



Assessment of Mobile and Portable Dentistry Programs to Improve Population Oral Health

Margaret Langelier, MSHSA, Jean Moore, DrPH, Rachel Carter,
Lauren Boyd, MPH, Carol Rodat, MA

Objective: The volume and variety of mobile and portable oral health programs in the United States has increased in recent years. Increasingly capable portable imaging technologies and treatment modalities have evolved to enable oral health professionals to provide a range of oral health services in public facilities and other community settings with portable equipment or in mobile vans equipped with fixed dental suites.

The configurations of mobile and portable oral health programs vary, with some providing only assessment, education, and fluoride varnish services, while others are sealant focused or provide a range of preventive and basic restorative services. Although mobile and portable oral health programs initially focused on children in schools and Head Start programs, many now serve adults and the elderly, especially those in nursing homes or with unstable housing, those with developmental disabilities or other special needs, those with limited transportation, and those who otherwise lack access to private dental practices.

The objectives of this study were:

- To describe the various structural configurations of portable and mobile oral health service delivery programs, including emerging models and applications
- To discuss the various populations targeted for services by these programs
- To detail regulatory variation by state for mobile and portable dentistry programs
- To examine, where possible, the outcomes of early and ongoing preventive interventions through portable dentistry in underserved communities

Design/Methods: This qualitative study examined peer-reviewed literature on mobile and portable dentistry and inventoried state-specific regulations governing these programs. Researchers also conducted case studies of 7 mobile and portable dentistry programs across the US to describe their value to underserved populations and to identify the facilitators of and barriers to the provision of effective portable oral health services. Case study participants were selected variously. Some case study participants were identified with the advice of the Mobile

Health Clinics Association. Others were found through peer-reviewed literature published on the subject. Case study participants were provided with a protocol of questions to guide the case study interview process. The New York State Department of Health's Institutional Review Board reviewed and approved this study prior to its conduct.

Results: The case studies revealed both notable commonality and significant diversity in program structures and service delivery models among mobile and portable oral health programs. Each sponsoring organization had initiated the portable service delivery model to address an access issue in specific underserved populations or in rural geographies in the catchment area. Each targeted population was challenged by distinct barriers in their abilities to access oral health services in more traditional clinical settings. The following themes were developed from the information provided by case study participants:

- The scope of services provided in mobile and portable dentistry programs ranges from preventive services to a full complement of dental treatment services.
- Mobile and portable dentistry programs have grown organically to meet the needs of particular populations or geographic areas for oral health services.
- Mobile and portable dentistry programs represent a response by local providers and organizations to unmet need for oral health services in communities of interest.
- The geographic locations and patient populations served by mobile and portable dentistry programs may change in response to shifting need.
- Mobile and portable dentistry programs are an integral part of the dental home.
- Mobile and portable dentistry programs are supported by various funding sources.
- Mobile and portable dentistry programs are an effective means of integrating oral health services into primary care environments.
- Mobile and portable service delivery results in the building of strong oral health care teams.

Conclusions: Mobile and portable dentistry services appear to mediate the structural and financial barriers to access to oral health services experienced by some population groups. While stakeholders sometimes express concern that mobile programs have the potential to act in isolation from the established delivery system, it was apparent from these case studies that these programs were integrated into local systems of care. The benefits of these programs, which include facilitating access to services and improving oral health management for patients, clearly support ongoing integration of mobile and portable modalities into the comprehensive oral health services delivery system.

Key Words: Mobile Dentistry, Mobile Dental Vans, Portable Dentistry, Oral Health

HWRC Website Link: http://www.oralhealthworkforce.org/wp-content/uploads/2017/09/OHWRC_Mobile_and_Portable_Dentistry_Programs_2017.pdf