Improving Perinatal and Infant Oral Health Project
Children’s Dental Health Project and the American Academy of Pediatric Dentistry

Final Report
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Project Background

Overview
For the past 5 years, the American Academy of Pediatric Dentistry (AAPD) and Children’s Dental health Project have implemented the Improving Perinatal and Infant Oral Health Project, which sought to promote the oral health of pregnant women and children, and to increase public awareness of the importance of perinatal and infant oral health. The Project worked to improve educational outreach and access to oral health care for pregnant women and infants, and to increase awareness of the importance of perinatal and infant oral health among diverse stakeholders from the clinical, public health, and policy arenas, among others. Primary activities included providing education to pregnant women and providers on the importance of accessing care during the perinatal period, promoting the AAPD age one and dental home policies, and developing nontraditional partnerships to promote oral health.

The Problem
Tooth decay remains the most common chronic childhood disease, being give times more common than asthma. It is estimated that 28 percent of 2-5 year olds have dental disease, and recent data from the National Health and Nutrition Examination Survey (NHANES) shows a rise in dental caries among 2-5 year olds for the first time in 40 years. We know that poor oral health in children has serious health consequences, causes needless pain and suffering, and affects children’s ability to speak, eat, and learn. In the United States, children miss millions of hours of school as a result of the disease.

Dental care is important during pregnancy because the physical changes women’s bodies undergo during pregnancy can negatively affect oral health. Hormonal changes can increase women’s susceptibility to oral infections like periodontal disease, and can reduce the body’s ability to repair soft tissues in the mouth. “Pregnancy gingivitis,” or mild inflammation of the gums, is estimated to occur in 60-75% of pregnant women. If untreated, gingivitis can lead to periodontal disease, which may lead to bone and tooth loss. Periodontal disease has been linked to cardiovascular disease, stroke, poor diabetes control, and adverse birth outcomes. Other serious consequences include comprising nutrition by reducing a woman’s ability to eat, limiting her ability to speak, and lowering self-esteem.

Oral health is important to a woman’s overall health, and a woman’s oral health status is important in its relationship to the health of her child.

- Studies show an association between periodontal disease and adverse birth outcomes, such as low birth weight, preterm birth, and gestational diabetes.

- The transmission of germs in saliva passed from mother-to-child is the primary way children acquire the disease that causes cavities.
The Solution
Fortunately, we know that dental disease is overwhelmingly preventable. Dental caries, the disease that leads to cavities, is a preventable, transmissible, and chronic condition. If the disease is left untreated, it is progressive and can be transmitted from caregiver to child. However, dental caries is preventable and manageable with the right actions and behaviors. Promoting the oral health of pregnant women and children right from the start is the best defense against ongoing, disruptive, and costly care.

In 2005, The American Academy of Pediatric Dentistry (AAPD) was the recipient of a $1 million grant from the Maternal and Child Health Bureau (MCHB), Health Resources and Services Administration. The grant, for the “Improving Perinatal Oral Health” project, was to be administered by the Washington, DC-based Children's Dental Health Project (CDHP).

The Project set out to promote prevention as the best path to keeping our children healthy and to giving them the best start in life, armed with the knowledge that we can promote the oral health of women and children by:

- Educating providers on the safety and importance of oral health care during pregnancy, encouraging referrals to care, and ensuring that pregnant women have access to oral health care during and after their pregnancy.

- Educating families, health care providers, maternal and child program professionals, and others that come in contact with young children about dental caries – including how to prevent disease and manage it after onset.

- Ensuring that children, especially those at greatest risk for dental disease, visit the dentist by age one as recommended by the AAPD, and establish a dental home as a source of comprehensive care in an ongoing relationship between provider and patient.

- Promoting awareness of the preventable and infectious nature of dental caries to the public at large to increase their knowledge and actions in preventing dental disease.

The Goals
Under the leadership of the AAPD Committee on Perinatal and Infant Oral Health, the Project was charged with three major goals, each with two specific objectives:

Project Goals

Goal I: Expand availability of prenatal oral health care.

- Objective I: Disseminate resources on dental care for pregnant women to clinicians, health educators, and patients.

- Objective II: Promote policymakers’ actions to expand access to perinatal dental services.

Goal II: Expand availability of infant oral health care.

- Objective I: Expand adoption of the age one dental visit and dental home policies by pediatric and general dentists.

- Objective II: Expand dental care for infants at greatest risk for early oral disease.

Goal III: Raise public awareness regarding dental care for pregnant women and infants.

- Objective I: Target AAPD’s public awareness campaigns and policies to pregnant women.

- Objective II: Promote inclusion of perinatal oral health components in public health campaigns.
The Project has worked to enhance maternal and child oral health programming across the country at the local, state, and national levels, specifically addressing the need to contribute to various health providers’ knowledge, skills, and practices regarding perinatal and infant oral health. The Project works collaboratively with Maternal and Child Health Bureau grantees that are members of the Alliance for Information on Maternal and Child Health (AIM). Through AIM partners, AAPD and CDHP have created new, nontraditional partnerships with organizations representing business, government, direct service providers, and philanthropy, and have disseminated oral health concepts and guidelines to a larger group of maternal and child health providers.

About AAPD and CDHP
The AAPD is the membership organization representing the specialty of pediatric dentistry. AAPD advocates policies, guidelines, and programs that promote optimal oral health and oral health care for children. Children's Dental Health Project (CDHP) is a national non-profit organization with the vision of achieving oral health for all children. CDHP works to create and advance innovative solutions so that all children reach their full potential.
Looking Back: Project Accomplishments

Expand availability of prenatal oral health care:

There is no doubt that over the course of the past five years, the Project has been able to both develop useful resources for providers, patients, and policymakers focused on improving both access and quality of oral health care for pregnant women. Additionally, both the dissemination of and positive feedback from these resources has been widespread. Utilizing partner organizations and their membership, social media, and the help of fellow grantees, the Project has been able to reach an impressive audience.

By crafting documents that highlight both the clinical and policy solutions available to combat early childhood caries and improve the oral health of pregnant women, the Project has been true to the objective of promoting policymakers’ actions to expand access to perinatal dental services as well.

The Project partnered with numerous non-profit, professional, and governmental organizations to develop professional guidelines, make policy recommendations, and educate providers in order to not only increase awareness and understanding of the importance of oral health care for pregnant women, but also to break down the barriers to access to care.

Relevant project activities included:

- Development of the Oral Health Care During Pregnancy: A Summary of Practice Guidelines document. These guidelines were a joint project undertaken by Project Staff, MCHB, the New York State Department of Health, and the National Maternal and Child Oral Health Resource Center as previously mentioned;
- Participation in the Maternal and Child Health Bureau Perinatal Oral Health Workgroup to take the lead, including funding, in facilitating the development of the abridged New York State Oral Health Care During Pregnancy and Early Childhood Practice Guidelines for national dissemination. This document, along with a policy brief and consumer education resource, was distributed nationally to a variety of stakeholders on the national and state level. These include: state dental directors, state dental societies, MCH and Medicaid directors, perinatal associations, MCHB-funded grantees, dental school directors, OB/GYN department chairs, schools of public health directors, community dental clinic directors, Indian Health Services dental directors, AAPD Head Start Dental Home contacts, and others;
- Submission of formal recommendations to the Commission on Dental Accreditation (CODA) promoting the inclusion of perinatal and infant oral health components in dental school accreditation standards. These letters were sent to the Chair of CODA, and address accreditation standards for both predoctoral and postdoctoral general dentistry education programs.;
- Collaboration on the oral health section of the American Bar Association’s recently released Healthy Beginnings, Healthy Futures: A Judges’ Guide publication. The Project Director, in consultation with Committee members, wrote a section providing guidance for linking children in the child welfare system to a dental home as a key action promoting children’s overall health and wellbeing. This section included AAPD resources and also the online referral resource for locating a pediatric dentist;
Promoting the development of a dental EPSDT Periodicity Schedule to Dental Directors, and state Pediatric Dental Associations;

Promoting perinatal and infant oral health to the Association of State and Territorial Dental Directors (ASTDD) Best practices Committee and Collaborating with ASTDD to develop their Best Practices document on Early Childhood Oral Health. The report highlighted AAPD’s policies and practices and promoted key focus areas of the Project, such as the importance of perinatal oral health and the importance of early risk assessment;

Development of a policy brief on Medicaid coverage of dental services for pregnant women including information on the importance of perinatal oral health, current dental utilization among pregnant women, and recommendations for expanded access to dental services for this population;

Collaboration with fellow grantee National Institute for Health Care Management (NIHCM) on the development and dissemination of a policy brief entitled “Improving Access to Perinatal Oral Health Care: Considerations and Strategies for Health Plans.” The policy brief is a collaborative document that addresses the importance of perinatal oral health care, barriers to accessing care, and identifies opportunities for health plan policymakers to support access to oral health services during the perinatal period;

Coordination of a series of focus groups to test Project messages, and to better understand existing oral health knowledge and practices among low-income pregnant women and new mothers. Discussion topics included vertical transmission, the age one dental visit, fluoride use, and limiting sugars. Information gathered will be used to strengthen and improve educational messages and outreach efforts for improving women’s and children’s oral health;

The preliminary results of these focus groups were presented upon request at a Centers for Medicare and Medicaid Services (CMS) listening session on the CHIPRA legislation requiring new parents receive information on the prevention of dental disease. A final report on the focus group findings was developed and submitted for publication to the Journal of Public Health Dentistry;

Collaboration with AAP to implement a multidisciplinary Perinatal and Infant Oral Health Workshop for policymakers;

Collaboration with AAPD membership newsletter Pediatric Dentistry Today to publish a series of articles on perinatal and infant oral health topics over authored by Committee members;

Webcast hosted by NACCHO and CityMatCH entitled “Promoting Oral Health through Policy and Partnerships,” and discussed the importance of perinatal oral health and opportunities for promoting and expanding awareness of and access to oral health care;

Creating and expanding the Improving Perinatal and Infant Oral Health web page on the CDHP website;

Coordination of the MCHB-sponsored Improving Perinatal Oral Health: Moving Forward meeting where Committee members presented. The purpose was to build partnerships to improve the oral health status of pregnant women, and attendees included representatives of MCHB, CMS, CDC, ACOG, AAPD, ADA, NNOHA, AMCHP, and others;

Invitation to join ASTDD’s Perinatal and Early Childhood Committee which works to advance perinatal and early childhood oral health through research, communication, and dissemination of information;

Presentations at numerous events including AAP’s National Summit on Children’s Oral Health, the Peds21 conference, Healthy Start Leadership Training Institute, MCHB AIM all-grantee meeting, various state and national membership meetings, AMCHP’s annual conference, CityMatCH conference, National
Oral Health Conference, National Healthy Start Association Conference, the HRSA, BPHC Oral Health Disparities Learning Session, the Caring About Babies Conference, Head Start Oral Health Initiative meetings, the Birth to Three conference, and the Surgeon General’s Health Symposium;

- Dissemination of Project materials to new audiences including an article on perinatal oral health and Project activities in membership newsletter of the American College of Nurse-Midwives (disseminated to 7,000 members nationally), an article in Today’s Child Magazine, addressing perinatal oral health. Additionally, and articles on oral health in publications of Grantmakers in Health and the National Association of School Nurses;

**Expand availability of infant oral health care:**

Similarly, this goal is difficult to measure in terms of the impact of the Project. However, the objectives outlined under this goal do provide some direction in considering the Project’s success.

There is no question that the efforts of the AAPD and the *Improving Perinatal and Infant Oral Health Project* have helped to expand adoption of the age one dental visit and dental home policies by pediatric and general dentists. Clinical guidelines promulgated in collaboration with the Project that include a recommended age one dental visit have been adopted by some states and at the national level.

Measuring the expansion of dental care for infants at greatest risk for early oral disease is an effort that would require greater analysis and access to data but the Project has certainly made every effort through research, publication, and messaging to call attention to the importance of risk-based individualized dental services, especially for children of certain populations.

**Relevant project activities included:**

- Completion of the Best Practices Project report on infant and early childhood oral health for the Association of State and Territorial Dental Directors (ASTDD). Components of the report included: background information (importance of oral health, disease burden, barriers to achieving health), a strategic framework for promoting early childhood oral health, clinical guidelines and recommendations, research evidence, and state practice examples. This report highlights AAPD's policies and practices and promotes key focus areas of the Project, such as the importance of perinatal oral health and the value of early risk assessment;

- Participation in the MCHB-convened Expert Meeting to assist MCHB in further exploring the concept of the dental home, explore the relationship between the medical home and dental home, identify the social
and health risks that impact attainment of the dental home, and to identify promising program approaches to implementing a dental home for children;

• Publishing articles on early childhood caries in AAPD’s Pediatric Dentistry Today;

• Initiating discussing with Special Smiles and ASTDD regarding dental care and program development for children with special health care needs;

• The design and implementation of a survey of pre-doctoral dental school pediatric chairs on infant and toddler oral health curricula;

• Inclusion of an article in the National Association of School Nurses School Nurse publication. “Promoting Children’s Oral Health: A Role for School Nurses in Prevention, Education, and Coordination” was disseminated to 14,000 members;

• Participation in a webcast promoting oral health to school nurses and state dental directors, hosted by ASTDD;

• Working with Regional Head Start Oral Health Consultants to promote partnerships with AAPD state chapters.

Raise public awareness regarding dental care for pregnant women and infants:

Arguably the area in which the Project has had the most success, promoting the messages developed through efforts such as scientific research and focus groups, the Project has performed remarkably well in developing useful resources and reaching wide and varied audiences.

While the Project has utilized AAPD’s public awareness campaigns and the public education campaigns of partner organizations, the greatest success has been found by harnessing the power of external stakeholders who maintain audiences in the parenting, clinical, and policymaking arenas. From publishing a series of short articles to partnering with business groups and health plans, the Project has been able to solidify the importance of perinatal oral health care in the minds of many.

• Initiation of educational events for the House and Senate Child Care Centers to provide training on early childhood oral health to staff at the Senate Child Care Center in August, providing clinical guidelines and AAPD guidance on diet and oral health behaviors and educational events for children and parents.

• Drafting of an educational document for the Chipotle employee newsletter promoting infant oral health.

• Hosting of parent education events at the House and Senate Child Care Centers for National Children’s Dental Health Month in February. The events provided an opportunity to promote infant oral health and to disseminate AAPD policies to congressional staff.

• Coordination of a series of focus groups to test educational messages promoted in the Project, and to better understand existing oral health knowledge among target populations in urban and rural settings in Maryland. The preliminary results of these focus groups were presented at a Centers for Medicare and Medicaid Services (CMS) listening session related to the CHIPRA legislation provision requiring new parents receive information on the prevention of dental disease.

• Development of the Vertical Transmission Fact Sheet, an educational document targeting pregnant women and new mothers on promoting oral health, specifically addressing the topic of vertical transmission.

• Conducting work with the MWW Group, AAPD’s public relations firm, on a “mommy blog initiative.” Establishing relationships with seven popular blogs that provide parents and new mothers with educational information and resources on child care and health, Project information was shared in easily digestable and interactive blog posts, resulting in Project messages being spread to nearly 250,000 people via websites and social media.
Moving Forward

While the *Improving Perinatal and Infant Oral Health Project* has been incredibly successful, there is still much work to be done in removing the barriers to dental services for pregnant women and infants as well as promoting quality care and oral health-conscious infant care.

Therefore, it is critical that AAPD maintain a presence in the world of perinatal and infant oral health. Through the Committee the Academy has gathered and developed an impressive team of experts who care deeply about elevating the health and well-being of pregnant women and their children through oral health. While the Project has ended and with it, the formal partnership with the Children’s Dental Health Project, there is no reason that both organizations should pause in their efforts to continue this work and maintain a collaborative relationship.

As the Oral Health Coordinating Committee gears up to improve the integration of oral health related initiatives across the Department of Health and Human Services, one consideration should be for the lessons learned through this project to be transmitted through the Committee’s oversight with a focus on public education and outreach in hopes that a formal campaign will be developed. If this opportunity presents itself, AAPD should be poised to advocate for perinatal and infant oral health messages and guidelines to be included in any federal campaign.

Certainly the question of where to go from here should be discussed extensively within the Academy and especially among Committee members.