Mobile and Portable School-Based/School-Linked Oral Health Programs: Delivery Models to Expand Care for Children and Adolescents

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This document is intended to provide guidance on issues to consider in developing and implementing a school-based or school-linked mobile or portable oral health program. It includes links to resources and information about entities that can provide state specific guidance. It is not intended to be a guide on how to provide clinical services in mobile and portable school-based/school-linked oral health programs, nor does it serve to provide legal advice or opinions regarding these programs. The examples provided help improve understanding of the issues; however, their inclusion is not an endorsement of individual programs or approaches.

Introduction

Dental caries (tooth decay) remains the most common chronic disease among children and adolescents in the United States. According to the Centers for Disease Control and Prevention (CDC), more than half of children age 6 to 8 have decay in at least one primary tooth and more than half of adolescents age 12 to 19 have at least one decayed permanent (adult) tooth.\(^1\) Healthy People 2030 includes a goal to reduce lifetime tooth decay of children and adolescents from 48.4% (baseline 2013 – 2016 data) to 42.9%.\(^2\)

Children from families with low-incomes are twice as likely to experience tooth decay compared to their counterparts from families with high-incomes.\(^1\)

Limited access to oral health care provided in traditional fixed (i.e., brick-and-mortar) settings remains a driving factor in the poor oral health of preschool and school-age children. Other models of care delivery, including utilization of mobile and portable (MP) dental equipment coupled with teledentistry, allow for many of these barriers to be addressed.

This issue brief has three objectives:

1. Raise awareness about the need for models of care delivery beyond traditional fixed settings.
2. Provide information about challenges MP school-based and school-linked (SB/SL) programs face, and suggest strategies to address these challenges.
3. Identify resources and community models that can provide guidance for program development.

This document discusses considerations for individuals and organizations interested in establishing mobile or portable school-based or school-linked (MP SB/SL) oral health programs for preschool and school-age children, including the community specific challenges these programs encounter and solutions they might find.

To ensure understanding of terminology in this document, definitions are provided for key words and phrases. Please see the Appendix for operationalized definitions.

**Dental home**: the location in which an on-going relationship between a dentist and patient exists.

**Fixed setting**: a brick-and-mortar private practice, dental clinic, or other public health setting.

**Hybrid oral health programs**: these programs utilize a combination of teledentistry with MP oral health programs.

**Mobile oral health program**: a program using self-contained motorized vehicles or a non-motorized trailer.

**Portable oral health program**: a program using portable dental equipment.

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School-based health program: a health program conducted entirely onsite at a school.

School-linked health program: a health program conducted both on-site at a school and in fixed settings outside of the school.

Virtual dental home: an oral health delivery system that utilizes teledentistry to link allied dental personnel in community settings with dentists in dental offices and clinics.

Teledentistry: utilization of telehealth technology to deliver virtual oral health care, including education.

- **Synchronous (live):** a real-time virtual interaction between a patient and an oral health provider located at a different site from the patient.
- **Asynchronous (store and forward):** the transmission of a patient’s health information from where the patient is present to another site where the oral health provider is present.
- **Originating site:** the site at which a patient is located at the time oral health care services are provided synchronously or asynchronously.
- **Distant site:** the site where an oral health provider is located while providing oral health services via a telecommunications system.

Background

Good oral health supports the overall health and well-being of individuals and their families, and the communities in which they attend school, work, and live. Lack of access to regular oral health care, including preventive care, results in an increased risk for dental disease, pain and infection. For preschool and school-age children, this can lead to school absences that can limit (or undermine) their ability to achieve educational and social milestones. According to “Oral Health in America: Advances and Challenges,” approximately half of all children in the United States are not receiving needed oral health care due to social, economic, and geographic barriers. Mobile and portable (MP) SB/SL oral health programs are one approach that can help address these barriers that prevent access to oral health care.

Mobile and portable SB/SL oral health programs have existed in the United States for many years. The services provided by these programs range from oral health education to preventive and restorative dental services, including cleanings, fillings, and extractions. A variety of models exist, influenced by several factors from finances to workforce availability to legislative and legal considerations.

When examining the effectiveness of MB SB/SL oral health programs, it is important to consider the Quadruple Aim, the way in which health care systems are optimized to deliver improved health outcomes through cost-effective care that supports a positive experience of the patients and providers. The Quadruple Aim expands upon the Triple Aim to include positive provider experience in the care delivery model.

Oral health programs are most often found in schools with a high percentage of students eligible for free or reduced lunch programs (70% and 53% respectively). In addition, 77% of schools with school-based health care services are eligible for Title I funding, which provides financial assistance to schools with high numbers or percentages of children from families with low-incomes. The Community Preventive
Services Taskforce recommends establishing school-based health programs in communities with families with low incomes, citing improved educational outcomes and improved health outcomes for participating students. While these programs often exist in these settings, SB/SL oral health programs should be considered for all preschool and school-age children.

This document contains resources for developing programs. For instance, the Association of State and Territorial Dental Directors (ASTDD) and the National Maternal and Child Oral Health Resource Center (OHRC) released Best Practice Approach: School Based Dental Sealant Programs in 2022. The American Dental Association (ADA) provides clinical guidelines regarding dental sealants (2016) and topical fluoride (2013), which can help inform SB/SL oral health program development. Information on resources and available funding for MP SB/SL oral health programs may be found on some state health department websites. A review of published literature can provide insight into reported success of individual programs. In addition, examples of successful programs can be found in the Appendix of this document.

Challenges

Knowing the challenges that may present when implementing MP SB/SL oral health programs can support improved outcomes.

Workforce considerations

Oral health services aim to prevent or control diseases of the hard and soft tissues of the mouth. These services range from education to preventive care to treatments to restore the form and function of the mouth. Most often, dentists provide the most comprehensive oral health services; however, many MP SB/SL oral health programs utilize dental hygienists and dental assistants to maximize utilization of skill sets and increase the efficiency of care delivery. Other support staff also are important to the success of these programs. With the increased use of teledentistry and electronic dental records (EDR), appropriate information technology (IT) support is needed to ensure functionality and access to patient dental records. Community health workers or care coordinators may be helpful. Their support may include scheduling appointments, obtaining informed consent, coordinating referrals for children and adolescents whose oral health needs cannot be met by the program, and following up with parents or caregivers regarding the child’s oral health needs. These individuals provide oral health education emphasizing preventive strategies as an interdisciplinary approach to promote overall health.

State dental practice acts, legislation, and regulations

Dentists work alongside a variety of allied oral health professionals.

Allied oral health professionals include:

- Dental hygienists
- Dental assistants
- Dental therapists
- Dental laboratory technicians
- Denturists
Scopes of practice for allied oral health professionals vary from state to state. The American Dental Hygienists’ Association (ADHA) notes that state scope of practice laws, regulations and rules dictate where dental hygienists can work as well as licensure, details of scope of practice, and supervision.\textsuperscript{18} The American Dental Assistants Association (ADAA) notes the same for dental assistants.\textsuperscript{19} Dental assistants typically are supervised by a dentist, although in some states a dental hygienist may supervise a dental assistant in specific practice settings or arrangements.\textsuperscript{19} However, in states when dental assistant supervision is limited to a dentist only, this can create challenges for a dental hygienist needing additional clinical support to deliver care. Dental therapists, a new addition to the allied oral professional workforce, are licensed providers who deliver routine oral health care under the direct, indirect, or general supervision of a dentist. Dental therapy is currently not permissible in all states. It is important to review state practice acts as well as rules and regulations regarding scope of practice for allied oral health professionals and requirements for supervision for the provision of care.

State, city, and county laws and regulations regarding MP clinics should be reviewed. Some may require MP SB/SL oral health programs be associated with a fixed setting. There may be regulatory requirements regarding permits and liability insurance that must be met. Private and public insurance programs may have limitations regarding the types of providers who are eligible for credentialling and reimbursement. Public and private dental insurance programs’ reimbursement policies for oral health care delivered via MP SB/SL programs should also be reviewed. Check with the state dental board and state regulations for additional information regarding state-specific guidelines. If teledentistry will be used, refer to state-specific guidelines and regulations and reimbursement policies from public and private insurance.

**Community opposition**

Some private practice dentists and professional dental organizations may not support MP SB/SL oral health programs. School administrators, teachers, and staff may be hesitant to support implementation of these programs in their schools. Increasing safety concerns for preschool and school-age children may create hesitancy about allowing non-school staff into the building. There may also be concern regarding lost time in the classroom when children and adolescents participate in multiple health-related programs. Additionally, novel, infectious diseases, such as COVID-19, can interrupt classroom time and the ability of schools to participate in oral health programs. Communicating early, clearly, and consistently with those concerned about implementation of these programs can facilitate understanding and acceptance of the goals and objectives of MP SB/SL programs.

**Infrastructure and infection control**

Mobile and portable SB/SL programs have unique infrastructure considerations. For mobile SB/SL programs there must be adequate space for the unit to park or to set up equipment. Programs using portable equipment may find that space is limited to the school nurse’s office, the gym, unused classrooms, or storage areas.

Having a comprehensive infection, prevention, and control (IPC) program, along with a designated IPC coordinator, can minimize disruption of SB/SL programs and enhance delivery of safe, appropriate, and effective oral health care. The Organization for Safety, Asepsis, and Prevention (OSAP) convened an advisory group to develop site assessment tools and checklists for MP dental programs as informed by the Center for Disease Control and Prevention (CDC) Guidelines for Infection Control in Dental Health-Care Settings.\textsuperscript{19,20}
Infectious disease epidemics can disrupt the delivery of oral health care and have a lasting impact. The COVID-19 pandemic brought new challenges regarding ventilation and spacing necessary for the safe delivery of oral health care. The risks and challenges associated with existing and future viruses and other pathogens change over time.

When utilizing teledentistry, quality broadband and technology are required to ensure accurate capture and transfer of patient information. This may be a challenge in rural areas with little or slow internet access. The benefits and challenges of synchronous or asynchronous teledentistry encounters should be considered when incorporating teledentistry into MP SB/SL oral health programs. Additionally, training and calibration of providers may be required for new equipment, such as intraoral cameras or software. ASTDD and the CareQuest Institute for Oral Health published a Best Practice Approach for Teledentistry in 2021.

Access to experts in the repair and maintenance of MP equipment is necessary. Often the retailer from which the equipment or mobile unit is purchased can provide this support. However, when purchasing used equipment, identifying individuals with the appropriate skills can be more challenging. Weather can negatively impact the feasibility of mobile dental clinics; for example, if freezing temperatures result in frozen water lines, the unit may be unusable, or excessive snow or ice may prohibit travel. When equipment, including the vehicle itself, does break down or malfunction, repairs may be costly and further disrupt the delivery of oral health care or negatively impact the sustainability of the program.

Interoperability of electronic dental records with teledentistry platforms
Electronic dental record (EDR) systems can enhance the efficiency and productivity of MP SB/SL oral health programs. Use of EDR systems allows for tracking of procedures and referrals as well as billing and reimbursement for services provided. Additionally, EDRs provide long-term storage of children’s dental health records and are Health Insurance Portability and Accountability Act (HIPAA) and Family Educational Rights and Privacy Act (FERPA) compliant. Challenges related to storage of paper records can be addressed with use of EDR.

Mobile and portable SB/SL oral health programs that include a teledentistry component should 1) consider the goals of that component and the software necessary to achieve these goals, 2) make sure the platform is HIPAA compliant, and 3) consider the platform’s interoperability with their electronic health record (EHR) system.

Other SB/SL programs (e.g., vision and hearing screening) may have their own EHR systems. Coordination with other programs can promote a more uniform, comprehensive health record for school-age children receiving care in other SB/SL programs.

Insurance, liability, and other professional coverage
Legal requirements and insurance coverage must be considered when providing oral health care through an MP SB/SL oral health program, with or without teledentistry components.

Professional liability insurance coverage may vary depending on:

- The employment status of the person providing oral health services (e.g., independent contractor, government employee, federally qualified health center staff, oral health service organization employee, private practice provider).

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• The profession of the individual providing the oral health services.
• School district memorandum of understanding (MOU) or memorandum of agreement (MOA) insurance requirements. (Note: School districts within a state may have different requirements.)
• Federal regulations.
• State regulations.

Oral health professionals should consult with their liability insurance carrier to determine coverage for services provided outside a fixed setting. State regulations or statutes also may have coverage requirements for practice outside of a fixed clinic. Federally qualified health centers (FQHCs) also provide professional coverage to persons and entities through the Federal Tort Claims Act.21 Program planners should contact the appropriate legislative agencies and state dental boards to understand these.

Programs should contact the school or school districts with which they wish to partner to determine the specific insurance requirements for individuals providing oral health services to students through MP SB/SL oral health programs.

Types of liability insurance:

• Professional liability/malpractice insurance – covers clinical standards and responsibilities.
• General liability insurance – covers damage to the property or school, to program equipment, and bodily harm to an individual (trip or fall).
• Non-owned automobile insurance – additional coverage for an employee who uses their own vehicle to transport portable dental equipment.

Consider additional coverage for the MP dental equipment or laptop computers. For instance, if a dental hygienist is transporting portable equipment provided by their employer in their personal vehicle to a school site, it may be challenging to obtain coverage for damage that occurs while the equipment is being transported.

Agreements and Consents Regarding Services to Be Provided

Mobile and portable SB/SL oral health programs need to establish formal agreements with schools or school districts and obtain informed consent from parents or guardians before providing services to students.

Schools or school districts often require an MOU or MOA between the school and the MP SB/SL oral health program providing services to their students. An MOU or MOA defines and outlines the responsibilities of the health care provider, the MP oral health program, and the school or school district involved. This document provides authorization from the school or school district to allow the MP oral health program to provide defined oral health services to the students during an agreed upon period.

Obtaining informed consent from parents for treatment of their child through an MP SB/SL oral health program can present challenges. Depending on the methods (e.g., paper form sent home with a student to be returned, secure form sent electronically to a parent) there may be challenges effectively communicating treatment options, expected outcomes, and risks associated with participation in the treatment. Without completion of an informed consent form, a student cannot receive care via an MP SB/SL oral health program. Protocols for obtaining informed consent must be developed to ensure
efficient care delivery. Educating school administrators, teachers, school nurses, and parents and caregivers of students about the importance of the consent process, and care opportunities that can result from informed consent, may help increase the percentage of students with informed consent.

Payment of dental services
Once established, MP SB/SL oral health programs require an ongoing source of revenue to ensure sustainability. Payment for services provided is necessary for program sustainability. Revenue is needed to cover the cost of staff salaries, equipment maintenance and repairs, supplies including personal protective equipment, and other expenses. Reimbursement may come through a variety of sources including public or private dental insurance and out-of-pocket payments based on sliding fee scales to make services more affordable for students participating in the program who are uninsured.

Insurance plans, both public and private, may have specific policies regarding credentialing, billing, and reimbursement eligibility for services. Coverage and reimbursement rates of public and private dental insurance plans vary for teledentistry. Mobile and portable SB/SL oral health programs need to understand and plan for the different insurance plans of the students they serve. Programs should consult with the state legislative body, state dental board, and insurance providers to understand requirements regarding billing and reimbursement.

Start-up funding of mobile and portable school-based/school-linked oral health programs
A variety of funding sources should be explored when starting an MP SB/SL oral health program. Grant funding is one opportunity, although it may require matching funds, provide one time funding, or may not pay for direct services. Grant funding may come from state or local health departments, non-profit organizations, or charitable branches of private entities. Fundraising, crowd-funding campaigns, community donations or private loans are other options to consider. Working with an experienced grant writer can result in greater success when applying for grants. An experienced fundraiser may also be helpful to develop and support fundraising efforts.

In 2022, Congress passed the Maximizing Outcomes through Better Investment in Lifesaving Equipment (MOBILE) Health Care Act. This legislation aims to expand access to care through establishment of new mobile care delivery programs using federal funds under the New Access Points program.  

States may have monies set aside, for example, state general funds and/or Title V funds, for outreach programs, including MP SB/SL oral health programs. As the political environment changes in a state, the funding for MP SB/SL oral health programs may change.

Continued funding of mobile and portable school-based/school-linked oral health programs
Once established, MP SB/SL oral health programs require ongoing sources of revenue to ensure sustainability. Renewable grant funding may be available based on demonstrated success of the program. Continued fundraising and donations from community members can be ongoing sources of income. Reimbursement from dental insurance plans and payment for services may also contribute to program income. Reliance upon too few sources of income can negatively impact the sustainability of MP SB/SL oral health programs. Relationships with experienced fundraisers and/or grant writers can help.

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Continuity of care and the dental home

Another challenge for MP SB/SL oral health programs is identifying a dental home as well as access to emergency and/or follow-up care for students. Many MP SB/SL oral health programs function primarily during the school year; however, oral health needs are not limited to the school year and there may be gaps in access to oral health care for families who rely on these programs to meet their children’s oral health needs. During the school year, there are frequent breaks and disruptions, such as school vacations and state and federal holidays. Standardized tests and other educational requirements for teachers may take precedence within the school and priority may not be given to student participation in MP SB/SL oral health programs. Inclement weather may prevent dental teams traveling to the site and disrupt care delivery.

In some instances, MP SB/SL oral health programs may travel great distances to provide services. This can pose challenges, as these remote sites may not have an effective way to communicate with the program when an emergency arises on a day the program is not at the school. Teledentistry is one method a program may consider to address this challenge. The Virtual Dental Home model in California presents a framework through which a combination of MP oral health care models, often coupled with teledentistry, connect preschool and school-age children to dental providers in traditional brick and mortar offices. Programs in Maine and Oregon have adopted similar strategies. Critics of this model contend that it has not demonstrated an efficient and effective alternative to care delivered in a fixed setting via dental hygienists and dental therapists under the supervision of a licensed dentist. The complex logistics, additional expenses, and lack of independent analysis of this model are noted as shortcomings.

Reporting and tracking systems

Reporting and tracking systems can document the oral health status of preschool and school-age children and the availability of oral health care. While programs must develop their own metrics to measure success and demonstrate outcomes, as of August 2023, no states require MP SB/SL oral health programs to report their data to the state department of education, health department or dental board. States do not have accurate ways to evaluate the reach or impact of MP SB/SL oral health programs.

Key take-aways: Current challenges

- MP SB/SL oral health programs require a clinical and non-clinical workforce.
- State practice acts, legislation, and other regulations dictate what oral health services can be provided and by which individuals in what settings.
- Poor understanding regarding the goals of MP SB/SL oral health programs may result in opposition from community members including private practice dentists and local dental organizations.
- Appropriate infrastructure and infection control procedures that support the safe delivery of oral health services are necessary for MP SB/SL oral health programs.
- A variety of insurance, liability, and other professional coverages often are required.
- Absence of a detailed MOU can result in poor understanding of roles and responsibilities of all MP SB/SL oral health program participants, including the care providers and the schools or school districts.
• Lack of informed consent from parents or guardians of children and adolescents participating in SB/SL oral health programs can interrupt care delivery.
• Private and public dental insurance plans may have specific credentialing requirements and/or reimbursement policies that impact payment for services provided through SB/SL oral health programs.
• Initial funding for MP SB/SL oral health programs may support only the startup of the program and not provide ongoing financial support.
• The inherent MP nature of these programs can create challenges identifying a dental home for participating children and adolescents.
• Lack of reporting requirements of MP SB/SL oral health programs creates gaps in understanding of the reach and effectiveness of these programs.

Strategies to address challenges

Program planning
Individuals or organizations interested in establishing MP SB/SL oral health programs should begin with a needs assessment. Both the school and the program need to collaboratively conduct an assessment of needs and readiness. A needs assessment not only allows for identification of a target population, but also provides insight regarding the existing healthcare system in the community and available resources. Non-financial resources in the community can often support the implementation and continuation of these programs. Program planning includes identification of community partners and the schools with which MP programs wish to partner. Developing effective communication strategies regarding the goals and objectives of the program can facilitate successful partnerships. The process can inform discussions with individuals or organizations who may oppose the implementation of MP SB/SL oral health programs. Addressing the perceived threats dentists and professional dental organizations may have regarding these programs allows for improved community relations and can also provide an opportunity to identify dental practices that may be willing to accept referrals for care beyond what the SB/SL oral health program can provide.

Please refer to the Appendix which provides recommended questions for schools considering these programs. Oral health professionals wishing to explore other care delivery models, including MP and teledentistry can find assessment documents from other professional organizations including the OHRC, OSAP, National Network for Oral Health Access (NNOHA), and the American Mobile and Teledentistry Alliance (AMTA). ASTDD provides a Seven-Step Model to assess the oral health needs of a community; an anticipated update of this model will be available at the end of 2023.

Establishing the role that school personnel and school districts will play is essential. Support from schools can range from financial support for equipment, supplies, and staffing to endorsement and promotion of the programs to students’ families, and in-kind support such as copying or mailing. The roles and responsibilities should be included in the MOU and be reviewed annually by both the program and the school to address any changes in the roles and responsibilities initially agreed upon.

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There may be opportunities for MP SB/SL oral health programs to provide services to the community beyond the regular school year. For instance, a program could partner with other organizations such as local health clinics or at health promotion events during the summer such as health fairs. As MP SB/SL oral health programs have conversations about opportunities to provide care throughout the year, they should include their school partners and other relevant stakeholders in these conversations. A school may expect that the equipment and supplies purchased will be utilized to provide care only to the students in the school district. Programs may need to develop separate policies and procedures and require additional or different funding and legal protections for such situations.

Development of policies and procedures
Information regarding the policies and procedures of existing MP school-based and school-linked dental programs is limited. Clearinghouses such as the Rural Health Information (RHI) Hub, NNOHA, and ASTDD may provide examples of existing best and promising MP dental programs. The Michigan Department of Health and Human Services provides guidelines for completion of the mobile dental facility application in their state. Oregon requires certification for local school dental sealant programs. Further information is available online from the Oregon Health Authority.

The variability in state licensing requirements for oral health professionals, including scope of practice along with reimbursement by public and private dental insurances, makes it difficult to develop national standards regarding policies and procedures for MP SB/SL oral health programs. When seeking to implement a program that crosses state lines, it is advisable to consult with the states’ dental boards and other regulatory agencies involved in the licensure and provision of oral health services. In addition, a review of reimbursement policies by public and private insurances will inform eligibility for reimbursement for care provided by these programs.

Community engagement and education
Collaboration between oral health team members and community members, such as school districts and community health workers (CHW), increases the likelihood that parents will receive oral health information regarding their children. The more informed parents are regarding their children’s oral health needs and options for oral health care, the more likely they will seek appropriate oral health care. This notion can be illustrated by the CDC Whole School, Whole Community, Whole Child (WSCC) Model as discussed in ASTDD’s Best Practice Approach: Improving Children’s Oral Health through the Whole School, Whole Community, Whole Child (WSCC) Model. MP SB/SL oral health programs are an excellent way to foster this collaboration and provide oral health education to children and their parents and/or caregivers. Additional information about family and community engagement is available from the Association of Maternal and Child Health Programs (AMCHP) and through the University of Kansas Community Tool Box.

Care coordination
Depending on the size, scope, and goals of an MP SB/SL oral health program, each student’s oral health needs may not be met through the program. It is important to establish and clearly communicate what services can be provided. Identification of individuals who will lead care coordination, such as scheduling follow-up treatment services to be provided through the SB/SL program or arranging for referral for services that cannot be delivered by the program, helps improve efficiency. For instance, the I-Smile and
I-Smile at School programs in Iowa utilize dental hygienists employed by the state health department to coordinate oral health care for children and adolescents in SB/SL oral health programs.

There may be instances where care delivered in a fixed dental clinic, or a hospital or outpatient surgery center is required due to extensive oral health needs and/or behavior management considerations. Establishing partnerships with local dental providers can support care continuity. Utilization of teledentistry can increase the efficiency of triage for students with behavioral management considerations requiring extensive treatment and promote efficient delivery of definitive in-person care. The Eastman Institute of Oral Health (EIOH) and Finger Lakes Community Health Center (FLCHC) in New York provide an example of coordinating care between pediatric patients at FLCHC and care teams at EIOH.35

Business plans and budgets
Developing a business plan and budget is essential for program planning, implementation, and continuation. Individuals or organizations should enlist the support of someone with a strong financial background to assist in developing a budget and conducting ongoing review. A business plan should identify diversified funding sources and activities, which may include soliciting financial support through advocacy and fundraising efforts. Mobile and portable SB/SL oral health programs may collaborate with a financial consultant, or in the case of state-sponsored programs, a fiscal services officer or financial services division to create a business plan. The 2017 School Based Health Care Census noted that most school-based health care programs have remained sustainable due to a diversity of funding sources including public and private insurance revenue, grant funding from public entities such as the federal, state, or local governments, grant funding from private entities such as foundations, and school and school district support.6

Quality measures and evaluation
Quality measures are important both to ensure appropriate care and to demonstrate the effectiveness of MP SB/SL oral health programs in improving the oral health status of the communities they serve. Common quality measures include the number of children and adolescents served or number and types of oral health services provided. The Dental Quality Alliance (DQA), an organization established by the ADA, is comprised of stakeholders and experts in oral health care delivery who develop performance measures for oral health care. Pediatric specific DQA measures include oral assessment, caries risk documentation, utilization of oral health services, and cost of care. A program that employs quality measures should demonstrate its effectiveness in meeting the needs of its target population.

Program evaluation is related to but differs from assessment of quality measures. Quality measures help identify what works and doesn’t work about the performance of the health service delivery system and can help drive improvement.36 Program evaluation involves the collection of specific information to determine a program’s effectiveness.37 Deciding which measures to use and drafting an evaluation plan are part of program planning and should be agreed upon before the program starts. CDC, the Rural Health Information (RHI) Hub, Kansas Community Tool Box, and other organizations provide guidance for developing and implementing evaluation plans.
Key take-aways: Strategies to address current challenges

- Begin with a needs assessment to determine if a MP SB/SL oral health program is right for your community’s needs and your professional goals.
- Develop a comprehensive program plan that includes effective communication strategies that can support the success and sustainability of the MP SB/SL oral health program.
- Engagement and education of community members will increase buy-in for MP SB/SL oral health programs.
- Creation of policies and procedures that align with state practice acts, legislation, and other regulations is necessary.
- Not all oral health needs of the children and adolescents served may be met through the MP SB/SL program; a care coordination system that supports the delivery of needed care outside the program is essential.
- With the assistance of a financial advisor, creation of a business plan that includes diversified sources of funding will support program sustainability. Incorporation of quality measures ensures appropriate care and can demonstrate the effectiveness of MP SB/SL oral health programs.

Conclusion

Mobile and portable SB/SL oral health programs are demonstrably key access points for children and adolescents who may otherwise face barriers to accessing oral health care in traditional brick and mortar clinics.

To better document MP SB/SL oral health programs’ impact and outcomes, improved state level tracking of measures and the services the programs provide is needed. Close collaboration between state health departments, departments of education, state dental boards, and state Medicaid programs is required to accurately collect and report MP SB/SL oral health program data in a timely fashion. Community care organizations, such as primary care associations or state oral health coalitions, could collaborate to develop guidance documents including policies and procedures for MP SB/SL oral health programs. Adoption of existing manuals and templates for contractual agreements, policies and procedures can create a more uniform approach and understanding regarding these programs. Creation of a national database that summarizes state laws, rules and regulations related to MP SB/SL oral health programs as well as school oral health services would allow for comparison of programs across the country and improve understanding of these alternative care settings.

Organizations such as the Rural Health Information (RHI) Hub, Kansas Community Tool Box, NNOHA, and ASTDD often collect examples of promising and best practices that can inform others seeking to adopt similar programs. These documents can provide a framework for online and in-person training and mentorship opportunities for oral health professionals who wish to engage with MP care models.

Improving interoperability of EHR and leveraging teledentistry can improve care coordination between MP SB/SL oral health programs and fixed dental settings. As optimization of health care systems is considered through the Quadruple Aim, the need for transparency in health status, the cost of health
care, and the care experiences of patients and oral health providers is needed. As of 2023, there is little information regarding the national use of teledentistry within MP SB/SL oral health programs.

Supporting and funding research about the effectiveness of MP SB/SL oral health programs can improve the evidence base for their acceptance and success. Along with expanding the evidence base, adoption of nationally recognized definitions for MP oral health care delivery systems is needed for states and dental insurers. These steps can help inform development of quality measures and identify opportunities to maximize reimbursement potential, funding, or cost-sharing mechanisms in ever-changing health care systems.

Mobile and portable SB/SL oral health programs will look different across the United States. When considering program planning, implementation, and evaluation, consultation with experts to better understand state-specific, school-specific, and regulatory-specific legislation and policies is paramount to success and sustainability.

Points for consideration moving forward

- Promote adoption of national definitions regarding MP SB/SL oral health programs by state legislative bodies and dental insurers.
- Support policies that allow allied oral health professionals to practice at the top of their scope of practice or certification.
- Raise community awareness regarding the benefits of school-based and school-linked programs to promote stakeholder involvement and address concerns.
- Create and maintain a comprehensive database of state policies, rules and regulations that address MP SB/SL oral health programs.
- Conduct local and state needs assessments to gauge children’s oral health needs and community interest and readiness.
- Conduct further evaluation and analysis of teledentistry programs.
- Increase support from policymakers to expand the use of teledentistry.
- Increase reimbursement for teledentistry.
- Promote the use of care coordinators to support the referral process of children and adolescents requiring additional oral health services that are not available through MP SB/SL oral health programs.
- Support research about the effectiveness of MP SB/SL oral health programs.
- Adopt nationally recognized quality measures for MP SB/SL oral health programs that align with ever-changing broader health care systems.

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Appendix

Operationalized definitions:

**Dental home:** the location in which an on-going relationship between a dentist and patient exists. This relationship supports the delivery of all aspects of health care in a “safe, culturally-sensitive, individualized, comprehensive, continuous, accessible, coordinated, compassionate, and patient- and family-centered way regardless of race, ethnicity, religion, sexual or gender identity, medical status, family structure, or financial circumstances.”\(^38\)

**Fixed setting:** a brick-and-mortar private practice, community health center dental clinic, free dental clinic, or other public health setting such as a health department or academic institution.

**Hybrid dental program:** a program that utilizes a combination of mobile, portable, and/or teledentistry models to deliver oral health services.

**Mobile dental program:** a program using self-contained motorized vehicles or a non-motorized trailer.

**Portable dental program:** a program using portable equipment.

**School-based health program:** a health program that is conducted onsite at a school. Often the program is organized through a relationship with a school, community, or health provider and administered via a sponsoring facility. Primary health services, including oral health services, are provided to students enrolled in the program in accordance with state and local law, including those related to licensure and certification of those administering the services. Additionally, there may be some state specific requirements that must also be met for a program to be identified as such.\(^39\)

**School-linked health program:** a health program that is conducted in or near a school facility. Often the program is organized through school, community, and health provider relationships and administered via a sponsoring facility. Primary health services, including oral health services, are provided to enrolled students enrolled in the program in accordance with state and local law, including those related to licensure and certification of those administering the services. Additionally, there may be some state specific requirements that must also be met for a program to be identified as school-linked.\(^39\)

**Virtual dental home:** a concept created by the Pacific Center for Special Care at the University of the Pacific, Arthur A. Dugoni School of Dentistry, which describes a “community-based oral health delivery system in which people receive preventive and simple therapeutic services in community settings. It utilizes telehealth technology to link allied dental personnel in the community with dentists in dental offices and clinics.”\(^23\)

**Teledentistry:** utilization of telehealth technology to deliver virtual oral health care, including education. Teledentistry is not a specific service, but an alternative means to provide oral health care and education via synchronous (live), asynchronous (store and forward), mobile health (mHealth) or remote-patient monitoring (RPM) methodologies.\(^40\)

- **Synchronous (live):** a real-time virtual interaction between a patient and a healthcare provider located at another site from the patient.
• **Asynchronous (store and forward):** the transmission of a patient’s health information from where the patient is present to another site where the healthcare provider is present.
• **Originating site:** the site at which a patient is located at the time health care services are provided synchronously or asynchronously.
• **Distant site:** the site where a healthcare provider is located while providing health services via a telecommunications system.
Examples of MP school-based and school-linked programs

**Gaston Family Health Services**: this is a mobile oral health program provided by Gaston Family Health Services, a federally qualified health center. A dentist travels to schools throughout Catawba, Statesville, and Davidson counties in North Carolina with a mobile dental unit equipped with a panoramic x-ray unit and NOMAD portable x-ray unit to provide preventive and diagnostic services. When the dentist identifies a need for restorative treatment, the child is referred to the nearest Gaston Family Health Services clinic for delivery of oral health care.41

**Dental Health Outreach Mobile Experience (H.O.M.E.) Coach**: The Ohio State University College of Dentistry utilizes a mobile dental clinic to provide dental care to children in the Columbus City and central Ohio schools. The van is outfitted with a dental chair that allows dental students enrolled at the university to provide pediatric oral health care, including preventive and restorative services, under the supervision of licensed Ohio State faculty. The program accepts public health insurance and does not require payment if the patient is uninsured.42

**USC Mobile Dental Clinic**: The University of Southern California (USC) Ostrow School of Dentistry mobile clinic has provided care to underserved children in Central and Southern California for over 50 years. This fleet of mobile clinics is the largest in the country and is a required rotation for all pre-doctoral DDS students at USC. Comprehensive oral health care including exams, cleanings, fillings, and sealant placement are provided to school-age children.43

**All Kids Dental School Program**: this program through the Illinois Department of Healthcare and Family Services allows licensed oral health providers including certified public health dental hygienists to provide out-of-office delivery of oral health services in school settings for children < 18 years old. Providers must adhere to the program requirements to be eligible for reimbursement.11

**The Friendship School**: this community health center school-based program utilizes portable dental equipment to create a semi-fixed clinic on-site at The Friendship School in Waterford, CT. Parents can go online to enroll their child in this program. The program bills public and private dental insurances for services rendered and charges out-of-pocket costs for uninsured children. Children can receive preventive and restorative care through this program on-site.44

**Apple Tree Dental**: this organization operates eight oral health centers in Minnesota as well as onsite care programs through partnerships with schools in the state and nearly 150 Head Start programs. Oral health team members including dentists, dental hygienists, dental assistants, and dental therapists travel to partnered sites throughout the state bringing portable equipment transported on a truck. Once on-site, the team sets up a dental clinic with the equipment and can provide services ranging from preventive care to restorative treatment (e.g., fillings and stainless-steel crowns) to extractions and even endodontic therapies (e.g., pulpotomies and root canals).45

**Wisconsin Seal-A-Smile (SAS)**: This collaborative effort between the Children’s Health Alliance of Wisconsin, Wisconsin Department of Health Services, and Delta Dental of Wisconsin aims to improve the oral health of Wisconsin’s children by providing school-based dental sealants. Dentists, dental hygienists, schools, hospitals, local health departments, community health centers, and non-profit agencies and free clinics can apply and receive funding through SAS to establish and maintain a school-based or school-linked dental sealant program.46
Planning checklist for implementing a MP SB/SL oral health program

▪ Conduct a needs assessment for the community in which you wish to establish a MP SB/SL oral health program. Identify the level of need for oral health services that can be provided via a school-based or school-linked oral health program.

▪ Determine if minimally invasive care (MIC) using silver diamine fluoride (SDF) and silver modified atraumatic restorative technique (SMART) will be used, for example if and when program budgets and/or logistics (e.g., location, weather, timing, staffing) suggest the use of less expensive equipment to affordably and effectively meet program goals.

▪ Determine if a MP SB/SL oral health program is an appropriate strategy to address identified needs.

▪ Identify your or your organization’s professional goals.

▪ Determine if development and implementation of a MP SB/SL oral health program will meet your identified professional goals.

▪ Review state regulations.
  o State dental boards and state health departments are recommended places to start.
  o Remember, rules and regulations regarding MP SB/SL oral health programs may be found in other state departments such as the state’s business administration branch as they relate to schools, or in the state education department or others, rather than the department of health.
  o Contact your legislative branch for more information.

▪ Review reimbursement policies.
  o This includes reimbursement policies of your state Medicaid program, as well as of commercial insurance companies.
  o Consider who is eligible for credentialing and reimbursement through insurance programs and if services must be delivered in a specified setting.

▪ Review what type and amount of insurance is required.
  o Malpractice coverage
  o Disability coverage
  o Worker’s compensation
  o Liability insurance
  o Non-owned automotive insurance
  o School required coverage(s).

▪ Consider feasibility of a MP SB/SL oral health program to utilize teledentistry to create a comprehensive patient record and improve triage and referral of oral health care needs.
  o Review teledentistry regulations in your state.
  o Review teledentistry reimbursement in your state.

▪ Develop a comprehensive business plan.
  o Consider collaborating with a financial consultant.
  o Consider collaborating with an experienced grantwriter.
  o Consider collaborating with an experienced fundraiser.
  o Consider collaborating with an evaluation specialist.

▪ Identify community partners, including dental homes for children who require care beyond the scope of the MP SB/SL oral health program.
- School districts, including administrators and teachers.
  - Consider partnerships with other health SB/SL programs (e.g., vision, screening)
- Community health workers
- State or local health departments
- Fixed dental clinic sites
- Ensure support of relevant stakeholders, including parents or caregivers of students receiving oral health services through these programs.
  - Provide education about the assessed needs, program plans, and other organizational information to individuals or organizations opposed to development and implementation of MP SB/SL oral health programs.
- Create policies and protocols regarding your MP SB/SL oral health program.
  - Infection control and prevention and identification of an IPC coordinator
  - Identification of appropriate HIPAA compliant information collection and sharing platform and health information technology (HIT) system(s)
  - Workflow regarding pre-site arrival, on-site care, and follow-up care
    - Consider identification of care coordinator(s)
  - Billing procedures
  - Quality improvement and quality assurance measures
- Complete a communication plan and data collection methodology that addresses these and other points:
  - What data are your program required to collect, track, and report?
  - To whom are these data made available?
  - How will the data be disseminated?
  - How can data collection support sustainability and scalability of your program?
- Identify equipment and supplies needed.
  - Identify who is responsible for maintaining the equipment and supplies.
  - Identify sources of/access to repair and replacement services, including financial support as needed.
Sample questions for MP SB/SL oral health programs

Below are questions a MP SB/SL oral health program should be prepared to answer. This list is not comprehensive; consider these questions as you complete your planning checklist and begin communication with potential community partners.

1. Who owns the program? How is the program funded?
2. Does the program have a contract or MOU/MOA with the school or school district?
3. How and where will the services be delivered? (e.g., is this a mobile dental unit with existing dental chairs staffed by a dentist? Is this a program in which a dental hygienist brings portable equipment onsite to provide preventive oral health care?)
4. What is the scope of services provided (e.g., screenings, exams, cleanings, fluoride varnish, sealants, fillings, extractions? 
5. What professional references are available for the organization and/or providers involved?
6. What verification processes (e.g., background check, fingerprinting) does the school and/or school district require for employees and/or volunteers?
7. How do you ensure appropriate licensure and delivery of services within the scope of practice of the oral health professional providing care?
8. Who is providing dental services? Are they employees of the organization? Independent contractors? Volunteers?
9. How frequently will there be an oral health professional providing services? Will the program work around school activities and schedules?
10. What liability coverage is provided for the oral health care providers? What liability does the school have in participating in these programs?
11. Who supervises the program?
12. Is there a program coordinator or liaison to the school?
13. What community and/or non-oral health professionals do you work with? What is their role in the program?
14. How are appointments scheduled?
15. How is informed consent obtained for these services?
16. What information is collected regarding oral health status? Where is this information reported?
17. If an oral health exam is completed, how are treatment plans developed and completed?
18. How are dental records maintained? How do you ensure HIPAA and FERPA compliance?
19. What is the protocol for follow-up/ongoing care?
20. What referral mechanisms are in place for children requiring care that cannot be delivered via this program?
21. What is the protocol for emergency care?
22. Is this program going to use a caries risk assessment tool? How will this information be shared?
23. What provisions for language translation are provided for children receiving oral health screenings, exams, or services and for the parents or caregivers of these children?
24. How do you comply with federal and state infection control guidelines?
25. Are there any medications dispensed? What is the process for this?
26. How are the oral health services financed? Are dental insurers billed? Is there any additional cost of services? How are the cost of services documented? What is the collection process regarding the cost of services?
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