Mounting evidence suggests that addressing oral health can help states move toward the Triple Aim goals of improved patient care, improved population health, and reduced per-capita costs. Oral health and overall health intersect in three important areas for states’ reform efforts: diabetes, maternal and child health, and avoidable emergency department use. State strategies to leverage these linkages include covering adult dental services in Medicaid; building connections between oral health care and medical care in service delivery, professional education, and licensing; and incorporating oral health into health reform efforts.

Poor oral health—including high rates of tooth decay, missing teeth, and gum disease—and inadequate access to oral health services are persistent problems for low-income populations. More than 40 percent of adults below the Federal Poverty Level have at least one untreated decayed tooth, but fewer than 20 percent of poor adults aged 19–64 receive any dental services. This low level of access is costly. Many low-income individuals turn to the emergency department as their primary and only source of care for oral health needs, and these visits for avoidable oral-health-related visits cost the U.S. health care system hundreds of millions of dollars per year.
Although state and federal policymakers are pursuing many strategies to reform health care delivery and move toward the Institute for Healthcare Improvement’s Triple Aim of improving the patient experience of care, improving the health of populations, and reducing the per-capita cost of care, oral health is very often left out of the equation. Accountable Care Organizations, patient-centered medical homes, and the federal State Innovation Models grant program have focused on coordinating care for patients with complex needs, delivering whole-person care that integrates primary and specialty care, including behavioral health, and addressing the drivers of health spending. Few of these initiatives, however, currently include oral health, despite a growing body of research indicating an important connection between oral and physical health.

The effects of poor oral health are not limited to the mouth. In addition to pain, lost work time, poorer nutrition, and avoidable costs from failing to prevent oral disease, a variety of studies have associated oral disease with systemic health conditions including cardiovascular disease and diabetes. Several studies of private insurance claims indicate that people with diabetes receiving treatment for gum disease had total costs that were thousands of dollars lower than those who did not receive such treatment.

State policymakers have an opportunity to build on several notable national and state initiatives and local pilot projects that address educational and programmatic barriers to bridging oral health and medical care. States seeking to pursue this opportunity can focus on coverage of adult dental benefits in Medicaid; building connections between oral health care and medical care in service delivery, professional education, and licensing; and inclusion of oral health goals in broader delivery reform efforts.

This brief will describe research on oral-systemic linkages, state-level experiences with incorporating oral health into reform strategies, and promising local examples. It will also describe next steps for states wishing to incorporate an oral health strategy into their reform efforts. NASHP will also be publishing a companion online toolkit for state policymakers that will provide more information on areas described here.

**Oral Health’s Links to Overall Health and Health Costs**

A 2011 Institute of Medicine (IOM) report concluded that “oral health is an integral part of overall health, and therefore, oral health care is an essential component of comprehensive health care.” Although oral health care delivery, financing, and provider training systems have historically been separate from medical care systems, the mouth is not separate from the rest of the body. Conditions affecting the mouth and teeth have effects on organs and systems throughout the body, and vice versa.

Pain from cavities and abscessed teeth can be severe, and can make it difficult to engage in daily activities like eating, speaking, or smiling. Poor oral health is related to frequent school absences. Oral cancers are very common and many cancer treatments affect oral health. Many common drugs can cause dry mouth, which can increase the risk of oral health problems. The earliest manifestations of HIV often occur in the mouth.

Oral health and overall health also intersect in three particular areas important to states’ reform efforts: diabetes, maternal and child health, and avoidable emergency department use. The sections below describe research in each of these areas and provide examples of how adopting an oral health strategy could provide states with another way to improve patient experience, improve population health, and reduce health costs.

**Diabetes and Gum Disease**

Diabetes is an important driver of health spending in the United States. The Centers for Disease Control and Prevention (CDC) estimates that in 2012, 29.1 million Americans had diagnosed or undiagnosed diabetes, and direct health spending related to diabetes totaled $176 billion. Medicaid covered 15 percent of individuals with diagnosed diabetes in 2003. Medicaid enrollees with diabetes had annual per capita health expenditures of more than $13,000, compared to per capita expenditures of $5,844 across all Medicaid enrollees for the most recent available year.

There is a two-way relationship between gum (periodontal) disease and glycemic (sugar) control in people with diabetes. Individuals with diabetes are at
much higher risk of developing gum disease, and chronic inflammation and infection from periodontal disease can make it more difficult to control blood sugar levels. Uncontrolled blood sugar can cause serious and costly complications, including blindness, amputation, heart disease and kidney disease.

Several studies of claims data from commercially-insured populations have estimated significant cost savings from providing frequent dental cleanings and periodontal therapy to members with diabetes.

- A study of data from United Concordia (a dental insurance company) and Highmark, Inc. (a medical insurer), published in the American Journal of Preventive Medicine, found that individuals with type 2 diabetes who received regular periodontal treatment had medical costs that averaged $2,840 less per year, from avoided hospitalizations and reduced utilization of medical services.

- A 2006-2008 CIGNA study estimated annual medical cost savings of $2,483 per person—a 23 percent reduction—for individuals with diabetes who completed periodontal therapy, compared to those who started but didn’t complete treatment for gum disease.

- A 2009 study of Blue Cross Blue Shield of Michigan claims found savings of 10 percent annually in diabetes-related medical care costs from treating gum disease, and savings of between 20-40 percent for individuals with diabetes and another chronic condition.

In response to studies such as these, insurers are beginning to change their policies. For example, United Concordia established Smile for Health—Wellness, an integrated program of improved dental benefits and member outreach for chronic disease patients. As another example, Aetna introduced a Dental-Medical Integration program that offers enhanced benefits to members who have diabetes, cardiovascular disease, or are pregnant. Those members are eligible to receive extra preventive periodontal services with no cost-sharing. Aetna reports that program participants who visit the dentist had 17 percent lower medical claim costs, improved diabetic control, fewer major dental services, and lower rates of hospital admission.

When applying this evidence to public insurance programs like Medicaid there are two important considerations to keep in mind. First, these studies were...
conducted using claims data from private insurers, and there has not yet been a similar study done using data from public programs. Second, clinical research on the relationship between periodontal treatment and diabetic control is still being developed. Recent meta-analyses and systematic reviews have supported the position that treating gum disease has a modest—but statistically significant—effect on blood sugar levels—a reduction in hemoglobin A1C levels of about four-tenths of a percentage point.21, 22 (The CDC reports that reducing A1C levels by one percentage point can reduce the risk of eye, kidney, and nerve diseases by 40 percent.)23 However, there has not yet been a large randomized controlled trial study that has definitively shown a causal relationship between periodontal treatment and diabetic control. Still, the health effects of untreated periodontal disease are serious—including pain, bleeding, and tooth loss—so interventions that treat an individual’s gum disease are beneficial for the patient, and could potentially result in cost savings to states.

Maternal and Child Oral Health

Oral health interventions aimed at pregnant women and new mothers also present an opportunity for states to improve care and avoid future costs—both for those women, and for their children. The oral health of pregnant women and new mothers is important for the health of young children; well-established evidence shows that women with high levels of the bacteria that cause cavities have a high likelihood of transmitting the bacteria to their young children.26 Children can be infected with these bacteria in their first few months of life. Without good oral health habits, healthy nutrition, and connection to systems of care, this infection can quickly progress to tooth decay, including the severe form of tooth decay known as Early Childhood Caries. While preventable, this severe decay is painful and expensive to treat, often requiring general anesthesia. A 2012 study estimated that the average cost to treat a child under general anesthesia was $7,200 per case, and that 12 percent of children under age 6 required treatment under anesthesia.27 Since Medicaid and the Children’s Health Insurance Program (CHIP) are required to cover children’s dental services, they must bear these higher costs for their enrollees.

Research shows providing oral health care during pregnancy is safe, recommended for addressing maternal oral health, and helps build healthy behaviors for mothers and their children.28 States including New York29 and California30 have established clinical guidelines for dentists and medical providers on delivering oral health care to pregnant women. The American College of Obstetricians and Gynecologists and the Maternal and Child Health Bureau (MCHB) have also issued statements reinforcing the importance of dental care and prenatal oral health counseling for pregnant women.31 These policy statements and guidelines have been important in building a foundation to change perceptions among some dental providers who may be uncomfortable treating women during pregnancy.

Pregnancy offers a unique opportunity for providers to provide prenatal counseling and oral health education, particularly for low-income women, if they are newly able to access dental benefits through Medicaid during this time.32 There is also mixed evidence suggesting a possible association between maternal periodontal disease and adverse birth outcomes, including low birth weight and preterm birth. For these reasons, some states that do not otherwise cover dental services for all adult enrollees have extended dental coverage to Medicaid- or CHIP-enrolled pregnant women as “pregnancy-related services.” In 2008, 19 states offered this type of coverage.33 Through delivery reform such as medical homes and accountable care activities, states have an opportunity to offer providers and patients resources and materials to help women have healthy pregnancies and prevent cavities in their babies’ early years. Sample materials are available.34

Emergency Department Utilization

The ADA’s Health Policy Institute estimates that, in 2010, treating oral health conditions in hospital emergency departments cost the healthcare system between $867 million and $2.1 billion. Dental-related visits to emergency departments increased from 1.1 million in 2000 to 2.1 million in 2010.37 Utilization of emergency departments for oral health conditions could be a prime target for efforts to improve care and reduce costs. Most dental conditions are preventable, and most emergency departments are not equipped to provide comprehensive oral health care. Emergency departments can typically only provide antibiotics and pain relievers. Prescriptions of opioid drugs by emergency departments for dental conditions rose during the last decade,38 so
addressing unmet dental needs may also be useful for states seeking to reduce overuse of powerful painkillers. A recent study from The Pew Charitable Trusts collected studies from more than a dozen states that noted significant costs associated with emergency department visits for preventable dental conditions. Frequently, emergency department utilization is driven by inadequate access to routine dental care among low-income individuals, including Medicaid enrollees. A study in Maryland found the state’s decision to eliminate Medicaid reimbursement for dental services corresponded with a 12 percent increase in oral health-related emergency department visits. Idaho reinstated adult dental benefits for certain adults after observing an increase in emergency department costs that more than outweighed projected savings from cutting the benefit.

Dental Emergencies Needing Treatment (DENT), a pilot project of Empire Health Foundation, Washington Dental Service Foundation and Providence Hospital in Spokane, WA, is designed to reduce emergency department utilization for avoidable dental issues. DENT is also part of Better Health Together, a Spokane-area design grantee for Washington’s regional approach to financing and delivery system reform called Accountable Communities for Health (ACH). The DENT project connects emergency department patients with dental problems to dental providers. The project recruits providers and provides case management and coaching to patients to ensure that patients follow up on referrals. More than 575 patients were connected to regular dental care in the first five months of the project, and 95 percent of patients getting referrals received care. The pilot has quickly achieved cost savings; the project was launched in July 2014 with an initial investment of $185,000, and by January 2015, the cost of charity care in the Providence emergency department had been reduced by $634,000.

**Strategies for Building Oral Health into Reform Efforts**

There is compelling and increasing evidence that oral health can help states move toward the Triple Aim, and there are projects in progress that are demonstrating that oral health can be integrated into whole-person care. In July 2014, the National Academy for State Health Policy (NASHP) conducted an expert roundtable and interviews with medical and dental experts and stakeholders across the country, as well as state and federal policymakers. Their insights informed the following set of potential strategies for state policymakers interested in leveraging these models to incorporate oral health into patient-centered medical homes, accountable care activities, and comprehensive reform efforts. Strategies include covering adult dental

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**Example in Progress**

**The Perinatal and Infant Oral Health Quality Improvement Program**

The federal Maternal and Child Health Bureau is supporting teams from state Medicaid and public health agencies in New York, Connecticut, and West Virginia to develop and spread innovative practices to improve access to care for pregnant women and new mothers through the Perinatal and Infant Oral Health Quality Improvement project. Connecticut’s project focuses on engaging trusted community members to change health behaviors and encouraging pregnant women to seek dental treatment. New York is working to incorporate an oral health strategy into the state’s Maternal and Infant Community Health Collaboratives initiative, which seeks to improve health outcomes for high-need mothers and their infants. The state is developing training and educational materials for dentists and pregnant women on the importance of oral health during pregnancy, and incorporating oral health screening and referral tools into an electronic case management system in one pilot county. West Virginia is scaling up a regional program to expand access to comprehensive preventive and restorative care for pregnant women. Over the next three years, outcomes from these projects will inform the development of a national framework for state policies and programs to improve oral health and access to oral health care for pregnant women and their children.
Covering Adult Dental Benefits in Medicaid

An important step in developing an oral health strategy to work toward the Triple Aim is ensuring that individuals have dental coverage, so that there is a way to finance care. Coverage of adult dental services in Medicaid is optional for states, and competes for limited state resources against other pressing needs. In fact, dental services are frequently reduced or eliminated in the face of competing needs and fiscal pressures, such as those posed by the recession of the mid-2000s. One study estimates that, between 1999 and 2011, the number of states offering comprehensive dental benefits to adults in Medicaid dropped from 15 to 10.49 Recently, several states including Washington, California, and Colorado, have reinstated adult dental coverage. The remainder of states provide limited coverage (which may include only tooth extraction or emergency services) or only cover certain groups of enrollees, such as pregnant women or people with developmental disabilities.50 Access to dental coverage is also limited for adults enrolled in Medicare, since most dental services are not covered in traditional Medicare. This has been noted as a potential reason for the limited inclusion of oral health in federal accountable care efforts, which have focused on Medicare populations.51

The IOM recommends Medicaid programs in all states provide adult dental coverage, and ensure that reimbursement rates are adequate to promote dental providers’ participation in the program.52 States that do not currently cover adult dental services could examine the possibility of introducing or reinstating coverage for all adults, or for targeted populations. To help make the fiscal case for adult dental benefits, states could analyze their own Medicaid claims data on the number and cost of dental-related emergency department visits, or could make use of the state-specific analyses that have been conducted by many state-based foundations, university researchers, and hospital associations.

Examining provider networks and payments
In states not currently providing adult coverage, policymakers can assess whether provider networks and payment rates are sufficient to ensure enrollees can connect to routine care and avoid unnecessary emergency department use. Dentists frequently cite inadequate reimbursement rates as a reason for low Medicaid participation rates by dentists. State experiences related to reimbursement rate increases for Medicaid-enrolled children may be instructive. For example, a 2006 NASHP analysis of six states found benefits in Medicaid, bridging medical and oral health care, and building oral health into system reform strategies.

Example in Progress
Hennepin Health, Minneapolis, Minnesota
Hennepin Health is a county-based accountable care organization (ACO) responsible for the quality and cost of physical and behavioral health services for a target population of Medicaid-enrolled childless adults in the Minneapolis area. It is a partnership of the Hennepin County Human Services and Public Health Department, NorthPoint Health and Wellness Center (a federally qualified health center), Hennepin County Medical Center (a public hospital), and Metropolitan Health Plan (a nonprofit health maintenance organization serving Medicare and Medicaid enrollees).46 Hennepin Health was identified by the ADA as one of a few early examples of an ACO that is including oral health in its accountable care activities.47

It has focused on enhancing oral health capacity and connecting members with oral health problems to dentists and dental hygienists, instead of costly emergency department services. Patients presenting at the emergency department with tooth pain are given same-day access to dental care. A recent Health Affairs study found that “…[B]eing able to access dental services is a high priority for patients and is sometimes more attractive than access to a physician or behavioral health counselor.” Moreover, the study suggested that the availability of dental care could serve as a gateway into comprehensive care; “Once a patient has visited the dental clinic, the fact that it is located in the same place as providers of medical and behavioral health services makes it easy to introduce the patient to other services.”48
that provider participation increased by one-third, and sometimes more than doubled, following increases in the rates paid for pediatric dental services. Children’s use of dental services in each state also increased by between 33 and 76 percent.33

Developing targeted approaches
States could also consider adapting strategies that have been successful in pediatric populations to certain targeted adult populations. Washington State’s Access to Baby and Child Dentistry (ABCD) program provides enhanced payments to general dentists who complete hands-on training in management of children ages 0-5—a population many general dentists have historically been reticent to treat. The ABCD’s provider outreach and reimbursement strategies have been very successful in improving access to oral health care for young children.54 This approach may be particularly pertinent for pregnant women, since they can be offered “pregnancy-related” benefits that may differ from those offered to other Medicaid-enrolled adults. In fact, the Washington Dental Service Foundation, a key partner in the ABCD program, developed curricula and training for dentists regarding oral health care delivery to pregnant women. To complement these efforts, Washington Dental Service Foundation also is advocating for enhanced Medicaid reimbursement to dentists for treating pregnant women and patients with diabetes and increasing the periodontal treatment benefit to up to four visits per year.

The dental benefits extended to enrollees can also be designed to take advantage of research findings. For example, a proposed section 1115 waiver in New Hampshire includes a pilot program to extend dental benefits to pregnant women and mothers until their child’s fifth birthday, to help mothers maintain their own oral health and establish good oral health for their children.35 With respect to individuals with diabetes, states can structure a dental benefit that includes the intensive preventive and periodontal services that research suggests are important to realize cost savings.

Developing managed care incentives
States can also leverage managed care contracts to improve coverage of and access to oral health services for adults. States could reward managed care contractors that offer adult dental coverage more extensive than what the state requires, for example by giving preferential auto-assignment of enrollees to those managed care organizations. Several states have also developed payment structures for contractors managing children’s dental care that tie incentive payments or penalties to performance measures, including improvements in dental service utilization, dental provider participation, and timeliness of data submission.36 Many of these strategies could be adopted for use in adult populations.

Bridging Medical and Oral Health Care
The optional nature of adult dental benefits in Medicaid is an example of the separation between oral health and the overall health care system. Financing mechanisms, delivery structures, workforce, and professional education for dental care and for medical care have traditionally been very separate.57 Inclusion of oral health in delivery system reform efforts requires a common understanding that oral health is a shared responsibility between medical and dental providers, and a willingness to break down traditional walls between oral health and medical care at both the system level and at the practice level. Bridging oral health care and medical care has many similar challenges to efforts to integrate behavioral health and primary care. For example, dental and medical providers rarely practice in the same physical location, and dental providers are not usually part of larger health systems; medical providers may not feel adequately trained to address oral health issues; and private dental insurance is usually administered separately from medical insurance.

Work to bridge the gap between the systems is underway. Stakeholders in the oral health community are discussing how efforts in primary and behavioral health care to expand accountable care and reorient payment strategies toward value over volume could also be applicable to oral health care. Payment and delivery reform offer an opportunity to engage primary care medical providers in delivering oral health services, making referrals for dental care to improve patient health, and similarly engaging dental providers in tracking patients’ chronic medical conditions.58, 59 And many of those same groups have been working over the last 10 years at the federal, state, and local levels on strategies and tools that could help lay the groundwork for policymakers to incorporate oral health into their payment and delivery system reform strategies.
Building on national reports and initiatives

In 2011, the IOM issued two reports to assess the current oral health care system, develop a vision to improve oral health care for vulnerable and underserved populations, and recommend strategies for state and federal policymakers to achieve the vision. The IOM recommended a variety of actions, including support for co-location of medical and dental services; adequate coverage of and financing for oral health in public insurance programs; practice acts that support health professionals acting at the top of their licenses; and a specific recommendation that the Health Resources and Services Administration (HRSA) develop core oral health competencies for a range of health professions.

HRSA has built on that recommendation with the publication of Integration of Oral Health and Primary Care Practice, a report that includes recommendations on how technology, shared medical-dental electronic health records, patient education, and executive-level champions can work together in safety net settings to integrate oral health clinical competencies into patient-centered medical and health homes. Recent HRSA funding to expand community health center operations has also included additions to health centers’ capacity to provide behavioral, pharmacy, vision, and oral health services. This capacity can facilitate stronger referral linkages and co-management of patients between medical and dental staff. States can partner with health centers to design pilot projects, track results, and scale up innovative approaches.

Provider education and training

States have several policy opportunities to promote interprofessional training. States can work with stakeholders, including universities and professional associations, to adopt the curricula and tools that are being developed nationally in their states’ medical and dental training programs. States can help spread the use of materials on interprofessional training by working with stakeholders to make continuing education opportunities available, and by incorporating these materials into learning collaboratives that exist in some states to support implementation of reform efforts including patient-centered medical homes and accountable care models. States can also examine policies around licensure and scope of practice to ensure state practice acts allow medical providers to conduct oral health screenings and provide appropriate anticipatory guidance and preventive treatments. State Medicaid and CHIP programs could

EXAMPLE IN PROGRESS

The National Interprofessional Initiative on Oral Health

The National Interprofessional Initiative on Oral Health (NIIOH) is a consortium of philanthropies and health professionals that has been working to foster dialogue between primary care and dental providers, and equip primary care clinicians with tools to identify and appropriately manage oral health conditions. NIIOH has supported several important initiatives that are laying the groundwork for medical care providers and systems to move forward on strategies for oral health conditions, including:

- The Smiles for Life curriculum, a set of online modules endorsed by 17 medical and dental professional societies that educate and provide clinical advice for physicians, nurses, and physician assistants in identifying and managing oral conditions throughout the lifespan, including for pregnant women and individuals with diabetes.
- The Oral Health Nursing Education and Practice initiative, led by the NYU College of Nursing, which is spreading the adoption of oral health practices by nursing training programs, professional associations, and practice settings. The initiative also aims to create an action plan for policy recommendations to support integration efforts.
- A project led by Qualis Health to develop toolsets for primary care practices to implement oral health services in patient-centered medical homes and increase patients’ access to oral health services. Qualis has also outlined lessons from four projects to incorporate oral health into community health center-based medical homes.
make incentive payments available to providers who complete training on collaboration between medical and dental providers.

**Building on pediatric experience**

Additionally, states can learn from their experience with medical-dental integration in the pediatric setting. Many state Medicaid programs have experience with reimbursing pediatricians and family practice providers for fluoride varnish and anticipatory guidance provided to young children. A 2010 NASHP report examined six states’ experiences with developing reimbursement policies, provider education and recruitment tools, strategies to facilitate referrals to dental care, and cost-effectiveness measures for fluoride varnish reimbursement. The study found that reimbursement policies are most successful when they involve a collaborative team of partners and link to broader, multi-pronged efforts to improve oral health. States’ successes and challenges with implementing these programs may be instructive in designing interventions for pregnant women and adults with chronic diseases. States could build on this experience by incorporating objectives for oral health into managed care contracts or home visitation programs. For example, states could require medical plans to track data on emergency room utilization for oral health-related conditions, or develop incentives for plans to promote screening, risk assessment, referral, and monitoring of individuals with diabetes and periodontal disease for appropriate dental treatment.

**Building Oral Health Into System Reform Strategies**

A major message from experts we spoke with was the importance for policymakers to consider oral health in all the aspects of health reform—including changes to benefits, payment structures, incentive programs, measurement, and delivery systems—states are currently contemplating. As mentioned throughout this brief, these initiatives could include accountable care approaches, patient-centered medical homes, managed care contracting, home visiting, and care coordination programs, to name a few.

A way to start is to make sure that oral health voices are represented in delivery system reform discussions. State public health dental directors, who oversee state oral health planning efforts, and state Medicaid and CHIP dental directors could serve as internal experts on oral health strategies. State oral health coalitions, primary care associations, dental associations, and foundations engaged in oral health issues can also be represented in stakeholder engagement networks. Engagement with oral health stakeholders can be helpful in identifying promising local initiatives and pilots that could be scaled up to a state level. Stakeholders can also help identify the policy changes needed to support such initiatives.

Initiatives across the country are working on incorporating oral health strategies that are linked to the Triple Aim goals of improving patient experience, improving population health, and reducing costs. Funding from the Center for Medicare and Medicaid Services (CMS) Innovation Center is supporting several oral health

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**Example in Progress**

**Coordinated Care Organizations, Oregon**

The legislation that established Oregon’s Coordinated Care Organizations (CCOs)—the state’s regional accountable care entities that deliver physical and behavioral health services under a single budget—including dental care alongside primary care and behavioral health in a reformed payment system. Dental services, and the dental care organizations that administer them, were the last piece to be folded into the CCOs; the transition was required to be completed by mid-2014. While it is still too early to draw conclusions about lessons learned from Oregon’s experience, the state is taking steps to bring oral health into its overall framework of quality measurement and evidence-based care. Oregon formed a Dental Quality Measures Workgroup that recommended a first round of basic oral health metrics, including two measures of dental utilization for children, that are being considered for use in CCO incentive payments. Several others, including dental-specific measures from a patient satisfaction survey, are being monitored, and the measures group may reconvene as national progress is made on developing oral health outcome measures.
projects. Circle of Smiles, a project of Delta Dental of South Dakota, received an Innovation Award to improve access to periodontal care for Native American tribal members with diabetes, and to deliver oral health care and education to pregnant women and new mothers in a variety of community settings.70 The Altarum Institute in Michigan received Innovation Award funding to provide risk assessment and prevention-focused dental care to Medicaid and CHIP-enrolled children at high risk of dental disease.71 And Minnesota is using a portion of its State Innovation Model testing funding for grants to demonstrate how emerging professions, including dental therapists—a new type of dental professional who provides basic preventive and restorative care—can be integrated into primary care models.72

Conclusion

The recent work of the Institute of Medicine reinforces a point made by Surgeon General David Satcher in the landmark 2000 report Oral Health in America; oral health is essential to overall health.74 Although oral health services have not played a large role in state and federal delivery system reform efforts, as researchers learn more about how oral health is intertwined with conditions like diabetes, and how untreated oral health conditions result in avoidable emergency department costs, the case for adopting policies to integrate oral health more fully into the health care system is coming into focus. Medical care providers have a role to play in identifying oral health conditions and providing appropriate preventive treatment and counseling, and dental providers can do more to aid in the management of individuals with chronic diseases. Several studies indicate that more comprehensively addressing oral health problems could result in significant cost savings for states and the nation.

Over the last 10 years, national stakeholders have made significant strides in developing interprofessional training programs and curricula, and local initiatives have demonstrated ways to promote overall health by addressing oral health. States can use these developments to advance their work. States could increase coverage of adult dental benefits, develop strategies for service delivery, provider education, managed care contracting, and licensing to better manage oral health alongside overall health, and integrate oral health across a range of reforms, including accountable care and patient-centered medical home activities. Oral health presents a promising, untapped area of potential in states’ work to move toward the Triple Aim, and now is an opportune time for states to explore how oral health can fit into their strategies for reform.

Endnotes


2 Kamyar Nasseh and Marko Vujicic. Dental Care Utilization Continues to Decline among Working-Age Adults, Increases among the Elderly, Stable among Children. (Chicago, IL: American Dental Association Health Policy Institute, 2013).


8 Naderah Pourat and Gina Nicholson. *Unaffordable Dental Care is Linked to Frequent School Absences* (Los Angeles, CA: UCLA Center for Health Policy Research, 2009).


15 Treatment for periodontal disease can include surgical operations on gum tissue and bone, as well as non-surgical deep cleanings known as “scaling and root planing” where plaque and calculus (hardened dental plaque) are manually removed from the crown and root surfaces of teeth. Initial periodontal therapy may be followed by periodic non-surgical “periodontal maintenance” treatments. The Blue Cross Blue Shield study mentioned in this brief looked at individuals receiving non-surgical periodontal therapy; the CIGNA and United Concordia studies examined both surgical and non-surgical periodontal therapy.


23 Centers for Disease Control and Prevention, Division of Diabetes Translation. *Diabetes At a Glance.* (Atlanta, GA: Centers for Disease Control and Prevention, 2011).


34 For example, the Washington Dental Service Foundation developed the *Cavity Free for Baby and Me* initiative, which. The initiative's key strategies include: 1) motivating and training dentists to provide dental care to pregnant women; 2) engaging prenatal medical providers to address oral health with their patients and connect them with dental care; and 3) educating pregnant women about the importance and safety of dental care during pregnancy. See [http://www.themightymouth.org/tips-parents/pregnancy/](http://www.themightymouth.org/tips-parents/pregnancy/).


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47 Marko Vujicic and Kamyar Nasseh. *Accountable Care Organizations Present Key Opportunities for the Dental Profession.* (Chicago, IL: American Dental Association Health Policy Institute, 2013).


51 Marko Vujicic and Kamyar Nasseh. *Accountable Care Organizations Present Key Opportunities for the Dental Profession.*

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61 U.S. Department of Health and Human Services, Health Services and Resources Administration. *Integration of Oral Health and Primary Care Practice.* (Rockville, MD: Health Resources and Services Administration, 2014).


