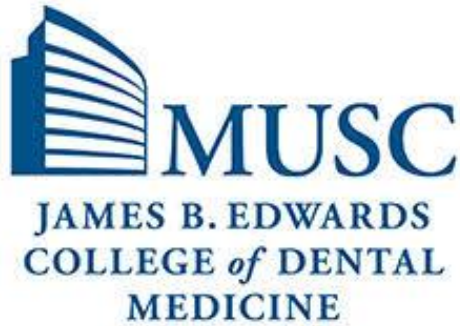




Carolinas School-Based Oral Health Expansion

***Philanthropic-Academic-Public Partnerships for Addressing Oral Health Inequities
Among Rural, Underserved Children***

On behalf of the team,
Amy Martin, DrPH, Chair & Professor
James B. Edwards College of Dental Medicine, Medical University of South Carolina



School-Based Oral Health Initiative



Objectives

1

Describe how partnerships are advancing oral health policy & improving rural oral health inequities

2

Frame an innovative initiative for school-based oral health programs

3

Share preliminary findings from the field

10 Year Journey

Data-driven partnership

GIH-HHS catalyst

Blueprints & evidence

Pilot projects & community engagement

Policy alignment

2012

- SC OHNA
- OHW Grant



2013

- FORHP Public-Private Partnership Initiative



2014

- USDHHS Frameworks



2015

- HRSA Grant Awards - ROADS & ROADTRIP



2016

- The Duke Endowment Portfolio



2017

- Duke Endowment funding awarded



2018

- POWER Pee Dee, NACRHHS



2019

- SC Medicaid contract



2020

- BCBSF of SC Partnership for COIN

Kids' Oral Health in the Carolinas:

A Tale of Two States

North Carolina

- High rates of ER visits by kids for non-traumatic dental reasons
- Excellent fluoride varnish rates by PCPs
- 'Real' dental public health infrastructure

South Carolina

- Historical race, ethnicity & income inequity gaps closing between 2002 and 2012
- Rural-urban divide widens
- Public health facilitates care partnerships

Rural Kids' Oral Health's Popular!

- 1956 views on EurekaAlert!
- Altmetric score increased from 1 to 39, putting it in the top 5% of all papers published at the same time.
- Good News 😊
- Bad News ☹️

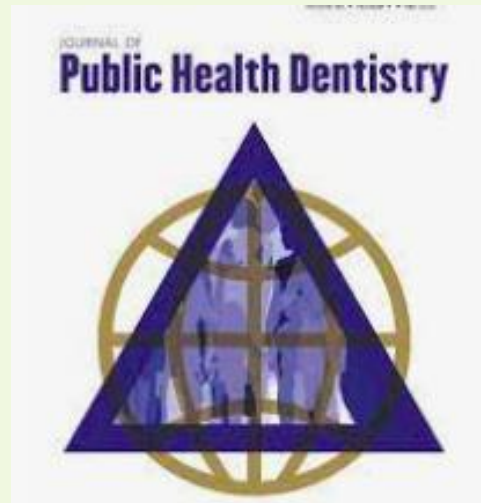


Table 2 Oral Health and Oral Health Care Access Characteristics of Respondents to the 2017–2018 National Survey of Children’s Health, in Total and Stratified by Residence, *n* = 20,842, 31 states and the District of Columbia

Characteristic	All (%)	Rural (%)	Urban (%)	<i>P</i> -value
Received any type of dental care				0.06
Saw a dentist	87.9	85.3	88.1	
Saw other oral healthcare provider	2.3	3.0	2.2	
No dental or oral healthcare visits	9.8	11.7	9.7	
Preventive dental visit				0.03
One or more preventive dental visits	87.3	84.9	87.5	
No preventive dental visit	12.7	15.1	12.5	
Forgone dental care				0.4581
Did not receive needed dental care	2.2	1.9	2.3	
Received needed dental care	97.8	98.1	97.7	
Teeth condition				0.02
Excellent or very good	75.3	71.7	75.7	
Good	18.0	21.0	17.7	
Fair or poor	6.6	7.3	6.6	
Oral health problems				0.07
One or more oral health problems	16.1	18.2	15.9	
No oral health problems	83.9	81.8	84.1	
Tooth decay				0.1323
Had decayed teeth or cavities	13.6	15.2	13.4	
No decayed teeth or cavities	86.4	84.8	86.6	
Fluoride treatment				0.0022
Received fluoride treatment	51.9	46.6	52.5	
Received preventive dental care, but not fluoride treatment	35.4	38.3	35.1	
Did not receive fluoride treatment	12.7	12.5	15.1	
Dental sealant				0.0147
Had dental sealant	22.2	19.5	22.5	
Received preventive dental care, but not receive dental sealant	65.1	65.5	65.0	
Did not receive preventive dental care	12.7	15.1	12.5	

Evidence-based Approaches & Setting Expectations

- 45% had dental caries at enrollment
- Enrollment increased from 5,000 to more than 9,700
- Percent receiving preventive services increased from 58% to 88%
- Sustainability was actualized for all (n=9) MCHB grantees through business plan efficiencies

Maternal and Child Health Journal
<https://doi.org/10.1007/s10995-018-2478-1>



Evaluation of a Comprehensive Oral Health Services Program in School-Based Health Centers

Tara Trudnak Fowler¹ · Gregory Matthews¹ · Cydney Black¹ · Hendi Crosby Kowal¹ · Pamela Vodicka² · Elizabeth Edgerton²

© Springer Science+Business Media, LLC, part of Springer Nature 2018

Abstract

Objectives In 2011, the Maternal and Child Health Bureau, within the Health Resources and Services Administration, awarded a 4-year grant to increase access to and assure the delivery of quality oral health preventive and restorative services to children. The grant was awarded to organizations serving high-need communities through school-based health centers (SBHCs). This article describes an independent evaluation investigating program efficacy, integration, and sustainability. **Methods** Program process and outcomes data were gathered from interim and final reports. Interviews with key informants were conducted by phone, and analyzed in NVivo qualitative software. **Results** Students had great need for comprehensive services: on average, 45% had dental caries at enrollment. Enrollment increased from 5000 to more than 9700, and the percent receiving preventive services increased from 58 to 88%. Results of the analytically weighted linear regression show statistically significant increases in the proportion of enrollees who had their teeth cleaned in the past year ($t(4)=5.19$, $\beta=8.85$, $p<0.05$) and those receiving overall preventive services ($t(4)=13.52$, $\beta=10.93$, $p<0.01$). Grantees integrated into existing programs using clear, consistent, and open communication. Grantees sustained the full suite of services beyond the grant period by increasing billing and insurance claims while still offering free and reduced-cost services to those uninsured or otherwise unable to pay. **Conclusions for Practice** This project demonstrates that access to comprehensive oral health care for children can be expanded through SBHCs. State Title V Block Grant and other similar federal initiatives can learn from the strategic approaches used to overcome challenges in the school-based environment.

Keywords School-based health · Oral health · Evaluation · Program sustainability · Program efficacy · Program integration

Significance

While many SBHCs offer basic dental screening, there is a need for comprehensive oral healthcare, particularly for children in high-need communities. Statistics related to dental disease prevalence, disparities, access to care, and the effectiveness of prevention and early treatment are well documented in a robust body of research. This evaluation of the MCHB oral health grant program highlights key factors that contribute to program success and adds to the on-going discourse on SBHC oral health program impact.

Introduction

Significant gaps in access to oral health persist among children in the U.S. (Culyer et al. 2014). Untreated dental disease has been found to have negative impacts on children's

This document is a deliverable under Contract HHS2502013000071, Independent Evaluation of the School-Based Comprehensive Oral Health Services (SBCOHS) Grant Program, between the Health Resources and Service Administration, Maternal and Child Health Bureau and Altarum. The goal of this task is to provide a report in the form of a publishable manuscript of the evaluation of SBCOHS grant program findings.

Tara Trudnak Fowler
tara.fowler@altarum.org

¹ Altarum, 2000 M Street NW Suite 400, Washington, DC 20036, USA

² Health Resources and Services Administration, Maternal and Child Health Bureau, 5600 Fishers Ln, Rockville, MD 20852, USA

Published online: 16 February 2018

Springer

Recommendations for Successful Programs

Care Plans

1. Define oral health services provided
2. Describe the care delivery site
3. Community engagement
4. Describe partnerships essential for program success
5. Describe care delivery modality
6. Provide case management services
7. Require oral health education
8. Describe process for obtaining consent

Business Plans & Tracking Impact

9. Encourage optimal staffing models
10. Encourage staff training & development
11. Purchase portable equipment and EHR
12. Describe billing strategy
13. Describe financial productivity goals
14. Demonstrate ability to collect & report performance data
15. Storytelling success

School-Based Oral Health Program Expansion

Purpose

This multi-year initiative will help NPOs expand dental services into rural and underserved schools to ensure all children receive dental care.

Goals

01

Improve access to dental care for school-aged children

02

Improve meaningful care outcomes for school-aged children

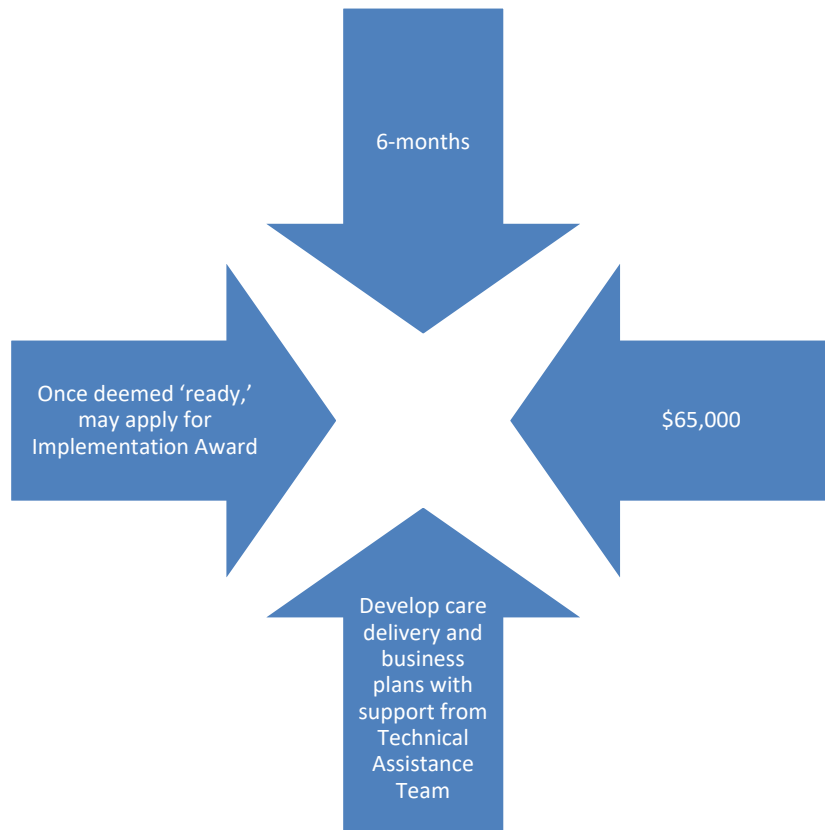
03

Proliferate programs that have viable business plans that lead to sustainability



Initiative Design

Readiness Phase



Implementation Phase

- 2 years of direct funding support
- 1 additional year of required data reporting and technical assistance
- Funding awards vary in amount depending on scope of work.

Technical Assistance & Coaching

Maternal and Child Health Journal
https://doi.org/10.1007/s10995-021-03167-7

FROM THE FIELD



A Technical Assistance Curriculum for Expanding Sustainable School-Based Oral Health Programs in the Carolinas' Dental Safety Net

Amy B. Martin¹ · Mark E. Moss² · Abby Kelly¹ · Amah Riley¹ · Vanessa Pardi² · Anna Chandler Pollard²

Accepted: 21 April 2021

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2021

Abstract

Purpose School-based oral health programs (SBOHPs) provide opportunities to address oral health inequities by providing convenient access points for care. No published guidelines on SBOHP implementation existed. Our work describes how philanthropic, public, and academic organizations partnered to support dental safety net providers with designing comprehensive SBOHPs in North and South Carolina.

Description A multi-sector leadership team was established to manage a new SBOHP philanthropic-funded grant program organized into two phases, Readiness and Implementation, with the former a 6-month planning period in preparation of the latter. Readiness included technical assistance (TA) delivered through coaching and 15 online learning modules organized in four domains: operations, finance, enabling services, and impact. Organizations could apply for implementation grants after successful TA completion. Process evaluation was used including a Readiness Stoplight Report for tracking progression.

Assessment Ten Readiness grantees completed the TA. A variety of models resulted, including mobile, portable and fixed clinics. Descriptive analysis was conducted on the readiness stoplight reports. Components of the operation and finance domains required were the most time-intensive, specifically the development of policy manuals, production goals, and financial performance tracking.

Conclusion The program's structure resulted in (a) a two-state learning community, (b) SBOHP practice and policy alignment, and (c) coordinated program distribution. TA improvements are planned to account for COVID-19 threats, including school closures, space limitations, and transmission fears. Telehealth, non-aerosolizing procedures, and improved scheduling and communication can address concerns. Organizations considering SBOHPs should explore similar recommendations to navigate adverse circumstances.

Keywords School health services · Oral health · Safety-net providers · Dental care for children · Preventive dentistry

Significance

What is already known on this subject? School-based oral health programs (SBOHPs) are essential components of the dental safety net. They serve children who otherwise would be unable to access care. SBOHPs have a range of scopes of

service through a variety of modalities. Success is accentuated when public policy aligns with their mission.

What does this study add? A technical assistance curriculum is presented that reflects the evidence-based clinical practice and the business tools essential for program sustainability. The value of SBOHPs is evident when implemented in the context of guidelines and policies that support sustainability, supported by a multi-sector leadership team.

✉ Amy B. Martin
martinamy@musc.edu

¹ Division of Population Oral Health, Department of Stomatology, James B. Edwards College of Dental Medicine, Medical University of South Carolina, 173 Ashley Avenue, MSC 507, Charleston, SC 29425, USA

² Department of Foundational Sciences, School of Dental Medicine, East Carolina University, 1851 MacGregor Downs Road, Mail Stop 701, Greenville, NC 27858, USA



Results from Cohort 1

Fig. 1 Counties where school-based oral health expansions were planned for academic year 2019

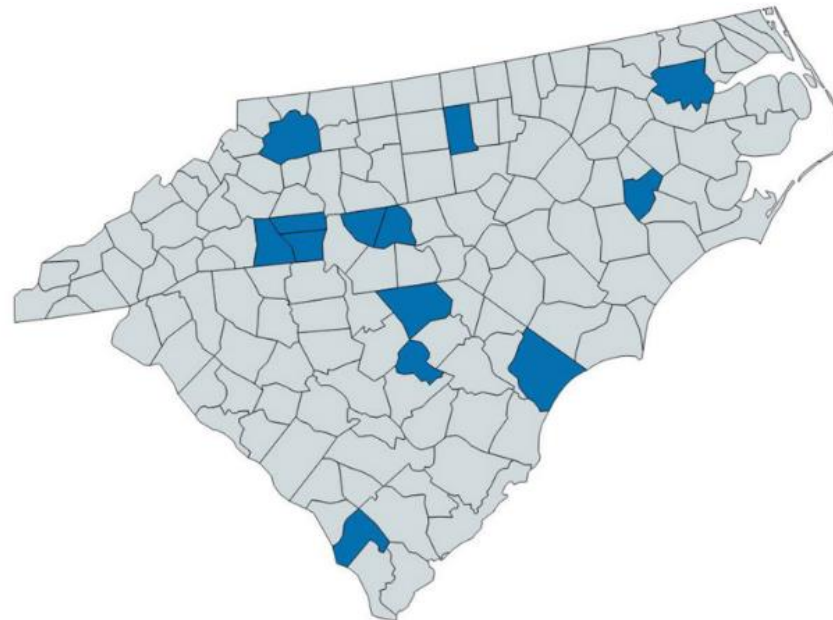
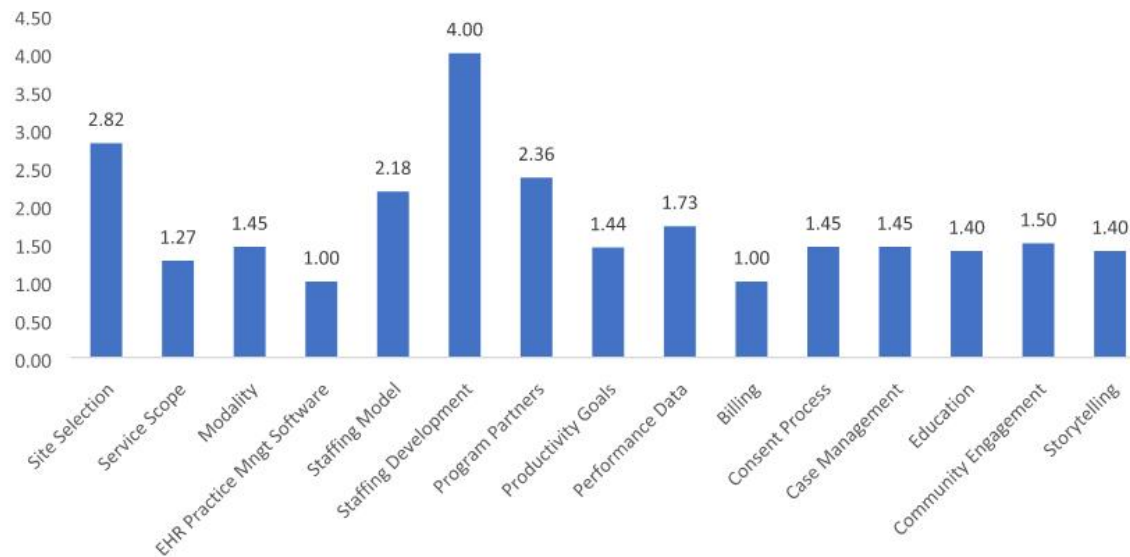
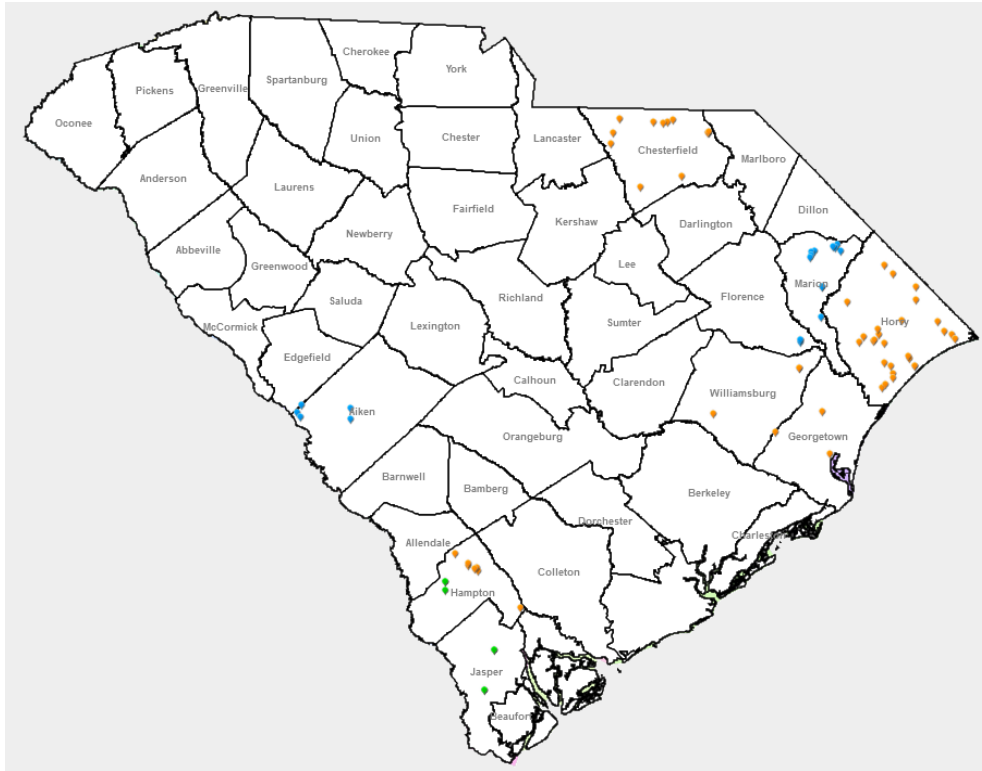


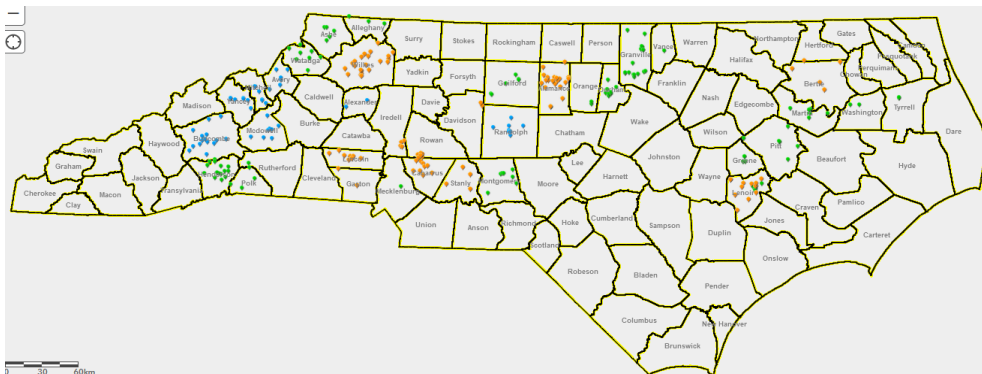
Fig. 2 Average number of months to complete each technical assistance learning module





Three Years
Later...

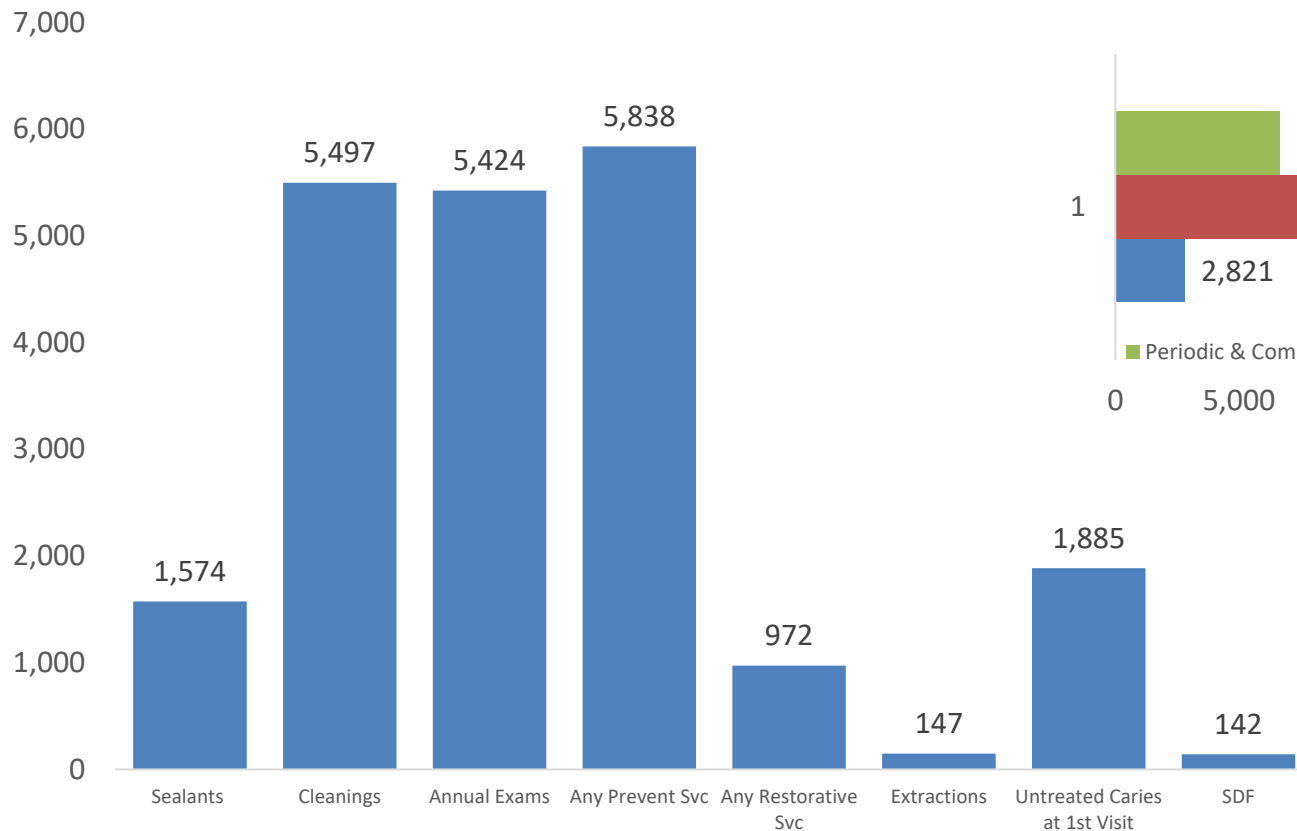
2 cohorts
21 grantees
78 schools
7,391 kids



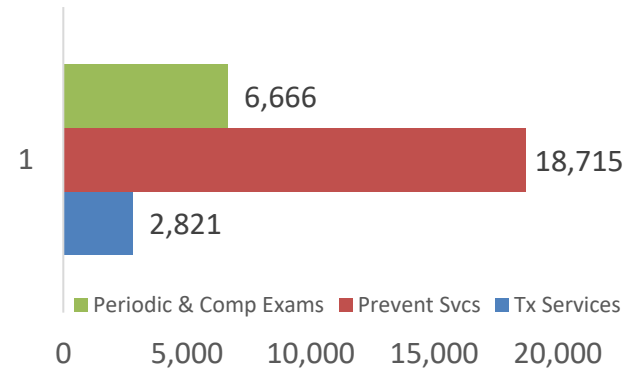
Cohorts 1 & 2 by the Numbers

SY20-21

Number of Children with...



Total Number of Services



Policy Impacts through Partnership

- Philanthropic investment elevated the policy prioritization of school-based oral health programs (and value-based reimbursement) in SC Medicaid
- Partners invited to participate in broader oral health policy analyses & discussions
- Innovations incentivized as a result of COVID
- Policies governing integrated care models are emerging: practice, reimbursement, and value

An aerial photograph of a historic church with a tall, ornate steeple, situated in a coastal town. The church has a classical portico with columns. The surrounding area is filled with colorful, historic houses and lush green trees. In the background, a body of water is visible under a dramatic, orange-hued sunset sky. The text "Thank You! martinamy@musc.edu" is overlaid in the upper right corner.

Thank You!
martinamy@musc.edu