

**Oral Health in Maine’s Head Start Programs:
Successes, Challenges, and New Directions**

Amy Courtney, OMSIII, University of New England College of Osteopathic Medicine,

Chloe Eisenhaur, DMD IV, University of New England College of Dental Medicine

ABSTRACT

Head Start (HS) / Early Head Start (EHS) programs are required to follow Program Performance Standards, which include oral health requirements defined by the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program. Head Start programs must also educate families and children about oral hygiene and the importance of preventive care. To identify barriers and successes in meeting these requirements, two sources of information were utilized: the 2018-2019 Program Information Report (PIR) data and a survey completed by Head Start health managers. The survey included current efforts to meet oral health program requirements, current areas where programs are most successful, strategies to increase the number of children meeting oral health requirements, and barriers to meeting requirements. Each territory had varying successes based on access to resources, but experienced common barriers, which included lack of providers, especially those accepting MaineCare, unreliable transportation, long wait lists, and difficulty obtaining family and staff “buy-in” regarding the importance of oral health care. Possible solutions to overcome identified barriers are proposed.

INTRODUCTION

As of 2013, the gap between privately insured and publicly insured children who obtained dental care was 15.7%. Children with public insurance have mandated comprehensive dental coverage through the CHIP Reauthorization Act of 2009, but still do not access care at the same rates as those of privately insured children. Less than half of children with Medicaid had received preventive dental care in the past 12 months as of March 2016. By age 3, children with public insurance are significantly less likely to have teeth in excellent or good condition compared to children with private insurance, and this remains true until adulthood (Shariff, 2016).

Rates of dental caries in United States children ages 2-8 have not changed from 1999 to 2014. As of 2014, preschool children in low-income families experienced dental caries at a rate of 35%, and 18% of these dental caries were untreated (Dye, 2017). Dental caries negatively impact a child's health and quality of life, and consequences of untreated caries include difficulty eating and drinking, unwillingness to smile, impaired speech, poor social relationships, missed school days, and difficulty concentrating in school (BaniHani, 2017). Dental disease and lack of adequate preventive care continues to be an area of concern despite recent improvements in insurance coverage.

Head Start was launched in 1965 with the purpose of providing comprehensive health, nutrition, and education services to children in poverty (National Head Start Association, 2020). Head Start and Early Head Start programs are required to follow Oral Health Performance Standards. These standards require sites to obtain information about whether the child is up to date on age appropriate preventive and primary oral health care (based on the dental periodicity schedules from the EPSDT), facilitate and

monitor necessary oral health preventive care, treatment and follow-up, develop a system to track referrals and services provided and monitor the implementation of a follow up plan, promote oral hygiene by ensuring all children with teeth brush daily with toothpaste containing fluoride, collaborate with parents to promote children's health and wellbeing by providing oral health education, and help families access private and public health insurance and secure a dental home for the children (US Department of Health and Human Services, 2020).

The goal of this project was to survey Head Start Health Managers from throughout Maine to identify strengths, challenges, and barriers to meeting the Head Start Oral Health Performance Standards. Outcomes data collected by each program was reviewed to determine success at meeting Head Start Oral Health Performance Standards.

METHODS

HS/ EHS health managers representing each geographic area (territory) in Maine (Androscoggin, Aroostook, Cumberland, Kennebec/Somerset, Oxford/Franklin, Penquis [Penobscot, Piscataquis, and Knox counties], Sagadahoc/Lincoln, Waldo, Washington/Hancock, and York) were surveyed (n=10). Respondents were surveyed regarding on-site dental services, methods for establishing and communicating with dental homes, challenges faced by children with developmental disabilities and in foster care, program successes and barriers, as well as child and adult oral health education. Health managers also provided their 2018-2019 PIR data. Data utilized for this report includes insurance enrollment, medical and dental home enrollment, number of children who received preventive care and exams as well as the number of children who

required care and received care. The study was granted exemption by the University of New England College of Osteopathic Medicine Institutional Review Board.

*Due to a change in database, Aroostook county was unable to access PIR data for the start of 2018. As a result, Aroostook county will have data missing from sets including “start of enrollment”

RESULTS

Efforts to Meet Oral Health Performance Standards

Finding a dental home: Two major models for securing a dental home exist, and often coexist: on-site dental clinics and referral to care with support. Seven out of ten territories offer some form of dental services on-site. Three territories have a partnership with local dentists and/or dental hygienists to do on-site clinics. Two counties have a partnership with The University of New England College of Dental Medicine to provide on-site screenings and fluoride varnish. Other territories offer exams, cleanings, sealants, and fillings on a limited basis. Due to location and dentist availability, not every program within these territories receives all or any of these on-site services. These on-site services do not meet Head Start Oral Health Program Performance Standards, which require a comprehensive exam or diagnostic tool and the establishment of a dental home, and therefore are not reflected in the PIR data.

All territories refer parents to dental homes and assist parents with making appointments by providing call lists. Additional support varies, and may include family advocates, case managers, and assistance with transportation on a limited basis.

Oral Health Education: All territories provide education to children and parents. A major component is supervised tooth brushing, which occurs daily at all sites. More in-depth education occurs less frequently, and the context varies by program and territory. This education may include nutrition, brushing and flossing technique, oral hygiene, and the importance of regular dental care. The delivery of the education is also variable, and may occur using group practice, demonstration, hands-on activities, or worksheets/coloring pages. Sites typically provide children with oral hygiene equipment including toothbrush, toothpaste, and dental floss. Parent education occurs on an informal ad-hoc basis only; there is no formal education for parents.

Successes and Barriers Associated with Oral Health Performance Standards

Initiating and maintaining dental home enrollment: All health managers reported difficulty establishing children with dental homes. Barriers included insufficient number of providers, especially those that treat children and are accepting new patients and Maine Care, long wait times for appointments, unreliable transportation, limited appointment hours, absence of dental coverage (for children with private insurance), and low oral health literacy of parents. Territories with a high percentage of children enrolled in dental homes attribute this success to strong relationships with community dental offices.

Dental homes for children with special dental care needs: These data are not included in the PIR data, and it is not tracked by all sites. Four territories, however, do find it more challenging to find dental homes for children with developmental disabilities. Barriers included provider willingness to treat this population and parental concerns

regarding prior negative experiences in dental offices and the dentist's ability to meet their child's unique needs.

Preventive care and exams: In spite of it being a federal requirement, in no territory did all children in HS or EHS receive preventive care or a comprehensive exam. However, efforts to provide on-site services led to a greater percentage of children receiving preventive care than exams in some territories. In eight territories, more EHS children were up to date with medical care than dental care. The biggest discrepancy is seen in Androscoggin County where the medical versus dental up-to-date status gap was 56%.

Insurance coverage: In general, HS/EHS programs are successful at increasing the number of children with dental and medical insurance. However, decreases in insurance coverage were noted across three EHS territories. Health managers reported that this was due to loss of eligibility for programs such as MaineCare/CHIP.

Parental "buy-in": Health managers cited parental "buy-in" regarding the importance of early oral health care as an area of concern. Survey responses indicated that this is due to cultural differences, "old guidance" (not seeing a dentist until age 3-5), and past negative dental experiences. Insufficient training for program staff was also identified as a barrier, and staff have low comfortability educating parents about oral health. A further barrier is that most resources available only in English, limiting their usefulness for nonnative speakers.

DISCUSSION

MaineCare covers 88.2% of HS children, and health managers unanimously reported difficulty finding providers for children that accept MaineCare. There are several factors that contribute to this challenge. First, Medicaid (MaineCare) only reimburses 44.6% on average of what a dental provider charges for a pediatric visit in Maine (Gupta, 2017), making accepting MaineCare financially burdensome for these providers. Second, Maine is considered the most rural state, with 40% of its population living in one of the 11 counties in Maine which are considered rural areas (Maine Center for Disease Control & Prevention). Third, Maine lacks sufficient dental providers, with Maine on average having one dentist for every 1,550 patients, and Maine's worst ranked county, Washington, having only one dentist for every 2,250 patients (County Health Rankings). Rurality, poor reimbursement, and insufficient number of providers are major challenges when finding dental homes for children, especially children with special dental needs.

When providers are found, other barriers, including transportation, lack of providers for children with developmental disabilities, lack of educational resources for parents, and wait times for appointments are at times insurmountable. These barriers cannot be overcome without significant changes in Medicaid reimbursement and changes to the workforce (more pediatric providers, rural providers, and providers who can see children with developmental disabilities), and significant changes in HS and EHS funding (additional resources for education, transportation, on-site clinics, etc.). Strategies are proposed below to mitigate some of these barriers without significant changes or significant funding.

1. **Obtain funding to provide on-site dental clinics at all sites for all children, with a process for referring children only for non-routine dental care or dental care requiring sedation.** On-site dental clinics twice per year would meet dental care requirements for every child. This would not eliminate the need for emergent care, but emergent care needs would become minimal if adequate preventive care was obtained.
2. **Adopt a Virtual Dental Home model.** Adopting a Virtual Dental Home model, whereby dental hygienists provide preventive care and utilize technology to communicate with a dentist regarding the child's care, would also meet the need for care. This model is cost-effective and conserves Maine's limited resources.
3. **Alter Head Start regulations to allow for a broader role for students in providing oral health services.** Current program regulations require a dentist complete an exam, screening, and fluoride varnish on a child for this service to qualify as a reportable outcome. However, dental students and dental hygiene students can provide screenings under the supervision of a licensed dentist at a lower cost. Moreover, opportunities for students to develop their skills at working with the pediatric population, including children with developmental disabilities and special needs, would have the long-term effect of growing the workforce in Maine with these skills. Partnerships with dental schools in Maine and New England would be mutually beneficial, and such partnerships are worth exploring.
4. **Continuing education for existing providers.** Several sites reported difficulty finding dental homes for children with developmental disabilities a dental home

due to an insufficient number of qualified providers. Opportunities for existing providers to increase their comfort level in working with these children could help grow the existing workforce in Maine.

5. **Expanding educational resources for Head Start programs with regards to oral health for both children and families.** Increasing awareness about the importance of early dental care amongst families, children, and staff is necessary to overcome existing barriers. Resources should be accessible for non-native English speakers and individuals with low health literacy.
6. **National Collaboration.** Maine is a unique state because of its geography and widespread population distribution. The barriers experienced by Maine Head Start programs are unique, but are likely shared by Head Start programs in other rural states. Nation-wide conversations about these issues could bring to light solutions that could help improve oral health for Maine's children.

CONCLUSIONS

Maine's Head Start programs are faced with extreme challenges, some of which are due to Maine's unique demographic character, which makes meeting the Oral Health Performance Standards nearly impossible to meet without significant funding and without substantial changes in public policy and to Maine's oral health workforce. Despite this, new strategies might improve outcomes within the current system.

REFERENCES

1. Shariff JA, Edelstein BL. Medicaid Meets Its Equal Access Requirement For Dental Care, But Oral Health Disparities Remain. *Health Aff.* 2016; 35: 2259-2267.
2. Dye BA, Lopez Mitnik G, Iafolla TJ, Vargas CM. Trends in dental caries in children and adolescents according to poverty status in the United States from 1999 through 2004 and from 2011 through 2014. *J. Am. Dent. Assoc.* 2017; 148: 550-565.
3. Banihani A, Deery C, Toumba J, Munyombwe T, Duggal M. The impact of dental caries and its treatment by conventional or biological approaches on the oral health-related quality of life of children and carers. *Int. J. Paediatr. Dent.* 2018;28: 266-276.
4. National Head Start Association. *Why Head Start: The Head Start Model.* (<https://www.nhsa.org/why-head-start/head-start-model>). Accessed August 1, 2020.
5. U.S. Department of Health and Human Services. *Head Start Early Childhood Learning Centers: Head Start Program Performance Standards Related to Oral Health.* (<https://eclkc.ohs.acf.hhs.gov/oral-health/article/head-start-program-performance-standards-related-oral-health>). Accessed August 1, 2020.
6. Gupta N, Yarbrough C, Vujicic M, Blatz A, Harrison B. Medicaid Fee-For-Service Reimbursement Rates for Child and Adult Dental Care Services for all States, 2016. *Health. Pol. Inst.* 2017; 1-15.
7. Maine Center for Disease Control & Prevention. *Rural Health in Maine.* (<https://www.maine.gov/dhhs/mecdc/public-health-systems/rhpc/rural-health.shtml>). Accessed January 1, 2021.
8. County Health Rankings. *Washington.* (<https://www.countyhealthrankings.org/app/maine/2020/rankings/washington/county/outcomes/overall/snapshot>). Accessed January 1, 2020.