# CT Primary Care Payment Reform
# Draft Capabilities Skeleton: Oral Health Integration into Primary Care
*This Draft: August 28th*

**Please go to the survey to rate this capability's impact as high, medium or low on the following criteria:**

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|---|
| Aim |
| Health promotion/prevention |
| Improved quality and outcomes |
| Patient experience |
| Provider satisfaction |
| Lower Cost |

## Understanding the Need

**The Problem:** Healthy teeth and mouths are a critical component of strong overall health, yet millions of Americans do not receive adequate oral care (Centers for Disease Control and Prevention, 2011). Nearly one quarter of children ages 2-5 and one half of those 12-15 have some degree of tooth decay. Older Americans consistently suffer from poor dental health: one in four adults above age 65 have lost all their teeth (Centers for Disease Control and Prevention, 2011). High costs, shortages of dental services, oral health care system complexity, and a lack of interdisciplinary collaboration, has led to a significant lack of necessary preventative oral healthcare (Chairman Bernard Sanders Subcommittee on Primary Health and Aging, 2012).

Two million emergency department (ED) visits are attributed to preventable dental problems annually, representing 1.5% of all ED visits (National Hospital Ambulatory Medical Care Survey, 2010). In 2012, ED dental visits cost the U.S. health care system $1.6 billion, an average cost of $749 per visit (Health Policy Institute, 2015). Recent research has shown ED utilization for preventable dental conditions is on the rise among select demographics (Lewis, et al., 2015).

The Surgeon General's landmark report *Oral Health in America,* labeled oral health a "silent crisis" and called for a national strategic oral health plan that would "improve quality of life and eliminate oral healthcare disparities." The report recommended increased collaboration among policy makers, communities and healthcare providers to address this public health crisis (Department of Health and Human Services, 2000). The report also recommended integrating oral health into overall healthcare delivery, but nearly 20 years later little progress has been made to end the separation of medical education, medical and dental delivery, and financing (Powers, B., Donoff, B.R., & Jain, S.H., 2017)

**Proven Strategy:**
***Name:*** Integration of Oral Health and Primary Care

***Definition:*** Oral health in primary care refers to providing essential dental screening and prevention in a primary care doctor's office. During regular checkups, patients can be screened, given simple treatments like fluoride varnish, educated on oral hygiene, and when necessary, referred to oral health providers.

Key components of integrated oral health models in primary care settings are (Qualis Health, 2015):

- **Risk Assessments**: The care team conducts a patient-specific oral health risk assessment that asks about symptoms suggesting oral disease or factors which increase disease risk.
- **Oral Health Screenings**: Care team performs oral health screening that looks for signs indicating poor oral health and active conditions. Examples may include assessing salivary flow, white spots or cavities, gum recession, and signs of poor hygiene.
- **Preventive interventions**: Implement appropriate patient-centered preventive oral health strategies. These may include prescribing or changing medications that protect teeth and gums, fluoride therapy, dietary counseling to promote glycemic control for patients with diabetes, in-

house or co-located dental cleaning by provider or dental hygienist, and therapy for tobacco, drug, or alcohol addition.

- **Communication and Education:** Provide targeted patient education about the importance of good oral health and practices to maintain it. Communications take into consideration health literacy and perceived oral health barriers. An example may include dietary counseling to promote glycemic control for patients with diabetes.
- **Interprofessional Collaboration:** Primary care providers exchange meaningful information with dental providers and facilitate patient navigation through the oral healthcare delivery system by ordering appropriate referrers and tracking oral health outcomes.

The SIM Clinical & Community Integration Program has developed the following standards for Advanced Networks as an elective capability for participating entities, which require oral health screenings and providing in-house preventive services and/or referral to treatment:

1. **Screen individuals for oral health risk factors and symptoms of oral disease, including:**
    a. Developing a risk assessment to screen all individuals for oral health needs
    b. Developing a process and protocol for administering the risk assessment
    c. Developing an oral exam procedure and process for conducting exams
    d. Educating and training all primary care team members on oral health

2. **Determine best course of treatment for individual, including**
    a. Designating care team members to review the risk assessment and the oral exam with the patient
    b. Developing a set of standardized criteria to determine the course of treatment
    c. Identifying which prevention activities can be provided in the primary care setting

3. **Provide necessary treatment - within primary care setting or referral to oral health provider, including:**
    a. Developing a process for who in the primary care setting delivers preventive oral services.
    b. Administering preventive dental services such as prescribing or changing medications that protect teeth and gums, fluoride therapy, and application of tooth varnish.
    c. Providing oral health education to patients by a trained health educator or care manager
    d. Developing a process and protocols to make, manage and close out referrals and coordinating with the patient's dentist or dental home (or identifying one for those who do not have one)

4. **Track oral health outcomes/improvement for decision support and population health management, including:**
    a. Electronically capturing risk assessment and oral exam results.
    b. Monitoring and reporting on coordination between primary care providers and dental providers and conducting quality improvement activities

Intended Outcomes:

- Enhance primary care providers' whole health capability
- Improve long term oral health outcomes by detecting oral disease earlier in its progression
- Reduce utilization of unnecessary services such as ED visits and hospitalizations
- Increase patient self-efficacy regarding oral hygiene

**Consumer Needs**:

- Many children and adults go without simple preventive services that have been proven effective in preventing oral diseases and reducing poor oral health (Centers for Disease Control and prevention, 2011).
- Education for caretakers and young children to establish strong tooth brushing habits
- Prevention strategies to minimize ED visits and tooth loss

**Health Equity Lens**:

- Caries and overall dental decay disproportionately affect poor, young, and minority populations (Malecki, et al., 2015)
- Costs are a primary predictor of access to dental care and poor oral health status (Malecki, et al., 2015)
- Of the 2,235 Dental Health Professional Shortage Areas, 74 percent are in rural areas (U.S Department of Health and Human Services, 2015)
- Dental problems lead to underemployment, lower wages, and higher rates of opioid misuse (Martin, S. A., & Simon, L., 2017)

**Implementing the Strategy**

**Example Scenario:** A patient checks in for a wellness appointment and as part of the medical record update is asked whether they have a regular dentist. During the appointment, the clinician (doctor, nurse practitioner or physician's assistant) notes signs of oral diseases, such as bleeding gums, lesions, and tooth decay. If the patient needs dental care and they do not have a dental home, the primary care office can provide a referral. If the primary care setting is fully integrated with on-site dental services, cleanings and restorative care may be delivered that day or during a scheduled follow up appointment. The primary care provider uses the EHR to track patient oral health outcomes and provide additional follow up as necessary.

**HIT Requirements:**

- EHR that allows providers to enter answers to oral health questions, document information regarding the patient's mouth, build an in-house risk assessment, order referrals, and track patient outcomes over time
- Patient Portal where educational materials and after visit summaries can be provided
- HIT networks should consider technologies such as direct messaging or secure messaging

- HIT networks should consider capturing data in a structured manner (i.e.; delimited fields vs free text) so data can easily be tracked and aggregated for reporting purposes

**Implementation Concerns:**

- Lack of formal primary care provider dental training
- Lack of consultation and referral resources
- Lack of private dental insurance
- Risk of added burden on PCP
- Gaps in EHR information sharing among primary and dentistry could result in duplication of services
- Handoffs to affiliated dental practices may have limited openings for new patients

**Impact**

| *Aim* | **Summary of Evidence** |
|---|---|
| *Health promotion/prevention* | An analysis of physician and dentist Medicaid claims showed that oral integration substantially increased preventive oral health services. Study results showed that approximately 30% of well-child visits for 6 to 36 month old children included oral screenings and other preventive dental services (Rozier, et al., 2010). A study that offered a two-hour training for pediatric primary care providers on infant oral health resulted in providers reaching an adequate level of accuracy in identifying children with signs of poor oral health. (Pierce, K.M., Rozier, G., Vann, W.F., 2002) |
| *Improved quality and outcomes* | Evidence on the effectiveness of oral health care in medical settings for adults is limited (Stearns, et al., 2012) but research investigating the effectiveness of dental primary care services such as referrals, in office screenings and education to prevent poor oral health in youth has shown promising results. An intervention that provided communication training using patient centered counseling, electronic medical records to prompt counseling, and offered parents additional educational materials saw a 77% risk reduction for developing caries at follow up (Kressin, et al., 2009). Children enrolled in North Carolina's Medicaid funded oral health integration program, who had more than four preventive visits, saw a 17% reduction in restorative treatments. (Pahel, et al., 2010). |
| *Patient experience* | A study that investigated parents' satisfaction with preventive dental care provided by their primary care providers found that 77% rated overall dental care greater than 7 on a 10-point scale. A 10 indicated the best care. (Rozier et al., 2005). |

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| *Provider satisfaction* | In a survey of 1386 primary care providers, 90% agreed they had an important role in identifying dental disease and providing counseling to families on the prevention of caries. 74% said they were interested in increasing their involvement and expressed willingness to apply fluoride varnish during medical appointments (Lewis, et al., 2000). Dental providers who have worked in collaboration with primary care providers in the Washington State ABCD oral integration program rated their experience "excellent" 86% of the time (Washington State Department of Social and Health Services, 2002). |
| *Lower Cost* | Few studies have evaluated cost and those that do have mixed results. One study concluded that preschool-aged, Medicaid-enrolled children who had preventive dental visits performed by a primary care provider were likely to seek subsequent preventive services and experience lower future restorative costs (Savage, et al., 2004). A North Carolina program funded by the state's Medicaid program was found to break even if future preventive costs were not discounted and would be cost saving if primary care preventive services were reimbursed at $34 instead of $55 per visit. (Stearns, et al., 2012). A study that investigated preventive screenings for oral cancers found that opportunistic screening for oral cancer may be cost-effective when set against a benchmark of $20,000-30,000 per QALY (Speight, et al., 2006) |

**Please complete the survey on this capability **here**.

**APPENDIX**

**Learning from Others**

**Case Study #1:** Dorchester House Multi Service Center is a Federally Qualified Health Center located in Boston, Massachusetts. In 2016 Dorchester House pediatricians noted they were unable to obtain dental appointments for patients with clear oral disease. Co-located comprehensive oral healthcare was available, but the services provided focused on adult patients and less than 10% of their dental patients were children. A grant funded five-year strategic plan was developed. The grant ensured all children seen in the pediatrics clinic and/or family medicine would have the opportunity to have their oral health needs met during medical appointments.

The program connects children with preventive dental care during their well-child visit and ensures children receive treatment in familiar surroundings. The program structure dictates all children under the age of five who are seen in the pediatric clinic undergo an oral health screening and risk assessment. Each patient is given a fluoride varnish and scheduled for a dental appointment prioritized based on risk assessment findings. Dental services are co-located with the medical clinic. Oral healthcare guidance is provided to the parent or guardian for ongoing and sustained pediatric oral hygiene.

Non-dental professionals were trained on oral health screening protocols by a provider "champion" - a licensed dental provider. In 2017 the Dorchester House built a dental "suite" in the pediatric clinic and hired a full-time public health dental hygienist. The provider "champion" educated the pediatric care team on the importance of oral health in youth and adolescents and provides ongoing guidance on how to utilize the in-house hygienist.

Lessons Learns:

- Special training was required for dentists to become comfortable treating pediatric patients as well as primary care team members being trained to provide oral screening and risk assessments
- Access to dental appointments was a problem and changes to the dental schedules to accommodate medical clinic referrals was necessary
- Medical providers cited limited time with patients, productively goals, and reimbursement as program limitations
- Non-reimbursement for fluoride varnish provider by the medical clinic was considered non-sustainable but overall program continues to be supported by high numbers of Medicaid-covered children utilizing dental clinic services
- The program recommended a provider champion to act as a change agent to guide pediatric dental integration

Results:

- As of 2017, 327 children have established a dental home receiving oral exams, cleanings and other dental care services (DotHouse Health Annual Report, 2017)
- Significantly increased the number of children under the age of five receiving preventive dental screenings
- Increased the number of pediatric patients referred for a dental appointment

**Case Study #2:** The N.C. Early Childhood Oral Health Collaborative (ECOHC) Into the Mouths of Babes (IMB) program trains and supports primary care providers to deliver preventive oral healthcare to children covered by North Carolina's Medicaid Program. Physicians, nurse practitioners, and physician assistants may conduct oral evaluations and risk assessments and refer children to a practicing pediatric dentist for further evaluation or restorative care. In state public health clinics, a registered nurse may perform oral preventive services under the direction of a physician.

Services are provided from the time of tooth development until 42 months of age and include:

- Oral evaluations and risk assessments
- Fluoride varnish application
- Parental oral care education
- Referrals to partnered dental homes

Goals include preventing and reducing early childhood tooth decay by providing primary care based preventive services and increasing referrals of high risk patinets to a dental home. North Carolina's Medicaid program reimburses pediatric primary care providers up to six preventive oral health service visits. Preventive oral health visits are incorporated as part of a well-child visit and are recommended every three to six months.

Primary care provider training consists of a standard one-hour continuing medical education session, which is acceptable for up to 1.00 Prescribed credit by the *American Academy of Family Physicians* and accepted by the *American Medical Association*. The training provides information on the four primary care services listed above in addition to Medicaid coding and billing.

Parental oral care education is a required as part of the preventive services package. Counseling includes education on the importance of brushing their child's teeth and continuing dental visits. Oral health risk assessments and preventive services are documented on PORRT- the IMB provided referral system.

Lessons Learned:

- Barriers to dental care remain as children age, hindering continuity of care for children receiving oral health services in medical offices (Kranz, et al., 2015).
- Dental treatments for children up to age 6 was cost-saving if Medicaid is willing to pay $2331 per hospital episode avoided (Stearns, et al., 2012).

Results:

- For children receiving at least four preventive visits before three years of age, there was a 21% reduction in hospitalizations for dental problems (Stearns, et al., 2012).
- Children receiving at least four preventive visits before three years of age showed a 17.7% reduction in caries (Achembong, L.N., Preisser, J.S., Rozier, R.G., 2015).
- The program has contributed to a statewide decline in dental caries rates since 2004 and helped reduce the gap in tooth decay between children from low- and other-income families at the community level (Achembong, L.N., Kranz, A.M., Rozier, R.G., 2014)
- Greater distance to care is not a barrier to preventive oral health visits in the medical setting for young NC Medicaid-insured children (Kranz, et al., 2014)

**Case Study #3:** Terry Reilly Health Services (TRHS) initiated a preventive oral health program targeted at pregnant and diabetic patients. The grant funded program provided medical staff with the resources necessary to screen for oral disease risk factors, offer dental screening exams, and provide microscopy periodontal assessments. Efforts were directed at identifying caries and applying therapy to eliminate the target bacteria rather than repairs or restorative dentistry. Patients were provided a view of their oral health status using microscope imaging and care team members provided education on oral hygiene. To facilitate a dental referral, the medical team integrated a prompt into their EHR. Once connected to a dental provider, patients received necessary dental care.

Lessons Learned:

- A shortage of available medical assistants reduced efficiency in workflow and overall lack of appropriate staff lengthened appointments and resulted in longer lab wait times
- Medical providers need the ability to charge additional fees for oral screenings
- Identified barriers to oral integration include lack of billable codes for preventive screenings and treatments, lack of funding sources for preventive oral services, and limited dental profession buy-in
- Oral bacteria risk assessment acted as a strong patient motivator for appointment follow up

Results: (Qualis Health, 2012)

- Patients who received a screening for oral disease risk factors, a microscopy periodontal risk assessment, and a referral to a dental clinic showed a 40% reduction in their oral health risk factors
- Follow up dental services were not co-located which resulted in 30-40% of referrals not being completed
- Oral screenings and risk assessments contributed to patient engagement in self-therapy practices.

**Additional Reading:**

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