

# Dental Public Health Project/Activity Descriptive Report Form

Please provide a detailed description of your **successful dental public health project/activity** by fully completing this form. Expand the submission form as needed but within any limitations noted.

**NOTE:** Please use Verdana 9 font.

## CONTACT PERSON PREPARING THE SUBMISSION AND TO ANSWER QUESTIONS

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## PROVIDE CONTACT INFORMATION FOR ONE ADDITIONAL PERSON WHO COULD ANSWER QUESTIONS REGARDING THIS PROGRAM

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**SECTION I: ACTIVITY OVERVIEW**

**Title of the dental public health activity:**

**Developing Practice Guidance on Oral Health Care During Pregnancy for Prenatal and Dental Providers in Maryland**

**Public Health Functions\*:** Check one or more categories related to the activity.

"X"	<b>Assessment</b>
	1. Assess oral health status and implement an oral health surveillance system.
	2. Analyze determinants of oral health and respond to health hazards in the community
	3. Assess public perceptions about oral health issues and educate/empower them to achieve and maintain optimal oral health
<b>Policy Development</b>	
	4. Mobilize community partners to leverage resources and advocate for/act on oral health issues
	5. Develop and implement policies and systematic plans that support state and community oral health efforts
<b>Assurance</b>	
	6. Review, educate about and enforce laws and regulations that promote oral health and ensure safe oral health practices
x	7. Reduce barriers to care and assure utilization of personal and population-based oral health services
x	8. Assure an adequate and competent public and private oral health workforce
	9. Evaluate effectiveness, accessibility and quality of personal and population-based oral health promotion activities and oral health services
	10. Conduct and review research for new insights and innovative solutions to oral health problems

**[\\*ASTDD Guidelines for State and Territorial Oral Health Programs that includes 10 Essential Public Health Services to Promote Oral Health](#)**

**Healthy People 2020 Objectives:** Check one or more key objectives related to the activity. If appropriate, add other national or state HP 2020 Objectives, such as tobacco use or injury.

"X"	<b><u>Healthy People 2020 Oral Health Objectives</u></b>
x	OH-1 Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth
x	OH-2 Reduce the proportion of children and adolescents with untreated dental decay
x	OH-3 Reduce the proportion of adults with untreated dental decay
x	OH-4 Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease
	OH-5 Reduce the proportion of adults aged 45 to 74 years with moderate or severe periodontitis
	OH-6 Increase the proportion of oral and pharyngeal cancers detected at the earliest stage
x	OH-7 Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year
x	OH-8 Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year
	OH-9 Increase the proportion of school-based health centers with an oral health component
	OH-10 Increase the proportion of local health departments and Federally Qualified Health Centers (FQHCs) that have an oral health component
	OH-11 Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year

	OH-12	Increase the proportion of children and adolescents who have received dental sealants on their molar teeth
	OH-13	Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water
x	OH-14	Increase the proportion of adults who receive preventive interventions in dental offices
	OH-15	Increase the number of States and the District of Columbia that have a system for recording and referring infants and children with cleft lips and cleft palates to craniofacial anomaly rehabilitative teams
	OH-16	Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system
	OH-17	Increase health agencies that have a dental public health program directed by a dental professional with public health training
<b>"X"</b>	<b>Other national or state <a href="#">Healthy People 2020 Objectives</a>: (list objective number and topic)</b>	
x	HC/HIT-1	Improve the health literacy of the population
x	HC/HIT-4	Increase the proportion of patients whose doctor recommends personalized health information resources to help them manage their health

**Provide 3-5 Key Words (e.g. fluoride, sealants, access to care, coalitions, policy, Medicaid, etc.) These will assist those looking for information on this topic:**

medical dental guidance, pregnancy, prenatal, PRAMS, access to care, planning with partners, partnerships, prevention (prenatal/perinatal)

**Executive Summary: Complete after Section II: Detailed Activity Description. Please limit to 300 words in one or two paragraphs.**

Provide a brief description of the dental public health activity. Include information on: (1) what is being done; (2) who is doing it and why; (3) associated costs; (4) outcomes achieved (5) lessons learned, both positive and negative.

With support from the U.S. Health Resources and Services Administration (HRSA), the Maryland Department of Health's (MDH) Office of Oral Health (OOH) launched its Perinatal and Infant Oral Health Quality Improvement (PIOHQI) project in 2015 to address barriers related to access to oral health care for pregnant women. As part of the PIOHQI project, an interprofessional steering committee of Maryland experts developed state-specific practice guidance for health care providers who serve pregnant women. The purpose of the guidance document was to provide up-to-date, evidence-based recommendations and resources to prenatal and dental providers throughout the state to increase utilization of oral health care services and ultimately improve oral health of pregnant women and infants in Maryland.

The final document, *Oral Health Care During Pregnancy: Practice Guidance for Maryland's Prenatal and Dental Providers* and its additional resources took almost two years to develop and cost approximately \$75,000 including lead staff member salary, and printing and mailing expenses. It was disseminated via mail to about 7,600 dentists, dental hygienists, obstetricians and gynecologists, and nurse midwives and was sent electronically to numerous provider organizations and academic and public health programs in Maryland.

Key lessons learned include ensuring an adequate number of committee meetings for review of document drafts and establishing a diverse group of experts to serve on the steering committee. Having an in-house graphic designer, sufficient internal staff support, and utilizing a cloud platform to house and access materials was critical to the development of a high-quality document.



**SECTION II: DETAILED ACTIVITY DESCRIPTION**

Provide detailed narrative about the dental public health activity using the headings provided and answering the questions. Include specifics to help readers understand what you are doing and how it's being done. References and links to information may be included.

**\*\*Complete using Verdana 9 font.**

**Rationale and History of the Activity:**

1. What were the key issues that led to the initiation of this activity?

The health of a woman's mouth is an essential part of a healthy pregnancy. It is also an important indicator of her future child's risk for developing dental caries- the most common chronic childhood disease in the United States. Pregnancy provides a key opportunity to provide oral health care services to women, as well as to provide education on good oral health practices and preventive strategies. Yet, according to the PRAMS, half of pregnant women in Maryland do not have an oral prophylaxis during pregnancy, and 19 percent of pregnant women report untreated oral health problems. For pregnant women enrolled in Medicaid, Maryland has experienced a steady decline in utilization of oral health care services over the past several years. Though Medicaid covers comprehensive oral health care services for women during pregnancy, only about 26 percent of pregnant women had one or more dental visits in calendar year 2016.

With support from the U.S. Health Resources and Services Administration (HRSA), the Maryland Department of Health's (MDH) Office of Oral Health (OOH) launched its Perinatal and Infant Oral Health Quality Improvement (PIOHQI) project in 2015 to address barriers related to access to oral health care for pregnant women. As part of the PIOHQI project, an interprofessional steering committee of Maryland experts was formed to review existing guidelines and current research related to oral health care during pregnancy. Based on this review, the steering committee developed state-specific practice guidance for health care providers who serve pregnant women. The purpose of the guidance document was to provide up-to-date, evidence-based recommendations and resources to prenatal and dental providers throughout the state to increase utilization of oral health care services and ultimately improve oral health of pregnant women and infants in Maryland.

2. What rationale/evidence (may be anecdotal) did you use to support the implementation of this activity?

A comprehensive review of existing state and national guidelines on oral health care during pregnancy was conducted to analyze content and layout. Guidelines from the following states were reviewed: California, Connecticut, Massachusetts, Michigan, New York, and Washington. National documents reviewed include the American Academy of Pediatric Dentistry's *Guideline on Perinatal and Infant Oral Health Care*; American College of Obstetricians and Gynecologists' Committee Opinion: *Oral Health Care During Pregnancy and Throughout the Lifespan*; and National Maternal and Child Oral Health Resource Center's *Oral Health Care During Pregnancy: A National Consensus Statement*. Maryland PRAMS and Medicaid data were also used to develop an infographic and were included in the opening letter and introduction to describe the problem in the state.

3. What month and year did the activity begin and what milestones have occurred along the way? (May include a timeline.)

<b>Preparation</b> (July 2016-April 2017)
Reviewed existing state and national guidelines
Formed steering committee (personal invitations were sent to potential members)

Searched for photographs and clinical images
Gained permission from the National Maternal and Child Oral Health Resource to adapt the <i>Oral Health Care During Pregnancy: A National Consensus Statement</i> ; gained permission from partners to use certain photographs and clinical images; purchased images
Developed first draft of guidance document
Planned first steering committee meeting
<b>Steering committee meetings</b>
May 1, 2017
August 8, 2017
August 29, 2017
October 10, 2017
<b>Feedback on guidance document due from PIOHQI project advisory board</b>
December 2017
<b>Guidance approved by MDH Deputy Secretary for Public Health Services</b>
January 2018
<b>Guidance released</b>
May 2018
<b>Press release</b>
May 2018

The sections below follow a logic model format. For more information on logic models go to: [W.K. Kellogg Foundation: Logic Model Development Guide](#)

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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1. What resources were needed to carry out the activity? (e.g., staffing, volunteers, funding, partnerships, collaborations with various organizations, etc.)

**Staffing:** The development of the guidance document was an initiative of the MD PIOHQI project and was led by the PIOHQI project manager and other staff members within the MD Office of Oral Health.

**Maryland Department of Health, OOH Staff**

PIOHQI Project Manager  
 Research Assistant  
 State Dental Director  
 Clinical Dental Public Health Specialist  
 Fluoride Varnish Program Manager  
 Oral Health Literacy Campaign Project Director  
 Graphic Designer

**Steering Committee:** Steering committee members were volunteers. Some were also members of the PIOHQI project advisory board (noted with \* below).

Maryland State Dental Association\*  
 The Maryland Section: American College of Obstetricians and Gynecologists\*  
 Maryland Affiliate: American College of Nurse Midwives\*  
 Choptank Community Health System  
 Maryland Dental Hygienists' Association  
 National Maternal and Child Oral Health Resource Center  
 University of Maryland College Park, School of Public Health\*  
 University of Maryland Baltimore School of Nursing  
 University of Maryland Baltimore School of Dentistry\*  
 Maryland Department of Health, Maternal and Child Health Bureau

**Funding:** The U.S. HRSA provided funding to the MDH OOH for the PIOHQI project (\$250,000 per year, August 1, 2015 – July 31, 2019). Development of the guidance was an initiative of the PIOHQI project.

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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2. Please provide a detailed description the key aspects of the activity, including the following aspects: administration, operations, and services.

The creation of *Oral Health Care During Pregnancy: Practice Guidance for Maryland's Prenatal and Dental Providers* began with comprehensive review of existing state and national perinatal, infant, and early childhood guidelines completed by the PIOHQI project manager and OOH staff. Permission was obtained from the National Maternal and Child Oral Health Resource Center to adapt *Oral Health Care During Pregnancy: A National Consensus Statement* to develop the Maryland document. During this preparatory phase, the PIOHQI project manager and OOH staff determined who would be invited to participate on the steering committee from organizations around the state. It was critical that these organizations be "at the table" from the start of the project to establish their early support. It was communicated to steering committee members that their expertise and perspective would contribute positively to the overall quality of the guidance document. Once determined who would be included, the PIOHQI project manager personally invited each organization via e-mail and/or phone call. All groups accepted the invitation to serve on the steering committee and attend in-person committee meetings. In-person meeting attendance was strongly preferred but a call-in option via phone was always available. It was explained that the committee would not be developing the guidance document from scratch but would adapt *Oral Health Care During Pregnancy: A National Consensus Statement* for use in Maryland.

Prior to the first steering committee meeting, a skeleton draft of the guidance document was developed and a search for photographs and clinical images was completed by the PIOHQI project manager and OOH staff. The first committee meeting included reviewing the purpose of the project and key components of existing state and national guidelines. The committee determined the title, sections, and design and layout of the guidance document. The committee agreed that the sections would include an oral health care during pregnancy infographic, letter from the MDH Deputy Secretary for Public Health Services, introduction, myths vs. facts, guidance for prenatal providers, oral conditions during pregnancy, guidance for dental providers, dental pharmacological considerations for pregnant women, and additional resources. A significant amount of time was spent reviewing and amending the guidance sections for prenatal and dental providers. Clarity and brevity were prioritized when developing the guidance sections for prenatal and dental providers. Textboxes with examples of practical questions that providers could ask pregnant women and oral health educational tips that could be shared with pregnant women were added to the guidance sections as well as key information (i.e., how to find a dentist, tips on how to position a pregnant woman in the dental chair).

Subsequent committee meetings included review and discussion of the content, layout, and design of the sections as well as development of provider and consumer resources including *Tips for Good Oral Health During Pregnancy/Infancy*, *Dental Pharmacological Considerations for Pregnant Women*, and *Dental Referral Form for Pregnant Women*. Between committee meetings, the PIOHQI project manager and OOH staff worked closely with the graphic designer to edit and enhance the document. It was invaluable to have an in-house graphic designer who could make both small and large content and design changes easily and frequently. An updated draft of the document was always sent to committee members via e-mail prior to committee meetings so they had time to review it. Some committee members sent feedback to either the PIOHQI project manager and/or the entire committee prior to meetings as well. OOH staff took detailed notes during committee meetings, documenting all suggested content changes which were subsequently updated and sent back to committee members for additional review.

The process of developing the guidance was very iterative with frequent revisions made to content, layout, and design based on feedback from steering committee members. The committee members' expertise and understanding of the target population for the guidance (i.e., prenatal and dental providers) and patient population (i.e., pregnant women) was relied upon heavily. For example, the representative from the Maryland Chapter of the American College of Nurse Midwives provided valuable insight into how midwives would interact with the information in the document, ensuring language that was understandable to them. The prenatal provider representatives were able to provide a unique perspective and at times, raised questions that prompted important discussion among the group (i.e., Why are radiographs safe for pregnant women and what measures are taken to ensure safety?). Based on these types of conversations, content was developed with the intent of increasing knowledge and understanding of prenatal and dental providers. Additionally, the organizational diversity of the PIOHQI project advisory board allowed for feedback from a variety of maternal and child health stakeholder groups in the state, ensuring the document was relevant and useful for various provider groups.

The last committee meeting included final review of all sections of the guidance document and development of a plan for statewide dissemination both via mail (hard copy) and electronically. Once

the final draft document was complete, it was sent to the PIOHQI project advisory board for feedback. Following final additions and edits, the guidance document was submitted to MDH leadership for approval. During this time, the PIOHQI project manager obtained address lists of all licensed dentists, dental hygienists, certified nurse midwives and Medicaid-participating obstetricians/gynecologists in MD and quotes for assembly, printing, and mailing. The guidance and a press release developed by MDH OOH were disseminated in May 2018.

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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3. What outputs or direct products resulted from program activities? (e.g., number of clients served, number of services units delivered, products developed, accomplishments, etc.)

**Mailed (hard copy): Total= 7,604**

- Maryland dentists (4,171)
- Dental hygienists (3,090)
- Medicaid-participating OB/GYN (260)
- Nurse midwives (83)

**Electronically Sent State**

- MD Section: American College of OB/GYN members (908)—also posted on their website
- MD Affiliate: American College of Nurse Midwives members
- MD Association of Family Physician members
- MD State Dental Association members
- MD Dental Hygienists’ Association members
- MD Dental Action Coalition members
- MD Oral Health Association members
- MD Dental Hygiene Program Directors (8)
- University of MD Baltimore, School of Dentistry- added to clinic’s evidence-based dentistry recommendations
- MD Chapter of the America Academy of Pediatrics members
- Nurse Practitioner Association of MD members
- MD Nurses Association members
- Minority Outreach and Technical Assistance grantees via the MDH Office of Minority Health and Health Disparities
- Administrative Care Coordination Units of local health departments

**National**

- Association of State and Territorial Dental Directors
- PIOHQI grantee network

In addition to broadly disseminating the guidance document, the Virginia Department of Health sought approval from MDH OOH to use the *Dental Pharmacological Considerations for Pregnant Women* document as part of their oral health care during pregnancy guidance document (to be released in 2019). The Texas Department of State Health Services also sought approval from MDH OOH to use certain content from the guidance document for educational purposes.

Since its release, the guidance document has also been part of several presentations on oral health care during pregnancy to various groups in MD. The dental referral form has been used in its entirety or has been adapted for use by prenatal providers throughout the state.

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES
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4. What outcomes did the program achieve? (e.g., health statuses, knowledge, behavior, care delivery system, impact on target population, etc.) Please include the following aspects:

- a. How outcomes are measured
- b. How often they are/were measured
- c. Data sources used
- d. Whether intended to be short-term (attainable within 1-3 years), intermediate (achievable within 4-6 years), or long-term (impact achieved in 7-10 years)

The MDH OOH, in partnership with the University of MD College Park School of Public Health (UMDSPH), plans to survey Maryland prenatal and dental providers to determine if they received the guidance document and how they have used it in their respective practice settings. The survey will also assess if additional resources included in the document were ordered. The OOH and UMDSPH are developing more effective systems to track resources ordered from both organizations.

**Budgetary Information:**

NOTE: Charts and tables may be used to provide clarity.

1. What is the annual budget for this activity?

This project was included in the PIOHQI grant budget for years 2 and 3 and was supported by HRSA. Additional funding from the DentaQuest Foundation supported printing costs.

2. What are the costs associated with the activity? (Including staffing, materials, equipment, etc.)

**Staff costs**

The PIOHQI project manager position was 100% funded by HRSA and approximately 40% effort was dedicated to the development of the guidance during the time period. Other OOH staff and steering committee member time was in-kind and not funded by HRSA.

**Staffing**

PIOHQI project manager                      Approximately \$50,000 (@ 40% effort for 2 years)

**Materials and printing, assembly, and mailing costs**

Guidance document	\$7,136
Two-pocket folder	\$4,608
Stand-alone cover memo	\$648
Insert 1	\$1,784
Insert 2	\$648
Insert 3	\$760
Insert 4	\$760
Insert 5	\$648
Insert 6	\$966
Insert 7	\$432
White catalog envelopes	\$1,273
Label, print, and insert	\$7,842
Total	\$27,505

3. How is the activity funded?

This activity was part of the MDH OOH PIOHQI project supported by the U.S. HRSA (\$250,000 per year, August 1, 2015 – July 31, 2019). In addition, the DentaQuest Foundation provided supplemental funding for printing (\$16,200).

4. What is the plan for sustainability?

The guidance document and all related resources are posted on the MDH OOH website at <https://phpa.health.maryland.gov/oralhealth/Pages/home.aspx>. The MDH OOH will periodically review and update the guidance document and resources, as needed. The MDH OOH will also electronically disseminate the guidance document via its partner networks annually.

**Lessons Learned and/or Plans for Addressing Challenges:**

1. What important lessons were learned that would be useful for others looking to implement a similar activity? Was there anything you would do differently?

Important lessons include:

- More committee meetings were needed than were anticipated. The process of reviewing the content and layout required four meetings, each two-three hours in duration. Because of this, the timeline for completion was longer than expected.



- The PIOHQI project manager served as facilitator for all committee meetings and guided discussions to keep everyone on-task and to establish consensus among committee members. Though the committee came to consensus naturally on most issues, having a lead facilitator was essential to ensuring a productive meeting.
- Having an in-house graphic designer was invaluable to the creation of the document and all additional resources. Revisions to content, layout, and design were able to be made quickly and frequently.
- Having a research assistant was a significant support during all phases of the project, from the preparatory phase of completing a comprehensive review of existing state and national guidelines to the development phase of taking detailed notes during committee meetings and working closely with the PIOHQI project manager and graphic designer to facilitate revisions to the document to the final phase of obtaining printing quotes, gathering address lists, and uploading all materials electronically to the MDH OOH website.
- Using google drive to store all documents, images, and resources was extremely helpful as it provided one place for everything to be located and could be easily accessed by the PIOHQI project manager and OOH staff from anywhere that had an Internet connection. This was especially useful during committee meetings if a particular resource needed to be accessed and viewed.
- An error of omission was made by not including the Maryland Chapter of the American Academy of Pediatrics to serve on the steering committee. In retrospect, an invitation should have been extended to that organization since the guidance included information about infants and young children.
- The development of the infographic was a much more difficult process and took much longer than anticipated. Much time was given to discussion about which data to include and how best to present it visually.
- Having committee members who could reach out to their own organizational and professional networks was a significant benefit. For example, the representative from the University of MD Baltimore School of Dentistry was able to speak with a colleague expert in dental pharmacology to review and provide input on the *Dental Pharmacological Considerations for Pregnant Women* document, and the representative from the National Maternal and Child Oral Health Resource Center was able to provide a historical perspective on the development of *Oral Health Care During Pregnancy: A National Consensus Statement* as well as updates that have been made to the consensus statement (e.g., new opioid prescribing statement).
- Establishing three key messages (i.e., oral health care during pregnancy is safe, important, and covered by Medicaid) to be woven throughout the document was a positive repetition strategy for prenatal and dental providers to remember the most salient points.
- Having a larger project advisory board with a diverse group of members allowed for another layer of review beyond the steering committee.

2. What challenges did the activity encounter and how were those addressed?

Fortunately, steering committee members came to consensus rather easily on most issues and respected one another's input but at times, the PIOHQI project manager and OOH staff had to make final decisions on content that would be included or not included and on specific wording. There were some challenges with obtaining a proof of the guidance and supporting materials in order for a final approval to be given which took more time than expected.

**Available Information Resources:**

Share any models, tools, and/or guidelines developed by the program specifically for this activity that may be useful to others seeking additional information. Hyperlink resources if possible.

[Oral Health Care During Pregnancy: Practice Guidance for Maryland's Prenatal and Dental Providers](#) and all [resources](#) related to oral health and pregnancy.

Horowitz Center for Health Literacy, University of Maryland College Park, School of Public Health  
<http://sph.umd.edu/center/hchl/oral-health-and-health-literacy>

Press Release: [Maryland Department of Health Creates Guidance for Providers on Oral Health Care During Pregnancy: Dental and Prenatal Providers Play a Vital Role for Women During this Important Time](#)

<b>TO BE COMPLETED BY ASTDD</b>	
Descriptive Report Number:	23014
Associated BPAR:	Perinatal Oral Health
Submitted by:	National Maternal and Child Oral Health Resource Center, Georgetown University
Submission filename:	DES23014MDpracguidancepgproviders-2019
Submission date:	March 2019
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