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Written Testimony
Submitted by
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Domestic Policy Subcommittee

Oversight and Government Reform Committee

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2154 Rayburn HOB

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"Necessary Reforms to Pediatric Dental Care under Medicaid"

Mr. Chairman and Members of the Subcommittee,

1. Introduction

I would like to thank you for the opportunity to testify today about reforms to pediatric oral health care in Medicaid. My name is Dr. Mark Casey and I am the dental director for the North Carolina Department of Health and Human Services, Division of Medical Assistance. I am proud to highlight one successful strategy that an extensive collaboration committed to improving oral health for children in the State of North Carolina has chosen to address concerns about access to oral health care for a targeted population of preschool Medicaid recipients in our state.

In previous hearings, the Subcommittee has heard about the increasing prevalence of dental decay in preschool low-income children. About 40 percent of all children enrolled in kindergarten in North Carolina have experienced tooth decay; and it can reach as high as 70% in some counties.[1] The oral health of these children and and their families' quality of life are greatly affected by difficult challenges in gaining access to dental care and by untreated tooth decay. Over the last decade, a number of like-minded organizations committed to finding a solution to this problem have aggressively and collaboratively pursued a strategy to deliver preventive and treatment services to Medicaid children birth to 3 years of age.

2. Development and Implementation

The architects of the strategy were concerned that a growing number of children would be so dramatically affected by the ravages of early childhood caries that they would continue to suffer from poor oral health throughout childhood and adolescence, and likely require an inordinate amount of complex treatment services to achieve acceptable oral health status. All stakeholders recognized that there were not nearly enough dental resources available to address the problem through traditional delivery methods. With this in mind, they suggested a different approach, utilizing non–dental health care professionals, in a preventive approach to the management of the chronic and widespread problem of early childhood caries in North Carolina preschool children. The medical model was chosen because preschool age children have more frequent contact with the medical care system than with the dental care system. Further, preventive oral health care services are easily integrated into the practices of primary care medical practitioners during well child visits. These visits occur at frequent intervals in the first few years of a child's life, making routine health check-up appointments an ideal time to intervene with a well-designed package of preventive oral health services. The network of Medicaid enrolled primary care physicians in North Carolina was robust and distributed throughout all counties of the state. All of the elements for sustainability were present to translate this approach into success for a preventive program in primary care medical settings.

The Medicaid program, known as "Into the Mouths of Babes" (IMB), began after a successful demonstration in a few counties in the Appalachian region of the state. Pilot

[1] NC Department of Health and Human Services (DHHS). Division of Public Health, Oral Health Section. 2004-2005 Annual K-5 Assessment of Oral Health. NC DHHS: Raleigh, NC: 2005.

studies in an expanded number of medical offices in selected sites throughout the state proved that the program would be sustainable. Based on these encouraging findings, the program was implemented statewide in 2001. From the inception of the program, the goals of the IMB have been to: (1) increase access to preventive dental care for low-income children 0 to 3 years of age; (2) reduce the incidence of early childhood caries in low-income children; and (3) reduce the burden of treatment needs on a dental care system stretched beyond its capacity to serve young children. As it has matured, IMB has increasingly emphasized effective dental referrals for IMB recipients, particularly those children who are at elevated risk for dental disease.

IMB visits in the primary care medical provider office consist of: 1) oral evaluation and detection of oral pathology; 2) risk assessment for oral disease; 3) counseling of parents/caregivers about oral hygiene and nutrition; and 4) application of fluoride varnish—the safest and most effective form of topical fluoride for the target population of children. Evidence from well-conducted studies and systematic reviews suggests that counseling and fluoride varnish applications can reduce early childhood caries by more than 30%.[2] Physicians can provide these services in up to six visits before the child is 42 months old. To become credentialed as an IMB provider, physicians and their extenders are required to participate in a Continuing Medical Education program. To date, more than 3,000 pediatricians, family physicians, nurses and other types of health care professionals have been trained. More than 400 primary medical practice sites are participating providers in the IMB.[3]

3. Funding

It is important to note that Federal funding played a very important role in the success of the IMB program. Partial funding for the initial developmental work was provided by the Appalachian Regional Commission [ARC Project No. NC-13186-99] for a project titled "Dental Health Promotion among Preschool Children in North Carolina's Appalachian Region: Smart Smiles Fluoride Varnish Project." A five-year demonstration was initially funded by the Centers for Medicare and Medicaid Services (CMS) and was later supported by funding from the Health Resources and Services Administration (HRSA) and the Centers for Disease Control and Prevention (CDC) for the project titled "Development and Evaluation of a Medical Model for Early Childhood Caries" [Grant No. 11-P-91251/4-02]. This application for statewide implementation of the IMB project was developed in response to a request for applications from several agencies in the U.S. Department of Health and Human Services (DHHS) in May 2000. The request (Catalogue of Federal Domestic Assistance Program Number 93.779) sought applications "to identify methods of innovative management of oral conditions among young children

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2 Weintraub JA, Ramos-Gomez F, Jue B, Shain S, Hoover CI, Featherstone JD, Gansky SA. Fluoride varnish efficacy in preventing early childhood caries. J Dent Res. 2006 Feb; 85(2):172-6.

Marinho VC, Higgins JP, Logan S, Sheiham A. Fluoride varnishes for preventing dental caries in children and adolescents. *Cochrane Database Syst Rev* 3:CD002279.

3 NC Department of Health and Human Services (DHHS). Division of Public Health, Oral Health Section, IMB Quarterly Report, January 2008.

enrolled in Medicaid and SCHIP that result in oral health improvements and dental care cost savings." This funding allowed Medicaid and partners in North Carolina to further develop our innovative approach to the prevention of early childhood caries in children enrolled in public insurance programs in North Carolina. In particular, the funding provided for staff to develop the curriculum for training, conduct the training and generally oversee the substantive aspects of the program and generate the science supporting the innovative program.

In our opinion, this one-time funding initiative from CMS and other Federal agencies provides an excellent model for one strategy that the Federal government could use to stimulate innovative thinking about new approaches for addressing the long-standing problems that children in this country face in gaining reasonable access to dental care. The partners in the IMB collaborative believe that renewal of this funding program, first implemented in 2000 to support innovative demonstration programs, would result in new approaches beyond the medical model developed in North Carolina that would yield oral health benefits to children enrolled in public insurance nationwide.

Federal sources of funding continue to make a difference in the sustainability of the IMB. Treatment services provided in the program are supported through the Federal Medical Assistance Percentage (FMAP) match to state appropriations. Current evaluation and research efforts are supported by HRSA and the National Institutes of Health (NIH). Initial achievements and continued success in the IMB would not be possible without the active financial support that Federal agencies have provided over the lifespan of the program.

4. Access to and Utilization of IMB Services

In State Fiscal Year 2008 (July 1, 2007–June 30, 2008), approximately 60,000[4] N.C. Medicaid children ages 0–3½ (see Figure 1) made more than 130,000[5] visits to medical offices for IMB services. Over this same period of time, about 51,000[6] of these children did not receive any services in a dental office, even as the number of children 0–3½ years old receiving preventive services from a dentist increased over the previous year's totals.[7] We believe that these observations are evidence that physician services are not a substitute for care in the dental office, but supplement preventive care rendered by dentists allowing infants and toddlers, who would otherwise go without treatment, to receive important preventive care in the medical office. We also have evidence from one of the studies done by the IMB evaluation team that physicians are much more likely to refer children with untreated early childhood caries than those without, and that those

[4] NC Department of Health and Human Services (DHHS). Division of Medical Assistance (DMA), Decision Support Report, August 27, 2008.

[5] DMA Decision Support Unit Report, August 7, 2008.

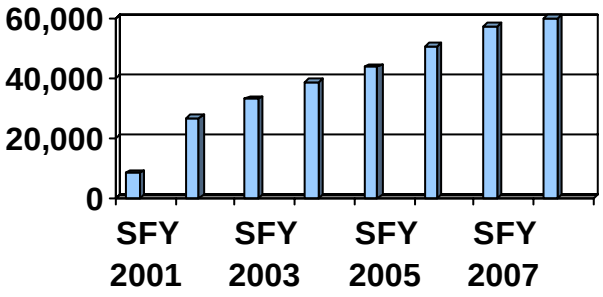
[6] DMA Decision Support Report, August 27, 2008.

[7] DMA Decision Support Report, September 16, 2008

who are referred as part of an IMB visit are three times more likely to make a visit to a dentist's office (36%) than those not referred (12%).[8]

[8] Pahel BT. Referrals for dental care in medical office-based preventive dental program. Ph.D. Thesis, University of North Carolina at Chapel Hill, 2008.

Figure 1: Number of Children Receiving IMB Services



Source: North Carolina Division of Medical Assistance Dental Program Decision Support Reports, March 12, 2007, and August 22, 2008.

By enabling Medicaid children younger than 3 years of age to receive an oral evaluation, counseling, and fluoride varnish in physicians' offices, the IMB program has resulted in a substantial increase—about 30-fold—in access to preventive oral health care services. Even in the early implementation phase of IMB, children from every county in North Carolina were receiving these services. In as many as one-third of the state's counties, no Medicaid child in this age group received any preventive care in dental offices before implementation of the program. The IMB has had a positive effect on overall access measures for Medicaid children of all ages in North Carolina during any one year. For example, according to recent DMA paid claims reports, 37%[9] of children under age 21 received at least one oral health care service from a dental provider in SFY 2008 (see Figure 2). When adding the children who received oral health care services in the IMB to the numerator used to calculate the measure, the access rate improves to 42%.[10]

Of course, increases in access measures for NC Medicaid recipients under age 21 are not solely a result of the growth of IMB. Dental program reforms—like removal of prior approval for many procedures, streamlined claims and billing processes (including more extensive use of electronic billing options by providers), and several reimbursement rate increases since SFY 2003—have all played a significant part in increasing access to care for children. Program reforms have resulted in gains in provider enrollment which, in turn, is an important factor behind the increases in access measures for dentists' services. Improving performance measures have occurred concurrently with steadily growing numbers of Medicaid-eligible children since 2001. The IMB, along with other program reforms, has played a large role in improving access to Medicaid pediatric oral health care in North Carolina.

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[9] DMA Decision Support Report, August 27, 2008.

[10] DMA Decision Support Report, August 27, 2008.

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6. Figure 2: Access to Oral Health Care for NC Medicaid Children <21 (Includes Children Receiving IMB Services)

Fiscal Year	# Medicaid Eligible Children	# Children Receiving at Least One Oral Health Care Procedure	% Receiving Oral Health Care Services
2001	750,563	188,941	25
2002	780,846	228,498	29
2003	819,202	267,809	33
2004	858,750	299,800	35
2005	891,305	332,696	37
2006	948,178	372,764	39
2007	984,530*	398,499*	40
2008	1,078,121†	450,178†	42

Unless noted, all numerator and denominator data in the chart are from CMS 416 Annual EPSDT Participation Reports for Federal FY 2001–2006 (Federal Fiscal Year is October 1–September 30), available at http://www.cms.hhs.gov/MedicaidEarlyPeriodicScrn/03_StateAgencyResponsibilities.asp.

*Source: North Carolina Division of Medical Assistance Dental Program Decision Support Report, March 12, 2007. These data are reported for SFY 2006 (July 1, 2005–June 30, 2006).

†Source: North Carolina Division of Medical Assistance Dental Program Decision Support Report, August 27, 2008. These data are reported for SFY 2007 (July 1, 2006–June 30, 2007).

7. Research Findings

Because of its innovation and potentially large impact on the oral health of young children, an extensive evaluation of IMB was undertaken. The IMB research team has gathered evidence demonstrating that those children who received preventive services in medical offices require less dental treatment than infants and toddlers who have not received IMB services. As previously mentioned, IMB has led to an increase in access to treatment services through the effect of referral of children, who already have disease at the time of the physician visit, to a dentist. An analysis of the effectiveness of physicians' referrals indicates that children, who were identified by their physician as having dental caries when provided with a referral to the dentist, saw the dentist sooner than children with no dental caries who were not referred. Taken together, these findings suggest that the IMB program both prevents early occurrence of dental disease and promotes earlier entry into the dental care system for those children in greatest need. Evaluation of Medicaid enrollees by University of North Carolina investigators as part of another project suggests that early preventive visits will lead to savings in Medicaid expenditures.[11]

To assess the potential of IMB in ultimately reducing dental caries among young children, the research team conducted additional analyses comparing dental outcomes for

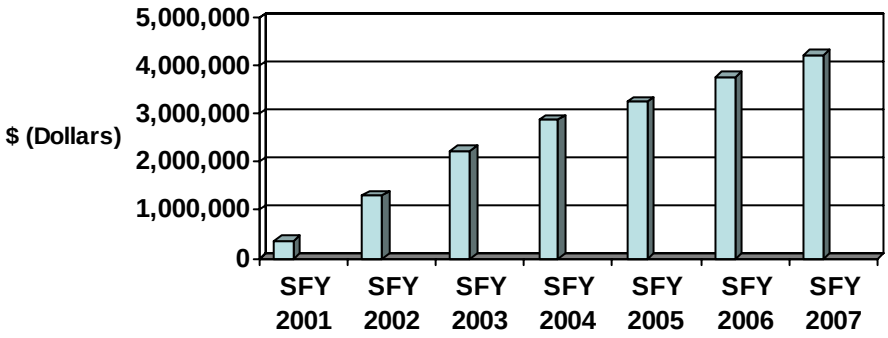
[11] Savage MF, Lee JY, Kotch JB, Vann WF Jr. Early preventive dental visits: effects on subsequent utilization and costs. Pediatrics. 2004 Oct;114(4):e418-23.

children who received at least four IMB visits and were eligible for Medicaid at 6 months of age to those of children who never received IMB services. These analyses showed a statistically significant reduction in restorative treatments for anterior teeth that increased with age. By 4 years of age, the estimated cumulative reduction in the number of restorative treatments was 39% for anterior teeth. A 12% reduction in restorative treatments found for posterior teeth was not statistically significant. It should be noted that primary anterior teeth are more likely to gain the full benefit of fluoride varnish treatments due to their eruption at an earlier age, possibly explaining the more effective caries reduction for primary incisors and canines.

8. Budget Impact

Because the costs of increasing access to preventive dental care are not currently offset by reductions in restorative treatment costs, the IMB program was not cost-saving to Medicaid during the implementation phase. However, access to care and oral health were both improved by the program. The cost-effectiveness analysis of the program has been deferred until the sample size of children receiving greater exposure to IMB services (i.e., four or more visits) can be increased. The research team plans to use estimates of cost benefits in terms of reduced need for dental treatment for children up to 7 years of age. The overall increase in access to care, and other beneficial effects of the IMB, have been achieved with a small investment in terms of Medicaid expenditures compared to the overall oral health budget. For example, expenditures for the IMB program in SFY 2007 totaled approximately $4.2 million[12] out of total expenditures of roughly $160 million[13] dedicated to the funding of children's oral health care.

Figure 3: IMB Services Expenditures



Source: North Carolina Division of Medical Assistance Dental Program Decision Support Reports, December 13, 2006, and December 18, 2007.

9. Growth, Sustainability, and Future Direction

The IMB partnership has moved beyond the original blueprint for the program to consider methods to improve the quality of program treatment services and extend the

[12] DMA Decision Support Report, August 22, 2008.

[13] DMA Decision Support Report, January 10, 2008.

preventive model. Current expansion strategies focus on: 1) refining caries-risk assessment tools used by both dentists and physicians and training them in their use; 2) training general dentists to provide care for infants and toddlers; 3) improving communication between primary care medical providers and dentists to facilitate referral when necessary due to elevated risk for dental disease; 4) coordinating patient care to ensure parent and/or caregiver compliance with treatment regimens; and 5) formulating oral health education initiatives targeted at parents and/or caregivers. The IMB team believes that the future looks bright for the program as we develop new ways to extend its success. IMB advocates are also encouraged by reports of the adoption of a similar model to provide preventive services for Medicaid children in many states throughout the country. This good news is an affirmation of our belief that the medical model works. We are proud to be at the forefront of this movement and stand ready to assist other states as they plan, develop, and implement similar programs.

On behalf of the many partners in the IMB collaborative, I thank you for allowing me to bring well-deserved national attention to this important North Carolina dental public health initiative.

The IMB project was carried out through a collaborative partnership of the North Carolina Academy of Family Physicians, Inc., the North Carolina Pediatric Society, the Division of Public Health–Oral Health Section, the Division of Medical Assistance, the North Carolina Dental Society, North Carolina Early Head Start and Head Start, and the University of North Carolina–Chapel Hill Schools of Dentistry and Public Health.