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Oral Health Promotion, Prevention, & Treatment Strategies for Head Start Families: Early Findings from the Oral Health Initiative Evaluation

Volume I: Final Interim Report

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EXECUTIVE SUMMARY

In 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

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 facilities 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

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.

CHAPTER I

INTRODUCTION

Since the publication of *Oral Health in America: A Report of the Surgeon General* (2000) and its companion document, *A National Call to Action to Promote Oral Health* (2003), national attention to the unmet oral health needs of many of the nation's children and families has increased significantly. These reports identify dental caries as the most prevalent chronic childhood disease. They also document the disproportionate burden of this disease on low-income populations—children living in poverty suffer twice as many dental caries as their higher-income peers. The surgeon general also documented that chronic oral disease in poor children is disproportionately more likely to go untreated, because their families commonly lack insurance or access to dental care providers. While more than 51 million school hours were lost to dental illness overall in 2000, poor children lost 12 times more school days than their middle-class counterparts (U.S. DHHS 2003). Untreated dental disease can impede children's ability to eat, speak, and learn and often has a lifelong negative impact on overall health (U.S. DHHS 2003).

In addition to the high prevalence of caries, low-income children face barriers to accessing dental care. For example, a national survey of Medicaid beneficiaries found that 12 percent of the Medicaid population had unmet dental care needs in 1994.[1] Unmet dental care needs were four percentage points higher than beneficiaries' unmet medical needs (U.S. GAO 2000). Commonly cited factors contributing to these unmet needs in dental care are cost of care; lack of insurance coverage; individuals' lack of understanding about the need for oral health care for young children; and an overall inadequate supply of dentists, including dentists willing to treat Medicaid-eligible children (Mouradian et al. 2000).

[1] Under Medicaid's Early Periodic Screening, Diagnosis, and Treatment Program (EPSDT), states are required to provide dental screening and diagnostic, preventive, and treatment services; however, many children do not receive these services. Low participation rates among dentists, overall shortages of dental providers, as well as low Medicaid reimbursement rates are commonly cited factors contributing to low use of dental services by Medicaid beneficiaries. Similar results were found with other public insurance coverage, such as State Children's Health Insurance Program (SCHIP), health centers, and Indian Health Services (IHS) facilities (U.S. GAO 2000).

Promoting oral health is an important concern for the Office of Head Start, since many of the risk factors for dental caries—children from racial and ethic minorities and low-income families are disproportionately affected by caries—characterize the Head Start population.[2] The Head Start Program Performance Standards require that a health care professional determine within 90 days of enrollment whether children are up to date on a schedule of age-appropriate preventive dental care and dental followup must include necessary preventive measures and further dental treatments as recommended by the dental professional (Administration for Children and Families 2007).[3] Many Head Start grantees, however, face challenges in meeting these requirements because of barriers to accessing oral health services faced by many Head Start families.

Head Start program data reflect the magnitude of the problem. In the 2004–2005 program year, 85 percent of all preschool-aged Head Start children completed a dental exam (Hamm 2006). 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). Among children enrolled in Early Head Start, only 69 percent had access to continuous dental care in 2004. Only 30 percent had received a professional dental exam; 61 percent had received a dental exam as part of a well-baby checkup (Hamm and Ewen 2006).

Two state surveys of the oral health status of children attending Head Start suggest even bleaker statistics. In Maryland, the overall prevalence of untreated decay was 52 percent, with a higher prevalence found in rural than in urban Head Start centers. The prevalence of caries increased by age from 43 percent for 3-year-olds to 62 percent for 4-year-olds (Vargas et al. 2002). A study of Ohio's Head Start programs revealed that 38 percent of screened children age 3 to 5 had experienced caries, and of these, 73 percent had decayed teeth (Siegal et al. 2005). Moreover, 11 percent of the Head Start parents surveyed reported that they could not get needed dental care for their children (Siegal et al. 2005).

To address issues of access to care and difficulties achieving full compliance with Head Start Program Performance Standards in the area of oral health, the Office of Head Start in the Administration for Children and Families (ACF), U.S. Department of Health and Human Services (U.S. DHHS)—through an interagency agreement with the Maternal and Child Health Bureau (MCHB) in the Health Resources and Services Administration (HRSA), U.S. DHHS—has worked to strengthen the capacity of Head Start programs to meet the oral health needs of children and pregnant women served by the program. The National Head Start Oral Health Resource Center (NHSOHRC) was established to assist the Office of Head Start and the MCHB in enhancing the availability and quality of oral health services

[2] Throughout this report, references to Head Start programs and families include Head Start, Early Head Start, and Migrant/Seasonal Head Start programs and families unless otherwise noted.

[3] Most states do not have a specific schedule for dental services as part of EPSDT. The American Association of Pediatric Dentists, the American Association of Pediatrics, and the American Dental Association recommend that children have a dental exam by age 1. Thus, despite the pressing need for oral health screening, diagnosis, and treatment, programs need more specific guidance about the schedule on which these services should be provided to children from birth to age 5.

for children and families enrolled in Head Start. NHSOHRC develops and disseminates information about oral health relevant to the Head Start population. Moreover, through the creation of public-private partnerships with diverse stakeholders, a variety of service delivery methods have been implemented to address oral health promotion, education, and access challenges (Hopewell and Steffenson 2004). These partners have included local governments, businesses, private dentists, dental education institutions, local nonprofits, and foundations.

In 2006, the Office of Head Start invested $2 million in grants to 52 Head Start, Early Head Start, and Migrant/Seasonal Head Start programs to implement the Head Start Oral Heath Initiative (OHI). The OHI grantees receive supplemental funding over a four-year period to develop, implement, and disseminate culturally sensitive, innovative, and empirically based best practice oral health models that meet the needs of the communities and populations they serve. To ensure consistent, systematic collection and analysis of information on OHI's implementation, the Office of Head Start contracted with Mathematica Policy Research, Inc. (MPR) and its contractor Altarum (formerly Health Systems Research) to conduct a two-year evaluation of the OHI. The purposes of the evaluation are to (1) document grantees' implementation experiences and challenges, (2) identify promising models and service delivery strategies, (3) assess the feasibility of replication or expansion of the models in other programs, and (4) disseminate information about lessons learned to the broader Head Start community. This interim report presents results from the first phase of the evaluation. The rest of this chapter provides an overview of the OHI and the evaluation.

THE HEAD START ORAL HEALTH INITIATIVE

The OHI provides an important opportunity for grantees to draw on their community partnerships and lessons learned from previous efforts in order to develop and test the implementation of innovative service delivery models to improve the oral health of Head Start children and families.

OHI Goals

The Office of Head Start defined eight main goals for the OHI:

1. Improve oral health care delivery systems for children from birth to age 5 and for pregnant women in Head Start programs.

2. Learn about the influences of culture on the oral health practices of Head Start families.

3. Develop high-quality service delivery models that promote oral health as integral to physical health as well as oral health prevention principles supported by evidence-based curricula that include use of promising practices, oral health education, and counseling for parents and staff.

4. Develop models of oral health care that are sustainable in communities through the development of collaborative partnerships with community and state agencies, as well as with other providers—such as local dentists, dental and dental hygiene schools, local and state health and dental associations, Women, Infants and Children (WIC) clinics, pediatricians, dieticians, and other dental-related groups.

5. Solicit buy-in from key stakeholders and demonstrate strategies for future funding and related support after federal grant support ends.

6. Develop models of care that integrate oral health into existing local public or private health systems to improve access to care for young children and pregnant women, including the development of referral systems to access pediatric dental services, referral systems for pregnant women, and oral health education.

7. Identify models of care that are replicable and develop strategies to share models of care and to disseminate information and lessons learned about the OHI.

8. Respond to issues addressed in regional and state/jurisdiction oral health strategic plans developed through Head Start Oral Health Forums.[4]

OHI Grantees

The 52 OHI grantees—selected by the Office of Head Start through a grant competition—administer diverse programs with unique geographic circumstances, program sizes, and target populations. Each grantee developed a program model for the OHI to best suit its characteristics and community needs. The rest of this section describes the OHI grantees, including their geographic locations, agency auspice, program type and size, experience providing services in the community, and the barriers to accessing oral health care faced by the families they serve. Data in this section are derived from telephone interviews with 52 grantees conducted in February and March 2007.[5] Table I.1 lists the 52 OHI grantees.

[4] In September 1999, the Head Start and Partners Forum on Oral Health brought together representatives from the Office of Head Start; the Health Resources and Services Administration (HRSA); the Health Care Financing Administration (HCFA); and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), as well as Head Start staff and parents; training and technical assistance providers; pediatric dentists; representatives from Medicaid, Maternal and Child Health and Child Care; and regional Administration on Children, Youth and Families (ACYF) staff. The purpose of the forum was to convene a group of representatives from Head Start and other federal agencies, researchers, scientists, practitioners, parents, and advocates to discuss the latest research and evidence-based oral health practices and to develop strategies to implement these practices.

[5] Fifty-one telephone interviews were conducted in February and March 2007; one telephone interview was conduced in May 2007.

Table I.1. Head Start Oral Health Initiative Grantees

Program	Location
Region I	
Community Action Program Belknap-Merrimack Counties, Inc.	Concord, NH
Easter Seals Head Start	Meriden, CT
Tri-City Community Action Program, Inc.	Malden, MA
Vermont HS/EHS Tooth Tutor Program	Barre and Burlington, VT
Woonsocket Head Start	Woonsocket, RI
York County Community Action Corporation	Sanford, ME
Region II	
Agri-Business Child Development	Middletown, NY
Opportunities for Otsego	Oneonta, NY
Washington County Head Start/Early Head Start	Hudson Falls, NY
Region III	
Baltimore City Head Start Program	Baltimore, MD
Region IV	
Community Action Council of Lexington, KY – Early Head Start & Head Start	Lexington, KY
Guilford Child Development	Greensboro, NC
Sunbelt Human Advancement Resources, Inc. (SHARE)	Greenville, SC
Suwannee Valley Community Coordinated Childcare, Inc.	Lake City, FL
Region V	
Adams-Brown Counties Early Head Start & Head Start	Georgetown, OH
Arrowhead Early Head Start	Virginia, MN
Child Focus, Inc.	Cincinnati, OH
Community Action Partnership of Ramsey and Washington Counties	St. Paul, MN
Genesee County Community Action Resource Department (GCCARD)	Flint, MI
Lima Allen Council on Community Affairs	Lima, OH
Rock and Walworth CFS, Inc.	Beloit, WI
Semcac Head Start	Rushford, MN
Washtenaw County Head Start Program	Ypsilanti, MI
Wayne County Head Start	Westland, MI
Western Dairyland EOC, Inc.	Independence, WI
Region VI	
Child Care Associates	Fort Worth, TX
Child Development, Inc.	Russellville, AR
Parent/Child, Inc.	San Antonio, TX
Sulphur Springs Independent School District Head Start	Sulphur Springs, TX
University of Arkansas for Medical Sciences	Little Rock, AR
Region VII	
Central Missouri Community Action—Head Start	Columbia, MO
Childcare Association of Sedgwick County	Wichita, KS
Project Eagle Early Head Start	Kansas City, KS
Reno County Head Start	Hutchinson, KS

Program	Location
Region VIII	
Bear River Head Start	Logan, UT
Community Partnership for Child Development	Colorado Springs, CO
Kids on the Move	Orem, UT
Region IX	
Child Development Resources of Ventura County, Inc.	Oxnard, CA
Community Action Partnership of Kern	Bakersfield, CA
Institute for Human and Social Development	South San Francisco, CA
Shasta Head Start	Redding, CA
Region X	
College of Southern Idaho—South Central Head Start	Twin Falls, ID
Lower Columbia College Head Start	Longview, WA
Puget Sound Educational Service District	Renton, WA
Region XI – American Indian/Alaska Native Program Branch	
Aleutian Pribilof Islands Association Head Start	Anchorage, AK
Inter-Tribal Council of Nevada Head Start	Reno, NV
San Felipe Pueblo Head Start	San Felipe Pueblo, NM
Yoruk Tribe Head Start	Klamath, CA
Region XII – Migrant/Seasonal Program Branch	
Community Action Council of Lexington, KY – Migrant/Seasonal Head Start	Lexington, KY
CPLC-Early Childhood Development	Phoenix, AZ
East Coast Migrant Head Start Project	Raleigh, NC
Telamon Corp. Michigan Migrant Head Start	Lansing, MI

Source: Office of Head Start.

The OHI grantees are geographically diverse. The grantees represent all 12 ACF regions, including the American Indian/Alaska Native Program Branch (Region XII) and the Migrant/Seasonal Program Branch (Region XI) (Table I.2). OHI grantees are from 18 states, including Alaska. Grantees' service areas include a mix of rural and urban locations, with rural areas predominating. During telephone interviews, 42 percent of programs defined their service areas as rural only; another 32 percent described their service areas as a mix of rural and urban. The remaining 26 percent defined their service areas as primarily urban.

Grantee agencies include a mix of public or private nonprofit agencies, community action agencies, government agencies, tribal governments or consortia, and public school districts. In addition to Head Start, grantees reported providing a range of other services in their communities. For example, community action agencies offered weatherization and energy services, public housing, WIC, employment assistance, programs for the elderly, and workforce development. Private and public nonprofits often provided other early care and education services, such as child care resource and referral and state prekindergarten programs, as well as home visiting and early intervention programs such as Healthy Start and Parents As Teachers.

Most OHI grantees have a long history of providing services in their communities. More than half have been in operation for more than 30 years, with several in operation for more than 40 years. Most OHI grantees operated both Head Start and Early Head Start programs; 27 percent operated Head Start only, and 6 percent operated Early Head Start only. Another 8 percent operated Migrant/Seasonal Head Start programs (Table I.1). In addition, most OHI grantees offered both home-based and center-based services. The most common program option provided by the OHI grantees was Head Start center-based services, offered by 82 percent of programs. In terms of size, enrollment ranged from 40 to 6,929; average enrollment across grantees was 888.

During telephone interviews, staff described the availability of medical and social services in their communities, with many reporting limited access. For example, medical services may exist for children but are limited for adults with Medicaid or other forms of public insurance. Staff at some grantees described shortages of mental health care, child care services, and bilingual/bicultural service providers. Grantees reporting adequate access to medical and social services were more likely to be in urban areas and to have medical services available through county health departments and community clinics. Limited transportation was reported to be a barrier to accessing medical and social services by nearly half of the grantees.

Nearly all grantees described dental care services as more limited than other medical services for families on Medicaid and other public insurance resulting from a limited number of dentists willing to accept public insurance. Four main barriers to oral health care included (1) overall shortages of dental providers, especially pediatric dentists; (2) few dentists willing to accept Medicaid (some also capped the number of Medicaid patients they would accept); (3) few dentists willing to serve children younger than age 4; and (4) lack of transportation,

Table I.2 Characteristics Of the Oral Health Initative Grantees

Characteristics	Number of Grantees
ACF Region	
Region I	6
Region II	3
Region III	1
Region IV	4
Region V	11
Region VI	5
Region VII	4
Region VIII	3
Region IX	4
Region X	3
Region XI	4
Region XII	4
Service Area	
Primarily rural	22
Primarily urban	13
Mix of rural and urban	17
Type of Agency	
Public or private nonprofit	21
Community action agency	15
Government agency	4
Tribal governments or consortia	4
University or community college	4
Public school districts	2
Other	2
Program Type	
Head Start and Early Head Start	31
Head Start only	14
Early Head Start only	3
Migrant/Seasonal Head Start	4
Program Option	
Center-based and home-based	28
Center-based only	23
Home-based only	1
Program Size	
1 to 200 children	13
201 to 600 children	20
601 to 1,000 children	6
More than 1,000 children	13

Source: 2007 telephone interviews with 52 OHI grantees.

especially when families needed to travel long distances for dental services. In addition, many grantees reported that undocumented families typically lack any insurance coverage and fear accessing public services due to their immigration status. In addition, these families often had poor oral health practices. Limited access to dental care for adults, as well as cultural norms and practices that often threaten oral health—such as beliefs that primary teeth are less important than permanent teeth to oral health and the practice of putting infants to sleep with bottles—restricted parents' knowledge of preventive oral health practices and increased the risk of dental caries for their Head Start children.

The Head Start Oral Health Initiative Evaluation

The Office of Head Start is committed to collecting and disseminating information about sustainable models and promising practices for improving the oral health care delivery system and for promoting oral health care prevention so that all Head Start programs can benefit from the experiences and lessons learned by the 52 OHI grantees. The evaluation focuses on assessing implementation; however it does not assess the OHI's impact on children's oral health outcomes. Based on expected outcomes for the OHI identified by the Office of Head Start, MPR and Altarum designed an evaluation to address the following research questions:

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 principles among Head Start families?

7. Can the models and service delivery practices developed by grantees be sustained in the community after grant funding ends?

Data Sources

To address these research questions, the research team is collecting and analyzing information from three main sources: (1) telephone interviews with program directors and/or other staff from all 52 OHI grantees, (2) a web-based record-keeping system designed for use by all grantees, and (3) site visits to a subset of grantees. This report includes information from the first two sources.

Table I.3. Type and Number of Telephone Interview Respondents

Respondents	Number
Health coordinator/specialist/manager	45
Program director	25
OHI coordinator/specialist	21
Other coordinator/specialist/manager	14
Contracted OHI staff	7
Evaluation or data management staff	4
Total Respondents	**114**

Source: 2007 telephone interviews with 52 OHI grantees.

Note: Respondents per telephone interview ranged from one to five.

Telephone Interviews. Much of the data needed for the evaluation was collected during telephone interviews with the OHI grantees. Although the number and type of staff participating in the interviews varied by grantee, three main types of staff were interviewed: (1) Head Start directors, (2) OHI coordinators, and (3) health coordinators. On average, two respondents participated in each interview. Table I.3 displays the number of each type of respondent interviewed across the 52 grantees. Interview protocols are included in Appendix A.

Program Record-Keeping System. MPR designed a web-based record-keeping system to collect consistent information about children, caregivers, and pregnant women enrolled in the OHI and services provided across the 52 grantees. Grantees were trained on the record-keeping system in January and February 2007. The OHI grantee staff entered data on four areas into the system: (1) characteristics of children and their primary caregivers and of pregnant women enrolled in the grantee programs; (2) the types of treatment and preventive oral health services children and pregnant women received through the OHI; (3) community partner characteristics; and (4) the types of education offered to children, parents, and staff, as well as the types of supplies distributed to Head Start families. To reduce the burden of data entry, grantees serving more than 200 participants entered data on only 200 participants. MPR worked with grantees to select a purposive sample of centers or classrooms (usually one portion of their total Head Start service area) to include in the record-keeping system. Grantees were given significant leeway in this selection but were asked to adhere to three criteria: (1) if the grantee serves children in Early Head Start, some of these children must be included; (2) if the grantee serves pregnant women, some of these women must be included; and (3) if more than a third of the grantee's caseload includes families that speak a language other than English at home, some of these children must be included. MPR also recommended that grantees select centers or classrooms in one geographic area for convenience. Grantees began entering data in February 2007, after Office of Management and Budget (OMB) clearance was obtained. This report includes

preliminary information from the record-keeping system covering the period February 1 through May 31, 2007. Data fields for the record-keeping system are included in Appendix B.

Site Visits. In fall 2007, the research team will conduct site visits to a subset of 16 OHI grantees. Site visits will include individual interviews with key grantee staff, individual or small group interviews with community partners and oral health service providers, a focus group with parents, and possibly one or more observations of educational or other grantee activities. In the following section, is a description of the process for selecting a subset of grantees for in-depth site visits.

Analytic Methods

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). The RE-AIM model evaluates multiple dimensions of a program that contribute to overall public health impact and assesses the replicability of public health promotion interventions to encourage their dissemination. The framework facilitates analysis of public health promotion strategies at both the individual and institutional levels as defined by the following categories:

- REACH: the intervention's reach into the target population
- EFFECTIVENESS: the intervention's effectiveness in modifying health risk
- ADOPTION: the extent to which the intervention is adopted in the target setting
- IMPLEMENTATION: the extent to which services are delivered with fidelity and at the desired level of intensity
- MAINTENANCE: the extent to which the intervention and its impacts on participants are maintained over time

Detailed information about the RE-AIM framework and how the research team used it on the Oral Health Initiative Evaluation is included in Chapter IV and Appendix C.

For this interim report, MPR and Altarum analyzed data collected during telephone interviews and a preliminary extract of data entered into the program record-keeping system

during the initial four months of system use.[6] Because of the large number of grantees in the evaluation, the research team used a qualitative analysis software package, Atlas.ti (Scientific Software Development 1997), to facilitate organizing and synthesizing the large amount of data collected during the telephone interviews. This software enabled research team members to use a structured coding scheme for organizing and categorizing data that is linked to the primary research questions (Table I.4). Once the interview reports were coded, the research team used Atlas.ti to conduct searches and retrieve data on our research questions and subtopics. The team analyzed these data both within and across sites to identify common themes that emerged across sites, as well as patterns of service delivery, staffing, and other program dimensions. To provide a snapshot of the characteristics of the children and pregnant women enrolled in the OHI, the services they received, and the characteristics of community partners, the research team used record-keeping system data to compute descriptive statistics—such as frequencies, means, percentages, and ranges—across the sites.

ROADMAP TO THE REPORT

The remainder of the report presents the interim findings from the evaluation. Chapter II examines grantees' program models, including descriptions of the design process, goals and key components, staffing structures, and funding levels and uses. In addition, it describes the characteristics of grantees' community partners for the OHI. Chapter III describes the services grantees provide. Chapter IV presents an analysis of grantees' OHI implementation according to the RE-AIM framework. Chapter V discusses early implementation lessons that emerged from the first year of the evaluation. The telephone interview protocol is included in Appendix A and data fields for the program record-keeping system are in Appendix B. Appendix C contains additional tables that show the results of the RE-AIM analysis. Volume II of this report provides profiles of the 52 OHI grantees. The research team used information obtained during telephone interviews with the grantees to develop the profiles.[7]

[6] One grantee was not in operation during the four months of record-keeping system data collection for the interim report. As a result, analysis using record-keeping system data includes data on 51, rather than 52, grantees.

[7] Because profiles were designed to be brief overviews of each grantee, the profiles include information about grantees that is relevant to the OHI. Information provided across grantees is not consistent.

Table I.4. Codes Used to Analyze Qualitative Data Collected During Telephone Interviews, by Research Question

Research Questions
Community and Grantee Characteristics
What is the community context for the Oral Health Initiative?
Agency background
Head Start program characteristics
Geographic service area
Availability of other services in the community
Family Characteristics
What are the characteristics of the families and children who receive services through the Oral Health Initiative?
Family characteristics
Barriers to accessing oral health care
Cultural norms and practices around oral health
Program Models
Which program models are grantees developing to improve the oral health care delivery systems for Head Start children and pregnant women?
Rational for applying for grant
Design process
Goals and objectives
Changes to goals since implementation
Key components
Target population
Annual budget
Implementation
Which services are Head Start families receiving through the Oral Health Initiative?
Staff structure
Satisfaction with staff structure
Staff training and technical assistance
Risk assessments for children and families
Treatment and preventive services for children and families
Referral system for families
Support services for families
Dental home definition and approaches
Oral health education for children and families
Oral health curricula
Materials and supplies for children and families
Outreach to broader community

Research Questions
Community Partnerships
Which types of community partnerships are grantees forming to increase Head Start families' access to oral health care services? Types of community partners Identifying and recruiting partners Roles of partners Partnership lessons Promising Practices
Which service delivery practices show promise for promoting oral health prevention principles? Early implementation lessons Early implementation challenges Early implementation successes
Sustainability
Can the models and service delivery practices developed by grantees be sustained in the community after grant funding ends? Sustainability of funding Other sources of funding

CHAPTER II

ORAL HEALTH INITIATIVE PLANNING AND DESIGN

The Office of Head Start funded the Oral Health Initiative (OHI) to address barriers to accessing dental care and provide oral health preventive and treatment services to Head Start children and pregnant women through innovative designs and implementation strategies. Grantees were given broad latitude in developing their plans for implementing the OHI. The Office of Head Start directed grantees to develop models for OHI implementation tailored to the unique characteristics of the children and families they served, as well as the needs and resources of their local communities. Grantees would thereby serve as laboratories for developing promising models that could be disseminated and replicated more broadly across the Head Start system.

This chapter presents important background information about the models developed by the OHI grantees to set the stage for examining service delivery and implementation lessons in subsequent chapters. The chapter begins with a discussion of Head Start grantees' motivations for applying for the OHI grant. Next, it examines the design process, including the key staff and partners involved, resources used, and decision-making processes. It then discusses grantees' goals and objectives for the OHI, as well as the target populations, staffing, funding, and community partnerships developed for the initiative. Information for this chapter is drawn primarily from telephone interviews with grantees.

RATIONALE FOR APPLYING FOR THE OHI GRANTS

The most common reason grantees reported applying for an OHI grant was to address specific oral health deficiencies within their Head Start service areas and, in some cases, the broader local community (reported by 81 percent of grantees). Grantees reported using program information and oral health surveillance data obtained from a range of state and local agencies to identify particular areas of need, such as high levels of dental disease, low rates of children receiving dental exams and follow-up treatment, and limited access to care among other family members. These needs indicated an inadequate oral health infrastructure in grantees' communities, including:

- Inadequate access to dental insurance, especially among immigrant populations
- A shortage of dental providers willing to accept public insurance plans and serve young children, especially children with special health care needs
- A shortage of dental facilities with multilingual and culturally competent staff
- Difficulty scheduling dental appointments at convenient times for families
- Inadequate personal and public transportation to dental care appointments
- A lack of fluoridated community drinking water

Another common reason grantees reported applying for an OHI grant was to offer oral health education to families, especially on the importance of oral health to overall health and of obtaining regular dental care (reported by 28 percent of grantees). Some grantees (15 percent) noted that dental services were readily available in their communities, but the lack of parent knowledge about the benefits of these services and how to access them greatly hindered utilization. Oral health education was also intended to promote better oral hygiene practices at home and to combat families' fears and misconceptions about dental services.

Grantees also reported applying for the OHI grant to continue or expand preexisting oral health initiatives (reported by 28 percent of grantees). In some instances, the OHI grant was used to replace lost funding that hindered implementation of the original program design. In other cases, the OHI grant was used to expand the pre-existing initiative to serve Head Start children and families beyond the range of activities provided by the previous programs (see box). Finally, several grantees reported using OHI funds to meet specific oral health policy goals and recommendations, including:

Examples of Using OHI Funds to Expand Preexisting Oral Health Initiatives

- Expand an oral health initiative targeted to Early Head Start children to include Head Start children
- Expand mobile dental van services to include all Head Start and Early Head Start centers in the service area
- Expand a pilot project using the "Into the Mouths of Babes" model to include all Head Start and Early Head Start centers
- Expand the "Tooth Tutor" program for elementary school students to Head Start
- Complete implementation of an oral health project developed under an innovations and improvement project whose funding had ended

- State Oral Health Initiative goals in Kansas
- Healthy People 2010 oral health goals in Texas
- The five major areas of need identified in the County Dental Coalition's children's oral health study conducted in 2000 in California

DESIGN PROCESS

As a first step for writing their OHI grant applications, Head Start grantees usually worked on identifying gaps in their communities' oral health service delivery systems and the barriers families faced when trying to access oral health services. Then, they worked with community partners to develop strategies for addressing these issues and complementing oral health initiatives already underway.

The rest of this section describes the key players involved in the design process, the resources used, and approaches to designing the OHI locally.

Key Players Involved in the Design Process

The primary staff members involved in developing the OHI grant applications were program managers, such as Head Start and Early Head Start directors and assistant directors, program development directors, health services managers, center directors, and health specialists. Other health, mental health, nutrition, family support, and grant-writing staff members were often asked to participate in program design processes as well. One grantee also reported collecting feedback from parents in focus groups to learn what they most wanted from the OHI.

Most grantees (81 percent) also sought input from community partners and stakeholders, most often through Head Start Health Services Advisory Committees and the Policy Council. These groups allowed staff to gain valuable insights into the needs of Head Start families, the availability of dental care throughout the service area, and best practices that could be incorporated into the OHI models. Moreover, these groups represented a diverse range of interests, such as community dental, medical, and social service providers; policymakers; academic institutions; area businesses owners; and parents. Some of these committee members also contributed to the OHI design process by serving as consultants to grantees. Specific examples of external contributors to the OHI design process included the following:

- Regional Head Start oral health consultants
- State departments of health
- State offices on oral health
- State oral health coordinators
- State and local oral health coalitions
- State Medicaid directors
- Directors of oral health programs in public schools

- Local Women, Infants and Children (WIC) offices

- Local dental and medical providers (including dentists, dental hygienists, school nurses, and pediatric and obstetrical providers)

Resources Used in Design Process

All grantees used Head Start program data to identify needs and design their OHI models. Most often, staff reported using data collected for its own annual Program Information Report (PIR) and for community needs assessments. PIR data included percentages of children receiving dental exams and follow-up treatment, which are important indicators of families' access to dental care services. Community needs assessments, conducted at least every three years by Head Start grantees, provided information on a range of indicators, including the overall availability of dental providers, providers willing to partner with Head Start on oral health activities, and the challenges families face in accessing community dental services.

Grantees also reported using information and resources from a range of other community, state, and federal agencies, as well as materials provided by professional associations. This information included oral health surveillance data, recommended practices, fact sheets, curricula, and other educational materials (Table II.1). Several grantees also reported using information from studies conducted by local university researchers, such as focus groups with parents and staff indicating the need for more up-to-date oral health information.

Main Approaches to Designing the OHI Models

Grantees took one of two main approaches to developing their OHI models: (1) they decided to continue or expand a preexisting oral health program or (2) they designed a new approach to fill service gaps. As noted earlier in the chapter, some grantees decided to continue or expand an already established oral health program, such as North Carolina's "Into the Mouths of Babes" and Vermont's "Tooth Tutors" programs. The activities for these OHI grantees were largely based on the original design and expansion of preexisting programs. In contrast, other grantees had a relatively low level of previous oral health programming, often limited to occasional oral health–related classroom lessons, distribution of oral hygiene supplies, and sporadic on-site clinical preventive services (such as visits from a mobile dental unit). These programs had to develop activities and strategies to expand previous oral health offerings with more comprehensive and frequent dental services, oral health education, support services, and partnership-building activities.

Table II.1. Sources and Types of Information Used By OHI Grantees in the Design Process

Source	Type of Information
Federal Agencies	
Office of Head Start Health Resources and Services Administration Maternal and Child Health Bureau Maternal and Child Health Oral Health Resource Center U.S. Census Bureau	Oral health education materials Bright Futures materials on oral health Evidence-based oral health promotion practices Population statistics National surveys Kids Count data book
State and Local Government Agencies	
State and county health departments County boards of supervisors State Medicaid offices	Oral health surveillance data --Communities with fluoridated drinking water --Number of families that lack dental insurance --Proportion of dentists who accept Medicaid/SCHIP State oral health plans Recommendations and statistics presented at state and local oral health forums
Professional Associations	
American Dental Association American Association of Pediatric Dentistry American Association of Pediatrics	Oral health education materials White papers Fact sheets
Community-Based Organizations	
Economic opportunity councils Community health centers	Community surveys on oral health Dental services utilization data

Source: 2007 telephone interviews with 50 OHI grantees.

SCHIP = State Child Health Insurance Program.

When grantees needed to design new approaches to oral health services, they used the resources and advisors described earlier to follow one or more of the following three approaches:

- ***Integrating Specific Best Practices into Oral Health Promotion Efforts.*** For example, several grantees researched the effectiveness of fluoride varnish as a preventive measure for children, which strongly influenced their decision to offer this service.

- ***Developing Referral Networks.*** Grantees in communities with access barriers to dental providers designed their programs to create enhanced referral networks with community providers to follow recommendations for establishing dental homes for children and, in some cases, for their families as well.

- ***Applying Approaches Used in Other Areas to Health Care.*** Some grantees reported using approaches from non–oral health programs to inspire ideas for innovative approaches under the OHI. For example, one grantee adapted an ongoing peer health-mentoring program, which covered a wide range of health and early childhood topics, to create a new peer education program on oral health. Another grantee adapted a learning collaborative designed for pediatricians to include both dentists and pediatricians to better address children's oral health care.

GOALS AND OBJECTIVES

The OHI grantees developed goals and objectives in three main areas: (1) increasing access to oral health services, (2) providing oral health education, and (3) developing community partnerships and conducting community outreach. All grantees devised goals to fulfill the oral health requirements of the Head Start Program Performance Standards that require programs to: (1) make a determination within 90 days of enrollment whether children are up to date on age appropriate primary preventive health care, including dental care such as dental exams; (2) document the need for follow-up treatments; and (3) ensure that children receive needed follow-up treatments. Many grantees also created goals to increase access to clinical preventive services beyond the scope of the performance standards, such as providing topical fluoride applications and cleanings. More than a third of grantees (38 percent) developed goals emphasizing the importance of offering oral health care on an ongoing basis, such as through a dental home. Examples of objectives used to measure progress toward goals on increasing access to care are:

- Reduce the incidence of dental caries in children ages 2 to 4
- Decrease the failure rate for children receiving dental exams from year to year (for example, decrease the percentage of children failing to receive the 90-day dental exam)
- Ensure that 95 percent of children receive at least one fluoride varnish treatment
- Arrange dental homes for all enrolled children (from birth to age 5) and pregnant women
- Develop individualized dental plans (IDP) for all Head Start families and ensure families receive treatment regardless of their ability to pay

Almost all grantees (94 percent) created specific goals for providing education to children and their families that emphasized the importance of oral health to overall health and well-being, as well as how to access needed dental services. The distribution of oral hygiene supplies was often included in grantees' goals to help reinforce oral health education topics and to promote good oral hygiene practices. More than half of grantees (54 percent) also included specific goals on providing training to increase staff commitment to address

oral health and to enable staff to offer support services that help families overcome potential barriers to accessing dental care. Examples of objectives used to measure the level of progress in meeting oral health education goals include the following:

- Parents will be given up-to-the-minute information about best practices and strategies for family oral health preventive care
- Pregnant women will receive an individualized oral health education curriculum
- Children, siblings, and parents will receive oral hygiene products
- Health, family service, and home visitor staff will gain knowledge and skills specific to oral health education, outreach, and advocacy by the end of the first year
- Staff will receive ongoing training and access to resources that address oral health care for children with special needs

Finally, most grantees (71 percent) developed goals to initiate and strengthen relationships with community partners and often to conduct community outreach. For example, some grantees offered training to a range of non–dental providers on how to deliver basic clinical services, such as visual screenings and oral health risk assessments, with the goal of increasing the pool of providers available to serve low-income populations. Also, some community-building goals emphasized establishing a network of local providers to offer clinical services, family oral health education, and staff training either at grantee sites or at providers' offices. Other goals were designed to increase public awareness about oral health and to advocate for community-level oral health policies, such as more streamlined oral health service delivery systems and community water fluoridation. Examples of objectives used to measure the level of progress in meeting community partnership and community-building goals include the following:

- Provide at least one oral health training session to 75 percent of medical providers in the community
- Recruit at least one dentist with Spanish-speaking staff
- Increase partnerships with dentists, family physicians, and obstetricians by 60 percent to support oral health care prevention and early intervention efforts after grant funding ends
- Develop an Oral Health Initiative Partnership consisting of oral health professionals, Early Head Start parents, and staff

- Develop at least two new partnerships with local dentists to provide services to some families and at least one new partnership with a local obstetrician to refer enrolled pregnant women for oral health care during pregnancy

TARGET POPULATION

Almost all grantees (94 percent) targeted their entire service area for OHI services. Only a few grantees (6 percent), limited OHI services to a subset of their service area, such as centers with large enrollments or those with a history of difficulty meeting the Head Start Program Performance Standards for oral health services. One of these grantees planned to expand the OHI to its entire service area by the end of the grant period.

Similarly, most grantees (63 percent) chose to offer OHI services to all enrolled children and pregnant women. However, a third of the grantees (33 percent) targeted specific OHI services to certain populations within their total enrollment. Grantees opted to concentrate services on specific groups for two main reasons: (1) to target resources to the groups in highest need and (2) to build upon oral health activities already in place. Some grantees offered oral health education, support services, and information on dental providers within the community to both children and pregnant women, but they provided direct clinical care only to children. Others provided more intensive services to Early Head Start families, including pregnant women, while providing oral health education, referrals, and support to both Head Start and Early Head Start families. In addition, two grantees reported prioritizing OHI services specifically for uninsured families that had difficulty paying for dental services. To build on services provided through existing initiatives or programs, grantees used OHI funds to reach additional populations within their service areas, such as expanding services beyond Early Head Start children to include preschool-age Head Start children.

Fifteen percent of grantees offered access to clinical services, such as dental exams and fluoride varnishes, to other family members of enrolled children and pregnant women. Typically, these grantees would invite parents to bring siblings and other family members to centers on the day that dental services were planned; if services were provided in the home, staff would offer services to family members during home visits. One grantee chose to use OHI funds to pay dental providers to treat older siblings and parents; existing Head Start program funds were used to provide clinical services to children. The grantee also provided education to both families and Head Start children.

Most grantees, however, reported that they did not have sufficient resources to extend this level of service beyond those directly enrolled in Head Start. More often, grantees were able to provide family members with less costly services, such as oral health education, information on and support for connecting to community dental providers, and oral hygiene supplies. The main family members targeted for these activities across all grantees were the primary caregivers, who grantees believed were the best potential models of good oral health habits in the home.

Grantees often extended the reach of the OHI to their broader communities through partnership-building activities, which helped raise the awareness of oral health issues among the public. Some grantees also reported targeting community children, families, and providers as key components of their OHI programs. For example, a few grantees reported providing direct clinical services to non–Head Start children in collaborative classrooms; another worked in collaboration with a neighboring Head Start grantee to provide education and clinical services to children in both programs; and another grantee offered clinic appointments to non–Head Start children. Activities directed toward community families included oral health fairs, informal oral health education workshops, and the distribution of oral health literature and supplies. Grantees also targeted community policymakers and providers, such as dentists, dental hygienists, physicians, and WIC staff by providing training on the oral health needs of low-income families. Also, some grantees engaged in advocacy efforts with partners, such as encouraging participation in the Medicaid program and establishing local oral health coalitions and task forces.

Demographic Characteristics of OHI Children and Families

During telephone interviews, grantee staff described Head Start families receiving OHI services as living at or below the federal poverty line. Many parents had low levels of education and worked in relatively low-wage jobs, often less than full time. Families' main employment opportunities included the agricultural, service, and light manufacturing industries.

Among children enrolled in the OHI and reported in the record-keeping system, about one-quarter were infants and toddlers at enrollment, and three-quarters were preschoolers (Table II.2). One-third were Hispanic or Latino. In terms of race, nearly 40 percent were white and 19 percent were African American. The ethnic and racial make-up of primary caregivers and pregnant women was similar (Tables II.3 and II.4). Some grantees also indicated that their families tended to reflect a greater degree of cultural diversity than the general population in the service areas because of the growing immigrant and refugee resettlement populations primarily from Latin America, Asia, and Africa. About a quarter of primary caregivers and pregnant women spoke a home language other than English, and, of these, most did not speak English well. Most of these primary caregivers spoke Spanish, but grantees reported that as many as 27 different languages were spoken at their sites. Other languages families spoke included Arabic, Haitian Creole, Bengali, Hmong, Korean, Chinese, Somali, Russian, and Vietnamese. In addition, some families from Latin America spoke tribal dialects, such as that of the indigenous Mixtecan culture in southern Mexico.

According to record-keeping system data, nearly all primary caregivers were parents; 2 percent were grandparents, and 2 percent were other relatives or nonrelatives (Table II.3). Nearly two-thirds were under age 30 at enrollment, and 90 percent were women. Among pregnant women, 85 percent were under age 30 at enrollment; one-quarter were under age 20 (Table II.4).

Table II.2. Demographic Characteristics of Children Enrolled in the OHI

Demographic Characteristics	Percentage of Children
Child's Age at Enrollment in Head Start, Early Head Start, or Migrant/Seasonal Head Start	
0–11 months	7
12–23 months	6
24–35 months	11
36-47 months	40
48-60 months	35
More than 60 months	1
Child's Gender	
Female	49
Male	51
Child's Race/Ethnicity	
White, non-Hispanic	38
African American, non-Hispanic	19
American Indian or Alaska Native	4
Asian	2
Pacific Islander	0.3
Multiracial/Biracial, non-Hispanic	3
Other race	1
Hispanic/Latino	33

Source: Record-keeping system data from 51 grantees, February 1 to May 31, 2007.[a]

Note: N = 8,687. Missing range from 104 to 475 across items because data entry was incomplete.

[a]One grantee was not in operation during the four months of record-keeping system data collection for the interim report. As a result, analysis using record-keeping system data includes data on 51, rather than 52, grantees.

Table II.3. Demographic Characteristics of OHI Children's Primary Caregivers

Demographic Characteristics	Percentage of Primary Caregivers
Primary Caregiver's Age at Enrollment in Head Start, Early Head Start, or Migrant/Seasonal Head Start	
Under age 20	3
20–29 years	60
30–39 years	28
40 years or older	8
Primary Caregiver's Relationship to Child	
Parent or stepparent	96
Grandparent	2
Other relative	1
Nonrelative	1
Primary Caregiver's Gender	
Female	90
Male	10
Primary Caregiver's Race/Ethnicity	
White, non-Hispanic	43
African American, non-Hispanic	17
American Indian or Alaska Native	1
Asian	2
Pacific Islander	0.4
Multiracial/Biracial, non-Hispanic	1
Other race	3
Hispanic/Latino	33
Primary Language	
English	73
Spanish	23
Arabic	1
Other	4
If English Is Not Primary Language, How Well Primary Caregiver Speaks English	
Very well	11
Well	19
Not well	70

Source: Record-keeping system data from 51 grantees, February 1 to May 31, 2007.

Note: N = 8,687. Missing range from 1,176 to 1,937 across items because data entry was incomplete.

Table II.4. Demographic Characteristics of Pregnant Women Enrolled in the OHI

Demographic Characteristics	Percentage of Pregnant Women
Woman's Age at Enrollment in Early Head Start	
Under age 20	25
20–29 years	60
30–39 years	15
40 years or older	
Woman's Ethnicity and Race	
White, non-Hispanic	48
African American, non-Hispanic	29
American Indian or Alaska Native	0
Asian	2
Pacific Islander	0
Multiracial/Biracial, non-Hispanic	0
Other race	0
Hispanic/Latino	21
Primary Language	
English	79
Spanish	17
Other	4
If English Is Not Primary Language, How Well Woman Speaks English	
Very well	0
Well	11
Not well	89

Source: Record-keeping system data from 51 grantees, February 1 to May 31, 2007.

Note: N = 168. Missing range from 1 to 32 across items because data entry was incomplete.

Family Barriers to Oral Health Promotion

According to grantee staff, many families do not have a history of following good oral health practices with young children. For example, staff reported that some families allow their children to drink from bottles containing sugary liquids or use pacifiers dipped in honey up to age 6. Moreover, grantees reported that many families did not think it was important to take care of primary (baby) teeth because they fall out during early childhood. Grantees also noted that immigrant families had particular difficulty accessing health services because they tended to be unfamiliar with service delivery systems and many did not speak English well.

Most children and pregnant women had dental insurance coverage (Table II.5). Children, however, were more likely than pregnant women to have coverage (87 percent and 71 percent, respectively). More than three-quarters of children and pregnant women were covered by Medicaid. Other types of coverage included State Children's Health Insurance Program (SCHIP), private insurance, and the Indian Health Service (IHS). Grantees serving large immigrant populations, some of which were ineligible for public insurance, reported lower overall rates of insurance coverage.

During telephone interviews, grantees described how they tailored their OHI services to fit the particular circumstances of families and the community. More than a third of grantees (44 percent) reported tailoring their programs to the beliefs and practices common among Head Start families that increase the risk for poor oral health. To meet the needs of diverse families, grantees reported trying to make the OHI grant programs as culturally and linguistically appropriate as possible. Specific strategies for accomplishing this task included:

- Hiring staff that reflect families' racial/ethnic backgrounds
- Providing staff training on culturally appropriate oral health practices
- Translating written educational materials into languages spoken by families
- Providing access to bilingual staff/providers or interpreters
- Providing equipment that simultaneously translates speech
- Collecting direct feedback from specific cultural groups

Grantees also tried to address the relatively low education and reading levels of many enrolled families. Oral health information was often communicated in an easy-to-understand way, such as by using simple presentations, skits and interactive activities, and visuals to illustrate oral health concepts. In addition, some grantees prepared written materials at a lower reading level. The age appropriateness of materials was also an important concern for children's oral health education. Grantees tried to select resources and curricula that were adapted to children's ages and levels of development.

Table II.5. Dental Insurance Coverage

	Percentage of Children	Percentage of Pregnant Women
Participants with Dental Insurance	87	71
Participants with Dental Insurance by Type of Insurance		
Medicaid	76	77
SCHIP	11	19[a]
Private insurance	8	3
HIS	1	0
Other	4	1

Source: Record-keeping system data from 51 grantees, February 1 to May 31, 2007.

Note: N = 8,687 children and 168 pregnant women enrolled in the OHI. Missing data range from 4 to 126 across items because data entry was incomplete.

[a] Of the 19 percent of women covered by SCHIP, nearly all reside in Vermont, a state that has expanded coverage to pregnant women.

SCHIP = State Child Health Insurance Program

IHS = Indian Health Service

STAFFING

This section describes the staffing structure grantees are using for the OHI, including their rationales for making staffing decisions, and also the training provided to OHI staff.

Staffing Structure

A key decision for the OHI grantees was whether to hire new staff or to rely on existing staff to carry out grant activities. More than half of the grantees (58 percent) created new staff positions with OHI funds; 42 percent relied on existing staff. Even when grantees created new staff positions, existing staff still played critical roles in carrying out grant activities.

New Staff Positions. Grantees reported creating new staff positions because existing staff did not have the time or expertise to carry out grant activities in addition to their ongoing responsibilities. In fact, the new hires added significant staff capacity. About half were full time; part-time positions were often three to four days a week. In some cases, more than one part-time person was hired or contracted.

The addition of new staff also enhanced grantees capacity to address children's oral health needs directly within communities with inadequate numbers of dental providers. More than half of the grantees with new staff positions filled them with individuals who have clinical dental experience, in nearly all cases dental hygienists. For example, one grantee hired a dental hygienist to work on site at the Head Start program and also one day a week at a community health center run by the grantee agency. The grantee reported that this arrangement helped provide continuity between Head Start and the clinic and facilitated access to the clinic. Another grantee was able to hire a bilingual dental hygienist.

Hiring dental professionals, however, was challenging for grantees, because of the relatively low salaries offered by the Head Start programs as compared to other employers. Head Start grantees' salary scales often limited their ability to offer competitive salaries and attract dental hygienists. In response to this challenge, some grantees obtained their clinical staff through contracts rather than as new staff hires, which gave them more flexibility to offer competitive compensation. Two programs contracted with hygienists who worked within county health departments or districts; one of these contracted hygienists, who coordinated the clinical component of the OHI grant, also coordinated a county program to provide free dental services donated by community providers.

Even when new or contracted staff was hired, existing staff—especially health coordinators and specialists—played a critical role in grant coordination. One grantee that hired a new clinical oral health specialist noted the benefits of having both new and existing staff involved in the initiative. The grantee staff appreciated having a person with dental experience whose job focused solely on the grant activities, and the clinician valued the health coordinator as a resource about Head Start and nutrition issues.

While hygienists were the major type of new staff hired or contracted, several grantees hired oral health educators. For example, one grantee (which already had dental capacity

through partnership with a clinic) hired a full-time health educator to provide training to parents and staff and to help children access needed treatment services. In another case, two individuals were contracted through a partner organization to conduct training, education, and recruitment of dentists.

Existing Staff. About 42 percent of grantees reported that they decided to staff the grant entirely with existing staff. Many took this approach so that they could devote as much of the grant funds as possible to direct services (rather than salary costs) or maintain existing staff positions threatened by budget cuts. In some cases, grantees reported that existing staff or partners had the skills and dental expertise needed to carry out the grant activities, and, therefore, there was no need to hire new staff. For example, one grantee whose health and nutrition coordinator played a major role on the OHI worked closely with both a Federally Qualified Health Center (FQHC) that provided dental services to Head Start families and dental hygiene students that provided oral health education and other services.

In more than three-quarters of grantees that used existing staff to implement the OHI, the staff person overseeing health-related activities—typically the health services coordinator, health/nutrition coordinator, or health services manager—took the lead role on the OHI. In half of these grantees, these health staff members took sole responsibility for grant coordination; in the other half, this role was shared with other staff. In most cases, these lead grantee staff reported spending two days a week or less on the OHI. When lead responsibility was shared, the two staff members were more likely to report spending at least three days a week between them. Although they had primary responsibility for grant coordination, the lead staff members were by no means the only staff carrying out grant activities. Most grantees relied heavily on direct service staff, including teachers, home visitors, and family support workers, to promote oral health messages with Head Start families. Several grantees made a point of noting that grant activities were integrated into staff roles across the agency.

Satisfaction with Staffing Arrangements. Regardless of their approach to staffing, most grantees reported satisfaction with their arrangements. Those that hired new staff noted the value of having staff focused full time on the grant, and programs that hired or contracted with dental professionals highly valued this new expertise. However, challenges were also noted. The most common (reported by 29 percent of grantees) was that the OHI implementation was more time consuming than anticipated and that more staff resources were needed. Even programs that created new staff positions routinely noted the labor-intensive nature of the grant; some reported that staff hired or contracted for the OHI was working more than anticipated and budgeted. Grantees reported that more staff time was needed to implement oral health education, provide preventive and treatment services, follow up with families, and track services.

Staff Training

In this early phase of implementation, grantees recognized the importance of providing staff with training in topics and skills needed to work on the OHI. Most grantees (81 percent) reported incorporating training into their grant activities.

They drew upon a variety of community resources in training their staff (see box). Nearly one-third of grantees reported that staff were trained by dental providers, oral health coalitions, or dental societies. Frequently staff from these grantees attended training sponsored by these groups or representatives from these groups presented information at grantee-sponsored trainings. One quarter of grantees reported that staff attended conferences sponsored by Head Start, regional offices, and others. Grantees also reported accessing training resources, such as guidance on training events, representatives to present at grantee-sponsored trainings, and information about training materials from regional offices, consultants, health departments, universities, and foundations.

Training lead OHI staff was an important focus of grantees. These lead staff members and, in some cases, a few additional staff members often participated in outside conferences and trainings focused on oral health. In addition to increasing their own knowledge and skills, the training bolstered their capacity to, in turn, train other staff.

Community Resources Used to Train OHI Grantee Staff

	Percentage of Programs
Dental providers/oral health coalitions/dental societies	27
Head Start/regional/other trainings and conferences	25
Regional offices	13
Consultants	13
State health department/other state agency	11
Universities	10
Foundations	4

N = 52 grantees.

Most grantees conducted training events for a broad range of staff, especially for direct service staff, including teachers, family support workers, and home visitors. More than two-thirds of the grantees conducted some training to staff, typically as part of grant kickoff activities; this is consistent with the intent among numerous grantees to integrate oral health into all program activities. These staff trainings provided an overview of the grant; information about oral health care and promotion for young children; and instruction on how to work with families on oral health, including parents (such as during home visits) and children in the classrooms. For example, some grantees mentioned toothbrushing skills as a training topic. One-third of grantees trained staff on specific curricula, such as "Cavity Free Kids" (Huntley, B., and J. Hagen 2004a; Huntley, B., and J. Hagen 2004b). One-quarter of the grantees trained staff in conducting visual inspections of the mouth, such as "Lift the Lip" (Lee et al 1993). Other grantees noted that they did not provide this sort of training because they had dental professionals on staff who performed oral health screenings. A few grantees had trained or planned to train staff or partners, including a health educator, nursing students, and community health advocates, to apply fluoride varnish.

According to record-keeping system data, 67 percent of grantees provided training for staff during at least one month between February and May 2007 (Table II.6). These trainings included large training events for most staff, as well as one-time conferences attended by one or two key OHI staff. Fewer grantees provided training for staff on a more regular basis. These grantees chose to either train some staff each month or provide monthly trainings for all staff; these were often incorporated into existing monthly trainings.

Table II.6. Training Provided to Staff on Oral Health

	Percentage of Programs
Provided Staff Training at Least One Month	67
Number of Months Training Offered to Staff	
0	33
1	29
2	16
3	12
4	10
Number of Months At Least 5 Percent of Staff Received Training[a]	
0	39
1	33
2	18
3	8

Source: Record-keeping system data from 51 grantees, February 1 to May 31, 2007.

Note: N = 51 grantees. Missing range from 0 to 2 across items because data entry was incomplete.

[a]The research team selected 5 percent as an indicator that more than one or two staff received training.

FUNDING

As described in Chapter I, the Office of Head Start invested $2 million in grants to 52 Head Start, Early Head Start, and Migrant/Seasonal Head Start programs. The grants provide supplemental funding for up to four funding years. Applicants were able to apply for a range of funding, based upon program size and the OHI design; however, the amount was not to exceed $75,000 for the first funding year. The average amount of funding for the first year of the grant was approximately $68,710, with funding amounts ranging from $40,000 to $75,000 (see box). Grantees' approaches on how to use these funds varied by program model. In this section we describe how grantees allocated OHI funds, the types of supplemental funding and resources available to grantees, and staff views on the adequacy of funding.

Oral Health Initiative Year One Funding Amounts

	Percentage of Grantees
$75,000	62
$50,000 to $74,999	30
$40,000 to $49,999	8

N = 52 grantees.

OHI Funds

Nearly all grantees used OHI funds for personnel—including both agency staff and contracted staff—with more than half of these grantees (56 percent) dedicating the largest proportion of funding to personnel time (see box). Less than half of grantees used OHI funds to provide or pay for clinical oral health services, and only three grantees spent more than 50 percent of funding on clinical services. These three grantees served large Spanish-speaking populations, including many undocumented workers not covered by health insurance. Most grantees reported using Head Start program funds to cover the costs of clinical services not billable to insurance companies. Nearly all grantees used some funding to purchase supplies and materials. The types of supplies ranged from dental hygiene supplies to dental equipment for mobile clinics or on-site clinics. Programs also commonly used funding to purchase fluoride treatment supplies and classroom materials, such as children's books and puppets, curricula materials, and materials developed for parents and children. Fewer grantees reported using OHI funds to pay for transportation costs to transport families to dental appointments. Other uses of funding included research and data analysis; staff training; and the sponsoring of training events for families, community partners, or medical and dental providers.

Budget Allocations of OHI Grant Funds

	Percentage of Grantees
Personnel	87
Provision of or reimbursement for clinical services	44
Supplies	75
Materials	36
Transportation	10
Other	12

N = 52 grantees.

Supplemental Funds and Resources

Most grantees (63 percent) did not supplement OHI funds during the first year of implementation. Those grantees that had access to supplemental funding and resources reported three main types of additional resources: (1) donations of funds or supplies (90 percent), (2) funding through other initiatives (8 percent), and (3) in-kind support from service providers (13 percent). Donations included small grants from community organizations and private businesses, as well as donations of materials and supplies from local dental providers and dental societies. Grants were often designated to cover the cost of direct care for uninsured children and pregnant women or to purchase supplies or training materials. Some grantees had access to additional funding through other initiatives, such state or county health department initiatives or university-funded initiatives. This funding was often used to pay for a specific component of the overall oral health activities, such as a pilot program that distributes xylitol products to families or curriculum development. In a few cases, funding from other initiatives was targeted at specific groups within a grantee, such as pregnant women or infants and toddlers. The OHI funding, then, was used to expand the services to the entire population. In-kind resources included grantee staff time; dental professionals' time, including that of dental hygienists, dentists, and university professors; and other in-kind contributions, such as space for meetings and parent volunteers.

Staff Views on Adequacy of Funding

In telephone interviews with grantee staff, 83 percent described available funding as adequate to support the OHI as planned. A few of these grantees, however, thought that they would need additional funding to expand the OHI to more centers in their service areas or to expand the types of services they offered. Five percent of grantees reported needing more funds to expand staff time on the initiative. These grantees reported underestimating the amount of staff time needed to carry out the OHI; a few grantees described the OHI as labor intensive. Other grantees reported having difficulty providing the direct clinical services they planned to provide through the OHI. These grantees reported the shortages as the result of changes in the availability of services for families on public insurance in the community, underestimations of the amount of treatment that children and adults would require, or an increase of uninsured children who needed funds for services. Across grantees, however, nearly all expressed gratitude to the Office of Head Start for making funds available that increased their ability to improve oral health services for families.

COMMUNITY PARTNERSHIPS

Head Start grantees have extensive experience in developing partnerships with other service providers in their communities. Indeed, the Head Start Program Performance Standards require grantees to develop such collaborative relationships with a range of organizations and providers, including health care professionals. Thus, the OHI grantees were well positioned to build on partnerships they had already formed with local oral health care providers or to form new partnerships if needed. This section provides an overview of the types of community partners involved in the OHI, the strategies used by grantees to develop the partnerships, and the views of grantee staff on how well the partnerships are working so far.

Types of Community Partners

To address the complex oral health care needs of Head Start children and families, the OHI grantees established multiple partnerships with a wide range of organizations and individuals who contributed to the development of the initial program design, early planning and implementation, and direct service delivery. Grantees recorded 941 partners—approximately 18 per grantee, on average—in the record-keeping system (Table II.7). Three-fourths of the grantees partnered with at least one general dentist and one pediatric dentist. Other types of partners recruited by at least a quarter of the grantees were clinics, public health departments, WIC programs and clinics, dentistry and dental hygiene schools, and dental hygienists.

In addition to direct service providers, the OHI grantees partnered with other community stakeholders for oral health education and advocacy activities to improve access to oral health care in the community. During telephone interviews, grantees reported partnering with a wide range of organizations such as elementary and secondary schools, local businesses, United Way and other local foundations, homeless shelters, early childhood programs or child care centers, and English as a Second Language (ESL) providers.

Table II.7. Characteristics of OHI Community Partnerships

Type of Partner	Total Number of Partners Across Grantees	Percentage of Grantees with Each Partner Type
General dentist	401	83
Pediatric dentist	154	75
Other clinic	129	51
Dental hygienist	57	26
Public health department	44	41
WIC program or clinic	25	28
Dental hygiene school	13	27
Ob/Gyn	11	5
Dentistry school	10	26
Hospital	8	15
Pediatrician	6	10
Family practitioner	8	10
Nurse practitioner	1	3
Other service provider	28	36
Other	46	39
Total	**941**	
Partnership Formed Prior to the OHI	691 (73%)	
Formal Partnership Agreement or Written Agreement with Partner	361 (38%)	

Source: Record-keeping system data from 51 grantees, February 1 to May 31, 2007.

Note: N = 941 community partner records across 51 grantees. Missing data range from 3 to 17 across items because data entry was incomplete.

Grantees reported that nearly three-quarters (74 percent) of their OHI partners were already partnering with them prior to the OHI grant (Table II.7). For example, grantees may have already formed partnerships with dentists, WIC clinics, and public health departments; these partnerships were expanded to include new activities under the OHI. Approximately 30 percent reported continuing or expanding their work with previously existing oral health coalitions or task forces in the community. Nevertheless, during telephone interviews, nearly half of the grantees (43 percent) reported they also formed new partnerships for the OHI. Grantees reported having formal, written partnership agreements in place with nearly 40 percent of their OHI partners.

Strategies for Developing Partnerships

During telephone interviews, most grantees reported using the OHI grant funds to pay for staff time dedicated to recruiting and developing community partners. Nearly half of the grantees reported providing specialized training on the OHI to their partners, such as educating general dentists about the oral health care needs of Head Start families and children or providing information to WIC clinics about the importance of oral health in overall health. In addition to training, grantees used a variety of strategies to recruit and retain community partners for the OHI, including:

- Discussing the oral health care needs of Head Start children with potential partners during personal visits or telephone calls
- Engaging members of Head Start Health Advisory Committees and local oral health coalitions to recruit partners
- Approaching potential partners at Head Start and other oral health forums
- Providing transportation to families for visits to partner dentists to reduce no-shows
- Providing payment for dental services through enhanced reimbursements, Medicaid, SCHIP, or other insurers or funders
- Offering continuing education units (CEUs) for participating in the OHI training
- Providing free or low-cost supplies or other in-kind incentives
- Offering community-based learning experiences for students of dentistry, dental hygiene, public health, and social work

Once partners were engaged and trained, grantees defined their roles according to grant objectives and plans for implementation. During telephone interviews, more than 71 percent of grantees reported that partners provided direct oral health care services. Half of the grantees involved partners in providing oral health education to families, Head Start staff, or other service providers. A third of the grantees reported that partners were part of a referral network, either referring children in need of care or agreeing to receive referrals and provide needed services. Other partner roles reported by grantees included: serving as a dental home for Head Start children; leveraging funds from foundations, businesses, or Medicaid/SCHIP; assisting with community needs assessments or parent surveys; or providing supplies or training, transportation, billing, or translation services.

Staff Views on the Partnerships

During telephone interviews, nearly all grantees expressed overall satisfaction with how their OHI partnerships were working. About 42 percent reported that community partnerships developed for the OHI had resulted in increased access to oral health care for Head Start children. About 15 percent noted that forming partnerships for the OHI increased the number of oral health care providers they worked with or added new members to advisory committees and oral health coalitions. A few grantees noted that OHI partners improved their capacity to provide culturally competent services and linguistically appropriate materials to families.

Grantees also reported some early challenges related to their OHI community partnerships. A third of the grantees noted the dearth of potential partners, especially dentists who were willing to serve Head Start children and accept Medicaid reimbursement and dentists who were willing to provide care to older siblings and other family members. For some grantees, their rural locations added to this challenge, and, in other communities, a lack of bilingual or culturally competent oral health care providers available to treat Head Start children made finding partners difficult. In some sites, oral health care services were provided by a small group of volunteers or a busy community clinic. When Head Start families did not keep their appointments, relationships with these partners became strained. Staff turnover among grantee and partner staff also strained some partnerships. About 15 percent of the grantees reported that they had to dedicate staff time to retraining or orienting new partners on an ongoing basis because of turnover.

CHAPTER III

DELIVERY OF SERVICES

The plans that Head Start grantees developed for the Oral Health Initiative (OHI) focused largely on oral health education; preventive services; and capacity building with community, county, and state dental professionals and professional organizations. While grantees already had systems in place for providing dental exams and treatment as required by Head Start Program Performance Standards, OHI services were intended to supplement existing services, reduce the need for treatment through prevention, and increase the percentage of children and pregnant women receiving needed care. This chapter further explores the types of oral health services and activities Head Start grantees carried out in the first year of implementation. It focuses on the five main categories of activities and services grantees provided to children and families through the OHI: (1) education for parents, pregnant women, and children; (2) establishment of dental homes for children and pregnant women; (3) preventive and treatment dental care services; (4) support services; and (5) distribution of supplies. Information for this chapter comes from two main sources: (1) record-keeping system data and (2) telephone interviews conducted with grantee staff.

ORAL HEALTH EDUCATION

Grantees reported that a common barrier to dental care was the lack of education among families about the importance of oral health care for young children. According to grantee staff, many parents believed that primary teeth were unimportant because children eventually lose these teeth. In addition, many parents feared taking their children to a dentist based on their own negative or painful experiences. To overcome these barriers and promote oral health care for children, parents of children at high risk for caries should receive education that motivates them to take an active role in their children's oral health and information that reinforces proper oral hygiene and dietary habits at home (Brown et al. 2005a; Brown et al. 2005b).

To promote attitudes and beliefs conducive to supporting healthy teeth and gums, the OHI grantees reported providing education to three key groups: (1) parents and primary caregivers, (2) pregnant women, and (3) preschool children. In addition to educational

opportunities for families and children, grantees also discussed the benefits of training for staff. As described in Chapter II, grantees provided training on oral health curricula and prevention strategies to improve staff's understanding of oral health care. This increased understanding was intended to benefit the families staff members serve, as well as improve their own oral health status.

Education for Parents

Nearly all grantees (94 percent) described parent education as a main goal or key component. In response to this goal, all grantees reported providing some type of oral health education for parents. According to the record-keeping system data, 82 percent of grantees provided some form of oral health education for parents between February and May 2007 (Table III.1). More than half of the grantees reported providing parent education through workshops (at parent meetings or special events) or home visits once a month. Through workshops and home visits together, grantees provided education to nearly 2,000 parents a month on average.

Education for parents followed two main formats: (1) integration into already existing formats and (2) newly created events and workshops. Grantees that integrated educational messages about oral health into already existing formats provided education during parent meetings, home visits, and parent conferences and through materials distributed to parents, such as monthly newsletters and take-home activities from classroom curricula (see box). New formats included specially planned workshops, additional home visits from oral health professionals, educational opportunities that took place during dental appointments, and special events. For example, grantees planned events that brought together families and dental professionals, as well as trainings for parents conducted by grantee staff or a combination of grantee and community partner staff.

Location of Parent Education

	Percentage of Grantees
Parent meetings	67
Home visits	36
Workshops	17
Appointments	17
Events	15
Material Sent Home	33

N = 52 grantees.

Educational opportunities integrated into existing avenues of contact with parents were most commonly the responsibility of home visitors and family service workers. These staff frequently received training and resources, such as curricula materials, Internet resources, and theme bags or kits containing materials and supplies. They, in turn, used the training and resources to educate parents. Grantees that offered education at special events and workshops more commonly relied on oral health specialists, health specialists, or other dental professionals to deliver messages. These staff members conducted training at specially planned events and workshops or during annual parent meetings focused on oral health. In some cases, specialized staff and professionals also conducted home visits with parents to assess oral health needs and provide individualized education. Grantees that used

Table III.1. Oral Health Education Offered to Parents and Children

	Percentage of Grantees
Offered Parent Education at Least One Month	82
Number of Months Grantees Offered Parent Education Through Workshops	
0	21
1	22
2	25
3	20
4	12
Number of Months Grantees Offered Parent Education During Home Visits[a]	
0	23
1	18
2	12
3	16
4	29
Number of Months Parent Education Offered Through Written Materials Sent Home with Children	
0	29
1	12
2	10
3	23
4	25
Offered Education for Children at Least One Month	82
Number of Months Grantees Offered Education to Children in Classrooms	
0	18
1	20
2	4
3	23
4	33
Number of Months Grantees Offered Education to Children During Home Visits[a]	
0	45
1	10
2	8
3	19
4	18

Source: Record-keeping system data from 51 grantees, Februrary 1 to May 31, 2007.

Note: N = 51 grantees. Missing range from 0 to 2 across items because data entry was incomplete.

[a]Percentages based on 51 grantees; however, 22 grantees did not offer home-based services.

OHI funds to create new staff positions were more likely than grantees that used existing staff to report specialized home visits and training workshops. All grantees relied on classroom teachers, home visitors, and family service workers to reinforce oral health education with families.

Topics for Education on Oral Health

	Percentage of Grantees
Importance of oral health	69
Skills training on dental hygiene	52
Healthy nutrition	36
Developmental milestones	23
Preparation for dental visits	21
Visual inspections of children's teeth	23
Behaviors that threaten oral health	11

N = 52 grantees.

The most common educational messages delivered during trainings were on preventive care and the importance of oral health care for young children. Programs provided parents with information on prevention and early detection of dental caries, how oral health development relates to overall physical development, when and how parents should care for their children's teeth and gums, and the importance of preventive care for all family members. Half of the grantees cited skills training on dental hygiene as a key educational message for parents. Grantees reported showing parents how to brush their children's teeth, wipe infants' gums, and encourage proper tooth brushing techniques with children. Information on healthy nutrition and the role of nutrition in promoting healthy teeth was included in education delivered to parents by 36 percent of grantees. Other commonly cited educational topics included the developmental milestones in oral health development; dentist visit procedures or information about what to expect at the dentist's office; how to conduct visual inspections of children's teeth using methods such as "Lift the Lip" (Lee et al. 1993);[8] and behaviors that threaten oral health, such as the use of bottles and "sippy cups" beyond recommended ages (see box).

Education for Pregnant Women

Almost half of grantees (46 percent) provided oral health education specifically tailored to pregnant women. Information about oral health was most often delivered to pregnant women during home visits (63 percent of the grantees that offered education to pregnant women). Another third of these grantees (32 percent) conducted workshops or training classes on oral health, and about half of these were delivered in combination with education during home visits. These events were sometimes one-time trainings, while other grantees delivered a series of classes. One grantee reported conducting a training at the start of the Early Head Start program year and then a follow-up training about five months later, which is typically after women have had their babies. This format allowed the oral health coordinator to focus the first training on the importance of practicing preventive care,

[8] "Lift the Lip" is a tool kit consisting of a descriptive video and flip chart developed by the University of Washington School of Dentistry to instruct families and program staff on how to conduct a brief oral health screening of infants' and toddlers' teeth (Lee et al. 1993).

including dental visits, during pregnancy and the follow-up training on caring for infants' oral health.

While the main educational messages delivered to pregnant women mirrored those delivered to Head Start parents, additional topics specific to pregnancy were also addressed. These topics included how to care for teeth during pregnancy, key milestones for care during pregnancy, prevention of the transmission of dental caries, and the use of xylitol products. In addition, contact with pregnant women also focused on encouraging dental visits and working with women to find access to dental providers.

Grantee staff, including home visitors and oral health coordinators, typically provided education to pregnant women. Grantees also partnered with dental hygienists, nursing students, and Women, Infants and Children (WIC) staff to deliver oral health education.

Education for Children

According to record-keeping system data, more than 80 percent of the OHI grantees provided oral health education to children at least monthly from February through May 2007 (Table III.1). To encourage healthy dental hygiene habits among Head Start children, grantees reported educating children on how to care for their teeth, specifically proper tooth brushing techniques. Education also focused on healthy eating and nutrition and what to expect during dental appointments (see box). Education for children most commonly occurred in the classroom or during home visits (75 percent of grantees). However, staff used other opportunities to teach children about the importance of oral health, such as at dental appointments and special events. For example, some grantees held events for Dental Health Month and provided oral health education at community celebrations and health fairs.

Main Topics Covered During Education with Children

	Percentage of Grantees
How to care for teeth	48
What to expect during dental visits	29
Healthy nutrition	13

N = 52 grantees.

Grantees used various materials to support lessons about oral health. Lessons frequently included reading a storybook about caring for teeth or visiting the dentist. Storybooks were often included in curricula materials or purchased to support oral health lessons. Grantees also had puppets available in classrooms and during home visits. Staff used puppets with oversized teeth and toothbrushes to demonstrate tooth brushing techniques and had puppets of dentists available for children to play with and familiarize themselves with dental professionals' white coats and tools. Other grantees used models of teeth to demonstrate proper dental hygiene. Dramatic play centers helped familiarize children with the tools dentists and dental hygienists use, such as mirrors and flashlights. These materials were included in dramatic play centers with other props, such as white coats, to allow children to become comfortable with the objects they

could expect to see at the dentist's office. One grantee even reported housing a dental chair in classrooms for children to sit in prior to a visit from a dentist.

In nearly three-fourths (73 percent) of grantees, teachers and home visitors carried out oral health education activities with children by integrating oral health lessons into the daily, weekly, or monthly lesson plans. Eleven percent of grantees required teachers to provide oral health lessons either weekly or monthly, and some were required to document oral health objectives in lesson plans. In addition to education provided by teachers and home visitors, grantee staff, mainly oral health specialists and dental hygienists, provided education to children. Often these staff members would visit classrooms or accompany home visitors a couple times a year to teach children about oral health. These visits frequently occurred in conjunction with dental services. For example, hygienists reported visiting classrooms a week or a few days before they were scheduled to conduct screenings and fluoride varnishes. These visits had three main objectives: (1) introduce the hygienists to the children, (2) present a lesson on oral health, and (3) demonstrate the service they would be providing to reduce children's fears.

Curricula Used for Oral Health Education

To support oral health education, 67 percent of grantees reported using one or more oral health curricula. Rather than relying solely on one curriculum, most grantees reported using selected components of one curriculum in combination with other curricula or resources. Grantees explained that the combination of various curricula allowed them to better tailor their oral health education to the needs of families. For example, drawing on multiple resources enabled grantees to target messages to families that speak multiple home languages, parents with low literacy levels, and families served through multiple program options (for example, home visits and classroom presentations). Moreover, staff drew from multiple curricula to target educational messages to parents, preschool children, and pregnant women.

Commonly Used Curricula by OHI Grantees

	Percentage of Grantees
"Bright Futures, Bright Smiles"	19
"Cavity Free Kids"	15
"Open Wide"	8
"Bright Futures in Practice"	6
University developed	4
State or county health department developed	13

N = 52 grantees.

Grantees reported using widely available curricula as well as locally or regionally designed curricula, such as those developed by state departments of health, local universities, and regional initiatives (see box). The most commonly cited curriculum used by grantees was "Bright Futures, Bright Smiles: An Oral Health and Early Literacy Program for Head Start and Early Childhood Programs" developed by Colgate (Colgate Bright Futures, Bright Smiles 2003). Colgate's "Bright Futures, Bright Smiles" contains resources for promoting early literacy while helping children ages 3 to 8 establish and maintain positive oral health behaviors. Available materials include a teacher's manual and classroom posters, as well as storybooks for children and parent booklets. The materials are available in both

English and Spanish. Materials are available at low cost, and many materials are available free of charge online. Other commonly used curricula included "Cavity Free Kids" (Huntley, B., and J. Hagen 2004a; Huntley, B., and J. Hagen 2004b), "Open Wide" (Holt, K., and R. Barzel 2004), and "Bright Futures in Practice" (Casmassimo, P. and K. Holt 2004).

Thirteen percent of grantees reported using OHI funds to develop a compilation of resources and materials on oral health. These grantees reported researching evidence-based curricula and resources, determining the curricula and resources most appropriate for the families they serve, and compiling the materials and resources they found most useful for their program. These materials and resources were used to train Head Start staff and parents and to create packets of information for Head Start teachers and family service workers. Two of these grantees described developing resources and materials on oral health as the main focus of the OHI. One developed and piloted a comprehensive curriculum, which includes components for children, pregnant women, and parents, which it will implement in all Head Start centers in the 2007-2008 program year. The other grantee collaborated with community partners to develop and produce videos/DVDs and booklets about oral health for families. The materials were developed in English and Spanish and at a reading level that is accessible to parents.

An important consideration for grantees when selecting or developing curricula was finding materials that were culturally and linguistically appropriate for the populations they served. Grantees often reported selecting specific curricula because the materials were available in Spanish or were at an appropriate reading level for parents. In order to serve all families, grantees translated materials into other languages, such as Arabic, and developed materials at third-grade reading levels. One oral health specialist serving a program with a high percentage of families from Mexico and Colombia accessed resources from the departments of health and dental associations in those countries via the Internet to share with families.

ESTABLISHING DENTAL HOMES

Establishing a dental home is an important step in increasing access to care and implementing a schedule of routine preventive care and treatment if needed for children and families. Head Start Program Performance Standards require that Head Start grantees in collaboration with parents and as quickly as possible, but no later than 90 calendar days from the child's entry into the program, make a determination as to whether or not each child has an ongoing source of continuous, accessible health care. If a child does not have a source of ongoing health care, grantees must assist the parents in accessing a source of care (Administration for Children and Families 2007). The National Head Start Oral Health Resource Center defines a dental home as "the ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivered in a comprehensive, continuously accessible, coordinated, and family-centered way" (National Head Start Oral Health Resource Center 2007).

When asked during telephone interviews how they defined a dental home, 62 percent of grantees reported a dental home as an ongoing, regular, or continuous source of care. In addition, staff at 29 percent of grantees included in their definitions that dental homes must

provide comprehensive care, including both preventive and treatment services as needed. Staff at another 15 percent of grantees defined a dental home as providing accessible care; that is, families are easily able to make appointments and receive care in cases of emergencies. Mobile clinics or vans, therefore, do not meet this definition. Other important characteristics of dental homes cited by grantees included that care was affordable (6 percent) and culturally appropriate (6 percent) and that dental providers were willing to accept other family members in addition to the Head Start child (4 percent).

Data on establishment of dental homes as reported by grantees through the record-keeping system illustrate the difficulties grantees face finding dental homes for families. Through May 2007, some 50 percent of children and 20 percent of pregnant women had established dental homes (Table III.2).[9] These rates are lower than national Head Start averages,[10] likely attributable to the high need of these grantees to improve oral health care (Hamm 2006). Of children and pregnant women with a dental home, about half had a dental home established before enrolling in Head Start. Over one-third of dental homes were established within the first three months of program enrollment.

Table III.2. Dental Home Status of Children and Pregnant Women

	Percentage of Children	Percentage of Pregnant Women
Participants with a Dental Home Established	50	20
Number of Months After Enrollment in Head Start Dental Home Established		
Had dental home prior to enrollment in Head Start	25	14
0–3 months	19	6
4–6 months	3	0
7–9 months	<1	0
More than 9 months	2	0

Source: Record-keeping system data from 51 grantees, February 1 to May 31, 2007.

Note: N = 8,687 children and 168 pregnant women enrolled in the OHI. Missing data range from 4 to 126 across items because data entry was incomplete.

Meeting the requirement to establish a dental home in communities with limited dental providers, specifically finding providers willing to serve young children and accept Medicaid, is challenging. In order to meet this challenge, 85 percent of grantees reported helping families establish a dental home for children. Of these, 35 percent described establishing dental homes as a major goal or objective of the OHI. Most of these grantees were already

[9] Regional differences existed in the rates of children and pregnant women with dental homes established, with more than half of children reported as having dental homes in regions III, VIII, IX, and X, compared to less than half in other regions. Across all regions, grantees reported higher percentages of dental homes established for children than for pregnant women. This disparity may reflect the difficulties that adults on Medicaid and other public insurance have finding dental care.

[10] In 2005, some 47 percent of children entered Head Start without an ongoing source of dental care; by the end of the program year, 82 percent of children had a dental home (Hamm 2006).

carrying out these activities prior to the OHI but are focusing the grant resources to further support this component. The main strategy grantees described using to help families establish dental homes for children was referring them to local dentists; often these were dentists that the grantees had established partnerships with (see box). Another 12 percent of grantees reported partnering with a specific provider or network of providers that could provide dental homes for all Head Start children.

Strategies to Help Families Establish Dental Homes for Children

	Percentage of Grantees
Referrals for families	73
Partnering with one provider to serve all children	11

N = 52 grantees.

Four percent of grantees described establishing dental homes for all Head Start families as unrealistic given the limited number of dental providers in their communities who accept clients with Medicaid. Migrant/Seasonal Head Start grantees were more likely than other grantees to report on the limited opportunities to establish a dental home because of the high migration rate of families. These grantees explained that because many families are in the area for only a limited amount of time each year, and Medicaid benefits are not portable to other states, even families with dental homes were likely to spend a significant part of the year with limited or no access to dental services.

PREVENTIVE AND TREATMENT ORAL HEALTH SERVICES

Paramount to the prevention and early detection of early childhood dental caries is the provision of preventive oral health services. Risk assessments and the provision of needed followup and treatment are identified as key components to preventing dental caries (American Academy of Pediatrics 2003). To promote oral health, grantees provided or assisted families in receiving risk assessments, preventive services, and treatment services.

Risk Assessments

Individual risk assessments are especially important for Head Start children, who are often at higher risk for dental disease. Risk-assessment recommendations for Head Start children and pregnant women include identifying previous caries experience, precavity lesions, and visible plaque, as well as perceived risk by examiners (Kanellis 2000). According to the American Academy of Pediatrics "Oral Health Risk Assessment Timing and Establishment of the Dental Home Policy Statement" (2003), every child should begin to receive oral health risk assessments by age 6 months by a qualified pediatrician or pediatric health care professional. Risk assessment tools, such as the Caries Risk Assessment Tool (American Academy of Pediatric Dentistry 2006), are available to assist health care professionals in determining the patient's relative risk of caries. In the case of the very young patient, a risk assessment to identify parents (usually mothers) and infants with a high predisposition to caries can easily be performed by taking a simple dental history from a new mother. Questions directed at dietary practices, fluoride exposure, oral hygiene, utilization of dental services, and the number and location of the mother's dental fillings can give a relative indication of the mother's baseline decay potential. Frequent sugar intake, low fluoride

exposure, poor oral hygiene practices, infrequent utilization of dental services, active decay, and multiple dental fillings in multiple quadrants of the mouth indicate a high caries risk in the mother (American Academy of Pediatrics 2003).

More than half of the OHI grantees (63 percent) reported conducting risk assessments for Head Start children and pregnant women. Another 31 percent reported referring children and pregnant women to dental homes or other dental providers for risk assessments; however one-quarter of these did provide risk assessments if children and pregnant women did not have dental homes. Ten percent of grantees did not provide or refer children for formal risk assessments. These grantees explained that assessments were not necessary because all of the children they serve are considered high risk. One grantee explained that an oral health task force at the program was in the process of researching the best approach to providing risk assessments.

The results of risk assessments typically categorize children and pregnant women into specific risk categories, such as high risk, moderate risk, and low risk. Once a risk category was applied, grantees reported using this information to triage children and pregnant women for services. Children and pregnant women categorized as high risk were referred for immediate attention by a dental professional; those at moderate risk were referred to a dental professional, although services were considered less urgent; and those identified as low risk were instructed to continue routine preventive dental treatments. Head Start grantees also used risk assessment results to tailor education and treatment plans for individual families and to track progress of care.

Preventive and Treatment Services

To meet the oral health needs of children and pregnant women, grantees implemented a range of strategies to obtain preventive services and needed follow-up treatments. Grantees' strategies included direct provision of services, referrals for services, and a combination of the two. During telephone interviews, most grantees (77 percent) reported providing some preventive services; nearly all grantees (92 percent) referred children and pregnant women to dental professionals for treatment services.

Grantees commonly planned to provide or arrange dental screenings and fluoride treatments (including varnish applications, rinses, and prescription tablets). Fewer grantees provided cleanings and dental examinations; instead, families were typically referred to dental homes or another dental provider for these services. Eight percent of grantees reported providing some treatment services, such as fillings. Grantees that provided some treatment services either operated or partnered with an organization that operated a mobile van, provided on-site dental clinics, or designated clinic days when appointments were made for Head Start children. All grantees referred families to dental providers for more extensive restorative treatments.

According to program record-keeping system data, 34 percent of children received at least one service between February and May 2007; 25 percent received more than one service (Table III.3). For pregnant women, the rates were lower with 17 percent receiving

Table III.3. Treatment and Preventive Services Provided to Children and Pregnant Women

	Percentage of Children	Percentage of Pregnant Women
Received at Least One Service	34	17
Received More Than One Service	25	13
Preventive Services		
Dental screening	11	7
Dental exam	15	10
Cleaning	10	7
Fluoride rinse	1	0
Fluoride varnish	22	4
Fluoride tablets prescribed	<1	0
Xylitol wipes	2	0
Preventive root planing and scaling (preventive)	0	1
Topical fluoride	5	1
Dental sealants	<1	0
Other fluoride	<1	1
Treatment Services		
Fillings (1–2)	2	4
Fillings (3 or more)	2	1
Extractions (1–2)	1	1
Extractions (3 or more)	<1	0
Steel crowns	<1	1
Root canal	<1	1
Bridge/dental implant	<1	0
Therapeutic root planing and scaling (therapeutic)	<1	0
Treatment requiring hospitalization and/or sedation	<1	0
Other	2	1

Source: Record-keeping system data from 51 grantees, February 1 to May 31, 2007.

Note: N = 8,687 children and 168 pregnant women enrolled in the OHI. Missing data range from 6 to 59 across items because data entry was incomplete.

Table III.4. Characteristics of Preventive and Treatment Services

	Percentage of Records with Preventive Services Only[a]	Percentage of Records with Treatment Services Only[b]	Percentage of Records with Both Preventive and Treatment Services[c]	Percentage of Total Services
Referred for Service by Grantee	52	5	5	63
Provider of Service				
Grantee: health specialist	4	0	0	4
Grantee: dental hygienist	25	0	0	26
Grantee: other	3	0	0	3
Community partner	44	6	7	56
Other community provider	7	2	2	10
Location of Service				
Grantee site	57	2	0	59
Service provider office	21	6	6	33
Hospital	0	0	0	1
Home	2	0	0	3
Mobile van or clinic	2	0	1	3
Other	0	0	0	1
Support Services Provided	29	5	4	38
Type of Support Services Provided				
Help making appointment	45	10	7	61
Transportation	15	4	3	23
Translation	11	1	2	15
Other	44	5	5	54
Provider of Support Services				
Grantee: health specialist	38	8	5	51
Grantee: dental hygienist	3	1	0	4
Grantee: other	28	4	6	38
Community partner	3	0	1	4
Other community provider	2	0	0	3
Follow-Up Service Required	18	4	3	26
If Followup Required, Status of Followup				
Referral made	21	3	1	25
Appointment pending	41	12	10	63
Followup complete	12	3	2	18
If Followup Complete, Number of Months Between Service Date and Date Followup Completed				
0–2 months	63	19	14	96
3–4 months	4	0	0	4

Source: Record-keeping system data from 51 grantees, February 1 to May 31, 2007.

Note: N = 3,842 service records. Missing range from 0 to 183 across items because data entry was incomplete.

[a]Preventive services include dental screenings, clinical exams, cleaning, fluoride rinse, fluoride varnish treatment, fluoride tablets prescribed, xylitol wipes, and root planning and scaling (preventive).

[b]Treatment services include fillings, extractions, steel crowns, root canal, bridge/dental implant, root planing and scaling (therapeutic), and treatment requiring hospitalization and/or sedation.

[c]Because the record-keeping system allows users to select more than one type of service per record, some records included both preventive and treatment services.

one service and 13 percent receiving more than one service. The most common types of services children received were fluoride varnishes (22 percent), followed by dental screenings (11 percent) and dental exams (15 percent). Ten percent of pregnant women received dental screenings; 7 percent received dental exams and cleanings.[11] Far fewer children and pregnant women received treatment services, but of those who did, most received fillings.

The delivery of services was conducted by a variety of providers, most often by a community partner (56 percent of services; Table III.4). Dental hygienists on staff or under contract to grantees provided one-quarter of preventive services. Typically, these hygienists were under the supervision of a dentist; many of these dentists were also community partners or within the network of dentists serving Head Start children.[12] Other grantees contracted with private dental hygienists, partnered with dental hygienist students, or worked with dental hygienists who volunteered their time.

The primary location at which children and pregnant women received services varied by type of service, but nearly all services were provided either at the grantee site or at a provider office (Table III.4). Most preventive services were conducted at the grantee site; in contrast, treatment services more commonly were delivered at provider offices. Models for providing services on site included having dental hygienists or dentists conduct services in classrooms or arranging for dental providers to offer on-site clinic days when families could make appointments for children. A few grantees reported partnering with organizations that operate mobile dental vans. The vans would visit various Head Start centers or other community locations to offer services to children. To support these on-site services, grantees used OHI funds to purchase portable dental equipment and other supplies.

Follow-up treatment was required for about one-quarter of the services and was completed on close to 20 percent of these services (Table III.4). For the majority of follow-up services, appointments were pending. This status likely reflects the short data collection window (February through May 2007), compounded by long waiting lists for appointments at many dental offices and clinics.

According to record-keeping system data, grantees referred children and pregnant women to about two-thirds of services (Table III.4). During telephone interviews, nearly all grantees (94 percent) reported having a system in place for referring families to dental providers. Grantees usually maintained lists of providers who were willing to serve Head Start families. As needed, programs would share the list with families. One grantee included the names and contact information of providers willing to serve Head Start families in a community resource guide that was given to families at enrollment. Another grantee

[11] These findings are likely due to the timing of the data collection period (February through May) and the fact that grantees often provided fluoride varnishes two to three times per year. Dental exams and screenings were more commonly provided at the beginning of the program year.

[12] Dental hygienists are required by law, in most states, to be under the supervision of a dentist. Many states allow hygienists to go into schools, nursing homes, and other public health facilities to provide preventive services to underserved populations (Gehshan et al. 2001).

operated a referral hotline that families could call when they needed referrals for all health care, including dental care. All grantees reported having a system for referring families to dental providers in place prior to the OHI; however, a few grantees aimed to improve this system through the OHI, and nearly all grantees planned to expand the network of dental providers willing to accept referrals through the OHI. One grantee worked with a community partner to refer clients to services. The community partner operated a referral network, and outreach workers communicated directly with Head Start families to help them locate providers. When making referrals, grantees stressed the importance of finding providers who could work with families' characteristics and needs. These factors included ensuring that providers accepted families' insurance coverage; were in convenient locations; and, when possible, provided culturally competent services, such as having staff or interpreters available for families that spoke a language other than English.

To cover the costs of services, staff described four main approaches in telephone interviews: (1) billing Medicaid or another insurance provider, (2) receiving in-kind donations of dental professional time, (3) using OHI funds for materials/supplies/equipment, and (4) using OHI/Head Start funds for services. The cost of treatment services was almost always covered by health insurance, including Medicaid, SCHIP, and Indian Health Services, or paid for using regular Head Start funds. Some grantees reported using OHI funds as additional funding or back-up funding. Few grantees reported using OHI funds as a primary source of funding for oral health services.

SUPPORT SERVICES

To facilitate the provision of preventive and treatment services, grantees reported providing a range of support services. Of the dental services recorded in the record-keeping system, support services were provided to families for more than one-third of oral health preventive and/or treatment services (Table III.4). Grantee health specialists were typically responsible for providing or arranging these services (51 percent). Other grantee staff, such as family service workers and home visitors, also assisted with providing support services to families.

Types of Support Services Available to Families

	Percentage of Grantees
Transportation	77
Making appointments	75
Translation	54
Reminder notices	21
Accompanying to Appointments	10

N = 52 grantees.

In telephone interviews grantees reported that the types of support services available to families included providing transportation or transportation assistance, helping families make appointments, providing or arranging for interpreters, sending out reminder notices or making reminder calls to families about appointments, and accompanying families to appointments (see box). On a more limited basis, grantees reported reimbursing families for the cost of child care during appointments and providing funding to cover the costs of travel and lodging for overnight stays. Grantees also reported helping families access services available through providers and others, such as shuttle services for Medicaid clients and interpreters available through providers.

DISTRIBUTION OF SUPPLIES

Oral hygiene supplies were distributed to families to reinforce educational messages and to ensure that families had the tools they needed to engage in healthy dental hygiene. According to record-keeping system data, 78 percent of grantees distributed supplies to Head Start children between February and May 2007 (Table III.5). In telephone interviews with grantee staff, 92 percent of grantees reported distributing supplies at some point during the program year. The primary recipients of oral hygiene supplies were children. In addition, more than half of the grantees also distributed supplies to parents and siblings. Supplies were commonly distributed at parent meetings and training events when oral health topics were discussed during home visits, and were sent home with children. Grantees also distributed supplies at community events.

The types of supplies distributed to families included toothbrushes, toothpaste, dental floss, timers, toothbrush covers, disclosing tablets that expose plaque on teeth, xylitol products, gauze and finger cloths for wiping infants' gums, and dental mirrors for parents to use to check children's teeth (Table III.5).

Table III.5. Oral Hygiene Supplies Distributed to Families

	Percentage of Grantees
Distributed Oral Hygiene Supplies to Families at Least One Month	78
Types of Oral Hygiene Supplies Distributed to Families at Least One Month	
Toothbrushes	74
Fluoride toothpaste	73
Floss	59
Xylitol wipes	29
Xylitol gum	23
Fluoride rinse	6
Other supplies	55

Source: Record-keeping system data from 51 grantees, February 1 to May 31, 2007.

Note: N = 51 grantees.

CHAPTER IV

IDENTIFYING GRANTEES FOR IN-DEPTH SITE VISITS USING THE RE-AIM ANALYSIS

The primary focus of the Oral Health Initiative (OHI) evaluation is identifying promising practices for improving access to oral health care for Head Start children and pregnant women and for providing oral health education to Head Start families and staff. As described in Chapters II and III, the 52 OHI grantees are diverse in terms of their community contexts, populations served, and oral health promotion strategies. This diversity poses a significant challenge for the evaluation. To address this challenge and to ensure a systematic and objective analysis of the data collected for the evaluation, we 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).

This chapter describes the RE-AIM analytic model and how the research team applied it to the OHI evaluation, including measures used to assess grantees' performance on each RE-AIM dimension. The chapter also includes a description of the RE-AIM methodology and a presentation of the findings of the analysis. The chapter concludes with a description of how the results will be used to select grantees for the in-depth site visits in Year Two of the evaluation. Appendix C contains additional tables with the results of the RE-AIM analysis.

THE RE-AIM FRAMEWORK

Researchers developed the RE-AIM model by drawing on previous work in several areas of public health evaluation, including the "diffusion of innovations," "multilevel," and "precede-proceed" models (Rogers 1995; Green and Kreuter 2005).[13] RE-AIM extends this previous work in three main ways: (1) it focuses on the translation of research into practice,

[13] The Robert Wood Johnson Foundation funded the development of the RE-AIM model and its accompanying website (RE-AIM.org), which serves as a clearinghouse for information related to the model.

(2) it emphases internal and external validity issues and representativeness of diverse populations equally, and (3) it provides specific and standard ways of measuring key dimensions of public health impact and widespread application. Researchers have used RE-AIM to evaluate a range of public health interventions in areas such as physical activity promotion among children and adults and school health promotion.

As described in Chapter I, the RE-AIM framework facilitates analysis of public health promotion strategies at both the individual and institutional levels as defined by five dimensions:

- ***Reach:*** the intervention's reach into the target population
- ***Effectiveness:*** the intervention's effectiveness in modifying health risk
- ***Adoption:*** the extent to which the intervention is adopted in the target setting
- ***Implementation:*** the extent to which services are delivered with fidelity and at the desired level of intensity
- ***Maintenance:*** the extent to which the intervention and its impact on participants is maintained over time

As an analytic model designed to evaluate public health promotion initiatives, RE-AIM provides an ideal framework for addressing the target outcomes of the OHI and the diverse strategies employed by grantees. The OHI emphasizes collaboration between early childhood education programs and the public health promotion system. Applying the RE-AIM framework to this evaluation balances the emphasis on individual measures of effectiveness and institutional measures of change, both of which are equally important.

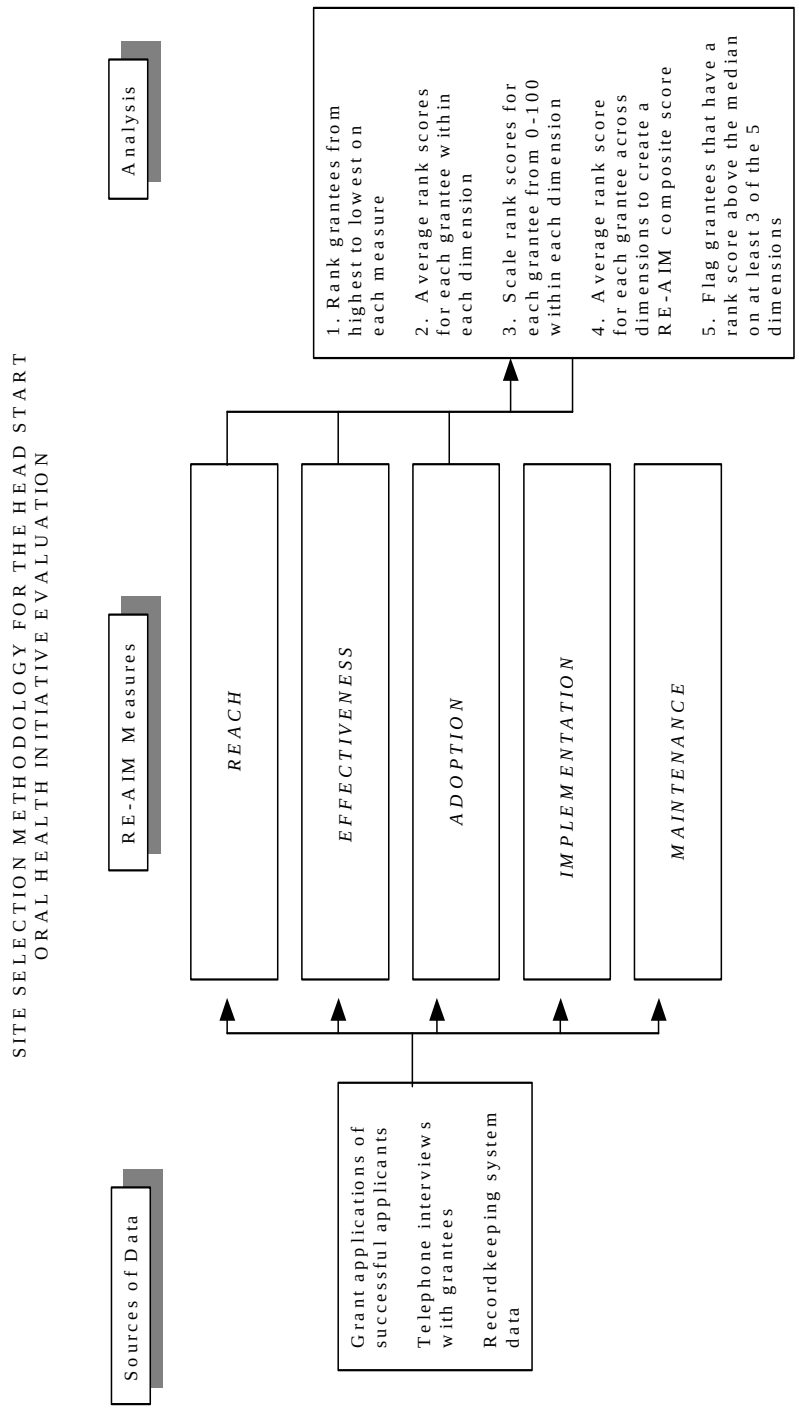
RE-AIM METHODOLOGY

The RE-AIM framework facilitates a systematic analysis of each grantee's early performance by employing a set of consistent measures to assess grantee performance on each of the five RE-AIM dimensions. To apply the RE-AIM framework to the OHI evaluation, the research team (1) developed measures within each of the five RE-AIM dimensions, (2) collected the necessary data for each measure using information collected during the telephone interviews and from the record-keeping system, (3) conducted the analysis using the RE-AIM framework, and (4) examined the results for specific subgroups. Figure IV.1 illustrates this methodology. This section provides a description of these steps as they were applied to the overall RE-AIM analysis, as well as of the examination of subgroups.

Developing Measures Within Each Dimension

The measures developed for the RE-AIM analysis were based on previous research studies that utilized the RE-AIM analysis but were specified for the particular context of the

FIGURE IV.1
SITE SELECTION METHODOLOGY FOR THE HEAD START
ORAL HEALTH INITIATIVE EVALUATION



OHI grantee communities, populations served, and oral health promotion strategies. The final set of measures, developed in consultation with the Office of Planning, Research, and Evaluation (OPRE), were designed to encompass a broad range of possible OHI models (Table IV.1).

Within the Reach dimension, we included three measures to assess grantees' success at engaging the target population by assessing the percentage of children enrolled from the grantees' target populations. Within the Effectiveness dimension, we included five measures to assess the intervention's success at improving oral health care among Head Start children and pregnant women. The measures assess receipt of dental screenings and exams, clinical preventive services, and clinical treatment services. For Adoption, we included seven measures that assess staffing for the initiative, the development of partnerships by grantees, the length of grantee start-up, and the extent of training for staff and partners on oral health education and treatment needs and strategies for the target population. The Implementation dimension assessed whether the intervention is provided with fidelity. We included nine measures that assessed the receipt of oral health education among children, parents, and pregnant women and the provision of oral hygiene supplies. The Maintenance dimension examines the degree to which the intervention is sustained over time. To study this dimension, we included three measures to assess the extent to which children and pregnant women received recommended follow-up services and the extent to which grantees are able to help families establish a dental home for enrolled children and pregnant women at which they can receive ongoing oral health care.

To facilitate comparison across grantees, the measures are quantitative, primarily percentages or ratios, or draw on qualitative information from telephone interviews. All qualitative measures are quantified by rating various aspects of grantee activities, such as the extent to which grantees have implemented key components of the initiative.

Collecting Necessary Data

The data necessary to carry out the RE-AIM analysis were collected during telephone interviews with all 52 grantees in February and March 2007 and from data collected through the record-keeping system from February 1 through May 30, 2007 from 51 grantees. Because of the operating schedule of one grantee, the record-keeping system data included information on only 51 grantees. As a result, it was decided to exclude the grantee with the missing record-keeping system data from the RE-AIM analysis because an accurate and fair application of the framework was not possible with the extent of missing information.

Conducting Analysis Using the RE-AIM Framework

The next step was to conduct analysis of the OHI grantees using the RE-AIM model. The research team followed five systematic steps: (1) ranking grantees from highest to lowest on each measure, (2) calculating the average ranking for each dimension, (3) scaling rank scores for each dimension, (4) ranking grantees based on a RE-AIM composite score, and (5) flagging grantees ranking above the median on multiple dimensions. This section discusses these steps and how the research team applied them to the OHI evaluation.

Table IV.1. RE-AIM Measures for the OHI Evaluation

Reach
Percentage of total service population served through the OHI
Percentage of enrolled children and pregnant women who have received at least one service
Whether grantees are providing direct services or outreach or to others beyond Head Start
Effectiveness
Percentage of participants who received any service
Percentage of participants who received more than one service
Percentage of participants who received a dental screening or dental exam
Percentage of children who received a fluoride treatment
Percentage of participants who received any other service
Adoption
Whether planned staff positions filled as of March 2007
Whether grantee implemented planned staffing structure
Whether program staff received training on oral health topics
Number of months in which at least 5 percent of staff received training on oral health topics
Whether grantee has partnerships with direct service providers
Whether grantee is involved in coalitions/partnerships for advocacy and training
Whether grantee is involved in partnerships with organizations that provide education and Support services
Implementation
Whether grantee has provided oral health education and skill development training to children
Number of months in which at least 10 percent of children received oral health education and skill development training
Whether grantee has provided oral health education and skill development training to pregnant women
Whether grantee has provided oral health education and skill development training to parents
Number of months in which at least 5 percent of parents received oral health education and skill development training
Percentage of parents who received oral health education and skill development training on average every month
Whether grantee provided oral hygiene supplies
Number of months in which at least 10 percent of families received oral hygiene supplies
Percentage of families that received oral hygiene supplies on average every month
Maintenance
Percentage of children and pregnant women identified as needing follow-up treatment who have pending appointments for followup or followup is completed
Percentage of children and pregnant women with a dental home
Percentage of treatment/preventive services provided by a community partner

Ranking Grantees from Highest to Lowest on Each Measure Within Dimensions. After the research team collected the necessary data and created the measures, grantees were ranked within and across each RE-AIM dimension. To begin, each measure was calculated for each grantee. Next, grantees were ranked from highest to lowest according to their scores on each measure. When two or more grantees received the same result on any measure, their resulting ranking for that measure was also the same. Rankings were then averaged to calculate the average rank scores for each dimension. The average rank score was converted into a scaled score ranging from 0 to 100. The scale was developed based on the number of grantees ranked for all measures, which was 51 grantees. This resulted in a scale divided into increments of 1.96, which assumes all 51 grantees received an individual ranking. However, when two or more grantees had the same average ranking, they received the same scaled score. Subsequent scaled scores were downward adjusted to accommodate duplicate rankings. Next, the scaled average rank scores for all dimensions were averaged to create a composite RE-AIM score. The composite scores were then ranked from highest to lowest to compare performance across all 51 grantees.

Calculating Average Rankings for Each RE-AIM Dimension. Rankings were then averaged to calculate the average rank scores for each dimension. On most dimensions, all grantees received a score for all measures. To calculate averages, therefore, the rankings for all measures were added together and then divided by the number of measures. On a few dimensions, however, not all measures applied to all grantees. When this occurred, averages for grantees were based on the number of measures that applied. For example, measures specific to pregnant women were included in the average only for those grantees serving pregnant women.

Scaling Rank Scores for Each Grantee on Each RE-AIM Dimension. The average rank score was converted into a scaled score ranging from 0 to 100. This process normalized scores and allowed for comparisons across measures. The scale was developed based on the number of grantees ranked for all measures, which was 51 grantees. This resulted in a scale divided into increments of 1.96, which assumes all 51 grantees received an individual ranking. However, when two or more grantees had the same average ranking, they received the same scaled score. Subsequent scaled scores were downward adjusted to accommodate duplicate rankings. Tables IV.2 and IV.3 include the scaled score for each RE-AIM dimension for a subset of grantees. Table C.1 in Appendix C includes scaled scores for each RE-AIM dimension, RE-AIM composite scores, and overall rankings for all 51 grantees.

Ranking Grantees Based on a RE-AIM Composite Score. Using the scaled scores for each dimension, a RE-AIM composite score was calculated (see Tables IV.2 and IV.3). This score measures the overall impact of each grantee's OHI program. The RE-AIM composite score is an average of the five scaled average rankings. Grantees were then ranked from highest to lowest (1 to 51) based on the RE-AIM composite score. As in previous rankings, when two or more grantees had the same average ranking, they received the same scaled score. Subsequent scaled scores were downward adjusted to accommodate

Table IV.2. RE-AIM Analysis Overall Rankings: Grantees With An Overall Ranking of 20 and Above

	Scaled Score by Dimension							
Grantee ID[a]	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Dimensions Above Median
AT	88	98	90	73	86	87	1	R, E, A, I, M
E	98	96	82	94	53	85	2	R, E, A, I, M
AF	94	82	98	84	63	84	3	R, E, A, I, M
AU	82	80	65	100	84	82	4	R, E, A, I, M
AN	65	67	78	96	98	81	5	R, E, A, I, M
AI	75	75	92	57	84	76	6	R, E, A, I, M
AK	100	100	31	86	49	73	7	R, E, I
X	63	92	55	61	90	72	8	R, E, A, I, M
AQ	90	80	98	39	33	68	9	R, E, A
T	57	71	37	88	88	68	9	R, E, I, M
AP	96	86	33	76	35	66	11	R, E, I
U	92	90	51	29	61	65	12	R, E, M
L	53	84	78	2	100	64	13	R, E, A, M
AG	26	39	90	92	69	63	14	A, I, M
AB	69	37	49	61	92	62	15	R, I, M
AO	76	49	98	37	41	60	16	R, A
AV	43	73	71	35	80	60	17	E, A, M
AM	59	55	73	41	71	60	18	R, E, A, M
AW	41	22	80	98	57	60	18	A, I, M
F	80	51	65	55	41	58	20	R, A, I

Note: R = Reach; E = Effectiveness; A = Adoption; I = Implementation; M = Maintenance.
[a]Grantee IDs are unique identifiers assigned at random and do not represent any specific characteristics of the grantees.

Table IV.3. RE-AIM Analysis Overall Rankings: Grantees With An Overall Ranking of 42 and Below

	Scaled Score by Dimension							
Grantee ID[a]	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Dimensions Above Median
K	35	16	71	51	14	37	42	A
AC	61	31	8	14	67	36	43	R, M
Y	8	24	41	63	16	30	44	I
AJ	16	10	71	33	6	27	45	A
AL	6	10	90	24	2	26	46	A
M	4	45	16	18	41	25	47	
G	47	10	12	12	20	20	48	
N	20	33	24	18	22	23	49	
J	31	10	26	10	8	17	50	
Z	16	10	6	20	6	11	51	

Note: R = Reach; E = Effectiveness; A = Adoption; I = Implementation; M = Maintenance.

[a]Grantee IDs are unique identifiers assigned at random and do not represent any specific characteristics of the grantees.

duplicate rankings. The overall rankings were then used to determine both the highest-performing and lowest-performing grantees.

Flagging Grantees with Dimensions Above the Median. To ensure that grantees with the highest rankings had high scaled average rankings across dimensions, we calculated the median ranking for each dimension. Grantees at or above the median for each dimension were then flagged (see Tables IV.2 and IV.3). This process allowed us to separate those grantees that received a very high scaled average ranking on one or two dimensions, while receiving a low ranking on the other dimensions, from those that scored above the median on three or more dimensions, thus indicating grantees with a strong overall model, not just strengths in one or two areas.

Examining Results by Subgroup

Once overall rankings were completed, the research team examined results for various subgroups of interest, including program type (Early Head Start only, Head Start only, and both Early Head Start and Head Start), Administration for Children and Families (ACF) region, grantees in which less than 90 percent of children have insurance coverage, and grantees located in rural areas. To examine these data, the research team identified grantees within a given subgroup using information collected during telephone interviews and from the record-keeping system. The research team then used the RE-AIM composite scores to rank grantees within the subgroups. Grantees were given a subgroup ranking in addition to an overall ranking (see Tables C.2 through C.8 in Appendix C). Similar to previously described methods, when two or more grantees had the same average ranking, they received the same scaled score. Subsequent scaled scores were downward adjusted to accommodate duplicate rankings.

RESULTS

The RE-AIM analytic framework, as applied to the OHI evaluation, enabled the research team to systematically consider five dimensions when assessing the OHI grantees. These five dimensions—Reach, Effectiveness, Adoption, Implementation, and Maintenance—have be shown to be compatible with community-based and public health interventions (Glasgow et al. 1999). In addition, the RE-AIM framework facilitates the analysis of public health promotion strategies at both the individual and institutional levels. For the OHI evaluation, the RE-AIM framework facilitated an examination of grantees' performance on the five dimensions despite the diversity of community contexts, individually designed initiatives, and varying target populations. This section describes the results of the RE-AIM analysis. First, the section includes a description of grantee performance across the RE-AIM measures. Second, it reviews the overall ranking of grantees by the RE-AIM composite score. Third, it includes an examination of the RE-AIM results by subgroups.

Grantee Performance Across the RE-AIM Measures

Table IV.4 presents the measures developed for each RE-AIM dimension and the average, lowest, and highest values for each measure. There is considerable variation on grantee performance across the 27 measures. On all but 10 measures, values ranged from 0 to 100. However, the average value on each measure varied widely, with average scores ranging from 11 to 100 across measures.

The first two RE-AIM dimensions, Reach and Effectiveness, were used to evaluate the OHI at the individual level by measuring (1) its reach into the target population and (2) its effectiveness in modifying health risk. Within the Reach dimension, an average of more than 90 percent of the total children and pregnant women enrolled in Head Start, Early Head Start, and Migrant/Seasonal Head Start were targeted for OHI services, according to grantees (Table IV.4). On average more than one-third of enrolled children and pregnant women received a preventive or treatment service across grantees.[14] The measures within the Effectiveness dimension include the percentage of children and pregnant women that received preventive and treatment dental care. The average scores across the measures in the Effectiveness dimension were lower than the average scores across measures within the other four dimensions. While the averages were low, the range of scores was similar to the range in other dimensions, with all or nearly all children and pregnant women at some grantees receiving services, and with none receiving services at other grantees (during the data collection period). The lower average performance of grantees on the Effectiveness measures coincides with grantees' descriptions during telephone interviews of the challenges associated with securing dental services for Head Start children and pregnant women.

The RE-AIM dimensions of Adoption and Implementation facilitate the analysis of the OHI at the institutional, or grantee, level. The dimensions include measures of the extent to which the OHI has been adopted by grantees and services are implemented as planned. Within the adoption dimension, grantees reported that all planned staff positions for the OHI were filled, and most positions (an average of 84 percent) were implemented as planned (Table IV.4). Grantees varied in their approaches to training staff. Some grantees trained only staff involved in the OHI or direct service staff while others trained all staff on the OHI. A few grantees did not provide training to staff (during the data collection period). Three Adoption measures examined the types of partnerships grantees formed. Most grantees formed partnerships with at least one direct service provider. Fewer grantees reported developing partnerships aimed at advocacy and training and with organizations that provide education and support services. As described in Chapter III, education for children,

[14] These data represent the sample of children and pregnant women included in the program record-keeping system. The data collection period was from February through May 2007.

Table VI.4. RE-AIM Measures and Performance Values For 51 OHI Grantees

RE-AIM Dimensions and Measures	Grantee Performance		
	Average	Lowest	Highest
Reach			
Percentage of total service population served through the OHI	93	50	100
Percentage of enrolled children and pregnant women who have received at least one service	36	0	100
Whether grantees are providing direct services or outreach to others beyond Head Start	42	0	100
Effectiveness			
Percentage of participants who received any service	36	0	100
Percentage of participants who received more than one service	25	0	94
Percentage of participants who received a dental screening or dental exam	26	0	100
Percentage of children who received a fluoride treatment	28	0	94
Percentage of participants who received any other service	16	0	88
Adoption			
Whether planned staff positions filled as of March 2007	100	100	100
Whether grantee implemented planned staffing structure	84	50	100
Whether program staff received training on oral health topics	62	0	100
Number of months in which at least 5 percent of staff received training on oral health topics	20	0	80
Whether grantee has partnerships with direct service providers	94	0	100
Whether grantee is involved in coalitions/partnerships for advocacy and training	34	0	100
Whether grantee is involved in partnerships with organizations that provide education and support services	33	0	100
Implementation			
Whether grantee has provided oral health education and skill development training to children	78	0	100
Number of months in which at least 10 percent of children received oral health education and skill development training	49	0	100

RE-AIM Dimensions and Measures	Grantee Performance		
	Average	Lowest	Highest
Whether grantee has provided oral health education and skill development training to pregnant women	81	0	100
Whether grantee has provided oral health education and skill development training to parents	100	100	100
Number of months in which at least 5 percent of parents received oral health education and skill development training	35	0	100
Percentage of parents who received oral health education and skill development training on average every month	11	0	100
Whether grantee provided oral hygiene supplies	92	0	100
Number of months in which at least 10 percent of families received oral hygiene supplies	33	0	100
Percentage of families that received oral hygiene supplies on average every month	14	0	83
Maintenance			
Percentage of children and pregnant women identified as needing follow-up treatment who have pending appointments for followup or followup is completed	48	0	99
Percentage of children and pregnant women with a dental home	66	0	100
Percentage of treatment/preventive services provided by a community partner	45	0	100

Note: RE-AIM is reach, effectiveness, adoption, implementation, and maintenance.

pregnant women, and parents was a key component of the OHI at most grantees. This focus on education for the OHI is reflected in the average scores on the measures within the Implementation dimension. The three measures within this dimension that examine whether grantees provided education to children, pregnant women (if included in the target least some of the children, pregnant women, and parents being served through the OHI. Similarly, nearly all grantees distributed oral hygiene supplies to families as indicated by an average score of 92 for this measure.

The measures that constitute the Maintenance dimension capture both the maintenance of oral health promotion strategies for Head Start children and pregnant women and the maintenance of the OHI at the grantee level. During telephone interviews, grantees reported that establishing dental homes for Head Start children and pregnant women was important because it established a source of on-going dental care for the family, even after they leave Head Start. The average percentage of per grantee children and pregnant women with a dental home was 66 percent (Table VI.4). To measure maintenance at the grantee level, the research team measured the percentage of services provided by a community partner, which, according to grantees' reports during telephone interviews, was likely to continue to serve Head Start once a partnership was developed.

Results by Overall Rankings

The RE-AIM analysis resulted in a final ranking of all grantees from 1 to 51 based on the RE-AIM composite score. In addition, the research team identified the RE-AIM dimensions in which grantees scored above the median. Table C.1 in Appendix C presents the overall ranking of each grantee, as well as the RE-AIM dimensions at or above the median for each.[15] Table IV.2 shows the grantees that ranked in the top 20 overall. Table IV.3, in contrast, includes the lowest ranking grantees; those that ranked from 42 to 51 overall.

Of the top-ranking grantees, all but one scored above the median on three or more RE-AIM dimensions, with seven of the grantees ranking in the top eight overall, scoring above the median on all five RE-AIM dimensions (Table IV.2). This ensures that the OHI models developed by the highest-ranking grantees represent a range of strategies and strengths, rather than particular success in a given group of dimensions. In contrast, the grantees that ranked in the bottom 10 overall scored above the median on few RE-AIM dimensions, with the five lowest-ranking grantees scoring below the median on all five dimensions (Table IV.3).

During Year Two of the OHI evaluation, the research team will conduct site visits to a mix of high- and low-ranking grantees to identify the implementation approaches and strategies that set these grantees apart from the other grantees. Year Two will focus on learning more about why grantees selected particular strategies and service delivery models,

[15] To ensure the privacy of the OHI grantees, the data is presented using unique identifiers. These identifiers were assigned at random and do not represent any specific characteristics of the grantees.

how grantees implemented those strategies and services, and the successes and challenges grantee staff and community partners experienced. For example, information obtained during the site visits may shed light on outreach strategies that work well for various populations and on service delivery models that are well-suited to different community contexts and types of community partners. Developing a thorough understanding of these factors will be critical to identifying promising practices for replication in other Head Start programs. The research team will use a systematic approach for determining whether to classify a strategy as "promising."

Examination of Results by Subgroup

In addition to the overall rankings, the research team examined subgroups of grantees that represent the variety of contexts in which the OHI has been implemented. The team identified subgroups of grantees of interest, including program type (Early Head Start only, Head Start only, and both Early Head Start and Head Start), program size, grantees located in rural areas, Administration for Children and Families (ACF) regions, and rates of dental insurance coverage.[16] The research team also examined RE-AIM scores for grantees operating in primarily rural areas and compared results with those operating in primarily urban locations. Using a similar process for ranking across all grantees, the research team ranked grantees within the selected subgroups.

Among several subgroups, the research team found no differences in their distribution across rankings. For example, among grantees offering Head Start only, Early Head Start only, and both Early Head Start and Head Start, grantees were evenly distributed across high and low rankings (Appendix C, Tables C.2, C.3, and C.4). Across all three groups, more than one-half of the grantees ranked at or above the median on three or more dimensions. In addition, nearly a one-third of grantees in each of the three groups ranked in the top 20 in overall rankings. To examine results by program size, the research team grouped grantees by four size categories based on grantee enrollment: (1) 1 to 200, (2) 201 to 600, (3) 601 to 1,000, and (4) more than 1,000. As with program type, these four groups of grantees were evenly distributed across high and low rankings when compared to the overall rankings of all grantees (not shown). The research team found similar findings when they examined grantees located in rural areas (Appendix C, Table C.5). Despite a hypothesis that grantees in rural areas might fare slightly worse than grantees in more urban areas because of more limited access to services, the research team found similar distributions across rankings. When the research team examined grantees by region, they had similar findings for grantees across Regions I through X. All but two regions included at least one grantee in the top 20 overall rankings, and all but one region included at least one grantee with three or more dimensions at or above the median (not shown).

Patterns did emerge in the examination, however, with grantees serving hard-to-serve Head Start populations. Specifically, the Migrant/Seasonal Head Start Program Branch

[16] Insurance coverage of children is based on record-keeping system data from February 1 to May 31, 2007.

grantees (Region XII) ranked within the lowest one-third of grantees overall across all grantees. For the Migrant/Seasonal Head Start Program Branch grantees, only one RE-AIM dimension was at or above the median (Appendix C, Table C.6). The low performance of these grantees in the RE-AIM analysis may demonstrate the difficulties Migrant/Seasonal Head Start programs face in serving populations that include highly mobile families and many undocumented workers who often do not have insurance coverage or the means to pay for dental care. Similarly, among the grantees from the American Indian/Alaska Native Program Branch (Region XI), no grantees were included within the top 20 in overall rankings nor did any grantees have three or more dimensions at or above the median (Appendix C, Table C.7). As with Migrant/Seasonal Head Start grantees, the American Indian/Alaska Native grantees face particular challenges in service provision, such as isolated locations and limited access to dental providers.

To account for grantees serving populations with high numbers of children without insurance coverage, the research team categorized grantees by those with 90 percent or more of children with coverage, and with those with 89 percent or fewer of children with coverage. The analysis revealed that grantees with 89 percent or fewer children covered by insurance were less likely to be included in the top 20 grantees and more likely to be included in the lowest one-third in overall rankings (Appendix C, Table C.8). Grantees with high percentages of children without insurance coverage face particular challenges in securing providers and paying for services. Many of these grantees serve large immigrant populations, including undocumented workers and others who do not qualify for public insurance.

SELECTING SUBSET OF GRANTEES FOR SITE VISITS

As a next step, the research team, in consultation with ACF, will use 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-ranking grantees. In addition, the research team will include grantees from the subgroups discussed earlier to represent the various contexts in which the OHI was implemented.

As described above, the main focus of the in-depth site visits will be to identify promising practices in each RE-AIM dimension and collect detailed information about the practice for future replication in other Head Start settings. The approach of visiting a combination of high- and low-ranking grantees will provide an overall understanding of implementation and how it varies across grantees. Including grantees from subgroups of interest will facilitate an understanding of implementation strategies that are most successful with hard-to-serve Head Start populations.

In Year Two, all grantees will continue to report on OHI using the program record-keeping system. These data, combined with the information collected during the site visits, will be used to produce a final report.

CHAPTER V

EARLY IMPLEMENTATION LESSONS

The experiences of the participating Head Start programs in developing and implementing the Oral Health Initiative (OHI) can yield important guidance on program development and implementation. As noted in Chapter I, this evaluation has been designed to assess the OHI implementation; it does not assess the OHI's impact on oral health outcomes. Nevertheless, an analysis of early successes and challenges identified by grantees can provide important insights about how to strengthen similar initiatives in the future. A key question for assessing implementation is the extent to which staff has been able to carry out the initiative as planned. In addition, learning about the factors that facilitated or, alternatively, impeded implementation can provide important foundations on which to build future initiatives.

During telephone interviews, grantees identified a number of early implementation successes. Despite the reported progress toward meeting their goals, grantees also encountered challenges that hindered their ability to implement the OHI. This chapter discusses the experiences of grantees in the early stages of implementation and, in particular, the primary successes and challenges that grantees have identified thus far.[17] The chapter also discusses strategies grantees developed to overcome obstacles and additional resources, training, and technical assistance that the OHI grantees identified as having the potential to enhance implementation. The chapter concludes with a brief presentation of next steps in the OHI evaluation. Information in this section is drawn from telephone interviews with grantee staff.

[17] Timing of the receipt of grants varied by grantee, often by region. As a result, at the time of the telephone interviews in February and March of 2007, some grantees had been implementing the OHI for one year, while others had been implementing the initiative for periods between six and nine months.

SUCCESSES

During telephone interviews, staff members reported that they had made significant progress on many of their goals. At some sites, activities proceeded as planned, while other grantees had to make adjustments to their initial plans or experienced delays launching some activities. Although implementation has differed across grantees, all were able to point to at least one early implementation success, and most identified several. 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. These successes are discussed in the following sections in more detail.

Improving Access to Dental Services

Since all grantees included increased access to treatment as a key goal of the OHI, it is not surprising that two-thirds of the grantees (67 percent) reported improved access to dental services as an important early implementation success. Grantees reported that increased access to care has enhanced their ability to meet the oral health care needs of children and pregnant women.

Staff cited improvement in various measures related to access, including providing more on-site services to children, increasing the number of dental providers willing to serve Head Start families, helping families establish dental homes, and developing models of service delivery relevant to the needs and resources of their communities.

Grantees Provided More On-Site Services for Children. As described in Chapter III, grantees implemented strategies to increase the on-site oral health services they provided to children. For many grantees, hiring or contracting with a dental hygienist created a system for delivering on-site preventive services, such as fluoride varnish applications, dental screenings, and dental exams. Other grantees partnered with community providers, including dentists, dental hygienists, and mobile dental vans, to visit their programs several times a year to provide oral health services to Head Start children. During telephone interviews, a third of the grantees (37 percent) reported that these service delivery strategies helped them increase the number of children receiving preventive services.

Outreach to Dental Providers Resulted in More Providers Willing to Serve Head Start Families. For many grantees (71 percent), the OHI was an opportunity to designate more staff time and resources to networking with dental providers and educating them about the needs of Head Start families. In turn, more than a quarter of grantees (27 percent) reported that additional providers in their communities were willing to treat Head Start families.

Grantees Helped Families Establish Dental Homes. Many grantees described the OHI as an opportunity to help more families establish dental homes for their children. Staff described the long-term impact of helping families establish a relationship with a dental provider who can continue to provide care even after the child leaves Head Start. The OHI funding often enabled grantees to devote more staff time to identifying dentists willing to

accept Head Start families. A few grantees (4 percent) described connecting families with dental homes as an important early implementation success of the OHI.

Programs Developed Models of Service Delivery Tailored to the Needs of Their Communities. The strategies used to improve access to dental services varied across grantees. Decisions about which models or approaches to implement were influenced by community factors, such as the accessibility of community dental providers, availability of transportation, the dental qualifications of OHI staff, and the characteristics of the children and families served, including families cultural backgrounds and primary languages. Some provided on-site dental services, such as arranging for dental hygienists to conduct screenings and fluoride varnish applications several times throughout the program year, as a means of overcoming barriers of access or limited transportation. Other grantees used this on-site approach so that they could provide a positive dental experience in a familiar environment; for many children, this was their first experience with a dental provider. In those communities in which dental professionals were available, grantees partnered with those community providers or networks of providers willing to serve Head Start families. These grantees often reported using the connections with providers as a means of increasing access for both Head Start children and other family members. Grantees also reported referring families to service providers that met their specific needs. For example, grantees attempted to refer families that spoke Spanish to dental providers that were bilingual or had bilingual staff.

Expanding Education and Oral Health Awareness Among Families

Two-thirds of the grantees (67 percent) reported offering more oral health education for children, parents, and staff as an important early success of the OHI. Grantees reported providing more education for children on oral health in classrooms and during home visits than they did before implementing the OHI. Staff also reported offering more education on oral health for parents at workshops and parent meetings and through materials and newsletters distributed to families. Finally, grantees offered more training to staff. This section discusses programs' successes in providing oral health education and increasing awareness about its importance.

Grantees Offered More Opportunities for Children to Learn About the Importance of Oral Health Care. Nearly a fifth of grantees (17 percent) described offering more education to children about the importance of oral health and oral hygiene by integrating oral health messages into daily classroom activities and specially planned lessons on oral health. Some of these grantees reported adopting specific oral health curricula or drawing on other oral health education materials. During telephone interviews, staff reported that this education made children more aware of oral health and what to expect during visits to the dentist. A few grantees reported that dental providers told them children appeared more at ease during dental appointments because they were informed about what to expect.

Families Received More Education About Oral Health. Staff reported expanding oral health education for parents and other family members through new workshops and

training events, as well as by introducing oral health topics during parent meetings and home visits. More than half of the grantees (54 percent) described these expanded educational opportunities as an implementation success of the OHI. Grantees used these opportunities to inform parents about the importance of oral health, address parents' fears related to seeking dental care, and inform them about available community resources.

Grantees Developed Approaches to Education and Educational Materials and Messages to Address the Specific Needs of Enrolled Families. Many programs tailored materials to be more accessible to families, particularly immigrant and migrant families. For example, grantees purchased or accessed materials at appropriate reading levels for parents. They also identified oral health resources available in multiple languages or translated materials into the primary languages spoken by the families they served. Grantees offered education through a variety of methods, including home visits; parent meetings; training events or workshops; and materials, such as newsletters and pamphlets, sent home. As a result, grantees reported being able to reach more families.

Partnership Building

Partnership building was identified as a major accomplishment by nearly half of the grantees (42 percent). Almost all of these new or enhanced partnerships were with dental providers, which grantees believed were instrumental to OHI implementation. Grantees also built partnerships with advocacy groups, oral health coalitions, and other community groups aimed at increasing awareness and building frameworks for sustainability.

Grantees Expanded Their Networks of Dental Providers Willing to Serve Head Start Families. Thirty-eight percent of grantees described these expanded networks of providers as key to implementation of the OHI. As described in Chapter II, some grantees relied on a few partnerships established with individual providers, while others developed larger networks of providers who were willing to accept referrals and provide treatment to Head Start children. Grantees reported identifying providers willing to provide services to young children, accept Medicaid, and provide services at reduced rates or on a pro bono basis. These partnerships were described as particularly important by grantees in rural areas, where there were typically fewer dental providers.

Dental and Medical Providers Received Education About the Oral Health Needs of Low-Income Children. Grantees educated providers about the dental needs of the Head Start population, considered at high risk for developing dental caries. Grantees reported conducting informal information sessions for providers during outreach efforts and at community events. Others joined coalitions and other programs designed to educate providers, and some participated in statewide conferences or policy groups. Overall, 13 percent of grantees described presenting education to providers as an early implementation success.

Grantees Fostered Community Involvement in the OHI. Some grantees identified engagement with a range of community stakeholders, such as health departments and local oral health coalitions, as an early success of the OHI. These grantees developed program

goals that were community focused and conducted education, training, and advocacy targeting community members. During telephone interviews, staff described broader awareness of oral health issues in the community as an important step in increasing the likelihood that oral health activities would be sustained once grant funding ended.

Staff Engagement

More than a fifth of grantees (21 percent) mentioned staff engagement as an important success, because implementation of the OHI activities was enhanced by a high degree of staff buy-in and commitment. Grantees reported that their staff members were more receptive to implementing activities as their knowledge of oral health improved and they were better equipped to engage parents and community members on the topic. In addition, this increased knowledge enabled staff members to improve their own dental hygiene and oral health habits.

CHALLENGES

Grantees shared a number of challenges that affected their ability to implement the 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.

Securing Treatment for Families

While some grantees reported early successes in improving access to dental care, almost 67 percent of grantees reported that they continued to experience challenges to securing treatment for Head Start children and families. The main obstacles to care included shortages of dental care providers, difficulty paying for services (especially for the uninsured), and a lack of transportation to dental appointments.

Grantees Faced Challenges Finding Dentists Willing to Serve Head Start Families. During telephone interviews, the greatest challenge reported for most grantees was securing dental treatment for the OHI enrollees, especially Early Head Start children and pregnant women. This problem resulted from (1) shortages of dental care providers in grantee communities, (reported by 58 percent of grantees) (2) providers who were reluctant to accept Medicaid or other forms of public insurance, and (3) providers who were unwilling to treat young children. This challenge was even greater for children requiring specialized dental services, because many dentists were not trained to handle children with physical and behavioral challenges.

Paying for Needed Dental Services Proved to Be More Expensive Than Many Grantees Had Anticipated. Grantees reported paying for services when they were unable to locate a dentist who accepted Medicaid, and to cover the cost of services for children that were uninsured. Grantees typically relied on Head Start program funds and/or OHI funds to pay for services. Fifteen percent of grantees reported the high cost of these services made it difficult for them to assist all families needing care. Grantees that were attempting to meet

the treatment needs of Head Start families underestimated the costs of providing treatment to an adult population that often needed extensive restorative dental work resulting from years of untreated dental disease (reported by 8 percent of grantees).

Despite Grantee Efforts, Limited Transportation and Other Barriers Impeded Access to Care. In some communities, families depended on unreliable transportation or had to travel substantial distances to visit a dentist who accepted Medicaid, which sometimes made it difficult for families to keep their appointments. Ongoing challenges associated with transportation were reported by 21 percent of grantees. Some grantees (10 percent) reported the additional challenge of arranging dental care for families that required translation during appointments and of finding culturally sensitive providers to work with immigrant families that may have had no prior experience receiving dental care.

Parental Engagement

A third of grantees reported struggling to engage parents in educational opportunities and in following up with needed treatment for children. During telephone interviews, some grantee staff said that some parents were resistant to learning new information about oral health. Others faced challenges getting parents to participate in educational sessions, and still others struggled to get parents to make and keep dental appointments once a referral had been made. Grantees acknowledged that families had other priorities, including finding and sustaining work and child care, which made it challenging to engage them.

Staff Engagement

Some grantees (13 percent) also discussed the staff-related challenges that have affected implementation of grant activities. Some grantees reported having difficulty finding appropriately skilled individuals to fill OHI positions and problems with staff turnover in key positions. More often, grantees discussed difficulty achieving staff buy-in and experiencing time management issues. A number of grantees reported underestimating the amount of staff time required to complete the OHI activities, including coordination of day-to-day logistics and data entry.

STRATEGIES GRANTEES DEVELOPED TO OVERCOME CHALLENGES

To overcome the challenges associated with securing treatment for families and engaging parents and staff, grantees reported developing strategies and approaches that helped them overcome or at least lessen the impact of these obstacles.

As described above, the most common challenges reported by grantees involved difficulties securing treatments for families. To overcome these difficulties, grantees described three main strategies they developed: (1) recruiting providers to participate in the OHI in various capacities; (2) providing support services for families to make services more accessible; and (3) paying for or securing payment for dental services for children and families. Many grantees tried to overcome limited access to care by building a network of dentists willing to serve Head Start families. Grantees reported encouraging dentists who

were reluctant to accept patients with Medicaid to serve a small number of Head Start families by offering to provide support services to families to ensure that they would keep appointments and follow-up with needed treatment. Other grantees reported recruiting dentists to provide treatment during specific dental events, such as on-site dental clinics and health fairs, throughout the year. To help make services more accessible to families and to encourage families to keep appointments and secure follow-up treatment for children, grantees sometimes paid for transportation or transported families to their appointments, provided translation services during appointments, and accompanied families to appointments. When some grantees were unable to locate dentists who accepted Medicaid, they reported trying to identify providers willing to treat the OHI enrollees at no cost or at reduced rates. This type of arrangement was especially helpful to grantees that enrolled immigrant children and others without insurance coverage. When these arrangements were not available, grantees relied on Head Start program funds and/or OHI funds to pay for services.

Grantees also reported challenges associated with engaging parents and staff in the oral health initiative. To address these challenges some grantees worked to improve the educational materials they provided to parents. They also reported investing more time in working individually with families to tailor oral health education messages to their beliefs and to address their specific barriers to accessing services. To engage staff, grantees provided training on oral health and provided teachers with resources and materials to encourage them to relay educational messages to children about the importance of oral health. Grantees also reported challenges associated with staffing, due to limited staff resources to carry out the activities and services they planned to provide through the OHI. In response to these challenges, grantees involved more Head Start staff, such as family service workers, in the OHI to provide education to parents and to track services for families.

NEED FOR ADDITIONAL SUPPORT

During telephone interviews, grantees reported on additional support, training, and technical assistance that would enhance the future implementation of the OHI. About half of grantees expressed an interest in receiving additional support through increased collaboration among the OHI grantees, additional guidance from the Office of Head Start, or added training and technical assistance.

Grantees Wanted More Opportunities to Exchange Information with Other OHI Grantees. Almost a quarter of grantees expressed a desire for more opportunities to exchange information with other OHI grantees. These grantees believed that discussing implementation experiences with other grantees that are addressing similar challenges could enhance the OHI implementation. In particular, grantees expressed interest in learning about other OHI grantees' approaches to service delivery, staffing, engaging families, recruiting dental providers, managing data, and tracking services.

Grantees Asked for Clearer Guidance from the Office of Head Start. Grantees thought they could benefit from additional guidance or training on Head Start Program

Performance Standards related to oral health, specifically guidance on definitions of dental exams and dental homes.

Grantees Expressed a Need for Additional Training and Technical Assistance. In addition to resources and information, the OHI grantees also indicated that targeted training and technical assistance were needed in various areas, including service delivery, curriculum development, and billing and reimbursement issues. In addition, grantees requested additional information related to oral health during pregnancy that addresses the risks of untreated dental disease to both the pregnant woman and her child. Some grantees requested guidance on oral health curricula with an explanation of the resources and staff training necessary to implement them.

NEXT STEPS

In Year Two of the OHI evaluation, MPR and Altarum will conduct site visits to 16 grantees in fall 2007 and continue collecting data through the record-keeping system. The selection of grantees, as described in Chapter IV, will be based on the results of the RE-AIM analysis. Site visits will focus on identifying promising practices in each of the RE-AIM dimensions, exploring the rationale for grantees' approaches to service delivery, and understanding the factors that influenced implementation of the OHI at the selected sites. Site visits will last one to two days and will be conducted by members of the evaluation team familiar with the OHI program and grantee characteristics. During the site visit, the evaluator will observe OHI activities, interview key staff and partners involved in implementation, and conduct focus groups with parents. 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 evaluation team will prepare a final report (currently scheduled for March 2008) 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 examine the potential for replication in other Head Start settings.

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APPENDIX A

TELEPHONE INTERVIEW PROTOCOL

Head Start Oral Health Initiative
Director Telephone Interview Protocol

INTRODUCTION (2 minutes)

My name is _____ and I work for [MATHEMATICA POLICY RESEARCH/HEALTH SYSTEMS RESEARCH], an independent research firm. As you know, we are conducting a study for the Administration on Children and Families about Head Start agencies' experiences implementing the Head Start Oral Health Initiative. Findings from the study will be helpful to other Head Start agencies implementing similar initiatives. Thank you for agreeing to participate in this telephone interview.

I would like you to feel comfortable giving your opinions and impressions. The information we gather will be used to write a report for the Administration for Children and Families about programs' experiences implementing the Head Start Oral Health Initiative, including successes, challenges, and lessons learned by grantees. Our report will describe the experiences and viewpoints expressed by staff across grantees, but specific comments will not be attributed to specific individuals or programs. No one will be quoted by name. We will also use the information to create a profile for your site, and we will give you an opportunity to review and comment on a draft version of the profile before we finalize it.

I need to cover a number of topics during the interview. At times I may need to move our conversation along to make sure we have enough time to cover all of the topics within 90 minutes.

Do you have any questions before we get started?

About You

To begin, I'd like to learn about your role in the Oral Health Initiative.

1. What is your official job title? What are your primary responsibilities?
2. How long have you worked for [GRANTEE]?
3. How long have you held your current position? What other positions have you held within the agency?

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GRANTEE CHARACTERISTICS (5 minutes)

Now I'd like to confirm some information from your agency's Oral Health Initiative proposal. This information was included in a letter we sent you about scheduling this interview.

4. Has any of the information listed in the letter changed? If so, what has changed? (PROMPTS ONLY IF NEEDED: grantee contact information, programs operated by grantees, service options)

5. What are the main programs (other than Head Start) that your agency operates/services you provide?

6. What is the size of your organization? How many families does your agency serve annually? Approximately how many staff do you have? How many Head Start centers do you operate? What is your Head Start program's operating schedule?

7. How long has your agency provided services in [COMMUNITY]? How long has your agency operated the Head Start, Early Head Start, and/or Migrant/Seasonal Head Start program(s)?

COMMUNITY AND FAMILY CHARACTERISTICS (10 minutes)

Let's talk about your community and the characteristics of families and children targeted for the Oral Health Initiative.

8. What is your Head Start/Early Head Start/Migrant Head Start program's geographic service area? Is it primarily urban, rural, suburban, or a mix? Are you operating the Oral Health Initiative in the entire service area, or only a portion of it? If so, what part and why?

PROBE:

- If implementing in multiple locations, does implementation differ across sites, and if so, how?

9. Can you please describe the Head Start families you are serving through the Oral Health Initiative?

PROBES:

- What languages do they speak?

- What are their ethnic and cultural backgrounds?

10. *Briefly, can you tell me about the availability of other services for children and families, such as medical care, transportation, and social services?*

11. What are families' main barriers to accessing oral health care? What is the availability of oral health care providers in the community?

PROBES:

- Availability of general dentists? Pediatric dentists? Other providers?
- Do oral health care providers in your community accept Medicaid?
- Are they willing to serve young children?
- Are providers available who speak the languages spoken by Head Start families?

12. In general, what are families' cultural norms and practices related to oral health care? Oral health care beliefs and practices for young children?

PROBE ONLY IF NEEDED:

- What is the prevalence of practices that threaten oral health, such as putting babies to bed with bottles, using pacifiers past age 3, giving children sweetened drinks, other?

GRANTEE GOALS, OBJECTIVES, AND KEY COMPONENTS (5 minutes)

At this point, I'd like to begin talking specifically about the Health Start Oral Health Initiative. To start, let's talk about how your agency designed the initiative and decided which services to offer.

13. Why did you decide to apply for an Oral Health Initiative grant?
14. What are your program's goals and objectives for the Oral Health Initiative?

PROBES:

- Have these goals and objectives changed since you began implementation?
- If so, how have they changed and why?

15. What are the key components of your Oral Health Initiative?
16. How many children are you planning to serve, and what ages? Will your program provide services to pregnant women? Other family members? CONFIRM FROM PROPOSAL.

PROBE:

- How did you decide which children and families to target for Oral Health Initiative services?

17. What is your annual budget for the Oral Health Initiative? CONFIRM FROM PROPOSAL. Approximately what proportion of funds do you spend on staff salaries, direct purchase of dental services, oral hygiene supplies, and other types of expenses?

PROBES:

- When did you receive your grant?
- When did you begin implementing OHI?

DESIGN PROCESS (10 minutes)

18. How did your program identify goals and objectives for the Oral Health Initiative and decide which services to provide?
19. Who was involved in designing the Oral Health Initiative?

PROBES:

- Was your health advisory committee, policy council, or another advisory body involved in the planning process? If so, who are the members of this committee and what is its role?
- Are there any dental representatives on your health advisory committee?
- Did you work with community oral health coalitions or other community groups in planning your grant?
- Regional office and/or TA staff, regional oral health consultants?

20. What other resources did you use for designing the initiative?

PROBE:

- For example, did you draw on any state plans related to oral health (state oral health plans, plans resulting from a Head Start oral health forum)?

21. Did you do a community needs assessment or use data from one that was already done? If so, how did you use the needs assessment data?
22. In designing the Oral Health Initiative, did you build on previously existing oral health activities in your program, or did you design a new approach?

PROBES:

- If you built on previous activities, please tell me about these activities.
- If you designed a new approach, how did you design it?

STAFFING STRUCTURE AND TRAINING (10 minutes)

Now I'd like to learn about how your Oral Health Initiative is staffed.

23. Approximately how much time do you spend on the initiative on a weekly or monthly basis?

24. How did you decide how to staff the initiative? Did you hire new staff, reassign existing staff, or both?

PROBE:

- Why did you take this approach?

25. How many staff work on the oral health initiative? What are their job titles and main duties related to the initiative?

PROBE:

- What are their qualifications?

26. Are all planned positions for the Oral Health Initiative filled? If not, why not, and what plans do you have to fill the positions?

PROBE:

- If positions are filled, how soon after receiving Oral Health Initiative funding were you able to fill them?

27. How well is the staffing structure for the Oral Health Initiative working out so far?

PROBE:

1. *Do you have sufficient staff resources to operate the initiative as planned?*

28. Did staff receive any special training in preparation for their work on the Oral Health Initiative? If so, which staff received training? Please describe the training they received.

PROBES:

- Did they receive training on how to conduct visual inspection of teeth and mouth to identify children who need follow up care?

- How to provide oral health education to parents and children?

- Cultural issues related to oral health?

- Other topics?

29. Have staff received any training for the initiative since the initiative started? Do you have future training plans for Oral Health Initiative staff? IF NOT ALREADY MENTIONED IN # 29 ABOVE

PROBES:

- Any plans to provide training on conducting visual inspection of teeth and mouth to identify children who need follow up care?
- How to provide oral health education to parents and children?
- Cultural issues related to oral health?
- Other topics?

30. Do you have plans in place to train new staff hired in the future due to turnover in Oral Health Initiative staff? Please describe.

31. Has your program received any training or technical assistance from the Head Start T/TA system, the regional oral health consultants, or other sources to support your work on the Oral Health Initiative?

PROBES:

- Have your staff attended any regional cluster trainings on oral health?
- If so, was the training helpful?

COMMUNITY PARTNERS (10 minutes)

32. How many and what types of organizations have you partnered with to provide services through the Oral Health Initiative?

PROBES:

- What was your rationale for recruiting them?
- Are there other partners that you still need to pursue?
- If so, please describe them and their potential role in the Oral Health Initiative?

33. What strategies did you use to identify and reach out to these partners?

34. Do you have formal partnership agreements with these partners?

PROBE:

- If so, what is included in the agreements?

35. What are the partners' roles in the Oral Health Initiative? What services do they provide to Head Start children and families?

36. Have you provided any training to community partners or other oral health care providers?

PROBES:

- To improve their ability to address oral health issues for young children?
- To improve their cultural competence for working with Head Start families?
- How helpful do you think this training was for community partners?
- Did the training increase their receptivity to serving Head Start children and families?

37. How are the partnerships going so far?

PROBE:

- What has worked well about the partnerships, and what has been challenging?

SERVICE DELIVERY (25 minutes)

Now I'd like to learn about the services you provide to children and families through the Oral Health Initiative. I'll start with some questions about oral health risk assessments and exams, and then ask about clinical preventive and treatment services.

Risk Assessment and Clinical Services

38. Does your program conduct or arrange for routine oral health assessments using clinical or other means (such as clinical assessments, parent questionnaires, assessment of medical history, assessment of demographic risk factors) through the Oral Health Initiative? Who conducts these assessments (for example, dentists, dental hygienists, nurses, health coordinators, others)?

39. Does your program use a formal oral health risk assessment tool for the Oral Health Initiative that classifies children into risk categories?

PROBE:

- If so, which tools do you use and why did you select them?

40. How does your program use the results of the risk assessments?

PROBE:

- For example, are oral health care providers able to use the assessment results to make a diagnosis or development a treatment plan based on this assessment?

41. What types of other preventive services do you provide through the Oral Health Initiative? Who provides these services?

Reference: Services listed in the recordkeeping system	
Dental Screening	Topical fluoride treatment
Clinical exam	Other fluoride treatment
Cleaning	Xylitol wipes
Fluoride rinse	Dental sealants
Fluoride varnish treatment	Root planing and scaling (preventive)
Fluoride tablets prescribed	Anticipatory guidance

PROBES:

- For example, do you provide cleanings, sealants, fluoride treatments, or other preventive services?
- Which services are provided by your program and which are provided by partners?
- Where are the services provided?
- How are the costs of these services covered (for example, program grant funds, insurance reimbursement, donated by provider)?

42. What types of clinical treatment services do you provide through the Oral Health Initiative?

Reference: Services listed in the recordkeeping system	
Fillings (1-2)	Bridge/dental implant
Fillings (3 or more)	Root planing and scaling (therapeutic)
Extractions (1-2)	Treatment requiring hospitalization and/or sedation
Extractions (3 or more)	Other

PROBES:

- Which services are provided by your program and which are provided by partners?
- Where and by whom are the services provided? How are the costs of these services covered (for example, program grant funds, insurance reimbursement, donated by provider)?

43. Which services do you provide to other family members such as siblings, pregnant women, and other adults? Does this differ for different populations of children and families?

Services to Support Access to Dental Services

44. Do you have referral systems in place through the Oral Health Initiative for helping families access needed clinical services? If so, how do these work?

45. Do you keep track of treatment outcomes and needed follow up services through the Oral Health Initiative? If so, how do you do this?

46. Do you provide services through the Oral Health Initiative to help families access needed clinical services, such as help them make appointments, provide transportation, or provide translation services? If so, who provides these services?

47. What is your definition of a dental home? Does your program help families establish dental homes for their children? If so, how do you do this?

Reference: Definition from HS regulations
A dental home is a source of continuous, accessible, comprehensive, family-oriented, coordinated, compassionate, and culturally effective oral health care delivered and directed by a professional dentist (Oral Health. ACF-PI-HS-06-03. DHHS/ACF/OHS. 2006. English).

Oral Health Education

48. Do you provide education and skills-building activities to parents about oral health promotion as part of the Oral Health Initiative?

PROBES:

- If yes, please tell me about these services and the main educational messages you aim to deliver.

- Who provides this education?

- How and where are the educational messages delivered (for example, during parent meetings, home visits, or by distributing written materials)?

- Are parents instructed on how to do visual inspections of children's teeth using such techniques as "Lift the Lip"?

49. Do you provide education and skills-building activities through the Oral Health Initiative on oral health promotion specifically to pregnant women?

PROBES:

- If so, who provides this education, and where?

- Are the educational messages different from those provided to other Head Start parents? If so, how?

- What happens after the baby is born? How do the educational messages change?

50. Do you provide oral health education and skill building activities to children through the Oral Health Initiative?

PROBES:

- Who provides this education, and where is it provided?
- How are the educational messages delivered (for example, classroom activities, home visit)?

51. Do you use a curriculum to provide oral health education to children and families through the Oral Health Initiative? If so, what curriculum do you use?

PROBES:

- Why did you choose it?
- Have you made any adjustments to the curriculum? If so, why?
- What feedback have you received on the curriculum from teachers, other staff, and families?

52. Do you provide oral hygiene supplies to children and families through the Oral Health Initiative? If so, what types of supplies do you provide, and to whom?

PROBES:

- How do you provide them and how often?
- Do parents receive training on how to use the supplies?

53. To what extent have you tailored education and other non-clinical services to the needs and cultural norms of your target population for the Oral Health Initiative?

PROBE:

- Can you please provide some examples?

54. Have you taken steps to expand your Oral Health Initiative to the broader community?

PROBE:

- For example, have you participated in community health fairs or other community education events? Other Head Start programs?

EARLY IMPLEMENTATION EXPERIENCES (15 minutes)

I'd like to wrap up the call by hearing your views on the successes and challenges you've experienced implementing the initiative so far.

55. Is your funding for the initiative sufficient to implement it as planned? Do you have access to additional funding sources or other resources for operating the Oral Health Initiative? If so, what are these sources and which costs do they cover?

56. Have you applied to any other sources for additional funding to operate the Oral Health Initiative?

PROBES:

- If so, where is your application in the review process?
- How will you use the funds if you receive an award?

57. At this early stage, how much progress have you made toward meeting your goals and objectives for the Oral Health Initiative?

58. Since you began implementing the Oral Health Initiative, have you made changes to your original design? If so, what are the changes and why did you make them?

59. What have been your most important successes so far?

PROBE:

- What are you most proud of?

60. What are the most significant challenges your program has faced so far?

61. What strategies have you used to address these challenges? How well do you think these strategies are working?

62. Have you consulted with other Oral Health Initiative grantees about implementation challenges or other issues?

PROBES:

- If so, how did this happen—email, phone, facilitated by Head Start Oral Health Consultant?
- What issues did you discuss?

63. Is there anything more the Office of Head Start, the regional office, or the Head Start T/TA network could do to support your work on the Oral Health Initiative?

64. Is there anything else you would like to add before we end the discussion?

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Thank you again for participating in the interview. As a next step, our evaluation team will draft a profile of your program's Oral Health Initiative and send it to you for review by the late spring, most likely in May. These profiles will be included in an interim evaluation report scheduled for completion in summer 2007. We will use information from these interviews and the recordkeeping system to select 16 Oral Health Initiative grantees to participate in site visits in fall 2007. We will produce a final report for the evaluation in spring 2008.

APPENDIX B

RECORD-KEEPING SYSTEM DATA FIELDS

TABLE B.1. CHILD AND FAMILY CHARACTERISTICS SCREEN OF THE PROGRAM RECORD-KEEPING SYSTEM: DATA FIELDS AND RESPONSE CATEGORIES

Data field	Response Category	Response Type
Primary recipient	Child	Drop-down list
	Pregnant woman	
Child or woman's name	Open field	Open field
Identification number	6-digit number	System will generate
Child's date of birth	Open date field	Date field
Due date (if pregnant woman)	Open date field	Date field
Gender of child	Male	Drop-down list
	Female	
Ethnicity of the child	Hispanic or Latino	Check Box
	Not Hispanic or Latino	
Race/ethnicity of the child	American Indian or Alaska Native	Check boxes (all that apply)
	Asian	
	Black or African American	
	Native Hawaiian or other Pacific Islander	
	White	
Whether child/pregnant woman has dental insurance coverage	Yes	Check Box
	No	
If yes, type of coverage	Private insurance	Drop-down list
	Medicaid	
	SCHIP	
	Indian Health Services	
	Other	
Whether child/pregnant woman has ever had a dental exam	Yes	Check Box
	No	
If yes, date if known	Open date field (month/year)	Date field (month/year)
Program type	Early Head Start	Check boxes (all that apply)
	Head Start	
	Migrant/Seasonal Head Start	
	Center-based	
	Home-based	
	Other	
Head Start enrollment date	Open date field	Open date field
Oral Health Initiative enrollment date	Open date field	Open date field

TABLE B.1 *(continued)*

Data field	Response Category	Response Type
Exit date	Open date field	Date field
Primary caregiver's (parent) name[a]	Open field	Open field
Primary caregiver's date of birth	Open date field	Date field
Primary caregiver's gender	Male	Drop-down list
	Female	
Primary caregiver's ethnicity	Hispanic or Latino	Check Box
	Not Hispanic or Latino	
Primary caregiver's race/ethnicity	Asian	Check boxes (all that apply) Yes/No
	Black or African American	
	Native Hawaiian or other Pacific Islander	
	White	
Primary language spoken at home	English	Drop-down list
	Spanish	
	Arabic	
	Other	
If not English, how well primary caregiver speaks English	Very well	Drop-down list
	Well	
	Not well	
	Not at all	
Primary caregiver's relationship to the child	Parent or stepparent	Drop-down list
	Grandparent	
	Other relative	
	Other nonrelative	

[a]All data fields on primary caregiver (parent) characteristics are completed for pregnant women when they are the primary targets of the intervention.

TABLE B.2. COMMUNITY PARTNER SCREEN OF THE PROGRAM RECORDKEEPING SYSTEM: DATA FIELDS AND RESPONSE CATEGORIES

Data Field	Response Category	Response Type
Community partner name	Open field	Open field
Identification number	6-digit number	System will generate
TYPE OF PARTNER	General dentist	Drop-down list
	Pediatric dentist	
	Dental hygienist	
	Dentistry school	
	Dental hygiene school	
	Pediatrician	
	Family practitioner	
	OB/GYN	
	Nurse practitioner	
	WIC program or clinic	
	Public health department	
	Other clinic	
	Hospital	
	Part B or C	
	Other service provider	
	Other	
Formal partnership agreement	Yes	Check box
	No	
If yes, date of agreement	Open date field	Date field
Community partner prior to Oral Health Initiative	Yes	Check Box
	No	
Partnership end date	Open date field	Date field

TABLE B.3. SERVICES SCREEN OF THE PROGRAM RECORDKEEPING SYSTEM: DATA FIELDS AND RESPONSE CATEGORIES

Data Field	Response Category	Response Type
Name of child/pregnant women	Select from list	List
Identification number	6-digit number	System will insert
Date of service	Open date field	Date field
Type of service	Dental screening	Check Box (check all that apply)
	Clinical exam	
	Cleaning	
	Fluoride rinse	
	Fluoride varnish treatment	
	Fluoride tablets prescribed	
	Xylitol wipes	
	Root planing and scaling (preventive)	
	Anticipatory guidance	
	Oral health education	
	Fillings (1-2)	
	Fillings (2 or more)	
	Extractions (1-2)	
	Extractions (2 or more)	
	Steel crowns	
	Root canal	
	Bridge/dental implant	
	Root planning and scaling (therapeutic)	
	Treatment requiring hospitalization and/or sedation	
	Other	
Location of services	At grantee site	Drop-down list
	Service provider office	
	Hospital	
	At home	
	Mobile van or mobile clinic	
	Other location	
Type of service provider	Grantee staff—Dental hygienist	Drop-down list
	Grantee staff—Health specialist	
	Grantee staff—Other	
	Community partner	
	Other community provider	
If community partner, name of	Select from list	Drop-down list

TABLE B.3 *(continued)*

Data Field	Response Category	Response Type
partner		
Identification number	6-digit number	System will insert
If other community provider, type of provider	General dentist	Drop-down list
	Pediatric dentist	
	Dental hygienist	
	Dentistry school	
	Dental hygienist school	
	Pediatrician	
	Family practitioner	
	OB/GYN	
	Nurse practitioner	
	WIC program or clinic	
	Public health department	
	Other clinic	
	Hospital	
	Part B or C	
	Other service provider	
	Other	
Referred to service by grantee	Yes	Check box
	No	
Support services provided	Yes	Check box
	No	
If yes, type of service	Transportation	Drop-down box
	Helping making an appointment	
	Translation	
	Other	
If yes, service provider	Grantee staff—Dental hygienist	Drop-down box
	Grantee staff—Health specialist	
	Grantee staff—Other	
	Community partner	
	Other community provider	
If community partner, name of partner	Select from list	Drop-down list
Followup required	Yes	Check box
	No	
If yes, type of followup	Referral	Drop down list
	Appointment	
	Treatment	
	Counseling	
	Other	

TABLE B.3 *(continued)*

Data Field	Response Category	Response Type
If yes, followup action	Referral made	Drop down list
	Appointment pending	
	Followup competed	
If completed, date completed	Open date field	Date field
Dental home established	Open date field	Date field
Type of dental home	Community partner	Drop-down list
	Other community provider	
If community partner, select	Select from list	Drop-down list
If other provider, type	Private dental office	Drop-down list
	Community health center	
	Mobile van or mobile clinic	
	University dental clinic	
	Other	

TABLE B.4. DENTAL HOME SCREEN OF THE PROGRAM RECORDKEEPING SYSTEM: DATA FIELDS AND RESPONSE CATEGORIES

Data Field	Response Category	Response Type
Name of child/pregnant women	Select from list	List
Identification number	6-digit number	System will insert
Dental home established	Open date field	Date field
Type of dental home	Community partner	Drop-down list
	Other community provider	
If community partner, select	Select from list	Drop-down list
If other provider, type	Private dental office	Drop-down list
	Community health center	
	Mobile van or mobile clinic	
	University dental clinic	
	Other	

TABLE B.5. EDUCATION AND SUPPLIES SCREEN OF THE PROGRAM RECORDKEEPING SYSTEM: DATA FIELDS AND RESPONSE CATEGORIES

Data Field	Response Category	Response Type
Month/Year	Select from list	List
Parent education services provided in past month	Yes	Check box
	No	
Parent education workshop provided	Yes	Check box
	No	
If yes, number of workshops provided	Open field	Open field
If yes, total number of workshop attendees	Open field	Open field
Parent education provided during home visits	Yes	Check box
	No	
If yes, number of home visits with oral health education	Open field	Open field
Oral hygiene supplies provided to families in past month	Yes	Check box
	No	
If yes, total number of families who received supplies	Open field	Open field
If yes, types of supplies	Fluoride toothpaste	Check box (check all that apply)
	Toothbrush	
	Floss	
	Fluoride rinse	
	Xylitol gum	
	Xylitol wipes	
	Other supplies	
Educational materials and other materials provided to classrooms	Yes	Check box
	No	
Parent Education Provided Through Written Materials Sent Home with Children	Yes	Check box
	No	
Staff training provided on oral health education	Yes	Check box
	No	
If yes, total number of training attendees	Open field	Open field
Oral health education provided to children	Yes	Check box
	No	
If yes, location	Classroom	Check box (check all that apply)
	Home Visit	
	Other	
If classroom, number of classrooms	Open field	Open field

TABLE B.5 *(continued)*

Data Field	Response Category	Response Type
If home visits, number of home visits	Open field	Open field
Comments	Open field	Open field

APPENDIX C

RE-AIM TABLES

Table C.1. RE-AIM Analysis Overall Rankings

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Dimensions Above Median
AT	88	98	90	73	86	87	1	R, E, A, I, M
E	98	96	82	94	53	85	2	R, E, A, I, M
AF	94	82	98	84	63	84	3	R, E, A, I, M
AU	82	80	65	100	84	82	4	R, E, A, I, M
AN	65	67	78	96	98	81	5	R, E, A, I, M
AI	75	75	92	57	84	76	6	R, E, A, I, M
AK	100	100	31	86	49	73	7	R, E, I
X	63	92	55	61	90	72	8	R, E, A, I, M
AQ	90	80	98	39	33	68	9	R, E, A
T	57	71	37	88	88	68	9	R, E, I, M
AP	96	86	33	76	35	66	11	R, E, I
U	92	90	51	29	61	65	12	R, E, M
L	53	84	78	2	100	64	13	R, E, A, M
AG	26	39	90	92	69	63	14	A, I, M
AB	69	37	49	61	92	62	15	R, I, M
AO	76	49	98	37	41	60	16	R, A
AV	43	73	71	35	80	60	16	E, A, M
AM	59	55	73	41	71	60	16	R, E, A, M
AW	41	22	80	98	57	60	16	A, I, M
F	80	51	65	55	41	58	20	R, A, I
O	45	65	55	82	29	55	21	E, A, I
B	73	94	14	67	26	55	22	R, E, I
W	4	22	78	71	94	54	23	A, I, M
V	73	69	61	22	43	53	24	R, E, A
Q	41	18	57	71	76	53	24	A, I, M
AE	69	76	24	43	49	52	26	R, E
AR	31	55	84	65	24	52	26	E, A, I
AA	12	63	100	26	45	49	28	E, A

Table C.1 *(continued)*

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Dimensions Above Median
C	86	57	41	33	27	49	28	R, E
AY	51	61	24	92	12	48	30	E, I
I	57	47	27	53	55	48	30	R, I, M
AH	31	12	49	49	98	48	30	M
D	33	14	71	45	73	47	33	A, M
R	22	26	37	75	75	47	33	I, M
AD	18	90	10	80	33	46	35	E, I
P	51	31	43	8	78	42	36	M
A	10	59	4	78	59	42	36	E, A, M
AX	84	43	45	6	18	39	38	R
AS	26	41	29	29	67	38	39	M
H	78	35	61	6	12	38	39	R, I
S	41	27	24	47	53	38	39	M
K	35	16	71	51	14	37	42	A
AC	61	31	8	14	67	36	43	R, M
Y	8	24	41	63	16	30	44	I
AJ	16	10	71	33	6	27	45	A
AL	6	10	90	24	2	26	46	A
M	4	45	16	18	41	25	47	
G	47	10	12	12	20	20	48	
N	20	33	24	18	22	23	49	
J	31	10	26	10	8	17	50	
Z	16	10	6	20	6	11	51	

Note: R = Reach; E = Effectiveness; A = Adoption; I = Implementation; M = Maintenance.

[a]Grantee IDs are unique identifiers assigned at random and do not represent any specific characteristics of the grantees.

Table C.2. Grantees Offering Head Start Services Only

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Subgroup Ranking	Dimensions Above Median
AT	88	98	90	73	86	87	1	1	R, E, A, I, M
E	98	96	82	94	53	85	2	2	R, E, A, I, M
AN	65	67	78	96	98	81	5	3	R, E, A, I, M
AK	100	100	31	86	49	73	7	4	R, E, I
T	57	71	37	88	88	68	9	5	R, E, I, M
L	53	84	78	2	100	64	13	6	R, E, A, M
AM	59	55	73	41	71	60	18	7	R, E, A, M
AE	69	76	24	43	49	52	26	8	R, E
AR	31	55	84	65	24	52	26	8	E, A, I
AH	31	12	49	49	98	48	30	10	M
AX	84	43	45	6	18	39	38	11	R
AS	26	41	29	29	67	38	39	12	M
AJ	16	10	71	33	6	27	45	13	A

Note: R = Reach; E = Effectiveness; A = Adoption; I = Implementation; M = Maintenance.

[a]Grantee IDs are unique identifiers assigned at random and do not represent any specific characteristics of the grantees.

Table C.3. Grantees Offering Early Head Start Services Only

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Subgroup Ranking	Dimensions Above Median
AF	94	82	98	84	63	84	3	1	R, E, A, I, M
B	73	94	14	67	26	55	22	2	R, E, I
G	47	10	12	12	20	20	48	3	

Note: R = Reach; E = Effectiveness; A = Adoption; I = Implementation; M = Maintenance.

[a]Grantee IDs are unique identifiers assigned at random and do not represent any specific characteristics of the grantees.

Table C.4. Grantees Offering Both Head Start And Early Head Start Services

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Subgroup Ranking	Dimensions Above Median
AU	82	80	65	100	84	82	4	1	R, E, A, I, M
AI	75	75	92	57	84	76	6	2	R, E, A, I, M
X	63	92	55	61	90	72	8	3	R, E, A, I, M
AQ	90	80	98	39	33	68	9	4	R, E, A
AP	96	86	33	76	35	66	11	5	R, E, I
U	92	90	51	29	61	65	12	6	R, E, M
AG	26	39	90	92	69	63	14	7	A, I, M
AB	69	37	49	61	92	62	15	8	R, I, M
AO	76	49	98	37	41	60	16	9	R, A
AV	43	73	71	35	80	60	16	9	E, A, M
AW	41	22	80	98	57	60	16	9	A, I, M
F	80	51	65	55	41	58	20	12	R, A, I
O	45	65	55	82	29	55	21	13	E, A, I
W	4	22	78	71	94	54	23	14	A, I, M
V	73	69	61	22	43	53	24	15	R, E, A
Q	41	18	57	71	76	53	24	15	A, I, M
AA	12	63	100	26	45	49	28	17	E, A
C	86	57	41	33	27	49	28	17	R, E
AY	51	61	24	92	12	48	30	19	E, I
I	57	47	27	53	55	48	30	19	R, I, M
D	33	14	71	45	73	47	33	21	A, M
R	22	26	37	75	75	47	33	21	I, M

Table C.4 (continued)

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Subgroup Ranking	Dimensions Above Median
AD	18	90	10	80	33	46	35	23	E, I
P	51	31	43	8	78	42	36	24	M
A	10	59	4	78	59	42	36	24	E, A, M
S	41	27	24	47	53	38	39	26	M
K	35	16	71	51	14	37	42	27	A
AC	61	31	8	14	67	36	43	28	R, M
Y	8	24	41	63	16	30	44	29	I
J	31	10	26	10	8	17	50	30	
Z	16	10	6	20	6	11	51	31	

Note: R = Reach; E = Effectiveness; A = Adoption; I = Implementation; M = Maintenance.

[a]Grantee IDs are unique identifiers assigned at random and do not represent any specific characteristics of the grantees.

Table C.5. Grantees with Primarily Rural Service Areas

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Subgroup Ranking	Dimensions Above Median
AT	88	98	90	73	86	87	1	1	R, E, A, I, M
AF	94	82	98	84	63	84	3	2	R, E, A, I, M
AU	82	80	65	100	84	82	4	3	R, E, A, I, M
AK	100	100	31	86	49	73	7	4	R, E, I
T	57	71	37	88	88	68	9	5	R, E, I, M
AP	96	86	33	76	35	66	11	6	R, E, I
AG	26	39	90	92	69	63	14	7	A, I, M
AB	69	37	49	61	92	62	15	8	R, I, M
AO	76	49	98	37	41	60	16	9	R, A
AM	59	55	73	41	71	60	16	9	R, E, A, M
AW	41	22	80	98	57	60	16	9	A, I, M
W	4	22	78	71	94	54	23	12	A, I, M
V	73	69	61	22	43	53	24	13	R, E, A
AE	69	76	24	43	49	52	26	14	R, E
AY	51	61	24	92	12	48	30	15	E, I
AH	31	12	49	49	98	48	30	15	M
D	33	14	71	45	73	47	33	17	A, M
R	22	26	37	75	75	47	33	17	I, M
AD	18	90	10	80	33	46	35	19	E, I
AX	84	43	45	6	18	39	38	20	R
AS	26	41	29	29	67	38	39	21	M
H	78	35	61	6	12	38	39	21	R, I
M	4	45	16	18	41	25	47	23	

Table C.5 (continued)

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Subgroup Ranking	Dimensions Above Median
N	20	33	24	18	22	23	49	24	
Z	16	10	6	20	6	11	51	25	

Note: R = Reach; E = Effectiveness; A = Adoption; I = Implementation; M = Maintenance.

Table C.6 Migrant/Seasonal Head Start Program Branch (Region XII) Grantees

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Subgroup Ranking	Dimensions Above Median
S	41	27	24	47	53	38	39	1	M
M	4	45	16	18	41	25	47	2	
N	20	33	24	18	22	23	49	3	

Note: R = Reach; E = Effectiveness; A = Adoption; I = Implementation; M = Maintenance.

[a]Grantee IDs are unique identifiers assigned at random and do not represent any specific characteristics of the grantees.

Table C.7. American Indian/Alaska Native Program Branch (Region XI) Grantees

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Subgroup Ranking	Dimensions Above Median
AE	69	76	24	43	49	52	26	1	R, E
AH	31	12	49	49	98	48	30	2	M
AX	84	43	45	6	18	39	38	3	R
H	78	35	61	6	12	38	39	4	R, I

Note:R = Reach; E = Effectiveness; A = Adoption; I = Implementation; M = Maintenance.

[a]Grantee IDs are unique identifiers assigned at random and do not represent any specific characteristics of the grantees.

Table C.8. Grantees At Which Less Than 90 Percent Of Children Have Insurance Coverage

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Subgroup Ranking	Dimensions Above Median
AT	88	98	90	73	86	87	1	1	R, E, A, I, M
AK	100	100	31	86	49	73	7	2	R, E, I
AQ	90	80	98	39	33	68	9	3	R, E, A
T	57	71	37	88	88	68	9	3	R, E, I, M
AV	43	73	71	35	80	60	16	5	E, A, M
AW	41	22	80	98	57	60	16	5	A, I, M
O	45	65	55	82	29	55	21	7	E, A, I
W	4	22	78	71	94	54	23	8	A, I, M
V	73	69	61	22	43	53	24	9	R, E, A
AE	69	76	24	43	49	52	26	10	R, E
AA	12	63	100	26	45	49	28	11	E, A
C	86	57	41	33	27	49	28	11	R, E
AY	51	61	24	92	12	48	30	13	E, I
R	22	26	37	75	75	47	34	14	I, M
P	51	31	43	8	78	42	36	15	M
AS	26	41	29	29	67	38	39	16	M
H	78	35	61	6	12	38	39	16	R, I
S	41	27	24	47	53	38	39	16	M
AC	61	31	8	14	67	36	43	19	R, M
Y	8	24	41	63	16	30	44	20	I
AL	6	10	90	24	2	26	46	21	A
M	4	45	16	18	41	25	47	22	
G	47	10	12	12	20	20	48	23	

Table C.8 (continued)

Grantee ID	Reach	Effectiveness	Adoption	Implementation	Maintenance	RE-AIM Composite Score	Overall Ranking	Subgroup Ranking	Dimensions Above Median
N	20	33	24	18	22	23	49	24	
Z	16	10	6	20	6	11	51	25	

Note: R = Reach; E = Effectiveness; A = Adoption; I = Implementation; M = Maintenance.

[a]Grantee IDs are unique identifiers assigned at random and do not represent any specific characteristics of the grantees.