Protect Tiny Teeth Implementation Project

A prenatal oral health medical-dental integration quality improvement project

“The biggest success of this project was capturing pregnant women who had serious dental issues that would not have brought them up if I had not asked. We got to start those conversations and get those patients into the dental care they so desperately needed.”

— Family medicine provider at an Indian Health Clinic
Intended Audience

Prenatal care providers and others who care for pregnant people and their families, including medical and dental professionals are the intended audience for this guide. Community based organizations may also be interested in this content, but the primary audience are those working within a clinical setting.

Why Medical-Dental Integration During Pregnancy?

Healthy teeth and gums are especially important during the prenatal period. According to the Centers for Disease Control and Prevention (CDC), pregnant women may be more prone to periodontal disease and cavities. Additionally, parents with poor oral health can pass cavity-causing bacteria to their children. Routine prenatal visits are a great opportunity to screen pregnant patients for untreated cavities and gum disease. Many people do not know the importance of oral health during pregnancy and may think it is unsafe to see a dental professional while pregnant. Prenatal care providers can help screen pregnant patients for chronic and acute oral health conditions, educate them on the importance of oral health for their families, and refer pregnant patients to a dental professional.

Why a Medical-Dental Integration Implementation Guide?

Medical-dental integration is challenging. Medical and dental settings often work completely independently with their own electronic health or electronic dental records and patient scheduling systems. This guide was developed from a 9-month project with 8 prenatal sites across the United States to pilot test the Protect Tiny Teeth Toolkit. Best practices and lessons learned from the pilot project have been compiled. This guide is intended to provide a roadmap for clinics interested in turning the goal of improving maternal and child oral health into a reality.

“The pandemic presented a really interesting opportunity. Since our dental office was closed, we switched our two dental hygienists to be in the medical setting. The medical team would call and we [dental hygienists] would come into the room and educate the families and examine their teeth.”

— Dental hygienist at a Federally Qualified Health Center
Implementation Steps

1) Plan

a. **Appoint a Project Champion**: Successful sites typically appoint a “project champion” who will oversee setting up meetings, educating staff on the topic, and tracking project progress.

b. **Create an Interdisciplinary Team**: Include representatives from all clinical teams such as prenatal, pediatric, and dental, as this will help to create sustainable medical-dental integration projects and better project outcomes. Do not forget to include front desk staff who can screen for oral health via phone, and information technology staff who can add oral health questions to the electronic medical record.

c. **Build Interprofessional Collaboration**: Medical and dental teams should meet to discuss possible medical-dental integration projects. Focus on common goals, how best to work together, and overcoming challenges to improve overall health. Map out both medical and dental workflows and identify where synergies could occur. As a team, consider exploring the questions below:
   i. How does the dental team prefer to receive referrals?
   ii. What is the current dental appointment wait time in the dental community?
   iii. How are dental emergencies scheduled?
   iv. How could pregnant patients be prioritized for visits during their pregnancy?
   v. What is the medical setting already doing to address oral health?

d. **Design a Workflow**: Within the medical setting, identify who will conduct the oral health screening, education, and referral.
   i. Assess the composition of your team and align responsibilities for the incorporation of preventive oral health care in practice. For example:
      1. front desk staff are responsible for ordering supplies and administering the prenatal oral health information form.
      2. the primary care provider is responsible for risk assessment, screening, and education.
      3. the nurse or other support staff are responsible for referrals and follow-up.

   “Many of our patient visits began happening virtually due to the COVID-19 pandemic. We adapted by emailing out the “Questions Moms are Asking About Oral Health” brochure to all pregnant patients. We received positive feedback that patients enjoyed having it on file to reference later.”

   — Community health worker at a Federally Qualified Health Center
ii. Figure out where each step of the process fits into your workday and create a diagram to illustrate it for the team.

iii. Share the workflow with everyone on the team and get commitment to accept these responsibilities. A sample workflow is available in English and Spanish at [www.aap.org/tinyteeth](http://www.aap.org/tinyteeth). Don't forget to celebrate successes and make tweaks to the workflow along the way!

iv. (Optional) Consider if your current workforce is sufficient to carry out the needed oral health screening, education, and referral tasks. If not, explore other potential options such as an embedded dental hygienist, dental assistant, or community health worker with oral health knowledge. This step may take considerable time, require support from upper management, and extra funds.

e. Select Resources:
   Review the Protect Tiny Teeth Toolkit ([www.aap.org/tinyteeth](http://www.aap.org/tinyteeth)) to decide which resources would be best to integrate into the patient flow, electronic medical record, or patient care checklists.

   i. Pilot sites found the (1) Questions Moms Ask About Oral Health, (2) Prenatal Conversation Guide, and (3) Prenatal Oral Health Screening to be the most helpful tools. Some prenatal sites used the Conversation Guide to help them prioritize high risk patients who need a more urgent referral to dental services. Other prenatal sites used community health workers to screen pregnant patients for dental problems. The Questions Moms Are Asking About Oral Health brochure and the Prenatal Oral Health Screening that includes pictures helped them to feel more confident in their conversations with families about oral health.

   ii. Go to [www.aap.org/tinyteeth](http://www.aap.org/tinyteeth) to download copies of these helpful forms. Many of the patient handouts and waiting room posters are available in English, Spanish, Arabic, Cambodian, Chinese, French, Korean, Russian, and Taiwanese. Health centers can customize all tools by completing the “Customize Materials with your Organization’s Logo” form.

“We really enjoyed having our pregnant patients fill out the information form to “grade” their oral health. Most of our patients were Bs (moderate oral health risk) but if they were Cs (high risk of dental caries), we could use that evidence to help the dental office prioritize those patients in greater need during the pandemic.”

—Community health worker at a Federally Qualified Health Center
f. Set Goals: Select specific measurable goals to assess the site’s medical dental integration project; 3 – 5 goals are a great starting point for a new project. See the “Sample Medical-Dental Integration Goals” used by the sites in the pilot project below.

Sample Medical-Dental Integration Goals

Medical Staff Training

- 90% of all prenatal staff will have completed the free, online Smiles for Life pregnant women module by July 31, 2021.
- 90% of all prenatal staff will attend a presentation by the oral health champion on how oral health should be integrated into visits by July 31, 2021.
- 90% of medical staff will document oral health education, screening, and referral within the EHR by July 31, 2021.

Education, Screening, and Referral

- 80% of all pregnant patients seen will be screened for oral health issues at least once during their pregnancy by July 31, 2021 (baseline measurement at this clinic is 15%).
- 80% of all pregnant patients seen will receive oral health education and one handout at least once during their pregnancy by July 31, 2021 (baseline is 25%).
- 80% of all pregnant patients seen will be referred to a dentist if they do not have one by July 31, 2021 (baseline is 0%).

2) Educate and Train

Have all participating staff complete the evidence-based Smiles for Life training to establish a baseline of knowledge. This free, virtual training provides continuing education credit. The Pregnancy and Women’s Oral Health and Caries Risk Assessment, Fluoride Varnish, and Counseling are particularly helpful for the target population (prenatal patients). Seek out other opportunities for live and online training in your state and community. See one, do one, teach one is often an effective training strategy to improve the skills of health professionals.

“We have such a large patient population. The recommended dental to user population is 1 to 1,200 and we are at 1 to 6,700. This project required a lot of collaboration, but my dental providers were able to make sure that our pregnant women were given urgent entry to deep cleaning or the extraction they needed.”

– Dental director at an Indian Health Clinic

Note: Most Medicaid programs do not currently pay for preventive oral health services in the prenatal care setting. Contact your Medicaid office for more information and consider advocacy to improve payment.
3) Launch Project and Track Progress

After setting goals and training staff, launch the project and begin tracking progress.

a. Start small: It is often helpful to start small and expand projects over time. For example, ask one provider to utilize one oral health screening form for a day and ask for feedback on its use in the practice setting.

b. Track all progress: Whether your practice uses an EHR or not, you should track progress towards attaining your goals. Tracking can be done in many ways. One participating site did not use an EHR so they added oral health education, screening, and referral into the printed patient checklists that are included in their paper charts. Several sites with an EHR added oral health questions (see box with sample EHR questions top right.) Post project results in a highly visible area so project participants and other personnel can see how the practice is doing.

4) Adapt

Adapt the Protect Tiny Teeth Toolkit resources to fit the practice setting. Some practices have found listing the oral health screening questions on a “Badge Buddy”, a small reference sheet under their name tag, helped providers remember to screen and provide a phone number for easy dental referrals.

Sample Electronic Health Record Questions

**Prenatal Oral Health Questions**
- How often does the patient brush their teeth per day? (0,1,2,3)
- Has patient seen a dentist in the last year? (yes/no)
- Does the patient have tooth or gum pain? (yes/no)

**Prenatal Oral Health Exam Results**
- Is there visible plaque on the teeth? (yes/no)
- Are there visible decay or white spots on the teeth? (yes/no)
- Are there serious oral health conditions (broken teeth, abscess, mouth pain)? (yes/no)
- Was fluoride varnish applied on patient’s teeth? (yes/no)

**Prenatal Oral Health Education and Referral**
- Was patient given an oral health handout? (yes/no)
- Was patient given a referral to a dentist? (yes/no)

Sample Oral Health Badge Buddy

**Prenatal Oral Health Talking Points**
- Mom’s oral health impacts baby’s oral health-taking care of your teeth takes care of baby
- Use baking soda and water after vomiting, do NOT brush after each vomiting episode
- Brush twice a day and floss
- X-rays and dental care are SAFE during pregnancy
- See a dentist twice per year

**Common Pregnancy Oral Health Findings**
- Gingivitis: inflamed gums that may bleed
- Granulomas: benign small gum tumors
- Tooth Decay: white, brown, or black spots
- Erosion: May be visible

Dental Referral Number: (555)555-5555
Insert any other helpful numbers.

5) Review, Celebrate, and Discuss

Set aside time weekly or monthly to review progress, celebrate successes, and discuss ways to maintain positive outcomes or reverse declining results. If your team is competitive, consider sharing data for each provider (with permission) or hosting a competition between different clinical sites within your health system.

6) Maintain and Sustain

Once oral health screening, education, and referral has been established in the medical setting, it is important to sustain this positive change. Train all new staff on oral health and continue to track progress. Some ways to continue to track progress and make sure changes are being sustained include:

- Having a front office staff member run a monthly report on the number of prenatal oral health screenings and prominently post the results for the staff team to view.
- Identifying and support an oral health champion who not only will train new staff about prenatal oral health and how to track progress, but will review reports and make changes as needed. For example, this champion may notice that fewer providers are entering oral health information in patient charts and survey the staff to see why this is happening. She can then plan a training to address staff concerns and barriers to care.
Advice from Prenatal Medical Practice Pilot Sites

Establish supportive policies

“Make sure there are good policies for prenatal patients to see the dental providers. Prior to joining this clinic, every prenatal patient needed a letter from their primary provider for medical clearance which is silly because pregnancy should not be a barrier to dental care. I changed that to be a standing order that all pregnant patients have my blessing as their prenatal provider to see a dentist during their pregnancy.”

—Family medicine provider at an Indian Health Clinic

Set up a system that makes integrating oral health easy

“I would say set up a great system. That way you don’t have to think about remembering oral health at every visit, it just becomes a natural part of your process.”

—Nurse practitioner at an Indian Health Clinic

Collaborate and Develop Relationships

“Find the champions in each discipline that will excite others and motivate others to drive a project like this forward.”

—Office administrator at a Federally Qualified Health Center

“Our electronic medical records between medical and dental are linked so we loved having our prenatal team set up dental visits for the dental staff. The dental need is huge, but we don’t have as many staff as the prenatal department, so we really appreciated the help.

—Dental director at a Federally Qualified Health Center

“My biggest piece of advice to medical providers wanting to integrate oral health into their practice is to focus on developing relationships. Meet and find out about dentists in your area and figure out how you can support one another and say the same messages.”

—Dental director at a Federally Qualified Health Center

Go for it!

“I would encourage all prenatal providers who are interested in focusing on oral health to go for it! Looking at the teeth is already on the ACOG checklist, so I have always looked at the teeth, but this project made me really focus on the educational piece so pregnant women understand the importance of taking care of their teeth and their children’s teeth.”

—Nurse practitioner at an Indian Health Clinic

“I would encourage people to not recreate the wheel and not get overwhelmed. Looking at the Protect Tiny Teeth toolkit can be overwhelming because it has so many tools. Just pick out what you think will work best for you, create a plan with your team, and go for it. This has been one of the easiest quality improvements we’ve made at our clinic.”

—Nurse practitioner at an Indian Health Clinic
Resources and References

- American Academy of Pediatrics (AAP): Protect Tiny Teeth Toolkit
- AAP: Brush, Book, Bed
- American Dental Association (ADA): Health Policy Institute
- ADA: MouthHealthy
- American Dental Hygienists' Association (ADHA): Dental Hygienist Scope of Practice
- Campaign for Dental Health: Common questions about Fluoride
- Center for Integration of Primary Care and Oral Health: Integrating Oral Health Curricula into Nurse Practitioner Graduate Programs: Results of a US Survey (2018)
- National Academy for State Health Policy (NASHP): State Medicaid Coverage of Dental Services for General Adult and Pregnant Populations
- Healthychildren.org (AAP): Give Your Baby the Best Possible Start (English & Spanish)
- Oral Health Nursing Education and Practice (OHNEP): Nurse Midwifery Program: Interprofessional Oral Health Faculty Toolkit

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