

Integrating Oral Health Care into Primary Care

Five Successful, Long-Standing, Statewide Programs
Providing Care for the Maternal and Child Health Population

Program Spotlight

Into the Mouths of Babes

Overview

Into the Mouths of Babes (IMB) is a statewide program co-managed by the North Carolina Department of Health and Human Services, North Carolina Medicaid, Division of Health Benefits and the North Carolina Department of Health and Human Services, Division of Public Health, Oral Health Section (OHS) that aims to prevent and reduce early childhood caries (ECC) and increase referrals to dental homes for children at high risk for caries. The program trains medical professionals to deliver preventive oral health services to young children enrolled in Medicaid in North Carolina from the time of tooth eruption to age 42 months. IMB encourages medical professionals to incorporate oral health risk assessment and evaluation, counseling for parents and other caregivers, fluoride varnish application, and referral to dental homes.

OHS employs 20 public health dental hygienists throughout 10 regions across North Carolina to serve populations across the lifespan within communities. As part of their role, these dental hygienists provide IMB training to medical professionals interested in implementing IMB. Once medical professionals are trained, the practice can follow a train-the-trainer model in which medical professionals can train staff using the [Into the Mouths of Babes Toolkit](#). The medical practice can also request that the public health dental hygienist return to provide IMB training for new staff. Technical assistance is also available and includes billing and payment support provided by the North Carolina Medicaid, Division of Health Benefits.

Inception and Early Years

In 1995, pediatricians and child advocacy organizations in western North Carolina identified the need for oral health care as a top priority, owing to the high prevalence of ECC in children from families with low incomes. With a limited number of dentists participating in the Medicaid program, the child advocacy organizations focused efforts on promoting preventive oral health care within the medical home. After identifying fluoride varnish as an effective preventive intervention, the organizations submitted an application to the Appalachian Regional Commission, and in 1998 the Smart Smiles nine-county pilot program was funded. The child advocacy organizations then created an advisory committee consisting of subject matter experts who developed training and educational materials. Since the program was unable to provide reimbursement to medical professionals for preventive oral health services, it relied on their willingness to deliver care without financial compensation.





In 2001, the North Carolina Medicaid, Division of Health Benefits began reimbursing for initial and periodic oral evaluations using local W codes, which greatly increased the number of medical professionals participating in IMB. Also, in 2001, the division received a 5-year demonstration grant from the Centers for Medicare & Medicaid Services (CMS) and rebranded the Smart Smiles pilot as the IMB program. In 2007, the North Carolina Medicaid, Division of Health Benefits adopted D0145 (oral evaluation for a patient under age 3 and counseling with primary caregiver) and D1206 (topical application of fluoride varnish) for medical professionals to receive reimbursement as part of the IMB program.

Funding

The North Carolina Medicaid, Division of Health Benefits provides reimbursement to medical professionals for oral evaluation, counseling to parents or other caregivers, and fluoride varnish application. IMB services are reimbursed under a fee-for-service model.

IMB previously received funding from the Centers for Disease Control and Prevention, CMS, and the Health Resources and Services Administration.

Notable Program Strengths

- Medical professionals were involved in early identification of ECC as a high priority need in the community and in the development of IMB. The program has benefitted from their strong and consistent buy-in.
- The North Carolina Medicaid, Division of Health Benefits co-manages IMB and provides reimbursement for oral health care and access to Medicaid claims data for program evaluation.
- Medicaid reimbursement levels for oral evaluation for a child under age 3 and counseling with primary caregiver (D0145) and fluoride varnish application (D1206) are considered fair by medical professionals. Reimbursement helps incentivize medical professionals to participate in IMB.
- The training is accredited for 1 hour of prescribed continuing medical education credit by the American Academy of Family Physicians.
- Two training approaches—the use of regional public health dental hygienists and the train-the-trainer model—allow for fast and widespread adoption of IMB across North Carolina. Twenty regional public health dental hygienists, employed by OHS, covering 10 public health regions in North Carolina are

responsible for supporting oral health programming across the lifespan. For IMB, this includes training medical professionals and serving as a community resource to assist in the identification of dental homes. Once a medical professional receives IMB training from a regional public health dental hygienist, the medical professional can then train other medical professionals and staff using the IMB training curriculum. This train-the-trainer approach is especially useful for initial and ongoing training of medical professionals and staff members and reduces reliance on regional public health dental hygienists for training.

“One of the strengths of IMB has been the reimbursement paid to participating primary care medical professionals. I believe that the reimbursement has been a welcome surprise for physicians because they probably thought they’d be reimbursed less for additional services rendered during a well-child visit. When you compare our program to other states, that’s one reason why we’ve had success, not the only reason, but one that’s been impactful for sure.”

—IMB

Notable Program Evaluation Activities

- IMB has benefitted from the assistance of academic partners at the University of North Carolina Adams School of Dentistry and the Gillings School of Global Public Health, which led program evaluation. The evaluation team tracked IMB recipients over several years until cost savings and other impacts were demonstrated. Program evaluation in the early years



of IMB was funded by the National Institutes of Health. Having a skilled research team to conduct robust studies highlighted the efficacy of the program and made IMB a widely admired and duplicated program nationwide.

- There is a wealth of published studies about the success of IMB in increasing access to preventive oral health care, reducing the oral disease burden of children from families with low incomes, and realizing cost savings for the Medicaid program in North Carolina.
- The evidence behind IMB helps influence policymakers when they make decisions about spending cuts in times of economic austerity and has helped sustain funding for the program. IMB has also provided program information including evaluation data to other states to help them develop and implement similar programs.

Evaluation Methodology

IMB uses the following data sources and performance measures to evaluate the program.

Source: North Carolina Medicaid, Division of Health Benefits

- Number of primary care preventive oral health service visits for beneficiaries from birth to age 42 months.
- Number of beneficiaries from birth through age 3 receiving oral health services from a medical professional.
- Percentage of children ages 1 through 20 who received at least two topical fluoride applications within the reporting year (Core Set of Children's Health Care Quality Measures).

Source: Basic Screening Survey

- Percentage of North Carolina kindergarten students with dental caries experience (annually).
- Percentage of North Carolina prekindergarten students with dental caries experience (every 5 years).

Select Evaluation Findings

- By 2006, approximately 30 percent of well-child visits for children ages 6 months to 3 years included IMB services. (Source: *How a North Carolina Program Boosted Preventive Oral Health Services for Low-Income Children* [2010]).
- For children receiving four or more IMB visits before age 3, there was a 21 percent reduction in hospitalizations for dental

treatment. (Source: *Cost-effectiveness of Preventive Oral Health Care in Medical Offices for Young Medicaid Enrollees* [2012]).

- On average, children with four or more IMB visits before age 3 show a 17.7 percent reduction in dental caries, compared to children with no IMB visits. (Source: *Effects of Physician-Based Preventive Oral Health Services on Dental Caries* [2015]).

Resources for More Information About Evaluation

- *Office-Based Preventive Dental Program and Statewide Trends in Dental Caries* (2014)
- *How a North Carolina Program Boosted Preventive Oral Health Services for Low-Income Children* (2010)
- *Evaluation of Into the Mouths of Babes Program* (2007)
- *Prevention of Early Childhood Caries in North Carolina Medical Practices: Implications for Research and Practice* (2003)



From Battani K, Crall J, Fischer D, Goodman H, Holt K. 2024. *Integrating Oral Health Care into Primary Care: Five Successful, Long-Standing, Statewide Programs Providing Care for the Maternal and Child Health Population*. Washington, DC: National Maternal and Child Oral Health Resource Center. Permission is given to save and print this publication and to forward it, in its entirety, to others.