Dental Public Health Activity Descriptive Report Submission Form

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

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

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

NOTE: Please use Verdana 9 font.

CONTACT PERSON PREPARING THE SUBMISSION AND TO ANSWER QUESTIONS
Name: Paul Glassman DDS, MA, MBA **Title: Professor** **Agency/Organization: University of the Pacific School of Dentistry** **Address: 155 5th Street** **San Francisco, CA 94103** **Phone: 415-929-6490** **Email Address: pglassman@pacific.edu**

PROVIDE CONTACT INFORMATION FOR ONE ADDITIONAL PERSON WHO COULD ANSWER QUESTIONS REGARDING THIS PROGRAM
Name: Same as above **Title:** **Agency/Organization:** **Address:** **Phone:** **Email Address:**

SECTION I: ACTIVITY OVERVIEW

Title of the dental public health activity:

The Virtual Dental Home

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

"X"	**Assessment**
X	1. Assess oral health status and implement an oral health surveillance system.
X	2. Analyze determinants of oral health and respond to health hazards in the community
	3. Assess public perceptions about oral health issues and educate/empower them to achieve and maintain optimal oral health
	Policy Development
X	4. Mobilize community partners to leverage resources and advocate for/act on oral health issues
X	5. Develop and implement policies and systematic plans that support state and community oral health efforts
	Assurance
	6. Review, educate about and enforce laws and regulations that promote oral health and ensure safe oral health practices
X	7. Reduce barriers to care and assure utilization of personal and population-based oral health services
X	8. Assure an adequate and competent public and private oral health workforce
	9. Evaluate effectiveness, accessibility and quality of personal and population-based oral health promotion activities and oral health services
X	10. Conduct and review research for new insights and innovative solutions to oral health problems

***ASTDD Guidelines for State and Territorial Oral Health Programs that includes 10 Essential Public Health Services to Promote Oral Health**

Healthy People 2020 Objectives: Check one or more key objectives related to the activity. If appropriate, add other national or state HP 2020 Objectives, such as tobacco use or injury.

"X"	**Healthy People 2020 Oral Health Objectives**	
X	OH-1	Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth
X	OH-2	Reduce the proportion of children and adolescents with untreated dental decay
X	OH-3	Reduce the proportion of adults with untreated dental decay
X	OH-4	Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease
X	OH-5	Reduce the proportion of adults aged 45 to 74 years with moderate or severe periodontitis
X	OH-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-8	Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year
X	OH-9	Increase the proportion of school-based health centers with an oral health component
X	OH-10	Increase the proportion of local health departments and Federally Qualified Health Centers (FQHCs) that have an oral health component
X	OH-11	Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year

X	OH-12	Increase the proportion of children and adolescents who have received dental sealants on their molar teeth
	OH-13	Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water
	OH-14	Increase the proportion of adults who receive preventive interventions in dental offices
	OH-15	Increase the number of States and the District of Columbia that have a system for recording and referring infants and children with cleft lips and cleft palates to craniofacial anomaly rehabilitative teams
	OH-16	Increase the number of States and the District of Columbia that have an oral and craniofacial health surveillance system
	OH-17	Increase health agencies that have a dental public health program directed by a dental professional with public health training

"X"	**Other national or state Healthy People 2020 Objectives: (list objective number and topic)**	

Provide 3-5 Key Words (e.g. fluoride, sealants, access to care, coalitions, policy, Medicaid, etc.) These will assist those looking for information on this topic:

Value-based Care, Community-based Care, Teledentistry, Head Start, Schools, Medicaid, On-Site Care, Early Prevention and Intervention, Access to Care, Workforce, Communities

Executive Summary: Complete after Section II: Detailed Activity Description. Please limit to 300 words in one or two paragraphs.

Provide a brief description of the dental public health activity. Include information on: (1) what is being done; (2) who is doing it and why; (3) associated costs; (4) outcomes achieved (5) lessons learned, both positive and negative.

The Virtual Dental Home (VDH) is a community-based oral health delivery system in which people receive diagnostic and preventive services in community settings. It utilizes telehealth technology to link dental hygienists and assistants in the community with dentists in dental offices and clinics forming a complete system of care. Equipped with portable imaging equipment and an internet based dental record system, the dental hygienist collects electronic dental records such as X-rays, photographs, charts of dental findings, and dental and medical histories, and uploads the information to a secure web server where the dental record is reviewed by a collaborating dentist. The dentist completes a dental examination and creates a dental treatment plan. The dental hygienist performs those preventive and early intervention services that can be conducted in the community setting and refers patients to dental offices for procedures that require the skills of a dentist. In these cases, the patient is likely to receive a successful first visit and to need fewer visits in the dental office than with a traditional referral. On-going preventive services and examination visits take place in the community.

A major component of the VDH system is patient, parent, and caregiver education. Having a dental hygienist at the community site on a regular basis provides the opportunity to educate site staff, parents, and gather caregivers about critical mouth care and dietary activities that are the key to having good oral health.

Experience with the VDH has demonstrated that two-thirds of underserved children and the majority of adults can be kept healthy in community settings by procedures that can be performed by dental hygienists as described above. In California and now several other states, because of the experience with the VDH demonstration described above, legislation has been adopted to facilitate spread of the VDH system.

SECTION II: DETAILED ACTIVITY DESCRIPTION

Provide detailed narrative about the dental public health activity using the headings provided and answering the questions. Include specifics to help readers understand what you are doing and how it's being done. References and links to information may be included.

Complete using **Verdana 9 font.

Rationale and History of the Activity:

1. What were the key issues that led to the initiation of this activity?

   It is clear that the majority of children and adults in the U.S. population do not receive dental care. There are many barriers to receiving dental care in the traditional office-based system, including cost, location, hours, and cultural issues. The Virtual Dental Home (VDH) system was designed to bring care to where people are and deliver the majority of needed services in community sites. At the same time, it was designed to link community care with dentists in dental offices and clinics to create a full system for dental care.

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

   The Pacific Center for Special Care at the University of the Pacific School of Dentistry, under the direction of Dr. Paul Glassman, conducted a six-year demonstration of this concept, which lead to the adoption of legislation in California and now other states to create a policy environment where this system could be used. The report of the demonstration project is located here: http://www.dental.pacific.edu/departments-and-groups/pacific-center-for-special-care/publications

   The main findings from the demonstration were that the system could:
   - Reach people who traditionally did not receive dental care, emphasize prevention, and lower costs,
   - Keep the majority of people healthy on-site and verify that they were healthy, therefore eliminating the need for an unnecessary visit to a dental office.
   - Keep about 2/3 of children healthy with all needed services completed by a dental hygienist on site in the community,
   - Adopt a continuous presence system with the VDH "community team" being present all year long and therefore raising awareness of oral health and supporting adoption of oral healthy habits,
   - Integrate oral health activities into community organizations and programs,
   - Integrate the off-site dentist into the community-based program.

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

   The initial proof of concept demonstration started in 2009. It used a California Health Workforce Pilot (HWPP) project to test scope of practice changes outside of the then current regulatory environment.

   In 2014 legislation was passed in California (AB1174) that adopted the scope of practice changes that were tested in the HWPP and required the California Medicaid program to pay for covered dental services whether they were performed in-person or using telehealth technologies, whether real-time or store-and-forward telehealth technologies. Store-and-forward refers to the collection of electronic records at a community "originating" site which are then uploaded or otherwise made available to a dentist at a clinical "distant" site. At a later time, the dentist reviews the records an makes a diagnosis and treatment plan without the need for an in-person visit with the patient.

   Subsequent to 2014 a number of additional states have adopted the VDH system and supporting scope-of-practice and payment legislation. In addition, the American Dental Association has now adopted a policy statement on teledentistry, further supporting its use.

The sections below follow a logic model format. For more information on logic models go to: W.K. Kellogg Foundation: Logic Model Development Guide

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	OUTCOMES

1. What resources were needed to carry out the activity? (e.g., staffing, volunteers, funding, partnerships, collaborations with various organizations, etc.)

   The VDH system was developed and tested using grant funding. Currently grant funding is being used to train new sites and provide technical assistance. However, the care system is paid for using traditional funding sources.

   The VDH requires:
   - Formal relationships with community sites, such as Head Start pre-schools, elementary schools, community centers, and other community locations.
   - A consent package and process to enroll people in the system.
   - A "community team" often consisting of a dental hygienist and dental assistant/navigator.
   - Job descriptions, workflows and procedures for the community-based care, interface with the dental office environment, and internal operations within the dental office environment.
   - Adoption of record keeping, documentation, and billing practices that conform to the regulatory environment if the state where the VDH is being used.
   - Training and support for using the most current prevention and behavior support science to improve oral health at the lowest cost.
   - Data collection and evaluation systems to demonstrate progress and success.

INPUTS	**PROGRAM ACTIVITIES**	OUTPUTS	OUTCOMES

2. Please provide a detailed description the key aspects of the activity, including the following aspects: administration, operations, and services.

   See report at:
   http://www.dental.pacific.edu/departments-and-groups/pacific-center-for-special-care/publications

INPUTS	PROGRAM ACTIVITIES	**OUTPUTS**	OUTCOMES

3. What outputs or direct products resulted from program activities? (e.g., number of clients served, number of services units delivered, products developed, accomplishments, etc.)

   The VDH system has received widespread interest and support. At the time of this writing there are around 40 provider entities being trained in California. There are also funded replication projects underway in Colorado, Oregon, and Hawaii and other replication activities starting or under discussion in Missouri, Rhode Island, Idaho, North Dakota, Florida, New Hampshire, North Carolina, and Kansas.

INPUTS	PROGRAM ACTIVITIES	OUTPUTS	**OUTCOMES**

4. What outcomes did the program achieve? (e.g., health statuses, knowledge, behavior, care delivery system, impact on target population, etc.) Please include the following aspects:
   a. How outcomes are measured
   b. How often they are/were measured
   c. Data sources used
   d. Whether intended to be short-term (attainable within 1-3 years), intermediate (achievable within 4-6 years), or long-term (impact achieved in 7-10 years)

   See report at:
   http://www.dental.pacific.edu/departments-and-groups/pacific-center-for-special-care/publications

Also see outcomes summary for question #2 under rationale and history

In addition to the specific patient care outcomes listed in the document referenced above, the VDH demonstration developed and tested protocols for the placement of Interim Therapeutic Restorations by Allied Dental Personnel and generally raised awareness across the nation about the potential for using telehealth connected teams to support improved population health and lower costs.

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

1. What is the annual budget for this activity?

   Variable as it is being adopted by many provider entities in multiple states, all with different structures and circumstances.

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

   Variable as it is being adopted by many provider entities in multiple states, all with different structures and circumstances.

3. How is the activity funded?

   Grant funding is still being used to provide training and technical assistance to many provider entities. Patient care funding is variable as it is being adopted by many provider entities in multiple states, all with different structures and circumstances.

4. What is the plan for sustainability?

   This may vary by site, but the VDH system lowers costs for prevention and early intervention and is leading to sustainable systems that can produce better population health at lower cost per capita.

Lessons Learned and/or Plans for Addressing Challenges:

1. What important lessons were learned that would be useful for others looking to implement a similar activity? Was there anything you would do differently?

   There is a learning curve. Although the VDH system can produce better population health at lower cost per capita, it requires careful planning, a step-by-step implementation strategy and good training and technical assistance.

   It is also clear that uninformed resistance or opposition to use of this system of care is decreasing as additional states recognize the potential to improve health and lower costs.

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

   See report at:
   http://www.dental.pacific.edu/departments-and-groups/pacific-center-for-special-care/publications

   The VDH system has been developed over more than a decade and has been growing and adopting with time and experience.

   There have been many challenges in developing and supporting this system. In general, they can be characterized as:
   - Uninformed resistance to a new system: This a common impediment to diffusion of innovation. Ideas like "allied personnel can't possibly place ITRs safely" are less common now that the CA test had dental hygienists and assistants place over 1000 of them with no adverse outcomes. Also, ideas that "a dentist can't perform a dental

examination without being in-person with the patient" are less common after a formal published study and more than a decade of experience have shown that dentists can indeed so this.

- Regulatory systems created prior to the advent of telehealth delivery systems: Many federal, state, and local laws and regulations do not recognize, and therefore do not support the use of telehealth-connected teams, to deliver oral health services. Even in those states with some recognition, telehealth-connected team delivery systems are often treated as second choice systems of care in spite of growing experience showing the opposite.
- Payment system that do not include "telehealth parity": Some states are moving to system of "telehealth-parity" where regulatory and payment systems consider telehealth-delivered care as equal to in-person delivered care. The general philosophical orientation is shifting to understand that telehealth technologies are tools that can help providers deliver services. The choice of tools needs to be up to the provider. If a payment system pays for a service, they need to pay for that service whether that services was delivered using telehealth technologies or in-person services.

Available Information Resources:

Share any models, tools, and/or guidelines developed by the program specifically for this activity that may be useful to others seeking additional information. Hyperlink resources if possible.

See:
http://www.dental.pacific.edu/departments-and-groups/pacific-center-for-special-care

and

http://www.dental.pacific.edu/departments-and-groups/pacific-center-for-special-care/publications

TO BE COMPLETED BY ASTDD	
Descriptive Report Number:	06007
Associated BPAR:	The Role of Oral Health Workforce Development in Access to Care
Submitted by:	Univ. of the Pacific School of Dentistry
Submission filename:	DES06007CAvirtualdentalhome-2019
Submission date:	March 2019
Last reviewed:	March 2019
Last updated:	March 2019