Dental Public Health Activity Descriptive Report

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SECTION I: PRACTICE OVERVIEW

Name of the Dental Public Health Activity:

Program Development, Collaboration, and Sustainability

Public Health Functions:

Assessment – Use of Data
Policy Development – Collaboration and Partnership for Planning and Integration
Assurance – Population-based Interventions
Assurance – Building Linkages and Partnerships for Interventions
Assurance – Building State and Community Capacity for Interventions
Assurance – Access to Care and Health System Interventions

Healthy People 2020 Objectives:

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-12 Increase the proportion of children and adolescents who have received dental sealants on their molar teeth

State:	**Federal Region:**	**Key Words for Searches:**
West Virginia		Dental, health, sealants, school-based, policy, education, public-private partnerships, workforce, collaboration, integration

Abstract:

The West Virginia Oral Health Program (OHP) in its present form is a young, diversified, and ambitious collection of staff, investors, and oral health champions. Even though the OHP has been in existence for years, it has not been until recently that the program has gained significant traction earning both positive state and national reputations. This recognition stems from promising outcomes achieved via the unique "business-model" approach to population based oral health. A new approach to seeking funding redefines traditional financial resources and looks to include funders that are "investors" in the promotion of oral health. This includes advocacy, earned media, and engaged participation versus traditional required reporting.

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SECTION II: PRACTICE DESCRIPTION

History of the Practice:

Cross cutting elements of business principles in OHP programming include: practice/program growth, staff management, treatment plan development in the form of dental public health activities targeting population-based health, patient satisfaction components, profitability, and maintaining professional networks. A broad range of strategies, goals, and new hires have led to unique advancements in program development and coalition support for the OHP. In addition, the procurement of a wide range of funding/investing sources has catapulted the program forward in times where other Oral Health Programs have experienced drastic cuts.

A main catalyst/driver that fueled an initial flurry of activity came from The Claude Worthington Benedum Foundation. In West Virginia, the Benedum Foundation is recognized as an "investor" versus a traditional funder. This foundation has a standing health agenda and a history of tackling difficult health issues in the Appalachian region. The Benedum Foundation recognized a need from discussions with young leaders for young leadership that would champion, institute, and lead evidence-based approaches to dental public health. The Foundation cultivated and nurtured that need by investing seed dollars in a range of projects from training primary care providers on the utilization of fluoride varnish to expanding school-based sealant programs. The Foundation continues to monitor their initial investment and has been a constant source of support both financially and in advocating for policy change.

Justification of the Practice:

It was immediately following this initial investment from the Benedum Foundation that West Virginia received an "F" in oral health on the 2010 Pew Center on the States' "The State of Children's Dental Health: Making Coverage Matter" reporting that rated oral health policy benchmarks. This abysmal grade combined with a formal inquisition from the West Virginia legislature on poorly performing state-funded activities underscored the glaring fact that the OHP was deficient in reaching its mission of "promoting and improving the oral health of all West Virginians."

Inputs, Activities, Outputs and Outcomes of the Practice:

Applying principles from the business world, building upon the investment dollars from the Benedum Foundation, and responding to the inquiries from the WV legislature, the OHP, under the leadership of Dr. Jason Roush, began the laborious process of securing dollars to build an infrastructure steeped in diversity of funding, evidence-based programming, and innovative service delivery models. Financing for infrastructure expansion came from new funding from the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA), and continued support from state and private foundations. It was not until a nucleus of key professionals was in place that measurable growth occurred, expanding the staff dedicated to oral health from one part-time state dental director to a diversified team of 20 full and part-time staff. A breakdown of oral health funding by sources and staff growth is illustrated in Table 1.

Table 1 – West Virginia Oral Health Program Funding and Growth (2010 – 2013)

Funder	Grant Timeline	Grant Amount	Staff Growth
State funds/ Title V Block Grant	On-going	Approximately $800,000 annually	Supports 12 employees (state and contracted) • State Dental Director (FT) • Program Manager (FT) • Oral Health Epidemiologist (FT) • Adult Services Supervisor (FT) • Pre-Employment Specialist (FT) • Donated Denture Specialist (PT) • Office Assistant (FT) • StateCommunityOralHealth Lead(PHRDH) contracted(PT) • FourRegionalOralHealth Coordinators(PHRDH)–

			contracted(FT)
HRSA Dental Workforce Project	2012-2015	$1.5 million	Supports 5 employees • Workforce Coordinator (FT) • Dentist (PT) • Dental hygienist (PT) • Dental Office Manager (PT) • Dental Billing Specialist (PT)
CDC Oral Disease Prevention Project	2013-2018	$1.8 million	Supports 3 employees • Prevention Coordinator (FT) • Outreach Worker (FT) • Program Secretary (FT)
HRSA Perinatal and Infant Oral Health Quality Improvement (PIOHQI) Pilot Project	2013-2017	$625,000	In-kind support • Office Director • Division Director (Research, Evaluation, and Planning)

The majorities of OHP activities/programmatic efforts are a joint effort of public-private partnerships and include collaborative efforts with:

- Marshall University (MU): Marshall University School of Medicine houses a community and school oral health team. This team is a key partner in leading, conducting, and evaluating oral health surveillance following CDC protocol (http://www.cdc.gov/nohss/DSMain.htm). This partnership is responsible for taking a once vacant CDC WV state oral health profile to 100% populated data fields. The OHP, with the assistance of MU, now has a regimented surveillance protocol targeting 5 cohorts of perinatal, Pre-K, 3rd grade, adults, & older adults. Data obtained from surveillance is being utilized to build the first-ever WV Burden of Disease document.

- West Virginia University School of Dentistry (WVU SOD): The West Virginia University School of Dentistry is an academic institution and the only dental school in the state. They serve as a key partner in promoting the HRSA Dental Workforce Project, a three-year initiative targeting the recruitment and retention of WVU SOD graduates to provide access to dental services in Dental Health Professional Shortage Areas (DHPSAs) throughout the state.

- West Virginia University School of Public Health (WVU SOP): The West Virginia University School of Public Health's mission is to improve the health of West Virginians through innovation in leadership, education, research and service. As such, they are a key partner in providing evaluation support for the HRSA PIOHQI Pilot Project. The HRSA PIOHQI Pilot Project is a four-year initiative to promote perinatal and infant oral health, explore oral health service reimbursement for pregnant women, and establish dental homes for pregnant women and their children ages 0-2.

- West Virginia Board of Dentistry (WV BOD): The West Virginia Board of Dentistry is the licensing, credentialing, and regulating agency for the practice of dentistry in the state. As they have an on-going relationship with the state's dental workforce, they are a key partner in dental workforce assessment and surveillance.

- Investors such as the DentaQuest Foundation, HRSA, CDC, and the Claude Worthington Benedum Foundation.

In addition to the aforementioned partnerships, a critical collaborative effort of the OHP exists with the WV Oral Health Coalition (WV OHC). Through bidirectional communication and support between the two entities, the WV OHC is able to advocate for policies and activities outside the scope and reach of OHP governmental limitations. Moreover, the OHP has partnered with the WV OHC as they recognize certain activities tend to innovate and evolve faster than state government can respond. Activities that are a direct result of this partnership are successes in stopping community water fluoridation roll-back attempts, the state oral health plan, and the WV Kids Count Oral Health report.

Objectives / Rationale

Due to all strategies and programs either being created from infancy or thoroughly restructured, the OHP capitalized on the circumstances to build in evaluation metrics and deliverables congruent with Healthy People 2020 oral health objectives, ASTDD best practices and guidelines, and a number of areas for public health improvement, including the following:

- Increasing awareness of the importance of oral health to overall health and well-being;
- Increasing acceptance and adoption of effective preventive interventions;
- Reducing disparities in access to effective preventive and dental treatment services.

Goals and metrics are clearly delineated in the state oral health plan. For example, in 2010, The Pew Center on the States' "The State of Children's Dental Health: Making Coverage Matter" Report placed West Virginia in the national spotlight as one of the few states receiving an "F" on state dental polices. The report stated that West Virginia does not allow dental hygienists to place sealants prior to a dentist exam, which was one of six failed policy benchmarks. Just one year later in 2011, WV met half of the eight policy benchmarks aimed at addressing children's dental care, a significant improvement since 2010 that is directly attributed to expanding the scope of practice of the WV dental hygienists. The new 2015-2020 state oral health plan will continue to support effort to increase the number of dental hygienists acquiring their public health practice permit.

Impact/Effectiveness/Efficiency

The OHP recognizes the need to implement initiatives that are evidence-based to achieve impact in effective and efficient ways. One such initiative currently underway is our school-based sealant project. By 2020, OHP plans to have established a school-based sealant project in all 55 counties throughout the state that will adhere to the WV OHP's Sealant compliance manual. To date, there are 16 counties providing school-based dental sealant services and data collection through a web-based data entry portal developed and maintained by Marshall University. Marshall University also provides the training and calibration of participants in these projects for both screening and data entry. Moving forward, the compliance manual will serve to provide standardization of state sealant projects, which includes standards from the WV Board of Dentistry, Occupational Safety and Health Administration (OSHA), and Health Insurance Portability and Accountability Act (HIPAA) and will serve as a foundation for standardized care coordination and reporting throughout the state.

Because of the high poverty rates of WV children and the high percentage of free and reduced lunch rates, it would be unrealistic to have a school sealant program in 75% of all high risk schools. Therefore, using the Appalachian Regional Commission's (ARC) formula to determine at risk counties, the WV OHP will target those counties most at risk. Counties designated "Distressed" or "At-Risk" will receive priority funding. To expand programs to those most needy, WV OHP established a goal to have a school-based sealant program in those specific counties. The WV OHP will continue to explore additional expansion in every county in WV over the next five years. Additionally, schools outside those counties receiving Title I funding will be targeted for sealant programs.

With a limited dental workforce in WV to address these challenges, dental hygienists (DHs) are increasingly called upon to provide preventive dental services to children, particularly those at high risk. DHs are well positioned to initiate preventive oral health services such as caries risk assessment, provision of dental anticipatory guidance, application of sealants, application of fluoride varnish, and referral to a dental home. Furthermore, the concept of DHs involvement in the delivery of preventive oral health care has been endorsed and promoted by a number of Medicaid programs across the United States, including West Virginia. In 2009, West Virginia expanded the scope of practice for DHs with a public health practice permit to provide services without direct supervision of a dentist. The intent of this expansion was to address oral health disparities in vulnerable populations through increased access to services. Therefore, the ideal model for this initiative is to utilize public health certified DHs to provide school-based services, followed by care coordination to a dental home in the public and private dental sectors. Our goal with this model of care coordination is to maximize existing workforce infrastructure and facilitate public-private partnerships.

Collaboration/Integration

The West Virginia Oral Health Program values partnerships and integration with various internal and external entities. We recognize that collective impact can only be achieved through integration with both traditional and non-traditional partners. One recently successful collaborative initiative involves partnership with our state Department of Education. After West Virginia's low rating for state dental policies in the 2010 The Pew Center on the States' "The State of Children's Dental Health: Making Coverage Matter" report, oral health became a focal point for change in our state. The West Virginia

legislature began work on policies that would mandate dental examinations for public school students. However, the language in these proposed policies was punitive in nature and could not be supported by the West Virginia Department of Education.

Despite unsuccessful attempts to mandate dental examinations through the legislative process, oral health partners continued to recognize the importance of integration of oral health into existing health recommendations and requirements. The Oral Health Program initiated collaborative efforts with the West Virginia Department of Education to change policy at the state board of education. Coupled with findings from state surveillance showing that more than 1 in 2 WV children enter school with caries experience and that 1 in 5 WV children have active, untreated decay at school entry, an existing West Virginia Board of Education policy was changed to incorporate recommended dental examinations for students at school entry, 2nd, 7th, and 12th grades. These "checkpoints" are part of an effort to align best-practice initiatives for recommended medical and dental examinations and required immunizations. This policy (WVBE Policy 2423) was effective as of July 1, 2014 and will be phased in over the next five years.

Demonstrated Sustainability

With the collaborative efforts between the West Virginia Oral Health Program and the West Virginia Department of Education, a new system for preventive oral health services is underway in our state. With these changes, conversations often turn toward financial sustainability and how these services will be viable for the long term. This new policy change is no different. However, a sustainability plan for both human and financial resources has been developed and will be implemented in the months and years to come.

While the environment of both workforce and financial sustainability is ever-changing, West Virginia's goal is to achieve on-going efforts through public-private partnerships. For example, we will utilize our existing dental hygienist workforce and continue to support training to receive their public health permit. With this workforce in place, dentists and their public health dental hygienists will enter into cooperative agreements to provide billable services to the schools in their community. The public health dental hygienists will then provide oral health services at the school(s), the access point for patients. Those students who already have a dental home will be evaluated at the designated times (school entry, 2nd, 7th, and 12th grades) to ensure that they maintain their dental home and have received a dental examination. Those students who do not have a dental home will receive care coordination services to schedule an appointment with a dentist in their community. Both the initial school-based screening and the follow-up examination will create revenue for the private dental community to sustain the initiative. Public health dental hygienists will also be able to provide preventive cleanings and apply dental sealants in the school setting, which are also reimbursable oral health services.

Through West Virginia's existing collaborative agreement with the CDC, access is available to conduct cost/benefit analysis for both existing and new school-based dental sealant projects. A public health economist from CDC has developed a tool to determine sustainability costs for sealant projects and their expansion. Technical assistance is available through the CDC, the OHP, and other state partners with previous dental sealant experience for those projects that are just beginning or may be facing resource shortfalls. Future plans include use of this cost/benefit analysis tool to demonstrate sustainability of successful sealant projects throughout the state and will be used as a framework for development of new startups.

Evaluation Measures/Outcome Indicators

One of the greatest achievements of the OHP is the implementation of a State Oral Health Surveillance system. Because the OHP recognized the need for community level oral health status and dental care access data, they were expeditious in forming a partnership with the regional oral health educators housed at Marshall University. Through the support of state funding, Marshall University School of Medicine employs a team of public health dental hygienists (noted in Table 1 as PHRDH) that are utilized in the collection of data via the Basic Screening Survey (BSS) developed by the Association of State and Territorial Dental Directors (ASTDD). By collecting data in a consistent manner, West Virginia, for the first time, has the ability to compare their data with data collected by other organizations or agencies. The Marshall University dental public health hygienists are experts in oral health with experience in health policy. The team utilizes iPad technology for the data collection system and has expanded to five target populations that are screened through an established surveillance schedule. The target populations being monitored are the perinatal, Pre-K, third grade, adult, and older adult groups. Before embarking on a screening survey, the dental public health hygienists are calibrated and trained on the BSS protocol. It is important to note that the information

gathered through the screening surveys is consistent with monitoring the national health objectives found in the United States Public Health Service's Healthy People 2020 document.

Budget Estimates and Formulas of the Practice:

N/A

Lessons Learned and/or Plans for Improvement:

- Working in a system that is not conducive to change and transformation can be challenging. Unfortunately, some of the harshest criticisms to advancement come from within state entities and from both the policy and dental communities.

- Strong –willed, optimistic leadership, motivated staff, and both a desire and ability to enact change or at least disrupt current systems is critical. Because oral health is often overlooked in the areas of education, programming, surveillance, and policy there are many times leadership must be fearless and create a seat at the table to advocate on behalf of the voiceless.

- In addition, engaging oral health champions is key for advocating for policy/legislation targeted to improve population based oral health. Relationships with oral health champions i.e. legislators, WV oral health coalition members, must be forged and maintained before times of turbulence and adversity present.

- Finally, "diversity in funding and commonality in purpose." Multiple funding sources must be sought to ensure long-term program sustainability. Common ground must be sought with both traditional and non-traditional partners to ensure collective impact, maximize efforts, and ensure efficiency with limited resources.

Available Information Resources:

- West Virginia Board of Education Policy 2423: http://wvde.state.wv.us/policies/

- Expanded scope of practice for dental hygienists with a public health permit: http://www.wvdentalboard.org/; – Series 13: West Virginia Board of Dentistry

- Report to The Benedum Foundation on West Virginia Oral Health Initiative: http://www.benedum.org/about/news.shtml

SECTION III: PRACTICE EVALUATION INFORMATION

Impact/Effectiveness

How has the practice demonstrated impact, applicability, and benefits to the oral health care and well-being of certain populations or communities (i.e., reference scientific evidence, outcomes of the practice and/or evaluation results)?

Through on-going relationships and strategic partnerships, West Virginia has effectively created an oral health program from the ground up. Although the full impact of this program has yet to be realized, the capacity for project development, support and implementation of state oral health initiatives is now in place and ready to move forward.

Efficiency

How has the practice demonstrated cost and resource efficiency where expenses are appropriate to benefits? How has the practice demonstrated realistic and reasonable staffing and time requirements? Provide unit cost analysis or cost-benefit analysis if appropriate.

West Virginia has been able to use existing local resources (ex. Claude Worthington Benedum Foundation, Marshall University, West Virginia University, etc.) to support the growth of the state oral health program. Through leveraging these resources, the program is now able to seek federal

resources and further advance oral health through expanded staffing and evidence-based best practices.

Demonstrated Sustainability

How has the practice showed sustainable benefits and/or how has the practice been sustainable within populations/communities and between states/territories? What mechanisms have been built into the practice to assure sustainability?

As the state oral health program is relatively new, sustainability at the current level is yet to be actualized. However, West Virginia looks at oral health initiatives with a business perspective and works to incorporate sustainability principles into the development and design of all projects.

Collaboration/Integration

How has the practice built effective partnerships/collaborations among various organizations and integrated oral health with other health projects and issues? What are the traditional, non-traditional, public and private partnerships/collaborations established by the practice for integration, effectiveness, efficiency and sustainability?

West Virginia recognizes the importance of relationships and strategic partnerships in a climate of limited resources in an economically-limited state economy. Oral health is integrated into existing projects and initiatives, including public education, home visitation programming, health professional education, and workforce development to ensure sustainability and consistency of public health messages. As such, the state oral health program is moving from a collaborative mindset to that of collective impact, where all involved are invested in the work of promoting and improving oral health as a part of (as opposed to in addition to) their on-going work.

Objectives/Rationale

How has the practice addressed HP 2020 objectives, met the National Call to Action to Promote Oral Health, and/or built basic infrastructure and capacity for state/territorial/community oral health programs?

The West Virginia Oral Health Program has built basic infrastructure and capacity for a state oral health program by recognizing the need, developing surveillance and projects that measure that need, using those measures to seek a variety of funding sources, and using those funding sources to grow human and financial resources necessary for implementation. As West Virginia moves forward with implementation, the state oral health program will work to address established objectives (i.e. HP 2020) and maintain sustainability through collective impact and evidence-based best practices.