

# Experiential Learning of Dental Public Health Residents in Implementing Community-Based Oral Health Interventions

Authors: Katie Conklin, RDH, MS, MPH, Lisa Berens, DDS, MPH, Jean Star, DDS, MPH, Ray Stewart, DMD, MS, Enihomo Obadan-Udoh, DDS, MPH, Dr. Med. Sc.

## Learning Objectives

- Describe an innovative model of community engagement by an academic dental institution
- Provide examples of community-based projects and their impact on oral health
- Describe how faculty participation from the UCSF HRSA OpenSmiles Collaborative has increased community partner engagement in implementing community improvement efforts

## Background

In 2020, UCSF received a five-year HRSA postdoctoral training grant (OpenSmiles) to increase Dental Public Health (DPH) and Pediatric Dentistry (PD) postgraduate trainee awareness, confidence, and willingness to work in rural communities, and serve vulnerable/underserved populations.

## Methods

- DPH trainees received didactic coursework and hands-on training in teledentistry, oral-health integration, pediatric dentistry, and quality improvement.
- Every year, trainees were assigned to a rural/urban local oral health program or school-based program for 12 months (4 hours per week) throughout Northern California.
- Mutually-beneficial projects and objectives were developed in collaboration with UCSF faculty and field site supervisors.
- Weekly progress updates
- Quarterly evaluation of field site work was provided by the field site supervisors
- Final field site report



Source: Photo by Katie Conklin taken at an Elementary School screening in Sonoma County, Fall 2022

## Course Objectives DPH 420

- Develop practical skills associated with the core ABDPH competencies
- Learn to prepare written protocols, reports, and/or grant applications.
- Learn to communicate/ disseminate relevant findings to administrative leadership or stakeholders
- Develop practical skills to lead the implementation and evaluation of medical-dental integration activities in a community-based dental clinic.
- Develop practical skills to lead the implementation and evaluation of school-based telehealth programs in a rural county.

### Oral Health Integration

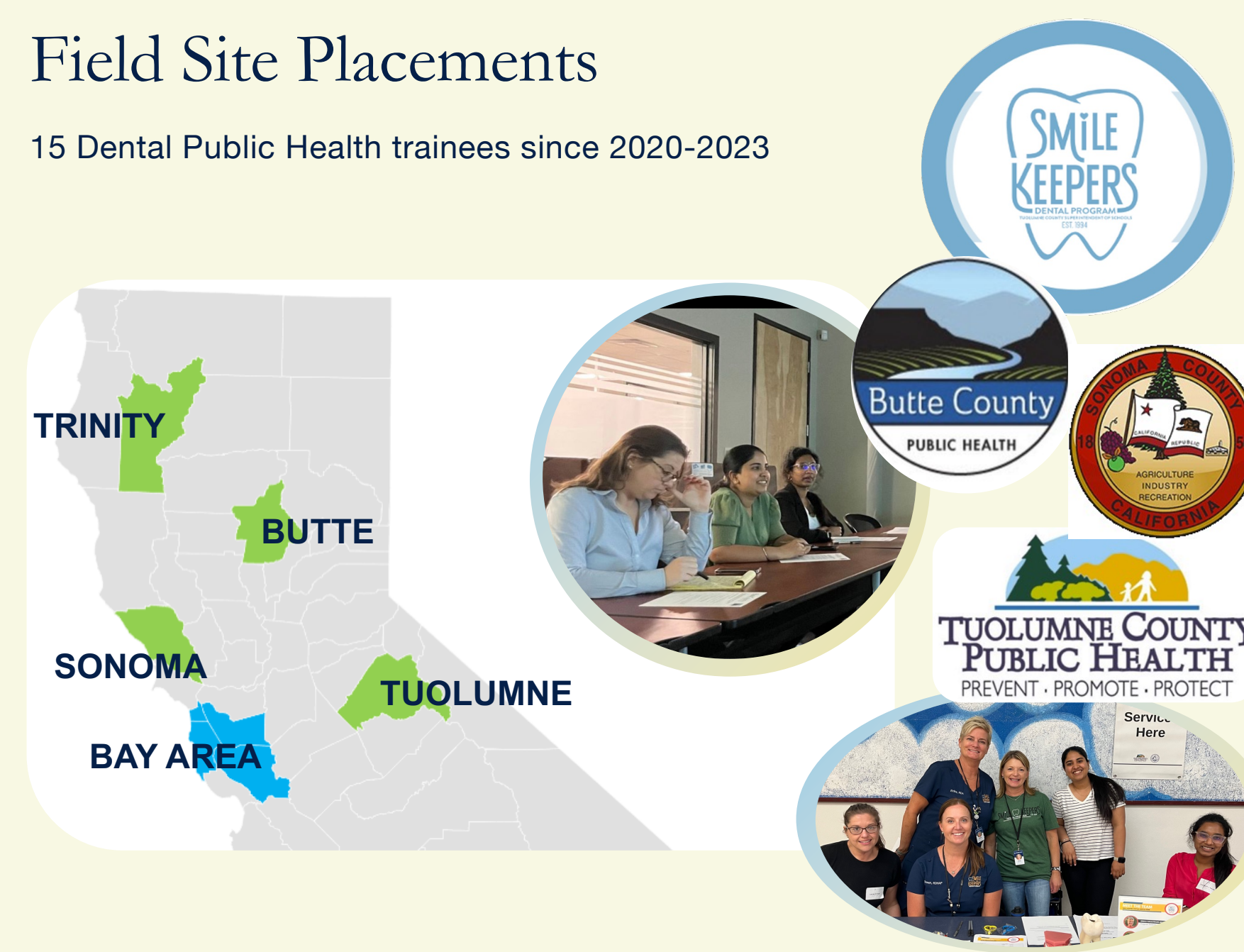
Led by Dr. Susan Fisher-Owens, DPH and Pediatric dentistry trainees attended didactic courses on oral health integration on how to present to non-dental professionals in the healthcare environment.

### Tele-Dentistry/Virtual Dental Home

Led by Dr. Paul Glassman, the DPH and Pediatric dentistry trainees attend 2-4 two-hour workshops on the VDH model, highlighting policy, workforce, and infrastructure.

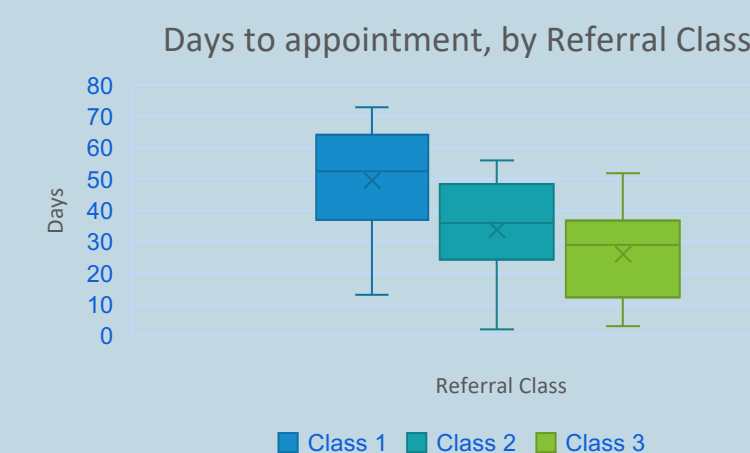
## Field Site Placements

15 Dental Public Health trainees since 2020-2023



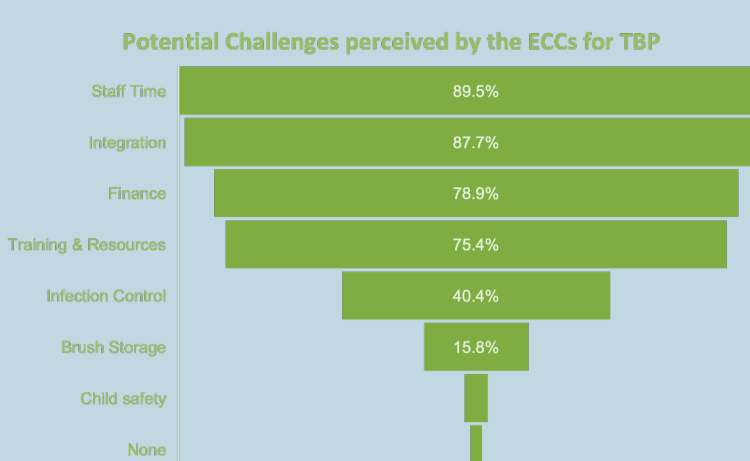
## Projects and Community Impact

Evaluation of an electronic dental referral pilot in Santa Rosa City School District: A mixed-methods analysis



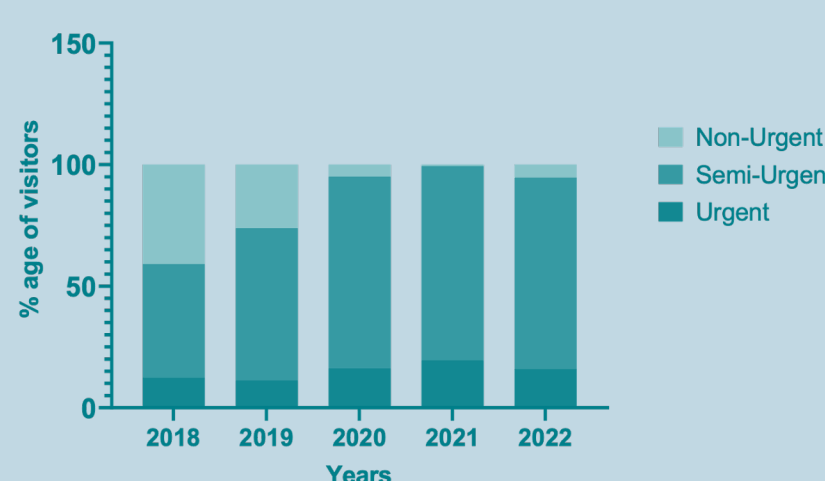
Boxplots showing days to appointment at Santa Rosa Community Health by referral Class.

Readiness of Early Childcare Centers and Feasibility to Implement a Supervised Tooth Brushing Program in Alameda County



Proportion of total ECCs reporting separate types of potential challenges in implementing the TBP.

Preventable Emergency Dental Visits for Nontraumatic Dental Conditions: Trends and Distribution in Butte County Rural Hospital, 2018-2022



Distribution of ED visitors for NTDC according to Triage categorization from 2018-2022

## Testimonials

"My favorite memory is going to the field sites and meeting and working with team members."

"One of the memories that stand out is the immersive community outreach program I participated in during the program...who shared their expertise and experiences with unwavering enthusiasm."

"Excellent job in the evaluation of the electronic dental referral system in Santa Rosa City Elementary Schools"

"DPH residents have been such a help with our pregnancy integration project!"

## Results of Learner

### Pre and Post Findings of Residents Comfort

Results from the surveys showed an improvement overall in the trainee's (n=4) preparedness to serve populations with special needs, rural areas, and different racial backgrounds.



## Conclusion

Community-Based oral health interventions increased Residents confidence in rural communities to implement public health initiatives.

