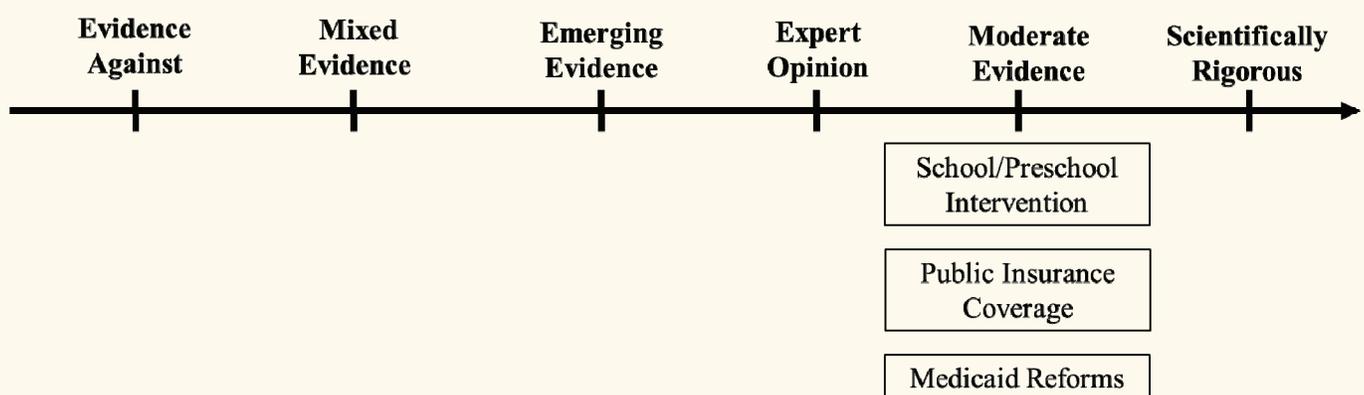


# Strengthen the Evidence Base for Maternal and Child Health Programs

## NPM 13B: Oral Health in Childhood

**Oral Health** is one of fifteen MCH National Performance Measures (NPMs) for the State Title V Block Grant program. The goal is to increase the percentage of children, ages 1 through 17, who had a preventive dental visit in the past year. Dental diseases are among the most prevalent, uncontrolled, and expensive health problems facing children and youth in the United States.<sup>1</sup> Poor oral health has been linked to school absenteeism and poor academic performance.<sup>2,3</sup> Preventive oral health care in children is critical as early detection and management of oral health can improve a child's general health, school readiness,<sup>1</sup> and reduce subsequent costs.<sup>4</sup> This brief identifies evidence-informed strategies that State Title V programs might consider implementing to address NPM 13B.

The evidence review categorized interventions along an evidence continuum from *Evidence Against* (least favorable) to *Scientifically Rigorous* (most favorable). Interventions that are characterized by *Emerging Evidence* or more favorable ratings are considered evidence-informed. *Moderate Evidence* was identified for school/preschool intervention, public insurance coverage, and Medicaid reforms.



This review was conducted as part of Strengthen the Evidence Base for Maternal and Child Health Programs, a Health Resources and Services Administration-funded initiative that aims to support states in their development and implementation of strategies to promote the health and well-being of MCH populations in the United States. The remainder of the brief summarizes the approach to the review. The full review may be found at <http://semch.org/evidence-reviews.html>.

Multiple professional organizations recommend a first examination at the time of the eruption of the first tooth and no later than 12 months of age. The recommended interval of examination is six months with variation depending on patient history.<sup>1</sup> The 2011-2012 National Survey of Children’s Health (NSCH) showed that for children 1 to 5 years, only 54% had at least one preventive dental care visit in the past year; the percentage increased to 88% for those 6 to 11 years and 85% for those 12 to 17 years. Children who were insured (79%) were more likely to receive preventive dental visits than those not insured (48%).<sup>5</sup>

**METHODS & RESULTS**

Peer-reviewed studies were identified by searching three online databases. Seventeen studies and three gray literature sources were included. Studies were categorized into five groups based on their primary intervention: “School/Preschool Intervention,” “Caregiver Education/Counseling,” “Home Visit and Provider Outreach,” “Public Insurance Coverage,” and “Medicaid Reforms.” Examples of each intervention and its evidence rating are shown below.

Target Audience	Intervention	Example(s)	Evidence Rating
School	School/Preschool Intervention	School-based dental services; Head Start participation	Moderate Evidence
Caregiver	Caregiver Education/Counseling	Informational postcards; motivational interviewing	—
Caregiver and Provider	Home Visit and Dental Practice Outreach	Home visit by dental care coordinator and recruitment of dental practices to provide care	—
State	Public Insurance Coverage	Medicaid/CHIP enrollment	Moderate Evidence
	Medicaid Reforms	Increased provider reimbursement; administrative changes; enhanced benefits; health plan incentives	Moderate Evidence

— indicates insufficient number of studies to assign evidence rating

Interventions identified from both peer-reviewed and gray literature (e.g., policy guidelines) were placed along an evidence continuum to reflect whether they were: *Evidence Against*, *Mixed Evidence*, *Emerging Evidence*, *Expert Opinion*, *Moderate Evidence*, or *Scientifically Rigorous*. Specific criteria for both study type and study results informed the designation of the level of evidence for each intervention.

Interventions with fewer than four studies were not placed on the continuum unless they included three peer-reviewed studies along with evidence from the gray literature.

### **ASSESSING PERFORMANCE FOR NPM 13B**

Data from the NSCH inform our thinking about progress in achieving NPM 13B. Revisions to the 2016 NSCH include capturing receipt of services from dentists or other health care providers rather than dentists alone. As a result, additional strategies that were beyond the scope of this evidence review may support improvements in the broader conceptualization of preventive oral health visits. These strategies include providing oral health services by non-oral health care providers, integrating oral health care into primary medical care, adopting state oral health plans, facilitating preventive oral health service delivery by dental managed care organizations, and incorporating oral health services into community-based programs such as Head Start and the Supplemental Nutrition Program for Women, Infants, and Children (WIC).

#### **KEY FINDINGS**

- School/preschool interventions appear to be effective.
- Public insurance coverage appears to be effective.
- Medicaid reforms appear to be effective.
- There is less clear evidence of the effectiveness for caregiver education/counseling and home visiting with dental practice outreach.

#### **IMPLICATIONS**

- Integrating oral health services and dental referrals into preschool and school programs and community-based services is likely to increase dental utilization.
- Maintaining public insurance coverage and comprehensive dental benefits, as well as implementing insurance reforms in the public and private sectors may increase dental utilization.
- Promoting children's oral health may be met by engaging both oral health and non-oral health care providers, integrating oral health and medical care delivery systems, and partnering with an array of community providers in the public and private sector.
- Future efforts are needed to examine the effectiveness of a broad array of strategies to promote utilization of preventive oral health services for children as well as the effectiveness of involving family members in their delivery.

Yu-Hsuan Lai, Stephanie Garcia, Donna Strobino, Cynthia Minkovitz

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**JOHNS HOPKINS**  
BLOOMBERG SCHOOL  
of PUBLIC HEALTH

**Department of Population,  
Family and Reproductive Health**  
Women's and Children's  
Health Policy Center

**615 N. Wolfe Street | Baltimore, MD 21205**  
**Phone: 410-502-5450**  
**Email: [sgarci22@jhu.edu](mailto:sgarci22@jhu.edu) | Web: <http://www.semch.org>**