Dental Public Health Activity Descriptive Report

Practice Number: 55004
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SECTION I: PRACTICE OVERVIEW

Name of the Dental Public Health Activity:

Smiles for Life Adult Dental Screening and Referral Program

Public Health Functions:

Assessment – Acquiring Data
Assessment – Use of Data
Policy Development – Collaboration and Partnership for Planning and Integration
Policy Development – Oral Health Program Policies
Policy Development – Use of State Oral Health Plan
Assurance – Population-based Interventions
Assurance – Oral Health Communications
Assurance – Building Linkages and Partnerships for Interventions
Assurance – Building State and Community Capacity for Interventions
Assurance – Access to Care and Health System Interventions
Assurance – Program Evaluation for Outcomes and Quality Management

Healthy People 2020 Objectives:

OH-3 Reduce the proportion of adults with untreated dental decay
OH-4 Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease
OH-5 Reduce the proportion of adults aged 45 to 74 years with moderate or severe periodontitis
OH-6 Increase the proportion of oral and pharyngeal cancers detected at the earliest stage
OH-7 Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year
OH-10 Increase the proportion of local health departments and Federally Qualified Health Centers (FQHCs) that have an oral health component
OH-14 Increase the proportion of adults who receive preventive interventions in dental offices
OH-17 Increase health agencies that have a dental public health program directed by a dental professional with public health training

State:	**Federal Region:**	**Key Words for Searches:**
West Virginia		Access to care, planning with partners, emergency department, emergency department diversion, non-traumatic dental conditions, Federally Qualified Health Center, case management

Abstract:

The Mid-Ohio Valley Health Department (MOVHD) is the only regional health department in West Virginia (WV) serving six counties. The Oral Health Program at MOVHD began in December 2007 with hiring a full-time dental hygienist/coordinator. MOVHD is one of only three health departments of 49 in the state that have any type of dental program. Since oral health is not classified as one of the ten essential public health services, it has not received state funding other than for initial start-up funds. Oral health education and community outreach are provided across the lifespan to all sectors of the population. Low income children and adults are aided in obtaining needed dental treatment. The three main service programs are:

I. **Early Smiles, First Dental Visit**: Is directed toward the large population of low income families through the MOVHD Clinical Department and Women, Infant and Children's Programs (WIC). Early Smiles, First Dental Visit is an attempt to reach the youngest most vulnerable children to prevent dental caries. MOVHD Public Health Practice Dental Hygienists, with Public Health Practice

Permits through the WV Board of Dental Examiners, educate parents of children ages one-five and aid in establishing a dental home. Preventive treatment is provided when appropriate.

II. **The School-Community Partnership for Children's Oral Health in West Virginia:** Provides oral health screenings and preventive dental services of prophylaxis (cleaning), fluoride varnish and dental sealants when appropriate in Wood and Roane County Schools. The goals of the program in addition to education and prevention are a positive first dental experience and to aid in establishing a dental home. The program is managed by registered dental hygienists MOVHD addresses Healthy People 2020 objectives for children and adolescents in programs but the main focus of this reporting is on the adult program.

III. **Smiles for Life (SFL) Adult Screening and Referral Program**: Provides a means for adults 18 and over who meet income guidelines to obtain "most needed" dental treatment. Program goals are to provide a safety net for the uninsured and under insured of the region, while reducing the number of hospital emergency department visits for dental pain and infection. Education is a strong component of the program to inform patients about prevention and accept personal responsibility for their own health. The SFL Program was developed in response to the 2009 Mission of Mercy (MOM) Free Dental Clinic held at West Virginia University (WVU) at Parkersburg. SFL is a partnership between MOVHD and the Blennerhassett Dental Society with 23 local dentists and 19 dental hygienists donating dental treatment from their private practices from 2011-2015.

The cost to run the SFL Program in fiscal 2015 was $187,790 with $112,217 to cover salary and fringe of a full-time dental hygienist coordinator, full-time office assistant and part-time dental hygienist. The remaining budget covers $40 patient visit stipend for overhead to the dentist volunteers and usual costs to run an office. The stipend was determined based on input from providers. An agreement with the MOVHD is renewed for each dentist annually.

The SFL Program is a true public/private partnership fulfilling an unmet need in the community.(Not to be confused with the Smiles for Life Curriculum) Adult patients are screened through the health department and placed with area dentists who volunteer services from their own office. MOVHD Public Health Dental Hygienists act as gatekeepers screening patients and gathering information to best serve patients and save time for the volunteer dentist. Most patient records are transmitted electronically, a form of teledentistry. Some referrals to specialists are provided through electronic transmission and review of patient records including health history, charting and x-rays. The SFL model provides a consistent, infection controlled source of care in lieu of a once a year mass clinic like a Mission of Mercy. Providers can be most efficient donating services from their own space while utilizing their own staff, equipment and preferred dental materials. The SFL model is cost efficient compared to a private dental practice or fully staffed treatment facility. Preliminary data indicates that SFL contributes to a 14% reduction in emergency department (ED) visits for dental pain and infection as well as it provides a resolution for the patients' infection. (Wittberg 2013, see Attachment A- white paper.)

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SECTION II: PRACTICE DESCRIPTION

History of the Practice:

Following the Mission of Mercy (MOM) Project in 2009, area dental providers were invited to participate in an appreciation dinner and discussion of "next steps" since the MOM raised awareness in

the community and demonstrated need. Prior to Mid-Ohio Valley Health Department (MOVHD) establishing the Oral Health Program, there were no public health programs available to address the needs of low income residents. The local dentists voted unanimously to support the development of a screening and referral program with MOVHD where they could volunteer from their office rather than starting a clinic where they would volunteer. It was agreed by all that the screening and referral program would be the most economical way to approach providing dental care for low income adults. It took two more years to apply for grant funding and meet one on one with area providers to discuss how the program would work and what they would support. A retired oral surgeon donated his time to assist with meetings. There was also a committee of three dentists from the Blennerhassett Dental Society that met monthly with the hygienist coordinator to finalize program details. (The Oral Health Coordinator Dental Hygienist is employed by the Mid-Ohio Valley Health Department. The Mid-Ohio Valley Health Department works with the West Virginia State Oral Health Program (WVSOHP) but does not receive funding from the State or Federal government to run programs. Financial support for the position comes from various grant foundation sources, Medicaid reimbursement and patient fees.) One of the chief complaints from providers was the high no-show rate with Medicaid clients. Smiles for Life (SFL) has been in existence for four years. In that time, MOVHD has been able to keep the no-show rate for participating dentists at 2%. This has been achieved through double confirming on the part of the dental office and MOVHD along with a strict no show policy. Another suggestion from dental providers was that some sort of fee should be charged to everyone so that they have a stake in their care. MOVHD as a public health entity is able to request proof of income to establish true need for the services something private practitioners are not permitted to do. Effective communication has contributed to volunteer retention.

Justification of the Practice:

WV Medicaid coverage for adults is limited to emergency care consisting of exam, x-rays and extractions. Additionally, there are few public health programs in WV to provide oral health care for low income adults. Locally there are few providers that accept adult Medicaid. The MOM targeted and treated 1300 adults over a two day period. Two other MOM projects in WV demonstrated similar numbers of adults seeking dental care. The Smiles for Life Adult Screening and Referral Program has reduced the number of emergency department (ED) visits for dental pain and infection by 14% from 2010-2012. The local ED now refers patients to SFL where in the past referrals would be attempted and not completed due to cost. The SLF Program requires proof of income and follows Federal Poverty Level (FPL) guidelines to allow those that qualify to pay on a sliding scale. Patients pay on a sliding scale and there is no foundation support to aid in paying for dental services other than the $40 dental stipends. Ninety-five percent of SFL clients are classified a 0% Federal Poverty Level (FPL).

Inputs, Activities, Outputs and Outcomes of the Practice:

Inputs: The SFL Program employs a full-time dental hygienist/coordinator, full-time office assistant and part-time dental hygienist. Due to budget constraints a second full-time office assistant was moved to another department in October, 2014. The MOVHD Oral Health Program is currently merging with the MOVHD Clinical Department to share office assistants and a billing specialist. To date the program has been grant funded by local and regional foundations and Medicaid reimbursement has been minimal. The high level of poverty has also limited program income. The program does not receive any direct state funding or federal funding and is not considered one of the ten essential public health services. To move toward sustainability, client fees were increased July 1, 2015. This program will always depend on some grant funding but with fee increases and better billing practices with Medicaid a more stable income should be realized for the future. The local and regional foundations have been very supportive of the oral health initiatives at MOVHD. There are 40 Parkersburg area dentists. Twenty-three dentists, nineteen dental hygienists and one lab technician volunteer for the SFL Program from the private practice. West Virginia University (WVU) dental and dental hygiene students provide services on rotations of six weeks. In the past there was only one dental office hosting students and their housing source was with a relative or someone they knew. Today there are five area providers willing to host students and a local housing source for any student who may be assigned rotation in the area.

Activities: MOVHD, is the only regional health department in WV, and serves six counties: Calhoun, Pleasants, Ritchie, Roane, Wood and Wirt. The main facility is located in Parkersburg, Wood County. In lieu of a full-time nurse in each county, clinic days are scheduled for immunizations, family planning, etc. The MOVHD Oral Health Program uses portable equipment for school-based prevention in Wood and Roane Counties. Some of the portable equipment is on loan from the WVSOHP. All other counties have some form of school- based oral health program through the FQHC in their area.

The SFL Program accepts patients from all service counties and beyond. The majority of adults are from Wood County. Program inquiries from outside the six county service area are advised if there is an oral health facility to serve them closer to their home. As of 2015, participation has been from eleven WV counties.

Outputs: The SFL Program began in September 2011. As of June 30, 2015: 1,419 adults have been screened with 2,400 dental visits and 1,888 volunteer hours; $835,444 has been donated based on usual and customary fees; 33% have been to an ED or visited a physician to receive antibiotics for dental pain and infection; 38% have acute infection and pain, swelling or abscess; 95% are at 0% FPL; 46% receive Medicaid; 28% are employed. Due to the strict no-show policy, rates have been kept at 2% for the volunteer dentist and 12% at MOVHD screening appointments. Dentists are paid a $40 per patient stipend to defray overhead costs.

Outcomes: In the first months of the SFL Program, the wait list was as high as 422 people. Over 2011-2015 that number has decreased dramatically. Local ED visits for dental pain and infection have decreased by 14% (Wittberg, 2014) and the local ED now refers patients to SFL. Part of the screening process includes oral health education, tobacco cessation, dispensing of oral health care items for home use, oral cancer screening, blood pressure screening and referral/resource for other health needs. The greatest emergent need for patients is tooth extraction 74%, restorative 21% and preventive 5%. Most patients have not had the benefit of routine dental care for restorations and prevention. Over time, with continued availability of the SFL Program, it is hoped that the treatment needs will shift from emergencies to restorative and preventive. The patients who access the SFL Program do not have a dental home. There have been many repeat clients through the SFL Program and some changes in behaviors have been affected with personal habits to improve oral health. Positive changes in hygiene, diet or tobacco use have been witnessed. Initially the dentists were the primary volunteers but now with 19 dental hygienists and dental hygiene students on rotation preventive services will be more readily available. Many clients do not have a primary care provider and have uncontrolled diabetes or high blood pressure. Some require medical clearance to receive dental treatment

Budget Estimates and Formulas of the Practice:

Start-up funding was provided by the State of WV and the Claude Worthington Bendum Foundation. That funding helped with establishing the program. The local Community Resources Agency donated digital panorex and periapical x-ray along with practice management software. Now that initial funds have been expended and the program is established the biggest cost is salary and fringe for the 2.75 positions that operate the program.

Salary and Benefits	$112,217
Contract/Stipends	$ 21,000
IT and Software Maintenance	$ 7,583
Travel, training	$ 10,696
Office, print, postage, parking, dues	$ 5,164
Medical, dental supplies and equipment	$ 20,397
Indirect Costs	$ 10,733
Total Program Budget	$187,790

Lessons Learned and/or Plans for Improvement:

Sustainability has been the biggest challenge with the SFL Program. Although utilizing dental providers volunteering from their offices is the most economical way to go about providing services there are still costs to run the program. Foundations want to see sustainability over time. The clients served do not have money to pay for services. The State government does not see the value nor realize the negative economic impact of poor oral health.

The SFL Program is a great public/private partnership providing a needed service to the community yet it has received little recognition from state government in the way of ongoing financial support. Past advocacy efforts were having success but changes in political appointments have not provided continued support. Advocacy efforts are ongoing through the MOVHD Administration, WVSOHP and the WV Oral Health Coalition. As a government agency, MOVHD is not permitted to have fundraising events like other non-profits.

Plans for improvement include the merger with the MOVHD Clinical Department that has more experience with billing and providing services to low socio-economic clients. A new agency Executive Director and Finance Director have been reviewing all operations to implement cost-saving measures. The direction of the Clinical Department is also analyzing MOVHD Oral Health Department operations for economy and efficiency. Increased fees have been approved that unfortunately must be passed on to the patients. Utilizing a billing specialist has helped recoup unrealized Medicaid reimbursement. Since April 2015, $22,548 has been reimbursed by Medicaid, double the amount received in 2014. Obtaining a housing source and increased use of dental and dental hygiene students on rotation will help increase program capacity for patients. Collaboration with the Benedum Foundation and the WVU School of Dentistry Rural Health Program has successfully secured a student housing source. Additional Health Science students in medicine, nursing and pharmacy will also be using the facility for rural rotations to help maximize its capacity and cost effectiveness

Available Information Resources:

Smiles for Life, Oral Health and Mid-Ohio Valley Health Department program information: www.movhd.com

The Smiles for Life Adult Screening and Referral Program received attention with the Rural Assistance Center (RAC) Models and Innovations on-line grant resource site. http://www.raconline.org/success/project-examples/779

The American Dental Association (ADA) featured the Smiles for Life Program with promotion in Social media and their on-line newsletter. http://www.ada.org/en/public-programs/action-for-dental-health/action-for-dental-health-success-stories/health-department-in-west-virginia-connects-low-income-adults-with-community-dentists

Attachment A: White paper - Emergency Room Visitation and Expense Reduction Due to a Community Based Oral Health Program

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)?

The Smiles for Life Adult (SFL) Screening and Referral Program began in September 2011. As of June 30, 2015, 1,419 adults have been screened with 400 dental visits and 1,888 volunteer hours. $835,444 has been donated based on usual and customary fees. Local ED visits for dental pain and infection have decreased by 14% (Wittberg, 2014) and the local ED now refers patients to SFL.

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.

Adult patients are screened through the health department and placed with area dentists who volunteer services from their own office. MOVHD Public Health Dental Hygienists act as gatekeepers screening clients and gathering information to best serve clients and save time for the volunteer dentist. Most client records are transmitted electronically. The SFL model provides a consistent source of care in lieu of a once a year mass clinic such as MOM. Providers can be most efficient donating services from their own space while utilizing their own staff, equipment and preferred dental materials. The SFL model is cost efficient compared to a private dental practice or fully staffed treatment facility. Reference to the previous program budget indicates the cost of this program. The SFL Program is limited to basic dental treatment and does not provide complete and comprehensive dental services. Having a fully staffed dental clinic including a dentist with multiple treatment rooms and additional staff would cost more than double the current budget.

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?

The merger with the MOVHD Clinical Department that has more experience with billing and providing services to low socio-economic clients will aid in sustainability. A new Agency Executive Director and Finance Director have been reviewing all operations to implement cost-saving measures. The direction of the MOVHD Clinical Department is also analyzing Oral Health operations for economy and efficiency. Increased fees have been approved that unfortunately must be passed on to the patient. Utilizing a billing specialist has helped recoup unrealized Medicaid reimbursement more than doubling the amount received in 2014. During the period April to August, 2015, $22,548 has been received in past and present Medicaid claims reimbursement.

Obtaining a housing source and increased use of dental and dental hygiene students on rotation will help increase program capacity for patients.

The Mid-Ohio Valley Oral Health Fund, an endowment fund with the local Parkesburg Area Community Foundation has been established to aid in future program funding.
Unless public health or state government provides funding, this program will always be somewhat dependent on grant funding. Advocacy efforts have been made in the past with little success, but continue as awareness has been raised through the efforts of MOVHD Administration, WVOHP and the WV Oral Health Coalition. Over $1,000,000 in grant funding has been for both children and adults in the Oral Health Program at MOVHD since its inception in December 2007.

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?

The SFL Program is a true public/private partnership fulfilling an unmet need in the community. SFL is a partnership between MOVHD and the Blennerhassett Dental Society with 23 local dentists and 19 dental hygienists currently donating dental treatment from their private practices. A local lab technician volunteers on a limited basis in cases of extreme hardship. WVU School of Dentistry students provide added capacity when on six week rotations.

The support of local and regional foundations has helped to establish this most needed program. The Mid-Ohio Valley Health Department has been a leader establishing an oral health department and hiring a dental hygienists/coordinator. MOVHD Clinical, Health and Wellness and Women Infant and Children's (WIC) Programs increasingly work together to better integrate services and improve the overall health of the community.

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?

X	OH-3	Reduce the proportion of adults with untreated dental decay
X	OH-4	Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease
X	OH-5	Reduce the proportion of adults aged 45 to 74 years with moderate or severe periodontitis
X	ON-6	Increase the proportion of oral and pharyngeal cancers detected at the earliest stage
X	OH-7	Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year

X	OH-10	Increase the proportion of local health departments and Federally Qualified Health Centers (FQHCs) that have an oral health component

X	OH-14	Increase the proportion of adults who receive preventive interventions in dental offices

X	OH-17	Increase health agencies that have a dental public health program directed by a dental professional with public health training

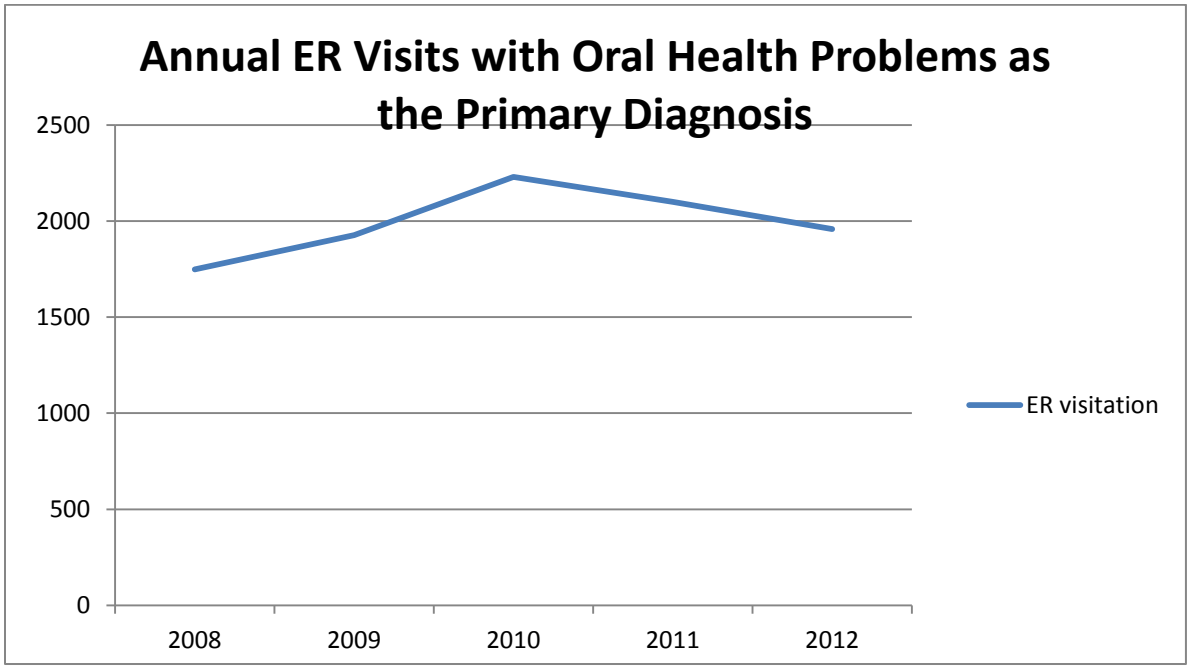
The Smiles for Life Adult Screening and Referral Program is addressing the above HP 2020 objectives related to adult oral health. SFL has built infrastructure and capacity for community, state and territorial oral health programs because this is a model that can be replicated. It is utilizing dental hygienists in public health in a unique capacity along with teledentistry. Teledentistry is implemented through sending patient records along with electronic review of records by dentists to obtain specialty referrals. This program demonstrates a successful treatment program using volunteer providers. Coordination and communication are the keys to program success.

Attachment A –White Paper

Emergency Room Visitation and Expense Reduction Due to a Community Based Oral Health Program

Hospital Emergency Rooms (ER) are a common place for patients with dental pain to seek treatment. It has been estimated that visits to ERs for preventable dental conditions increased 16% nationwide between 2006 and 2009 (or about 5% per year)[i]. The percentage of these ER visits made by Medicaid patients, and thus paid for by tax dollars, has been reported in States to vary between one-third and one-half[ii]. Most hospitals are only able to treat pain and infection,[iii] and thus these patients tend to have a high rate of readmission. One study has concluded that 80% of low-income patients presenting to ERs with oral health pain needed subsequent care from a dentist.[iv] A Minnesota study found that 20% of ER visits for oral health complaints were made by patients who had previously sought ER care for the same complaint.[v] ER and hospital treatment is expensive and incomplete: it does not solve underlying problems and does not provide restorative work or extractions. [vi] ER physicians merely address pain and infection by providing pain medication and antibiotics.[vii]

In view of these challenges, the Mid-Ohio Valley Health Department (MOVHD) in collaboration with the local dental community developed the Smiles for Life program. MOVHD acts as the gate-keeper. Low income clients (below 250% of Federal Poverty Level) make an appointment with MOVHD. At MOVHD, Public Health Practice Dental Hygienists are used as case managers. At the appointment, clients are evaluated, given a full mouth x-ray, and placed with a participating dentist. The dentist in effect volunteers his or her time, but the office receives a $40 per client visit to assist with costs for staff and overhead. MOVHD controls the flow of clients to the dentists, assuring that no dentist gets more than they are willing to give. MOVHD also assures that clients keep appointments. Currently the no-show rate is only about 3%, which is substantially better than the typical no-show rate for all participating dentists. The program, including stipends, costs MOVHD approximately $170,000 per year to run.



The data on the chart demonstrates the impact on hospital Emergency Room visitation of a community dental program for low-income clients. Hospital visits in the Parkersburg, WV area went up 27.5% between 2008 and 2010 for oral health complaints. The Smiles for Life program started seeing clients in September of 2011, and the drop in ER visitation from 2010 and 2012 was 13.8%. At the same time, the cost per visit dropped from an average of $131.50 prior to the start of the

program to $112.91 after, likely due to referrals to a program that provided clients better, more appropriate care than the hospital ER (MOVHD is only two blocks from the hospital).

Nationwide, ER visitation for oral health complaints is going up at a rate of about 5% per year, lower that the rapid increase seen in this area of WV (approximately 13% per year). Using a 5% increase per year, visitation to the ER would have been expected to be 2457 in 2012. Likewise, health care costs are rising at a double digit rate. Using a 10% increase per year, the cost per visit could be expected to be $158.60. Thus, in the absence of this program, hospital ER costs for oral health complaints could have been expected to be approximately $390,000 instead of the $221,071 reported, a savings of about $170,000. The program costs as much to run ($170,000) as it saves in the Emergency Room, but the problem is not fixed in the ER. The hospital can only give pain meds, which have a street value and contribute to addiction, and antibiotics. There is a high rate of readmission for oral health complaints. The MOVHD program fixes the problem.

The savings of this program presented here are based strictly on hospital ER costs. It ignores quality of life issues, costs to businesses for absenteeism, economic costs to individuals (getting a job with poor oral health is very difficult), and readmission issues for hospitals.

Questions about the program can be directed to Dr. Richard Wittberg or Mary Beth Shea at (304) 485-7374.

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[i] Agency for Healthcare Research and Quality (AHRQ). Healthcare Cost and Utilization Project (HCUP) – The Nationwide Emergency Department Sample for the years 2009 and 2006. AHRQ, Rockville, MD. http://hcupnet.ahrq.gov/.

[ii] The PEW Center on the States. A Costly Dental Destination – Hospital Care Means States Pay Dearly. www.pewcenteronthestates.org/dental, February, 2012.

[iii] C. Lewis, H. Lynch, and B. Johnston. Dental Complaints in Emergency Departments: A National Perspective. Annals of Emergency Medicine. 2003; 42:93-99.

[iv] L. Cohen, A. Bonito, D. Akin, R. Manski, M. Macek, R. Edwards, and L. Cornelius. Toothache Pain: A Comparison of Visits to Physicians, Emergency Departments and Dentists. Journal of American Dental Association. 2008; 71:1205-1216.

[v] The PEW Center on the States. A Costly Dental Destination – Hospital Care Means States Pay Dearly. www.pewcenteronthestates.org/dental, February, 2012.

[vi] Davis E.E. PhD, Deinard A.S. MD, MPH, Maïga E.W.H MS. Doctor, my tooth hurts: the costs of incomplete dental care in the emergency room. Article first published online: 10 MAR 2010, Journal of Public Health Dentistry.

[vii] Davis E.E. PhD, Deinard A.S. MD, MPH, Maïga E.W.H MS. Doctor, my tooth hurts: the costs of incomplete dental care in the emergency room. Article first published online: 10 MAR 2010, Journal of Public Health Dentistry.