



# Reimbursing Medical Providers for Preventive Oral Health Services: State Policy Options

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# Executive Summary

To ooth decay, while highly preventable, is the most common chronic disease among children and it disproportionately affects children from families with low incomes. Thirty-five state Medicaid agencies are working to increase children's access to preventive oral health services by reimbursing primary care medical providers for services such as fluoride varnish application, an oral examination or screening, oral health risk assessment, and/or caregiver education. This report is intended to help states that are considering adopting similar policies by describing some of the available options and major elements of policy design and implementation.

Based on the results of a 50-state survey and recommendations from national experts, the National Academy for State Health Policy, with the support of the Pew Children's Dental Campaign, selected five states to interview about their Medicaid reimbursement policies for preventive oral health services: Iowa, Minnesota, North Carolina, Utah, and Washington. Drawing from the experiences of these states, this report addresses the following questions:

- What preventive oral health services do states pay for?
- What procedure codes do states use and whom do they reimburse for services?
- What types of training programs do states use?
- What regulatory or legislative activity have states taken to implement policies?
- What are the costs or potential cost-savings associated with policies?
- How do states track the progress or effects of their policies?
- How do states facilitate medical provider participation in policies?

For each of these questions, this document provides examples of some of the potential challenges and facilitating factors associated with medical provider reimbursement. Featured states' lessons learned include:

#### • Service components and reimbursement:

- Reimbursable service components vary by state.
- Reimbursement for multiple oral health services attracts provider interest and increases provider uptake.
- States can use a dental or medical code to reimburse medical providers for fluoride varnish application.
- Differences in reimbursement rates or service eligibility between medical and dental providers (particularly higher rates or eligibility for more services for medical providers) may lead to tension between the two communities.

#### • Training:

- In-person trainings offer hands-on learning and the opportunity for providers to learn from trainers who are familiar with the community.
- Including information about making dental referrals and accessing community dental resources in trainings can facilitate collaboration between local medical and dental providers.

#### • Legislation and regulation:

- Although implementing reimbursement is usually a simple, administrative process, legislation may be needed to secure funding for reimbursement.
- Providing data about the potential cost-savings associated with reimbursing preventive oral health services helps make the case to legislators for funding.
- Sending a reimbursement policy through the regulatory process allows for public comment and provides a mechanism to address dental community concerns.

#### • Evaluation:

- To assess policy progress, states can track the number of providers trained each year, the number of providers who bill for reimbursable services, the number of oral health preventive services delivered to Medicaid-enrolled children, referrals to dentists, and/or the number of well-child visits that include preventive oral health services.
- Few states have a formal process in place to evaluate their reimbursement policies, but those that do have found evaluative data to be helpful in assessing progress and making the case for continued support.
- Considering evaluation at the outset of a policy's implementation better positions a state to establish the baseline data needed to assess change.

#### • Stakeholder collaboration:

- Partnering with dental providers, medical providers, and stakeholders such as public health agencies and health plans is essential to ensuring policy awareness and participation.
- Meeting with dental provider associations early on offers the opportunity to assess their concerns and clarify the complementary role medical providers can play in preventing dental disease, addressing early signs of disease among children, and making referrals to dentists.
- Marketing and outreach to medical providers are needed to explain the rationale for their involvement in preventive oral health services and to describe training opportunities; these campaigns are resource-intensive but local primary care professional organizations can be useful resources.
- Reimbursement policies are often one component of statewide strategies or programs to improve children's oral health and coordinate care.

The experiences of Iowa, Minnesota, North Carolina, Utah, and Washington demonstrate that reimbursement policies are most successful when they involve a collaborative team of partners and link to broader, multi-pronged efforts to improve children's oral health. Partners in case study states are committed to meeting the oral health needs of all children; their lessons may be useful in designing policies for other populations, such as children who are in the Children's Health Insurance Program (CHIP) or are privately insured.

#### INTRODUCTION

Tooth decay, while highly preventable, is the most common chronic disease among children and it disproportionately affects children from families with low incomes. In a recent report, the Government Accountability Office (GAO) estimated that 6.5 million children aged 2-18 enrolled in Medicaid had untreated tooth decay in 2008 and concluded that children in Medicaid had nearly twice the rate of untreated tooth decay as children with private insurance.<sup>1</sup> Additionally the Centers for Medicare & Medicaid Services (CMS) has identified concerns about state adherence to federal Early and Periodic Screening, Diagnosis and Treatment (EPSDT) law, which requires state Medicaid programs to provide dental services to all children eligible for the program.<sup>2</sup> Preventive oral health care is particularly important for young children at high risk for dental disease; the presence of cavity-causing bacteria can quickly progress into extensive decay known as Early Childhood Caries (ECC) or baby bottle tooth decay. Thirty-five state Medicaid agencies are working to meet these challenges and increase children's access to preventive oral health services by reimbursing primary care medical providers for services such as fluoride varnish application, an oral examination or screening, oral health risk assessment, and/or caregiver education.<sup>3</sup> This report is intended to help states that are considering adopting similar policies by describing some of the available options and major elements of policy design and implementation.

State Medicaid agencies opt to reimburse medical providers for preventive oral health services provided to children for several reasons:

- Few dentists see children enrolled in Medicaid or Children's Health Insurance Programs (CHIP), citing low reimbursement rates, administrative burdens, and patient compliance issues.<sup>4</sup>
- Despite the American Academy of Pediatric Dentistry's recommendation that children see a dentist by age 1, few general dentists treat young children aged 1-3 because they do not have experience with this population. Pediatric dentists are more willing to initiate treatment for children in this age group, but they make up a small percentage of all dentists.<sup>5</sup>
- Children see primary care medical providers earlier and more regularly than they see dentists. Children have thirteen well-child visits from birth to age 5, in addition to sick care visits.<sup>6</sup>

Based on the results of a 50-state survey and recommendations from national experts, the National Academy for State Health Policy, with the support of the Pew Children's Dental Campaign, selected five states to interview about their Medicaid reimbursement policies for preventive oral health services: Iowa, Minnesota, North Carolina, Utah, and Washington.<sup>7</sup> These states were selected because they were early adopters or their policies have unique features that show the diversity of state options for design and implementation.

Drawing from the experiences of the five case study states, this report addresses the following questions:

- What preventive oral health services do states pay for?
- What procedure codes do states use and whom do they reimburse for services?
- What types of training programs do states use?
- What regulatory or legislative activity have states taken to implement policies?
- What are the costs or potential cost-savings associated with policies?

- How do states track the progress or effects of their policies?
- How do states facilitate medical provider participation in policies?

For each of these questions, this document provides examples of some of the potential challenges, facilitating factors, and lessons learned associated with medical provider reimbursement for preventive oral health services. Attention is particularly focused on provider training and stakeholder collaboration, which emerged as major topics of interest during interviews.

#### Design and Implementation Considerations

The following section reviews several important considerations for designing and implementing Medicaid reimbursement policies for preventive oral health services by medical providers.

## SERVICE COMPONENTS

An important step in designing a reimbursement policy is determining which services to reimburse. The American Academy of Pediatrics (AAP) recommends pediatricians provide oral health risk assessments and anticipatory guidance (or caregiver education) to all children, along with fluoride varnish for children without access to a dental home who are at high risk of tooth decay.<sup>8</sup> A risk assessment involves taking a child's history by interviewing a parent/caregiver, an examination of a child's mouth and an assessment of general health to detect risk factors for tooth decay.<sup>9</sup> Anticipatory guidance is the provision of developmentally appropriate information about good oral health habits (e.g., oral hygiene, nutritious diet) and dental injury prevention to parents and primary caregivers. A recent study associates a 77 percent reduction in children's risk for developing ECC with anticipatory guidance offered by trained pediatricians.<sup>10</sup> Case study states agreed that these services were important and effective, but differ in how they reimburse them.

Nationally, most states that reimburse medical providers for fluoride varnish application do not separately reimburse for related oral health services such as anticipatory guidance, risk assessment, or an oral exam.<sup>11</sup> Exceptions are North Carolina, which reimburses for a limited oral exam/screening, and Washington, which recently added reimbursement for related preventive oral health services.

According to interviewees in Washington State, the fluoride varnish reimbursement policy implemented for primary care medical providers in 1998 was insufficient to engage them in a significant way. Advocates moved to establish reimbursement for oral exam and caregiver education with the intent of offering an incentive for providers to include preventive oral health services in standard well-child care. Stakeholders in Washington partnered with the Cover All Kids Coalition, a broad partnership committed to expanding children's health coverage, and set the groundwork for reimbursement of related services. As a result, language about the role of primary care providers in preventive oral health was included in state health reform legislation.<sup>12</sup> In 2008, the state began reimbursing for both an oral exam/ screening and caregiver education. The \$57.04 in combined reimbursement for the two services is more than triple the \$13.25 for fluoride varnish, which captured provider interest. Interviewees noted that reimbursing these related services has been instrumental in increasing medical provider participation in fluoride varnish application. Overall, the number of fluoride varnish applications for young children in Washington has increased annually—from 145 in 2000 to more than 11,300 in 2008—as primary care medical providers began to anticipate expanded reimbursement.<sup>13</sup>

Reimbursable service components vary by state in part because states administer their EPSDT programs differently. EPSDT is Medicaid's comprehensive and preventive child health program for individuals under 21; it ensures that all Medicaid-eligible children receive medically necessary health care services, including dental services. Within federal EPSDT guidelines, each Medicaid agency determines what services are part of a standard EPSDT, or well-child visit, and what services should be billed separately.<sup>14</sup> Fluoride varnish application is not an element listed in the CMS manual as part of a standard well-child exam, so case study states agreed that the service can be reimbursed separate from the exam. There is not consensus among case study states regarding whether oral exams/screenings, an oral assessment or caregiver education about establishing good oral health habits should be considered included in a standard well-child exam. Iowa does not separately reimburse for an oral screening because it deems the service part of a well-child exam; similarly, Minnesota considers caregiver education a standard element of the exam. States such as Utah and Minnesota also require a related service, such as an oral assessment, to be provided with fluoride varnish application, but do not separately reimburse the related service. North Carolina trains medical providers to go beyond the scope of what it considers the usual EPSDT oral screening and believes providers should be reimbursed for their increased effort to detect oral disease.

# PROCEDURE CODES AND PAYMENT RATES

States must also establish parameters for fluoride varnish reimbursement, including the reimbursement rate and code, eligible providers, and limits for service frequency or patient age. Additionally, if states opt to reimburse related oral health services, they must determine whether these services will be bundled together under one (or more) procedure code(s) or reimbursed separately. They must also decide if related services must be billed in conjunction with fluoride varnish application.

Important reimbursement considerations include what procedure code(s) to use and amounts to reimburse providers. All but one of the case study states uses the American Dental Association's Current Dental Terminology (CDT) code for fluoride varnish application. (See Table 1 for a list of state policies and codes.) Utah is unique in that it uses a medical rather than dental code for the service, a decision that was made in an effort to simplify the reimbursement process for medical providers who are already familiar with using medical codes.<sup>15</sup> Medical providers bill for fluoride varnish by including a special modifier with the appropriate well-child exam Current Procedural Terminology (CPT) code to indicate that the exam included the service. Each state has its own process for assigning modifiers; in Utah, the decision went through a policy and operations committee.

The five case study states typically selected an initial reimbursement rate for fluoride varnish application that matched the state's reimbursement rate for dental providers. (See Table 1 for a list of procedure codes and reimbursement rates.) Featured states found it poses a challenge if medical providers have higher reimbursement rates or eligibility for more services than dental providers. Prior to 2007, North Carolina reimbursed medical providers for oral evaluation, fluoride varnish application, and a third service called "oral hygiene instructions." Dental providers were not able to bill for the third service, and the discrepancy led to some tension between the two provider types. In November 2007, the state adopted new codes and did away with reimbursement for oral hygiene instructions. Today medical and dental providers use the same two codes for oral evaluation and fluoride varnish and continue to be reimbursed at the same rates.

#### **Eligible providers**

States must also determine which medical providers are eligible to receive reimbursement for preventive oral health services. All of the case study states reimburse physicians and nurse practitioners for fluoride varnish application, but the eligibility of physician assistants and nurses varies across states. Physician assistants are eligible in Iowa, Minnesota, Utah, and Washington, while nurses are eligible providers in Minnesota and Washington. Since the procedure is simple, featured states allow eligible providers to delegate the task to certain types of allied health professionals, such as licensed practical nurses or certified medical assistants; the service is then billed under the eligible provider's name.<sup>16</sup> Doing so enables more children to receive fluoride varnish because more providers are available to apply it.

State	Service	Policy Implementation Year	Current Reimbursement Code	Reimbursement Rate (Fee for Service, as of July 2009)	Notes
lowa	Fluoride varnish application	2001	D1206	\$14.55	Service includes oral screening as part of the EPSDT exam
Minnesota	Fluoride varnish application	2003	D1206	\$14.00	Service includes oral screening, risk assessment, and caregiver education as part of the EPSDT visit
North Carolina	Fluoride varnish application	1999	D1206	\$16.80	
	Oral exam/ evaluation	1999	D0145	\$38.07	Service includes caregiver education
Utah	Fluoride varnish application	2007	EPSDT procedure code (99381 or 99382 for new patients or 99391 or 99392 for established patients) with an EP modifier	\$15.00	Service includes risk assessment as part of the EPSDT exam
Washington	Fluoride varnish application	1998	D1203	\$13.25	
	Family oral health education	2008	D9999	\$27.58	
	Oral exam	2008	D0120	\$29.46	

TABLE 1: CASE STUDY STATE REIMBURSEMENT POLICIES AT A GLANCE

Source: 2009 Survey by Amos Deinard, MD, MPH, on behalf of the American Academy of Pediatrics Oral Health Initiative, Medicaid/SCHIP Dental Association, and Chris Cantrell, et al, of the National Academy for State Health Policy

#### Patient age or service frequency limits

States also decide whether to set patient age limits or service frequency for fluoride varnish application. For children at high risk of tooth decay who do not have access to a dental home, the AAP recommends that appropriately trained primary care medical providers apply fluoride varnish once a month for three months, and then again either in six months if risk factors are well managed or once a month until risk factors are managed.<sup>17</sup> Most of the highlighted states limit the service to children under age 4. Their service frequency limits vary a little more; Iowa and Washington limit the service to three times a year, but in Utah the service is allowed at every well-child visit. Minnesota is unique in that it has no age limit for fluoride

varnish application by medical providers. Medical providers can apply fluoride varnish to a child's teeth as often as every three to six months as medically necessary. However, dental providers are limited by Minnesota Statute to reimbursement for one application every six months per child. This could be a source of contention between the two provider communities.

#### **Bundling services**

States can opt to bundle related oral health services (such as risk assessment) with fluoride varnish into one code to ease administrative burden and to encourage providers to complete the needed services. One case study state noted that despite completing training in the provision of multiple services in conjunction with fluoride varnish, some providers continue to only bill for the fluoride varnish application.

# TRAINING PROGRAMS

Since medical education has not traditionally covered the topic of delivering preventive oral health services, states must consider how to handle medical provider training. The first consideration is whether or not to require training, which at least 17 Medicaid agencies do for fluoride varnish application.<sup>18</sup> Iowa is a state that does not require training; the agency's position is and experience has been that physicians voluntarily seek training as they only provide services for which they feel sufficiently skilled or prepared.

If requiring training, states must determine the scope and nature of the training, including who will provide it, what topics will be covered, and what the format will be. Nationally, it is more common for trainings to be provided by non-Medicaid entities (such as universities, foundations, or health plans) than Medicaid, and inperson trainings are more common than on-line training.<sup>19</sup> This is also true of the five states featured in this report. Featured states find that providers like in-person trainings since trainers are often based in and familiar with the community. The format also allows for hands-on training rather than a strictly didactic approach. Hands-on training enables participants to, for example, practice positioning a baby during an oral screening or a fluoride varnish application. Some states offer multiple types of training. For example, in Utah, where training is required, providers have access to in-person trainings led by Medicaid, as well as in-person and on-line training programs led by a non-Medicaid entity, such as the local chapter of the AAP. Utah has coordinated video conference training with community health centers and provided presentations to residents at a children's hospital on how to apply fluoride varnish. Utah also has developed a very simple checklist on how to conduct risk assessments.

Trainings in case study states typically cover what fluoride varnish is, when and how it should be applied, any related reimbursable services such as risk assessment, guidelines for Medicaid billing, as well as making referrals to dentists for children with identified dental problems. The main message to providers about fluoride varnish is that it is a simple, quick service that takes only a couple of minutes to provide.

In Washington, the Washington Dental Service (WDS) Foundation, a non-profit funded by the state's leading dental benefits company, offers 90-minute trainings in provider offices during lunch; trainings are led by contracted dentists and physicians.<sup>20</sup> All clinic staff are encouraged to attend the trainings, which address not only delivery of the services, but also each clinic's plans for adoption, including integration of services into patient flow and electronic health records. Oral health coordinators from local public health departments are invited to attend so that they can begin to develop a relationship with medical providers, and medical providers learn about local resources to facilitate referrals to dental providers, such as the Access to Baby and Child Dentistry (ABCD) Program.<sup>21</sup> (See Text Box, page 14)The cost of delivering each training is approximately \$400, including lunch and supplies. In follow-up to trainings, the Foundation provides coaching to clinics to aid them in overcoming any barriers to implementation. Case study states supplement state trainings and information with national guidance and resources, such as the AAP's web-based training.<sup>22</sup> They also draw from resources developed in other states; Utah, for example, allows providers to use the University of Minnesota's online training tool. (See Appendix A for a list of state resources.)

Featured states shared that trainings also offer an opportunity to facilitate collaboration between the medical and dental provider communities. The topic of dental referrals is a specific area in which states have found the two communities can help each other. Featured states noted that often medical providers do not offer reimbursable, preventive oral health services if they do not have dentists who will accept referrals in the community. Case study states report that covering the topic of referrals and creating referral tools for trainings increase medical providers' awareness about existing dental referral sources and makes providers more comfortable making referrals to dentists. (See Appendix A for a list of state tools.) For example, Utah conducted a survey of dentists to compile a list of providers willing to serve young children; this resource is given to medical providers to facilitate referral to dentists in the community.

#### LEGISLATION AND REGULATION

The five featured states all reported that implementing their fluoride varnish reimbursement policies was a relatively simple process that consisted mainly of administrative, internal (to the Medicaid agency) changes such as reprogramming agency system software to allow medical providers to bill for what was previously a dental-only code. States provided examples of instances in which regulation or legislation facilitated implementation of the policy. It was not required, but Iowa decided to send its fluoride varnish policy through regulation to ensure that the dental community was allowed to publicly comment; as a result, the proposed regulation was amended to include language that medical providers are to inform caregivers that the service "is not a substitute for comprehensive dental care" and to "make every reasonable effort to refer or facilitate referral" to a dental provider.<sup>23</sup>

Washington State pursued legislation for its policy because funding needed to be secured for provider reimbursement. The Washington State Medicaid agency's reimbursement policies were included in state health reform legislation aimed at insuring more children. The final legislation states: "The department [of social and health services] shall take action to increase the number of primary care physicians providing dental disease prevention services, including oral health screenings, risk assessment, family education, the application of fluoride varnish and referral to a dentist as needed."<sup>24</sup>

# **EVALUATION**

Another element for states to consider is a process or plan for evaluating a policy's success in increasing children's access to preventive oral health services and decreasing dental decay among children. Featured states shared several ways to track progress at the state level. To assess reach and provider participation, states track the number of providers trained each year and/or the number of providers who bill for the service. States can also track the number of oral health preventive services delivered to Medicaid-enrolled children. Several case study states have found that one of the challenges of having several training sources is it makes it more difficult to track the number of providers who have completed training; the state does not have one place to go for the information. WDS Foundation has tracked its training numbers, and between 2002 and 2009, it trained 2,450 medical providers and staff, including nearly 1,200 primary care providers.

States can also evaluate the number of well-child visits that include preventive oral health services. To help assess its progress, Iowa has reviewed paid claims data to track changes in the number of Medicaid-en-rolled children ages 0-5 receiving a preventive oral health service. Using its Child and Adolescent Report-

ing System (CAReS), which documents oral health services provided to children served by Title V child health contractors, Iowa also tracks referrals made to dentists by its I-Smile Coordinators. (See I-Smile Text Box, page 13) In Washington State, as part of a three-year demonstration project with a nonprofit health system, Group Health Cooperative, the WDS Foundation along with Washington Dental Service aim to develop a model for making preventive oral health care a part of routine medical care for infants and young children. This project targets Medicaid-enrollees along with the privately insured. The project evaluation involves tracking the percentage of well-child visits with oral health services as well as provider and patient satisfaction.

State resources such as oral health surveys of school children also may provide reference points to track trends in dental disease and inform evaluation. For example, Washington has referenced a statewide Department of Health survey of children who were screened by dentists and dental hygienists.<sup>25</sup>

Interestingly, most featured states do not have a formal evaluation plan or process for tracking the progress or effect of their policies. Given constraints on agency time and resources, states rely on national data that demonstrate the effectiveness preventive oral health services for young children; they also turn to the evaluative work of the Into the Mouths of Babes (IMB) program by North Carolina and researchers at the University of North Carolina. Based on its experience, North Carolina recommends that other states collect data on the number of visits and the percentage of children receiving services at well-child visits.<sup>26</sup> Data from more states that have designed their policies differently from North Carolina would help determine if and how differences in state policies affect outcomes.

# POTENTIAL COST-SAVINGS

Given tight fiscal times, data showing participation and improvement may also provide a way to help sustain policies by showing a justification for funding and staff time. Featured states have been able to make the case to state legislatures to fund reimbursement of preventive oral health services by showing how the services will both save money (by preventing the need for costly treatment for decay) and improve quality of life for children in the long run. For its three preventive oral health services, the WDS Foundation estimated in 2007 that total state and federal expenses would be about \$1.7 million over two years and savings would be slightly more than \$2 million. They projected about \$316,000 in net savings over the first two years and nearly \$28 million in savings over the lifetime of the children. The methodology for calculating the savings is outlined in Appendix B.<sup>27</sup> North Carolina's data show its IMB program, which includes fluoride varnish, is already reducing treatment needs for children consistently receiving services. University researchers leading the program evaluation have documented a 40 percent reduction in treatment related to tooth decay for children with four or more IMB visits by age 4.<sup>28</sup>

It takes time to amass enough data to see trends or change, particularly because provider participation tends to build slowly over time. An evaluation of the cost effectiveness of North Carolina's IMB program is awaiting sufficient data to assess impact among children at age 7.<sup>29</sup> States that consider evaluation at the outset of a policy's implementation are well-positioned to establish baseline data needed to assess change.

# STAKEHOLDER ENGAGEMENT AND COLLABORATION

Across all of the previously mentioned considerations, the main theme that emerged in interviews with the five featured states was the importance of collaborating with a group of stakeholders. By reaching out to and partnering with dental providers, medical providers, and other stakeholders such as health plans and local public health agencies, states reported that they were better positioned to make the kinds of systemic changes needed to ensure that children receive oral health services early enough to prevent dental disease.

#### **Dental providers**

Featured states noted that outreach to dental providers is critical to alleviating their concerns about encroachments on their authority, as well as for engaging dental providers in accepting referrals for young children. To avoid dental provider community resistance, case study states recommended that Medicaid agencies meet with dental provider associations early on to assess their concerns and clarify that medical providers *augment* rather than take the place of dental providers. An evaluation of North Carolina's policy demonstrated that the policy did not result in a decrease in preventive care visits to dentists by young children.<sup>30</sup> Case study states also noted that medical providers are much more likely to help identify oral health problems if they can refer children in need of care to dentists who will treat them. Washington's experience, particularly its ABCD Program, illustrates how states can successfully engage dental providers in referrals. (See Text Box, page 14.)

#### **Medical providers**

Every featured state noted the importance of engaging medical providers to ensure provider awareness of and participation in reimbursement policies. Marketing and outreach need to explain the rationale for medical provider involvement in preventive oral health services and detail training opportunities; these campaigns are resource-intensive. Local chapters of the AAP, American Academy of Family Physicians, as well as other primary care medical associations are useful resources for case study states and can provide outreach ideas and assistance. Currently, the AAP has 34 Chapter Oral Health Advocates who have been identified to serve as their Chapter's oral health expert. By 2011, all 66 AAP Chapters should have a Chapter Oral Health Advocate identified and trained.<sup>31</sup> One strategy that boosted physician engagement in oral health in Washington State was engaging the state's medical and family medicine associations to enact resolutions that called on their members to recognize the importance of primary care providers addressing oral health and promoting dental disease prevention. Articles in professional publications and presentations at professional conferences also helped to engage medical providers in Washington.

#### **Other entities**

Case study states have found collaboration with universities, health and dental plans, and community organizations to be a valuable way to ensure provider and family participation and raise awareness of oral health services in medical offices. These entities help support training and outreach to families and providers. As the Iowa, North Carolina, and Washington experiences illustrate, stakeholder engagement and collaboration help support multi-pronged efforts to improve children's oral health and coordinate children's care. For these states, reimbursement policies are just one component of broader children's oral health strategies or programs.

#### IOWA'S I-SMILE DENTAL HOME INITIATIVE

lowa has established the I-Smile Dental Home Initiative to create a "system that allows all children, especially those often excluded from receiving dental care, to have early and regular care and ensure optimal oral health."<sup>32</sup> The initiative is a result of state legislation requiring Medicaid-enrolled children age 12 and younger to have a dental home.<sup>33</sup> Dental hygienists serve as Regional I-Smile Coordinators; I-Smile Coordinators link families with community organizations and providers, and coordinate trainings, referrals and care. Each I-Smile coordinator has a list of medical and dental providers, and the coordinators let the community know they are there to facilitate referrals. Coordinators also plan community oral health events and educate policymakers, families, and early childhood program staff about the importance of preventive oral health services. Their work extends to issues of community water fluoridation and collaboration with the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) staff to provide preventive oral health services at WIC settings. I-Smile Coordinators also develop oral health protocols with local EPSDT coordinators, who coordinate well-child visits and review EPSDT benefits with families in every county.

At the center of I-Smile is a Department of Public Health (DPH) database that tracks Medicaid-eligible children and service delivery; it allows the state to assess dental home activity and determine whether a child has a dentist or not. DPH and Medicaid share the information and the state is able to generate yearly reports assessing access to care. With this data, Iowa is able to track referrals and dental and medical providers billing Medicaid for oral health services for children. Data tracked include the number of medical practices receiving training, medical providers billing for oral health services, and number of dental services provided by dentists to Medicaid-enrolled children ages 0-12. The state has seen increases in rates of all measures since the inception of I-Smile.<sup>34</sup> An updated I-Smile report shows similar trends in data and notes that separate reimbursement for oral screenings will likely be needed to increase medical provider participation in delivering preventive oral health services.<sup>35</sup>

### THE CAROLINA DENTAL HOME INITIATIVE<sup>36</sup>

With the support of a federal grant, North Carolina is piloting a demonstration program called the Carolina Dental Home Initiative. Carolina Dental Home is "a collaborative, coordinated and comprehensive community-based system that provides access to dental services for preschool-age Medicaid children."37 The program is intended to build on the success of the IMB program by offering primary care medical providers additional tools to help them refer children to dentists based on risk of tooth decay. These tools include: a screening instrument to assess dental disease and risk factors for decay; the support of community care coordinators who help organize referrals and follow up with caregivers if dental appointments are broken; and learning collaboratives for physicians and dentists. Carolina Dental Home primary care medical providers are all active IMB providers. Carolina Dental Home has a system for screening, referral, and treatment by different types of providers. Physicians screen children ages 0-2 and refer children with special health care needs or who present with advanced disease to pediatric dentists. Physicians continue to care for children at low risk of decay until they age out of IMB benefits (age 3 and a half), when the physician refers them to general dentists (or safety net providers in certain areas) for dental care. Pediatric dentists treat children ages 0-2 with special health care needs or who have ECC. General dentists receive training to make them feel more comfortable accepting referrals of children at high risk for ECC who need basic preventive and restorative care. Carolina Dental Home also includes a strong caregiver education component; printed materials have been created in two languages and tested by focus groups. The program is funded through October 2010, and partners are exploring potential next steps.

## WASHINGTON'S ABCD PROGRAM

Washington State's reimbursement policy for medical providers builds off and complements the state's ABCD program, which has been in place since 1995.<sup>38</sup> Implemented by the state's Medicaid administration, ABCD is a program to expand access to dental care for Medicaid-eligible children up to age 6. ABCD represents a collaboration between the WDS Foundation, the University of Washington School of Dentistry, the Departments of Health and of Social and Health Services, the Washington State Dental Association, and local dental societies and health jurisdictions. Participating dentists attend training about pediatric dentistry to certify and qualify them for enhanced Medicaid reimbursements for certain services provided to children. With the support of community partners such as local Head Start programs, local health jurisdictions administer the program at the county level by conducting outreach to families, identifying and enrolling children in ABCD, linking children to program-certified dentists, and providing case management services for families. As a result of ABCD, the number of Medicaid-eligible children receiving dental care has increased from 21 percent in 1995 to 42.8 percent in 2009. Interviewees noted that by developing a group of dentists to receive referrals and treat young children, ABCD paved the way for implementation of medical provider reimbursement policies. ABCD helped raise awareness about the importance of preventive oral health care for young children and developed strong resources at the community level for referrals to dentists. In some cases, Washington integrates medical provider training with ABCD program training for dentists to enable the two provider types to get to know each other and learn together.

Many of the stakeholders actively involved in ABCD have partnered for other oral health initiatives, and state interviewees emphasized the importance of the WDS Foundation, which has consistently played an important role in state efforts. In addition to funding ABCD and leading primary care medical provider trainings, the WDS Foundation has spearheaded efforts to increase public awareness about the importance of preventive oral health, including the "Baby Teeth" campaign targeting parents and caregivers and the Citizens' Watch for Oral Health Campaign aimed at influencing public policy.

# Lessons Learned

nterviews with the featured states revealed several lessons about reimbursement policy design and implementation considerations, which are summarized in the below table.

## TABLE 2: LESSONS LEARNED FROM INTERVIEWS WITH FEATURED STATES

s and	<ul> <li>Reimbursable service components vary by state based in part on how states administer their EPSDT programs; states currently reimburse medical providers for fluoride varnish application, caregiver educatio and oral exams/evaluations.</li> </ul>	on,
nent	• Reimbursement for multiple oral health services attracts provider interest and increases provider uptake.	
Service Components and Reimbursement	• States that have implemented a fluoride varnish policy can add reimbursement for related services such as caregiver education with relative ease.	S
ce C Rein	• States can use a dental or medical code to reimburse medical providers for fluoride varnish application.	
Servi	• Differences in reimbursement rates or service eligibility between medical and dental providers (particularly higher rates or eligibility for more services for medical providers) may lead to tension between the two communities.	у
Training	• In-person trainings offer hands-on learning and the opportunity for providers to learn from trainers who a familiar with the community.	are
Trai	<ul> <li>Including information about dental referrals and community resources to facilitate referral in trainings can facilitate collaboration between local medical and dental providers.</li> </ul>	1
) L	• Although implementing reimbursement for preventive oral health services is usually a simple, administrative process internal to Medicaid agencies, legislation may be needed to secure funding for reimbursement.	ve
Legislation/ Regulation	• Sending a reimbursement policy through the regulatory process allows for public comment and provides mechanism to address dental community concerns.	а
Le. Re	<ul> <li>Providing data about the potential cost-savings associated with reimbursing preventive oral health service helps make the case to legislators for funding.</li> </ul>	25
noi	• To assess policy progress, states can track the number of providers trained each year, the number of providers who bill for reimbursable services, the number of preventive oral health services delivered to Medicaid-enrolled children, referrals to dentists, and/or the number of well-child visits that include preventive oral health services.	
Evaluation	• Few states have a formal process in place to evaluate their reimbursement policies, but those that do have found evaluative data to be helpful in assessing progress and making the case for continued support.	5
	<ul> <li>In part because provider participation builds slowly, it takes time to collect sufficient data to observe tree or impact; considering evaluation at the outset of a policy's implementation better positions a state to establish the baseline data needed to assess change.</li> </ul>	าds
ration	• Partnering with dental providers, medical providers, and stakeholders such as public health agencies and health plans is essential to ensuring policy awareness and participation.	
	• Meeting with dental provider associations early on offers the opportunity to assess their concerns and clarify the complementary role medical providers can play in preventing dental disease, addressing early signs of disease among children, and making referrals to dentists.	
Stakeholder collabo	• Marketing and outreach to medical providers are needed to explain the rationale for their involvement in preventive oral health services and to describe training opportunities; these campaigns are resource-intensive but local primary care professional associations, such as AAP chapters, can be useful resources.	
Sta	• Reimbursement policies are often just one component of statewide strategies or programs to improve children's oral health and coordinate care.	

The experiences of Iowa, Minnesota, North Carolina, Utah, and Washington demonstrate several common elements states consider when designing and implementing a Medicaid policy to reimburse medical providers for preventive oral health services such as fluoride varnish application. States must establish the service components, parameters for reimbursement, and provider training. To help secure funding and track progress, states create evaluation plans and engage multiple stakeholders. Featured states' activities suggest that reimbursement policies are most successful when they involve a collaborative team of partners and link to broader, multi-pronged efforts to improve children's oral health. Since children from families with lowincomes are at highest risk, this report focuses almost exclusively on Medicaid policies. However, partners in case study states are committed to meeting the oral health needs of all children; their lessons may be useful in designing policies for other populations, such as children who are in CHIP or are privately insured. Appendices

# Appendix A: Helpful Resources

Below are links to a variety of state and national resources related to the provision of preventive oral health services by medical providers. Tools fall into two categories: referral and provider education/training. All links were retrieved January 26, 2010. Asterisks (\*) denote particularly recommended materials.

The National Maternal and Child Oral Health Resource Center has created an online database of over 100 materials related to oral health. This valuable resource may be accessed at: http://www.mchoralhealth.org/action.lasso?-database=Biblio&-layout=Web&-response=materials/results.lasso&-MaxRecords=all&-DoScript=OHRCNonProf&-search.

## Referral

- Iowa Department of Public Health. "EPSDT Registry." 2005. http://www.idph.state.ia.us/hpcdp/common/pdf/oral\_health/2005\_epsdt\_registry.pdf
   Offers a listing of Iowa dentists who accept Medicaid, children under the age of three years, and/or children with disabilities.
- \*North Carolina Department of Health and Human Services. "Referral Guidelines for Infants and Toddlers." http://www.communityhealth.dhhs.state.nc.us/dental/IMB\_resources/10\_Provider\_Referral\_Guidelines.pdf Into the Mouths of Babes resource.
- Tennessee Department of Health. "Dental Clinics." http://health.state.tn.us/oralhealth/state.html
- Utah Department of Health. "Dental Resource Guide: State of Utah." 2009. http://health.utah.gov/oralhealth/pdf/statewideOHP.pdf
- **Virginia** Department of Health. "Dental Directory: Advanced Search." http://www.vahealth.org/dental/dentaldirectory/AdvanceSearch.aspx
- Washington Dental Service Foundation. "Dental Resources in Your Community." http://www.kidsoralhealth.org/images/DentalResources.pdf

# Provider Education/Training

- \*American Academy of Pediatrics. "Oral Health Risk Assessment Training for Pediatricians and Other Child Health Professionals." http://www.aap.org/oralhealth/cme/intro.htm "Provides a concise overview of how to perform an oral examination and conduct an oral health risk assessment and triage for infants and young children."
- \*American Academy of Pediatrics. "Protecting All Children's Teeth (PACT): A Pediatric Oral Health Training Program." http://www.aap.org/oralhealth/pact/pact-home.cfm "Aim[s] to educate pediatricians, pediatricians in training, and others interested in the important role that oral health plays in the overall health of young patients."
- American Academy of Pediatric Dentistry Foundation. "Establishing A Dental Home Using the American Academy of Pediatric Dentistry's Caries-Risk Assessment Tool (CAT) as a First Step." 2007. http://www.aapd.org/foundation/pdfs/CAT.pdf
   Presents the American Academy of Pediatric Dentistry's Caries-Risk Assessment Tool (CAT).

- Association of State and Territorial Dental Directors. "Basic Screening Surveys: An Approach to Monitoring Community Oral Health Preschool & School Children." 2008. http://www.astdd.org/docs/BSSChildrensManual2008forwebsite.pdf
   "Manual provides general information on how to conduct a Basic Screening Survey in preschool and school age children. It includes the clinical indicators that should, at a minimum, be collected and the diagnostic criteria that all jurisdictions should use when collecting oral health data."
- National Maternal and Child Oral Health Resource Center. "A Health Professional's Guide to Pediatric Oral Health Management." 2003. http://www.mchoralhealth.org/PediatricOH/index.htm Contains "a series of seven modules designed to assist health professionals in managing the oral health of infants and young children."
- \*National Maternal and Child Oral Health Resource Center. "Bright Futures in Practice: Oral Health Pocket Guide." 2004. http://www.mchoralhealth.org/PDFs/BFOHPocketGuide.pdf
   "Designed to help health professionals implement specific oral health guidelines during pregnancy and postpartum, infancy, early childhood, middle childhood, and adolescence, and...addresses risk assessment for dental caries, periodontal disease, malocclusion, and injury."
- National Maternal and Child Oral Health Resource Center. "Open Wide: Oral Health Training for Health Professionals." 2004. http://www.mchoralhealth.org/OpenWide/index.htm
   Contains "a series of four modules designed to help health and early childhood professionals working in community settings (for example, Head Start and WIC staff) promote oral health in the course of promoting general health for infants, children, and their families."
- Society of Teachers of Family Medicine. "Smiles for Life Curriculum." 2009. http://www.smilesforlife2.org Seven online modules on oral health targeted to family medicine residents, medical schools, and more.
- [California] First5 Oral Health. "First Smiles." http://www.first5oralhealth.org "Dedicated to providing education and training for dental, medical and early childhood educators, as well as education to parents of young children, including those with disabilities and other special needs, on the prevention of" early childhood caries. In particular, see video on oral health assessment for medical providers: http://www.first5oralhealth.org/page\_asp?page\_id=286.
- \*University of Connecticut Health Center. "Oral Health Resources for Health Professionals." http://oralhealth.uchc.edu/index.html
   Offers a variety of resources for medical practitioners to learn about oral health for patients of all ages, but focuses especially on pediatric population. Includes video case studies.
- Kansas Chapter AAP. "Bright Smiles for Kansas Kids." http://www.aapkansas.org/content/chapterFocus/oralHealth/brightSmiles/brightSmiles.htm "A program for provider education on Fluoride Varnish application for children ages 0-3"
- Minnesota Department of Health and Minnesota Department of Human Services. "Child and Teen Checkups (C&TC) FACT Sheet for Primary Care Providers: Dental Checkup." 2009. http://www.health.state.mn.us/divs/fh/mch/ctc/factsheets/dentalcheckup.pdf Part of a series of fact sheets designed to assist providers in performing EPSDT exams.
- Minnesota Department of Health and Minnesota Department of Human Services. "Fluoride varnish information for providers of Minnesota Child and Teen Checkups (C&TC)." 2007. http://edocs.dhs.state.mn.us/lfserver/Legacy/DHS-5012-ENG
   Short publication on the role of the primary care provider in prevention of caries and providing fluoride varnish. Includes information on reimbursement for fluoride varnish.

 \*University of Minnesota. "Dental Health Screening and Fluoride Varnish Application." 2009. http://www.oralhealthzone.umn.edu
 Online training on children's oral health for primary health care providers. Discusses caries prevention, oral examination, fluoride

varnish application, billing process, and more.

- \*North Carolina Department of Health and Human Services. "Into the Mouths of Babes Toolkit for Project Participants." 2008. http://www.communityhealth.dhhs.state.nc.us/dental/IMB\_Toolkit.htm Provides a variety of educational and practice assistance resources for non-oral health professionals participating in North Carolina's Into the Mouths of Babes program. See especially "Helpful Hints" (http://www.communityhealth.dhhs.state.nc.us/dental/IMB\_resources/2\_Helpful\_Hints.pdf) and "Encounter Form" (http://www.communityhealth.dhhs.state.nc.us/dental/IMB\_resources/4\_Encounter\_Form.pdf).
- \*Ohio Department of Health. "Help Me Smile: Oral Health Risk Assessment Protocols, Training Modules, and Educational Materials for Use with Families of Young Children." 2007. http://www.mchoralhealth.org/materials/multiples/helpmesmile/

"Divided developmentally, topics include fluoride, brushing and flossing, dental decay, white spots on teeth, nutritious snacking, and 'lift the lip' protocols for infants and young children. Also included are handouts, an illustrated flip chart, and assessment tools."

• **Ohio** Department of Health. "Smiles for Ohio Fluoride Varnish Program for Primary Care Providers." 2006. http://www.mchoralhealth.org/materials/multiples/smilesforohio/

"This training manual, which is intended for health professionals, provides information about how to assess the oral health of infants and young children at well-child examinations to better enable these health professionals to identify infants and children at risk for early childhood caries. The manual also provides information about how to implement the Smiles for Ohio Fluoride Varnish Program."

- [Pennsylvania] University of Pittsburgh. "Oral Health Tutorial: Providing a brief overview of Early Childhood Caries for Non-Dental Professionals." http://www.oralhealthtutorial.org/index.html Training program "designed for non-dental professionals who work with infants, toddlers, and preschoolers and children with disabilities." Requires registration to view.
- Medical University of **South Carolina**. "Special Topics: Oral Health." 2005. http://fammed.musc.edu/fmc/data/Oral\_Health.htm Oral health curriculum goals and objectives for family medicine medical students.
- Virginia Department of Health. "Bright Smiles for Babies." 2009. http://www.vahealth.org/dental/maternalandearlychildhood/brightsmiles/index.htm Brief program description.
- \*Washington Dental Service Foundation. "Provider Training." http://www.kidsoralhealth.org/provider-training.html Information on training, reimbursement, and health education materials for families. Online continuing medical education course to be posted Spring 2010. See especially "3 Simple Steps" poster at: http://www.kidsoralhealth.org/images/three\_simple\_steps. pdf.

Appendix B: Washington's Methodology for Estimating Cost-Savings

Tashington State used the following methodology to estimate short-term (two-year) and lifetime cost savings associated with reimbursement to medical providers for an oral exam and caregiver education about oral health in addition to existing reimbursement for fluoride varnish.

SHORT-TERM (NET) SAVINGS
I. Increased cost of preventive services
# of children seen <sup>a</sup>
x additional reimbursement per visit ${}^{\scriptscriptstyle \mathrm{b}}$
= increased cost of preventive services
II. Reduced cost of restorative services
# of children seen <sup>a</sup>
x proportion with cavities <sup>c</sup>
x restorative cost per child <sup>d</sup>
x reduction due to early treatment <sup>e</sup>
= reduced cost of restorative services
III. Net savings
Reduced cost of restorative services (II)
- increased cost of preventive services (I)
= net savings

LIFETIME SAVINGS
# of children seen <sup>a</sup>
x average restorations per child <sup>f</sup>
x lifetime cost per cavity <sup>g</sup>
x reduction due to early treatment <sup>e</sup>
= lifetime savings from increased
preventive services

#### Key and Data Sources:

- (a) Number of children seen: number of children projected to receive the package of oral health preventive services during well-child visits. Number based on WDS Foundation's best conservative projection of the number of well-child visits with oral health prevention services in the next calendar year as compared to actual fluoride varnish applications in the prior year.
- (b) Additional reimbursement per visit: difference between the current amount of reimbursement for fluoride varnish and the amount of reimbursement for the oral exam and caregiver education.
- (c) Proportion of children with cavities: statewide survey data on the percent of low-income children ages 3-5 with dental decay. The data source was the Washington State Department of Health's 2005 Smile Survey. (See http://www.doh.wa.gov/cfh/Oral\_Health/Documents/Smilesurvey/2005SSFull.pdf). State dental directors are a good source to contact for information about available survey data in other states.
- (d) Restorative cost per child: number of children with cavities multiplied by the average cost of restorations for Medicaidenrolled children ages 0-5 years, based on Washington State Medicaid data on dental expenditures for restorative costs.
- (e) Reduction due to early treatment: The following article showed a 38% reduction in average dental costs when children have their first dental visit between age 1 and 2 as compared to between ages 4 and 5: Matthew F. Savage et al., "Early Preventive Dental Visits: Effects on Subsequent Utilization and Costs," *Pediatrics* 114, no. 4 (Oct. 2004): e418-e423.
- (f) Average restorations per child: average number of restorations per Medicaid-enrollee under age 8, based on Washington State Medicaid claims data.
- (g) Lifetime cost per cavity: estimated cost of \$1,811 to maintain a restored cavity over the lifetime, based on June 2004 analysis conducted by the Dental Data and Analysis Center.

### Endnotes

1 U.S. Government Accountability Office, Extent of Dental Disease in Children Has Not Decreased, and Millions are Estimated to Have Untreated Tooth Decay (Washington, D.C.: GAO, Sept. 2008). Retrieved 26 January 2010. http://www.gao.gov/new.items/d081121.pdf.

2 U.S. Department of Health and Human Services Centers for Medicare & Medicaid Services. 2008 National Dental Summary. Jan. 2009. Retrieved 26 Jan. 2010.

http://www.cms.hhs.gov/MedicaidDentalCoverage/Downloads/natdensum011209.pdf.

3 NASHP previously identified 34 states, and since that publication, New York State has begun fluoride varnish reimbursement. See Chris Cantrell, *Engaging Primary Care Medical Providers in Children's Oral Health* (Washington, DC: National Academy for State Health Policy, Sept. 2009). Retrieved 26 Jan. 2010. http://www.nashp.org/node/1153. See also New York State Department of Health, "Dental Update: Fluoride Varnish Applications Covered for Children up to Seven Years of Age," *New York State Medicaid Update* 25, no. 11 (Sept. 2009). Retrieved 26 Jan. 2010.

 $http://www.health.state.ny.us/health\_care/medicaid/program/update/2009/2009-09.htm \#den.$ 

4 See Peter J. Cunningham and Jessica H. May, *Medicaid Patients Increasingly Concentrated Among Physicians*, (Washington, D.C.: Center for Studying Health System Change, Aug. 2006). Retrieved 26 Jan. 2010.

http://www.hschange.com/CONTENT/866. See also Alison Borchgrevink, Andrew Snyder, and Shelly Gehshan, *The Effects of Medicaid Reimbursement Rates on Access to Dental Care* (Portland, ME: National Academy for State Health Policy, March 2008). Retrieved 26 Jan. 2010. http://www.nashp.org/node/670.

5 American Dental Association, Survey of Dental Practice, as cited by: American Dental Education Association. Distribution of Professionally Active Dental Specialists, 2001. Retrieved 26 Jan. 2010. http://www.adea.org/publications/TrendsinDen-talEducation/TDEDental%20Professions/Pages/ProfessionallyActiveDentists.aspx. (Site best viewed in Microsoft Internet Explorer.)

6 Wellness visits based on: American Academy of Pediatrics and Bright Futures. "Recommendations for Preventive Pediatric Health Care." 2009. AAP. Retrieved 26 Jan. 2010. http://practice.aap.org/content.aspx?aid=1599.

"Recommendations for Pediatric Preventive Health Care" provides the recommended periodicity schedule for well-child visits. These recommendations are published in *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adoles- cents,* which remains the standard of pediatric preventive care.

7 Unless otherwise cited, all case study information and data comes from personal interviews conducted with state officials or stakeholders by the author.

8 Section on Pediatric Dentistry and Oral Health, "Preventive Oral Health Intervention for Pediatricians," *Pediatrics* 122, no. 6 (Dec. 2008): 1387-1394.

9 For a sample risk assessment tool, see: American Association of Pediatric Dentistry. "Policy on Use of a Caries-risk Assessment Tool (CAT) for Infants, Children, and Adolescents." 2006. AAPD. Retrieved 26 Jan. 2010. http://www.aapd.org/media/policies\_guidelines/p\_cariesriskassess.pdf.

10 Nancy Kressin et al., "Pediatric Clinicians Can Help Reduce Rates of Early Childhood Caries: Effects of a Practice Based Intervention," *Medical Care* 47, no. 11 (November 2009): 1121-1128.

23

11 Chris Cantrell, Engaging Primary Care Medical Providers in Children's Oral Health.

12 Washington State Second Substitute Senate Bill 5093, introduced 2 Feb. 2007. Retrieved 26 Jan. 2010. http://apps.leg.wa.gov/documents/billdocs/2007-08/Pdf/Bills/Senate%20Bills/5093-S2.pdf.

13 The reimbursement became effective in February 2008 and Medicaid billing data is not yet available for the first year of the expanded reimbursement. Washington State Medical Assistance Administration, *Washington State Medicaid Enrolled Children Birth through Five Years: Fluoride Varnish Applications by Primary Care Medical Providers 2000-2008*.

14 Centers for Medicare & Medicaid Services. "Medicaid Early & Periodic Screening & Diagnostic Treatment Benefit: EPSDT Benefits." Dec. 2005. CMS. Retrieved 26 Jan. 2010. http://www.cms.hhs.gov/medicaidearlyperiodicscrn/02\_benefits.asp.

15 Two additional states use a medical code: Florida and Texas. Source: 2009 Survey by Amos Deinard, MD, MPH, on behalf of the American Academy of Pediatrics Oral Health Initiative, Medicaid/SCHIP Dental Association, and Chris Cantrell, et al, of the National Academy for State Health Policy.

16 Ibid.

17 American Academy of Pediatrics and Bright Futures. "Preventive Oral Health Intervention for Pediatricians."

18 2009 Survey by Amos Deinard, MD, MPH, on behalf of the American Academy of Pediatrics Oral Health Initiative, Medicaid/SCHIP Dental Association, and Chris Cantrell, et al, of the National Academy for State Health Policy.

19 Ibid.

20 Dianne Riter et al., "Delivering Preventive Oral Health Services in Pediatric Primary Care: A Case Study," *Health Affairs* 27, no. 6 (Nov./Dec. 2008): 1728-1732.

21 At the training, attendees receive simple how-to kits which include a brightly-colored sheet that outlines the 3 Simple Steps for delivering oral health services, a laminated booklet that guides providers to assess the pediatric patient's oral disease risk and to deliver specific services if they see certain oral health conditions, as well as samples of educational brochures for families. See Appendix A for links to these training materials.

22 See American Academy of Pediatrics (AAP) Oral Health Initiative. "Protecting All Children's Teeth (PACT): A Pediatric Oral Health Training Program." AAP. Retrieved 26 Jan. 2010. http://www.aap.org/oralhealth/pact.cfm. See also: American Academy of Pediatrics (AAP) Oral Health Initiative. "Oral Health Risk Assessment: Training for Pediatricians and Other Health Professionals." AAP. Retrieved 26 Jan. 2010. http://www.aap.org/oralhealth/cme/.

23 Iowa Administrative Code, sec. 441-78.1 (24). Retrieved 26 Jan. 2010. http://www.legis.state.ia.us/IAC.html.

24 Revised Code of Washington, sec. 74.09.470(7). Retrieved 26 Jan. 2010. http://apps.leg.wa.gov/RCW/.

25 Washington State Department of Health Office of Maternal and Child Health Oral Health Program, *Smile Survey 2005: The Oral Health of Washington's Children*. (Olympia, WA: Washington Department of Health, March 2006). Retrieved 26 Jan. 2010. http://www.doh.wa.gov/cfh/Oral\_Health/Documents/Smilesurvey/2005SSFull.pdf

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27 WDS Foundation, "Oral Health/Primary Care Medical: 2007 Legislative Session and Health Outcomes." 2007. Cost saving factors based on the following data sources: dental caries prevalence assumptions based on Washington State Department of Health's 2005 Smile Survey; restorative costs based on Washington state Medicaid dental expenditures on restorative costs; cost reduction assumptions based on Matthew F. Savage et al., "Early Preventive Dental Visits: Effects on Subsequent Utilization and Costs," *Pediatrics* 114, no. 4 (Oct. 2004): e418-e423; lifetime savings based on analysis conducted by the Dental Data & Analysis Center (June 2004).

28 Rebecca King, "Into the Mouths of Babes: The North Carolina Experience" and Gary R. Rozier et al., *Evaluation of Into the Mouths of Babes Program* (Chapel Hill, NC: University of North Carolina at Chapel Hill, June 2007).

29 Ibid.

30 Gary R. Rozier et al., Evaluation of Into the Mouths of Babes Program.

31 Additional information, including a listing of Chapter Oral Health Advocates, may be found at: http://www.aap.org/oralhealth/catooh.cfm.

32 Tracy Rogers, Bob Russell, and Shaela Meister, *Inside I-Smile: A Look at Iowa's Dental Home Initiative for Children* (Des Moines, IA: Iowa Department of Public Health, Dec. 2008). Retrieved 26 Jan. 2010. http://www.idph.state.ia.us/hcr\_committees/common/pdf/medical\_home/inside\_ismile.pdf.

33 Iowa Code, sec. 249J.14(7). Retrieved 26 Jan. 2010. http://www.legis.state.ia.us/IowaLaw.html.

34 Tracy Rogers, Bob Russell, and Shaela Meister, Inside I-Smile: A Look at Iowa's Dental Home Initiative for Children.

35 Although the number of very young children receiving fluoride varnish applications from medical providers has increased since the inception of I-Smile, Iowa did see a decrease in this number in the past year. See Tracy Rodgers, Bob Russell, and Shaela Meister, *Inside I-Smile 2009: An Update on Iowa's Dental Home Initiative for Children* (Des Moines, IA: Oral Health Bureau, Iowa Department of Public Health, Jan. 2010). Retrieved 26 Jan. 2010. http://www.idph.state.ia.us/hpcdp/common/pdf/oral\_health/inside\_ismile\_2009.pdf

36 Unless otherwise indicated, all information comes from: Mark Casey, "Increasing Access to Medicaid Dental Services for Very Young Children: Carolina Dental Home Initiative" (presentation at the 2009 Fall National Association of State Medicaid Directors Conference, 10 November 2009).

37 Larry Myers, *Carolina Dental Home Fact Sheet* (Raleigh, NC: North Carolina Division of Public Health, Oral Health Section, Feb. 2007).

38 To learn more about ABCD, visit http://www.abcd-dental.org.