

3-3. Maternal and Child Health

Dentistry has a strong history of supporting early childhood oral health through organized public health activities, interprofessional collaboration, and preventive services provided in public health settings to high-risk populations. More recently, increased efforts in this area have targeted pregnant women and their perinatal oral health.

Environmental Scan of Publications

Each program listed in Table 9 describes interventions related to maternal and child health. This is not an exhaustive list of interventions in this area. Specifically, it does not encompass the wide body of policy and evidence supporting interprofessional collaboration for early childhood oral health.⁵⁵

Program Settings and Scope

While most of the integrated activities targeting maternal and child oral health noted were clinic-based, two environmental approaches were also seen in Michigan's Perinatal Oral Health Initiative and the UCLA-First 5 LA Oral Health Program. Both programs offer clinical components and, thus, are included in this section.

Blackstone Valley Community Health Care integrates oral health with primary care for all children ages 1-3 years.⁴⁶ Pediatricians refer children at age 1 or first tooth eruption to a dentist at the FQHC. Attempts are made to see the child on the same day. Children are then scheduled for dental appointments every six months to receive fluoride varnish; parents receive education about child oral health care at these appointments. Additionally, the dental clinic coordinator reviews medical records to identify families who have had babies over the past year; mothers are then invited to bring the child into the dental clinic for a screening at age 1.

The **UCLA-First 5 Children's Dental Care Project** includes two programs: the 21st Century Dental Homes Project and the Children's Dental Care Program.⁵⁶ Twenty-two clinics, primarily FQHCs, with high concentrations of Medicaid-enrolled children, are targeted by the program. The program interventions address barriers to care through four broad activities⁵⁶:

- 1) Infrastructure development targeting personnel, facilities, equipment, and information technology.
- 2) Practice management technical assistance provided by DentaQuest Institute's Safety Net Solutions.
- 3) Clinical training for dental, medical, and childcare providers.
- 4) Quality improvement to improve integration of oral health care delivery by the health care team.

Michigan's **Perinatal Oral Health Plan** is part of the state's Infant Mortality Reduction Plan. The comprehensive action plan for this initiative includes⁵⁷:

- 1) Development of evidence-based guidelines
- 2) Integration of oral health into the health home for women and children
- 3) Interdisciplinary professional education
- 4) Increased public awareness about the importance of oral health
- 5) Development of a financing system to support perinatal oral health

Table 9. Integrated Programs That Target Maternal and Child Health

Program	State	Brief description
Blackstone Valley Community Health Care	RI	Pediatricians in the FQHC refer all children at age 1 or at first tooth eruption to the dental clinic. Dental coordinator also performs outreach to new mothers to set up an age 1 dental visit.
Dorchester House Multi- Services Center	MA	All children aged 0-5 years in the pediatric clinic receive oral health screening and risk assessment, fluoride varnish, and anticipatory guidance for parents.
Michigan Perinatal Oral Health Initiative	MI	Initiative includes multiple components to improve oral health of pregnant women and infants.
Neighborcare Health	WA	Program targets prenatal patients early in pregnancy for education and oral hygiene.
NYU Lutheran Family Health Services	NY	Dental clinic hosts a baby shower for pregnant patients at the obstetrical clinic to provide patient engagement and education.
UCLA-First 5 LA Oral Health Program	CA	Multiple components to improve access to dental care for children aged 0-5, including provider trainings and infrastructure development.
United Community & Family Services	CT	Dental hygienist provides screenings for children aged 1-3 during routine pediatric medical visits (see section on Health Workforce Innovations).
Ravenswood Family Health Center	CA	Nurse midwife refers all women for an oral health visit to a preexisting dental home or the FQHC's dental clinic. The FQHC also participates in the Virtual Dental Home pilot project.
Yakima Valley Farm Workers Clinic	OR, WA	Staff and providers in the WIC clinic, primary care clinic, and outreach services perform oral health risk assessments.

Neighborcare Health tracks quality metrics, including the percent of pregnant women receiving dental care prior to delivery.¹⁵ The FQHC has used this metric as an example of continuous quality improvement in its application for NCQA Patient-Centered Medical Home recognition.

The **Yakima Valley Farm Workers Clinic** has targeted low-income infants, children, and new mothers in order to reduce oral health disparities.⁵⁸ Oral health risk assessments are performed for all children in multiple settings, including WIC clinics, primary care, and during outreach. Children and mothers who have not received dental care within the past six months or those with dental need are flagged as “high risk” and referred for same-day dental care. Additionally, the clinic’s EHR auto-generates dental referrals for patients who go longer than six months between dental visits. A dental outreach coordinator communicates directly with patients and clinics to arrange for same-day appointments—especially for WIC patients.

Community Oral Health Programs

Two notable examples that target maternal and child health were reported in our survey of community oral health programs:

- 1) The oral health program at **Price County Health and Human Services Department** (Phillips, WI) works collaboratively between medical and dental in targeting higher-risk prenatal women for care coordination. This activity is facilitated by an established referral mechanism for pregnant women.
- 2) **Ascension-St. Elizabeth Ann Seton Dental Clinic** (Milwaukee, WI) is an example of a local oral health program that is conducting health promotional activities to encourage prenatal dental care as one component for a healthier birth outcome.⁵⁹

Additionally, 14 of 30 respondents noted that medical providers within their organizations perform dental screenings for children.

State Chronic Disease and Oral Health Programs

Most, if not all, oral health programs have historically focused at least part of their educational and clinical efforts toward maternal and child health. However, we direct readers to other sections of this document for risk factor–specific initiatives that address oral and overall preventive health measures in these populations (e.g., the Tobacco Use, Oral Cancer, and Oral Health section or the Obesity, Nutrition, and Oral Health section).

Of the 26 responses to the online survey, 17 state oral health programs indicated that medical providers routinely provided dental screenings. New Mexico also noted that medical providers provided dental screenings for mothers at WIC clinics.

Of the 19 chronic disease directors who responded to this survey, several indicated that they conducted activities relating to mothers or children in the areas of surveillance (e.g., Behavioral Risk Factor Surveillance System [BRFSS], Body Mass Index [BMI]) and preventive and educational programs directed to prevent or minimize the deleterious effects of oral disease. This section only contains information about one type of surveillance: BRFSS. The reader is directed to the Obesity, Nutrition, and Oral Health section and the Tobacco Use, Oral Cancer, and Oral Health section for other preventive and cessation activities involving collaborations between chronic disease and oral health programs.

Only three chronic disease programs (Georgia, New York, and Pennsylvania) identified the BRFSS as a state activity (with input from oral health programs) that is directed toward either mother or child. For example, New York’s Division of Chronic Disease Prevention seeks input from oral health experts about dental-related questions as it develops and conducts the survey.

State Oral Health Plans

Although many states address maternal and/or child health generically in their oral health plans, fewer states provide specific objectives or strategies to serve these populations. Some states—such as Colorado, South Dakota, and Vermont—that have the objective of increasing the percentage of pregnant women who receive information about optimal oral health often employ strategies that either provide education to pregnant women about maternal and infant oral health or about the relationship between oral health and overall well-being for both mother and child.

Some states, such as Virginia, emphasize partnering with other health professionals (i.e., Obstetrics-Gynecology) to educate expectant mothers about the importance of oral health, whereas other states like Rhode Island include specific recommendations for promoting either the incorporation or expansion of preventive oral health measures, especially during perinatal and well-child visits.

Other states are more specific about their recommendations and strategies. One of the ways that **California** uses a Health Resources and Services Administration (HRSA)–funded Perinatal and Infant Oral Health Quality Improvement grant to address a perceived barrier to dental care is by providing technical assistance and training for supporting oral health inclusion in Promotora and community health worker programs and home visitation programs. Similarly, Maryland initiated a Spanish-language social marketing campaign that helps create awareness about the importance of oral health during pregnancy.

Michigan, with a goal toward health literacy, explicitly created measurable objectives and strategies. For example, one objective is to “increase the number of programs and/or interventions that educate parents on how to prevent early childhood caries among children aged 0-3 by 10%.” This objective is coupled with a strategy that develops messaging for pregnant women and community organizations that serve children on preventive oral health measures.

Conclusions

State oral health programs have traditionally addressed the topic of maternal and child oral health; the majority of state oral health programs surveyed indicated that affiliated medical providers routinely provided dental screenings.

Challenges

- Not all states provide dental benefits for pregnant women with Medicaid coverage.
- Coordination of activities between state oral health and chronic disease programs can be difficult.

Recommendations

- 1) Several states have well-established efforts targeting maternal and child oral health—for example, Michigan’s Perinatal Oral Health Action Plan⁵⁷—which can be expanded upon in order to increase reach and effectiveness.
- 2) Utilize existing educational resources (e.g., Smiles for Life national oral health curriculum) to provide standardized training for providers.
- 3) Encourage linkage between state oral health programs and chronic disease programs to develop interdisciplinary interventions.
- 4) Programs looking to address maternal and child oral health in clinical or community-based settings should consider use of integrated care teams, including case managers, social workers, and midwives.
- 5) Continue to explore workforce innovations, including embedding dental hygienists within primary care clinics, in order to target high-risk populations.