

## EXECUTIVE SUMMARY

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**I**n a report by the Surgeon General released in 2000, dental caries were revealed to be the most prevalent chronic childhood disease (U.S. Department of Health and Human Services 2000). The disease was also shown to disproportionately affect children living in poverty. In addition to the high prevalence of caries, low-income children faced barriers to accessing dental care. As a result, oral health problems often go untreated, further complicating the disease. Head Start program data reflect the magnitude of the problem. In the 2004–2005 program year, 85 percent of all preschool-age Head Start children received a dental exam. Of these, 26 percent required follow-up treatment and about 80 percent of those needing care were able to access oral health treatment (Hamm 2006).

To respond to these challenges, the Office of Head Start invested \$2 million in grants to 52 Head Start, Early Head Start, and Migrant/Seasonal Head Start programs to design and implement oral health models that meet the needs of the communities and populations they serve. The grants provide supplemental funding for up to four years.

The Office of Head Start contracted with Mathematica Policy Research, Inc. (MPR) and its partner Altarum (formerly Health Systems Research) to conduct a two-year evaluation of the Oral Health Initiative (OHI). The study is designed to describe the oral health promotion strategies developed by the OHI grantees and to evaluate implementation; the evaluation is not assessing the OHI's impact on children's oral health outcomes. Data sources for the evaluation include telephone interviews with all 52 grantees, site visits to a subset of grantees, and a program record-keeping system maintained by the grantees.

Seven primary research questions guide the evaluation:

1. What are the community contexts for the OHI?
2. What are the characteristics of the families and children who receive services through the OHI?

3. What program models are grantees developing to improve the oral health care delivery systems for Head Start children and pregnant women?
4. What services are Head Start families receiving through the OHI?
5. What types of community partnerships are grantees forming to increase Head Start families' access to oral health care services?
6. Which service delivery practices show promise for promoting oral health prevention practices among Head Start families?
7. Can the models and service delivery practices developed by grantees be sustained in the community after grant funding ends?

This interim report describes the early implementation experiences of the OHI grantees. It is based primarily on telephone interviews with grantees conducted in 2007 and on information collected in the program record-keeping system by grantees on the characteristics of children, their families, and pregnant women enrolled in the OHI and the oral health services they received. To ensure a systematic and objective analysis of OHI implementation and to facilitate the selection of a subset of grantees for in-depth site visits in Year Two of the evaluation, the research team used the RE-AIM (Reach, Effectiveness, Adoption, Implementation, and Maintenance) analytic model as an organizing framework for the evaluation (Glasgow et al. 1999; Dzewaltowok et al. 2006). By applying the RE-AIM framework to this evaluation, the research team was able to evaluate each OHI grantee's early performance by employing a set of consistent measures on each of the five RE-AIM dimensions.

During their first year of implementing the OHI, participating Head Start grantees developed and implemented models of service delivery aimed at reducing the disparity of care among low-income children and improving the oral health outcomes of the children they serve. Although each grantee has its own program design, target population, service delivery strategies, and community partnerships, common themes have emerged in the areas of program design and early implementation of the OHI services.

#### KEY DESIGN THEMES

**Most Grantees Are Implementing the OHI in Their Entire Service Area.** Grantees tended to design the OHI for all children and pregnant women enrolled in their programs. Some grantees, however, chose to target services to a specific subgroup of the population, such as Early Head Start families, communities with high needs and limited available services, or uninsured families with limited means for paying for care.

**Grantees Partnered with a Combination of Direct Service Providers, Local Oral Health Coalitions, and Advocacy Groups.** Three-quarters of grantees partnered with at least one general dentist and one pediatric dentist. Dentists were frequently recruited to provide on-site services, such as dental exams, and to accept referrals for Head Start families. Community partners provided many of the preventive and treatment services children and

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pregnant women received. Through partnerships with local oral health coalitions and advocacy groups, grantees worked to draw attention to the oral health needs of Head Start families and to foster community support for the OHI.

**Grantees Using OHI Funds for New Staff Positions Often Hired Individuals with Clinical Dental Experience.** Two-thirds of grantees created new staff positions with OHI funds. Of these, nearly half hired individuals with clinical dental experience, most commonly dental hygienists. The new staff positions increased staff capacity to focus on oral health, and dental hygienists frequently provided on-site preventive services for Head Start children, such as dental screenings and fluoride varnish applications.

**The OHI Served Diverse Children and Families.** The children served included a mix of infants, toddlers, and preschool-age children. Many grantees also targeted pregnant women enrolled in Early Head Start. About a third of the children and pregnant women enrolled were Hispanic or Latino, and about a quarter of the primary caregivers and pregnant women spoke a language other than English at home.

#### KEY SERVICE DELIVERY THEMES

**Educating Parents, Children, Pregnant Women, and Staff About Oral Health Was a Main Component of the OHI.** Grantees developed new materials and adopted existing curricula and materials to support educational messages about oral health. Topics included in educational messages were the importance of oral health to overall health, skills training on dental hygiene, and nutrition that supports oral health. Education for children also included information about what to expect during dental procedures.

**Grantees Expanded the Types of Preventive Services Offered to Head Start Children.** Grantees frequently expanded the types of services offered to Head Start children, the service delivery formats for providing these services, and the frequency with which the services were delivered. For example, some grantees expanded already existing service delivery models to all enrolled children. Other grantees began offering on-site services in addition to services available through community providers. Finally, grantees increased the frequency with which they provided services in order to reach more children.

**Most Grantees Referred Children and Pregnant Women to Community Providers for Follow-Up Treatments.** Although grantees were able to offer many preventive services on site or through mobile dental clinics, families were referred to community providers for more extensive treatment services. Grantees frequently referred families to community partners for these services.

**Partnerships with Direct Service Providers Were Important Factors in Service Delivery Approaches.** The service delivery models implemented by grantees were often connected to the types of partnerships they formed. For example, some grantees partnered with one or two providers who were willing to serve all Head Start families. Grantees commonly worked with these providers to offer clinic days for Head Start families and developed systems with these partners for tracking services. Other grantees partnered with a

network of providers. These networks sometimes included partners who met specific needs, such as offering services in various locations or providing bilingual staff.

**To Reduce Barriers to Care, Grantees Provided a Range of Support Services.** Grantees used existing infrastructure, such as transportation services, translators, and systems for tracking services, to support families in need of care. In addition, grantees relied on both OHI staff and other grantee staff, such as family service workers, to help families make appointments, remind them of the appointments, and accompany them to appointments.

**Grantees Distributed Oral Hygiene Supplies to Reinforce Educational Messages.** Grantees gave families the tools they needed to reinforce proper dental hygiene at home. Nearly all grantees distributed toothbrushes, toothpaste, dental floss, and other supplies to children and their families.

#### EARLY IMPLEMENTATION SUCCESSES AND CHALLENGES

During telephone interviews, staff members reported that they had made significant progress on many of their goals. At some sites, activities have proceeded as planned, while other grantees had to make adjustments to their initial plans or experienced delays launching some activities. Staff described four main types of early implementation successes: (1) improved access to dental services for children and pregnant women, (2) expanded education and oral health awareness among families, (3) partnership building, and (4) staff engagement.

Grantees shared a number of challenges that affected their ability to implement OHI activities as planned. Most of these challenges concerned difficulties obtaining dental services for the OHI enrollees; other challenges included difficulty engaging Head Start parents and staff. The most commonly cited challenges described by grantees included (1) finding dentists willing to serve Head Start families, (2) paying for needed dental services that were often more expensive than many grantees had anticipated, (3) overcoming limited access to transportation and other barriers to care, (4) engaging parents in both educational opportunities and encouraging them to follow up with needed treatments for children, and (5) finding appropriately skilled individuals to fill the OHI positions and addressing staff turnover in key positions.

#### RE-AIM ANALYSIS RESULTS

The RE-AIM framework facilitates a systematic analysis of each grantee's OHI by employing a set of consistent measures to assess grantee performance on each of the five RE-AIM dimensions (reach, adoption, effectiveness, implementation, and maintenance). These five dimensions have been shown to be compatible with community-based and public health interventions (Glasgow et al. 1999). For the OHI evaluation, the RE-AIM framework facilitated an examination of grantees' OHIs despite the diversity of community contexts, individually designed initiatives, and varying target populations. Within each dimension, the research team developed a number of measures. There was considerable variation on

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grantee performance across the measures. While the range of values for each measure was typically 0 to 100, the average score per measure ranged from 11 to 100. The RE-AIM analysis resulted in a final ranking of all grantees from 1 to 51 based on a RE-AIM composite score. In Year Two of the evaluation, the research team will conduct site visits to a combination of high- and low-ranking grantees to identify implementation approaches and strategies that set these grantees apart from the other grantees.

#### NEXT STEPS

The next steps of the evaluation will include using the results of the RE-AIM analysis to select a subset of 16 grantees for in-depth site visits that will be conducted in Year Two of the evaluation. The selection will include a mix of both high- and low-performing grantees. The main focus of the in-depth site visits will be to identify promising practices in each RE-AIM dimension and to collect detailed information about the practices for future replication in other Head Start settings. During the visits, the research team will learn more about why grantees selected particular oral health promotion strategies and service delivery models, how grantees implemented those strategies and services, and the successes and challenges grantee staff and community partners experienced.

In addition, all grantees will continue to report data about participants, services, and community partners through the record-keeping system. At the conclusion of the evaluation, the research team will prepare a final report that will include an analysis of record-keeping data and information gathered during the 16 site visits. The focus of the report will be to highlight the implementation lessons learned during the site visits, discuss promising practices, and present the potential for replication.

