

Developing a Mobile Dental Program in Trinity County, California

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Introduction to Trinity County

- Trinity County is a **frontier** county in northern California¹
 - Rural MSSA: <250 persons per square mile
 - Frontier MSSA: <11 persons per square mile
 - Isolated from health care and other services
- Trinity County demographics²
 - 80.5% White, 7.7% Hispanic or Latino, 5.1% American Indian or Alaska Native, 2.7% Asian, and 0.7% Black
- Trinity County social and health statistics^{3,4,5,6}

	Trinity County	California
Population	15,419	38,965,193
Population-to-PCP ratio	4,356:1	1666:1
Population-to-dentist ratio	2,130:1	1284:1
Children in poverty (%)	26	15
Single parent households (%)	41	22
Children eligible for free or reduced lunch (%)	66	59
Broadband access (%)	71	89

	Trinity	Los Angeles	Untreated decay (%)	Untreated decay (%)



Figure 3. Trinity County Map. Trinity County is located in northern California, bordering Siskiyou, Shasta, Tehama, Mendocino, and Humboldt Counties.

Key Findings from Trinity County Oral Health Needs Assessment 2019⁶

- The number of dental providers in Trinity County is inadequate to meet patient need
- The remoteness of the region and rugged terrain make transportation a central problem
- The level of poverty in Trinity County significantly affects residents' ability to access oral health care
- Many residents have faulty or out-of-date knowledge about oral health
- Social isolation presents significant challenges to urban-oriented health education strategies

Project Background

- Trinity County Office of Education (TCOE) established *Trinity Smiles* program in 2015
 - Connecting children with urgent or emergent dental needs with 2 contracted dental providers
 - \$15,000 funding per year from **First 5** between 2020 and 2024
- TCOE contracted with registered dental hygienist to perform Kindergarten Oral Health Assessments
 - Findings used to create referrals and link families to care
 - \$10,000 funding per year from **Delta Dental**
- In 2022-2023, TCOE and Trinity County Oral Health Program (TC-OHP) collaborated on current project to research and develop a mobile dental program

Project Objectives

- Create a report on best practices for increasing access to dental care in frontier communities and on the most appropriate vehicle and equipment to be used for the Trinity County mobile dental program
- Create a report on the personnel required for the Trinity County mobile dental program and provide recommendations on the scope of practice for each personnel member
- Support the creation of an implementation plan, budget plan, and evaluation plan for the Trinity County mobile dental program

Project Activities

- Objective 1
 - Conducted literature review of dental outreach programs in frontier communities
 - Met with public health staff in other rural California counties
 - Met with dental public health specialists
 - Conducted literature review of mobile dental programs
 - Met with coordinators of existing mobile dental programs
 - Met with dental van company representatives
 - Researched ideas for sustainability
- Objective 2
 - Reviewed CA Dental Board's Table of Permitted Duties
 - Contacted local dental organizations and schools
- Objective 3
 - Researched staffing, supplies, and costs
 - Created sample budget
 - Created sample logic model
 - Created sample evaluation plan

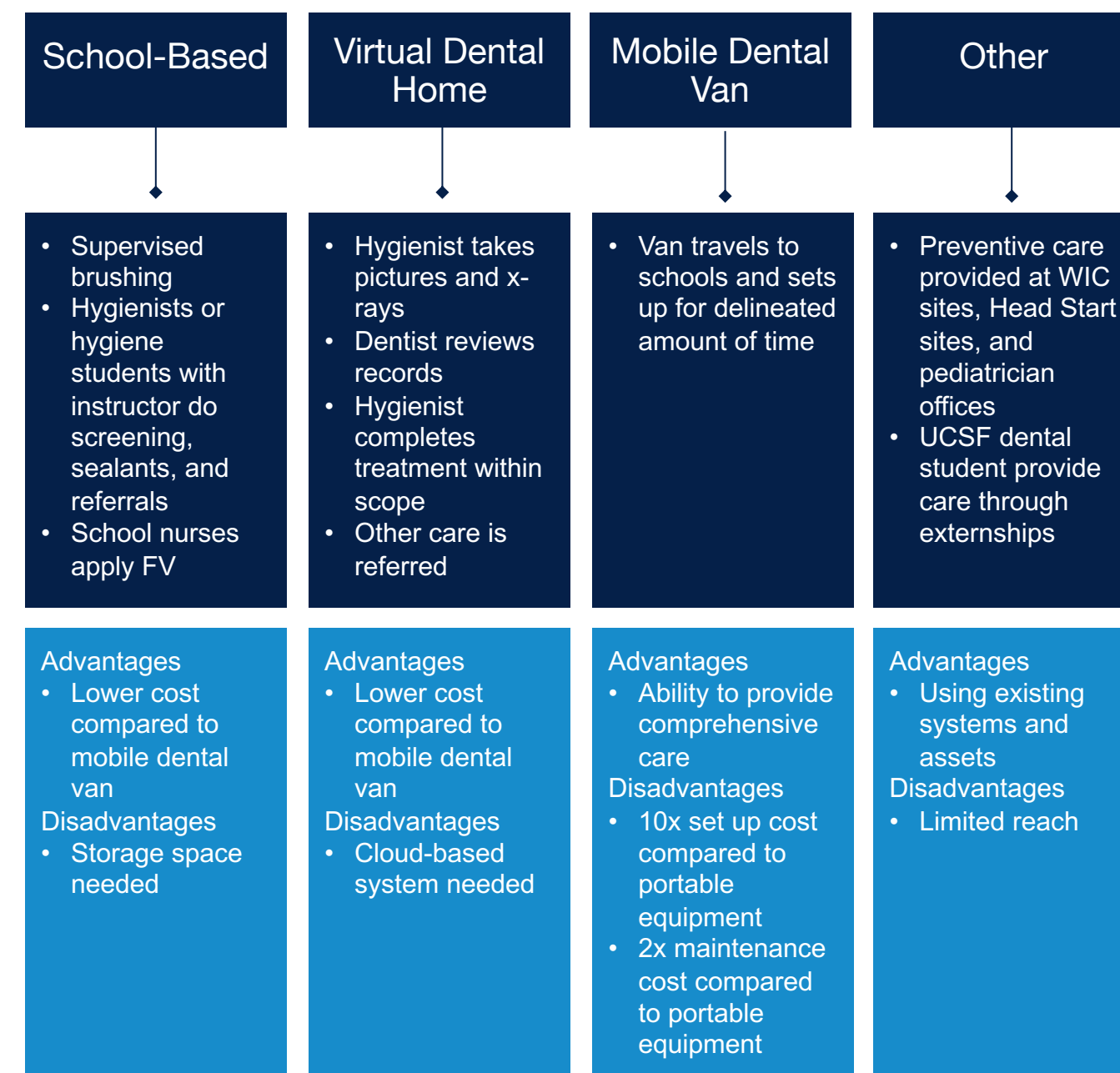


Figure 4. Comparison of Dental Outreach Models. TCOE and TC-OHP staff reviewed the advantages and disadvantages of school-based programs, virtual dental homes, mobile dental programs, and other models and decided upon a combination of school-based and mobile dental programs as the most suitable solution to the problem in Trinity County.

Outcomes

- Development of comprehensive School-Based Preventive Program with mobile dental component⁸
 - Grant cycle: 2022-2027
 - Population: TK-8 students in 10 schools, 990 students total
 - Partners: TCOE, schools, TCOE School Health Services, TC-OHP, dentist, registered dental hygienist
- Funding to purchase mobile dental van from Matthews Specialty Vehicles
 - \$277,522 in TC-OHP grant funds from CA Office of Oral Health

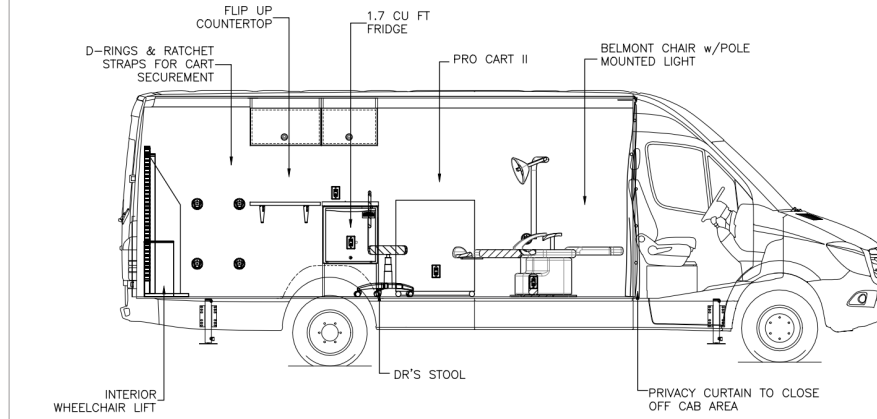


Figure 5. Dental Van Concept Drawing. Preliminary concept drawing for *Trinity Smiles* mobile dental van provided by Matthews Specialty Vehicles.

Proposed Workflow

- Early educational sessions in school classrooms
- KOHA assessments and mobile dental van intake questionnaires
- Mobile dental van school visits
 - OHI, prophylaxis, fluoride varnish, and sealant services
- Data analysis
- Expand existing referral system and implement community-clinical linkage system

Quality Improvement

- Surveys for parents of children participating in dental van

Sustainability

- Dentist and registered dental hygienist billing MediCal Dental Program
 - Reimbursement for first year of direct services: \$141,809 (projected)
 - Reimbursement for second and third years of direct services: \$132,769 (projected)

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Figure 1. Percentage of Kindergarteners with Untreated Tooth decay in Trinity County versus other California Counties in 2022.⁷ Trinity County features one of the highest rates of untreated tooth decay in California.

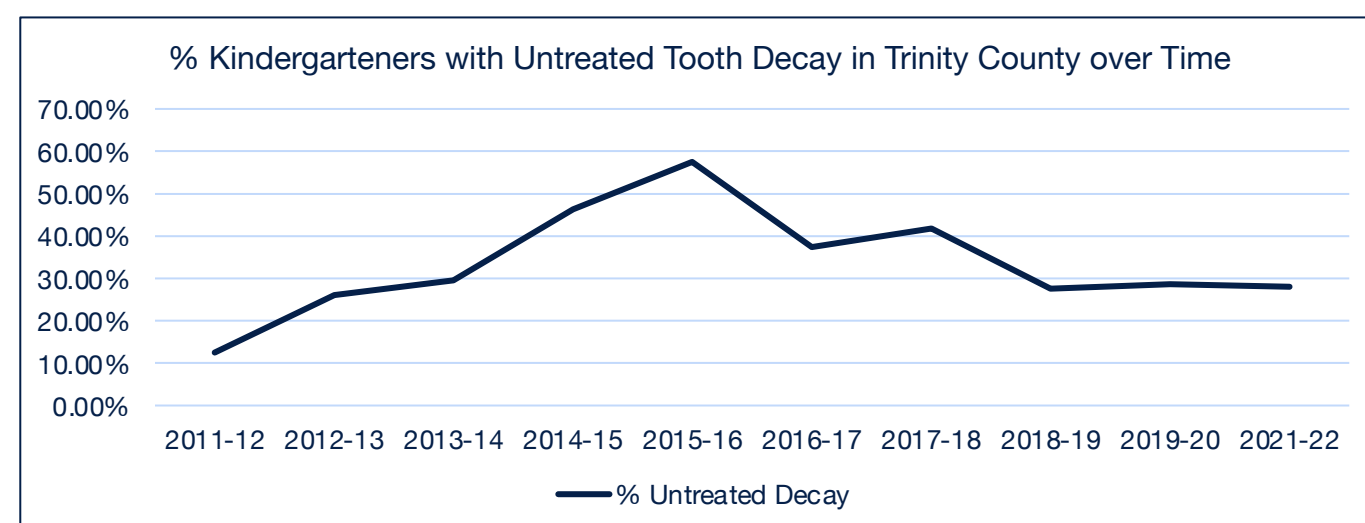


Figure 2. Percentage of Kindergarteners with Untreated Tooth Decay in Trinity County over Time.⁷ Untreated tooth decay rates in Trinity County are oscillating rather than improving over time.