals of children with treatment needs to dentists. The program moved from a pilot in the state's Appalachian region to a statewide initiative with the introduction of Medicaid reimbursement. Medicaid pays \$54 per visit for up to six visits, up to age three and a half. The number of children served by *Into the Mouths of Babes* has grown impressively, from 8,300 in 2001, to more than 57,000 in 2007.<sup>4</sup> Preliminary data shows reductions in treatment-related expenditures (such as fillings) in front teeth for children receiving four or more *Into the Mouths of Babes* visits.<sup>5</sup> The state's strong partnership between Medicaid, public health, providers, academics, and community organizations continues to build on the state's successes by refining methods for identifying children at highest risk and enhancing physicians' ability to make successful referrals to dentists for those children.
- **Rhode Island's *Rlte Smiles*** program involves a specialized dental managed care contract to pay enhanced rates for services to enrolled children, recruit more private dentists to care for them, and train those dentists in techniques for managing young children. Because the state's budget picture did not allow for the program to be introduced at the same time for all children, it focused on children born after May 1, 2000. To finance it, the state has rebalanced the funds in its dental budget -- for example, tightening its criteria for coverage of orthodontic services. . In its first year of operation, participation among dentists has grown from 27 to 217 dentists (out of about 500 in the state), and use of services among *Rlte Smiles*-enrolled children has increased, particularly among the oldest children in the cohort.<sup>6</sup> Using a phased-in approach, the state is hoping to gradually expand this enhanced coverage to all of its Medicaid-enrolled children.

## PREGNANT WOMEN

Mothers are the primary route of transmission of the bacteria that cause cavities to children (usually through actions that involve the mother's saliva, like sharing a spoon for tasting baby food). Providing dental care to pregnant women therefore presents a way to reduce their children's risk of dental disease, both by reducing the risk of transmission and by teaching mothers good oral health habits that they can

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pass to family members.<sup>7</sup> Moreover, a growing body of research suggests a link between untreated gum disease and adverse birth outcomes such as preterm birth or low birth weight.<sup>8</sup> Despite disagreement in the research community regarding the extent and even the existence of this “perio-systemic” link, state Medicaid programs have begun to focus on dental coverage for their pregnant enrollees because of the potential for savings. An eighth of all births are low-birth weight or pre-term, and Medicaid pays for 42 percent of these. Pre-term births cost an average of \$65,000, and low-birth weight children are at an increased risk for conditions such as cerebral palsy and mental retardation.<sup>9</sup> If treating oral infections reduces the number of pre-term or low-birth weight deliveries even by a small percentage, there is potential for states to enjoy cost savings immediately and avert future medical expenditures.

A WIC-based pilot program in Klamath County, **Oregon**, hopes to show that providing intensive dental care and oral health education to pregnant women and new mothers will result in improved health status for their children by improving oral health literacy and intervening in the primary route that cavity-causing bacteria are transmitted to children. Two state Medicaid dental managed care contractors are paying for the innovative program, including coverage of items not ordinarily paid for by Medicaid, such as toothbrushes, toothpaste, and floss. Students from a dental hygiene training program bring training materials and oral health supplies on three home visits to pregnant women and new mothers and arrange for the women to receive preventive services at the program’s hygiene clinic. Women with identified treatment needs are referred to dentists in the managed care plans’ networks to receive services geared toward eliminating active “reservoirs of disease.” Between 2004 and 2006, 503 women in the county were identified as pregnant and eligible for Medicaid coverage. Of these, 339 received home visits and 235 received services at the dental hygiene program or dental offices, a large improvement from the 8.8 percent of Medicaid-enrolled pregnant women statewide who accessed dental care in 2001. Preliminary data show a positive impact on the oral health of the children in the county, and a larger experiment to confirm these findings is underway in four more counties.<sup>10</sup>

## PEOPLE WITH DEVELOPMENTAL DISABILITIES

People with developmental disabilities suffer more dental disease than non-disabled people. They have more missing teeth, and encounter even more difficulty in locating dental care than other segments of the Medicaid population. Additionally, people with severe developmental disabilities often cannot accurately express when they are experiencing dental pain or discomfort. Caregivers may not be able to make a connection between signs of distress such as not eating or fighting and an unmet dental need. There is an extremely limited pool of dentists who specialize in “special care” dentistry for people with disabilities, even including pediatric dentists, the small number of geriatric dentists, and dentists who provide services in hospitals.<sup>11</sup> Providing dental care to people with developmental disabilities requires extra time and special management skills that general dentists are not required to develop.

- **New Mexico** has built a corps of community dentists who are specially trained to provide the more involved and time-intensive care that people with developmental disabilities need. Its *Special Needs Code* program provides an enhanced payment of \$97 per dental visit to dentists completing on-line study and in-person training with special care dentists. Since the program’s inception in 1995, the state has developed a small but dedicated corps of 40 dentists who have completed Special Needs Code training. Over the course of the program, over 37,000 patient visits have been supplemented by the Special Needs Code. In state fiscal year 2006, three thousand people with developmental disabilities made more than 6,100 visits to dental offices.<sup>12</sup>
- In **Pennsylvania**, Medicaid managed care organizations are contracting with a specialized dental practice to provide dental care to people with severe disabilities who require sedation or general

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anesthesia. This practice, called Special Smiles, Ltd., negotiated with the four Medicaid managed care organizations operating in southeastern Pennsylvania for a “global budgeting” arrangement, in which the managed care organizations pay a fixed rate for the dentists to see about 1,000 patients per year in an operating room setting. Since the program began in 2001, more than 5,000 full mouth rehabilitations have been performed.<sup>13</sup> In fee-for-service areas of the state, a new pay-for-performance program provides financial incentives for dentists to provide dental disease management to pregnant women, young children, and people with chronic conditions.<sup>14</sup>

## PEOPLE IN RURAL AREAS

People in rural areas have significantly poorer oral health than non-rural residents – with higher rates of untreated dental decay, lower frequency of visits to dentists, and higher probability of having lost all their natural teeth. Rural areas are less likely to be on community water systems, and therefore less likely to have access to water fluoridation, one of the major public health tools to prevent tooth decay. They are older, have poorer overall health status, and have higher rates of poverty. Rural residents have further to travel for care, which may be compounded by a lack of public transportation. Practitioners graduating from dental school are not choosing to locate in rural areas, instead concentrating in urban and suburban areas. A report of the National Rural Health Association found that of “the approximately 150,000 general dentists in practice in the United States, only 14 percent practice in rural areas. [...] Similarly, there were 2,235 federally designated dental supply shortage areas, 74 percent of which were located in non-metropolitan areas in 2003.”<sup>15</sup>

- **Wisconsin** is using relatively modest direct budget appropriations (\$632,000) to build up Federally Qualified Health Centers in rural northern areas of the state. The Medicaid cost-based reimbursements that these clinics have access to help sustain large group practices that increase Medicaid enrollees’ use of care and brings that care closer to home. Dental use among Medicaid-enrolled patients from Rusk County (population: 15, 347), where the 17-chair Ladysmith Dental Clinic opened in November 2002, has risen to almost 40 percent, compared to a statewide rate of less than 25 percent in 2003. The improvement is particularly marked for adolescents, where service utilization has been above 50 percent for the last three years. This model is being replicated in half a dozen communities across northern Wisconsin.<sup>16</sup>

## HOW DOES CALIFORNIA COMPARE?

California faces challenges similar to many other states in providing dental care to the groups of underserved citizens profiled here. A 2002 survey by the Rural Health Research Center at the University of Washington found that rural areas of California had a ratio of 35 dentists per 100,000 population (compared to 47 per 100,000 in urban California), which placed the state 19<sup>th</sup> in the nation.<sup>17</sup> Among pregnant women, the recent California HealthCare Foundation “Denti-Cal Facts and Figures” report found that less than 20 percent of Denti-Cal-enrolled pregnant women utilized dental services in 2004.<sup>18</sup>

The state is well-poised, however, to make targeted investments in interventions for these populations of interest. There are already a variety of efforts operating or in development by California’s state agencies, universities, and communities that could be built upon, using promising models from across other states. Examples include:

- The Healthy Kids, Healthy Teeth pilot program in Alameda County seeks to improve dental use among young children enrolled in Denti-Cal (the state’s Medicaid dental program) by training general dentists to provide that care.



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- The California Dental Association Foundation has grant funding to develop clinical guidelines for the dental treatment of pregnant women.
  - The California Statewide Taskforce on Oral Health for People with Disabilities and Aging Californians and the California Dental Association have been working to introduce a program modeled on New Mexico's Special Needs Code.
  - The Managed Risk Medical Insurance Board (MRMIB) uses its Rural Health Demonstration Projects to fund a variety of dental enhancement projects, including mobile dental vans, placement of additional providers in rural areas, and funding to extend clinic hours to nights and weekends.

It is important to note that many of the state programs described here are possible because the states chose to provide a comprehensive Medicaid adult dental benefit. Greg Nycz, Executive Director of the Family Health Center dental clinics in Wisconsin, says, "Our chance of being successful [in addressing the oral health needs of rural communities] is greatly enhanced by Wisconsin's commitment to providing adult dental services in their Medicaid program. Without it, the resource requirements for serving the uninsured low-income population would grow considerably, severely limiting our progress."

As of this writing, it appears that California's adult dental benefit is once again in jeopardy of elimination<sup>19</sup>. Adult dental benefits can serve as a foundation for targeted interventions, particularly for low-income pregnant women, rural adults, and adults with developmental disabilities, who would otherwise be unable to afford care. Particularly for pregnant women and new mothers, access to oral health services is crucial for the future oral health of their children.

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## INTRODUCTION

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Poor access to oral health care and low use of oral health services by publicly-insured people have been persistent problems that states and their Medicaid programs have grappled with for decades. This is a blanket statement, reflective of a widely recognized problem – that the low-income population carries the highest burden of oral disease and has the least ability to receive care when and where they need it. It is important to consider, however, that within the blanket observation that “access to care for Medicaid enrollees needs improvement,” there are discrete groups of Medicaid enrollees who face particular oral health challenges, and who can benefit from interventions that are targeted specifically to their needs. This policy briefing, which is drawn from a literature review and interviews with stakeholders across the country, describes strategies that several states have used to better address the oral health needs of particular groups of Medicaid enrollees, including very young children, pregnant women, people with developmental disabilities, and people living in rural areas.

Targeted interventions represent an achievable step that can be made in a difficult fiscal environment. The programs are limited in scope, which contains their total cost. They are also aimed toward populations that are recognized as being of specific concern to policymakers, which can make the programs easier to build legislative and executive branch consensus around. If a state can’t achieve comprehensive reform in one leap, targeted interventions can be effective incremental steps along the way.

There are also solid policy reasons for crafting interventions that specifically try to improve access to dental care – and, in some cases, to provide specialized modalities of care – for each of the groups that this paper examines. Part of the reason is that there is a growing body of evidence that dental interventions may result in improved overall health outcomes for groups like pregnant women. Perhaps even more importantly, these groups have specialized needs that don’t always mesh well with the standard private dental care delivery system.

- The standard system anticipates twice-yearly visits to the dental office for checkups and cleanings; for young children at high risk of Early Childhood Caries – rampant tooth decay that can destroy a child’s primary teeth by age 3 – preventive services are needed earlier and more often.
- Dental education often provides graduating dentists with little or no experience in managing the care of people with complex health needs. This means that most practicing dentists – most of whom are general dentists – are not equipped with the knowledge, skills, and facilities to feel comfortable treating people with disabilities, children under age five, or pregnant women. Similarly, there is a shortage of specialists who are equipped to handle complex patients.
- Treatment plans for dental restorative services (e.g., fillings) often involve a series of appointments spaced out over a span of weeks or months. Pregnant women – whose Medicaid enrollment may expire shortly after the birth of their children – may lose coverage for dental services partway through treatment, resulting in uncertainty and frustration for both provider and patient.
- The economics and demographics of dentistry, like many other health professions, have led to a “geographic maldistribution” in which dentists and affiliated oral health providers are concentrated in urban and suburban areas, leaving residents of rural areas in situations where they must sometimes travel hundreds of miles to locate care.

These structural barriers can be ameliorated by overall reforms, such as those undertaken by states like Alabama and Tennessee (both profiled in a previous NASHP report on Medicaid dental programs) but overcoming the barriers specific to these groups requires more.<sup>20</sup> It requires building support among a core of providers (both dental and medical) willing to address the oral health needs of these populations,

and building infrastructure that sustains that support – education for dentists and physicians on identifying the early signs of tooth decay and providing appropriate preventive services, networks of providers willing to take referrals of complex cases, and funding to make providing this specialized care economically feasible for the practice.

This report will briefly examine the particular oral health needs facing each of the identified groups – young children, pregnant women, people with developmental disabilities, and people in rural areas – and discuss financing strategies that states such as New Mexico, North Carolina, and Wisconsin have used to respond to those needs. Each section will also include a discussion of ways that California’s active and engaged state agencies (including Denti-Cal, the state’s Medicaid dental program), dental association, and universities have explored these issues. While it is difficult to capture all of the activities happening in a large, diverse state such as California, the report will highlight activities that are reflective of the lessons learned in other states.

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## YOUNG CHILDREN

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Cavity-causing bacteria can be established in an infant's mouth by the time his or her first tooth erupts – between nine months and one year of age. For children at high risk of oral disease, this infection can quickly progress into the condition known as Early Childhood Caries (ECC). Formerly known as “bottle rot” or “baby bottle tooth decay,” ECC is characterized by rampant decay that can totally destroy a child's primary teeth as they emerge. Early detection is crucial to preventing the disease from reaching this stage of severity, but access to dental care is very limited for young children, especially those in low-income families, resulting in many children who are highly susceptible to ECC missing opportunities for early diagnosis. In 2004, only 25.1 percent of children under six years of age saw a dentist.<sup>21</sup>

Even though the American Academy of Pediatric Dentistry has issued guidelines recommending that a child be seen by a dentist by age one, there are significant barriers to implementing this recommendation, particularly for Medicaid-enrolled children. There is a very limited pool of dentists specially trained to treat young children – pediatric dentists accounted for less than three percent of dentists in 2001 – and general dentists, who make up 80 percent of practicing dentists, are often not well equipped to provide care to this population.<sup>22</sup> General dentistry curriculum has traditionally contained very little information on how to manage young children in the dental office. This lack of training has reinforced a practice pattern among providers to defer treatment of young children until a time when children can sit still and comply with instructions – usually, at age three or later, after all of their primary teeth have erupted. This problem has been exacerbated by beliefs among some families and cultural groups that primary teeth are unimportant (and thus, taking young children to the dentist is unimportant) because “baby teeth fall out.”<sup>23</sup>

Primary teeth, however, are important to lifetime oral health and overall child development. Primary teeth hold space in the mouth for the permanent teeth that will emerge as a child ages. Losing baby teeth prematurely can cause permanent teeth to come in crowded or crooked, which can result in worsened orthodontic problems in adolescence. Primary teeth are necessary for children to make the transition from milk to solid food and for developing speech. Moreover, decay in primary teeth, particularly in molars (back teeth), is a predictor of decay in permanent teeth, because oral bacteria persist in the mouth as permanent teeth grow in.<sup>24</sup> Providing appropriate, timely preventive care can help eliminate unnecessary pain and avert future disease.

### **NORTH CAROLINA'S RESPONSE – INTO THE MOUTHS OF BABES**

As of this writing, approximately half of state Medicaid programs reimburse physicians for applications of fluoride varnish – a form of topical fluoride that is easily and quickly painted onto teeth, and which can provide valuable protection if it is provided multiple times in a year.<sup>25</sup> These state policies are based on the pioneering efforts of North Carolina, where, more than a decade ago, the *Into the Mouths of Babes* program began. This program seeks to expand young children's access to early preventive oral health services by drawing on the capacity of the medical community to expand the number and types of locations where children can have contact with the oral health care system. Even though some facets of the program have been adopted by other states, North Carolina's strong partnerships and continued efforts to improve the program continue to teach new lessons about how to best implement such efforts and the results that states might expect from them.

*Into the Mouths of Babes* grew out of North Carolina's Appalachian Regional Consortium, which in 1996 identified oral health as the primary unmet need among young children in the area. One-third of kindergartners were identified as having untreated dental decay. The consortium sought a grant from the Ap-

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palachian Regional Commission to start a program that they called *Smart Smiles* (building on the state's *Smart Start* early childhood program) that employed a central program coordinator to build a network of pediatricians and family physicians, local health department clinics, and dental hygienists to provide limited oral health services to preschool children in low-income families. (In later years, additional funding for support and evaluation would come from a variety of sources, including the Health Resources and Services Administration, the Centers for Disease Control and Prevention, the National Institute for Dental and Craniofacial Research, and the Centers for Medicare and Medicaid Services.) The consortium decided to use physicians' offices for several reasons. The target children already had better levels of access to physicians than they did to dentists, and particularly pediatric dentists, in the mountain areas of the state. Local physicians in the area were engaged and willing to experiment with the project. The theory was that early prevention should avert later treatment needs and conserve scarce financial resources. And finally, as state dental director Dr. Rebecca King succinctly puts it, "It was the best idea anyone had."<sup>26</sup>

Working closely with consortium partners, including faculty at the University of North Carolina School of Dentistry and School of Public Health, the group designed a three-part program for physicians to evaluate children for signs of active dental disease, apply fluoride varnish, and provide families with basic oral health education. The plan began in the Appalachian region in 1999. However, the initial grant funding for the program prohibited funds being used to pay for direct service delivery, so Medicaid was identified as a natural funding stream for the program.

The case for this funding was hastened by a 1999 North Carolina Institute of Medicine report on Medicaid dental access that made a set of detailed recommendations to the legislature for program improvements. Those recommendations included a request for statewide funding through Medicaid of the three-part *Smart Smiles* program.<sup>27</sup>

State program staff noted two things about the Institute of Medicine (IOM) report that influenced the future shape of *Into the Mouths of Babes*. First, the IOM report had the strong support of the lieutenant governor, who helped to make the extra funding needed to implement Medicaid reimbursement a reality. Second, implementation of the program statewide was more desirable than a regional pilot program, since it meant that the state would not have to apply for a waiver from Medicaid rules about "statewideness."<sup>28</sup>

Reimbursement for a three-part bundle of services began in 2000 in the pilot area, and expanded statewide in 2001. Under current program rules, these services may be provided to a child up to six times before 42 months of age (the program is targeted at children under 3 years of age, but some leeway was included for children whose 3-year well-child visit doesn't happen right on time), and physicians are currently reimbursed \$54 for each visit. Stakeholders noted that this level of reimbursement, which is high compared to most other state Medicaid programs that reimburse for fluoride varnish application, was important to physicians' decisions to adopt the practice, as was having the central program coordinator who, along with staff from the Division of Medical Assistance and the state's Medicaid fiscal agent could provide assistance to staff who had to navigate billing and program administration.<sup>29</sup>

In the initial year of implementation, the program targeted the practices of physicians who already served a significant number of Medicaid enrollees, with the thought that those practices would find it easiest to integrate oral health activities into their practices. Since the program's inception, it has grown impressively, from just over 8,300 Medicaid-enrolled children receiving *Into the Mouths of Babes* services in state fiscal year 2001, to more than 57,000 in 2007. Total Medicaid spending on the program has increased commensurately, from \$350,000 in 2001 to \$4.2 million in 2007. The growth of the program is reflected in Chart 1 below.

More than 425 medical providers are currently providing Into the Mouths of Babes services, in almost every part of the state, and, when these are combined with the oral health services provided by dentists, more than 40 percent of Medicaid-enrolled children are receiving oral health services. While evaluations of the program cannot yet claim to show long-term cost-savings to the state, a review of 2001-2003 data by UNC researchers found that children receiving at least four visits had significantly reduced rates of caries-related treatment services in their

front teeth (which are usually affected first by Early Childhood Caries).<sup>30</sup> The hope is that as more data become available, there will be clearer evidence that the program's combination of education and preventive services provides long-term benefit to children and possible reductions in future restorative needs.

Early prevention is only one component of a comprehensive solution for access to dental care. North Carolina continues to push the development of such a comprehensive solution. Many children receiving Into the Mouths of Babes services still have active decay that requires treatment. Once those children are identified, it is important for physicians to be able to refer them to dentists who will address their treatment needs.

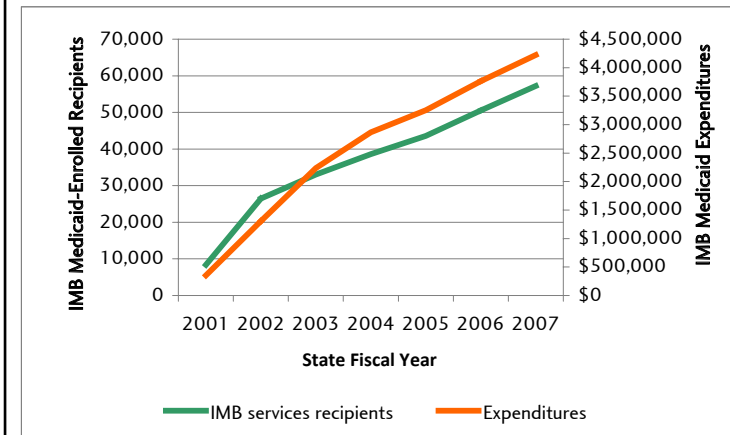
The state's grant-funded Carolina Dental Home project seeks to strengthen that referral bridge.<sup>31</sup> This project will also develop an improved risk-assessment tool that will help physicians to determine when to refer a child to a dentist. This will allow for the management of low-risk children in physician's offices or general practice dentists' offices, and conserve the scarce pool of pediatric dentists for children at highest risk, and those with active decay.

### **RHODE ISLAND'S RESPONSE – RITE SMILES**

The *Rite Smiles* program is a specialized dental managed care program designed to provide enhanced dental coverage to Medicaid-enrolled young children while not involving a large increase in Medicaid dental spending. It provides children born on or after May 1, 2000 with insurance coverage through United Healthcare Dental. Providers treating these children have access to higher reimbursement rates than in traditional Medicaid. The state anticipates that as these children grow up with better access to dental care, the savings from averted disease will help offset increased spending on preventive care. While the program currently covers children from birth to eight years of age, it is planned to expand along with this cohort of children, until eventually, the program covers all children. The program has just completed its second year of full implementation, and early data indicates that it has been successful attracting increased dentist participation and improving access for the targeted children.

*Rite Smiles* grew out of a 1999-2001 Special Senate Commission on Oral Health, chaired by Senator Elizabeth Roberts (now the state's lieutenant governor), which made twenty-two recommendations on improving access to oral health care, including recommendations to enhance Medicaid payment rates and streamline administration.<sup>32</sup> Additionally, state Medicaid staff were sensitive to feedback from enrollees

**Chart 1. Into the Mouths of Babes Spending and Utilization, 2001-2007**



Source: Testimony of Dr. Mark Casey, North Carolina Department of Health and Human Services, Division of Medical Assistance, to House of Representatives Domestic Policy Subcommittee, September 23, 2008.

of the state's successful Rlte Care medical insurance program that access to dental care was one of their most common unmet needs. The state Department of Human Services, Rhode Island KIDS Count, and the Rhode Island Foundation partnered in the Rhode Island Oral Health Access Project to obtain almost \$750,000 in grant funding from the Robert Wood Johnson Foundation's State Action for Oral Health Access project for assistance in planning and designing a dental managed care intervention to respond to these concerns.

These grant funds were used to hire a program coordinator, enhance the state's data analysis capabilities, and make mini-grants to safety net providers to enhance their oral health capacity in advance of the implementation of the full program.<sup>33</sup> The state sought a waiver from the Centers for Medicare and Medicaid Services to enroll the targeted cohort of young children in a separate managed care product. The type of waiver requested, a 1915(b) waiver, had to be designed to be cost-effective over the period of the program in order to gain federal approval, and an actuarial study conducted for the state identified three areas where it could redirect funds within the dental budget to pay for an enhanced benefit for young children:

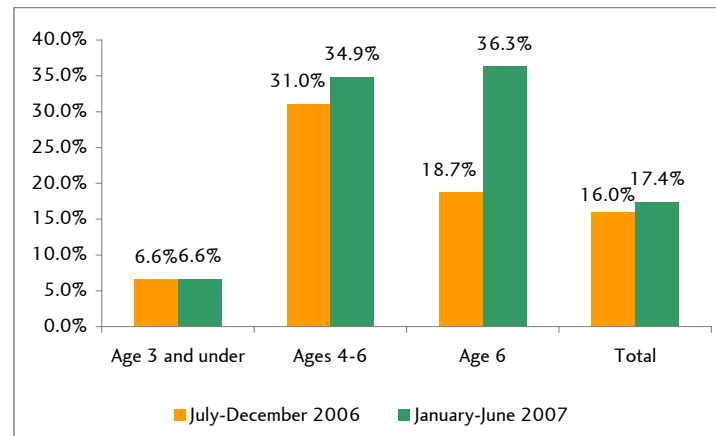
- First, state expenditure data projected a three-year trend of 20 percent expenditure growth per year under the current system (inclusive of the increased Medicaid claims from safety net providers receiving mini-grant funding). It was conservatively assumed that early prevention could avert at least some extractions, and thus result in a lower growth trend.
- Second, it was noted that young children on Medicaid were being seen more often by safety net providers like Federally Qualified Health Centers and hospital-based dental clinics than by private-practice dentists. Those safety net settings were eligible to receive enhanced Medicaid payments that raised the total cost of services; it was assumed that increasing reimbursement rates to a level approaching commercial payments would attract private dentists, and young children would shift to being seen in those settings.
- Third, orthodontic services were identified as an area of the program that could be realigned in order to free up additional funds for preventive care. The state moved to a stricter definition of "medically necessary" orthodontic care, using a formal scale for quantifying the extent of orthodontic problems (the HLD index, which is already used by Denti-Cal).<sup>34</sup>

The state's actuarial analysis arrived at monthly payments to United of about \$8 per member per month in the first year of the program, and about \$9 per member per month in the second year. Although this seems like a small amount, because it is spread across a population of young children – a significant portion of whom have low levels of accumulated need – it enabled United to establish provider reimbursement rates that roughly doubled the rates paid under the previous program.<sup>35</sup> This represented the first Medicaid reimbursement rate increase since 1992.<sup>36</sup>

United Healthcare assumed responsibility for claims payment, program administration, and provider and patient education in September 2006. Although state officials say additional data will need to be collected before the cost-effectiveness assumptions of the program can be assessed, their analysis of the first year reflects improvements in provider participation and access, especially for children at the older end of the Rlte Smiles cohort.<sup>37</sup> Recent data show that the number of "significant" providers (defined as providing more than \$1,000 in services yearly) has improved from 27 to 217 (out of approximately 550 licensed dentists in the state), including all of the state's pediatric dentists.<sup>38</sup> Chart 2 below shows the growth in the percentage of enrollees with a dental visit over the course of the implementation year. Gains were most marked for the oldest children in the cohort (age 6), where more than 36 percent of enrollees had a dental visit. Rates were much lower for the youngest children (ages 0 to 3), where only 6.6 percent of enrollees had a visit.

State officials plan to address this continuing low level of use among very young children through several methods. The state's contract with United requires increased outreach to providers and enrollees, particularly targeting the families of children who have not seen a dentist. The state is also funding mini-residencies to train general practice dentists in management of very young children, and is exploring ways to encourage increased oral health awareness among pediatricians and family physicians participating in Rlte Care managed care plans, which may include reimbursement for physician-applied fluoride varnish.

**Chart 2. Percentage of Rlte Smiles Enrollees with Any Dental Visit, During Fiscal Year of Implementation**



Source: J. Griffin and C. Payne, "Rlte Smiles Oral Health Indicators – Year One," MCH Evaluation, Inc., January 30, 2008. Note that Rlte Smiles began in September 2006.

### CALIFORNIA ACTIVITIES

The Denti-Cal program has experimented with a pilot program to train general practice dentists to treat young children, similar to Washington State's *Access to Baby and Child Dentistry* program. Since 2003, the *Healthy Kids, Healthy Teeth* (HKHT) program in Alameda County has provided enhanced reimbursement to providers completing the training and providing services to 0-to-5-year olds. While the number of program enrollees has been small (under 2,500), state officials report that utilization rate for these enrollees is substantially higher than for Alameda County Denti-Cal enrollees who are not in the program. The difference is particularly marked for the youngest children, with rates for HKHT-enrolled that eclipse those of non-enrolled children. Utilization was more than 50 percent for HKHT one-year olds, compared to less than 10 percent for non-enrolled children, and more than 40 percent for HKHT two-year-olds, compared to roughly 20 percent of non-enrollees.<sup>39</sup>

The California Dental Association Foundation also has a program to train general dentists to treat infants and young children, called the *Pediatric Oral Health Access Program*, that has a goal of providing increased access to 50,000 young children by 2010.<sup>40</sup> Expansion of the HKHT program might be a promising, low-cost method to improve access to dental care for young children.

With the goal of spreading oral health messages and preventive services in primary care settings, Medi-Cal began reimbursing physicians for fluoride varnish application in June 2006, with an additional effort in April 2007 to improve participation among Medi-Cal participating managed care plans. Payment under the fee-for-service Medi-Cal program is \$18 per application, with three applications allowable per year (managed care plans set their own reimbursement rates).<sup>41</sup>

As states continue to gain experience with physician-applied fluoride varnish reimbursement, there should be an increased ability to gauge the relative effects of reimbursement for these services, and whether additional reimbursement for family education and oral screening (as in the *Into the Mouths of Babies* bundle of services) result in improved outcomes, relative to fluoride-only programs.



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## PREGNANT WOMEN

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There are several reasons for states to focus on pregnant women as a target for an oral health intervention. It is already well established that mothers are the primary route of transmission of the bacteria that cause cavities to children, usually through actions that involve the mother's saliva, like sharing a spoon for tasting baby food. Providing dental care to pregnant women therefore presents a way to reduce their children's burden of dental disease, both by reducing the risk of transmission and by teaching the mother good oral health habits that she can spread among family members.<sup>42</sup> Moreover, there is a growing body of research that suggests a link between untreated gum disease and adverse birth outcomes. The hypothesis is that the bacteria involved in periodontal (gum) infections spread through the mother's body, releasing chemical signals that contribute to pre-term birth or low-birth weight. Even though there is still disagreement in the research community regarding the extent and even the existence of this "perio-systemic" link, state Medicaid programs have begun to focus on dental coverage for their pregnant enrollees because of the potential for state budget savings.<sup>43</sup> An eighth of all births are low-birth weight or pre-term, and Medicaid pays for 42 percent of these.<sup>44</sup> Pre-term births cost an average of \$65,000 and low-birth weight children are at an increased risk for conditions such as cerebral palsy and mental retardation.<sup>45</sup> If treating oral infections reduces the number of pre-term or low-birth weight deliveries even by a small percentage, there is potential for states to enjoy cost savings immediately and avert future medical expenditures.

However, there are significant structural barriers to improving access to dental care for pregnant women:

- Since Medicaid coverage for adult dental services is optional, many states choose to provide very limited coverage, or none at all. As of 2007, six states did not cover adult services, and an additional 16 covered only emergency services. Twenty-five states, including California, provided coverage to pregnant women for some periodontal services (typically, a procedure called "scaling and root planing," where debris, called calculus, is removed from the sides of the teeth above and below the gumline).<sup>46</sup>
- Many women gaining Medicaid eligibility through pregnancy only have insurance coverage for sixty days after delivery. (State income eligibility criteria for parents is often more restrictive than the federally-mandated coverage levels for pregnant women.) Pregnancy is a busy time for a woman in terms of pre-natal medical services and counseling that must be provided in a limited time, and women may not learn that they are pregnant (or seek Medicaid coverage) until they are several months into their pregnancy, further shortening the window for providing care. This doesn't mesh well with conventional dental practice, where even commercially-insured patients may experience waiting times of several weeks or even months before a routine appointment can be scheduled.
- There is longstanding reticence among dentists to treat pregnant women, because of inadequate training in managing patients during pregnancy, concerns about payment rates from insurers, lack of knowledge about the safety of providing treatment services to these women, and the fear of being held liable if there is an adverse pregnancy outcome.<sup>47</sup> Recent guidelines developed by New York's Department of Health reaffirm that providing care to pregnant women, particularly in the second trimester, is safe and essential for the oral health of the mother and her new baby.<sup>48</sup>

### **OREGON'S RESPONSE – KLAMATH MOTHERS AND INFANTS CAVITY PREVENTION INITIATIVE**

Oregon is conducting a small but innovative pilot program in rural Klamath County, focused on eliminating caries in two-year-olds by providing a different kind of care to Medicaid-enrolled pregnant women and new mothers.<sup>49</sup> The *Early Childhood Cavities Prevention* initiative has been operating since 2004 and was begun

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with the assistance of a three-year grant from the Robert Wood Johnson Foundation to the Oregon Public Health Division, Oral Health Program. The initiative coordinates the efforts of several public and private agencies that serve as points of contact between pregnant women and the state's health and human services systems. The county's WIC (Women, Infants, and Children) agency serves as the hub for the program, and a county-funded program coordinator based there recruits pregnant women into the program. During the initial contact, women are provided an oral health toolkit, including educational materials and supplies (a toothbrush, toothpaste, and dental floss).

Subsequent visits in the woman's home are provided by a dental hygiene student from the Oregon Institute of Technology (OIT) who provides further counseling and schedules a visit to the OIT dental hygiene clinic for an oral assessment and preventive services to reduce the severity of the woman's oral infection – prophylaxis (cleaning), fluoride application, and chlorhexidine mouthrinse, an antimicrobial agent that is intended to kill the bacteria in dental plaque.

Because Oregon provides dental benefits to adult pregnant women (as well as certain other adults), the OIT clinic was able to contract with Oregon Health Plan's (Medicaid) two dental managed care plans to receive a flat fee of \$38 for these services. The clinic's x-rays and assessments are passed on to network dentists, and women with treatment needs are scheduled for follow-up care.

The treatment services that are emphasized are those that reduce the chances for transmission of disease to children by eliminating “reservoirs of disease” in the mouth – extracting teeth that are very far-gone, and repairing those that have open cavities.<sup>50</sup> (Women in the program had, on average, eight decayed, missing or filled teeth, and an average of six untreated cavities.)

After delivery, women are provided xylitol gum (another antimicrobial agent) through the WIC office for six months, and follow-up case management visits are used to deliver additional toolkits at three intervals – six weeks, six months, and one year post-delivery – that provide the family with age-appropriate oral health education and supplies (fluoridated toothpaste, adult and child toothbrushes, and floss). Supplies like toothbrushes and xylitol gum are not typically reimbursable through Medicaid, because they are available over-the-counter, but they are paid for through a special arrangement with the dental managed care plans.

Between 2004 and 2006, 503 women in the county were identified as pregnant and eligible for Medicaid coverage. Of these, 339 received home visits and 235 received services at the dental hygiene program or dental offices, a large improvement from the 8.8 percent of Medicaid-enrolled pregnant women statewide who accessed dental care in 2001.<sup>51</sup> The University of Washington researchers who are evaluating the program say that preliminary data shows a positive impact on the oral health of the children in the county. A larger experiment to confirm these findings is just getting under way in four additional counties. The program represents a useful rethinking of how states can work with a variety of groups in the community to best treat dental disease like the chronic, transmissible disease that it is and lessen its impact on future generations of children.

## **CALIFORNIA ACTIVITIES**

As noted above, Denti-Cal provides comprehensive dental benefits to Medicaid-enrolled adults, including pregnant women, that are among the most comprehensive in the nation. Coverage for pregnant women under Denti-Cal is more comprehensive than many other states, even those such as Louisiana, which designed a coverage package particularly for pregnant women.<sup>52</sup>

There are two segments of pregnant women in the Medi-Cal population – those who are eligible for the full scope of benefits, and those who are eligible only for services directly related to their pregnancy. “Pregnancy-only” enrollees are pregnant women who do not meet Medicaid eligibility criteria. They receive a limited package of services including cleanings, fluoride applications, periodontal services, and emergency dental care – all of which are paid with state-only funding. “Full scope” pregnant women qualify for all Medicaid services, including more types of dental care, such as restorative care. Pregnant women are also exempt from the state’s \$1800 annual adult benefit limit for cleanings, fluoride applications, and periodontal services.<sup>53</sup> Still, the recent California HealthCare Foundation “Denti-Cal Facts and Figures” report found that less than 20 percent of Denti-Cal-enrolled pregnant women (counting both “full scope” and “pregnancy-only” enrollees) used services in 2004.<sup>54</sup>

The California HealthCare Foundation is also funding a California Dental Association Foundation project to develop – as New York did – clinical guidelines for the treatment of pregnant women in the dental office.<sup>55</sup> If projects such as the Klamath County demonstration prove to have long-term benefits, the broad oral health coverage for pregnant women in California would provide a good platform for designing a program that would be supportive of a mother-child approach to managing dental disease by breaking the cycle of transmission.

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## PEOPLE WITH DEVELOPMENTAL DISABILITIES

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Of the four targeted populations in this study, the oral health challenges facing people with developmental disabilities are the steepest and most complex. People with developmental disabilities suffer more dental disease than non-disabled people. They also have more missing teeth, and encounter even more difficulty in locating dental care than other segments of the Medicaid population. People with developmental disabilities, as well as people in long-term care, can suffer oral problems that are exacerbated by complex pharmaceutical regimens.<sup>56</sup> Additionally, people with severe developmental disabilities often cannot accurately express when they are experiencing dental pain or discomfort. Caregivers may not be able to make a connection between signs of distress like not eating or fighting, and an unmet dental need. When a need is identified, many people with developmental disabilities have difficulty with the high level of compliance expected of dental patients – staying still in the dental chair, responding to directions, and allowing providers to work inside their mouths.

Dr. Ray Lyons from the Los Lunas Community Program in New Mexico summarizes the situation in this way: “Clinical dental treatment is the most exacting and demanding medical procedure that [people with developmental disabilities] must undergo on a regular basis throughout their lifetimes. Dental treatment is basically surgical in nature and places sharp instruments in intimate proximity to the face, airway and highly vascularized and innervated oral soft tissues.”<sup>57</sup>

There is an extremely limited pool of dentists who specialize in “special care” dentistry for people with developmental disabilities, even including pediatric dentists and the small numbers of geriatric dentists and dentists who provide services in hospitals. Providing dental care to people with developmental disabilities requires extra time and special management skills that general dentists are not required to develop in the course of their education. The American Dental Association’s Commission on Dental Accreditation requires that “Graduates [of accredited dental schools] must be competent in assessing the *treatment needs* of patients with special needs,” (emphasis added) but not that graduates be competent in the special techniques required to provide care to those patients.<sup>58</sup> Additionally, treating people with developmental disabilities may require specialized equipment, such as chair lifts for patients in wheelchairs, that most private-practice dental offices do not have. Hospitals are a frequent source of care for people with developmental disabilities, but hospital-based dentistry requires patients to be placed under general anesthesia. This entails additional risks, which are heightened for people with developmental disabilities because of their medical complexity.

The movement toward caring for people with developmental disabilities in home- and community-based settings, and away from placements in state-run institutions, is a further complication. While there are many benefits to home- and community-based placements, the poor state of access to dental care for Medicaid enrollees often means that they are moving from a setting where the state was required to provide care (often provided by state-employed dentists) to one where they and their families are seeking services from the same scarce pool of Medicaid-participating community dentists. In this situation, states have to work hard to make sure that the capacity to deliver care exists in the community.

The limited coverage of Medicaid dental benefits for adults in many states poses another barrier. Children with developmental disabilities have coverage for their dental needs through the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) benefit. EPSDT requires that state Medicaid programs pay for all medically necessary treatment for children, even if it would not normally be covered by Medicaid. Although these patients’ specialized needs do not expire at their twenty-first birthday, often, their dental

benefits do. In response, an association of dentists who treat special-needs patients has proposed the Special Care Dentistry Act, which would extend EPSDT-style coverage for medically necessary dental services for enrollees in the “aged, blind, and disabled” Medicaid categories. This legislation was introduced in the 109<sup>th</sup> Congress, but was not enacted.<sup>59</sup>

### **NEW MEXICO’S RESPONSE – THE SPECIAL NEEDS CODE**

Through the course of the 1980s and 1990s, legal proceedings in New Mexico led to the relocation of the residents of the state’s two institutions for the developmentally disabled to community settings. The state, however, recognized that it needed to maintain access to care that would be difficult to locate in the community. One of the identified needs was dental care. New Mexico already has a shortage of dentists, with one of the lowest dentist-to-population ratios (46 per 100,000 residents) in the nation, and, like other parts of the country, access to care for people with developmental disabilities is even more restricted.<sup>60</sup>

Additionally, because New Mexico is a very rural state, people with developmental disabilities often have to travel great distances to access both dental and specialty medical care. In response, the dental clinic at one of the two institutions, Los Lunas Hospital and Training School, was kept open.<sup>61</sup> Dr. Ray Lyons, the clinic’s director, recognized that community capacity would need to be built up, so he worked with the state Medicaid program to develop a strategy to educate dentists about how to care for developmentally disabled patients, and to reimburse them for the added time and costs involved in that care. He compared the operational and personnel costs for his clinic patients with the Medicaid reimbursements for the services provided, and the difference – \$85 per patient visit – became the supplemental reimbursement rate for what would become known as the *Special Needs Code* (SNC).<sup>62</sup> The SNC builds on the state’s foundation of a comprehensive Medicaid dental benefit for adults.

Not every dentist who treats people with developmental disabilities can receive enhanced reimbursement under the SNC. To qualify, dentists must complete a series of self-directed online study modules, which require about 25 hours of study (which can be completed at the dentist’s own pace), and then attend four days of in-person training at Los Lunas or the Carrie Tingley Clinic at the University of New Mexico (UNM) in Albuquerque. After the training is complete and certification granted, the dentist can receive supplemental reimbursement for developmentally disabled patients treated in their offices. Since the additional payment is intended to compensate for the extra time needed to provide enhanced management to patients in the dental chair, the payment is not available if the patient is placed under general anesthesia in hospital settings.

Since the program’s inception in 1995, the state has developed a small but dedicated group of dentists who have completed SNC training. Fifty-seven dentists and twenty dental hygienists have sought the training, and as of 2006, forty dentists have completed the training and have been certified to bill the code. During the course of the program, over 37,000 patient visits have been supplemented by the SNC. In state fiscal year 2006, three thousand people with developmental disabilities made more than 6,100 visits to dental offices.<sup>63</sup> Since Medicaid does not track beneficiaries with developmental disabilities as a discrete Medicaid enrollment group, it is difficult to say how much of the state’s population this represents, but state Medicaid representatives feel that children and adults with developmental disabilities have access to comprehensive dental care in the state.<sup>64</sup> Additionally, state staff believe that some of the providers who participated in, but did not complete the entire training course are now providing services to some less-medically-complex disabled patients, and foregoing the enhanced reimbursement.<sup>65</sup>

In addition to the need to raise rates to keep pace with rising medical costs (the reimbursement rate has been raised over time from the original \$85 to just more than \$97 in July 2007),<sup>66</sup> the state has had

to deal with several unanticipated challenges. First was the federal push for national standardization of procedure coding that, in 2002, required the state to replace its state-designed Special Needs Code with the ADA *Current Dental Terminology* procedure code for “behavior management,” which was not specifically designed for the same purpose. Because the state restricted payment for this code to its SNC providers, this created some confusion with other Medicaid-participating dentists who used that code for the management of other patients. Additionally, the introduction of Medicaid reimbursement for dental hygienists in independent practice created a question about whether the SNC should be available to them. New Mexico decided that the enhanced payment should only be available to dentists who complete SNC training and who can provide comprehensive preventive and treatment services.<sup>67</sup>

The state also sees further room for improvement. Particularly, there is a concern that, as the current cohort of providers ages, there may not be new dentists stepping up to provide services to this population. Although community SNC dentists can refer complex patients to Los Lunas or UNM, more could be done to organize a formal support mechanism for these dentists. Additionally, Dr. Lyons reports some frustration among SNC dentists regarding the differing rules among Medicaid managed care contractors who administer the dental benefit. Increasing efforts to remove these administrative obstacles might help to retain the provider corps.<sup>68</sup>

#### **PENNSYLVANIA’S RESPONSE – CONTRACTING FOR SPECIALIZED CARE IN PHILADELPHIA**

In the late 1990s and early 2000s, Pennsylvania, like New Mexico, was moving people with developmental disabilities out of state institutions and into community settings. In Philadelphia County, these enrollees, like other Medicaid enrollees, were subject to mandatory enrollment in managed care organizations. The need to address the dental needs of people with profound disabilities was raised at two state oral health summits in 1999 and 2001, and in response to these discussions, a private pediatric dental practice decided to launch a dedicated practice model to provide comprehensive care under sedation or general anesthesia to this population.

This practice, called Special Smiles, Ltd., negotiated with the four Medicaid managed care organizations operating in southeastern Pennsylvania for a “global budgeting” arrangement, where the managed care organizations pay a fixed rate for the dentists to see about 1,000 patients per year in an operating room setting. (Because this arrangement is between two private parties, information on the size of the “global budget” is proprietary and not available to the state.) The contract is possible because Pennsylvania opts to provide dental benefits to its Medicaid-enrolled adults.

The practice uses a two-appointment model, where the patient is first provided a screening/triage appointment, with a brief physical exam, confirmation of medical clearances and diagnostic lab tests that are provided by the patient’s physician, and obtaining consent from the caretaker. The patient is then scheduled for a “full mouth rehabilitation” under intravenous sedation or general anesthesia, where all necessary restorative care is provided, along with a cleaning and preventive services such as application of topical fluoride and sealants. Since the program began in 2001, over 5,000 full mouth rehabilitations have been performed.<sup>69</sup>

State Medicaid officials hope that the strengthened service delivery system in Philadelphia will serve as a basis for improving dental access for people with developmental disabilities statewide. They report that a new program being developed by the University of Pittsburgh School of Dental Medicine promises to improve access in southwestern Pennsylvania (another mandatory managed care enrollment area) and provide better exposure to dental students in treating people with developmental disabilities. In the areas of the state served by Pennsylvania’s fee-for-service Medicaid program, dentists treating developmentally

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disabled patients can bill the same ADA code for “behavioral management” that New Mexico uses, up to four times per year, although no special education is required.<sup>70</sup>

The state is also deploying a two-pronged set of interventions in its fee-for-service program to improve access to care for young children, pregnant women, and people with chronic conditions like diabetes and coronary artery disease. The state identified funding to establish “dental disease management.” A portion of these funds went to increase reimbursement rates significantly on 39 selected procedure codes (for example, a 37 percent increase on root canal procedures and a 34 percent increase on oral surgery) identified as being of particular concern to dentists, and the rest was used to introduce a pay-for-performance program geared to pay dentists more for providing appropriate comprehensive care to enrollees in the groups mentioned above.

The state Medicaid agency pays each dentist a \$30 incentive payment for every beneficiary to whom the dentist provided an exam, cleaning, and (for children) a fluoride application in the previous calendar quarter. For pregnant women, diabetics, and people with coronary artery disease, the state also pays dentists a \$25 incentive for each enrollee who received periodontal scaling and root planing (which must be pre-authorized) in the previous quarter. The state hopes to show cost-savings due to related health improvements from the establishment of a “dental home” and provision of comprehensive oral health care for these enrollees.<sup>71</sup>

### **CALIFORNIA ACTIVITIES**

The California Statewide Taskforce on Oral Health for People with Disabilities and Aging Californians has been working for several years to introduce a program modeled on New Mexico’s Special Needs Code. The group, organized by faculty at the University of the Pacific’s Dugoni School of Dentistry, has developed a set of 31 recommendations across six domains, including the development of improved incentives for oral health professionals to care for people with disabilities. The group proposes a training program that would provide dentists with 20 hours of instruction, followed by ten hours of hands-on experience. After the completion of this training, the dentist would be certified to receive an additional \$85 “behavior management” fee when providing services to enrollees with developmental disabilities.

The group estimates that, if the incentive increased visits for the 370,500 enrollees in “disabled” enrollment codes by 25 percent, the state would incur approximately \$31 million in additional expenditures, an increase of less than 5 percent in Denti-Cal expenditures.<sup>72</sup> This group worked with the California Dental Association on a legislative proposal to enact this program, but the 2008 budget deficit precluded its introduction. Since legislation did not move forward, the CDA Foundation has secured grant funding to conduct a demonstration project that will collect clinical and economic data for use in future legislative endeavors.<sup>73</sup>

In addition to its comprehensive dental benefit for adults, Denti-Cal exempts dentists treating developmentally disabled enrollees from prior authorization for restorative services, if there is evidence of decay on an x-ray.<sup>74</sup>

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## PEOPLE IN RURAL AREAS

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People in rural areas have significantly poorer oral health than non-rural residents – with higher rates of untreated dental decay, lower frequency of visits to dentists, and higher probability of having lost all their natural teeth.<sup>75</sup> The dental health issue for people in rural areas is both fairly straightforward, and more complex than it appears. In the simplest sense, dental access is harder to obtain in rural areas because there are not enough dentists. Practitioners graduating from dental school are choosing not to locate in rural areas, instead choosing urban and suburban areas.

The American Dental Association, which maintains that the current dental workforce is adequate to meet the demand for services, recognizes that there are “geographic imbalances” in the distribution of dentists that limit access to care.<sup>76</sup> A report of the National Rural Health Association found that of “the approximately 150,000 general dentists in practice in the United States, only 14 percent practice in rural areas. [...] Similarly, there were 2,235 federally designated dental supply shortage areas, 74 percent of which were located in non-metropolitan areas in 2003.”<sup>77</sup>

Beyond a simple lack of providers, people in rural areas also face additional structural barriers to maintaining their oral health. Rural areas are less likely to be on community water systems, and therefore less likely to have access to water fluoridation, one of the major public health tools to prevent tooth decay. They are older, have poorer overall health status, and have higher rates of poverty. Rural residents have further to travel for care, which may be compounded by a lack of public transportation resources.<sup>78</sup> Michigan’s *Healthy Kids Dental* program, which provides a commercial dental insurance product to children in rural areas of Michigan, succeeded in reducing the average distance that families had to travel to care from 24.1 to 12.1 miles.<sup>79</sup>

Sustaining the existing Medicaid-participating dental practices in rural areas has been the objective of several state Medicaid incentive programs. One of these, Minnesota’s *Critical Access Dental Provider* program, was established in 2002 to provide enhanced payments to dental offices that agreed to devote a certain percentage of their patient roster to Medicaid enrollees. The program made \$3.5 million in incentive payments in 2002, and grew to \$9.4 million in 2005.

However, a recent report by Medicaid to the state legislature found that, while the program had helped to sustain rural practices, it had not significantly increased the percentage of Medicaid enrollees accessing care. Additionally, the Medicaid agency had concerns that some “critical access” practices might be misusing the program by providing inappropriate or unnecessary treatment services to a high volume of Medicaid enrollees. The Medicaid agency proposed maintaining the program, but investigating ways to modify it to promote appropriate preventive care, evidence-based treatment services, and the use of new workforce models, such as the dental therapist model that is in use in Alaska, to reduce disparities in access to care.<sup>80</sup> A work group empanelled to develop such a workforce model (which the state calls an Oral Health Practitioner), was to deliver its final recommendations to the legislature by December 2008.<sup>81</sup>

### **WISCONSIN’S RESPONSE – STATE APPROPRIATIONS TO ENHANCE COMMUNITY HEALTH CENTERS**

Medicaid reimbursements are not the only financial lever that states have at their disposal. Wisconsin is using the direct appropriations process to stimulate the growth of safety net providers in rural areas of the state. Since November 2002, the Family Health Center of Marshfield has operated a dental clinic in Ladysmith, Wisconsin, a town in rural Rusk County (county population: 15,347<sup>82</sup>), and received an annual appropriation of \$232,000 to support its operations. A second Family Health Center clinic in Chippewa Falls (in Chippewa County, population 55,195) opened in September 2005, and is supported by an appro-



priation of \$400,000.<sup>83</sup> These clinics represent a new model of service delivery for rural areas – building large amounts of new physical capacity in rural areas, with the goal of eliminating the disparity between the low-income uninsured and Medicaid-enrolled population in the county and the national levels of utilization for privately-insured people.

The clinic in Ladysmith has 17 dental chairs, and the Chippewa clinic has 29 dental chairs. They engage dentists as employees of the Marshfield Clinic, a large medical group practice with which Family Health Center is affiliated. Along with two other clinics in Owen (in Clark County, population 33,557) and Park Falls (in Price County, population 15,822), the network of clinics employs 22 dentists and 22 dental hygienists, with 66 dental chairs and more than 38,000 square feet of space.<sup>84</sup> Several more expansions are currently planned, and Family Health Center is seeking to use Marshfield Clinic’s medical capacity to improve the integration of medical and dental care for its clients, particularly for children with special health care needs and people with disabilities.

Medicaid-enrolled patients comprise about 60 percent of the clinics’ caseload, and because of Family Health Center’s status as a Federally Qualified Health Center (FQHC) – a designation granted by the federal Health Resources and Services Administration to Community Health Centers that must be located in a medically underserved area or serve a medically underserved population – the clinics are able to capture cost-based reimbursement for services provided to Medicaid enrollees. Cost-based reimbursement results in supplemental payments that make up the difference between the amount the clinic receives from Medicaid claims, and its costs for providing those services.

This means that the clinics’ \$1.3 million in fee-for-service reimbursements are roughly doubled by Medicaid, where spending is split between the state (40 percent) and the federal government (60 percent).<sup>85</sup> This is a significant investment on the state’s part, but because FQHC cost-based reimbursement is a federal requirement, no additional legislative or administrative branch actions were required to authorize it.

It is important to note that since the state provides a comprehensive Medicaid adult dental benefit, the clinic is in a better position to sustain its operations. Family Health Center Executive Director Greg Nycz says, “Our chance of being successful is greatly enhanced by Wisconsin’s commitment to providing adult dental services in their Medicaid program. Without it, the resource requirements for serving the uninsured low-income population would grow considerably, severely limiting our progress.”

Nycz hopes to put enough dental providers and services in rural areas of the state to show that if access disparities can be overcome in rural northwestern Wisconsin, they can be overcome anywhere. A smaller intervention, along the lines typically found in underfunded safety net programs with one or two dentists, would only be able to address emergencies and a subset of the target populations. Underfunded safety net programs, in his opinion, are not able to get beyond the backlog of unmet dental needs. “I look at this as a decade-long endeavor, which does have its costs and challenges, but you have to aim to solve and then prevent the disease problem, not just put a band-aid on it. *By putting a band-aid on it you institutionalize under-service.*”<sup>86</sup>

The longest-operating clinic, in Ladysmith, is showing indications of improving access to dental care to Rusk County residents, as shown in Charts 3 and 4. Dental utilization among Medicaid-enrolled Rusk County enrollees has risen to almost 40 percent, compared to a statewide utilization rate of under 25 percent in 2003.<sup>87</sup> As Chart 3 shows, the improvement is particularly marked for adolescents, where service utilization has been above 50 percent for the last three years.

Charts 3 and 4 also point out an area of concern about this model. The percentage of care that is provided by Rusk County dentists other than the Ladysmith Dental Center has progressively shrunk. This is partly

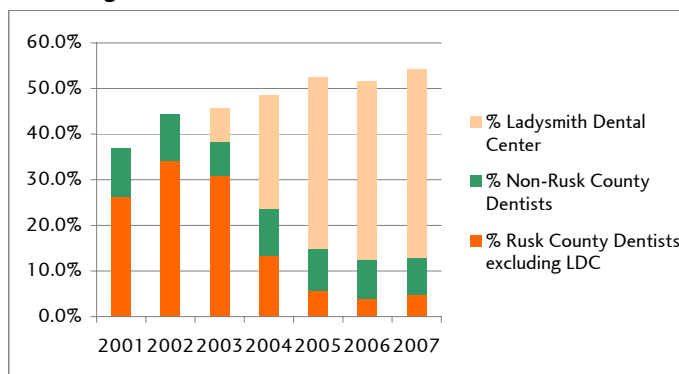
due to the fact that in 2003, two dentists who had been seeing Medicaid-enrolled patients in private practice joined the Ladysmith Dental Center, but the decline has continued since 2004.

Although Family Health Center seeks collaboration with local dentist when it is possible, new expansions of the Family Health Center's FQHC model are not usually well-received by community dentists, partly because they have access to enhanced Medicaid reimbursement that private dental offices do not.<sup>88</sup> Expansion plans are based on Family Health Center's estimation of the community readiness of rural population centers, whether a community without a clinic is a significant source of patients traveling to Family Health Center clinics, and the willingness of local governments to negotiate agreements for land, or financial support, but not on developing support among county dental societies. Although this can create tension and conflict, it is a transformative idea that Family Health Center is looking to build upon, with a proposal to build a new dental school in northern Wisconsin. The new school would have an emphasis on public health and community service in order to produce a corps of dentists who are more willing to locate in underserved areas and participate in public assistance programs like Medicaid.<sup>89</sup>

### CALIFORNIA ACTIVITIES

The Rural Health Research Center at the University of Washington conducted a survey of California's 845 rural dentists in 2002 to collect information on their demographics, practice habits, and attitudes on oral health access issues. Rural areas of the state had a ratio of 35 dentists per 100,000 population (compared to 47 per 100,000 in urban California), which placed the state 19<sup>th</sup> in the nation. The survey found that rural California dentists were mostly white, male general dentists, who grew up in rural or suburban areas, and were nearing retirement age. Their average age was 51, and 38 percent of them were over 55. About half reported participating in Denti-Cal or Healthy Families (the state's SCHIP program). When asked about their opinions on several issues about the future of dental access, more than fifty percent agreed that there is significant unmet dental need in their communities, and that high-risk children should receive preventive care from non-dental providers.

**Chart 3. Sources of Dental Care for Rusk County Medicaid Enrollees, Ages 6-14.**



Source: Family Health Center of Marshfield, Inc., 2008. Note that the Ladysmith Dental Center began providing services in November 2002. Data for state fiscal year (July 1 – June 30)

**Chart 4. Sources of Dental Care for Rusk County Medicaid Enrollees, All Ages.**



Source: Family Health Center of Marshfield, Inc., 2008. Note that the Ladysmith Dental Center began providing services in November 2002. Data for state fiscal year (July 1 – June 30)

The survey also solicited their ideas for addressing unmet need. Twenty-five percent said that unmet needs should be addressed with enhanced Medicaid support, 24 percent advocated improved education for children and families, and twelve percent said that care should be provided through “free government dental clinics.”<sup>90</sup>

According to Denti-Cal staff, FQHCs in California account for approximately 15 percent of Medi-Cal dental expenditures and 9 percent of Medi-Cal dental users and are particularly important sources of access to dental care in rural communities. There is, however, incomplete information on the number and types of services they provide, as the state’s system for FQHC reimbursement is based on set payments per encounter, regardless of the services provided, and there is no requirement for FQHCs to report the number or types of procedures they provide.<sup>91</sup>

Since 1998, the state’s Managed Risk Medical Insurance Board (MRMIB) has funded a variety of dental enhancement projects under the auspices of its Rural Health Demonstration Projects program. This program uses the State Children’s Health Insurance Program (SCHIP) to match state money with federal funds, at a 35/65 split. In state fiscal year 2006, the legislature allocated \$2.877 million to the program, which resulted in total funding of \$5.75 million for projects in telemedicine, mental health, obesity, asthma, and several other areas. In regard to dental services, MRMIB allocates funds to SCHIP dental managed care plans, including Access Dental, Premier Dental, and Delta Dental, to fund mobile dental vans, help to place additional providers in rural areas, and fund extended clinic hours on nights and weekends.<sup>92</sup>

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## FINDINGS AND CONCLUSION

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In 2005, the California Statewide Task Force on Oral Health for People with Special Needs and Aging Californians published a consensus statement on the issues in the dental care delivery system that prevent people with special needs from achieving optimum oral health.<sup>93</sup> Some of the issues that they raised are paraphrased below, and they are equally applicable to the targeted populations of Medicaid enrollees that were examined in this study.

- *Connecting enrollees to dental care:* Young children, pregnant women, people with developmental disabilities, and people in rural areas encounter great difficulty finding oral health services and obtaining good oral health.
- *Enhancing the training of dental professionals:* Dental education provides little exposure to pregnant women, young children, and people with developmental disabilities, which makes practicing dentists in the community less confident in their ability to properly care for these patients.
- *Aligning incentives:* There are inadequate incentives for dental professionals to become involved in treatment of these groups and many state Medicaid programs' reimbursement and coverage limitations do not promote care for these populations.
- *Broadening service delivery sites:* Dental offices are not the only place that oral health services can or should be provided. Some oral health services, particularly preventive services, can be provided in settings that are closer to where people live, work, and learn.
- *Integrating oral health and overall health:* The dental delivery system, and oral health in general, is poorly integrated with the rest of the health care system, even though oral health is essential to daily functions of life like eating, breathing, and communicating, and there are established links between oral infections and systemic conditions like aspiration pneumonia and diabetes, and emerging links to conditions like cardiovascular disease, and pre-term and low-birth-weight births.

Each state example in this study shows how states and state Medicaid programs can address one or more of these points. They seek to stretch beyond the current dental care delivery system in order to provide dental care that better meshes with the specific needs and circumstances of their targeted populations.

### **CONNECTING ENROLLEES TO DENTAL CARE:**

- Rhode Island's RItE Smiles program is using an enhanced dental benefit and a specialized dental managed care contract to build the network of private dental offices providing services to young children, in the hope it will result in reduced treatment needs in the future.
- North Carolina's Carolina Dental Home project seeks to develop improved risk-assessment tools that allow physicians to identify children who most need connection to a dental home and build a more robust network of participating dental providers that accept physicians' referrals.
- In Southeastern Pennsylvania, Medicaid managed care organizations have secured a reliable point of access for people with severe disabilities by contracting with a specialized dental practice.

### **ENHANCING THE TRAINING OF DENTAL PROFESSIONALS:**

- Both Rhode Island's and North Carolina's strategies include training for general dentists to learn techniques for managing young children in the dental office, which helps to stretch the capacity of the very scarce pool of pediatric dentists, who account for less than three percent of the overall dentist workforce.

- New Mexico's Special Needs Code creates incentives for dentists to complete on-line study and in-person training with special care dentists, which complements an area that is lacking in most dental school curriculum. This training helps build communities' capacity to meet the needs of people with developmental disabilities and helps those people to live successfully in their own homes and communities.

### **ALIGNING INCENTIVES**

- Both North Carolina and New Mexico use enhanced Medicaid payments for certain discrete services to make those services more financially sustainable for providers. Into the Mouths of Babes reimburses physicians for a bundle of services – fluoride varnish, assessment of oral disease status, and anticipatory guidance – to incorporate oral health into well-child checks. The Special Needs Code seeks to compensate dentists for the extra time and effort needed to provide appropriate care and management to people with developmental disabilities.
- Because the state's budget picture did not allow for the RItE Smiles program to be introduced at the same time for all children, Rhode Island rebalanced the funds in its dental budget to focus first on improving coverage for very young children and in providing early preventive care in less-costly settings.
- In areas of Pennsylvania served by the fee-for-service Medicaid program, the state is experimenting with a pay-for-performance strategy to encourage dentists to provide care to members of targeted groups – children, pregnant women, and people with certain chronic diseases.
- Wisconsin is using relatively modest direct budget appropriations to build up Federally Qualified Health Centers in rural northern areas of the state. The enhanced payments available through Medicaid cost-based reimbursements to which these clinics have access help to sustain large group practices that increase Medicaid enrollees' utilization of care

### **BROADENING SERVICE DELIVERY SITES**

- North Carolina's Into the Mouths of Babes early prevention program for young children developed out of a local recognition that there were service delivery sites – namely, primary care physicians' offices – that babies and toddlers visited earlier and more often than dental offices.
- A pilot program in Klamath County, Oregon hopes to show that providing intensive dental care and oral health education to pregnant women and new mothers, coordinated through nontraditional settings – WIC offices and home visits – will result in improved health status for their children by improving oral health literacy and intervening in the primary route by which cavity-causing bacteria are transmitted to children.
- New Mexico's corps of Special Needs Code dentists broadens the points of access for people with developmental disabilities, who otherwise must rely on state institutions or large hospitals, even if they don't have complex needs, because of the limited provider base.
- The network of Family Health Center clinics in northern Wisconsin is succeeding in improving Medicaid enrollees' ability to have their dental needs met in their home county, ameliorating a situation where families in rural areas often have to travel hundreds of miles for care.

### **INTEGRATING ORAL HEALTH AND OVERALL HEALTH**

- The efforts of the North Carolina team of community stakeholders, physicians, dentists, academics, and state officials has developed into a multi-pronged effort to integrate oral health into physician practice and strengthen the bonds between medicine and dentistry.

- The Family Health Center seeks to use its affiliation with a large northern Wisconsin medical group to improve its ability to meet both the medical health and dental health needs of its patients.

In a very difficult budget environment that precludes large new investments in state Medicaid dental programs, smaller interventions for targeted populations can be an achievable step in the short term. There are already a variety of efforts operating or in development by California's state agencies, universities, and communities that could be built upon, using promising models from other states.

It is important to note, though, that one of the foundations for such interventions, particularly for pregnant women, rural adults, and adults with developmental disabilities, is Medicaid coverage for adult dental services. The important and innovative programs in Oregon, New Mexico, Pennsylvania, and Wisconsin are all predicated on Medicaid providing dental coverage to their Medicaid-enrolled adults.

As of this writing, it appears that California's adult dental benefit is once again in jeopardy of elimination.<sup>94</sup> If this service is eliminated, assuring the oral health of these targeted populations will be even more difficult.

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APPENDIX

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## DENTIST LOAN REPAYMENT AND DEFERRED COMPENSATION

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In addition to targeted reimbursement strategies, states have also explored other low-cost methods to improve dentist participation in Medicaid. State loan repayment programs, often patterned after the federal National Health Service Corps program, are a common tool used to obligate health providers – usually new graduates of medical and dental school – to practice in underserved geographic areas. Another strategy, used far less often, is deferred compensation, which allows Medicaid-participating dentists to contribute all or part of the payments they receive from Medicaid into the same retirement funds available to state employees.

### STATE LOAN REPAYMENT PROGRAMS

A 2004 survey by the National Conference of State Legislators reported that more than two dozen states operated a state-designed loan repayment program.<sup>1</sup> These programs are usually multi-year agreements between the state and new practitioners, where providers agree to practice in underserved areas in return for a discrete amount of loan forgiveness per year. These state-designed programs operate separately from the federal loan repayment program operated by the National Health Service Corps (NHSC), and the matching programs that are jointly funded by states and the NHSC.<sup>2</sup> While the NHSC has been operating since 1970, state-designed loan repayment programs are relatively more recent, only emerging since 1990.<sup>3</sup>

These programs typically fund only a few dentists per year – usually ten or fewer dentists, with an average yearly award between \$10,000 and \$20,000 per recipient.<sup>4</sup> The typical period of obligated service is two years, although many states allow dentists to stay in the program longer. California's State Loan Repayment program is a jointly-funded state and local program that can provide dentists and dental hygienists with a maximum of \$120,000 in loan repayment over four years.<sup>5</sup> It differs from many other state loan repayment programs in that it exempts the loan repayments from taxes.

New Mexico provides an example of a well-designed program to weave together federal and state funding streams to support the placement of dentists in rural and underserved areas. Recruitment of graduating students to community health centers is the responsibility of New Mexico Health Resources (NMHR), a nonprofit organization that has operated for 27 years under a contract with the state Office of Primary Care and Rural Health. It is a clearinghouse for workforce recruitment to underserved areas, and NMHR serves as a matchmaker between individual practices or clinics and approximately 45 new providers per year, mostly physicians and dentists.

NMHR coordinates with many federal and state programs, including NHSC, the New Mexico Loan Repayment Program, and the New Mexico Health Service Corps, a state-funded program that subsidizes medical residencies. New Mexico also participates in the Western Interstate Commission on Higher Education (WICHE) program, a joint partnership of several western states which tries to obtain tuition reciprocity for students entering medical, dental, or veterinary school, on the condition that they return to their home state to practice.

NMHR works with partners at the primary care office, the New Mexico Primary Care Association (the state association of community health centers), and the University of New Mexico to weave together these programs into an offer that draws students to health centers, and ensures that they are retained there for several years. An essential part of the program's success is personal outreach to students to determine the best candidates for assistance, and the best placement for those candidates.<sup>6</sup>

## DEFERRED COMPENSATION

Arkansas, Mississippi, and Louisiana have been identified as operating deferred compensation programs that allow Medicaid-participating dentists, as independent contractors of the state, to contribute their reimbursements into the same investment accounts available to state employees.<sup>7</sup> In Arkansas, the plan is called the Arkansas Diamond Plan, and Mississippi's is called the Mississippi Deferred Compensation Plan and Trust.<sup>8</sup>

These section 457(b) plans are government-operated plans that function like other 401(k) or 403(b) retirement plans, where state employees can make a maximum yearly contribution of \$15,500, pre-tax. If a person is 50 or older, they can make "catch-up" contributions up to a limit of \$5,000.<sup>9</sup> These types of plans might be attractive to small-business owners such as dentists in solo practice, because it allows them entrance into a large-group retirement plan with a variety of investment options, but reported participation is somewhat limited. Mississippi staff reported to the American Dental Association that 100 of the 568 participating dentists in calendar year 2003 had contributed to the deferred compensation plan during the year, and the state dental society reports that the plan is not actively marketed to dentists.<sup>10, 11</sup>

## ENDNOTES

1 National Conference of State Legislatures, Forum for State Health Policy Leadership. *State Experience with Dental Loan Repayment Programs*. (Denver, CO: National Conference of State Legislatures, 2005).

2 See <http://nhsc.bhpr.hrsa.gov/>.

3 NCSL, 6.

4 *Ibid.*, 9-10.

5 California National Health Service Corps/State Loan Repayment Program Fact Sheet. Retrieved December 19, 2008. [http://www.oshpd.ca.gov/HWDD/pdfs/slrp\\_factsheet.pdf](http://www.oshpd.ca.gov/HWDD/pdfs/slrp_factsheet.pdf).

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7 The Arkansas and Mississippi programs are described in a 2006 study by the Florida Department of Health. See Florida State Oral Health Improvement Plan, "Background Information: Dental Provider Incentives to Improve Access for Medicaid Patients," 2006. [http://www.doh.state.fl.us/family/dental/sohip/workgroup/Pro\\_Incentives.pdf](http://www.doh.state.fl.us/family/dental/sohip/workgroup/Pro_Incentives.pdf). Retrieved December 1, 2008. Information on Louisiana's plan is available at <http://www.ladental.org/cms/content/view/46/55/>.

8 Information on Arkansas can be found at <https://www.medicaid.state.ar.us/InternetSolution/Provider/faq/faq.aspx#deferred> and Mississippi Deferred Compensation Plan and Trust. Available at: <http://www6.ingretirementplans.com/SponsorExtranet/MDCPT/YourPlanHighlights/index.html>.

9 Internal Revenue Code, USC 26(A)(1)(E)(II)(B) s.457. [http://www.law.cornell.edu/uscode/html/uscode26/usc\\_sec\\_26\\_00000457----000-.html](http://www.law.cornell.edu/uscode/html/uscode26/usc_sec_26_00000457----000-.html). Retrieved December 11, 2008.

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