

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

Grant Number: H47MC28478

Project Title: Virginia Perinatal and Infant Oral Health Quality Improvement Expansion Grant Program

Organization Name: Virginia Department of Health

Primary Contact Information:

Name: JoAnn Wells

Phone: 804-864-7782

Title: Perinatal and Infant Oral Health Consultant **Email:** joann.wells@vdh.virginia.gov

I. PROGRESS:

During this final phase of the Perinatal and Infant Oral Health Quality Improvement Expansion (PIOHQIE) grant, the Virginia Department of Health (VDH) Dental Health Program (DHP) continued many of the existing activities and evaluation measures and worked to increase sustainability of successful projects and interventions that have positively impacted perinatal and infant oral health.

All grant activities continue to build on the capacity to address the needs of the population. The two primary indicators that support long-term sustainability of outcomes are Medicaid reimbursement for preventive dental services and continued means of training and support from the DHP regarding perinatal and infant oral health. Strategies and activities that will continue after the grant's conclusion include:

- collaboration with the Virginia Oral Health Coalition (VAOHC), Early Dental Home Action Team (EDHAT)/ PIOHQIE Project Advisory Board (PAB) to receive input and oversight to maximize the statewide impact of the programs;
- oral health services integration and referrals for pregnant women into existing dental hygienists duties in local health districts;
- evidence-based trainings for internal and external dental and medical providers regarding the importance of oral health during pregnancy, early preventive care for infants, and Medicaid dental coverage;
- expansion of DHP activities into primary care settings with statewide reach, including working with medical providers and other prenatal and early child providers; and
- surveillance activities including the Basic Screening Survey (BSS) for pregnant women every five years.

Project Goal: Improve access to oral health care for pregnant women and infants who are most at risk for disease, through integration into the primary care delivery system.

a. Project Advisory Board

Objective 1: By July 2019, hire a project coordinator; establish and receive input and oversight from Project Advisory Board.

Staffing JoAnn Wells, the DHP Perinatal and Infant Oral Health Consultant and PIOHQIE Grant Coordinator, continues to lead PIOHQIE efforts in Virginia and to be the primary participant in the PIOHQI National Learning Network for the Center of Oral Health Services Integration and

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

Improvement (COSHI) led Oral Health Learning Collaborative. She continues to make substantial progress implementing new projects for the grant as detailed throughout this report. During this performance period, Monalisa Mbaiti, MPH, continues to support the DHP as the PIOHQIE Epidemiologist Evaluator. Ms. Mbaiti has made considerable progress with evaluating and reporting on grant activities and will continue to provide surveillance support, and manage all aspects of data collection and reporting for the DHP. The data entry support staff member, Monique Jackson, continues to be essential to activities involving data cleaning, entry, storage, and management, and does an excellent job of entering ongoing detailed data indicators into databases.

The DHP contracts with the VAOHC to ensure adequate coordination and implementation of several Grant activities. In September 2018, Mr. Matt Jones resigned his position with the VAOHC, and Ms. Quan Williams was hired as the new program manager in November 2018. Ms. Williams resigned her position in January 2019. The VAOHC actively recruited for a Program Manager to contribute to the EDHAT PIOHQIE PAB, Home Visiting (HV) trainings, and to serve as an active member of the Community Health Workers (CHWs) Advisory Group to provide program direction and share the responsibility of community ownership of Grant work to sustain project services beyond the project period. In April 2019, the VAOHC hired Ms. Brita Bergland, MPH, CHES as the new Program Manager. In addition to PIOHQIE work, Ms. Bergland will be managing much of the VAOHC's regional alliance work, new initiatives, and partnerships. A biographical sketch for Ms. Brita Bergland is included in this submission. *(Responds to Activity 1.1.1) (Attachment 1)*

In August 2018, the EDHAT/ PIOHQIE PAB members were asked to complete an assessment to gauge how the PAB was progressing and what could be done differently to advance the group's work around improving access to oral health services for Virginians through policy change public awareness, and programmatic activities. The majority of responses indicated that the PAB made them more knowledgeable about various oral health efforts with pregnant women and enabled them to make connections with other organizations who support statewide oral health initiatives. This activity occurred later than initially planned. This change was previously reflected in the Revised Work Plan, and the Project Activities Timeline. *(Responds to Activity QII.1)*

The EDHAT/PIOHQIE PAB December meeting was rescheduled due to weather to February 2019. At the February 2019 meeting, the VAOHC staff convened the EDHAT/PIOHQIE PAB members to discuss the PIOHQIE PAB purpose and accomplishments. The DHP Perinatal and Infant Oral Health Consultant and PIOHQIE Grant Coordinator provided an overview of the PIOHQIE advisory board, its role, and progress over the past four years including oral health training in all five of Virginia's health regions. It was agreed that the EDHAT/PIOHQIE PAB, comprised of members who are early dental home and perinatal leaders from across the state, will continue to convene after the PIOHQIE grant ends.

At this meeting, the DHP Perinatal and Infant Oral Health Consultant also shared the VDH DHP's American Maternal and Child Health Programs (AMCHP) conference abstract, "Impacting Oral Health in the Community by Engaging Home Visitors and Family Educators to Improve Oral Health Outcomes for Pregnant Women and Infants: One State's Experience."

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative

This poster session was selected to be presented at the AMCHP's meeting "*Investments in MCH: Strengthening Families and MCH Workforce*" held in March 2019.

The Title V Director shared that AMCHP staff requested that the DHP provide a submission to the Innovation Station database for Best Practices. AMCHP's Best Practice committee categorizes practices that are submitted to the Innovation Station into four categories: Cutting-Edge, Emerging, Promising, and Best Practices. The DHP proposed a Best Practice related to HV trainings. (*Responds to Activity 1.1.2*)

The VDH, Division of Population Health Data (DPHD) provided a comparison PowerPoint presentation on the 2017/2018 BSS results and trends. Of note, the number of women who reported knowing about the pregnancy Medicaid dental benefit in 2018 (37%) was substantially down from 2017 (52%). Potentially competing priorities, particularly among the Hispanic/immigrant communities, may account for some of the decrease. Additionally, the marketing push for the Medicaid benefit for pregnant women may have been stronger in prior years after its initial rollout in 2015. DentaQuest is continuing to increase its outreach and partnerships to promote the dental benefit.

The EDHAT/PIOHQIE PAB members shared their activities related to this target population. Examples included:

- The Smart Beginnings program coordinator is working with partners in the Tidewater area to maintain their school-age oral health programs despite funding changes.
- VDH's Division of Child and Family Health (DCFH), Title V Director stated that the MCH grant includes oral health for pregnant women and infants as a priority area and is expanding to include adolescent children. In addition, she reported that the Virginia Department of Education (VDOE) removed the question on school health forms regarding a "medical home." VDH and the VaOHC are working to have the question added back and potentially add a question about a dental home. The EDHAT/PIOHQIE PAB may be requested for their support in re-add this question.
- VDH's Bright Smiles for Babies (BSB) program is still active and offers online and in-person trainings
- Old Dominion University (ODU) and the Virginia Commonwealth University School of Dentistry (VCU SoD), Oral Health Services Research Core are coordinating a survey to Obstetricians/Gynecologists (OB-GYNs), and nurse practitioner (NP) organizations throughout the state with questions about their work to deliver oral health information to pregnant women.
- Eastern Virginia Medical School's (EVMS) Minus 9 to 5 Program leveraged partnerships with VAOHC, ODU, and Reach, Inc. (Reading Enriches all Children) to implement the "Brush Book Bed" (BBB) project in Tidewater that will reach several thousand children. This program distributed 1,500 BBB packets to family and children through the Home Visiting Alliance, Head Start, Reach Bright Start Outreach, and the EVMS Community

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

Day. The BBB packets included materials from the VAOHC highlighting the Medicaid dental benefit for pregnant women and how to find dental providers.

- Department of Behavioral Health and Developmental Services (DBHDS) is working on legislation to allow their hygienists to deliver the same remote supervision services as VDH-employed dental hygienists.
- Family Lifeline’s home visitors shared that the community health nurses are providing oral health education, and fluoride varnish.
- The VAOHC provided a policy update. A major priority for VAOHC is a budget amendment to study the cost of dental-related emergency department (ED) visits. In other states, dental problems are among the top reasons why uninsured individuals visit the ED. The budget amendment and the study results will be reported back to the budget committees so they will get to review the findings and the fiscal impact of dental-related issues. It may also provide evidence to support a request for comprehensive adult Medicaid dental benefits in 2020. A comprehensive Medicaid dental benefit for all adults will increase utilization for the entire family and allow providers to continue treating pregnant women after their pregnancy Medicaid expires. In addition, the VAOHC is supporting legislation to allow DBHDS hygienists to practice under the same remote supervision provisions as VDH hygienists. The VAOHC also supports legislation to allow VDH to identify an entity to certify CHWs.
- VAOHC also discussed Richmond’s Safety Net Survey results. The VAOHC’s regional alliance in Richmond/Petersburg conducted a qualitative research study (with funding from Richmond Memorial Health Foundation) with Richmond-based safety net dental clinics to understand why patients who access medical services are not accessing dental services. VAOHC and Community Health Solutions interviewed 100 patients, 50 providers, and 50 patients who were referred for dental care. There were significant differences in the reasons patients offered for not seeking care and the reasons providers proposed patients were not seeking care. The primary reason that patients reported not accessing care was cost; patients also lifted up issues related to shame and embarrassment, and pointed to a lack of cultural competency by providers and office staff. In addition to cost, providers indicated they thought the reason patients did not access dental services was that they did not care; and, the second reason was transportation. The VDH DHP is interested in collaborating with a group to work on cultural competency training opportunities. The VAOHC shared a handout that encourages all states to reimburse for oral health services based on the American Academy of Pediatrics’ (AAP) Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) protocol. Virginia has room for improvement to match the AAP protocol, specifically in the areas of fluoride varnish and oral health assessments. The VAOHC staff will meet with the Department of Medical Assistance Services (DMAS) at their Managed Care Organizations (MCO) meetings to reinforce the importance of matching the AAP protocol.

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

The VAOHC will continue to coordinate the EDHAT/PIOHQIE PAB activities including sharing responsibility of community ownership to sustain project services. The EDHAT/PIOHQIE PAB member list has been updated to include members who are currently involved, and will continue to be involved after the PIOHQIE grant ends. (Responds to Activity 1.1.2) (Attachment 2) The next EDHAT/PIOHQIE PAB will gather in June 2019.

b. Accomplishments

Objective 2: By July 2019, expand the role of the VDH Remote Supervision Dental Hygienists (RSDHs) in 14 local health districts to improve access to care for pregnant women and infants and increase collaboration with medical and dental professionals in those communities.

During this reporting period, the DHP is fully staffed with ten remote dental teams, consisting of a registered dental hygienist and a dental assistant. The remote dental teams continue to provide preventive services in the Special Nutrition Program for Women Infant and Children (WIC) Clinics by applying fluoride varnish to the teeth of children and providing anticipatory guidance for the parent or caregiver. The teams also continue to provide preventive dental services that include oral health education for pregnant women in 15 local health districts. (*Responds to Activity 2.1.1*)

The RSDHs work collaboratively and continue to share their successes and proven best practices with each other during monthly conference calls throughout the year. The monthly conference calls provide an opportunity to review new protocols and share new resources related to pregnant women and infants. (*Responds to Activity 2.1.14*)

Between September 2018 and March 2019, the RSDHs conducted oral screenings of 212 children under the age of one, as well as preventive dental services and education to 253 pregnant women in WIC. One RSDH provides preventive services for Children with Special Health Care Needs (CSHCN) at Southwest Virginia Care Connection for Children (CCC) Pediatric Medical Specialty Clinics. In those medical specialty clinics, during this period, 14 children received oral screenings and fluoride varnish applications, 14 caregivers received oral health educational sessions, and 44 individuals received a referral to a dentist for treatment. The VDH DHP continues to provide pregnant women with referral and follow-up information regarding dental care. (*Responds to 2.1.8*)

In addition, one RSDH trained 40 medical residents at the Virginia Tech School of Medicine, and together they will train 14 pediatric/family medicine offices in Southwest Virginia to apply fluoride varnish.

The DHP continues to update the existing BSB, Fluoride Varnish Program in-person and online medical provider trainings and handbook, as needed. (*Responds to Activity Q2.*) One new update in August 2018 included a pre-course knowledge assessment to match the post-course assessment. The inclusion on TRAIN should allow better tracking of the medical providers trained.

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative

During this period, social media messages on the VDHLiveWell site with oral health information and other modalities were tracked. Facebook messages reached 2387 people with 84 engagements and 27 Tweets receive 8680 impressions and 81 engagements (likes, retweets, and comments). Finally, VDHLiveWell made two post on Instagram about oral health during this period, receiving 67 engagements (likes, comments).

The VDH Communications Department (VDHLiveWell), through collaboration with the DHP, added online resources for all external and internal partners to share during National Children’s Dental Health Month (NCDHM) in February 2019. VDH posted NCDHM messages on Facebook, Instagram and Twitter. During February, the communications team reported seven FB posts, 11 Tweets, and one Instagram post. The NCDHM Facebook post reached 1123 people, received over 1.2K impressions, and 48 engagements (likes, shares, comments, etc.) The NCDHM Twitter posts received 3425 impressions and 27 engagements. The Instagram post received 32 engagements.

In addition, the VDH DHP’s “*Oral Health During Pregnancy, Practice Guidance for Virginia’s Prenatal and Dental Providers*” was developed with permission from the Maryland Department of Health to adapt their guidelines to support Virginia’s prenatal and dental providers in addressing the needs of pregnant women. (*Responds to Activity 2.1.11*)

Objective 3: By July 2019, build and strengthen sufficient workforce capacity to support the delivery of professional dental services for pregnant women and infants

The DHP continues to collaborate and maintain a working relationship with organizations that support the delivery of professional dental services for pregnant women. The VAOHC continues to provide support to the PIOHQIE grant consultant as the network liaison to lead the PIOHQIE project’s collaborative process as Grant work continues. The VAOHC partners with organizations and community leaders with the power to effect policy and system changes. (*Responds to Activity 2.1.12 Q1-4*)

During this time period, the VAOHC highlighted and updated materials on its website. At every training for CHWs and HVs, the VAOHC directed attendees to this material on their website. As a result, the oral health and pregnancy pages were viewed 462 times and resources were downloaded 31 times.

In November, the VAOHC held the 2018 Virginia Oral Health Summit for 217 attendees with the goal of assisting community partners with incorporating oral health messages, services, and referrals into their business activities. The event included messaging on the relationship between oral health and poverty and other social determinants of health, and building systems of care for vulnerable populations. The VAOHC included a handout on oral health and pregnancy in the Virginia Oral Health Summit program book. The handout included information on the Medicaid pregnancy dental benefit and the importance of oral health care during pregnancy. (*Responds to Activity 3.1.1 (Attachment 3)*)

In addition, the VAOHC staff presented to the Dental Advisory Committee, an appointed group of dental stakeholders who oversee the Medicaid dental program. This presentation included an

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative

update on the VAOHC efforts to improve utilization of the Medicaid dental benefit and the need for education about the benefit in the community, especially among pregnant women and dental providers.

VAOHC wrote a blog post in partnership with the Children's Dental Home Project (CDHP) that focused on the importance of accessing dental care during pregnancy. CDHP shared the bog post in its September 2018 monthly newsletter, which has an audience of over 1,000 oral health professional, advocates, funders, and state health departments. Additionally, CDHP tweeted out the blog frequently in two weeks following its publication. During that time, messages sharing the link received more than 2,830 impressions. (*Responds to Activity 3.2.8*)

The L. Douglas Wilder School of Government and Public Affairs research team reported on the experience of conducting in-depth interviews with pregnant women regarding the Smile for Children (SFC) Medicaid benefit. This qualitative study was initiated with the goals being to understand the women's experiences with the SFC benefit for pregnant women, barriers to use, and plans for on-going dental care following their period of eligibility. A summary of this qualitative study is included in the *Telling Your Story*, Evaluation section - e.

Virginia's Individuals with Special Health Care Needs (ISHCN) Oral Health Program continues to focus on oral health for ISHCN. The ISHCN program collaborates with a variety of stakeholders including the DBHDS Direct Support Professionals (DSP), VCU SoD, Virginia Dental Association Foundation (VDAF), and the VAOHC. The Oral Health Care Access for ISHCN trainings previously included three main components in five geographic areas of the Commonwealth. The components included the DBHDS DSP oral health training, Community Conversations regarding oral health access to care for ISHCN in a specific region, and dental provider continuing education regarding oral health care of ISHCN. (*Responds to Activity 3.1.9*) For SFY19, all project partners agreed to discontinue the Community Conversation piece because sufficient representative information was available from the past two years.

The VAOHC and VDAF promote the remaining events in their online newsletters and on their website to expand the potential pool of practitioners and other attendees. Between September 2018 and March 2019, four DBHDS DSP oral health courses trained 60 direct support professionals and four continuing education courses provided training to 94 dental professionals, including discussions regarding dental care of pregnant women. (*Responds to Activity 3.1.3*)

In January 2019, the ISHCN Oral Health Coordinator presented a two-hour lecture to 20 dental hygienists at the Northern Virginia Community College regarding oral health for perinatal women and ISHCN. (*Responds to Activity 3.2.8*) The VAOHC and VDH DHP continue to offer trainings for family educators, nurses, family support workers, community health workers, and associated staff from any home visiting or family education program serving pregnant women, families with infants, toddlers, school age children, and families of ISHCN. The trainings provide crucial information necessary for grant-funded initiatives to sustain the PIOHQIE project.

The DHP continues to collaborate with the Olde Towne Medical Dental Center (OTMDC), a community-based rural health clinic for the uninsured. OTMDC continues to develop a system

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

for medical and dental integration, to analyze client data related to prenatal health and birth outcomes, and report findings to the community and other stakeholders.

At the January 2019 VDH DCFH family planning webinar, the Perinatal and Infant Oral Health Consultant presented to 76 local health department staff on efforts to improve utilization of the Medicaid dental benefit for pregnant women and the need for education about the Medicaid dental benefit within the community, especially among pregnant women and dental providers. The DCFH and the DHP program are currently reviewing oral health questions to include on family planning medical history forms.

Objective 4: Enhance collaboration with partners to create a sustainable environment for connecting pregnant women and infants to oral health services through developing two pilots, which have the potential to be expanded statewide.

Meetings of organizations and community leaders with the power to affect policy and system changes continue to be held and have active participation. The DHP developed an oral health HV model that has enhanced collaboration among local program partners to improve access to dental care. The DHP targeted health districts with significant HV partners and provided training regarding oral health for pregnant women and infants and put in place a referral system for women enrolled in the HV programs. The oral health trainings had a strong focus on cultural competency and using key messages from anticipatory guidance developed from evidence-based sources, such as Bright Futures, on dental care during pregnancy to educate clients. The goal of the oral health trainings is to provide the family support workers, family educators, CHWs, and community health nurses with information on oral health and dental care and to empower them to help improve access to oral health information for pregnant women and infants. *(Responds to Activity 4.1.3)*

During this time period, with the assistance of the VAOHC, Family Lifeline in Richmond organized an oral health training for their HVs. The pre- and post-knowledge surveys showed an increase from 95% to 99% correct answers. It was determined that this group had sufficient knowledge of most of the information before the course and may be better suited to receive more in-depth oral health information than the basic information taught. The course evaluations for the overall course were 95% positive and 99% positive for the instructor. *(Responds to Activities 4.1.4 and Q4.1)*

The VAOHC partnered with the DHP and the Children's Health Investment Partnership (CHIP) of Virginia to provide oral health trainings to Family Support Workers and CHWs. Trainings were provided for 88 home visitors, family educators and support workers, and nine nurses at four sites across the state. Each training was a three-hour course presented by DHP staff. Topics included oral health during pregnancy, infant oral care, oral health nutrition, and oral disease processes and prevention. Post-test scores have shown an increase in correct answer over pre-test scores for all participants, from 83% to 96 % correct. *(Responds to Activities 4.1.6 and Q4.2)*

The VDH HV program, Early Impact Virginia, and James Madison University (JMU) collaborated with the Iowa Department of Public Health and the University of Kansas to develop

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative

the Institute for the Advancement of Family Support Professionals, a free, on-line training platform for HVs that offers more than 50 competency based e-learning modules for HV professionals. Neither Iowa nor Virginia has an oral health HV training online. The team is currently reviewing the DHP oral health HV training and evaluating it for possible augmentation for online use. Iowa Department of Public Health applied for, and received, a small grant to develop an oral health e-learning module for HVs, and will be contracting directly with JMU in Virginia to develop the module. Additionally, for the HV collaboration, grant activities are planned to address training needs beyond the grant period. DHP partners, Family Lifeline and CHIP, will offer a web-based standardized curriculum and other resources to sustain training efforts of non-dental health providers.

Even with Medicaid coverage, low-income pregnant women and very young children may have dental care access issues due to gaps in networks of participating dental providers in certain parts of the state. The state Medicaid office continues to work to improve provider participation rates in underserved areas of the Commonwealth. Obstetricians and pediatricians express much frustration about not having local dental providers willing to treat pregnant women and provide the age one dental visit, not to mention the overwhelming need for restorative care for young children. Identifying a dentist with subject matter expertise in pregnancy and infant care to provide trainings targeting Medicaid dental providers is an important strategy to increase knowledge and overcome fears and other barriers for dental professionals.

In September 2018, the ISHCN Oral Health Coordinator provided a three-hour oral health training for 28 HVs/family educators in Richmond with a focus on oral health during pregnancy, early childhood, and for CSHCN. This course is an expansion of the previous program pilot. (Responds to Activity 4.2.6). The presentation was very well received with the large majority of participants (97%) agreeing the event was of quality and they learned from the experience. The 25 pre-tests returned at the training had a mean score of 76% and the 26 returned post-tests had a mean score of 98%. The majority of respondents reported they would return if the training were offered again. The overall course objective was to improve access to oral health information and dental care for pregnant women and children in at risk families. (*Responds to Activities 4.2.5 and 4.2.6*) In the final year of the PIOHQIE grant, DHP staff plan to expand this training to teach dental hygiene students in community health programs to educate family educators on this subject matter with the goal to creating a sustainable educational program.

The DHP Adult and Chronic Disease Oral Health Coordinator continues to include pregnant women and perinatal oral health information in adult oral health programming, when appropriate. In October 2018, this staff member provided a 60- minute presentation that included information on perinatal, prenatal, and early childhood oral health to 22 medical assisting students at Eastern Shore Community College in Onley, Virginia. During this annual educational event, each participant is provided a *Bright Futures Oral Health Pocket Guide*, as well as supporting oral health materials and resources for care specific to the Eastern Shore region. (*Responds to Activity 4.1.4*)

In addition, the DHP Adult and Chronic Disease Oral Health Coordinator participated in two exhibit fairs where oral health materials and resources were distributed. The first event was a health fair with the Patowmack Tribe in Stafford, Virginia. This Native American tribe had

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative

requested oral health information prior to this event and therefore the information was well received. While this event was attended by all age groups, specifically 46 people received perinatal, prenatal, and early childhood information. This annual wellness gathering was supported and organized by the Rappahannock Area Health District, allowing this information to also be shared with the local health district staff present at the event. Materials and resources, including the *Bright Futures Oral Health Pocket Guide* were distributed to be taken back to the local clinic for use by their medical staff.

The second exhibit event was at the annual meeting for the Virginia Association of Free and Charitable Clinics. Virginia's network of free clinics serves as a vital safety net clinic system, providing both medical and dental care to underserved populations in Virginia. The staff and executive directors of free clinics statewide attended this event, held in Northern Virginia. Over 50 clinics were represented at the meeting and perinatal, prenatal, and early childhood oral health information was distributed to 125 people. The majority of participants took applicable resources back to their respective clinics to share with staff and volunteer providers. This proved beneficial as educational resources could be further disseminated beyond this event.

The DHP Adult and Chronic Disease Oral Health Educator and VAOHC staff continue to actively participate with the Virginia CHW Advisory Group, and specifically, with the Training and Curriculum subcommittee. The overseeing body with the Virginia Board of Certification (VCB) continues to accept applications of credentialed individuals currently working as CHWs, and individuals interested in becoming trained to work as CHWs. The certification process for CHWs in Virginia has been developed and requires completion of an approved training curriculum. During this reporting period, domains and session topics for the curriculums were finalized and approved. Oral Health is included in three of the seven required domains and must be a part of the training program in order to be an approved curriculum. The VDH DHP has offered to provide oral health training for Certified CHWs who have been "grandfathered in" prior to the oral health curriculum requirement. This training can be offered in partnership with the Virginia CHWs Association. Continuing to develop and make available oral health resources, including the *Smiles for Life* online curriculum, will help to disseminate oral health information and improve access to care for pregnant women, infants and children throughout Virginia.

Objective 5: By July 2019, expand the existing Virginia Oral Health Surveillance System to include data collection, analysis, and reporting of indicators regarding pregnant women and infants and evaluate grant activities.

VA PRAMS data is survey data collected annually by VDH in collaboration with the Centers for Disease Control and Prevention. A data sharing agreement was completed between VDH and VCU for sharing of survey results for a VCU project. This study was approved by the VCU Institutional Review Board (IRB), and by VDH IRB as an exempt study. Three-year data were pooled together and average estimates for the 2012-2014 period were calculated to study service utilization during pregnancy.

Main outcome variables were before pregnancy dental visits and during pregnancy dental visits among Virginia women. A total of 1,344 weighted respondents represented approximately 293,608 women in Virginia. Overall 56% of women reported a dental visit before pregnancy,

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative

and 47% of women reported dental cleaning during pregnancy. Nearly 60% of women were Non-Hispanic white, 78% were between 20-34 years of age, and 67% reported having dental insurance. Oral health knowledge was high, with 88% knowing that it was important to take care of their teeth and gums during pregnancy. A little over half (52.6%) of women reported that a health provider had talked with them about oral health during their pregnancy. Dental insurance and oral health knowledge were the main predictors of before-pregnancy dental visits. During-pregnancy dental visits were strongly associated with before-pregnancy dental visits, oral health promotion by health provider, and dental insurance.

This analysis provides a baseline dental utilization measure among Virginia women suggesting that improving the use of routine dental visits before pregnancy, increasing access to dental care, and engaging healthcare providers to promote oral health can impact the use of dental care during pregnancy.

This study was submitted to the Journal of Women's Health, a peer-reviewed journal that advances research on women's health issues. The paper has been accepted and will be published in October issue of the Journal. To further examine changes after the 2015 policy implementation, newer PRAMS data will examine the impact of the new policy on a population level. The IRB was amended, completed, and approved in April 2019. The new data (2015-2017) will examine the dental benefit policy's influence on access to care among Medicaid enrolled women and its impact on reducing health disparities in Virginia.

This year, the BSS with Pregnant women expanded Oral Health Surveillance System activities into maternity and family planning clinics. The data collection and entry for this survey is still in progress, however, preliminary analysis has been performed on the available pregnant women BSS data. Thus far, a total of 549 women were screened across 19 sites within five health regions. Examiners

The DHP RSDH served as examiners for this survey and were calibrated using guidelines and information from the ASTDD. Staff continue to work with coordinators at each local health department to schedule the on-site oral health assessments for data collection. The oral health assessments for each of the pregnant women includes a survey questionnaire followed by a brief open mouth clinical exam. The purpose of the screening was to collect oral health data on untreated decay, treated decay, periodontal disease and urgent need for dental care. The assessment protocol was administered uniformly across all of the districts to ensure that the data was collected in a consistent, reliable manner for both the questionnaire and oral exam portions. No dental exams were conducted on any pregnant WIC participant without her informed, written consent. Data was collected and entered into the REDCap database and secured hard copies of the surveys in a restricted-access storage cabinet. Scheduled destruction of the documents follows retention and destruction guidelines.

Of the pregnant women screened, the race/ethnicity demographics were as follows Hispanic/Latino - 36.6%, Multi-racial - 5.1%, White - 27.7%, Black/African American - 27.3%, Asian - 3.1%, American Indian/Alaska Native - 0.4% and Native Hawaiian/ Pacific Islander - 0.2%. The largest age groups of women screened was 20-29 years at 58%, followed by 30-39 years at 30%, and 40-49 years at 2%. At screening, 59.4% of participants presented with untreated cavities,

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative

25.7% had treated decay, 66.1% presented periodontal disease, and 57.8% needed urgent care. When asked about having Medicaid, 54.1% of the women said they had Medicaid while 45.9% answered “No” to having Medicaid. When asked about having FAMIS, 11.1% of women said they had FAMIS, while 88.9% answered “No”. The majority of the women were screened during 27-40 weeks of pregnancy (39%), followed by 14-26 weeks of pregnancy at 36%, 0-13 weeks of pregnancy at 21%, and 41+ weeks of pregnancy at 3%. When asked how often during the last year the women had painful aching anywhere in their mouth, 8.1% said “Very often”, 30.1% said “Occasionally”, 28.3% said “Hardly ever” and 33.6% said “Never”. The majority of the women had visited a dentist within the last year (31.6%) or around 1-2 years ago (31.8%). The rest saw a dentist 3-5 years ago (19.4%) or 5+ years ago (17.2%). For questions regarding ER visits and dental insurance coverage, 7.6% of women had gone to an emergency room for a mouth related problem or pain during the last year; 29.9% of women screened had dental insurance that covered routine dental care in the 12 months before they got pregnant; and 10.2% of the women screened said that they were not being able to find a dentist or dental clinic that took pregnant patients. On questions about caring for teeth during their current pregnancy, the screening results included the following:

- 15.5% of women had their teeth cleaned by a dentist within the past year;
- 95.4% of women knew the importance of caring for their teeth and gums during pregnancy;
- 47.2% of women had a dental or health care worker talk with them on how to care for their teeth and gums;
- 56.0% of women knew that they had insurance to cover their dental care during pregnancy;
- 38.2% of women screened reported needing to see a dentist for a problem; and
- 10.4% of women had gone to a dentist or dental clinic about a problem during their pregnancy.

Barriers that made it difficult for the pregnant women to visit the dentist or dental clinic during pregnancy included the following:

- 10.2% of patients could not find a dentist or dental clinic that would take pregnant patients;
- 10.2% of patients could not find a dentist or dental clinic that would take Medicaid patients;
- 27.0% of women did not think it was safe to go to the dentist during pregnancy; and
- 28.7% of women could not afford to go to the dentist during pregnancy.

Additionally, 42.3% were not aware that they had dental insurance through Medicaid while pregnant before they were screened.

This information will be disseminated to internal and external stakeholders once complete. (Responds to Activities 5.1.2, Q5.1, 5.1.3, and 5.1.4)

C. Participation in the COHSII led activities

To ensure measures are in place to increase sustainability, the VDH DHP continued participation in a Learning Collaborative with the Maternal and Child Health Bureau (MCHB), PIOHQI

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative

COHSII, and the Frameshift Group. The focus of the collaborative was on QI measures and sharing other state grantee activities and has been extremely helpful to Virginia's PIOHQIE project.

In September 2018, at the in-person meeting in Alexandria, Virginia, a presentation by COSHII set the tone to identify small adjustments that can be made to PIOHQI project activities in the following three months that could improve the ability to meet project goals. Through state team presentations and group discussions with facilitated sessions, participants left the in-person meeting with specific ideas about how to ensure sustainable interventions that promote utilization of oral health services after partnerships end. Virginia focused on ways to improve existing strategies for BSS data collection and analysis to sustain practices in the future. In addition, Virginia was able to have a dialogue with other state grantees on using oral health data to encourage program sustainability.

The PIOHQIE webinar meetings, held during this reporting period, have been more interactive, allowing other state grantees, including Virginia, to share effective activities that work within their programs. In December 2018, the Perinatal and Infant Oral Health Consultant provided information shared at professional meetings, such as the VAOHC summit, to promote PIOHQI goals and activities. Additionally, Arizona and South Carolina discussed professional meetings in their states that were also successful. At the February 2019 meeting, Virginia shared some of our successes and challenges in working with the HV programs.

Participation in COSHII has been very informative and instrumental in supporting Virginia's HV programs descriptive submission to the ASTDD, which included resources, experiences, and lessons learned. Of particular usefulness was the sharing of Virginia's work with HVs, at the request from AMCHP, for Virginia to submit to the Innovation Station.

The NLN continues to facilitate discussion on strategies and activities with multiple partners to ensure that the right systems are in place so oral health is imbedded and measured in HV and WIC programs across Virginia. To continue to increase sustainability with PIOHQIE efforts in the final phase of the grant, the DHP looks forward to the opportunity to learn more with other state grantees about perinatal oral health initiatives at the May final in-person meeting in Arlington, Virginia.

d. Contributions to Strategic Framework

Contributions to the strategic framework progress continue and correspond to the five preliminary steps that make up the national implementation framework as listed in the project narrative section. Activities that involve surveys, including the 2019 BSS with pregnant women in local health departments fall under step i. Training activities are ongoing and fall under step ii, including the HV, CHWs, community health nurses trainings and webinars. Step iii activities center around the VAOHC's engagements, messaging and strategies for disseminating information to the Regional Alliances' workgroups and at the VAOHC summit. Also included in this step would be the VAOHC's successful presentation to the Dental Advisory Committee (DAC), which is a group of dental stakeholders who advise the Medicaid dental program. VAOHC also connected Birth in Color RVA, a collaborative that seeks to improve maternal and

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

child health outcomes in the African American community, with a local pediatric dentist to develop a strategic approach to medical and dental integration models with the potential to expand statewide and this fits into step iii. Step iv activities continue through the PIOHQIE PAB and involve actions to sustain programs with perinatal and early childhood leaders including mandating dental related HV intake questions; DentaQuest and DMAS outreach efforts; and the BSB Program clinical services to infants. The DHP continues to incorporate program activities that involve rapid cycles of continuous QI measures to complete the implementation framework process as written in step v.

e. Project Timeline

Significant progress was made toward Year 4 activities during this reporting period with nearly all activities planned to date being fully implemented. After the grant ends, many of the existing activities will continue to be implemented with new timelines to reflect sustained work going forward. Most importantly, implementation of formal data collection will continue with HV programs and QI tools will be used to continue to assist with the timely completion of QI evaluation for all projects.

II. SIGNIFICANT CHANGES:

During this performance period, the PIOHQIE grant coordinator prepared two national submissions related to perinatal and infant oral health. “Impacting Oral Health in the Community by Engaging Home Visitors and Family Educators to Improve Oral Health Outcomes for Pregnant Women and Infants: One State’s Experience,” was submitted to both the ASTDD Best Practice Approach review, and to AMCHPs Innovation Station.

Between October 2017 and May 2018, the VCU SoD-Oral Health Services Research Core conducted a study to understand oral health knowledge and awareness of the pregnancy dental benefit among women in Virginia. A convenience sample of women visiting the VCU Health Center or VCU Pediatric Dental Clinic was collected from respondents answering recruitment flyers. A woman was eligible to participate in the study if she was between 21 to 45 years of age, was a mother to a young child or if she was currently pregnant. The study was approved by the VCU IRB board as an exempt study. Data was collected from October 2017 to May 2018. The study results were presented at various research meetings including the National Oral Health Conference, which was attended by more than 600 attendees engaged in dental public health programs and research.

There were no significant changes that adversely impacted program activities or evaluation during this reporting period.

III. EVALUATION

As PIOHQIE grant projects progress with the goal of increasing sustainability, data collection and surveillance continues to monitor and assess ongoing processes in the implementation of the selected models.

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

Type and Number of Testing (Learning Laboratory) and Other Intervention Sites

a. Increase opportunities for access to oral health care

Site Type	Number of Testing (Learning Sites)	Number of Other Intervention Sites
FQHCs-CVSS, Olde Towne Medical/Dental Center (OTMDC)	2	2
WIC	20 WIC BSS Sites in 17 Health Districts	10 RSDHs work in WIC Sites in 15 Districts
HV- HHFs, Norfolk, Hampton Healthy Families, Richmond-CHIP of Virginia and Families Forward	2	4
Community Clinics - Crossover Health Care Ministries, Northern Neck, and OTMDC	2	3
Other: VCU SoD, ODU Dental Hygiene students, Northern Virginia Dental Hygiene students, Medical Assisting students at Eastern Shore Community College, Medical Providers at Carilion Hospital	1	5

b. Increase opportunities for training on oral health care, including training on oral health clinical competencies

HV/Family Educator & Support Workers/ and CHWs trainings: The VAOHC has partnered with the DHP, Healthy Families, and CHIP of Virginia in Richmond to provide oral health trainings to Family Support Workers and CHWs. In September 2019, one training was provided for 28 individuals, including two nurses. The second training was held in October 2018 for 38 Family Support Workers and CHWs. Each training is a three-hour course presented by DHP staff. Topics include oral health during pregnancy, infant oral health care, oral health for children with special health care needs, oral health nutrition, and oral disease processes and prevention. Post-test scores for the trainings show an increase in correct answers over pre-test scores for all participants, from 76% to 98% correct.

Type of Provider attending In-person Home Visitor/Family Educator trainings	Number of Completed Pre-Tests	Number Completing Training	Number of Completed Post-Tests
Primary care providers (e.g. family physician, pediatrician, NPs, nurses)	2	2	2
Prenatal care providers (e.g. ob/gyn provider, midwife)	0	0	0
Oral health providers (e.g. dentist, dental hygienist)	0	0	0
Other (e.g. CHWs)	23	64	24
Total	25	66	64

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

To assist community partners with incorporating oral health messages, services, and referrals into their business activities, the VAOHC provides the Virginia Oral Health Summit annually. Of note, the 2018 meeting included messaging on the relationship between oral health and poverty, and other social determinants of health. After attending the Virginia Oral Health Summit, most survey respondents felt that they gained additional understanding on incorporating oral health messages and services and plan to apply information learned at the Summit to their daily work.

Type of Provider- <i>VAOHC Summit</i>	Number of Completed Pre-Tests	Number Completing Training	Number of Completed Post-Tests
Primary care providers (e.g. family physician, pediatrician, NP)	N/A	8	6
Prenatal care providers (e.g. ob/gyn provider, midwife)	N/A	0	0
Oral health providers	N/A	57	53
Other (e.g. CHW)	N/A	152	39
Total		217	98

Virginia ISHCN- Virginia’s ISHCN Oral Health Program continues to focus on oral health for ISHCN. ISHCN Program staff work with a variety of stakeholders including the DBHDS, DSPs, VCU SoD, VDAF, and the VAOHC. Between September 2018 and March 2019, four DBHDS DSP oral health courses trained 60 direct support professionals and four continuing education courses provided training to 94 dental professionals, including discussions regarding dental care of pregnant women. In January 2019, the ISHCN Oral Health Coordinator also presented a two-hour lecture to 20 dental hygienists at the Northern Virginia Community College regarding oral health for perinatal women and ISHCN.

Type of Provider attending ISHCN In-person dental provider trainings	Number of Completed Pre- Tests	Number Completing Training	Number of Completed Post-Tests
Primary care providers (e.g. family physician, pediatrician, NP)	n/a	0	n/a
Prenatal care providers (e.g. ob/gyn provider, midwife)	n/a	0	n/a
Oral health providers (e.g. dentist, dental hygienist)	n/a	114	n/a
Other (e.g. CHW)	n/a	0	n/a
Total	n/a	114	n/a

c. Increase opportunities for outreach and oral health education

Education is provided consistently in all oral health programs. VCU OBGYN clinics were provided with oral health educational brochures that can be given to eligible patients explaining the importance of oral health, as well as providing information about the pregnancy Medicaid benefit. One testing site, OTMDC, continues to provide education to pregnant women along with

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

anticipatory guidance. The education is included for women in Diabetes clinics. In addition, the RSDHs provide education to pregnant women and women who have young children in WIC clinics, and to pregnant women who participate in the BSS.

Activity	Number of Completed Pre-Tests	Number Completing Education	Number of Completed Post-Tests
VCU SoD	No Pre-test	118	No Post-tests
OTMDC	No Pre-test	188	No Post-tests
RSDHs	No Pre-test	253	No Post-tests
BSS	No Pre-test	549 (In process)	No Post-tests
Total			

BSB In-Person and On-line Trainings: The DHP continues to update the existing BSB in-person and online medical provider trainings and handbook, as needed. Between September 2018 and March 2019, two private-office BSB in-person trainings were conducted for 15 individuals: six physicians, six nurses, one medical assistant, and two other office staff members in Ashburn and Hampton. Post-test scores for the two in-person trainings show an increase in correct answers over pre-test scores for all participants from 79% to 85% correct. Within the same time period, 20 people (19 from Virginia) completed the BSB online training: one nurse practitioner, 17 nurses, one dentist from the Florida Department of Health, and one lay health professional. Post-test scores during this time show an increase in correct answers over pre-test scores for all participants, from 79% to 89% correct.

Type of Provider In-Person BSB Training	Number of Completed Pre-Tests	Number Completing Training	Number of Completed Post-Tests
Primary care providers (e.g. family physician, pediatrician, NPs, nurses)	12	12	12
Oral Health providers (dentist, dental hygienist)	0	0	0
Other (e.g. medical assistants, CHWs, office staff)	3	3	3
Total	15	15	15

Type of Provider Online BSB Training	Number of Completed Pre-Tests	Number Completing Training	Number of Completed Post-Tests
Primary care providers (e.g. family physician, pediatrician, NPs, nurses)	18	18	18
Oral Health providers (dentist, dental hygienist)	1	1	1
Other (e.g. medical assistants, CHWs, office staff)	1	1	1
Total	20	20	20

d. *Increase opportunities for utilization of oral health care.*

RSDHs conducted oral screenings of 212 children under the age of one and provided preventive dental services and education to 253 pregnant women in WIC clinics.

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

Number of Pregnant Women, Infants, and Children Receiving Oral Health Care

Period of Service	Number of Pregnant Women Clients Enrolled in Site	Number Receiving Oral Health Education	Number Receiving Anticipatory Guidance	Number of Referrals to Providers for Dental/Oral Health Care	Number Receiving Preventive Dental/Oral Health Care (oral screening only)	Number Receiving Restorative Treatment	Number with Treatment Completed
8/1/18-3/31/19	unavailable	253	n/a	254	138	n/a	n/a

Period of Service	Number of Infants (0-1) Clients Enrolled in Site	Number Receiving Oral Health Education	Number Receiving Anticipatory Guidance	Number of Referrals to Providers for Dental/Oral Health Care	Number Receiving Preventive Dental/Oral Health Care (oral screening and/or fluoride varnish)	Number Receiving Restorative Treatment	Number with Treatment Completed
8/1/18-3/31/19	unavailable	406	n/a	204	212	n/a	n/a

Period of Service	Number of Children (1-5 yrs) Clients Enrolled in Site	Number Receiving Oral Health Education	Number Receiving Anticipatory Guidance	Number of Referrals to Providers for Dental/Oral Health Care	Number Receiving Preventive Dental/Oral Health Care (oral screening and/or fluoride varnish)	Number Receiving Restorative Treatment	Number with Treatment Completed
8/1/18-3/31/19	unavailable	956	n/a	547	1359	n/a	n/a

Basic Screening Survey: The BSS is a grant deliverable in each year of the PIOHQIE Grant. In addition to gathering oral health information, participants are educated regarding perinatal and infant oral health and provided resources and assistance with accessing care.

Period of Service	Number of Clients Enrolled in Site	Number Receiving Oral Health Education	Number Receiving Anticipatory Guidance	Number of Referrals to Providers for Dental/Oral Health Care	Number Receiving Preventive Dental/Oral Health Care	Number Receiving Restorative Treatment	Number with Treatment Completed
Baseline	599	599	599	198	218	218	75.3% (treatment

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

							completed in past)
Year 2	596	596	596	263	188	249	67.1% (treatment complete
Year 3 (In process)	549	549	549	326	85	141	N/A

The OTMDC continues to utilize existing system-wide processes for a medical and dental integration management system in a community-based rural health clinic setting; document integration activities and processes that work; develop a system to analyze client data relating dental visits to prenatal health and birth outcomes; and report findings.

Olde Towne Medical and Dental Center

Period of Service	Number of Clients Enrolled in Site	Number Receiving Oral Health Education	Number Receiving Anticipatory Guidance	Number of Referrals to Providers for Dental/Oral Health Care	Number Receiving Preventive Dental/Oral Health Care	Number Receiving Restorative Treatment	Number with Treatment Completed
01/01/2015 Thru 12/31/2015	457	126	126	457	126	21	15
01/01/2016 Thru 12/31/2016	467	151	151	467	151	78	18
01/01/2017 Thru 12/31/2017	484	178	178	484	178	30	34
01/01/2018 Thru 12/31/2018	452	188	188	452	183	28	25

VCU SoD-Oral Health Research Services Core –Between September 2018 to March 2019, there were a total of 118 women over age 21 who utilized dental Medicaid benefits. The total cost of services delivered was nearly \$43,000. More than half of the cost went toward endodontic procedures and nearly 30% were oral surgery related.

Virginia Commonwealth University School of Dentistry-Oral Health Research Services Core

Period of Service	Number of Clients Enrolled in Site	Number Receiving Oral Health Education	Number Receiving Anticipatory Guidance	Number of Referrals to Providers for Dental/Oral Health Care	Number Receiving Preventive Dental/Oral Health Care	Number Receiving Restorative Treatment	Number with Treatment Completed
Baseline	234	234	234	113	40	19	19
Year 2	69	69	69	112	112	95	95
Year 3	118	118	118	211	118	110	118

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

According to the pregnancy-related data on indicators collected through the Virginia Pregnancy Risk Assessment Monitoring System (VA PRAMS) during the 2017 data collection cycle, 47.76% of surveyed women reported not having a dental visit during their pregnancy; this percentage was much higher in Richmond city (55%). Hispanic women (59.6%) were more likely to report not having visited a dentist while pregnant versus Black, non-Hispanic (52.4%) and White, non-Hispanic women (41.6%). According to 2017 VA PRAMS, 86% of pregnant women knew the importance of caring for their teeth and gums during pregnancy; however, only 45% of women had a dental visit within the last year to have their teeth cleaned. Although 19.7% of pregnant women in Virginia needed to see a dentist for a problem in 2017, only 14.5% went to see a dentist about a problem.

Period of Service	Number of Clients Enrolled in Site	Number Receiving Oral Health Education	Number Receiving Anticipatory Guidance	Number of Referrals to Providers for Dental/Oral Health Care	Number Receiving Preventive Dental/Oral Health Care	Number Receiving Restorative Treatment	Number with Treatment Completed
Baseline-PRAMs (2012-2014)	1,344	1,344	Unknown	Unknown	Unknown	Unknown	Unknown
Baseline (SFY 2015 March-July)	1,333	1,333	Unknown	Not Applicable	7,922 claims	TBD	TBD
Year 2 (SFY 2015-2016)	3,955	3,955	Unknown	Not Applicable	35,408	TBD	TBD
Year 3 (SFY 2017-2018)	5,308	5,308	Unknown	Not Applicable	55,814	TBD	TBD

Data from Medicaid claims was utilized to examine the impact of the Medicaid dental benefit policy on its intended recipients. Data from March 2015-2017 was requested and analyzed first. A total of 10,936 women who had at least one claim and were enrolled in Medicaid for one month or more were included in the analysis. Descriptive analysis suggests that utilization of dental benefit increased from 2015 to 2017. Of the total sample, nearly 56% of women were white, 37% black, and less than 1% were Hispanic. Nearly 85% of women were US citizens. The majority of women (57%) were enrolled for 3-12 months, whereas 33% were enrolled for more than 12 months. When categorized by DMAS regions, more than 75% were from Central Virginia, Winchester/Northern Virginia, and the Tidewater area. The other regions of the Commonwealth constituted the remaining 25%.

There were more than 99,000 total claims, of which 7,922 claims were in 2015; 35,408 in 2016; and the highest were in 2017 (55,814). On average, the number of dental visits, claims, and costs increased each year from 2015 to 2017. Average cost per patient increased from \$564 in 2015 to

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

\$978 in 2017. When classified by visit, those who had more than one visit increased in volume and percentage from 2015-2017.

The data was categorized further by type of visit to understand the service use among these women. In 2017, 6% of all claims were for preventive services, 35% were for diagnostic services and remaining were for treatment services. When receipt of services was categorized at the patient level, 50% of patients received preventive services, 94% received diagnostic services, and 76% received treatment services. Virginia Medicaid does not include comprehensive dental care coverage for low-income adults and these women may have become eligible for dental care solely due to pregnancy, so there was a high demand for treatment services.

Survey results have been presented at research meetings, including VCU's, Women's Research Day. A manuscript describing findings is being prepared and will be submitted to the Virginia Dental Association Journal, a peer-reviewed journal that reaches many Virginia dental providers.

To get a better understanding of dental care utilization and to answer some of the questions that emerged from review of earlier analysis, VCU SoD requested data on all pregnant women who are eligible for dental benefits irrespective of their dental claims. They will assess the use of benefits and how these two groups, those who have dental visits compared to those who do not, differ. Further aims are to utilize this data and link it with families to understand family dental care utilization patterns and impact of pregnant women's use of services on the oral health of their children and family members.

e. Telling Your Story

The VDH DHP has two examples of activities at intervention sites to highlight in this grant report. The activities include the VCU SoD medical and dental integration efforts, and VCU L. Douglas Wilder School of Public Affairs project.

VCU-SoD Urgent Care Dental Clinic

Intervention Site: VCU OBGYN clinics

Location: VCU OBGYN Nelson Clinic, 401 N. 11th Street, Richmond, VA 23219

Target Population: Pregnant patients seeking dental care

Service Provided: Oral health education and information on the SFC Medicaid dental benefit

Implementation Process: VCU Dental Care is one of the largest safety net providers in the Richmond area. To engage OBGYN providers and develop a system of caring for the immediate needs of pregnant women, VCU SoD implemented an urgent care clinic for pregnant women. The development of this urgent care clinic, supporting education materials, and educational trainings for dental and women's health providers, are some key activities that VCU SoD has engaged in to improve the oral health of pregnant women. (*Attachment 4*)

**Perinatal and Infant Oral Health Quality Improvement Expansion Program
2019 Final Progress Narrative**

Results: From our previous pilot data from VCU OBGYN clinics, a substantial percentage of women do not have a dental home or dental provider during pregnancy. One challenge in the process is consistency of use of the electronic dental record and completion of the referral fields. The number of pregnant women using Medicaid benefits has increased during this reporting period; however, it is not clear how many of those were referred from OBGYN clinics and more specifically the VCU OBGYN clinic. VCU SoD is trying to establish a more streamlined system that will reduce variability and provide consistent data. In addition, a similar challenge on the VCU OBGYN side is the implementation of a referral system, as well as completion of dental-related questions in their electronic health forms. It is important to examine this and systematically explore the barriers for systems level change. Learning from other programs or practices who have engaged women's health providers, implemented referral systems, and successfully integrated oral health questions/assessments will be helpful.

VCU L. Douglas Wilder Graduate School of Public Affairs

Intervention Site: Richmond City WIC Clinics

Location: Richmond City Health Department, 400 E Cary St, Richmond, VA 23219

Target Population: Pregnant women

Service Provided: Focus groups interviews

Implementation Process: The L. Douglas Wilder School of Government and Public Affairs at VCU received a grant to examine the implementation of the SFC Medicaid dental benefit for pregnant women. Staff from the VCU Institute for Inclusion, Inquiry, and Innovation - Oral Health Core, and the L. Douglas Wilder Graduate School of Public Affairs, which is made up of one Doctoral student in public policy, one Masters student in public administration, and one first generation undergraduate majoring in Global Studies, interviewed low-income women in Richmond, Virginia who had been pregnant or delivered babies since the benefit was introduced in March 2015.

Results: Initial analysis demonstrated that while beneficiaries' enthusiasm for the coverage is robust, utilization is suboptimal due to the termination of the benefit at the end of the month of the 60th day post-partum. It was not uncommon for participants to describe how the competing priorities of meeting their infants and their own medical needs during the most immediate stages post-partum, such as follow-up OB-GYN care and pediatric care, in addition to managing the infants' feeding and sleeping schedules did not allow time for completing dental care before coverage expired.

The qualitative study was conducted in partnership with a survey by VDH DHP staff who sought to understand pregnant women's oral health knowledge and awareness of the SFC dental benefit for pregnant women. One researcher explained how the benefit enabled pregnant women to obtain treatment, early in pregnancy, for an abscess that had developed from an improperly treated cavity. One pregnant woman worried, based on her previous experience of dental treatment delays due to awaiting insurance preauthorization, that her abscess, which had

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative

worsened to the point of swelling shut one side of her jaw, would put her fetus at risk of harm and subject her to persistent pain. Fortunately, the researcher explained, the SFC dental benefit expediently facilitated the pregnant woman's entry into treatment, where she received antibiotics, abscess drainage, and subsequently, a dental extraction. "I have this bad anxiety, fear of the dentist," she explained, "but if I had to rate the quality of the care, the dentist provided a good job as far as that infection and the safety of my baby."

A Doctoral student described his experience: *"through participating with this research, we hear the voices from underserved populations--particularly economically disadvantaged populations--with unique dental care challenges, barriers, and vulnerabilities. This community-based research is essential to allowing these voices to be systematically, yet thoughtfully, examined to support public policies that can help address the factors that either facilitate or hinder participation and the utilization of much needed preventative, restorative, and acute dental care services."*

IV. IMPACT

Progress made toward implementing all grant activities with new collaborative partnerships expands oral health messaging and medical and dental integration. Materials are made available for use by local, state, and national entities.

In October 2018, the PIOHQIE grant coordinator attended the Neonatal Perinatal Second Annual Summit, a collaboration opportunity between state and local perinatal and infant programs with a framework to improve access to dental care for pregnant women and infants who otherwise would not receive needed care. Colleagues from local hospitals who attended the Summit and were interested in perinatal oral health have reached out and been provided with oral health education tools to use with pregnant women and in the pediatric clinics.

The VDH DHP continues to provide support to the EDHAT/PIOHQIE PAB, which has led to new resources for data collection and oral health message dissemination. The development of the *"Oral Health During Pregnancy, Practice Guidance for Prenatal and Dental Providers,"* offers step-by-step guidelines for medical/dental providers and health providers of all disciplines who wish to integrate oral health services, education, referrals into their practices, and provide information on their website.

Connecting women and infants to dental homes could not easily be accomplished without integrating oral health education and referrals into HV programs. This program, based on broad engagement of non-dental partners in the community, was implemented to maximize their ability to reach the target audience with appropriate messaging and generate referrals into the dental care system. It is important to acknowledge the workload of the community providers and to communicate an understanding that providing oral health education and instruction to their clients is just one more thing added to their already enormous list of duties. After acknowledging their workload, it is important to help them understand how improved oral health can benefit their clients in many different ways, including improving emotional health and overall wellness. It is also important to look at existing duties and find ways to incorporate oral health messages into other mandated messages like hygiene and nutrition. It was important for

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Narrative

the DHP to survey workers and use feedback to make changes to programs. Since no one program “fits all,” continuing to use QI tools to evaluate and make changes, as necessary, was important. After multiple courses, a more interactive course proved to be the best approach to keeping audiences with various levels of education interested in the topics.

Virginia’s RSDH model was initially developed to provide preventive dental services to schoolchildren. The model has now expanded in scope during this project by extending preventive services to pregnant women and continues to build and expand collaborative partnerships to improve services for pregnant women and infants. The RSDHs provide oral screening, oral health education, and dental referrals in WIC and other health department clinics. The VDH DHP trains pediatric and family medical professionals to promote the importance of oral health during pregnancy, interconception, and early childhood. The expansion of the Virginia Tech School of Medicine model will provide an opportunity for pediatricians and family practice doctors to apply fluoride varnish.

In addition to the provision of preventive services, the RSDHs also provide support through data collection in local health department clinics. The BSS of pregnant women is an additional data source that will continue every five years after the PIOHQIE grant ends, with results that can be compared with other state and national data. Program evaluation of data will continue and create a framework for sustainability for existing programs, as well as future program expansion to provide statewide reach.

The VAOHC, with VDH DHP as a partner, will continue to integrate oral health services, education, referrals, and data collection to support the regional alliance workgroups. Organizations and community partners, with the power to affect policy and system change regarding prenatal and infant oral health will continue to assist with program expansion.

The Title V Maternal and Child Health Services Block Grant reintegrated oral health for pregnant women, children, and their families as a state priority in Virginia. The Title V program is currently collaborating with the DHP and the VAOHC to foster a network of six regional Oral Health Alliances to conduct regional needs assessments and implement systems change and data-sharing initiatives to improve the oral health of all Virginians, with an emphasis on pregnant women and children.

The DHP continues to move toward sustainability, focusing on data collection to influence change, inclusion of perinatal and infant oral health information into local prenatal classes, and to reach health systems and prenatal health educators with perinatal oral health messaging in the final grant year.

V. PLANS FOR NO-COST EXTENSION

VDH does not plan to request a no-cost extension.

Attachment 1 – New Personnel and Key Biographical Sketches – Virginia

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Report

Grant Number: H47MC28478
Project Title: Virginia Perinatal and Infant Oral Health Quality Improvement Expansion Grant Program
Organization Name: Virginia Department of Health
Primary Contact Information:
Name: JoAnn Wells **Phone:** 804-864-7782
Title: Perinatal and Infant Oral Health Consultant **Email:** joann.wells@vdh.virginia.gov

A. Brita Bergland, MPH, CHES

22 S Davis Ave. Unit B • Richmond, VA 23220 • (443) 253-8232 • abb5053@gmail.com

A public health professional with experience in health communications, project management, and health education interested in applying this work on a local level. Interest in and experience with health equity and disability and health.

EDUCATION & CERTIFICATIONS

Emory University, Rollins School of Public Health, Atlanta, GA Master of Public Health in Behavioral Science and Health Education	May 2016
The Pennsylvania State University, College of Health and Human Development, University Park, PA Bachelor of Science in Biobehavioral Health Minor in Human Development and Family Studies	May 2011
Certified Health Education Specialist (CHES) National Commission for Health Education Credentialing, Inc.	June 2016

PROFESSIONAL EXPERIENCE

Centers for Disease Control and Prevention, Atlanta, GA July 2016-Present
National Center on Birth Defects and Developmental Disabilities, Division of Human Development and Disability (DHDD)
ORISE Fellow – Policy, Communications, and Partnership (PCP) Unit

Communications and Policy

- Create internal and external communication materials for six teams within DHDD and the division Director, including graphics, presentations, print and online resources, talking points, and scientific publications
- Develop a monthly calendar of social media posts for all DHDD teams
- Write and disseminate a monthly DHDD Newsletter to over 4,000 external partners and subscribers
- Manage and coordinate responses to CDC, Congressional, and external requests of DHDD staff
- Engage partners in the development of communications materials in order to create materials that are most beneficial to partners and the division
- Support large publications or products with communications plans, including partner and Congressional outreach, social media, and press releases

Project Management

- Coordinate internal and external training and events, including promotional materials, content, and evaluation
- Prepare the Director of DHDD for meetings and conferences
 - Create visual components – PowerPoint presentations, handouts, graphics, etc.
 - Write talking points with input from others in PCP Unit and across division
 - Attend meetings with Director to facilitate follow through with meeting summaries and action items
- Disseminate a weekly report of DHDD events, publications, and meetings to the entire division and Center leaders
- Compile high-priority DHDD items for Center leadership to share with the Director of CDC in weekly update meetings

Attachment 1 – New Personnel and Key Biographical Sketches – Virginia

Perinatal and Infant Oral Health Quality Improvement Expansion Program 2019 Final Progress Report

Diabetes Training and Technical Assistance Center, Emory University, Atlanta, GA

February 2015-June 2016

Graduate Assistant

- Coordinated communication materials, data entry, and logistical tasks associated with the national Lifestyle Coach and Master Trainer *Select* trainings of the evidence-based National Diabetes Prevention Program (National DPP)
- Maintained, managed membership of, and wrote creative pieces for the Lifestyle Coach online community, Common Ground (www.lccommonground.org)
- Created and sent multiple monthly e-newsletters that reached over 1,700 Common Ground members using MailChimp
- Updated Lifestyle Coach Training Manual to reflect new data and curriculum design
- Edited a 4-module curriculum about Alzheimer's disease for a pilot course targeted at undergraduate public health students

Region IV Public Health Training Center, Emory University, Atlanta, GA

May 2015-June 2016

Graduate Assistant

- Created a database of over 500 trainings pertaining to Region IV's HHS-designated health issue infectious disease by conducting an environmental scan of 75 public health training websites across the country to increase capacity for and access to e-learning opportunities for public health professionals
- Developed a 4-part curriculum and implementation plan for a Distance Education And Learning (DEAL) course
- Analyzed community needs assessments of over 150 counties/districts in Georgia, both high- and low-resource settings, in order to designate 10 priority needs for training purposes
- Supported the facilitation of trainings for public health workforce, such as Effective Communications

Millennium Pharmaceuticals, INC., Cambridge, MA

August 2011-June 2014

Business Analyst – Government Pricing

- Analyzed claim level details for Medicaid drug rebates from all 51 State Medicaid Departments quarterly using Excel
- Organized contracts in ModelN with six large group purchasing organizations (GPOs) as a part of a ten-person team using growth and market share information to calculate appropriate rebates
- Coordinated the distribution of Medicaid rebate and GPO contract checks quarterly, totaling \$100,000s to millions of dollars
- Managed product complaints requesting credit reimbursement
- Maintained and updated pricing sharepoint data for approximately 10 oncology drugs
- Conducted bi-monthly chargeback audits to determine the correct accounts receiving a government discount; worked with distribution centers and third party logistics servers to adjust any pricing issues

Harvard Recreation, Cambridge, MA

September 2011-July 2014

Gym Staff (September 2011– February 2012), Manager on Duty (February 2012 – July 2014)

- Oversee a team of three team members to carry out facility duties around the gym, as well as interact with members
- Tracked expenditures before and after each shift

LEADERSHIP & SERVICE

Culture and Climate Crew, DHDD, Atlanta, GA

April 2017-Present

Inaugural Member

- Analyze and aggregate data from DHDD staff surveys and comments for trends in feedback with the mission of understanding how to create a more supportive and efficient work environment
- Serve as a resource between division leadership and DHDD staff; meet on a regular basis to convey feedback and form action plans to address concerns

Center for Leadership and Disability, Georgia State University, Atlanta, GA

August 2017-May 2018

Georgia Leadership and Education in Neurodevelopmental and related Disabilities (GaLEND) Trainee

- Attended twice weekly seminars about leadership skill development, neurodevelopmental disabilities, and policy
- Completed a community-based project with a group of three trainees to address gaps in knowledge around reporting results and follow-up data to newborn screenings for congenital heart defects

SKILLS

- Proficient with MS Outlook, Word, PowerPoint, Excel; Excellent written and oral communication skills; Quantitative and qualitative data collection and analysis; Proficient in GovDelivery; Experience with SPSS and SAS; Qualtrics and SurveyMonkey; MailChimp and Piktochart; ModelN

Attachment 2 – Early Dental Home Action Team/PIOHQIE Project Advisory Board - Virginia

Primary Contact Information:

Name: JoAnn Wells

Phone: 804-864-7782

Title: Perinatal and Infant Oral Health Consultant **Email:** joann.wells@vdh.virginia.gov

Last name	First name	Company	Job title
Adiches	Tonya	Virginia Department of Health	Dental Health Programs Manager
Ault	Dawn	Virginia Head Start Association	Director
Bell	Wendy	Eastern Shore Rural Health System, Inc.	Dental Operations Manager
Bilik	Lisa	Department Of Medical Assistance Services	Dental Contract Administrator
Claiborne, BSDH, MS	Denise	ODU	Dental Hygiene Educator
Deagle	Cornelia PhD, MSPH	Division of Child & Family Health	Director
Dorr	Samantha	Virginia Oral Health Coalition	Communications and Operations Manager
Duregger	Julie	Smart Beginnings Virginia Peninsula	Assistant Coordinator
Galstan, DDS	Samuel W.	Virginia Dental Association	President/Private Practice Dentist
Giles	Jernice DDS	Daily Planet	Dental Director
Gilliam	Kristen	DentaQuest, LLC	Executive Director
Glasgow	Jane Elyce	Hampton Roads Community Foundation	
Hairston, DDS	Zachary	Department Of Medical Assistance Services	Dentist / Dental Consultant
Holland	Sarah	Virginia Oral Health Coalition	Executive Director
Laughlin, DDS	Jeff	VCU School of Dentistry	Pediatric Dentist, Assistant Professor
Logue, RDH, MPH	Sharon	VA Department of Health	Community Dental Preventive Services Coordinator
Maas, MPH, CHES	Kate	Virginia Premier	Maternal & Child Health Program Manager

Mbaitisi	Monalisa	VDH-Division of Population Health Data	Epidemiologist Evaluator
McGuire	Lisa	James Madison University -	Department of Social Work
Moore	Melinda	CHIP of Virginia	Director
Naavaal	Shillpa	VCU School of Dentistry	Assistant Professor
Pennywell, MPH	Natalie	VDH - Division of Community Nutrition	Community Outreach Coordinator
Purcell	Patricia	Family Lifeline	Senior Vice President
Randolph	Trinette	Virginia Community Healthcare Association	Director of Programs and Training
Schultz	Richard	Smart Beginnings RVA	Executive Director
Shook	Myra	Department Of Medical Assistance Services	Dental Program Manager
Singer Wright	Ally	Virginia Health Care Foundation	Dental Opportunities Coordinator
Specter-Dunaway	Lisa	CHIP of Virginia	President-CEO
Staton, M.Ed.	Consuelo	VDH - Child and Family Health, Early Childhood Health, Resource Mother's Program	Resource Mothers Coordinator
Tupea	Casey	Virginia Department of Behavioral Developmental Services	RDH
Vo	Rachelle	Hampton Healthy Families	Team Lead
Wake	Jacqueline	DentaQuest, LLC	Outreach Coordinator
Wells, BSHS, RDH	JoAnn	Virginia Department of Health	Perinatal & Infant Oral Health Consultant
Williams, DDS	Tiffany	VCU School of Dentistry	Assistant professor
Wolpin, DDS	Scott	Eastern Shore Rural Health System, Inc.	Chief Dental Officer



Oral Health and Pregnancy

Help Spread the Word!

Dental Coverage for Low-Income Pregnant Women in Virginia

Pregnant women enrolled in Medicaid and FAMIS have comprehensive dental coverage. Pregnant women (over 21 for Medicaid and over 19 for FAMIS) can receive comprehensive dental benefits.

Covered dental services include:

- Preventive
 - Diagnostic
 - Restorative
 - Endodontics
 - Periodontal treatment
 - Dentures.
- (Orthodontics are not a covered service.)*

For more information:

- VaOHC website: www.vaoralhealth.org
- DMAS website: http://www.dmas.virginia.gov/Content_pgs/SPL.aspx
- DentaQuest website: www.dentaquest.com or call 1.888.912.3456



Resources for You, Your Practice or Your Patients

Are you a **dental provider** interested in learning more about treating pregnant women? Or, are you a **medical provider** interested in understanding the importance of dental care for your practice or for your patients? The Virginia Oral Health Coalition can provide clinical trainings and/or resources for you or your practice. Contact Quan Williams at 804.424.2484 or qwilliams@vaoralhealth.org.

Oral Health Care During Pregnancy Leads to Healthier Moms and Babies



- The American Dental Association and the American College of Obstetricians and Gynecologists agree that routine dental care is safe for pregnant women and an important part of a healthy pregnancy.^{1,2}
- Approximately 25% of all pregnant women have periodontal disease.³ Managing periodontal disease requires comprehensive treatment procedures such as scaling and root planing in addition to preventive care.
- Pregnant women with periodontal disease may be up to eight times more likely to deliver prematurely.⁴
- Providing dental care during pregnancy reduces the bacteria in a mother's mouth, which significantly lowers her risk of spreading decay-causing bacteria to her baby.⁵

For free, downloadable patient resources, visit

<http://mchoralhealth.org/>

Online Educational Videos

www.vaoralhealth.org

Citations:

1. American Dental Association. Mouth Healthy Pregnancy Slideshow, "What to Expect for Your Oral Health." Retrieved from <http://www.mouthhealthy.org/en/pregnancy-slideshow>.
2. Oral health care during pregnancy and through the lifespan. Committee Opinion No. 569. American College of Obstetricians and Gynecologists. Obstet Gynecol 2013;122:417-22.
3. Lief S, Boggess KA, Murtha AP, Jared H, Madianos PN, Moss K, et al. The oral conditions and pregnancy study: periodontal status of a cohort of pregnant women. J Periodontol 2004;75:116-26.
4. Jeffcoat M, Parry S, Sammel M, Clothier B, Catlin A, Macones G. Periodontal infection and preterm birth: successful periodontal therapy reduces the risk of preterm birth. BJOG: An International Journal of Obstetrics & Gynaecology, 2011; 118 (2): 250.
5. Ramos-Gomez FJ, Weintraub JA, Gansky SA, Hoover CI, Featherstone JD. Bacterial, behavioral and environmental factors associated with early childhood caries. J Clin Pediatr Dent 2002;26(2):165-73.

Medicaid Dental Benefits

Adult Dental Coverage in Virginia Medicaid

Virginia Medicaid will reimburse comprehensive dental services for pregnant women and children, and very limited dental services for adults, through the **Smiles for Children (SFC)** Medicaid dental benefit. Many of the CCC Plus and Medallion 4.0 Medicaid health plans, also known as **Managed Care Organizations (MCOs)**, will also reimburse some “enhanced” dental services for adults enrolled in their medical coverage. These reimbursable, enhanced dental services vary by MCO, so it’s important to know your patient’s health plan.

*** New Resource ***

**Provider FAQ:
Medicaid Adult Dental Coverage
CCC Plus and Medallion 4.0**



Visit the VaOHC website at www.vaoralhealth.org or contact Samantha Dorr at sdorr@vaoralhealth.org for a copy of our *Provider FAQ* about billing, reimbursement, and covered dental services in CCC Plus and Medallion 4.0.

Comprehensive Dental Coverage for All Adults

Virginia Medicaid does not currently include a comprehensive dental benefit for adults; providing this benefit will help the Commonwealth realize cost savings related to reduced emergency department (ED) use, chronic disease management, and a reduction in opioid prescribing.

An adult dental benefit in Medicaid will improve health and save money by:

- Reducing avoidable emergency department visits**

Virginia spent \$3.31 million on 12,617 visits to the ED for dental related pain and infection - no treatment is provided in the ED; if these adults had a dental benefit they could seek care and treatment in an appropriate dental setting.

- Improving overall health**

54% of older adults cited dental care as their second-most frequent unmet need.

- Improving chronic disease outcomes and saving money**

A recent study showed one Virginia skilled nursing center saved \$1.93 million dollars in 13 months through tooth brushing, which prevented costly and dangerous pneumonia.

- Reducing opioid prescribing in the emergency department**

56% of the Medicaid beneficiaries who visited the ED for dental issues filled an opioid prescription within 30 days at a cost to Medicaid of \$121,269.