Oral Health Toolkit
A Guide to Promoting Oral Health in Community Health Centers and Achieving Medical-Dental Integration

Arizona Alliance for Community Health Centers
Primary Healthcare for All
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Introduction

Historically, oral health has not been included in assessment of overall health but considered a personal matter. The Surgeon General’s Report on Oral Health in America in 2000 cited the ‘Silent Epidemic’ of untreated dental diseases affecting our most vulnerable populations. Since then, studies, research and health professionals worldwide have proven that oral health is an essential component of total health. In February 2014, HRSA (Health Resources and Services Administration, US Department of Health and Human Services) released a report, Integration of Oral Health and Primary Care Practice, giving recommendations to serve as a framework for an interprofessional practice model to integrate oral health and primary care. Health care professionals of all disciplines now realize the extent to which oral health can affect overall health and that oral health means much more than healthy teeth.

In numerous studies dental diseases have been linked with other health problems such as diabetes, cardiovascular disease, stroke, cancer, Alzheimer’s disease, bacterial pneumonias, failure to thrive, premature/low-birth weight babies, supporting oral health as a crucial element of overall health. The mouth is often where first symptoms of disease appear. The mouth is the gateway to the body and should not be overlooked in general health assessments as an indicator of overall health.

Dental disease is the most common chronic disease. This infectious disease affects 92% of adults and 65% of children by age 13. Early tooth decay is on the RISE and is a predictor of lifetime oral disease but with an early start, it is nearly 100% preventable. Community Health Centers play a crucial role in preventing dental disease in their communities.

Purpose

This toolkit was developed by the Arizona Alliance for Community Health Centers to create awareness among Community Health Center medical providers and ancillary staff of the impact of oral health on systemic health and to serve as a resource for CHCs as they examine how to achieve medical-dental integration and a patient-centered health home. Most of the content in this toolkit is geared toward CHCs with dental programs. If your CHC does not have a dental department, we encourage you to develop a strong partnership with a dentist in your area.

How to Use This Toolkit

The five sections that make up this toolkit are:

• Oral Health in Children
• Oral Health in Adults
• Oral Health in the Elderly
• Special Populations & Opportunities for Medical-Dental Integration
• Appendix

The first three sections contain oral health information related to specific populations. The goal for these sections is to educate CHC staff on oral health diseases so they can recognize potential problems, educate patients on need for oral health care and make appropriate referrals to dental departments/providers for oral health care.

The fourth section explores specific opportunities for medical-dental integration in Community Health Centers. The suggested techniques are ideas to help you think about how your CHC can begin focusing on primary care and oral health care integration.

The appendix provides sample documents related to ideas discussed in the toolkit.
Oral Health Statistics

**National Data**\(^1,2,3,4,5,6\)
- Tooth decay is the single most common chronic childhood disease - 5 times more common than asthma, 4 times more common than early childhood obesity, and 20 times more common than diabetes
- 108 million Americans do not have dental insurance benefits and pay for dental care out-of-pocket; the insured may have trouble getting care
- For every child without medical insurance, there are at least 2.6 children without dental insurance
- For every adult 19 years or older without medical insurance, there are 3 without dental insurance
- Children and adolescents living in poverty suffer twice as much tooth decay as their more affluent peers, and their disease is more likely to go untreated
- Over 40 percent of poor adults (20 years and older) have at least one untreated decayed tooth compared to 16 percent of non-poor adults
- 92% of adults 20 to 64 have had dental caries in their permanent teeth
- 23% of adults 20 to 64 have untreated decay
- 1 out of 20 middle-aged adults are missing all of their teeth, 25% over age 65
- 70% of age 65+ have periodontitis, the more advanced form of periodontal disease
- US spends $64 billion/year on dental care, 4% paid by government programs.
- 6.1% of children & 16.4% of adults under 65 did not receive needed dental care due to costs.

**Arizona Data**\(^7,8\)
- 50% of children 0-4 have never visited a dentist
- 7% of children age birth to 1 year have the first signs of tooth decay
- 52% of children age 4 have decay experience, 40% untreated
- 30% of children ages 2-4 have untreated tooth decay
- 40% of four-year-olds have early or urgent treatment needs
- 75% of Arizona 3rd graders have experienced tooth decay
- By the time Arizona children are 11 to 13 years of age, 65 percent have experienced tooth decay
- While 24% of Arizonans lack medical insurance, over 44% of Arizona adults and 38% of children lack dental insurance and have more untreated decay
- Arizona’s ratio of dentist-to-population is lower than the US average (Arizona has one dentist for every 2,250 people; the national average is one dentist to every 1,740 people, a difference of 510 people per dentist)
- In a 2009 study, the number one reason given for a child not visiting the dentist was “child doesn’t need to see a dentist”

**References**
\(^1\)http://www.aapd.org/assets/2/7/ECCstats.pdf
\(^2\)http://www.cdc.gov/OralHealth/publications/factsheets/adult.htm (HRSA.gov/publichealth/clinical)
\(^3\)http://www.nidcr.nih.gov/DataStatistics/SurgeonGeneral/sgr/execsum.htm
\(^4\)http://www.nidcr.nih.gov/DataStatistics/FindDataByTopic/DentalCaries/DentalCariesAdults20to64.htm
\(^5\)http://www.cdc.gov/OralHealth/publications/factsheets/adult_older.htm
\(^6\)http://www.sanders.senate.gov/imo/media/doc/DENTALCRISIS.REPORT.pdf
\(^8\)http://www.azda.org/Public/media/Oral_Health_Statistics/
Part 1: Early Childhood Caries

Early Childhood Caries (ECC) is a transmissible infectious disease that can begin as early as the teeth begin to emerge (6 months old). ECC destroys tooth structure and causes the loss of chewing function, pain and infection in children up to six years of age. The rate of ECC has recently increased.

What Causes Dental Caries

Caries is a multi-step process that results in destruction of the tooth structure. Oral bacteria (most commonly streptococci mutans) mix with sugars to form acids (sugars come from food/drink/plaque on teeth if not brushed off). Those acids demineralize the tooth enamel. If the cycle of acid production and demineralization continues, the enamel will break down, forming a cavity. The outer protective enamel is much thinner in deciduous (baby) teeth, making them more susceptible to decay.

Signs & Symptoms - What to look for

1) Chalky White Spots: Early Stages of ECC

White spot lesions appear as white bands/spots on the tooth enamel and begin along the gingival margin (gum line) of the upper front teeth. If the teeth are not treated at this stage of disease, the lesions will progress and the demineralized enamel will cavitate, also spreading to back and lower teeth. White spot lesions may be reversible with preventive treatments like topical fluoride varnish applications to remineralize tooth enamel. Parents/caregivers should be educated on dietary restriction of sugary food/drinks and proper brushing techniques. Refer to the dental department for exam and preventative services.

2) Brown Cavitations

If white spot lesions are not addressed, they will progress into cavities. The lesions appear darker, and teeth may be sensitive to cold, hot, sweet and/or sour foods and drinks. Oral hygiene and dietary education should be given to parents/caregivers. Fluoride varnish should be applied to help prevent progression of disease. The child should be referred to your CHC’s dental department for examination, necessary treatment and establishment of a dental home.

3) Advanced ECC

If brown cavitations are left untreated, they will progress into larger and deeper carious lesions that will destroy the tooth. These cavities will primarily be present on the upper teeth and the child will experience pain. If many teeth have severe decay (rampant caries), extensive dental treatment under sedation may be needed. Caries is an infectious progressive disease that affects overall health. Children with this degree of infection need URGENT referrals. Oral hygiene and dietary education should be given to parents and the child should receive fluoride varnish to help prevent disease progression.
Part 2: Prevention

Dental caries is the most common chronic childhood disease. It’s one of the great preventable public health challenges of the 21st century. 51 million school hours are lost each year due to oral health issues. According to one study, every dollar spent on prevention saves $8 - $50 in restorative and emergency procedures. Here are a few prevention methods that can be implemented in your health center:

1) Fluoride - Fluoride prevents and slows the progression of tooth decay and can even reverse early tooth decay. Sources of fluoride include drinking water, topical fluoride varnish, toothpastes, mouth rinses and supplements. Children should start receiving screenings and fluoride varnish applications as soon as teeth erupt (6 months). This can be done in the pediatric/primary health office. The Arizona Health Care Cost Containment System (AHCCCS) will reimburse for procedures by submitting designated codes. Referrals to the dental department should be made by age 1 to establish a dental home.

2) Sealants - Dental sealants prevent decay by serving as a barrier between a tooth and cavity causing bacteria. The plastic coating is placed by a dental professional on the back permanent teeth where decay most commonly occurs. Sealants prevent up to 75% of decay at one third the cost of a filling. Sealants are the only proven prevention for decay other than fluoridated water. The first permanent molars erupt behind the last primary molars at around six years of age (no primary teeth are lost in this process). Caregivers should be educated on sealants by their medical provider and referred to the CHC’s dental department for sealants to be placed on their children’s teeth.

3) Transmissibility of Dental Disease - Dental disease is a transmissible, infectious disease. Studies show children are not born with the bacteria that causes decay but acquire it from parents (mothers particularly)/caregivers. The transmission takes place when an infant is kissed or food and utensils shared. It is not uncommon that whole families will be affected by the caries infection. The risk increases if mother or other family members have untreated decay. Reducing the transmissions of bacteria from mother to child will improve future oral health for the child.

4) Education and Anticipatory Guidance - One of the main reasons parents/caregivers do not bring their child to the dentist is because they have low health literacy levels and are not educated on the importance of oral health. Parents and caregivers must be given anticipatory guidance on topics as:

- The causes and prevention of tooth decay, including how to recognize early signs of tooth decay
- Appropriate fluoride intake for a child
- Bottle feeding and sippy cups
- Good oral hygiene techniques (i.e. toothbrushing)
- Nutrition habits
- Dental visit by age 1

Parents should be discouraged from putting children to sleep with a bottle of juice or milk or allowing toddlers to walk around with a sippy cup or bottle of anything other than water. Having children drink fluoridated water and brush with fluoridated toothpaste should also be encouraged (see page 5 for resources containing additional information on the use of fluoride). Parents need to assist children with toothbrushing until the child develops the necessary motor skills to brush correctly (when they can tie their own shoes).
Medical providers can play a role in giving parents the tools they need to help prevent dental disease in their child. Parents/caregivers need to be educated on prevention methods and encouraged to take prevention seriously, saving their child from pain and other health issues. Untreated decay infections can spread through the rest of the body affecting overall health. Early prevention leads to a healthy mouth for life and saving future costs of dental treatment.

Part 3: Resources

**Smiles for Life: A National Oral Health Curriculum- Strongly recommended for all Primary Care Providers**

**Sesame Street**

**American Academy of Pediatric Dentistry**
Get it Done in Year One. [http://www.aapd.org/assets/2/7/GetItDoneInYearOne.pdf](http://www.aapd.org/assets/2/7/GetItDoneInYearOne.pdf)


**Center for Disease Control and Prevention**
Fluoridation Basics. [http://www.cdc.gov/fluoridation/benefits/background.htm](http://www.cdc.gov/fluoridation/benefits/background.htm)
Children's Oral Health. [http://www.cdc.gov/oralhealth/topics/child.htm](http://www.cdc.gov/oralhealth/topics/child.htm)

**American Academy of Pediatrics - Children's Oral Health**
Pediatric Guide to Oral Health Flip Chart and Reference Guide. [http://www2.aap.org/oralhealth/PediatricGuides.html & aapd.org/oralhealth/pact/Ch4_sect7.cfm](http://www2.aap.org/oralhealth/PediatricGuides.html & aapd.org/oralhealth/pact/Ch4_sect7.cfm)
Protecting All Childrens Teeth Oral Health Practice Tools. [http://www2.aap.org/oralhealth/PracticeTools.html](http://www2.aap.org/oralhealth/PracticeTools.html)

**Cavity Free at Three**
Lap to Lap Exam Video. [http://youtu.be/9b0a6a_YK5o](http://youtu.be/9b0a6a_YK5o)

**CDA Journal**
Section 2: Oral Health in Adults

What makes the adult population different from children is that adults, for the most part, have the ability to seek dental treatment once they see it as necessary. One challenge is the lack of dental insurance benefits for adults, especially adults with low income. 66% of low income adults have dental decay. Community Health Centers play a crucial role in treating these patients.

Adults need to be educated on the importance of oral health. Dental disease is the most common chronic disease with 92% of adults living with some type of dental disease. Poor oral health has been linked to diabetes, cardiovascular disease and stroke, pre-term births and low birth weights, HIV/AIDS, Alzheimers and osteoporosis. It is important to inform patients that improving their oral health can have a positive impact on their overall health. Medical providers should be referring adults, especially pregnant women and those with systemic diseases, to the dental department in their CHC for regular dental exams. This toolkit will focus on the following priority areas related to oral health in adults: Caries, Root caries, Gingivitis, Periodontitis, Oral Cancer and the Effects of alcohol, tobacco and drug use.

Part 1: Adult Caries

Four criteria are needed for a cavity (decay): a tooth, decay causing bacteria, carbohydrates (fermentable) and time. Other factors contribute to oral health outcomes including: susceptibility, diet (consistent/frequent exposure to sugary foods/drinks), oral hygiene habits, aging, saliva buffering capacity & flow, tobacco use, fluoride exposure and medication effects. Compromised immune systems and presence of ongoing systemic diseases can make maintaining good oral health more difficult and complex.

Part 2: Root Caries

Root caries occur when gums recede and the tooth root becomes exposed. Tooth roots do not have the same hard enamel as the crown to protect the tooth and therefore decay happens three times faster. Xerostomia, dry mouth, also contributes to root caries due to reduced buffering mechanisms in the saliva. Erosion from acid wear, bruxism and incorrect brushing technique can also expose root surfaces. Fluoride varnish applications and use of prescription strength fluoride toothpaste and other remineralizing agents can reduce incidence. Restorations can restore tooth structure.

Part 3: Gingivitis

Gingivitis is a common and mild form of gum disease that causes irritation, redness and inflammation and may cause the gums to bleed with brushing. The most common cause is poor oral hygiene. Patients may indicate their gums are tender and bleed while brushing or flossing. Pregnancy and diabetes can also contribute to gingivitis. Pregnant patients and patients who have been diagnosed with diabetes should be educated on the links between gingivitis and overall health. Referrals to the dental department for exams and professional cleaning are recommended as well as daily brushing and flossing.
Part 4: Periodontitis

Periodontitis is a bacterial infection, chronic inflammation, that destroys the attachment and supporting bone holding the tooth in the mouth. Periodontitis is the leading cause of tooth loss in adults. In addition to poor oral hygiene, the following can also contribute to the development of periodontitis: pregnancy, diabetes, HIV, and smoking. Patients with any of these conditions should be referred to the dental department for evaluation to prevent the development or progression of periodontal disease. Treatment includes deep cleaning (root planing and scaling), possible surgical procedures, frequent dental visits, avoidance of tobacco and other irritants, and possible prescription of oral antibiotics or anti-microbial agents. Educating your patients on the necessity of good home care is essential for preventing disease.

Part 5: Oral Cancer

Oral cancer is the sixth most common type of cancer and has the worst five year survival rate of only 57%. The most common type is squamous cell carcinoma. The majority of lesions begin on the floor of the mouth, the tongue, or the lower lip. The cancer may appear as a white or red patch of tissue in the mouth, or a small hardened ulcer which looks like a common canker sore but does not heal. HPV linked cancers with sites in the oropharyngeal and tonsilar areas are replacing cancers caused by tobacco use. Recent statistics show that the fastest growing age range for oral cancer is 25-50 years, with white non-smoking males 35-55 having incidence 4:1 over females. Symptoms include difficult or painful swallowing or chewing, persistent sore throat or hoarseness, swelling or lump, numb feeling in lips, constant cough. Patients who drink and/or use tobacco are at an increased risk of developing oral cancer. Unfortunately, early stages of oral cancer often go unnoticed. For that reason, it is extremely important for medical providers to do a basic oral health exam and ask the patient if they have noticed any mouth sores that have lasted more than 14 days or any of the symptoms described above. Oral cancer screenings should be performed on all adult patients to include education on self-assessment.

Part 6: The Effects of Alcohol, Tobacco and Drug Use on Oral Health

The effects of alcohol, tobacco and recreational drug use on the mouth include: tooth loss, gum disease, dry mouth, severe tooth decay, erosion, staining, bad breath, cracked and broken teeth, and oral cancer. Patients using methamphetamine often have dramatic changes in oral health referred to as ‘Meth Mouth’. These changes are linked to xerostomia, bruxism and excessive sugar consumption. The risk of oral cancer is six times higher in heavy drinkers. If it is known that a patient consumes excessive amounts of alcohol, uses tobacco or recreational drugs, immediately refer them to the dental department for an oral health exam. In Arizona, providers should refer all tobacco users to ASHLine (Arizona Smoker’s Helpline).
Part 7: Resources

Smiles for Life: A National Oral Health Curriculum

Center for Disease Control


Delta Dental


National Institute of Dental and Craniofacial Research


California Dental Association

Staying Healthy with AIDS
www.aids.gov/hiv-aids/staying-healthy-with-hiv-aids

American Academy of Periodontology

Section 3: Oral Health in Older Adults

Part 1: Oral Health Complications in Older Adults
70% of elders lack dental insurance (Medicare does not cover); 80% have one or more chronic diseases; 14% live in poverty, and 38% of adults over the age of 65 are disabled. All of these factors result in complex dental needs among the elderly population.\(^1\) The AZ Governor’s Council on Aging identified access to oral health care as the #1 concern of seniors.

According to the CDC, about 25% of adults 65 years and older have lost all of their natural teeth. 33% of this age group have untreated decay. If oral care is not received, dental disease and edentulism (no teeth) can greatly affect older adults quality of life. Nutrition is compromised if eating solid, fresh foods is impossible and social interaction is diminished when their appearance is affected by missing or decayed teeth. The Baby Boomer generation is now turning 65 and will retain more teeth into late age. Complications from tooth retention include: increased incidence of dental decay, more severe periodontal disease, and the majority of oral cancer being diagnosed in the elderly population.\(^2\)

Oral cancers from ill-fitting prosthesis (dentures and removable partials) as well as oral cancers from tobacco/alcohol use and unknown causes all contribute to this statistic.

There are many contributing risk factors to oral health problems in older adults. The most common is xerostomia (dry mouth) from increased use of prescription and over-the-counter medications. Over 400 commonly used medications reduce salivary flow. Saliva acts as a buffer to neutralize the acidic environment and inhibits bacterial growth. The elderly population that live in long term care (LTC) facilities numbers about 1.3 million\(^4\). This population is at a higher risk for oral health complications. They have difficulties with self-care; they often can’t communicate pain or concerns to caregivers; basic oral hygiene care is not provided by staff; and dentures and prosthesis are not checked or cleaned. Studies have shown that bacterial components of dental plaque are a major cause of respiratory infections of LTC facility residents. Up to 48% of infections in nursing homes result from aspiration pneumonia. These patients often cannot get to a dentist, and dental services are rarely provided by the facility. Therefore, it is crucial for medical providers to check an elderly patient’s mouth and refer them to the dentist for an oral health exam.\(^5\)

Part 2: Resources

Smiles for Life: A National Oral Health Curriculum

Center for Disease Control


Delta Dental

Department of Health & Human Services - Administration on Aging
Section 4: Special Populations & Opportunities for Integration

Part 1: Special Populations
Because there is such a strong connection between oral health and systemic health, there are certain populations that require extra attention when it comes to oral health care. Those populations include (but are not limited to) children, pregnant women, diabetics, patients with cardiovascular conditions and patients with HIV/AIDS.

1) Pregnant women (see page 8 for link to Prenatal Oral Health Guidelines)
Dental care is safe and effective during pregnancy and should be coordinated between dental and OB/GYN departments. Healthcare providers do not always recognize the importance of oral care during pregnancy. Statistics show that 40% of pregnant women have untreated decay and/or gum disease that can effect the health of mother and baby. Risk of premature or low birth weight babies has been linked to dental disease. Hormonal changes increase the risk of developing gum disease and pyogenic granulomas (pregnancy tumors). Pregnant women should be given anticipatory guidance on nutrition, oral hygiene and dental treatment including:
- Avoid sugary foods and drinks
- Brush with fluoridated toothpaste twice a day and drink tap water (if tap water is fluoridated)
- Floss regularly
- See a dentist while pregnant for an exam and cleaning. Elective procedures should be deferred until postpartum if possible
Pregnancy is the opportune time to educate women about caries prevention in young children. All mothers will benefit from knowing that dental disease is transmissible. Children are not born with the bacteria that causes dental disease, it is most often passed from mother to child through saliva. If mothers have active dental disease the risk is higher. Good oral health education for mothers is key to preventing oral disease in children.

2) Children (Please refer to Section 1 on page 3 for additional information on children’s oral health)
Dental disease is almost 100% preventable with an early start by the education of pregnant mothers. Medical providers need to screen children for dental wellness and refer families to dental departments/providers to establish a dental home by age 1. Once a dental home has been established and preventative measures have been taken, the risk of dental decay is decreased tremendously.

3) Diabetics
Diabetics have a higher than normal risk for bacterial infections because of compromised immune systems. Diabetics have a higher incidence of gum disease (inflammation) and that infection can cause blood sugar to rise making diabetes harder to control. Diabetics need to be educated on the links between diabetes, oral health and overall health at group classes and/or during routine check-ups. All diabetics should be referred to the dental department for thorough exams and close monitoring of their oral health.

4) Patients with Cardiovascular Conditions
Research shows that periodontal disease can increase the risk for heart disease and stroke. Although the connection between heart disease and periodontitis is not conclusive, the causal relationship is multi-factorial. Several studies have shown that people with periodontal disease may be more likely to have coronary artery disease than people with good oral health. One reason is the bacteria that cause periodontal disease can release toxins into the bloodstream and help to form fatty plaques in the arteries. These plaque deposits can lead to serious problems, such as blood clots,
which can block blood flow. Many studies have concluded that the inflammatory process is not limited to the site of the inflammation but has whole body effects (inflammation of blood vessels that could lead to heart attack or stroke). Patients who have cardiovascular conditions, especially patients with heart disease, should see a dentist for regular exams, cleanings and preventive education in order to maintain good oral health. Vigilance in updating medical histories is critical for providing safe, high quality dental care to that patient and referring the patient to medical providers when necessary.

5) Patients with HIV/AIDS
The mouth may be the first part of the body to show signs of HIV infection. Infections like thrush can indicate the immune system is not working properly. Medical/dental staff need to be aware of what these oral manifestations look like to better recognize possible HIV infection. Patients who have already been diagnosed with HIV may experience oral problems including: oral warts, fever blisters, hairy leukoplakia, oral candidiasis (thrush), and aphthous ulcers (canker sores). They often have dry mouth from medications increasing the risk of tooth decay. More than one-third of people living with HIV/AIDS have oral health conditions related to weakened immune systems. Inadequate oral health care can undermine HIV treatment regimens and diminish quality of life. Patients with HIV/AIDS need to be referred for regular oral exams. Dental departments need to be diligent in recognizing signs/symptoms and making proper referrals to local dentists or clinics specializing in treatment of HIV/AIDS patients if necessary.

Part 2: Opportunities for Medical-Dental Integration
Dental disease is the most common chronic disease in both children and adults. It is almost 100% preventable if prevention starts early, with babies in utero and their mothers. Educating pregnant moms on the importance of oral health for themselves and their babies puts them in the perfect position to prevent dental disease in their children. WIC programs are an excellent place for this education to take place. Consider having one of the dentists or dental hygienists in your CHC do a group oral health session for pregnant moms in the WIC program.
Once the baby reaches the age of 1, a dental home should be established for the child. Primary care providers should be educated on oral screenings of infants and proper anticipatory guidance. Parents should be educated that seeing the dentist at age one is very important to the healthy development of their child. 7% of AZ children have signs of decay before their 1st birthday. Inform parents that a simple knee-to-knee or lap exam will take place at the dentist appointment in order to make sure the child’s teeth are coming in correctly and the mouth looks healthy.

Patients with other systemic diseases should be educated about the links between their diseases and oral health. Good oral health will improve their overall health and dental care should be part of total healthcare.

Warm hand off - JCAHO defines “hand-off” as an interactive process of passing patient specific info from one caregiver to another for the purpose of ensuring the continuity and safety of patient care. The warm hand off technique requires medical and dental departments to be housed at the same location. It involves staff from one department physically walking a patient over to the other department for introduction and/or appointment scheduling. This can be done with pregnant women, children, diabetics or others with identified oral disease or with dental patients that have been identified with systemic health problems. See Part 4 on page 13 for additional medical-dental integration techniques.
Part 3: Internal Referral Options

Internal referrals between medical and dental departments in CHCs are critical to both the overall health of patients and the success of dental programs. There are several options for internal referral processes: 1) Verbal referrals, 2) Paper referrals, and 3) Electronic referrals.

1) Verbal referrals

Implementing a standardized referral process that involves verbal referrals can work a number of ways. Below are some tips to help make this referral process successful at your health center.

For medical providers:
• Include questions related to oral health on new patient intake forms (i.e. Does patient have a dental home? When was the last time patient saw a dentist? Experiencing oral pain or discomfort? Wear dentures or removable partials?)
• Include check boxes for providers on new patient intake forms that require action steps (i.e. oral health assessment performed, patient given dental referral, patient given anticipatory guidance on oral health care)
• Develop a protocol for providers that requires a dental referral for every patient who answers “no” to the dental home question
• Use warm-hand off technique when possible. Face-to-face contact can help assure next appointment will be kept.

For dental providers:
• Include questions related to primary care and regular health checks on new patient intake forms (i.e. Does patient have a primary care doctor? When was the last time a patient went in for a routine health check?)
• After reviewing and signing off on a patient’s medical history, if the patient has answered no to having a primary care doctor and/or has indicated not being seen for a regular health check in the last year, provide that patient with a referral to the medical department

For all providers:
• Create postcards or flyers for each exam room and waiting area that have the clinic information (i.e. address, phone number, hours of operation, services provided, etc.) for both primary care and dental providers. These bi-lateral referrals should have standardized forms
• Instruct staff to give the printed information to each patient that is given a referral
• Make sure medical and dental staffs know each other and are comfortable making introductions

2) Paper referrals

A standardized referral process involving paper referrals requires more time and effort for both the medical and dental staff. As with the verbal referral system, new patient intake forms should include; questions mentioned above and check boxes for providers that require action steps. The difference with a paper referral system is that the responsibility no longer lies with the patient but with the staff. This system requires additional paperwork. Instead of providing the patient with the clinic’s contact information, a paper referral will be sent over to the medical or dental department, or scanned into the EHR system and flagged for the providers to see (see appendix for sample referral forms). Once the department receives the referral, efforts should be made by the staff for an appointment to be scheduled for that patient. The referring provider should be notified once the patient has been seen, if the patient did not want to make an appointment, or if the staff member was unable to reach the patient to schedule the appointment. At least two efforts to schedule the appointment should be made.
2) Electronic referrals
The utilization of electronic health records (EHR) is also an option when creating an internal referral system. Templates can be built into EHR systems that allow for the documentation and tracking of internal referrals (see appendix for sample EHR templates). The referrals will appear as a pop-up window in the EHR system allowing the department receiving the referral to follow-up with that patient. This system may require additional training for your staff.

Part 4: Additional Medical-Dental Integration Techniques
*All of these suggestions are to be applied in situations where the patient does not already have a dental home.

Include an oral health assessment and/or dental appointment for pregnant women as part of your OB program. Include this in the intake form so every new patient undergoes a quick oral health assessment, making the referral process seamless (see page 8 for link to Perinatal Oral Health Guidelines).

Coordinate the implementation of a fluoride varnish program with the pediatric medical department. Distribute educational materials on children’s oral health and establishing a dental home. Coordinate scheduling of medical & dental appointments on the same day to decrease risk of cancelled appointments.

Have your medical providers do quick oral health risk assessments on children and provide referrals to the dental department (see appendix for oral health risk assessment tools). Make this part of the patient intake form so every new patient undergoes this assessment. Training courses available.

Have your medical providers do quick oral health assessments on higher risk populations (i.e. patients with diabetes, cardiovascular disease, HIV/AIDS), and provide referrals to the dental department. Make this part of the patient intake form so every new patient undergoes this assessment.

Follow-up with patients identified with high blood pressure at a dental visit to make sure they have appointed with a medical physician.

If your CHC hosts group education classes for the community, especially those geared toward special populations like diabetics, include a session on oral health.

Develop partnerships with Head Start and WIC programs in your area to provide oral health education and oral health screenings. Host WIC oral health days or Head Start field trip days at your center, blocking off appointments for Head Start clients only. Organizing health fairs for clients involved in the WIC program and/or Head Start clients also serves as an opportunity to provide oral health services to children and possibly gain new clients for your dental department.

Work with Arizona Smokers’ Helpline (ASHLine) to provide training for your medical and dental staff on tobacco cessation. Develop a protocol where all patients who use tobacco are given a referral to the dental department. Again, include this on the medical intake form so every patient that answers yes to using tobacco is also asked whether or not they have a dental home and is given a dental referral.

Work with local nursing homes and RV parks to provide dental screenings and other dental services to elderly patients (might require grant funding). *Especially good for CHCs with mobile dental units.

Work with local schools to provide dental screenings and sealants to children on school property (might require grant funding). *Especially good for CHCs with mobile dental units.
References - Section 1:

References - Section 2:

References - Section 3:

References - Section 4:
### 1) EMR/EDR Levels of Integration - How “integrated” is my Health Center?

<table>
<thead>
<tr>
<th>Type</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Integration</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| All Paper                                                            | • None                                                                                                          | • Inefficient  
• Costly storage and retrieval  
• Information not readily available  
• Discrepancies between charts  
• Cannot report off information (unstructured data) |
| **Electronic Medical Record Only**                                   | • Part of patient’s medical record exists in electronic format for easy accessibility  
• Advanced clinical decision support mechanisms can be implemented in EMR | • Paper workflows are inefficient and costly to maintain  
• No single patient record  
• Need for process improvement and efficiency of paper record “unstructured content” integration into an EMR |
| **Electronic Dental Record Only**                                    | • EDR vendors are adding EMR functionality and planning to obtain ONC certification for Stage 2  
• EDR integrated with electronic imaging provides a single view of patient record | • Paper workflows are inefficient and costly to maintain  
• No single source of patient information for demographics, meds, problems, allergies, etc.  
• Need for process improvement and efficiency of paper record “unstructured content” integration into an EMR |
| **Separate Electronic Medical and Dental Records**                   | • Dental can see medical  
• Sets the stage for tighter integration between the two systems | • Requires license to both programs  
• Must toggle between and log in/out of 2 distinct systems  
• No single sign on  
• Dual data entry  
• Any non-integrated EMR-EDR costly to maintain |
| **Home Grown Electronic Medical & Dental Records**                   | • Control over systems development lifecycle  
• Ability to customize to the specific needs of the clinic and providers | • High startup costs and time investment  
• Reinventing the wheel  
• Limited features and functionality  
• May not meet ONC certification criteria to qualify for MU initiatives |
| **Interfaced Electronic Medical & Dental Records**                   | • EDR dental specific  
• HL7 messaging is an accepted interoperability standard  
• Opportunity to obtain Meaningful Use incentive payments if EMR-EDR solution is ONC certified | • Limited information sharing  
• Duplicate information between two systems  
• Generally there is an extra cost for HL7 interface set up and any future upgrades |
| **Fully Integrated Electronic Medical & Dental Record (one database)** | • EDR dental specific  
• Streamlined and tightly integrated patient record and functions  
• Single sign on  
• Increased patient safety  
• Medication reconciliation  
• Single clinical view of patient record  
• Immediate access to patient records within the Health Center | • Generally the combined cost can be more  
• Internal IT and clinical staff need to maintain and service both applications if Health Center is not a member of a Health Center Controlled Network |
| **Electronic Medical & Dental Record + Electronic Health Record**     | • Multiple users can view a chart simultaneously  
• Lab and x-ray results returned automatically  
• Drug to drug/ allergy interaction checking  
• Quality of Care  
• Increased efficiency and improved workflow  
• Improved patient communications and services  
• Reduced medical records transportation costs | • Upgrade problems, including lack of internal or external IT or support resources  
• Inadequate EHR Templates that are difficult to use or update  
• Hidden or unexpected EHR expenses |

Created By: National Network for Oral Health Access
2) Patient Intake Form - EMR Version (see pages 12-13 for more information)

![Patient Intake Form](image)

Courtesy of: Sunset Community Health Center
3) Paper Referral - Medical to Dental (see page 12 for more information)

<table>
<thead>
<tr>
<th>Request for Dental Consultation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Patient__________________</td>
</tr>
<tr>
<td>Date of Referral________________</td>
</tr>
<tr>
<td>Patient’s Phone Number____________</td>
</tr>
<tr>
<td>Reason for Dental Referral:</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Significant Medical Conditions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>______________________________</td>
</tr>
<tr>
<td>______________________________</td>
</tr>
<tr>
<td>______________________________</td>
</tr>
<tr>
<td>______________________________</td>
</tr>
</tbody>
</table>

| Referring Physician_____________ |                                 |
| Signature_______________________ |                                 |

| Date Referral was Received_______ |                                 |

<table>
<thead>
<tr>
<th>Action Taken by Dental Staff (check all that apply):</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Attempted to Make Appointment Date________________</td>
</tr>
<tr>
<td>☐ Appointment Made Date________________</td>
</tr>
<tr>
<td>☐ Patient Seen Date________________</td>
</tr>
</tbody>
</table>

| Notes:                                              |
| ______________________________ |
| ______________________________ |
| ______________________________ |
| ______________________________ |

| Dentist or Dental Staff Signature__________________ |                                 |
### Request for Medical Consultation

<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Patient</td>
<td></td>
</tr>
<tr>
<td>Date of Birth</td>
<td></td>
</tr>
<tr>
<td>Date of Referral</td>
<td></td>
</tr>
<tr>
<td>Record #</td>
<td></td>
</tr>
<tr>
<td>Patient’s Phone Number</td>
<td></td>
</tr>
<tr>
<td>Reason for Medical Referral:</td>
<td></td>
</tr>
<tr>
<td>Significant Medical Conditions:</td>
<td></td>
</tr>
<tr>
<td>Planned Dental Treatment:</td>
<td></td>
</tr>
<tr>
<td>Referring Dentist</td>
<td></td>
</tr>
<tr>
<td>Signature</td>
<td></td>
</tr>
</tbody>
</table>

### Date Referral was Received

Date Referral was Received ________________________________

### Action Taken by Medical Staff (check all that apply):

- [ ] Attempted to Make Appointment  
  Date ____________
- [ ] Appointment Made  
  Date ____________
- [ ] Patient Seen  
  Date ____________
- [ ] Patient Stable for Dental Treatment  
  Date ____________  
  Through ____________

### Notes:

__________________________________________________________________________

__________________________________________________________________________

Medical Provider___________________________________________________________

Signature__________________________________________________________________
5) EHR Referral Template/EHR Referral Tracking (see page 13 for more information)

Courtesy of: Shasta Community Health Center
## Oral Health Risk Assessment Tool

The American Academy of Pediatrics (AAP) has developed this tool to aid in the implementation of oral health risk assessment during health supervision visits.

### Instructions for Use

This tool is intended for documenting caries risk of the child, however, two risk factors are based on the mother or primary caregiver’s oral health. All other factors and findings should be documented based on the child.

The child is at an absolute high risk for caries if any risk factors or clinical findings, marked with a △ sign, are documented yes. In the absence of △ risk factors or clinical findings, the clinician may determine the child is at high risk of caries based on one or more positive responses to other risk factors or clinical findings. Answering yes to protective factors should be taken into account with risk factors/clinical findings in determining low versus high risk.

### Treatment of High Risk Children

If appropriate, high-risk children should receive professionally applied fluoride varnish and have their teeth brushed daily with an age-appropriate amount of fluoridated toothpaste. Referral to a pediatric dentist or a dentist comfortable caring for children should be made with follow-up to ensure that the child is being cared for in the dental home.

### Caries Risk:
- Low
- High

### Completed:
- Anticipatory Guidance
- Fluoride Varnish
- Dental Referral

---

### Risk Factors

<table>
<thead>
<tr>
<th>Clinical Findings</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>White spots or visible demineralizations in the past 12 months</td>
<td>△</td>
<td></td>
</tr>
<tr>
<td>Obvious decay</td>
<td>△</td>
<td></td>
</tr>
<tr>
<td>Restorations (fillings) present</td>
<td>△</td>
<td></td>
</tr>
</tbody>
</table>

### Protective Factors

<table>
<thead>
<tr>
<th>Protective Factors</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing dental home</td>
<td>△</td>
<td></td>
</tr>
<tr>
<td>Drinks fluoridated water or takes fluoride supplements</td>
<td>△</td>
<td></td>
</tr>
<tr>
<td>Fluoride varnish in the last 6 months</td>
<td>△</td>
<td></td>
</tr>
<tr>
<td>Has teeth brushed daily</td>
<td>△</td>
<td></td>
</tr>
</tbody>
</table>

---


The recommendations in this publication do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate. Copyright © 2011 American Academy of Pediatrics. All Rights Reserved. The American Academy of Pediatrics does not review or endorse any modifications made to this document and in no event shall the AAP be liable for any such changes.

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**Oral Health Risk Assessment Tool (see page 13 for more information)**

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TABLE 7
CAMBRA Form for Medical Providers (0-5 year patients), Assessment Tool

(Adapted from UCSF/San Francisco General Hospital Department of Family and Community Medicine.)

<table>
<thead>
<tr>
<th>Family Health Center</th>
<th>MRN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric Oral Health Screening</td>
<td>PCP</td>
</tr>
<tr>
<td>Progress Notes</td>
<td>Patient ID/Addressograph</td>
</tr>
</tbody>
</table>

MEDICAL CAMBRA RISK ASSESSMENT FORM 0 TO 5 INFANTS & TODDLERS

- **Chief complaint or reason for referral**
  - Initial
  - Follow-up

- **Caries risk indicators — based on parent interview**
  - (a) Mother/primary caregiver has had active dental decay in past 12 months
  - (b) Older siblings with history of dental decay
  - (c) Continual use of bottle containing beverages other than water/milk. Bottle use > 24 months old.
  - (d) Child sleeps with a bottle or nurses on demand
  - (e) Frequent (greater 3x/day total) candy, carbohydrate snacks (junk food), soda, sugared beverages (including processed juice)
  - (f) Medical issues
    1. Saliva-reducing meds (asthma, seizure, hyperactivity etc.)
    2. Developmental problems etc.
    3. H2/U anemia or Fe+ 

- **Protective factors — based on parent interview**
  - (a) Child lives in fluoridated community AND drinks tap water daily
  - (b) Teeth cleaned with fluoride toothpaste (pea-size) daily
  - (c) Fluoride varnish applied to child's teeth in last 6 months

- **Oral examination**
  - Obvious white spots (decalcifications), or obvious decay present on the child's teeth:
    - **NOTE ON DIAGRAM**
  - (b) Plaque is obvious on the teeth and/or gums bleed easily
  - ECC (Early Childhood Caries) Diagnosis:
    - No visible Early Childhood Caries (ECC)
    - Non-cavitated ECC
    - Cavitated ECC

- **Assessment:** Child's caries risk status (cavities in the mother/caregiver, white spots or cavities in the child indicate high caries risk. The balance between the checked shaded areas (risk indicators) and the checked un-shaded areas (protective factors) provides the risk status as high or low):
  - LOW ≠ HIGH

- **Plan:**
  - Health education handouts
  - Self-management Goals 1, __________________________
  - Dispense fluoride toothpaste and toothbrush
  - Prophylaxis and fluoride varnish
  - FHC Oral Health Clinic follow-up appointment (high risk) ___ months
  - Urgent outside dental referral (high risk, needs tracking)
  - Routine dental referral for dental home (all others)

**Signature of Rendering Provider:** __________________________ Name: __________________________ CHN #: __________________________ Date of Service: __________________________

**Supervising Attending:** __________________________ CHN #: __________________________ Date of Service: __________________________
“You’re not healthy without good oral health!”

~C. Everett Koop, Former Surgeon General