Dental Public Health Project/Activity Descriptive Report Form

Please provide a detailed description of your **successful dental public health project/activity** by fully completing this form. Expand the submission form as needed but within any limitations noted. Please return completed form to: lcofano@astdd.org

NOTE: Please use Arial 10 pt. font.

CONTACT PERSON PREPARING THE SUBMISSION AND TO ANSWER QUESTIONS
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PROVIDE CONTACT INFORMATION FOR ONE ADDITIONAL PERSON WHO COULD ANSWER QUESTIONS REGARDING THIS PROGRAM
Name: Dr. Guy Deyton **Title: State Dental Director** **Agency/Organization: Missouri Department of Health & Senior Services-Office of Dental Health** **Address: PO Box 570, Jefferson City, MO 65102** **Phone: 573-751-5874** **Email Address: guy.deyton@health.mo.gov**

SECTION I: ACTIVITY OVERVIEW

Title of the dental public health activity:

Teledentistry at Schools & Nursing Homes

Public Health Functions* and the 10 Essential Public Health Services to Promote Oral Health: Check one or more categories related to the activity.

"X"	Assessment
x	1. Assess oral health status and implement an oral health surveillance system.
	2. Analyze determinants of oral health and respond to health hazards in the community
x	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
x	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 2030 Objectives: Please list HP 2030 objectives related to the activity described in this submission. If there are any state-level objectives the activity addresses please include those as well.
Reduce the proportion of adults with active or untreated tooth decay.
Increase the use of the oral health care system.
Reduce the proportion of children and adolescents with lifetime tooth decay.
Reduce the proportion of children and adolescents with active or untreated tooth decay.
Reduce the proportion of people who cannot get the dental care they need when they need it.
Reduce the proportion of older adults with untreated root surface decay.
Increase the proportion of low-income youth who have a preventive dental visit.
Increase the proportion of children and adolescents who have dental sealants on one or more molars.

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:

Access to Care: Adults and Older Adults Services, Access to Care: Children Services, Access to Care: Communities, Access to Care: School-Based Oral Health, Access to Care: Workforce, Medicaid, Teledentistry, Health equity

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.

In conjunction with our HRSA Workforce and CDC grants, the Office of Dental Health (ODH) have contracted with dental providers to either provide teledentistry services at schools, including providing sealants, or nursing homes or both. Contracts are being funded through private Missouri foundations and/or CDC. The contracts funded through private Missouri foundations are the match part of the requirement of the HRSA Workforce Grant. The contracts funded by CDC are for sealant programs and are from the CDC Improving Oral Health Outcomes Grant. (Sealant contracts are funded through CDC and do not provide for personnel services but provide for education pertaining to dental sealants.) We contracted with Local Public Health Agencies who have dental programs, Federally Qualified Health Centers (FQHCs), Health Clinics and Dental/Dental Hygiene Schools to provide care to schools targeting those in their area with the highest percentage of Free & Reduced Lunches. In order to qualify for the Free & Reduced Lunch Program, a family needs to meet the requirement of being at or below 185% of the poverty level[1]. Since these children are at or below the poverty level, they are considered high risk because they have a harder time accessing and receiving dental care. Nursing Home targets were based on counties with one or fewer dentists. The contractors are required to bill Medicaid to show sustainability of teledentistry services after the contract is complete.

Associated costs are mainly for equipment, travel and personnel services, with the largest proportion being equipment. Equipment costs are reimbursed mainly through the first year of the contract and vary from $24,000-$48,000 depending on if they go to schools, nursing homes or both. Lessons learned were to not try to get into schools or nursing homes during a pandemic; if you try, the contractor must build a relationship with the facility they are trying to access to provide care. Another lesson was that many potential contractors are not enticed to respond to a Request for Bid due to the daunting aspect of filling out the forms and contracting with the state. Success was seen by contracting with agencies through a direct contract, which is allowed under state rules. After this success, other providers heard of the program and were more willing to fill out the Request for Bid and become a contractor. We got our Coalition for Oral Health involved to help answer the Request for Bid questions as the Office of Dental Health could not do so under state law.

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 **Arial 10 pt.

Rationale and History of the Activity:

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

   Much of Missouri is rural and many counties qualify as a dental health professional shortage area (HPSA) with one or fewer dentists. Medicaid numbers show low participation rates among children and nursing home residents. Dental sealant rates are about 29%. ODH knew we needed to increase these numbers and with the Dental Practice Act just being changed allowing teledentistry and with one of the teledentistry innovators in Missouri (Dr. Nathan Suter), it was a natural fit to try to bring

teledentistry services to our state. When the opportunities arose to apply for HRSA and CDC grants, funding was asked for to help fund teledentistry services in schools and nursing homes.

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

The dental practice act changed around 2016 to allow teledentistry. It was not a change in the practice act that specifically mentioned teledentistry, but it allowed activities to fall under supervision rules. Under the Dental Practice Act, a dental hygienist cannot supervise a dental assistant, but it's unclear what that means. Does it mean a dental assistant can clean up after a hygienist or can a hygienist watch an assistant do a polish? Currently, in Missouri only a dentist can supervise a Missouri expanded function dental assistant (EFDA). The pilot program will test whether a dentist, using teledentistry, can adequately supervise each oral healthcare worker within the scope of their practice. The Missouri Hygiene Association has communicated it hopes one outcome will be a rule change that will allow hygienists to supervise assistants in 'public health settings.'

Deploying a hygienist to a school or nursing home without the presence of dentist is cost effective. A dentist can keep the office running and have an extension of the office at relatively little expense at high profit margin. The hygienist can generate well over $150 an hour even at Medicaid rates under this scenario. Dr. Suter had a spreadsheet that showed his hygienist brought in over $50,000 in four months for a pilot project he did with his practice. ODH used that for justification to promote teledentistry. At time of the HRSA Workforce grant, there were about 4200 licensed hygienists & 3200 dentists in Missouri with the underemployment rate at about 30%, so it was an opportunity to expand use of that trained workforce. We just couldn't get them out of the "brick & mortar" facility to serve the underserved population.

Because we are doing asynchronous teledentistry the exams, X-rays, charting and photos do not have to be reviewed on a live basis. They can be reviewed wherever & whenever as long as dentist has wireless hook up. Hygienists can do preventive services next time they are in that building since the hygienists can work with indirect supervision once the treatment plan is completed. This project has increased access to care for underserved.

Dr. Deyton, Missouri's State Dental Director, has proposed a pilot program to extend our existing oral healthcare workforce into underserved populations using teledentistry .The purpose of pilot is to determine if teledentistry can be used to fulfill the requirements of supervision for Missouri Expanded Function Dental Assistants (EFDA's) and Missouri hygienists to perform level 1 interventional care and specific portions of restorative and prosthetic care in nursing homes. The pilot program will require dentists at distant sites to collaborate with EFDA's and hygienists performing in nursing homes via teledentistry to perform data collection, radiography, photography, periodontal debridement, fluoride varnish applications, placement of palliative restorations, preliminary impressions when necessary, and prophylaxis and periodontal re-evaluation. Patient outcomes, quality of care outcomes, and diagnostic efficacy outcomes will be evaluated. The Missouri Dental Board, Missouri Dental Association, Missouri Hygiene Association, and Missouri Primary Care Association are supporting the pilot program proposal. The pilot study will be a one-year term with a report to the Missouri Dental Board on the outcomes. If the pilot program has positive results, it would open opportunities for expansion of fixed and removable prosthetic EFDA functions using that teledentistry-supervised work arrangement. See description of Missouri Expanded Function Dental Assistants below.

Missouri Expanded Function Dental Assistants (EFDA's) in Missouri can perform specific expanded functions, subsequent to approved training, competency testing, and certification, under the supervision of a licensed dentist. The expanded functions fall into five categories:

- Restorative Services 1
- Restorative Services 2
- Fixed Prosthodontics
- Removable Prosthodontics
- Orthodontic Procedures

Specifically, supervising dentists may delegate the following functions to a certified Missouri EFDA if the dentist deems it appropriate for the skill of the EFDA and for the individual patient.

Restorative Services 1:

- Placing, condensing, and carving amalgam restorations for class I, V, & VI;
- Placement of composite restorations for Class I, V, & VI
- Placement of sedative fillings

Restorative Services 2:

- All Restorative 1 services
- Sizing & cementing prefabricated crowns
- Placing, condensing, & carving amalgam restorations for class II, III, IV
- Placement of composite restorations for class II, III, IV

Fixed Prosthodontics:

- Placement of retraction cord for impression
- Making an impression for a fixed prosthesis
- Extra-oral adjustment of fixed prostheses
- Final cementation of a fixed prosthesis
- Minor palliative care of dental emergencies

Removable Prosthodontics:

- Placement of temporary soft liners in removable prostheses
- Making impressions for removable prosthesis
- Making extra-oral adjustments to removable prostheses during or after insertion
- Minor palliative care of dental emergencies

Orthodontic Functions:

- Preliminary bending of archwire
- Removal of orthodontic bands and bonds
- Making final impressions for the fabrication of an orthodontic appliance or prosthetic
- Placement and cementation of an orthodontic band or appliance

If the pilot program is positive, the Dental Board may be open to allow dentists to use teledentistry to supervise EFDA's to perform allowable prosthodontic EFDA functions.

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

The Dental Practice Act was approved around 2016.
Applied for the HRSA & CDC grants in 2017.
Received the grants in September of 2018.
Tried to get contractors for these services, but that proved difficult because teledentistry was still really new in Missouri.
Found we could direct contract with Local Public Health Agencies (LPHA) who had dental services; with LPHAs receiving the funds and doing the work, it helped to promote teledentistry.
Met with Coalition and other stakeholders to talk about the bidding process and what we could do to make it easier for potential bidders.

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.)

- ODH staff had to write grant application, find funders, write contract, contract monitoring and find potential bidders/contractors
- Receive outside funding. ODH did not have the funding for this project through our state agency.

- Collaborate with private foundations since HRSA grant required a match, which is what funds the teledentistry contracts.
- Partnered with MPCA, Coalition for Oral Health, funders and Local Public Health Agencies just to generate interest in contracts.

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.

ODH had to understand the contracting process, from writing the contract and deliverables to getting it approved through the Admin system before it was placed online for bidding. ODH understood that not everyone is willing to bid on state contracts because of the degree of difficulty and ramifications that accompany signing a contract with the state.

ODH had to generate interest. We are able to do a direct contract with state entities, like a local public health agency, so we chose to do that since it was much easier than going through the bidding process. That got several other dental offices interested so they would then bid on subsequent bid opportunities. It was not great to try to get into schools & nursing homes because of a pandemic, but it also brought and drove interest to telehealth, which caused more entities to bid on our contracts.

Since ODH could not answer questions while the bid was out and available, we partnered with the Coalition to answer questions and help bidders through the contract process. Also contracted with Dr. Suter to train and an entity to host the training on teledentistry. Contract with Dr. Suter also pays for his consulting fees when a contractor starts their teledentistry program.

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, and accomplishments)?
    - In 2021, there were 248 nursing home residents who were provided with care through two contractors, one being a private entity and the other being a safety net clinic.
    - In 2020, there were 91 school children who were served through one contract
    - In 2021, there were 237 children receiving teledentistry services through three contracts.
    - In 2020, there were 407 students who had sealants placed through teledentistry services through two contracts.

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:
    Measure the number of children and nursing home residents served.

    b. How often they are/were measured:
    Quarterly

    c. Data sources used:
    Reporting from the contractors utilizing an online reporting tool ODH created.

    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):
    Contracts are yearly but can be renewed for 1-2 more years. We are hoping the contractors continue with the program after their contracts run out and they have the equipment provided by the contract to do it.

The Program has increased people's awareness of teledentistry and that it does not have to be done at the dentist's office. It can be done at schools, nursing homes or another non-conventional location. The contractors are seeing more people every year and that number will increase as Covid dissipates and more contractors are becoming involved in teledentistry. At the nursing homes, 248 people received care via teledentistry who normally would not have seen a dentist, especially during Covid because residents were not being allowed outside of the facility unless there was a major issue. Those residents seen were able to receive preventive care which could have prevented major health issues.

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

1. What is the annual budget for this activity?

First year Improving Oral Health Sealant Teledentistry & Promotion Budget	
Items	**Cost**
Equipment	$67,908
Supplies and Educational Material	$18,000
Total	$85,908

2.

Possible Subsequent Year(s) Improving Oral Health Sealant Teledentistry & Promotion Budget	
Items	**Cost**
Equipment	$8,970
Supplies and Educational Material	$16,986.87
Total	$25,956.87

Example of Nursing Home or School Teledentistry Equipment Budget

Item (Non-Federal)	Quantity	Total	Explanation
Major Equipment Items			
Laptop	1	$ 1,000	Computer for data entry
Nomad	1	$ 5,390	Handheld x-ray machine
Dexis Sensor	1	$ 8,480	Intra oral x-ray sensor
Intra/Extraoral Camera	1	$ 1,200	Camera to take intra oral pictures for diagnosis
Lead Apron	1	$ 136	Lead apron for radiation protection of patient
Prophywiz	1	$ 1,502	Dental handpiece for cleanings and treatments
Head lamps	2	$ 800	light for intra-oral examination
Mirrors and Retractors	1	$ 4,000	Tools for intra oral pictures
Aseptico Treatment Cart Suitcase	1	$ 5,000	Case for carrying equipment
Aseptico Patient Chair	1	$ 3,000	Portable seat for patient
Aseptico Doctor Stool	1	$ 685	Portable seat for provider
Aseptico Nomad/Technology Case	1	$ 1,502	Case for carrying x-ray equipment
Portable Storage and Transport			
DEWALT TSTAK Trolley with Handle	1	$ 102	Cases to carry instruments or equipment
DEWALT TSTAK IV Double Shallow Drawers	2	$ 80	Cases to carry instruments or equipment

DEWAL TSTAK III Single Deep Drawer	2	$ 66	Cases to carry instruments or equipment
DEWALT Tough System L-Cart Carrier	1	$ 155	Cases to carry instruments or equipment
DEWALT Tough System Case, Extra Large	1	$ 56	Cases to carry instruments or equipment
DEWALT Tough System Case, Large	1	$ 48	Cases to carry instruments or equipment
DEWALT Tough System Case, Small	1	$ 43	Cases to carry instruments or equipment
Capso Healthcare Avalo Model	1	$ 500	
HS-1 Amalgamator Ivory 220 Volt Complete Unit Safety Cover	1	$ 435	Small machine to mix dental materials
Instruments			
Hygiene and examination instrument kits			
Scaler Double End N135 #6 Handle Stainless Steel	12	$ 651	Hand instruments to clean teeth
Cavitron Select SPS Ultrasonic Scaler 30K	1	$ 2,533	Ultrasonic cleaning machine for scaling teeth
E-Z Jett Cassette Lilac	12	$ 288	Container for hand instruments after autoclaved
SideKick Portable Instrument Sharpener Cordless	1	$ 375	Sharpening stone for hand instruments
Scaler Sickle Double End 135 #9 EverEdge 2.0 Stainless Steel	12	$ 558	Hand instruments to clean teeth
Expro 23 Double End #6 Satin Steel	12	$ 402	Hand instruments to clean teeth
Scaler Nevi Double End 4 #9 EverEdge 2.0 Satin Steel	12	$ 558	Hand instruments to clean teeth
Disposables	1	$ 7,500	Gauze, cotton rolls, patient napkins, other products for appointments
Total per Site		**49,045**	

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

   See above for contract & equipment costs, but ODH costs are for staff people to write, work through bidding process and finally monitor the contracts. Takes about .1 FTE per contract for those tasks.

4. How is the activity funded?

   Funded through private funders as a match to our HRSA grant and also funded through CDC for the Sealant contracts.

5. What is the plan for sustainability?

   External grants & Medicaid

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?

   Biggest lesson is not to plan to get into schools and nursing homes during a pandemic! Another lesson would be to promote the program and contracts more. We assumed everyone would be interested or knew about teledentistry, but we were incorrect. Starting something new is always scary. We would work with the Coalition sooner in asking them to help potential bidders because of the complicated bidding process.

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

   Challenges were getting into the facilities during a pandemic. Contractors just built and maintained their relationships with those facilities in hopes that when they were open, they would allow them inside. Also had a letter from our dental director and department director that said this program was safe for schools. Challenges were getting bidders to bid on the contracts. Worked with the Coalition to help potential bidders through the process. Challenges were that teledentistry is a fairly new concept, so education had to be done, which we knew, but it probably needed to happen sooner.

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.

[1]https://nces.ed.gov/fastfacts/display.asp?id=898

School-Based Teledentistry and Sealant Programs letter

TO BE COMPLETED BY ASTDD	
Descriptive Report Number:	28010
Associated BPAR:	Teledentistry
Submitted by:	Missouri Department of Health & Senior Services-Office of Dental Health
Submission filename:	**DES28010MO-teledentistry-2021**
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