



RETURNING THE MOUTH TO THE BODY:  
INTEGRATING ORAL HEALTH AND PRIMARY CARE

Background Paper

*Prepared for a Grantmakers In Health Issue Dialogue*

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Dental disease is one of the great preventable public health challenges of the 21<sup>st</sup> century. Labeled a “silent epidemic” by the U.S. Surgeon General, dental disease ranks high in prevalence among chronic health conditions (HHS 2000). While dental disease is a universally prevalent chronic disease, a number of subpopulations are particularly vulnerable, including seniors, children and adolescents, low-income people, minority groups, and people with special health care needs (IOM 2011).

The persistence of barriers to treatment and care has generated new and innovative approaches to increasing access to quality care. A concept gaining traction in many circles is the coordination, and even integration, of oral health into primary care, reversing the traditional divide between medical and dental care that has essentially separated the mouth from the rest of the body. The Grantmakers In Health Issue Dialogue *Returning the Mouth to the Body: Integrating Oral Health and Primary Care* will not only reinforce the case for integrating oral health into primary care, but also explore theoretical models for integration and real world applications. The Issue Dialogue will also examine current opportunities in health care reform and existing federal policy for integrating care. Using this information, participants will engage in active dialogue to determine what next steps need to be taken and funders’ roles in supporting this work.

This paper provides key background information and highlights areas of opportunity for grantmakers.

#### **Defining Dental Disease**

The dental and craniofacial diseases that affect a person’s oral health include, but are not limited to:

- dental caries, or tooth decay;
- periodontal disease, or gum disease;
- oral and facial pain;
- oral and pharyngeal cancers, or mouth and throat cancers; and
- cleft lip and palate.

Source: HHS 2000

## **Scope of the Problem**

Dental disease is a highly prevalent and highly preventable health issue that affects the population of the entire country. While a number of subgroups experience dental disease in higher proportions, poor oral health is a widely pervasive public health issue that affects every population, regardless of race, age, gender, and socioeconomic status.

Among the vulnerable groups in need of improved oral health, seniors are near the top of the list. Seniors have a high incidence of dental disease but often do not receive the treatment they need. According to the *National Health and Nutrition Examination Survey*, 23 percent of seniors age 65 or older have untreated dental decay (NIH et al. 2012). Over 25 percent of adults over the age of 60 have lost all of their natural teeth (CDC 2006a). This is in part due to a lack of consistent or prevalent preventive measures from earlier in life, such as community water fluoridation and fluoridated toothpaste. Seniors’ problems are compounded by over 400 common medications they take that cause dry mouth, which greatly increases the risk for dental disease. In addition, seniors and their caregivers tend to focus more on traditional health concerns (for example, heart disease, dementia, or stroke) than on oral health.

Even at younger ages adults are experiencing high incidence of dental disease. About 14 percent of middle-aged adults have severe periodontal disease, while 25 percent reported experiencing some form of facial pain in the last six months, and 1 in 20 are missing not some, but all, of their original teeth. The disease burden is more pronounced for low-income adults. More than 40 percent of those ages 20 and up have at least one untreated decayed tooth; the same is true for only 16 percent of higher-income adults (CDC 2006b).

The burden of dental disease is especially high among children and adolescents. Every year an estimated 16.5 million children do not receive basic dental care (Pew Center on the States 2011). In 2010 alone, 4.6 million children ages 2 to 17 in the United States (7 percent of the total population) did not receive needed dental care, simply because their families could not afford it (Bloom et al. 2011). As a result, 16 percent, or nearly one-in-five, of all children and teens between the ages of 6 and 19 have untreated dental carries (CDC 2010).

Low-income children with unmet dental needs fare far worse than the general population. About one-half of all low-income children and two-thirds of low-income adolescents suffer from dental carries. Uninsured children, who are disproportionately from low-income families, are six times more likely to have unmet dental needs as those with private dental insurance and four times more likely as those with public dental insurance (CDC 2010).

Ethnic minority children experience significant disparities. For instance, 40 percent of Mexican-American children ages six to eight have untreated dental caries compared to only 25 percent of non-Hispanic whites (CDC 2011). Likewise, non-Hispanic white children are more likely to have had contact with a dental professional in the last six months than their black or Hispanic counterparts (Bloom et al. 2011). American Indian and Alaskan Native children ages two to four experience five times the rate of tooth decay of other populations (GAO 2000).

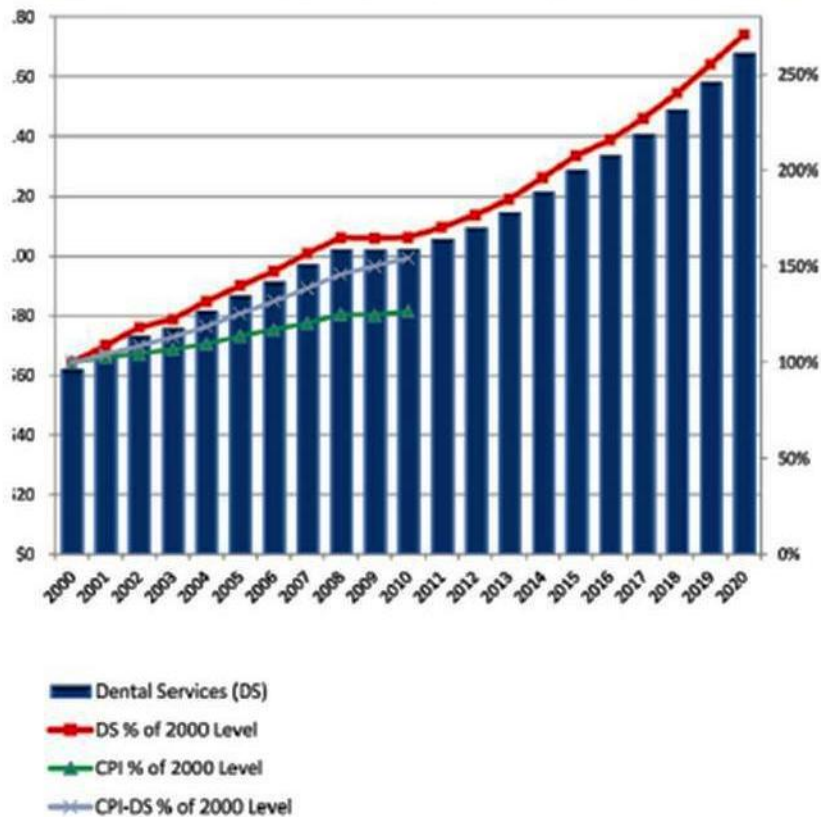
Children and adolescents with special health care needs are particularly vulnerable to dental disease and often face significant barriers to care. As defined by the U.S. Maternal and Child Health Bureau, children with special health care needs are those who have or are at increased risk for chronic physical, developmental, behavioral, or emotional conditions and require health and related services of a type or amount beyond that typically required by children. Of the 10.2 million children with special physical and mental health care needs, about 750,000 experience critical gaps in accessing dental care; they are also three times more likely to have unmet dental needs (National Maternal and Child Oral Health Policy Center 2011a). This unmet need has significant consequences as these children transition to adulthood, resulting in lifelong oral health challenges that are both costly and detrimental to general health (ASTDD 2011).

While dental disease is itself a discrete health concern, like many other chronic diseases it has broader health impacts. Poor oral health has been linked to increased risk for cardiovascular disease, diabetes, and other chronic conditions (Pew Center on the States 2011). Among adults who have lost their natural teeth, studies have shown that there is a significant impact on nutritional intake, resulting in the consumption of little or no fresh fruit and vegetables. Poor oral health also exacerbates other underlying chronic diseases. For example, diabetic patients with periodontitis are six times more at risk for worsening glycemic control and are at increased risk for other diabetic health complications (Mealey and Rose 2008).

Dental disease has a number of larger non-health implications. Poor oral health in children has been shown to result in decreased academic performance and can adversely affect behavioral and social development. Over 51 million school hours are lost each year due to dental problems (Pew Center on the States 2011). Poor oral health is even a national security concern. According to a study conducted by the U.S. Department of Defense, 52 percent of new recruits were in need of urgent dental treatment that would delay their deployment (Leindecker et al. 2008).

Despite the overwhelming evidence reflected in the disease burden and unmet need, lack of access to proper dental care continues to be a pervasive issue. According to the *2008 National Health Interview Survey*, 45 million Americans (about 25 percent) under the age of 65 with private medical insurance had no dental coverage; low-income and less-educated people were even less likely to have dental insurance coverage (Bloom and Cohen 2010). Other studies place the number of total Americans without dental insurance at around 100 million, about twice the number (50.7 million) who lack medical insurance (The Henry J. Kaiser Family Foundation 2009).

Figure 1: U.S. National Dental Expenditures 2000-2020



Source: Glassman 2011

The large number of uninsured dental patients has contributed to rapidly increasing dental care expenditures. The Centers for Medicare and Medicaid Services projects that U.S. national dental expenditures will triple by 2020 to \$167.9 billion (see Figure 1) (Glassman 2011). Worsening oral health and lack of dental insurance coverage have also led to increasing out-of-pocket dental

expenditures. In 2008 they accounted for \$30.7 billion or over 22 percent of all out-of-pocket health expenditures, making dental out-of-pocket expenditures second only to those for prescription drugs (Glassman 2011; U.S. Bureau of Labor and Statistics 2010). While these costs most dramatically affect the uninsured and underinsured, they will increasingly affect those with comprehensive dental insurance as well.

## Why Integrate?

Integrating primary care and oral health makes logical sense for a number of reasons, ranging from the practical to the theoretical. Perhaps the most obvious benefit would be an increase in the effectiveness and efficiency of both dental and medical professionals in preventing disease. By sharing information, providing basic diagnostic services, and consulting one another in a systematic and sustained manner, dental and medical professionals would have a far better chance at identifying disease precursors and underlying conditions.

According to the American Dental Association, an estimated 30 percent of the population has difficulty accessing dental services via the predominantly private practice delivery system (Glassman 2011). By expanding entry points into the dental care system, integration of oral health into primary care has the potential to improve access, especially for at-risk and underserved populations that typically have greater access to primary care professional care than to dental care. For example, children, who are a particularly vulnerable population, are seen and treated by pediatricians and school nurses far more frequently than by dentists, especially at younger ages. Likewise, seniors who live in institutions, including independent living facilities and skilled care units, typically receive consistent nursing and other professional health care. These medical professionals, with additional training, can more easily provide ongoing preventive oral health care than dentists in a traditional private practice setting (IOM 2011; IOM and NRC 2011).

Integration of dental and primary care also makes sense from a cost-savings perspective, given the linkages between dental and other chronic diseases. Evidence suggests that, when integrated with primary care, preventive dental care can play at least an indirect role in controlling health care costs. Studies have found that patients with severe periodontal disease, for example, incur much higher health care costs than patients with good oral health (Ide et al. 2007). Likewise, diabetes patients, who are among the groups at greater risk for periodontal disease, incur on average \$2,500 less in health care costs per year after undergoing preventive treatment than patients with periodontal

### Coordination/Collaboration vs. Integration of Services

The terms *coordination* or *collaboration* are often used interchangeably with *integration* when discussing oral health being more closely attuned with primary care; however, there is an important distinction.

Collaboration or coordination of care is when oral health and primary care providers work with one another. In this case, patients perceive that they are receiving a separate specialist service from a dentist who works with their physician.

Integration is when oral health works within primary care. In this case, patients perceive that they are receiving dental services that are a routine part of their health care.

Source: Collins et al. 2010

disease—a 23 percent reduction in costs (Cigna 2011). The evidence suggests that prevention of oral health diseases could also result in widespread medical care cost reductions (Cigna 2010).

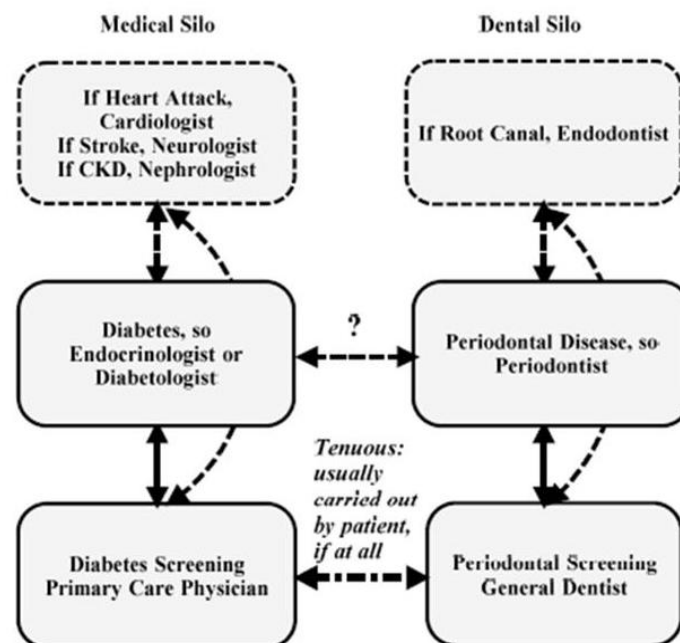
## Practical Challenges

While integration of oral health and primary care clearly makes sense from a theoretical perspective, there are numerous practical challenges to implementation on even a small scale. These challenges range from the systemic separation of primary care and dental practices to widespread access barriers.

### Traditional Separation of Services

Dental and primary care medical services have historically been delivered separately via differentiated delivery systems. Dental services are largely provided through private, independent practices with little or no ties to any medical practice or system. The typical practice consists of one or two dentists with a dental hygienist, dental assistant, and an office manager. Except in certain public health and community health center settings, dentists rarely interact with non-dental health professionals such as primary care physicians.

Figure 2: Flow of Information in Patient Care for Providers



Source: Powell and Din 2008

As demonstrated in Figure 2, typically there is little to no communication between the dental and medical care practitioner silos. In this example, the communication of information regarding the diagnosis and treatment of diabetes is heavily reliant upon the patient acting as the conduit, which is not only a serious burden on the patient, but also an unreliable means for the sharing of critical

health information. Unfortunately, this scenario is more the norm than the exception, despite a growing recognition of the value and importance of integrated (or at least coordinated) care systems.

### **Provider Training and Skills**

Despite the high prevalence of oral health disease and its far-reaching impacts, the mouth in effect is treated as a separate entity from the rest of the body by medical and dental practitioners. Physicians and other medical personnel receive little or no training in oral health procedures or practices (Krol 2004; Ferullo et al. 2011). Dentists and other dental personnel conversely have little or no training in interfacing with the medical community or in operating in a multidisciplinary team (Okwuje et al. 2009). This is largely a result of a long-standing traditional separation of the dental and medical fields that has in effect removed oral health from the collective mind of the medical community.

### **Insurance and Financing**

A critical challenge facing any attempt to integrate oral health and primary care is the current financing system for dental care. A significant number of children and adults simply do not have the means to pay for services because they lack dental insurance coverage, either public or private. Without even this basic financial support, meaningful integration of care becomes moot.

Federal and state governments have historically not provided comprehensive dental benefits through public insurance, which is reflected in the significant number of uninsured. While children enrolled in Medicaid have received dental benefits under the Early Periodic Screening, Diagnosis, and Treatment (EPSDT) requirements, the same has not been true of Children's Health Insurance Program (CHIP) enrollees. Some states, such as Washington, have provided coverage for children enrolled in CHIP, but many states either provided benefits or provided limited or capped benefits not equal to EPSDT requirements (Hess et al. 2011).

With the passage of the Patient Protection and Affordable Care Act (ACA) in 2010 and the Children's Health Insurance Program Reauthorization Act (CHIPRA) in 2009, pediatric dental benefits are now required offerings as part of the essential benefits package in the state health insurance exchanges and state CHIP benefits respectively. By 2014 these laws will result in dental coverage for an estimated 5.3 million additional children, which is a significant increase but will not result in universal coverage for children (Pew Center on the States 2011). Also, as a result of the U.S. Department of Health and Human Services' rules for the "Establishment of Exchanges and Qualified Health Plans," state health insurance exchanges that offer stand-alone dental plans are also required to offer child-only plans, which has the potential to further increase coverage for children whose families cannot afford family plans.

Unfortunately, comprehensive adult dental benefits are not specifically addressed in either piece of legislation and, excepting federally required emergency service coverage, will likely remain an optional benefit for state Medicaid programs. Only a handful of states, such as Michigan, provide comprehensive dental coverage for adults, and it is often one of the first benefits to be targeted in state budget cuts. The same holds true in principle for state health insurance exchanges, where states may or may not choose to offer affordable comprehensive medical plans that include dental benefits or traditional stand-alone dental insurance options. Likewise, for older and disabled adults enrolled in Medicare, there is no comprehensive dental benefit provided; in fact, routine services and

preventive care are denied via statutory exclusion. Even adults who are employed and receive medical benefits often find themselves without dental coverage. In 2010 only 47 percent of firms offering medical benefits offered or contributed to a separate dental plan (The Henry J. Kaiser Family Foundation 2010).

Adults' inability to obtain dental services affects their children. Studies have consistently found that if parents do not access dental care for themselves, their kids are far less likely to obtain dental services (Isong et al. 2010). Thus, despite advances made in the ACA and CHIPRA, without similar efforts to cover the rest of the family, there may be only modest increases in actual child access to dental services.

A significant issue with regard to the current financial system is the separation of dental and medical insurance. The divide between the two insurance realms reinforces larger obstacles to integrating dental and medical care. The current system requires dental and medical billing to be done separately in discrete and different formats and systems, which in turn:

- creates barriers to formally connected relationships and coordination of services between medical and dental providers,
- impedes performance assessments by separating related procedures into two claims silos,
- creates separate sets of claims and diagnostic codes and terminologies,
- feeds a general perception of dental care as an “optional” service, and
- impedes medical professionals from performing basic dental services.

The impediment of performance assessments is of particular concern given the current interest in using such assessments as part of outcomes-based cost reduction strategies. Ultimately, the current financing structure simply is not flexible enough and adds too many administrative barriers in integrating oral health into primary care.

### **Provider Access**

Access to dental care often boils down to a lack of providers and a lack of providers willing to treat the underinsured and uninsured. Despite recent policy successes to expand dental coverage for children through the ACA and CHIPRA, these efforts may not have the desired impact on access because there is a lack of providers, and many dental providers may be unwilling to treat patients covered by public dental insurance. Research has shown that only 44 percent (12.9 million out of 29 million) of Medicaid-enrolled children receive dental care, and inability to access a dental provider is cited as a major contributing factor (Pew Center on the States 2011).

#### **Dental Health Provider Shortage Areas**

As of December 2011 there are 4,397 Dental Health Provider Shortage Areas (DHPSAs) that contain about 47.1 million people. In order to provide an acceptable provider-to-population ratio in these areas, it would take 9,290 dental practitioners. Unfortunately, DHPSAs are typically less densely populated rural areas or low-income urban centers, locales that, for financial and other reasons, do not traditionally attract provider practices.

Source: HRSA 2012

Dentists' unwillingness to treat publicly insured and uninsured patients has been attributed to a number of factors. In many cases, state reimbursement rates are below what is considered “fair

market” value. Coupled with large dental student indebtedness, this creates a disincentive to establish dental practices in low-income areas. Others have cited large administrative barriers, claiming that participation in Medicaid results in more paper work and other related billing issues (Thomas 2009). Research has also indicated that dentists are often not well prepared to treat ethnic minorities, seniors, young children, and lower-income patients. Furthermore, pervasive underrepresentation of ethnic minority and women in dentistry has significantly affected provider access for many, because socioeconomic factors (such as race and gender) play a role in determining who dentists will treat and patient experiences (Edelstein 2006).

Current state dental practice laws are also a significant barrier to provider access. In the majority of states, these laws are very prescriptive about who can provide various oral health services. In most cases, these laws limit or disallow non-dentists from administering any oral health-related treatments. As a result, primary care physicians and other non-dentist providers have been legally barred from providing dental treatment to patients, regardless of circumstance (Behrens and Lear 2011).

### **Limited Research Base**

Perhaps one of the greatest challenges to integrating services is the lack of literature on the subject. While there have been some state and local efforts to facilitate integration, there has not been much research on best practices and strategies. Likewise, there have been few large-scale efforts to implement systems to fully integrate oral health into primary care. Projects in Colorado (sponsored by the Colorado Delta Dental Foundation), Washington (sponsored by the Washington Dental Services Foundation), and Michigan (through grants awarded by the Department of Community Health) that looked at the feasibility of co-located dental and primary care services have perhaps been the most notable attempts to date (see the section on practice models for more information about co-location) (National Maternal and Child Oral Health Policy Center 2011b). Some extrapolation from research on integrating behavioral health into primary care has yielded a starting point for researchers and practitioners, but focused research into oral health integration remains a critical gap.

## **Overview of Possible Solutions**

Despite the myriad challenges to integrating oral health and primary care, there are some promising approaches to addressing the problem. Many have been attempted at the state and local levels with varying degrees of success and generally have national support (U.S. National Oral Health Alliance 2011). All bear consideration as individual or collective investments; however, any approach requires thorough evaluation both pre- and post-implementation.

### **Practice Models for Integrating Delivery and Financing Systems**

Models for directly integrating or coordinating oral health and primary care range in scope and intensity (see Figure 3) (National Maternal and Child Oral Health Policy Center 2011b). Each has pros and cons that need to be assessed when considering the best approach in a given state or community.

The first group of models attempts to integrate oral health and primary care by altering the traditional physical separation of the practices. The most dramatic is a model that fully integrates oral health and primary care practice. This scenario uses a team approach in which dentists and other specialized oral health professionals provide a wide array of preventive and restorative treatments alongside primary care and other health professionals. This model would not only have full sharing of information between providers, but also a systematic structure for regular consultation of providers in treating and maintaining the health of patients. At present, this model is rarely seen outside certain clinics at children’s hospitals and other specialty clinics and, at least in theory, in a small number of health maintenance organization and accountable care organization settings. This approach requires a significant investment on the part of a provider organization, government, and/or philanthropy to develop the appropriate facilities, provider training, and infrastructure.

Figure 3: Overview of Practice Models

Model	Level of Integration
Full Integration	Highest
Co-Location	High
Virtual Co-Location	Moderate
Joint Financial	Moderate
Health Information Technology	Low
Systematic Referral/Follow-Up	Lowest

There are two intermediate models that are less dramatic in changing the physical arrangement of practice. Co-location models are similar to a full integration model, except the level of coordination between providers is more limited. Instead of a health team approach, providers openly share information concerning patients and can more easily refer patients to each other as needed. Co-location also allows for easier patient follow-up because of provider proximity. Several Federally Qualified Health Centers (FQHCs) and a small number of school-based health centers (SBHCs) have implemented this particular approach. Support from philanthropy and states is the typical avenue for implementing this model approach, while insurance reimbursement and other financial arrangements between the co-located providers can help sustain the arrangement.

Virtual co-location, another approach, is typically implemented when geography and dental provider availability are at issue. Using various Web and Net technologies, dentists remotely consult and assist in the treatment of patients in primary care and community health settings. Typically the dentist will work with a dental hygienist with more advanced training (or a similar provider, depending on state practice laws) who may or may not be part of a primary care or community health practice. Usually the dentist will assist in developing treatment plans, and in some cases, using webcam technologies, will supervise more advanced procedures. Like the physical co-location model, support from

philanthropy and states to finance the necessary technologies is the typical avenue for implementing this model approach. Insurance reimbursement and contractual arrangements between the dentist and primary care provider are also a likely necessity for sustaining this approach.

Some models attempt to integrate oral health and primary care using other means, ranging from incentives to various infrastructure changes. Joint financial arrangements are another coordinated approach where oral health and primary care providers enter an agreement where there is shared financial risk and opportunity. Providers may or may not be co-located, but the financial arrangement creates a system of shared concern regarding patient treatment and outcomes. In many cases, this approach provides for incentives for referral between providers and providing basic treatments to patients. For example, financial incentives may be given for primary care providers who provide dental screenings and dentists who provide basic medical screenings. In each case the intention is to facilitate referrals as necessary and increase patient utilization of services. State public insurance regulations and private insurance incentives are the method for funding and sustaining this approach.

Health information technology models are an attempt to overcome basic communications infrastructure issues; they generally rely heavily on digital records and coordinated or linked information networks. This approach creates a shared electronic patient health record system between oral health and primary care providers that is accessible by both providers. If properly executed and maintained, this approach should easily facilitate the transmission of pertinent information regarding patient treatment and health status amongst otherwise independent providers. This approach requires significant investment by providers, which can be offset by government and philanthropic grants and other financial incentives.

At the other end of the continuum from a fully integrative model is an approach that provides infrastructure for follow-up and referral. This strategy is, more or less, a formal system of checks and tracking of patients between providers. Often times, this model is used when primary care facilities contract with dentists. The most common examples of this are found in FQHCs and SBHCs. Funding for this strategy can range from grantmaker support and public grants to insurance incentives.

### **Joint Primary Care and Dental Provider Training**

A major issue affecting the implementation of the majority of integrative models is the lack of provider training and experience in operating in cross-disciplinary settings. As stated previously, oral health providers do not generally receive training for working in integrated practices (Krol 2004; Ferullo et al. 2011). Likewise, primary care providers do not generally receive any training in oral health procedures and practices (Okwuje et al. 2009). Given these facts, there is a significant need to train new providers and provide continuing education to existing providers in order for integration to succeed.

A handful of dental and medical schools have started to collaborate to create opportunities for dental and medical students to work together. At the basic level, training schools have started to consider making changes to their curriculum. Some medical schools have begun to develop courses in oral health for medical students or even partnered with dental schools to allow their students to take dental courses with dental students. For example, the University of Connecticut Medical and

Dental Schools have their students participate in biomedical science courses together (University of Connecticut 2012). At Harvard, dental medicine and medical students are together for their first two years of preclinical science (Harvard School of Dental Medicine 2012). Likewise, some dental schools, such as the University of Washington, have offered coursework in oral health to medical students (Mouradian et al. 2005). In each case, the goal is to provide students with greater knowledge of the other field so that they are more receptive and prepared to work together.

More advanced efforts that provide students with integrative work experience have focused on developing cross-disciplinary residencies and other training practicums. In most cases, both dental and medical students/residents participate together in a structured health team. Generally, these training opportunities take place in FQHCs and other community health settings, and they can range from a truly integrated model to a co-located model approach. For example, the Michigan Department of Community Health seeded grants that resulted in the University of Michigan Dental School rotating students into community health centers (ASTDD 2010).

There has been some effort to train primary care and other medical professionals in oral health practices and procedures. Most commonly they have centered on preventive care and treatment, including the application of fluoride varnishes, applying sealants, and conducting oral health screenings. Continuing education opportunities in working with primary care and providing primary care services have been limited for dentists and other oral health practitioners.

### **Midlevel Providers**

Perhaps the most controversial approach to addressing dental access is the development of midlevel oral health providers. This new class of dental provider, with a skill set between that of the traditional dentist and dental hygienist, would compensate for the serious shortage of dental providers in a number of geographically isolated and low-income areas.

Although controversial in this country, midlevel providers are not a new concept; they currently practice in over 40 countries. The Pew Center on the States has found that midlevel providers present a number of benefits. Using the Productivity and Profit Calculator tool, Pew found that these providers could help treat an increased number of Medicaid-insured patients in a financially sustainable way and could actually help dental practices generate revenue and increase their productivity (Pew Center on the States 2010). Midlevel providers also can be, and are, trained to work in a number of practice environments, including community health centers and other mixed-provider practice settings. They have the training to provide preventive and limited restorative services and the knowledge to provide referrals for more advanced care to dentists and other medical professionals.

Concerns about midlevel provider models tend to focus on training, financial, and competitive issues. While some models, such as the Advanced Dental Hygiene Practitioner and Minnesota's Dental Therapy Program, would require these professionals to have at least undergraduate degrees, other states, following Alaska's Dental Health Aide Therapist model, only require a high school diploma to enter the training program. Skeptics question whether these providers will be competent enough to treat patients and, if not, will provide underserved communities with second-rate care (NDA 2010). From a financial perspective, some have proposed that the solution to increasing access and provider numbers is to provide more and better incentives to dentists, rather than

creating a new provider class. Proposed incentives would include increasing dentists' Medicaid reimbursement rates, decreasing administrative burdens to accepting public insurance, and instituting dental loan forgiveness programs (ADA 2011). Dentists, like physicians in the 1990s, are concerned that a new midlevel provider class of professional (in the case of physicians, it was nurse practitioners and physician assistants) will compete with them for patients and thus negatively affect their practices.

Realistically, integrating oral health with primary care in many areas of the country will be extremely difficult if not impossible if there are no oral health providers with whom the medical community can interface. Current programs, such as those in Alaska and Minnesota, produce midlevel providers with sufficient training to work in primary care and other medical settings. Evaluation of their effectiveness and abilities has commenced now that the first graduating classes from these programs are entering practice. So far, an early two-year evaluation of the Alaska program has found that dental therapists are safe, effective, and competent dental practitioners (Wetterhall et al. 2010). These programs also open new opportunities for traditionally underrepresented ethnic minority groups to enter the dental workforce as higher-level practitioners. This background, coupled with their focus on operating in DHPsAs and other underserved areas, makes midlevel providers a potentially important link to integrating primary care and oral health where there could be the most benefit.

## Grantmaker Considerations

The following issues and questions are of particular relevance for grantmakers and will be among the topics discussed during the Issue Dialogue.

1. What specific goals will integrating oral health and primary care accomplish? How do we set realistic expectations?
2. What are the underlying issues hindering access to oral health care in a particular community/region/state? If, for example, insufficient dental practices exist, a virtual co-location model may be a better initial investment than funding a fully integrative approach.
3. What policies could facilitate or hinder integration, such as state dental practice laws? Integration of oral health and primary care could be severely limited depending on legal structures and limitations.
4. Do state dental and medical schools have cross-disciplinary training opportunities? Are they attempting to recruit a diverse student body?
5. What incentives can be given to medical and dental practices to integrate?
6. Are there any coordinated efforts regarding the adoption and implementation of health information technology in the community/state/region?
7. What kind of dental coverage is provided by state Medicaid? What barriers exist for physicians to bill for dental services?

8. What is the potential for FQHCs and other community health settings to integrate oral health into their primary care mission?
9. How can dental insurance coverage be expanded publicly and privately? What opportunities do the exchanges and health care reform provide? How can we ensure that dental coverage, especially for adults, remains on the agenda as plans are developed?
10. How should the case be made to philanthropy for investing in integrating oral health and primary care?

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