Policy Statement:
Integrating Oral Health Care into Primary Care

Association of State and Territorial Dental Directors
National Maternal and Child Oral Health Resource Center

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Summary

The oral health care system remains largely siloed from the broader health care system and traditionally has been underused by primary care delivery systems as a pathway to oral health promotion, prevention, and early intervention. Challenges persist that hinder the understanding and provision of oral health care in primary care. A key strategy for improving access to health care and health outcomes is integrating oral health and medical care; however, limited research has been published to guide the professions in assembling an efficient and effective integrated medical-dental health system.

However, the concept of integrating oral health care into primary care is based on evidence that there is a synergistic relationship between oral health and general health and that coordinating care is essential to maintaining overall health. Primary care presents an opportunity for providing oral health care, including risk assessment, screening, preventive interventions, anticipatory guidance and counseling, and referral to an oral health professional.

Some commercial health systems and insurers have tested models of integrated care delivery with the purpose of improving outcomes while reducing costs. Although full-scale integration of oral health care and medical and behavioral health care has not yet occurred, some strategies to enhance the integration of oral health care into primary care have been implemented. These include creating integrated and interoperable electronic health records; closing the loop when referrals are made; encouraging primary care health professionals to provide oral health care and implementing reimbursement mechanisms for preventive oral health care and counseling by primary care health professionals; building on the success of value-based reimbursement; using telehealth technology for providing oral health care; and building on existing infrastructure.

Although the U.S. Preventive Services Task Force concluded that “current evidence is insufficient to assess the balance of benefits and harms” of providing the integration of preventive oral health care into primary care for *asymptomatic* children, the task force recommended that primary care health professionals use their clinical expertise in decision-making related to oral health care in their practice.

ASTDD supports the integration of oral health care into primary care and encourages the development of practice-based and evaluated programs, which can reduce costs, improve health outcomes, and advance health equity. State and territorial oral health programs can offer support by providing funding; serving on advisory committees or workgroups; providing technical assistance; reviewing resources for professionals and consumers; encouraging strategies to foster the integration of oral health care into primary care; convening and facilitating events to identify concerns, challenges, and successes; and promoting activities within state health departments in collaboration with other chronic disease and disease-prevention programs.

Problem

Primary care is a key component of health systems. It encompasses integrated, accessible health care provided by health professionals who address a majority of health care needs, develop sustained partnerships with the people they care for, and practice in the context of family and community. Primary care health professionals provide promotive, protective, preventive, curative, rehabilitative, and palliative services throughout the life course.[1]

Poor oral health is associated with direct, indirect, and intangible costs throughout life, such as treatment expenditures, missed days from school and work, and a diminished quality of life.[2] Oral health care remains unaffordable and inaccessible for many people. In general, people who are Black or Hispanic; those with low incomes; those with developmental or acquired disabilities; those living in rural or tribal communities; and those who experience racism, discrimination, and injustice often have difficulty affording and accessing care.

Oral diseases can negatively impact the body in many ways. They have been associated with poor outcomes among people with various other health conditions and with damage to organ systems.[3] Oral diseases are frequently considered separate from other health conditions, but these are actually interrelated. Untreated tooth decay in children can result in persistent dental pain, dental abscesses, inability to chew foods well, and distractions from playing and learning. In addition, early tooth loss can result in reduced self-esteem.[4] Chronic inflammation associated with periodontal disease has been linked to poor glycemic control among people with diabetes and increased risk for delivering a preterm and/or low-birthweight infant.[5,6] Older adults with missing teeth are more likely to have nutrient deficiencies than those with all their teeth.[7] Poor oral hygiene and oral health among people admitted to the hospital increases their risk for pneumonia; researchers have matched bacteria in the lungs of patients with hospital-acquired pneumonia with bacteria found in the oral cavity. [8,9,10]

Despite the availability of effective preventive measures and treatment:

- Ten percent of children ages 2–5 and 16 percent of children ages 6–8 have untreated tooth decay in their primary teeth.[11]
- Children ages 2–11 from families with low incomes are twice as likely to have untreated tooth decay as children ages 2–11 from families with higher incomes.[11]
- Mexican American and non-Hispanic Black children ages 2–11 are twice as likely to have untreated tooth decay as non-Hispanic white children ages 2–11.[11]
- Fifteen percent of children ages 6–11 and 16 percent of adolescents ages 12–19 have untreated tooth decay in their permanent teeth.[11]
- Twenty-five percent of women of childbearing age have untreated tooth decay.[12]
- Only about 45 percent of pregnant women receive teeth cleanings, an important preventive procedure, during pregnancy, and this percentage is typically lower for individuals who are socially disadvantaged.[13]
- Twenty-six percent of adults ages 20–64 and 16 percent of adults ages 65 and older have untreated tooth decay.[11]
- An estimated 45 percent of adults aged 30 and older are affected by periodontal (gum) disease; a leading cause of tooth loss, it is also associated with systemic diseases including cardiovascular disease and diabetes, and with adverse pregnancy outcomes.[14,15]

- Oral cavity and pharynx cancers were estimated to represent 2.8% of all new cancer cases in the U.S. in 2023 (54,540 new cases) and an estimated 11,580 deaths that year, many preventable with early detection.[16]

The oral health care system remains largely siloed from the broader health care system and traditionally has been underused by primary care delivery systems as a pathway to oral health promotion, prevention, and early intervention. Challenges persist that hinder the *understanding of oral health care as primary care* and the provision of oral health care in primary care settings, including the separation of dental education and medical education, which produces health and oral health professionals unaccustomed to working together. In addition, electronic dental and medical health records are often not fully integrated or interoperable; reimbursement for oral health care provided by primary care health professionals (e.g., family physicians, general practitioners, obstetricians, gynecologists, nurse practitioners or nurse midwives) may be inadequate or nonexistent for some services (e.g., oral health risk assessment and evaluation) and for some populations (e.g., pregnant women); and telehealth technology that facilitates the delivery of health care, including oral health, is underused.[3]

An estimated 108 million people each year have a medical visit but no dental visit. Although primary care health professionals routinely ask people about their overall health, it is rare for them to complete oral health risk assessments and evaluations (i.e., oral screenings). Conversely, an estimated 27 million people each year have a dental visit but no medical visit. Although dentists and dental hygienists take medical histories, they rarely ask people about preventive health behaviors such as getting flu and human papillomavirus (HPV) vaccines and mammograms, nor do they routinely screen for diabetes or other chronic diseases.[17] A key strategy for improving access to health care and health outcomes is integrating oral health and medical care; however, limited research has been published to guide the medical profession in assembling an efficient and effective integrated medical-dental health system, including referral networks, performance standards, and consultation between provider types.[18]

The concept of integrating oral health care into primary care is based on evidence that there is a synergistic relationship between oral health and general health and that coordinating care is essential to maintaining overall health.[4] Primary care, as the main point of entry for people to access the health care system, represents a remarkable opportunity to help meet oral health needs. Integrating oral health care into primary care is a critical, yet underused, strategy for improving oral health, reducing oral health disparities, and advancing oral health equity.

Methods

The primary care setting presents an opportunity for providing oral health care, including risk assessment, screening, preventive interventions, anticipatory guidance and counseling, and referral to an oral health professional. Primary care health professionals have frequent contact with people across the lifespan, including groups at high risk for oral diseases such as young children, pregnant women, and adults with chronic diseases.

- For example, young children are typically seen by primary care health professionals more often than by oral health professionals. In 2018, of children from birth to age 5, 54.7 percent had only medical visits, 28.7 percent had both medical and dental visits; 5 percent had only dental visits;

and 11.6 percent had neither.[19] *Bright Futures*/the American Academy of Pediatrics recommends that infants and children have 12 well-child (preventive pediatric health care) visits in the first 36 months of life and also recommends an annual visit for children and adolescents ages 3–21.[20] During these visits, health professionals frequently observe morbidity associated with tooth decay (e.g., pain, compromised oral function).[21]

- Pregnancy is a major life event and teachable period when individuals may be motivated to adopt health behaviors. Primary care health professionals (e.g., obstetricians and gynecologists and family practice health professionals) are well positioned to address oral health with pregnant women, as they often are the first to assess their health.[22]
- Integrating oral health care into primary care is a promising strategy for older adults whose medical, physical, and cognitive issues can make accessing oral health care a challenge.[23] Further, adults ages 65 and older have lower dental visit rates and higher rates of tooth decay and periodontitis than younger adults and are more likely to visit a primary care health professional than an oral health professional.
- Primary care health professionals have opportunities to detect oral lesions related to infections, systemic disease or other causes, particularly those that may indicate oropharyngeal cancer, and to make timely referrals for appropriate care.[24]

In 2000, *Oral Health in America: A Report of the Surgeon General* highlighted integrating oral health care into primary care as a promising strategy for expanding access to oral health care and reducing health inequities; improving care coordination, health outcomes, and satisfaction with care; and reducing health care costs.[4] Since the release of the Surgeon General's report more than 20 years ago, several federal reports have been published; each one furthers the conceptualization and implementation of integrating oral health care into primary care.

In 2011, the Institute of Medicine reports *Advancing Oral Health in America* and *Improving Access to Oral Health for Vulnerable and Underserved Populations* recommended that the Health Resources and Services Administration (HRSA) address the need for improved access to oral health care through the development of a core set of oral health competencies for primary care health professionals.[25,26] In response, HRSA developed the Integration of Oral Health and Primary Care Practice Initiative, which identifies interprofessional oral health core clinical competencies for primary care health professionals, particularly those working in safety net settings.[27] Since the release of the core clinical competencies, demonstration projects have been conducted to integrate oral health care into primary care in safety net settings (e.g., community health centers, local public health departments, university-based women's health clinics).

The U.S. Department of Health and Human Services' *Oral Health Strategic Framework 2014–2017* asserts that interprofessional education and collaborative practice present tremendous possibilities for integrating oral health care and primary care and improving person-centered care.[28] The framework discusses the value of integrating oral health care into primary care.[29]

In 2021, the National Institute of Dental and Craniofacial Research published *Oral Health in America: Advances and Challenges*, offering strategies for integrating oral health care and primary care as part of a framework for meeting health needs effectively and efficiently.[30] As a result, multiple models of

integrated care, in which health professionals deliver oral health care as part of a health care system that includes primary care, specialty health care, and related services, are being implemented. Public and private organizations have expanded interprofessional practice models to serve underserved populations, and commercial health systems and insurers have tested new models of integrated care delivery with the purpose of improving outcomes while reducing costs. Although full-scale integration of oral health care and medical and behavioral health care has not yet occurred, some strategies to enhance the integration of oral health care into primary care are being implemented. For example:

- **Creating integrated and interoperable electronic health records (EHRs).** An EHR may be a component of a larger health information exchange (HIE) system (a secure central repository of patient data aggregated across multiple facilities and EHR systems in the same region), that facilitates sharing a patient's vital medical information electronically, thus improving the speed, quality, safety, and cost of patient care. However, most dental and medical EHRs are not fully integrated and interoperable and do not allow for the exchange of data and other information, which creates a barrier to coordinating care and expanding the integration of oral health care in primary care.[31] Health systems and federally qualified health centers using integrated and interoperable EHRs that incorporate both dental and medical data can provide seamless care, allowing health professionals to connect people to care, whether the person is at a dental or a medical visit.[3]
- **Closing the loop.** Ensuring that people act on referrals for oral health care can be challenging since primary care health professionals may not know whether the referrals have been completed. Using referral coordinators (e.g., community health worker, care coordinator) who track and close the referral loop has proven successful in addressing this problem.
- **Encouraging primary care health professionals to provide oral health care.** Reimbursement for preventive oral health care and counseling by primary care health professionals varies by state and may be minimal or nonexistent for some services and populations (e.g., pregnant women, adults, older adults). This may affect primary care health professionals' willingness to provide oral health care. Establishing a reimbursement structure or developing incentives could result in more integration. Also, increasing primary care health professionals' confidence in their ability to provide oral health care may increase their willingness to provide such care.[32] In 2015, the American Medical Association (AMA) approved a current procedural terminology (CPT) code for the application of fluoride varnish by primary care health professionals. In 2022, the AMA approved a CPT code for the application of silver diamine fluoride (SDF) by primary care health professionals to arrest tooth decay without the provision of more invasive restorative care such as a filling. These codes allow primary care health professionals to be reimbursed for providing preventive oral health care.
- **Building on the success of value-based reimbursement.** Successful primary care and behavioral-health-care integration models have been supported by reimbursement structures that incentivize prevention, effective chronic-care management, and whole-person care. Integrating oral health care into value-based primary care and accountable-care organization models has been limited by the absence of diagnostic codes and quality measures.
- **Using telehealth technology for providing oral health care.** Telehealth technology presents multiple possibilities for increasing the integration of oral health care into primary care. Primary care health

professionals can use telehealth technology to conduct oral health screenings and take digital radiographs and intra-oral photos during visits. This information can then be shared with oral health professionals. In addition, telehealth can make oral health care provided during primary care visits accessible to people in their homes and can facilitate access to care in rural, remote, and underserved areas.[3]

- **Building on existing infrastructure.** The purpose of federally qualified health centers (FQHCs) and FQHC look-alike clinics is to ensure that underserved populations, regardless of income, insurance type, and immigration status, have access to health care including oral health care. Oral health care during medical visits in FQHC clinics can include risk assessment, screening, preventive services (e.g., fluoride varnish application), and referrals to dentists within or outside FQHC clinics. Certain FQHC practices support integration of primary care into oral health care, including by using patient health information forms that include questions about the person's history of oral diseases and access to a dental home.[33]

The U.S. Preventive Services Task Force (USPSTF) (an independent, volunteer panel of national experts in prevention and evidence-based medicine that does not include any dental professionals) has made a series of recommendations about the provision of oral health care to children and adolescents in primary care settings and the integration of preventive oral health care into primary care. In November 2023, considering children ages 5–17, the USPSTF concluded that "current evidence is insufficient to assess the balance of benefits and harms" of providing these services for *asymptomatic* children; nevertheless, the task force recommended that primary care health professionals use their clinical expertise in decision-making related to oral health care in their practice. The USPSTF identified five evidence gaps and called for more research that "must focus on screening and preventive interventions that can be performed in nondental primary care settings and be inclusive of populations with a high prevalence of oral health conditions."[34]

Example of National Initiative

100 Million Mouths Campaign

The goal of the 100 Million Mouths Campaign (100MMC) initiative is to identify 50 oral health education champions between 2020 and 2030, one in each state, to work with health professional schools and programs to integrate oral health into their curricula to help bridge gaps in oral health access. 100MMC recruits and trains health professionals to engage with primary care training sites in their states to develop oral health curricula that have a health equity component. Champions are taught to reach out to the full range of health profession educational institutions, to use existing national and state resources, and to partner with local and state experts such as the state dental director, the state department of public health, faculty in health profession schools and programs, and dental professionals working in the community. The champions train faculty to implement the oral health curricula, creating a system that will generate future primary care health professionals who can engage the people they care for and improve the oral health of at least 100 million mouths by 2030.

Examples of Statewide Programs

Below are descriptions of five statewide programs that integrate oral health care into primary care. These programs have achieved successful outcomes and offer models for other groups interested in working toward integrating oral health care into primary care.

Cavity Free at Three

Cavity Free at Three (CF3), established in 2007, is a statewide program of the Colorado Department of Public Health and Environment Oral Health Unit. CF3 trains medical and oral health professionals to provide preventive oral health care for young children from birth to age 3 and pregnant women. CF3's mission is to decrease the incidence of oral diseases and reduce oral health disparities among populations at high risk for oral diseases. The CF3 model includes eight standard practices including caries risk assessment, oral health evaluation, knee-to-knee exam, fluoride varnish application, counseling and education, goal setting, referrals to oral health professionals, and oral health services for pregnant women. This initiative required participants to complete Smiles for Life, a free nationally available curriculum that is broadly endorsed by medical and oral health organizations.[35]

Colorado Medical Dental Integration Project

The Colorado Medical Dental Integration (CO MDI) project integrated dental hygienists into medical care teams to increase access to oral health care for marginalized populations, improve people's oral health, and build sustainable medical-dental integration models. While the initial goal was to reach young children, early in the project the focus changed from children to all populations across the lifespan being seen at the medical practice. The program consisted of three waves from 2007 to 2022.

From the First Tooth

From the First Tooth (FTFT), established in 2009, is a statewide oral health initiative led and administered by MaineHealth (a Portland-based health system) that aims to improve the oral health of children and adolescents from the time of tooth eruption to age 21 by implementing an evidence-based preventive oral health approach in the medical home. The program encourages pediatricians and family physicians to incorporate oral health risk assessment, fluoride varnish application, parent or other caregiver education, and referrals for oral health care into well-child visits. MaineHealth collaborates with several partners to implement FTFT and extend its reach throughout the state.

I-Smile Dental Home Initiative

I-Smile is a statewide program of the Iowa Department of Health and Human Services (IDHHS), established in 2007, that connects children and their families in Iowa with oral health, medical, and community resources to help ensure a lifetime of health and wellness. IDHHS administers the program through contracts with regional public and private non-profit organizations. Each contractor employs an I-Smile coordinator who is responsible for working with children and families; dentists and dental office staff; medical providers; school nurses, teachers, and administrators; businesses; civic organizations; and social service organizations.

Into the Mouths of Babes

Into the Mouths of Babes (IMB), a statewide program established in 2001 and co-led by the North Carolina Medicaid Dental Program and the Oral Health Section, Division of Public Health, aims to prevent and reduce early childhood dental caries and increase referrals to dental homes for children at

high risk for caries. The program trains health professionals to deliver preventive oral health care to young children insured by North Carolina Medicaid from the time of tooth eruption to age 3 and a half. IMB encourages health professionals to incorporate oral health risk assessment and evaluation, parent/caregiver counseling, fluoride varnish application, and referral to dental homes.

Role of State and Territorial Oral Health Programs

State and territorial oral health programs (SOHPs) can help support programs that integrate oral health care into primary care and encourage the development of strategies to foster integration (e.g., by providing funding for programs, serving on advisory committees or workgroups, providing technical assistance, reviewing resources for professionals and consumers). They can convene and facilitate events for health professionals, including oral health professionals, to identify concerns, challenges, and successes and promote activities within the state health department in collaboration with other chronic disease and disease-prevention programs. They may be well positioned to apply for grants from federal agencies (e.g., HRSA, Bureau of Health Workforce) and foundations to develop and fund strategies and may be able to support policies and policy-development efforts that facilitate the strategies.

The Association of State and Territorial Dental Directors' report, *2023 Synopses of State Dental Public Health Programs,* provides descriptions of collaborations between the state's oral health program and the state's chronic disease program to promote integrating oral health care into primary care. According to the report, 28 SOHPs described collaborative activities focusing on diabetes, cardiovascular health, HPV, oral cancer, and tobacco use and cessation.[36] ASTDD also provides Guidelines and Competencies to address integrating primary care and oral health care.

Below are examples of efforts by state oral health programs to promote the integration of oral health care into primary care:

- In Illinois, the Bright Smiles from Birth (BSFB) II program provides primary care health professionals with oral health education on the prevention of early childhood caries, resources to help health professionals integrate oral health care into well-child visits, and resources for health professionals to share with families. The BSFB II program also includes a 1-hour web-based training for physicians and pediatric health professionals.
- In Michigan, the Michigan Initiative for Maternal and Infant Oral Health (MIMIOH) integrates dental hygienists into OB/GYN clinics in federally qualified health centers to improve pregnant women's oral health. Evaluation of the MIMIOH program revealed that selecting dental hygienists with personal characteristics desirable for integrated-care delivery was a major factor in successfully integrating dental hygienists into OB/GYN clinics. Additionally, designing appropriate clinical workflows, gaining buy-in from prenatal care health professionals, presenting oral health care as part of prenatal care, having co-located OB/GYN and dental clinics, and maintaining adequate funding were all critical to program success.
- Ohio supports a program in which non-profit health care facilities are integrating oral health care into prenatal care. Prenatal care health professionals are trained to complete oral health assessments, provide education, refer people to a dental clinic, and provide case management to help ensure that women receive needed oral health care during pregnancy.

- Virginia provides oral health education and overall wellness education for adults and their caregivers in residential and day programs. In addition, the state is focusing on medical-dental integration education for oral health and non-oral health professionals and students. The state oral health program is offering training for primary care health professionals and their teams on integrating fluoride varnish application into the well child visit.

Policy Statement

ASTDD supports the integration of oral health care into primary care and encourages the development of practice-based and evaluated programs, which can reduce costs, improve health outcomes, and advance health equity. Research and promising national and state programs demonstrate that integration is feasible and can result in improved oral health and overall health, especially for vulnerable and underserved groups with limited access to oral health care. State and territorial oral health program directors and staff can encourage the development of strategies to foster the integration of oral health care into primary care.

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