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

NOTE: Please use Verdana 9 font.

### CONTACT PERSON PREPARING THE SUBMISSION AND TO ANSWER QUESTIONS

**Name:** Kathryn M. Dolan RDH, MEd  
**Title:** Director, Tufts Community Dental Program and Assistant Professor  
**Agency/Organization:** Tufts University School of Dental Medicine, Department of Public Health and Community Service  
**Address:** 1 Kneeland Street, Boston, MA 02111  
**Phone:** (617) 291-2217 or (617) 636-3683  
**Email Address:** Kathryn.dolan@tufts.edu

### PROVIDE CONTACT INFORMATION FOR ONE ADDITIONAL PERSON WHO COULD ANSWER QUESTIONS REGARDING THIS PROGRAM

**Name:** Dr. Mark Doherty, DMD, MPH, CCHP  
**Title:** Director, Commonwealth Mobile Oral Health Services  
**Agency/Organization:** Commonwealth Mobile Oral Health Services  
**Address:** 1 Collen Drive, Lakeville, MA 02347  
**Phone:** (508) 947-0111  
**Email Address:** mdoherty@dentaquestinstitute.org
### SECTION I: ACTIVITY OVERVIEW

**Title of the dental public health activity:**

**Oral Health Across the Commonwealth**

**Public Health Functions**

<table>
<thead>
<tr>
<th>“X”</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Assess oral health status and implement an oral health surveillance system.</td>
</tr>
<tr>
<td></td>
<td>2. Analyze determinants of oral health and respond to health hazards in the community</td>
</tr>
<tr>
<td></td>
<td>3. Assess public perceptions about oral health issues and educate/empower them to achieve and maintain optimal oral health</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Policy Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Mobilize community partners to leverage resources and advocate for/act on oral health issues</td>
</tr>
<tr>
<td>5. Develop and implement policies and systematic plans that support state and community oral health efforts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Review, educate about and enforce laws and regulations that promote oral health and ensure safe oral health practices</td>
</tr>
<tr>
<td>X 7. Reduce barriers to care and assure utilization of personal and population-based oral health services</td>
</tr>
<tr>
<td>X 8. Assure an adequate and competent public and private oral health workforce</td>
</tr>
<tr>
<td>9. Evaluate effectiveness, accessibility and quality of personal and population-based oral health promotion activities and oral health services</td>
</tr>
<tr>
<td>10. Conduct and review research for new insights and innovative solutions to oral health problems</td>
</tr>
</tbody>
</table>

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

**Healthy People 2020 Objectives**

<table>
<thead>
<tr>
<th>“X”</th>
<th><strong>Healthy People 2020 Oral Health Objectives</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>OH-1 Reduce the proportion of children and adolescents who have dental caries experience in their primary or permanent teeth</td>
</tr>
<tr>
<td>X</td>
<td>OH-2 Reduce the proportion of children and adolescents with untreated dental decay</td>
</tr>
<tr>
<td></td>
<td>OH-3 Reduce the proportion of adults with untreated dental decay</td>
</tr>
<tr>
<td></td>
<td>OH-4 Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease</td>
</tr>
<tr>
<td></td>
<td>OH-5 Reduce the proportion of adults aged 45 to 74 years with moderate or severe periodontitis</td>
</tr>
<tr>
<td></td>
<td>OH-6 Increase the proportion of oral and pharyngeal cancers detected at the earliest stage</td>
</tr>
<tr>
<td>X</td>
<td>OH-7 Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year</td>
</tr>
<tr>
<td>X</td>
<td>OH-8 Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year</td>
</tr>
<tr>
<td></td>
<td>OH-9 Increase the proportion of school-based health centers with an oral health component</td>
</tr>
<tr>
<td></td>
<td>OH-10 Increase the proportion of local health departments and Federally Qualified Health Centers (FQHCs) that have an oral health component</td>
</tr>
<tr>
<td></td>
<td>OH-11 Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year</td>
</tr>
</tbody>
</table>
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

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:

- children oral health
- access to dental care
- prevention
- early childhood tooth decay
- school dental programs
- community dental programs
- planning with partners

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 Oral Health Across the Commonwealth (OHAC) program is the result of a collaborative relationship between Tufts University School of Dental Medicine’s Community Dental Program (a dental school) and the Commonwealth Mobile Oral Health Services (a private portable dental care provider). This collaboration allows for a comprehensive care model with Tufts providing preventive services and oral health education and Commonwealth Mobile Oral Health Services providing restorative services.

The goal of OHAC is to provide children in Massachusetts access to oral health care. This is accomplished by providing comprehensive dental treatment at community sites with portable dental equipment. Oral health services include dental exam and diagnosis, dental cleaning, radiographs, dental fillings, fluoride treatment, sealants, and oral health education and referral services. Community sites include Head Start programs, preschools, public and charter school, summer camp program and Boys and Girls clubs. OHAC has increased access to dental care by bringing services to populations with significant access barriers.

The OHAC portable dental program is co-administered by the Tufts Community Dental Program and Commonwealth Mobile Oral Health Services, both working together to deliver oral health services. Medicaid reimbursement, private insurance reimbursement, grant funding and in kind support from Tufts University School of Dental Medicine cover the cost of the program. In FY17, the OHAC program provided dental exams, dental cleanings, fluoride varnish, sealants and restorative care to over 10,000 children in the Commonwealth of Massachusetts. In addition, 220 oral health trainings were provided to 1538 teachers and staff and 151 parents.

Overall, the OHAC model is an excellent example what can be achieved through collaboration
and development of public and private partnerships to reach disparate populations and improve their access to oral healthcare, thus decreasing the prevalence of oral health disease in this population.

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?

   The Oral Health Across the Commonwealth was initiated after a 2004 report on Oral Health in Massachusetts indicated that on average children with Medicaid had far lower utilization rates for dental services than all children in the state.

   The 2004 report found that while 73% of Massachusetts’ children have had a dental visit; only a third of children with Medicaid had a dental visit. And while 79% of all Massachusetts’ residents had a dental cleaning, only 20% of children with Medicaid had a dental cleaning visit.


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

   The purpose of the OHAC program was to provide oral health care using portable dental equipment to vulnerable populations. The target audience included children in elementary schools, Head Start facilities, and school-aged children with special needs. The OHAC pilot proved successful in reaching the program goals and leadership sought to expand its services. As a result, a collaborative relationship with the Tufts Community Dental Program (a statewide coordinated system of dental hygienists providing preventive dental services in community-based programs) and the Commonwealth Mobile Oral Health Services (a private portable comprehensive dental care provider) was established to expand and enhance the Oral Health Across the Commonwealth program. The two entities (Tufts and CMOHS) entered into a Memorandum of Understanding to provide comprehensive oral health services across the Commonwealth of Massachusetts. This agreement between Tufts and CMOHS allowed the OHAC portable program to become a comprehensive care model able to deliver oral health care statewide, and to establish a community-based initiative to provide preventive and restorative services to underserved populations.

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

   OHAC began activities in 2004.
   - In 2004, Tufts University School of Dental Medicine entered into a collaborative agreement with Commonwealth Mobile Oral Health Services to provide oral health services to underserved children in the Commonwealth of Massachusetts.
   - In 2004, Oral Health Across the Commonwealth (OHAC) began providing oral health services in the Boston and Springfield areas of Massachusetts. The pilot targeted services to Head
Start children, kindergarten students, and school-aged children with special needs by providing care with portable dental equipment.

- In 2005, grant funding from the MassHealth Access Program (MAP), a program addressing access issues of the state’s Medicaid program’s recipients, allowed OHAC to expand to all school-aged children to expand to communities beyond Boston and Springfield.

- From 2006-2008, additional grant funding was obtained from the MassHealth Access Program (MAP) and the Ronald McDonald Foundation to expand the OHAC program and serve a larger catchment area.

- From 2008-2011, a three-year grant from the DentaQuest Foundation of Massachusetts (formally known as the Oral Health Foundation) allowed the enhancement of the OHAC program by creating additional collaborations with community partners.

- From 2012- present:
  o The program is a major Medicaid provider in Massachusetts for low income children and children/adults with special needs.
  o Children at risk for dental disease and children with special health care needs have better access to dental care than before the onset of this statewide initiative.
  o A statewide coordinated system of dental care exists that includes a comprehensive approach to the prevention, diagnosis and treatment of dental disease, and a referral network of community health centers, university, hospital and private dental clinics.
  o Strong partnerships exist with private and public dental care systems and community agencies/organizations to deliver dental services.
  o Dental and dental hygiene students rotate through OHAC schools. These students better understand issues related to barriers to care and gain experience in treating the pediatric/special needs populations and providing oral health education.

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

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PROGRAM ACTIVITIES</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
</table>

1. What resources were needed to carry out the activity? (e.g., staffing, volunteers, funding, partnerships, collaborations with various organizations, etc.)
   - Environmental Scan/Needs Assessment
     o Surveillance data from the Massachusetts Department of Public Health
     o Surveillance data from the Catalyst Institute
     o Claims data from Masshealth (Medicaid)
   - Funding
     o MassHealth Access Program (Grant funding)
     o Ronald McDonald Foundation (Grant funding)
     o DentaQuest Foundation of Massachusetts (Grant funding)
     o Oral Health America – Smiles Across America (Grant funding)
     o National Children’s Oral Health Foundation (Grant funding)
     o American Dental Partners – (Gift funding)
     o In-Kind funding from Tufts University School of Dental Medicine
     o MassHealth (Medicaid) Reimbursement
     o Private Dental Insurance Reimbursement
   - Partners
     o preschools
     o public schools
     o head start programs
     o WIC centers
     o Day Care Centers
     o Summer Camps
     o Boys and Girls Clubs
     o Dental and dental hygiene schools (e.g. Boston University and Forsyth)
     o Other: Berkshire Medical Center, UMass Medical Center etc.
   - Equipment and supplies
     o portable dental equipment
• Dental providers
  o dentists
  o dental hygienists
  o dental assistants
  o dental and hygiene students and nutrition students
• Program staff
  o administrative staff,
  o operations practice managers
  o program director,
  o program assistants
  o billers
  o consultants
  o evaluator
• Sites
  o preschools
  o public schools
  o head start programs
  o WIC centers
• Data collection system (e.g. AxiUm, Access database/Dental Record/Billing Form)

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PROGRAM ACTIVITIES</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
</table>

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

• Identify gaps in care
  o Identify opportunities for closing gaps and determining methodology
  o Develop a strategic plan
• Engage community and gain stakeholder support
  o Identify partners and stakeholders
  o Identify funding sources
  o Develop policies and procedures
• Establish collaborative relationships with site administrators and staff
  o Recruit participants for the program (e.g. schools, Head Start, WIC)
  o Obtain parental consent for services
• Provide comprehensive oral health services (e.g., sealants, fluoride varnishes, oral health assessments, fillings, exams, etc.) and oral health education
  o Distribute oral health evaluation results and follow up treatment needed (i.e. letters) to parents of participants
  o Collect data on program participants (e.g. # of sealants, # of participants seen, # of restorative procedures conducted, etc.)
  o Enter dental record and billing form into Access database
  o Conduct case management of participants needing specialized services
  o Distribute and receive quality survey scales from participating schools
• Conduct trainings for program staff (e.g. infection control and best practices in dentistry)
  o Conduct Quality management checks

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PROGRAM ACTIVITIES</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
</table>

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.)

• # environmental scans/needs assessments conducted
  o 2003 MA Third Grade Survey
  o 2004 MA Head Start Survey
  o 2008 MA Statewide Survey
  o Medicaid claims data (looked at annually)
• # of partners and stakeholders identified
  o Commonwealth Oral Health Services
Tufts Community Dental Program
MassHealth Dental Program
MA Head Start Association
Massachusetts Department of Public Health, Office of Oral Health
Massachusetts Dental Society
Boston University School of Dental Medicine
Forsyth School of Dental Hygiene
Hampden County Partners for a Healthier Community

Program sites
- preschools
- public schools
- head start programs
- WIC centers
- Day Care Centers
- Summer Camps
- Boys and Girls Clubs

# of funding sources identified
- MassHealth (Medicaid) Reimbursement
- Private Dental Insurance Reimbursement
- MassHealth Access Program (Grant funding)
- Ronald McDonald Foundation (Grant funding)
- DentaQuest Foundation of Massachusetts (Grant funding)
- Oral Health America – Smiles Across America (Grant funding)
- National Children’s Oral Health Foundation (Grant funding)
- American Dental Partners – (Gift funding)
- In-Kind funding from Tufts University School of Dental Medicine

# of communities engaged/support gained
- Boston
- Springfield
- Pittsfield
- Lowell
- Great Barrington
- Lowell
- Hampden County
- Massachusetts Head Start Programs

# of relationships established – over 250 community based sites
# of participants recruited – approximately 10,000 participants annually
# of parental consents obtained - approximately 10,000 annually
# of services and education conducted – approximately 20,000 visits annually
# of oral health evaluation letters distributed to parents - approximately 20,000 annually
# of dental records/billing forms entered - - approximately 20,000 annually
# of cases managed for participants needing specialized services – approximately 500 annually
# of QA checks conducted – a minimum on 1 QA check per provider annually
# of annual trainings conducted – a minimum of 1 annual training for Infection control, OSHA training and HIPPA training, other meetings scheduled quarterly

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)

   Short Term Outcomes:
   - Increased number of oral health providers in public health settings
   - Increased exposure of oral health care to other professionals (e.g. nurses, teachers, etc.)
   - Reduced barriers to oral health care (i.e. access)
   - Reduced cultural and language barriers between providers and patients
Strengthened existing partnerships between participating sites and providers (i.e. program staff)

- Increased number of sites participating in program
- Increased number of grade levels serviced in existing participating schools
- Increased knowledge and awareness of oral health importance among participating families
- Increased number of participants with regular access to comprehensive oral health services
- Increased number of participants who complete the circle of dental care
- Increased number of sealants provided
- Decreased incidence of dental caries
- Decreased number of children with dental disease

Long Term Outcomes:

- Improved quality and quantity of comprehensive oral health services provided
- Increased number of overall participants receiving comprehensive oral health services and education throughout the Commonwealth
- Improved healthy behaviors related to oral healthcare among the population
- Reduced number of children with untreated dental decay in their primary and permanent teeth
- Enhanced cultural changes related to dental care at a population level (e.g. alleviation of fear and anxiety related to dental procedures)
- Increased equity related to oral health among all populations

Budgetary Information:

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

1. What is the annual budget for this activity?

The Tufts Community Dental Program FY'17 budget for the OHAC program was approximately $750,000.

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

The OHAC portable dental program is co-administered by the Tufts Community Dental Program and Commonwealth Mobile Oral Health Services, both working together to deliver oral health services. Many of the tasks, such as the enrollment process and scheduling of the dental providers, are shared. Billing for dental services remains separate.

Tufts is the lead for educational activities that includes professional development for teachers, school nurses and para-professional staff and classroom education. Tufts has a coordinated system of dental hygienists and dentists providing preventive services, oral health education, and referral services. There are full-time and part-time clinical and administrative staff supporting Tufts OHAC program: 1 dental director, 1 program director, 4 community dental hygienists, 5 dental assistants and 1 FTE billing coordinator.

CMOHS’s team of dentists provide the exams, diagnosis and restorative services to children attending Head Start programs, preschools, public school systems and special education schools. CMOHS employs a 1 project coordinator, 10 dentists, 10 dental assistants, and several billing and scheduling personnel.

Typical Set-Up:

- Compressor/Delivery System - $6,500
- X-Ray Machine/Nomad - $6,000
- Light/Headlight - $500
- Patient Chair - $1,000
- Provider Stool - $500
- Assistant Stool - $500
- Laptop for Electronic Health Record - $1,000
- Electronic Health Record Software - $4,000

3. How is the activity funded?

OHAC activities are funded primarily by reimbursement from billing MassHealth (Medicaid) and private dental insurance. In addition, grant funding has helped to cover the cost for children who are uninsured or underinsured.
4. What is the plan for sustainability?

Sustainability of the OHAC program requires generating revenue from billable services and seeking additional funding from grants and foundations to assure that oral health services are available for all children in the program.

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?

   - Educating public and governmental agencies is extremely important to increase awareness of access to care issues.
   - Sustainability of the OHAC program requires generating revenue from billable services and securing gap funding to cover costs of providing care to children who lack dental insurance.
   - Maximizing the use ancillary personnel in providing preventive services as allowed by the State Dental Practice Act can have positive effect on the financial viability of the program.
   - Dental partners are critical to assure appropriate referral for procedures that cannot be provided in the school setting such as specialty services (orthodontics, oral surgery etc.)
   - An integrated electronic health can improve efficiency in billing, patient data management, and health record documentation and will lead to added incomes and better assessment of outcomes data.
   - Ongoing Communication is the key to successful partnering.
     - Each partner should have a well-defined role and business plan for sustainability.
     - Consider playing to each other’s strengths rather than duplicating efforts. When partners share resources, everyone benefits.
     - Must have proper infrastructure to support the partnership, make sure to allot resources to administrative staff.
     - Finally, a business plan involving all partners based upon sound systems and operations, will ensure growth and sustainability.

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

   Challenges:
   - Keeping busy during school vacation weeks and testing days. These interruptions in the schedule can affect the number of days that the program can deliver services during a school year.
   - Time on learning in a school based program can affect the ability to take children out of the classroom, for instance, you may not be able to take children from a math or reading class.
   - Staff turnover at sites can affect the program as it takes time to establish new relationships with the school nurses.
   - Lunch and nap schedules you may need to work around lunch and nap schedules especially at preschools and day cares.
   - Space can be a challenge and the program may be limited to non-consecutive days if another specialist uses the same space.
   - Perception of the program by the community. It is helpful when starting a program to meet with community dentists and community leaders prior to starting a dental program.
   - The consent form can also be a challenge to the population being served.
     - Make sure you have all your documents translated by a reputable translation service in languages that are appropriate to your population.
     - Your informed consent is a legal document – you need it written at a level that your target population will understand.

   Tips for Success:
   - Assess for all cost variables. What are the hidden costs?
   - Monitor production and collections daily; weekly; monthly – develop dashboards.
   - Assess and revise program activities as needed.
   - Assign providers to work at the top of their license – scope of practice.
   - Customize your program to fit the needs of the community.
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.

http://now.tufts.edu/articles/communities-vs-cavities
http://now.tufts.edu/articles/care-where-kids-are

<table>
<thead>
<tr>
<th>descriptive Report Number:</th>
<th>TO BE COMPLETED BY ASTDD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Associated BPAR:</th>
<th>Prevention and Control of Early Childhood Tooth Decay; State and Territorial Oral Health Programs and Collaborative Partnerships</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Submitted by:</th>
<th>Tufts University School of Dental Medicine</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Submission filename:</th>
<th>DES24007MAoralhealthacross-2018</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Submission date:</th>
<th>September 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last reviewed:</td>
<td>February 2018</td>
</tr>
<tr>
<td>Last updated:</td>
<td>February 2018</td>
</tr>
</tbody>
</table>