



Dental Public Health Activity Descriptive Report Submission Form

The Best Practices Committee requests that you complete the Descriptive Report Submission Form as follow-up to acceptance of your State Activity Submission as an example of a best practice.

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

ASTDD Best Practices: [Strength of Evidence Supporting Best Practice Approaches](#)
Systematic vs. Narrative Reviews: <http://libguides.mssm.edu/c.php?g=168543&p=1107631>

NOTE: Please use Verdana 9 font.

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SECTION I: ACTIVITY OVERVIEW

Title of the dental public health activity:

Partnerships with Academia

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

"X"	Assessment
X	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
X	3. Assess public perceptions about oral health issues and educate/empower them to achieve and maintain optimal oral health
Policy Development	
X	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
Assurance	
	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
	8. Assure an adequate and competent public and private oral health workforce
X	9. Evaluate effectiveness, accessibility and quality of personal and population-based oral health promotion activities and oral health services
X	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"	<u>Healthy People 2020 Oral Health Objectives</u>	
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
X	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
	OH-7	Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year
	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
	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
"X"	Other national or state Healthy People 2020 Objectives: (list objective number and topic)	

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:

Office of Oral Health, University of Maryland School of Dentistry, University of Maryland School of Public Health, Johns Hopkins Medical Institutions, Howard University School of Dentistry, partnerships, academia

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.

The Maryland Department of Health, Office of Oral Health has partnered with the University of Maryland, School of Dentistry, the University of Maryland, School of Public Health, The Johns Hopkins Medical Institutions and the Howard University College of Dentistry on numerous projects, such as Basic Screening Surveys and advising/informing the direction of OOH programs. These collaborations have greatly benefited the OOH and increased our capacity to conduct surveillance, be on the forefront of the latest research, increase awareness of the importance of oral health and improve access to dental care for vulnerable populations throughout Maryland.

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?

Oral Health Surveys

Maryland measures the oral health status of different populations so that public programs and funding can be properly determined. Findings from the Oral Health Surveys are needed to facilitate

personnel and public program planning, as well as funding allocations. In addition, findings are critical for the purpose of assessing the current status of oral health and other health-related issues, including access to preventive and treatment services.

School-Based Dental Sealant Services

In 2008, 2013, and most recently 2018, the OOH received five-year grants from the Centers for Disease Control and Prevention (CDC) for a State-Based Oral Disease Prevention Program. This grant built upon the efforts of the OOH to plan, implement, and evaluate population-based oral disease prevention and promotion programs. As part of this grant, the OOH partnered with UMSOD to develop a demonstration project to examine the logistics and cost-effectiveness of school-based dental sealant services. The Task Force on Community Preventive Services indicates that school dental sealants are one of two evidence-based oral disease prevention services (along with community water fluoridation) and are therefore highly recommended by federal agencies (CDC and HRSA). The OOH partnered with University of Maryland, School of Dentistry (UMSOD) because of its expertise and experience in statewide dental assessment, surveillance, and prevention activities.

Prevention and Early Detection of Childhood Caries: The Maryland Health Literacy Model

In 2011, the DentaQuest Foundation provided a grant to the University of Maryland, School of Public Health (UMSPH) to conduct an assessment of what Maryland adults with young children know and do about preventing dental caries. In addition to caregivers and parents, the project also assessed the knowledge, opinions and practices of health care providers and policymakers. The OOH participated as a partner by providing technical support throughout the development of the proposal. The grant funding was used to establish essential baseline information about levels of oral health literacy in the target populations, to provide visibility to dental caries prevention and early diagnosis and to frame key actions and knowledge for the target population. The final outcome of this project was an evidence-based foundation for building the content of a statewide oral health literacy education program.

Healthy Teeth, Healthy Kids Campaign

In 2010, the OOH received a grant from the CDC to fund a project entitled "Maryland Oral Health Literacy Campaign." As a central part of this project, the Office of Oral Health wished to build on research conducted by the UMSPH on oral health literacy and implement the findings of that research. The OOH entered into an MOU with UMSPH to assure that the research findings were effectively implemented, supported and evaluated.

Perinatal and Infant Oral Health Quality Improvement Program

In 2015, the OOH received a grant from HRSA aimed at improving oral health conditions for pregnant women. Both UMSOD and UMSPH have contributed to the direction of the grant, advising staff on best practices and how to approach activities. The PIOHQI project ended in 2018.

Referral to Dental Care for People Living With HIV (PLWH)

In 2019 The OOH received a grant from the Maryland Infectious Disease Bureau to conduct a 5-year Referral to Dental Care Program for PLWH in key Maryland Counties. Working closely with the Maryland Center for HIV Prevention and Control, the OOH began to develop a comprehensive program, including a pilot project and social marketing campaign, designed to increase awareness of the importance of regular oral health care among PLWH as well as increase the rate of referral of PLWH to dental services by PCPs and medical professionals in medical practices and HIV treatment centers. The OOH has assembled a robust advisory committee to guide this initiative. Academic partners participating in this advisory committee include: The Johns Hopkins Medical Institutions (JHMI), UMSOD, and the Howard University College of Dentistry (HUCD).

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

Oral Health Surveys

Pursuant to Maryland Health-General Code Ann. § 13-2506, the Department of Health and Mental Hygiene is required to conduct a statewide survey of the oral health status of school children in Maryland. The sample for the study, consistent with the Basic Screening Survey (BSS) methodology

from the Centers for Disease Control and Prevention (CDC) and the Association of State and Territorial Dental Directors (ASTDD), was selected so that the resulting samples would be representative of all Maryland public school children in kindergarten and third grade.

Referral to Dental Care for People Living With HIV (PLWH)

In Maryland, there are more than 31,559 people aged 13+ living with diagnosed HIV¹. In addition, 11.3% of people living with HIV in Maryland are believed to be undiagnosed. Maryland was ranked 5th among U.S. states and territories in adult/adolescent HIV diagnosis rates (per 100,000) in 2017².

The ADA recommends that oral health care be part of all HIV treatment plans. PLWH are more susceptible to infections, including oral infections, which can affect overall health. Dental care is the greatest unmet health care need among HIV-infected individuals. The findings from the HIV cost and services utilization study (HCSUS) conducted during 1994-2000 found that this unmet need was as high as 60 percent. The unmet needs were almost twice as high for low income groups and people without insurance. A paper based on HCSUS data concluded that PLWH do not use dental care regularly, and that use varies by patient characteristics and availability of a regular source of dental care. The use of dental services was higher when provided at an aid's clinic (74%) compared to 12 percent among those without a usual source of dental care³. When compared to individuals without HIV, PLWH are not only less likely to visit the dentist, they are more likely to require complex and extensive dental care, such as restorative and extraction procedures. In addition, primarily because of the lack of collaboration between medical and dental practices, primary care physicians (PCPs) can often overlook referring PLWH to oral health services and unfortunately dentists often struggle with how to incorporate the HIV patient into their practice.

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

Oral Health Survey of Maryland School Children

The Oral Health Survey for 2015-2016 was a follow-up to earlier oral health surveillance projects conducted in 1994-1995 (1), 2000-2001 (2), 2005-2006 (3), 2011-2012 (4). The present project utilized methodology that was adapted from the earlier studies. The consistency in approach allowed for temporal oral health surveillance. However, the 2005-2006 project did not calculate caries experience. Therefore, data for caries experience is not available for 2005-2006.

The UMSOD collaborated with OOH at MDH to conduct the Oral Health Survey of Maryland School Children in school year 2015-2016. The survey described the oral health status of Maryland's public elementary school children, particularly those in kindergarten and third grade. Unlike previous assessments, this project was the first to use a passive consenting process and mobilized dental hygienists instead of dentists to conduct the oral screenings. Dental hygienists screened a total of 7,923 students in 56 schools under the scope of this survey. The overall response rate was 72.6 percent, made possible by the change in how consent was obtained from parents and guardians.

The survey findings indicated that Maryland was either meeting or surpassing Oral Health 2020 (OH 2020) targets. Children in Maryland fared better than the national average when it came to the proportion of children with dental caries, untreated dental caries, and dental sealants. The specific findings were as follows:

- Children's experience of dental caries was 35.9 percent, well below the national target of 49 percent.
- The proportion of children with untreated dental caries was 13.6 percent (compared to the national target of 26 percent).
- About 41.4 percent of surveyed children in Maryland had at least one dental sealant applied, surpassing the national target of 28 percent coverage.

¹ Maryland HIV/AIDS Quarterly Update Second Quarter 2019. Center for HIV Surveillance, Epidemiology and Evaluation, Maryland Department of Health, Baltimore, MD. 2019

² Centers for Disease Control and Prevention. HIV Surveillance Report, 2017; vol. 29. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published November 2018. Accessed November 19, 2018.

³ Coulter et.al. (2000). Use of Dental Care by HIV Infected Medical Patients. Journal of Dental Research 79 (6) Pg. 1356-1361

- There were some disparities in the status of oral health by geographic location and socio-economic status. The Western region of Maryland had the lowest rates of decay, whereas the Eastern Shore region had the highest rates. Children in schools with high proportions of free/reduced meals, indicating low socioeconomic status, had a higher lifetime decay experience and were more likely to have untreated decay than were children in schools with low proportions of free/reduced meals, indicating higher socioeconomic status. Children in schools with low proportions of free/reduced meals were more likely to have dental sealants than were children in higher socioeconomic status schools.

Oral Health Survey of Maryland Head Start Children

The OOH contracted with the UMSOD to conduct a study between November 2016 – June 2017. The Oral Health Survey was conducted with the Head Start children to investigate how the oral health of the population in Maryland has changed over the period of 20 years since previous study in 2007. The survey was conducted with the children between the ages of three and five attending Head Start.

The study included survey, comprising of a dental screening, with 1023 children (78 percent of the participation rate) the sampling frame for the survey included in all Head Start sites in Maryland. A systematic probability proportional to size sampling scheme was used to select a sample of 20 Head Start sites. Each of the selected sites' Health Coordinators was contacted by the project coordinator and asked to participate in the survey. All 20 of the sites agreed to partake in this oral health screening of children. The coordinator for this project then scheduled screening dates with each of the Head Starts. The outcome variable in the study was caries experience, which was stratified by demographic characteristics. All analyses were completed using the complex survey procedures within SAS 9.3.

The following were the key results:

- The current study found an approximate decay rate of 25 percent among three to five-year-old children enrolled in Maryland Head Start programs. This finding indicates that Maryland has surpassed the Healthy People 2020 (HP 2020) target of fewer than 30 percent of children having caries experience.
- The percentage of children with untreated decay was 13.5 percent while the proportion of children with treated decay was 16.2 percent.
- Around 1 percent children in Maryland's Head Start programs were in need of urgent care. The proportion of children who required dental cleaning was 6.1 percent.

Caries experience increases with age, as it is most prevalent among five-year-old children. No disparities were found between caries experience rates of males versus females or in urban versus rural communities. When delineating caries experience by racial categories, white children present the highest prevalence (30.1 percent) of caries experience whereas black/African American children have the lowest (22.1 percent). Head Start children in rural areas have slightly more unmet needs (15.5 percent) than those in urban areas (12.6 percent).

Oral Health Survey of Older Adults

The OOH, in collaboration with the Maryland Department of Aging, contracted with the UMSOD to conduct a BSS of Older Adults in 2013 – 2014. Overall, a total of 994 older adults participated in the survey. Four dental hygienists were hired in September 2013, and the data collection process began in October 2013. A representative sample of older adults 55 years or older were selected from approximately 160 long-term care facilities (congregate meal sites, senior centers, nursing homes, and assisted living facilities) around the state. A dental screening was administered to all participants, and a health questionnaire was administered to adults in congregate meal sites and senior centers.

The following were the key results:

- Older adults in nursing homes had the highest rate of untreated decay at 46 percent and were most likely to require follow-up (early care and/or urgent care) than any other type of long-term care facilities. Participants at senior centers had the lowest rate of untreated decay and required less follow-up than the other long-term care facilities.
- Approximately 20 percent were edentulous, and 21 percent had untreated decay. For the participants that answered the health questionnaire, 14 percent thought their teeth were in poor condition and 18 percent in very poor condition. Twenty nine percent (29 percent) reported needing periodontal care but very little had severe dry mouths and suspicious soft tissue lesions.

- The clinical screening showed that 74 percent of older adults in senior centers had no obvious problems. In the health questionnaire, 66 percent self-reported visiting the dentist within the last three years.

School-Based Dental Sealant Services

The statewide demonstration program was conducted at 10 elementary schools that were selected according to sampling needs. Dental screenings and sealants, when indicated, were provided to third graders in public elementary schools from 2009-2010. There were potential benefits to the children who were screened for oral health and those who had sealants placed on their teeth. Sealants provide a barrier and prevent tooth decay. The information obtained helped OOH's future program development and policy. One outcome of this effort was the development of a website devoted to dental sealants called "Mighty Tooth: Seal Away Decay"; this website can be found at: <http://mightytooth.com/>. OOH and UMSOD continue to support and maintain this website, and OOH recently enhanced the site to include information for the public and health providers.

The quantitative and qualitative findings from this demonstration program gave the OOH a greater understanding and perspective on how to conduct a statewide school-based dental sealant program. The following section describes the findings from the Dental Sealant Demonstration Project of the State-Based Oral Disease Prevention Program:

- Caries prevalence and average numbers of decayed teeth per student:
 - Students residing in a rural municipality, eligible for free/reduced meals, whose caregiver's education was less than college, and who were boys, had a higher prevalence of caries than their counterparts.
 - Students without dental insurance had the highest prevalence of caries; those with private dental insurance had the lowest prevalence of caries.
 - Students with caries prevalence from high to low respectively were non-Hispanic Whites, non-Hispanic Blacks, Hispanics and non-Hispanics.
- Sealant prevalence and average number of sealed teeth per student:
 - Students residing in an urban municipality, not eligible for free/reduced meals, whose caregiver's education was less than college, and who were girls, had a higher prevalence of sealants than their counterparts.
 - Students without dental insurance had the lowest prevalence of sealants; those with Medicaid coverage had the highest prevalence of sealants.
 - Students with sealants prevalence from high to low respectively were non-Hispanic others, non-Hispanic Whites, non-Hispanic Blacks, and Hispanics.

Prevention and Early Detection of Childhood Caries: The Maryland Health Literacy Model

The results of the assessment revealed a low overall level of knowledge about preventing dental caries among the target population. Parents with higher levels of education were more likely to have correct information regarding prevention and early detection of dental caries. Nearly all respondents (97.9 percent) reported they were aware of fluoride, but only 57.8 percent knew its purpose. More than one-third (35.1 percent) of the respondents were not aware of dental sealants. Parents with lower levels of education were significantly less likely to drink tap water, as were their children, and significantly less likely to have had a dental appointment in the preceding past 12 months.

The findings from this project informed the next steps for one of the Dental Action Committee's recommendations – to develop a statewide, multicultural oral health messaging campaign to educate parents and caregivers of young children about the importance of oral health and the prevention of oral disease.

Healthy Teeth, Healthy Kids Campaign

According to the MOU, the OOH's role in the project was to:

- (1) Develop curricula for (a) health care providers, and (b) health navigators that will educate these professionals on appropriate messages to communicate with their serving populations;
- (2) Collaborate with UMSD to evaluate educational curricula in case management settings;
- (3) Consult with social marketing firm to assure oral health literacy messages are communicated accurately and effectively during social marketing campaign;
- (4) Provide advice, consultation, and oral health literacy technical assistance as needed to Office of Oral Health, selected social marketing firm, UMSD, and Oral Health Literacy Campaign (OHLC) Advisory Board;
- (5) Participate on Oral Health Literacy Campaign Advisory Board;
- (6) Conduct a pre- and post-intervention survey of target populations; and

(7) By June 30, 2012, prepare a final report that provides an analysis of successes and challenges of implementing research results and includes recommendations for future oral health literacy campaigns.

A statewide Oral Health Literacy Campaign that contains culturally sensitive and age-specific messages was successfully launched March 23, 2012. Healthy Teeth, Healthy Kids, (HTHK) is a highly successful oral health literacy social marketing campaign. HTHK has achieved significant results over the past three years in building awareness and changing the oral health behavior of parents of young at-risk children.

When the campaign launched in 2012, it consisted of TV, radio, direct mail and transit advertising as well as brochure distribution, social media, media relations, community outreach and a website and call center. It ran for six months and achieved encouraging results in that 63 percent of target audience was aware of the campaign and a significant number of women that heard or saw the campaign were aware of specific campaign messaging after the campaign ran. Post campaign surveys also showed a seven percent increase in dental visits after the campaign.

Since the initial HTHK campaign, continuation of HTHK has occurred incrementally and in a more targeted way. After reviewing the results from the initial campaign, we theorized we would achieve better results in a more cost-effective manner if we targeted our audience more specifically. Since the initial campaign, we have focused our efforts on reaching the Spanish-speaking population ages 18 – 36 with young children ages 0 – 6.

In September 2014, in collaboration with MDAC, OOH implemented a Spanish Language version of the campaign, Dientes Sanos, Niños Sanos, (Healthy Teeth, Healthy Kids). Dientes Sanos, Niños Sanos was a nine-week social marketing campaign designed to educate Spanish-speaking women with young children about the importance of oral health and teach them the basic oral hygiene skills needed to care for their child's mouth.

The campaign utilized radio advertising (a 30 second PSA) as a primary communication tool to target the Latina women. The messaging was evidence based, focus group tested and communicated in plain language. Messages included in the ad were:

- Give your child a healthy mouth for life
- Brush your child's teeth twice a day using fluoride toothpaste
- Take your child to the dentist before their first birthday
- Dental health is important for overall health
- Contact www.dientessanosninossanos.org for more information or to find a dentist

The campaign ran 612 paid & promotional thirty-second ads over a nine-week time period on WLZL radio, the largest and most listened to Spanish language radio station in Maryland. The station also provided added value that included 60-second evening/overnight/weekend radio ads at no charge, 10- second promos and :05 live sponsorship mentions, as well as a 15-minute interview with an oral health expert that ran on their Sunday morning public affairs program. The radio campaign created 347,500 impressions reaching 51% of Hispanic population age 18-36 with an average frequency of 5.2x (meaning that on average, women 18-36 heard the radio ad 5.2x over the course of the nine-week time period.)

Before and after the campaign, MDAC, supported by OOH, conducted pre- and post-campaign surveys to measure the campaign's effectiveness. Specifically OOH and MDAC wanted to know if the campaign messages reached the intended audience and if the messaging influenced the oral health perceptions and behaviors of the Latina women living in the campaign's target geography. More than 400 Latina women with children participated in each round of the survey.

Results showed that Dientes Sanos, Niños Sanos campaign was extremely effective. Latinas better understood the importance of oral health, showed significant improvements in oral health knowledge and were taking action to practice more preventive oral health behaviors for themselves

Comparative results of the pre- and post-campaign surveys indicated that almost all mothers (91.5 percent) heard about the Dientes Sanos, Niños Sanos campaign, with 90.6 percent recalling at least one of the campaign's messages unaided. After the campaign, significantly more mothers (92.2 percent) believed children should go to the dentist before their first birthday, and 92.8 percent of mothers believed that dental health is an important part of overall health—both key campaign messages.

Following the campaign, more mothers (18.7 percent) had heard of fluoride and 71 percent more mothers understood its purpose; twice as many mothers had heard of fluoride varnish after the campaign; and there was a 210 percent increase in mothers who had their children receive fluoride varnish.

This increase in awareness and change in behaviors exceed the results obtained from the initial HTHK campaign supporting our thesis that by targeting the audience of the campaign more specifically, the campaign will have a greater impact and achieve more significant results.

The results provide evidence that shows:

- The campaign reached its target audience and had a positive effect on Latina mothers' attitudes perceptions and behaviors regarding oral health and the oral health of their children
- Social marketing is an innovative and effective tool that can positively influence oral health awareness, perceptions and behavior
- Using plain language to communicate evidence-based oral health messaging works
- Focusing on a single population, i.e., narrowly targeting the campaign to Latina women with young children, contributed significantly to the campaign's increased success and cost effectiveness
- Utilizing a proven and effective media tool, i.e., radio, in this case the most listened-to Hispanic radio station in Maryland, to reach this specific target audience, delivered the message successfully and in a cost-effective manor

In 2019 the all HTHK print materials and website were revised and updated. New messaging and a new color scheme for the campaign was developed and put into place. All revisions and updates occurred in both English and Spanish.

Perinatal and Infant Oral Health Quality Improvement Program

There were many activities conducted within the Perinatal and Infant Oral Health Quality (PIOHQI) Initiative funded by HRSA that involved collaborations with both the UMSOD and UMSPH.

1. Interviews with Certified Nurse Midwives (CNM): In August 2017, a convenience sample of 12 CNMs were interviewed by phone regarding their oral health knowledge and understanding as well as their practice of advising pregnant patients to seek oral health care during pregnancy, perceived barriers for low-income pregnant women, and reactions to sample educational materials promoting prenatal medical and dental care. The key findings were:
 - There was some level of information gap among CNMs on the linkage to oral health issues. Not all CNMs knew that Maryland Medicaid covers oral health care for pregnant women. They also did not prioritize sharing information to pregnant and lactating women about importance of drinking tap water which has fluoride.
 - In their opinion, the barriers that prevent women from obtaining early and regular prenatal medical care add up to the barriers for them to obtain oral health care. Some key barriers specific to their oral health care access were: lack of understanding about the importance of oral health, especially during pregnancy and difficulty in finding dentists that see pregnant women.
2. Survey of WIC Personnel: In partnership with the UMSPH, a survey with Women Infant and Children (WIC) personnel was conducted in 2017 utilizing web-based survey techniques with 130 WIC personnel. The survey findings were presented at the Fall 2017 Maryland Oral Health Association (MOHA) meeting (MOHA membership includes local health department and FQHC dental leadership/staff). A research poster was also presented at both the American Association for Dental Research's (AADR) annual meeting in March 2018 and the UMSPH Public Health Research Day titled, *Reimagining Health: Partnerships, Programs, Policies* in April 2018. They key findings from the survey were as follows:
 - The WIC personnel had knowledge about fluoride and dental linkages but did not realize the importance of fluoridated tap water for dental health. Among the respondents, 99 percent had heard of fluoride and 82 percent knew fluoride prevents dental caries. Additionally, 72 percent of personnel reported teaching clients about drinking fluoridated tap water. Only 2.3 percent recognized the best way to prevent tooth decay is consuming fluoridated tap water. Belief that all children get tooth decay differed by education level.
 - In the opinion of WIC personnel, the most pressing barriers for pregnant women to receive dental care were: cost associated with the service including uninsured (81

percent), transportation (62.4 percent), belief that dental consultation is not necessary (59 percent), and lack of dental providers that accept Medicaid (52 percent).

Referral to Dental Care for People Living With HIV (PLWH)

On July 1, 2019 the OOH began development of a comprehensive program, including a pilot project and social marketing campaign, to increase awareness of the importance of regular oral health care among PLWH and increase the rate of referral of PLWH to oral health care services by PCPs and medical professionals at HIV treatment centers.

Objectives:

- Increase awareness of the importance of regular oral health care among PLWH.
- Create a conversation about the importance of oral health care among PLWH.
- Motivate PLWH to seek oral health care.
- Dispel thinking among PLWH that oral health care providers do not want to treat them.
- Convince PLWH that they will be welcomed at the oral health care practice and have a positive health care experience when visiting the oral health care provider.
- Provide training to oral health care providers on interacting with and treating PLWH.
- Create a welcoming atmosphere within oral health care practices for PLWH.
- Maintain communication and work with PCPs to talk with their HIV patients about the importance of oral health care and refer patients for oral health services.

Staff: The OOH hired an outreach manager to oversee and coordinate all program activities, including the development, implementation, and evaluation of the pilot project. The Program Manager's duties will include:

- Acting as contract monitor for all contracts related to the project/program;
- Working directly with all contractors to ensure program activities are developed and implemented according to program goals and objectives;
- Leading team coordination including regular meetings with Provider Outreach Coordinators;
- Managing program data, including collection of data from project participants, data compilation and analysis etc.;
- Organizing project kickoff and summit meetings as well as additional program meetings as needed;
- Working with the Office of Oral Health Oral Health Literacy Program Manager to oversee the project's social marketing campaign;
- Drafting all program/project reporting and working with the Office of Oral Health Data Scientist to ensure that program evaluation is conducted appropriately; and
- Working with the contracted Evaluator to ensure production of a comprehensive final report.

Advisory Committee: An Advisory Committee was formed that provides interprofessional guidance and input on the development of the program, including the pilot project model and referral process and the campaign and project materials. The Advisory Committee consist of both medical and oral health partners, topic content experts, PLWH, and representatives from public health and academia, (including representatives from UMSOD, JHMI, and HUCD). Advisory Committee members attended the initial project kickoff meeting in December of 2019 and will meet regularly to guide the program throughout the duration of the project.

Focus Groups: The OOH is currently organizing focus groups that will be conducted with PCPs, oral health care providers, and PLWH to collect qualitative data for use in the development of program initiatives, including the pilot project and campaign. Focus groups will aim to:

Identify the barriers and facilitators that PCPs experience in referring PLWH to oral health care providers;

- Identify the barriers and facilitators that oral health care providers experience in treating PLWH;
- Gain input from PLWH on the level of awareness of the importance of oral health care, the level of comfort with seeking oral health care, and barriers and facilitators for PLWH in obtaining access to oral health care;
- Gain input from participants on structural, creative, educational, and strategic elements of a successful *Referral to Oral Health Care* pilot project; and

- Inform communication needs, messaging, and strategic approach to support a successful program.

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.)

- OOH staff
- UMSOD staff
- JHMI staff
- HUCD staff
- UMSPH staff
- Grants provided by OOH to supplement joint efforts

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.

- Researching and writing Basic Screening Surveys
- Strengthening existing partnerships and forming new partnerships to ensure successful implementation of goals JHMI and HUSOD
- Strengthening existing programs and initiatives based on advice and input from UMSOD, UMSPH, JHMI, CDHU

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.)

- Multiple BSS
- Vital surveillance that informs programs and policies
- Maryland residents screened for dental issues
- Development of a referral to dental care piolet program for PLWH

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 OOH hopes to achieve many outcomes through its continued partnership with UMSOD, UMSPH, JHMI and the HUCD such as continued surveillance projects and eventually, improved oral health and increased access to dental care for at-risk populations across Maryland.

Budgetary Information:

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

1. What is the annual budget for this activity?

The Oral Health Surveys were funded by OOH using CDC and state general funds. The OOH received a five-year grant award from the CDC for a State-Based Oral Disease Prevention Program. The OOH received a grant from HRSA for the PIOHQI Program.

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

The costs associated with this activity vary each year.

3. How is the activity funded?

These activities are funded through OOH grants to UMSOD and UMSPH.

4. What is the plan for sustainability?

The OOH will continue to partner with UMSOD and UMSPH to further efforts in improving oral health care across Maryland.

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?

Keeping partners and stakeholders informed quarterly on oral health projects is a great way to get their buy-in when needed for future projects.

Identify areas where partners are needed to diversify OOH's reach for future projects.

Continue building and maintaining existing partnerships and identify ways to keep them informed. Need to increase oral health literacy regarding caries prevention and early detection.

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

N/A

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.

OOH: <https://phpa.health.maryland.gov/oralhealth/Pages/home.aspx>

MDAC: <http://www.mdac.us/>

TO BE COMPLETED BY ASTDD	
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