



Dental Public Health Activities & Practices

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SECTION I: PRACTICE OVERVIEW

Name of the Dental Public Health Activity:

West Virginia University Childhood Oral Health Project

Public Health Functions:

Policy Development – Collaboration and Partnership for Planning and Integration
 Policy Development – Oral Health Program Policies
 Assurance – Oral Health Communications
 Assurance – Access to Care and Health System Interventions

Healthy People 2010 Objectives:

21-1 Reduce dental caries experience in children
 21-2 Reduce untreated dental decay in children and adults
 21-10 Increase utilization of oral health system
 21-12 Increase preventive dental services for low-income children and adolescents

State:

West Virginia

Federal Region:

East
 Region III

Key Words for Searches:

Best practices, anticipatory guidance, perinatal oral health, infant oral health, oral health curriculum

Abstract:

The West Virginia University (WVU) Childhood Oral Health Project (COHP), with a total funding of \$200,000 from the Benedum Foundation for 2006-2009, began as a three year planning grant, but quickly evolved into a planning and implementation project. The project is administered by the WVU Office of Rural Health with support from the WVU School of Dentistry. The goal of the project is to increase the responsiveness of the WVU Health Sciences Center (HSC) to address issues related to childhood oral health. In West Virginia, tooth decay index is higher than the national average with 59% of WV school-aged children having experienced tooth decay. In addition, only 36% of WV children covered by Medicaid are receiving dental services. To address these disparities, strategies were specifically crafted that included: (a) evaluating and modifying the curriculum of the Schools of Dentistry, Medicine, Nursing and Pharmacy at WVU HSC to include oral health content (didactic and clinical training); (b) developing a continuing education course for the existing dental workforce to promote best practice guidelines related to infant and toddler oral health care (First Smiles Continuing Education) and perinatal oral health; and (c) crafting and implementing advocacy actions to inform policy makers on issues (such as Medicaid reimbursement rates, provider shortages, a student loan repayment program to increase the dental workforce, and the application of fluoride varnish by non-dental providers). COHP has institutionalized the most current evidence-based protocols and best practice guidelines within the Schools of Dentistry, Medicine and Nursing; accelerated the science base transfer to State maternal child health programs; and advocated for oral health legislation. COHP will extend to July 2010 and will continue to implement the strategies of the project's action plan.

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SECTION II: PRACTICE DESCRIPTION

History of the Practice:

West Virginia University (WVU) Schools of Dentistry, Medicine, Nursing and Pharmacy at the Health Sciences Center (HSC) offer a range of undergraduate, graduate and professional degrees in health care and biosciences. The 29-degree programs offered by the WVU HSC provide the state with a strong group of professionals prepared to meet the varied health care needs of the communities and families. The mission statement of each of the WVU HSC Schools commits to excellence in education and advancing health outcomes. For example, in the late 1980s and early 1990s, WVU took bold steps to examine its role in meeting the needs of underserved rural areas in the state. WVU, with other state funded health sciences centers, engaged in a partnership with local rural communities, the WV state legislature, the Higher Policy Commission, and other state agencies to increase the number of WV-trained health professionals practicing in rural underserved communities in the state. This partnership was financially supported by the state legislature and the W.K. Kellogg Foundation and became the WV Rural Health Education Partnership.

The Claude Worthington Benedum Foundation provides support, through competitive grants, to innovative projects that have measurable outcomes in the areas of education, health and human services, community development, and economic development. In 2006, the foundation targeted oral health as an area of critical need (<http://www.oralhealthwv.org/downloads/benedumOH.pdf>). As a result, the Benedum Foundation actively pursued partners to address WV's oral disease epidemic. In response, WVU HSC proposed, was awarded, and established the **Childhood Oral Health Project (COHP)**. The COHP, as an extension of WVU's Office of Rural Health and School of Dentistry, provides leadership, expertise and assistance to health professionals, community groups and state maternal child health programs to improve children's oral health.

Justification of the Practice:

West Virginia has high oral health needs. Approximately 59% of WV school-aged children have experienced tooth decay. Only 36% of WV children covered by Medicaid are receiving dental services. Efforts are needed to increase oral health prevention and access to dental care. Strategies that integrate oral health into other disciplines, train dental and non-dental health providers, and promote early prevention are also needed.

Before the inception of the COHP, little to no effort was made in the following areas:

- Evaluation and enhancement of existing curriculums within the WVU HSC to include oral health content and reflection of the content in Graduate Medical Education (GME) and Content Standard Objectives (CSO);
- Exploration into the potential to develop a state-based loan assistance repayment program for dentists and dental hygienists;
- Implementation of a needs assessment or evaluation to establish a pediatric residency program;
- Development of a comprehensive effort to address oral health anticipatory guidance in state maternal child health (MCH) programs; and
- Development and implementation of continuing education programs to address prenatal, infant and toddler oral health best practice guidelines for the existing workforce (both dental and non-dental professionals).

Inputs, Activities, Outputs and Outcomes of the Practice:

The COHP began in 2006 and as of 2009 is completing the last of its 3-year funding period.

Project Goals

The goals of COHP are:

1. Increase WVU HSC's role in and linkages with childhood oral health projects in the state using evidence-based approaches and guided by the WV Healthy People 2010 objectives.

2. Encourage all existing primary care providers, both medical and dental, to adopt and practice the standard of care, as set forth by the American Academy of Pediatrics (AAP) and the American Academy of Pediatric Dentistry (AAPD), by providing continuing education seminars, and evaluate and add (if indicated) oral health content to the WVU HSC curriculum.
3. Develop an advocacy action plan to inform policy makers on issues (such as Medicaid reimbursement rates of dental services, projected provider shortages, a student loan repayment program to increase the dental workforce, and the application of fluoride varnish delivered by non-dental providers).

Inputs

The COHP is administered by the WV Office of Rural Health with support from the WVU School of Dentistry. Funding for COHP included:

1. Grant funding of \$200,000 for three years (2006-2009) from Claude Worthington Benedum Foundation.
2. Supplemental funding in the form of a chapter grant from the WV March of Dimes for approximately \$3,000 (funding was used in years 2 and 3 of the project).

Staffing support includes one assistant director (the only contracted staff) and an advisory board consisting of fifteen members. The funding for the assistant director position is provided through WVU HSC and the WVU School of Dentistry. The Claude Worthington Benedum Foundation grant award does not include any administration costs for the project. The time and efforts contributed by the project's advisory board members are in-kind contributions.

Direction for the project originates from the advisory board, which include representatives from the WVU School of Dentistry, WVU School of Nursing, WVU School of Medicine, WVU Office of Rural Health, WVU Extension Service, WV Center on Budget and Policy, WV State Medical Association, and the WV Free Clinic Association. The board members have been selected based on their interest in accomplishing the grant's objectives. The board holds quarterly meetings to review and modify the project's action plan.

Activities

The COHP devoted resources to three areas of clinical educational activities: (1) perinatal oral health, (2) infant and toddler oral health, and (3) curriculum evaluation and modification.

1. Perinatal Oral Health Activities
 - *March of Dimes* – The grant funding from the March of Dimes was used to:
 - Distribute a perinatal best practice guidelines document titled [Oral Health Care During Pregnancy: A Summary of Practice Guidelines](#) (developed by the New York State Department of Health and abridged by HRSA Maternal and Child Health Bureau's Perinatal Oral Health Workgroup).
 - Develop and distribute a new chairside reference guide titled [Oral Health Care during Pregnancy: At-a-Glance Reference Guide](#) for dental providers to promote perinatal anticipatory guidance for pregnant women.

The March of Dimes grant allowed COHP to provide these resources to all dental and many non-dental professionals. CHOP mailed 2,500 packets to health professionals including dentists, pediatricians, obstetricians, physician assistants and midwives. Each packet contained a cover letter from each organization's president/executive director promoting perinatal oral health within their respective organizations, the *Practice Guidelines* document, and a [Two Healthy Smiles](#) brochure (to educate pregnant women); dental professionals received the additional chairside reference guide in their packets. The following groups supported COHP's efforts and promoted perinatal oral health to their members: WV Dental Association, WV Dental Hygiene Association, WV Association of Physician Assistants, WV Chapter of American Academy of Pediatrics, Association of Women's Health, Obstetric and Neonatal Nurses, Midwives Alliance of West Virginia, WV Chapter of American College of Nurse Midwives, the West Virginia Chapter of Obstetrics and Gynecology, and the WV Office of Maternal and Child Family Health.

- *WV Perinatal Partnership (WVPP)* – The WVPP is a non-regulatory body representing providers and consumers of perinatal services and the interested public at large. The

COHP has been a key contributor to WVPP task force on specific oral health recommendations for improving birth outcomes. The recommendations are available at <http://www.wvperinatal.org/oralhealth.htm>. COHP supports WVPP continued efforts to evaluate and advocate for public policy to improve access to care for women of childbearing age, includes starting dental care education during the perinatal period.

- *Resource Materials* – Materials developed by the perinatal component of COHP included: (a) a brochure titled [A Parent's Guide to Healthy Teeth](#) (promotes the age-one dental visit and proper oral health care for infants and toddlers) and (b) a chairside reference guide titled [Oral Health Care during Pregnancy: At-a-Glance Reference Guide](#) (for dental providers to promote perinatal oral health anticipatory guidance). Brochures are provided to all new birth mothers in WV in the patient discharge packets and all birthing hospitals can download the brochure online from the WV Birth Score Office website for distribution. The reference guide can be downloaded from the National Maternal Child Oral Health Resource Center website.
- *Perinatal Continuing Education (CE) Program* – The CE program is designed to educate the prenatal, oral health and child health professionals to promote oral health care as a routine practice during pregnancy and early childhood and to increase the number of WV Medicaid women accessing dental services. COHP provided CE programs on perinatal oral health across the state. Courses on perinatal oral health best practices were conducted for dentists and dental hygienists. Trainings were also conducted statewide with the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) liaisons and the Right from the Start (RFTS) nurses and social workers. RFTS serves Medicaid eligible pregnant women and some infants until their first birthday.

2. Infant and Toddler Oral Health Activities

- *COHP Partnership with WV Head Start Association (WVHSA)* – In 2006, COHP established an active partnership with WVHSA leading to the production of a training DVD titled [Healthy Children, Happy Smiles](#). The video educates family and staff on a variety of oral health topics ranging from perinatal oral health to the roles and responsibilities of being a good dental patient. Also, the WVHSA website (<http://www.oralhealthwv.org/>) offers a free CE module [Oral Health in West Virginia Head Start and Early Head Start Children](#) that is approved for nurses, social workers, dentists, dental hygienists, and dental assistants.
- *The First Smiles Continuing Education Campaign* – The COHP utilized the network of the WV Dental Association local societies to conduct trainings. CE programs were provided statewide, training 25% of dentists and dental hygienists on infant/toddler oral health best practice guidelines. The campaign was driven by the dental utilization data of the Early and Periodic Screening, Diagnostic and Treatment Service (EPSDT), showing that only 36% of children under 21 see a dentist at least once during a year, and only 3% of 1-2 year olds receive preventive services in 2003. The campaign aims to improve access and utilization of dental services for 1-2 year olds by educating the clinical dental team on the importance of the age one dental visit and performing infant oral health exams.

3. Curriculum Evaluation and Modification Activities (Didactic and Clinical Training)

The goal of the curriculum evaluation and modification is to ensure that oral health content becomes a learning objective/standard within the various schools at the WVU HSC and that oral health curriculum will continue after the completion of the COHP. COHP added oral health content into the existing curriculum of the WVU Schools of Medicine, Pharmacy, Nursing and Dentistry. Many activities were implemented. The following are highlights of integrating oral health into the curriculum:

- All first year medical school undergraduates rotating through various departments within the WVU School of Dentistry are now provided with a "Dental Shadowing" experience. These rotations, instituted before COHP, allows for integrating oral health. The ENT faculty trains medical students on performing oral examinations and the "Patient Diagnosis and Clinic Integration" courses include common dental problems.
- Starting in 2009, Family Medicine graduate students will complete the curriculum produced by the Society of Teachers of Family Medicine (STFM) called "Smiles for Life" which intends to educate primary care clinicians about oral health. It was originally designed for Family Medicine residency training programs to allow educators to meet requirements mandating education of physicians in oral health. The Smiles for Life (Second Edition) curriculum has seven 45-minute PowerPoint modules covering core

topics of oral health. Also, the curriculum includes a educational objectives based on the ACGME competencies, test questions, resources for further learning, oral health web links, and an implementation guide with a detailed outline of the modules.

- WVU pediatric residents now attend three lectures on Preventive Oral Health, Dental Trauma, and Oral Pathology provided by the WVU School of Dentistry, Pediatric Dentistry Division. Lecture objectives include:
 - Know the recommended age for the first dental visit and its rationale.
 - Understand the objectives for an infant oral health visit.
 - Be able to perform a caries risk assessment.
 - Be able to provide Anticipatory Guidance on Nutrition, Oral hygiene and Xylitol.
 - Be able to diagnosis dental emergencies and determine the urgency for dental care.
 - Understand how dental development can be affected by medical conditions.
 - Know conditions that can cause delayed eruption of teeth.
 - Know conditions that can lead to early loss of primary teeth.
 - Know conditions associated with oligodontia.
 - Understand basic principles of amelogenesis and dentinogenesis imperfecta.
 - Understand how fluoride is absorbed and excreted from the body.
 - Understand how fluoride effects/prevents tooth decay.
 - Know the various systemic and topical forms of fluorides and their indications/contraindications.
 - Be able to calculate fluoride toxicity levels for a child and the treatment dosage required.
- When WVU HSC students rotate through the required WV Rural Health Education Partnership program, they have one-on-one interaction with providers serving as preceptors. Many of the preceptors participate in the Coronary Artery Risk Detection in Appalachian Communities (CARDIAC) Project, a statewide health screening program, which includes a dental component. The CARDIAC Project provides all health science students (not just dental and dental hygiene students) a training opportunity to assess and make referrals for oral and dental diseases/abnormalities. Each WVU HSC student is strongly encouraged to complete a training module on oral health assessment and dental referral before they begin their mandated rural rotations during their junior/senior years. The goal is for all health sciences students to be comfortable looking in the mouth, performing screenings and making the appropriate dental referral.

Outputs

1. Outputs related to perinatal oral health:
 - a. CE training on perinatal oral health
 - 50 RFTS staff trained
 - 60 WIC staff trained including all of the program's Nutritional Education Liaisons
 - 453 dentists and dental hygienists trained
 - b. Distribution of materials
 - More than 2,500 health professionals received a mailed packet containing perinatal oral health information: 1,700 dentists and dental hygienists and 861 non-dental professionals (e.g., administrators of state and local maternal child health programs).
2. Outputs related to infant and Toddler oral health:
 - a. CE training
 - 445 dentists and dental hygienists trained
 - b. Train-the-trainer activities
 - Non-dental professionals conducted CE training on infant and toddler oral health at state-level conferences for the WV Chapter of Pediatricians, WV Chapter of Physician Assistants, WV Social Workers, and WV Chapter of Family Practice Physicians.
 - 721 Head Start staff and 4,003 Head Start parents and families have been trained using the Healthy Children, Happy Smiles DVD.
 - 30 oral health educators trained using the Healthy Children, Happy Smiles DVD.
3. Outputs related to curriculum evaluation and modification:
 - a. Training of future health professionals in different health disciplines on oral health
 - Each year, oral health lectures engaged approximately 110 WUV HSC students.
 - Each year, 50 dental students completed rotations through pediatric dentistry and interdisciplinary clinics providing care for pediatrics patients.

- Each year, approximately 50 allied health science students rotated through the CARDIAC Project providing KINDER DENTAL services that include assessing the oral health status of children in kindergarten throughout the state.
 - As of 2009, over 330 future nursing professionals received training on oral health patient management.
 - As of 2009, over 150 WVU HSC students completed the KINDER DENTAL training course providing dental screenings to approximately 4,000 kindergarten children.
- b. Curriculum development and modification
- School of Medicine – New oral health lectures added to the three graduate programs of Pediatrics, Obstetrics and Gynecology and Family Medicine. Oral health curriculum grand rounds instituted and online Oral Health Curriculum required/encouraged to be completed in all programs.
 - School of Nursing – New course content include Content Standard Objectives to: collaborate with health care providers and community representatives to improve the health status of vulnerable populations; discuss concepts of health promotion as they apply to vulnerable populations including rural Appalachia; and identify health promotion/disease prevention strategies.
 - School of Dentistry – Student rotations provided training in treating children from ages 0 to 18 years, with special needs, and with cleft lip/palate.
4. Outputs related to planning and implementation:
- Strategies developed.
 - A COHP action plan prepared.

Outcomes

As of 2009, outcomes of the COHP include the following:

- A significant increase has been observed in dental utilization rates of the Medicaid “perinatal population” (pregnant women) after COHP statewide educational efforts began. Data from the WV Health Care Authority showed that:
 - 2004-05 showed 27% “Sought & Received Dental Treatment”
 - 2006-07 showed 48% “Sought & Received Dental Treatment”
- All HSC students in nursing, medicine, and residency programs in Pediatrics, Family Medicine and OBGYN have increased awareness of oral health and have increased their referrals to dentists for their patients.
- Health care practitioners throughout WV have increased awareness of the need for early infant dental care.
- The First Smiles CE Program demonstrated increased number of young children seen in dental practices. Evaluation found that 92% of the participating dental providers felt that the program increased their comfort in performing examinations on children less than 3 years old and 31% reported having examined an increased number of children less than 3 years old.
- WVU HSC has taken on a highly visible leadership role and is providing expertise to the private and public sectors of health care.
- WVU HSC has increased and enhanced its partnerships with the WV Dental Association and the WV Dental Hygiene Association.
- WVU HSC has enhanced its role and linkages with state maternal child health programs including the WV Right from the Start, the WV Healthy Start (HAPI) project, WIC programs, and Charleston Area Medical Center.
- COHP charted a path to develop the statewide plan; a State Oral Health Advisory Board has been established to develop a strategic oral health plan for WV.

Sustainability

The COHP has filed for an extension in September 2009, which will allow the grant to carry the project to July 2010. The project will stay at the WVU Office of Rural Health with continued support from the WVU School of Dentistry. The residual funding in the remaining year will be directed toward the following two goal areas.

1. Increase the number of pediatric dentists in the rural areas of the state by supporting current efforts to create a two-year pediatric specialization program in the WVU School of Dentistry. The plan is to hire an additional full-time pediatric dentist as faculty and develop a detailed plan on requirements to initiate a graduate residency program in pediatric dentistry.
2. Improve the role of healthcare providers in providing early childhood oral assessments, treatment, and referrals through evidence-based continuing education. The plan is to continue the First Smiles Program to educate dentists, hygienists and dental assistants; develop a program to integrate with new Head Start/AAPD initiative to promote age one dental visit; and assist in development of a Physician Early Childhood Intervention Program which will provide fluoride varnish.

Budget Estimates and Formulas of the Practice:

The total grant funding from the Benedum Foundation for the COHP was \$200,000 for three years. A portion of the funding covered programmatic costs. Over half of the grant funding went to the development and implementation of training programs and materials. The remaining funding will be reserved for the development of the WVU School of Dentistry pediatric program.

None of the Benedum Foundation grant monies were budgeted toward administrative staff salaries. The WVU HSC demonstrated its commitment to improving childhood oral health status by covering personnel expenses.

The \$3,000 supplemental chapter grant from the WV March of Dimes funded the dissemination of perinatal oral health resource information to dental/non-dental professionals.

Lessons Learned and/or Plans for Improvement:

Lessons learned include:

- *Importance of educating non-dental health sciences students on oral health:* Future non-dental health providers must receive training in order to provide oral health assessment, anticipatory guidance to parents, and support in establishing dental home for children. Training for medical students, nursing students, pediatric residents, OBGYN residents and Family Practice residents is needed and require a program like the COHP for coordination.
- *Training of dentists and dental hygienists:* The intent of the First Smiles program is to educate and motivate more general dentists to adopt best practice guidelines. Training on perinatal oral health best practice guidelines is important to dispel misinformation associated with providing oral health care during pregnancy and to support perinatal oral health care.
- *Education and Awareness:* It is important for dental and non-dental providers, state maternal child health agencies, and advocacy groups to improve oral health outcomes in WV by educating their patients/clients and raising awareness in communities.
- *Importance of Advocacy with the Legislature:* Time and effort should be devoted to inform key legislators on oral health issues and how new legislation and policy changes can impact oral health status. The COHP began work with the WV legislature in 2006. Since then, COHP has testified before the WV legislature sub-committee on oral health and advised on the Oral Health Bill in 2007-2008. Although the bill did not become law, it resulted in significant changes including the formation of a State Oral Health Advisory Board, increased Medicaid reimbursement rates, and increased the employment time of the state dental director.

Plans for Improvement include:

- Cultivate and improve communication. This includes improving partnerships (e.g., with the Medicaid program) and provide input in the development of the WV state oral health plan.
- Develop a pediatric dental residency program.
- Address the dental provider shortage problem by creating and implementing a loan repayment program for dental and dental hygiene students and encouraging new professionals to locate practices in provider shortage areas and remain in-state.
- Advocate and advance policy change such as oral health benefits for pregnant women in the Medicaid program.

Available Information Resources:

Many model programs across the United States were used to develop COHP activities and training/resource materials. These include [Points of Light in Michigan](#), [ABCD Program in Washington](#), and [Into the Mouth of Babes Program in North Carolina](#). An outstanding educational resource for non-dental health care professionals is the [AAP Oral Health Initiative's trainings and videos](#), which are available online at no cost.

Selected materials used by COHP that can be accessed online include:

- A report on Benedum Foundation investing \$2.7 million to promote Oral Health in WV. <http://www.oralhealthwv.org/downloads/benedumOH.pdf>
- *Healthy Children, Happy Smiles* – A training DVD educates family and staff on a variety of oral health topics ranging from perinatal oral health to the responsibilities of a good dental patient. The videos can be viewed online. <http://www.mchoralhealth.org/materials/multiples/wv/>
- *Oral Health Care During Pregnancy: A Summary of Practice Guidelines* – Developed by New York State Health Department; abridged by HRSA MCHB's Perinatal Oral Health Workgroup. http://www.mchoralhealth.org/PDFs/Summary_PracticeGuidelines.pdf
- *Two Healthy Smiles* – Developed by the National Maternal and Child Oral Health Resource Center, a consumer brochure for patient education. <http://www.mchoralhealth.org/PDFs/PregnancyBrochure.pdf>
- *Oral Health in West Virginia Head Start and Early Head Start Children* – A continuing education booklet developed by a COPH and WV Head Start Association. http://www.oralhealthwv.org/downloads/Oral_Health_Repor060409.pdf
- *A Parent's Guide for Healthy Teeth* – Developed by the WV University Birth Score Office. http://www.wvdhhr.org/birthscore/healthy_teeth.pdf
- *Oral Health Care During Pregnancy: At-a-Glance Reference Guide* – Developed by WV School of Dentistry; content adapted from the New York State Health Department, *Oral Health Care during Pregnancy and Early Childhood Practice Guidelines*. http://www.mchoralhealth.org/PDFs/WV_PregnancyRefGuide.pdf

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)?

Outcomes of the West Virginia University's Childhood Oral Health Project (COHP) include:

- A significant increase has been observed in dental utilization rates of the Medicaid pregnant women, from 27% to 48% when comparing 2004-05 (before COHP education efforts began) to 2006-07.
- For the First Smiles CE Program showed that 92% of the participating providers felt that the program increased their comfort in performing examinations on children less than 3 years old and 31% of the providers increased the number of children less than 3 years old examined in their dental practices.
- Evaluation results collected per semester of medical students' clinical rotations within the School of Dentistry showed a positive effect on the knowledge and attitudes of these students.
- Oral Health CE Programs were provided at WV state meetings of pediatrics and family practice physicians.

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.

The COHP has been staffed and administered by one, full-time assistant director, whose salary has been covered by the WVU School of Dentistry and WVU HSC as in-kind contribution. The COHP advisory board meets quarterly to offer guidance and support and the efforts of the board members are donated as in-kind.

Having the COHP provide central planning and coordination to improve the oral health training of all WVU HSC students in four Schools (Dentistry, Medicine, Nursing and Pharmacy) and to collaborate with the numerous professional associations in the state (pediatricians, obstetricians, physician assistants, midwives, etc.) is efficient for integrating oral health into various health disciplines.

Providing guidelines and common messages to dental and non-dental providers across the state and offering continuing education opportunities that follow these guidelines also improve efficiency in increasing awareness and educating WV providers.

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?

A primary strategy to sustain the benefits and activities of COHP is to integrate oral health content into the WVU HSC Schools' curricula and the existing infrastructure of state maternal child health programs (by training the program staff). For example, by securing programmatic changes within the targeted state maternal child health programs, the COHP has already seen a return on investment as the train-the-trainer activities resulted in MCH staff providing statewide trainings on oral disease management and prevention.

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?

COHP has increased collaboration and integration for oral health:

- COHP initiated discussion on oral health with WV healthcare organizations and professional associations representing pediatricians and family practice physicians, resulting in new relationships and integrating oral health into residency training programs for nursing and pediatrics.
- COHP raised the awareness and support among WV dentists and dental hygienists for establishing dental homes and improving infant oral health.
- COHP increased collaboration with WV state MCH programs including WIC and RFTS. These two groups have a significant influence in increasing oral health awareness through their health promotion/education activities and materials for pregnant women and new mothers.
- The March of Dimes funding of COHP activities initiated dialogues and collaborations between WIC, RFTS, and private OB/GYN and Family Medicine providers, nurse mid-wives and physician assistants; these stakeholders have become members of the WV Perinatal Partnership.
- COHP and the WV Head Start Association worked together to address issues of oral health disease and care coordination for Head Start children, and have become partners in laying the foundation for the AAPD Head Start Dental Home Initiative in WV.

Objectives/Rationale

How has the practice addressed HP 2010 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 COHP responds to the Call to Action issued by the Surgeon General's report on oral health. The report highlights 5 major action steps (change perceptions of oral health; overcome barriers by replicating effective programs and proven efforts; build the science base and accelerate science transfer; increase oral health workforce diversity, capacity, and flexibility; and increase collaborations), each has been incorporated to some degree into the COHP action plan.

The project addresses the following Healthy People 2010 objectives: reduce the dental caries experience in children; reduce untreated dental decay in children and adults; increase utilization of oral health system; and increase preventive dental services for low-income children and adolescents.

Extent of Use Among States

Describe the extent of the practice or aspects of the practice used in other states.

COHP activities and materials are being used in other states. For example, the training DVD, *Healthy Children Happy Smiles*, developed through the WVHSA support of COHP is utilized in 30 states. Additional copies of the DVD have also been ordered through the National Maternal and Child Oral Health Resource Center.