Learning As We Go: A First Snapshot of Early Head Start Programs, Staff, Families, and Children

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Learning As We Go: A First Snapshot of Early Head Start Programs, Staff, Families, and Children

Volume I: First Report

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This report is the first of a series that will document the progress of children and their families through Early Head Start and provide insight about programs and their staff. We owe a huge debt of gratitude to the 89 program directors who agreed to participate in a multiyear study that included a not insignificant amount of work for them and for their staff members. On-site coordinators at each program had ongoing contact with Mathematica staff, helped to recruit families into the study, and then scheduled visits and facilitated data collection. Staff members completed interviews and answered questions about study families; program directors themselves were interviewed and made time in the program day for our work. We are grateful for your assistance and hope the findings are useful to you. We also recognize the essential contributions of the parents of study children who patiently participated in telephone interviews that ran far longer than we anticipated. We look forward to meeting you and your children in person in future years.

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EXECUTIVE SUMMARY

The Early Head Start Family and Child Experiences Survey, or Baby FACES, is the latest contribution to an ongoing research effort that began with the inception of the Early Head Start program. The Office of Planning, Research & Evaluation (OPRE) in the Administration for Children and Families (ACF) of the U.S. Department of Health and Human Services contracted with Mathematica and its partners to implement a study that builds on the body of Early Head Start research and provides new information to guide program implementation and improvement. The study comes at an important period in the Early Head Start program, beginning the year before a major expansion that increased the size of the program by nearly 50,000 children in 2009–2010 (ACF 2010).

Baby FACES is a longitudinal descriptive study of Early Head Start that captures family- and child-level information in addition to program-level characteristics. From a nationally representative sample of 89 programs, we enrolled 976 parents of children who were in two age cohorts in spring 2009: 194 newborns, which includes pregnant women and children up to 8 weeks old, and 782 1-year-olds, which includes children aged 10 to 15 months. We gathered detailed information from program directors on program operations, services, management, and characteristics of staff and enrolled families. In addition, we gathered targeted information on participant families from parent interviews; Staff-Child Reports (SCRs) prepared by study children's teachers or home visitors; individual interviews with those staff members; and observations of study children's classrooms and home visits. When the children are 2 and 3 years old, we will conduct direct child assessments to measure cognitive and language development and record their interactions with their parents. In addition, in the future we will conduct exit interviews with families who drop out of the program before their child turns 3 to learn why they leave and where they go, and with families who stay through age 3 to learn about transitions out of Early Head Start and the post-Early Head Start services these families receive.

Research questions for Baby FACES address four aims: (1) describing Early Head Start and program services and staff, (2) describing the population served by the program, (3) relating program services to child and family outcomes, and (4) assessing the properties of measures used in the study. Because this is the first year of a multiyear effort, some questions will only be answered in later years when additional data have been obtained. Questions specifically addressed by this report on the spring 2009 findings include the following:

- What is Early Head Start? What are the program models employed, staff qualifications, and other important program features and characteristics?
- What specific services are delivered to families and how are these services individualized to meet the needs of each child and family?
- What are the characteristics of the families Early Head Start serves in terms of their demographic, household, and family characteristics; their needs; and their risk factors?
- What are the characteristics of special populations and subgroups in the programs and what services are provided to them? Examples of subgroups include children with identified special needs, high-risk families, mothers with depression, dual language learners (DLLs), and mothers pregnant at program enrollment.

- What are the psychometric properties (including concurrent and predictive validity) of our measures? What have we learned from fielding these instruments that can help inform their use at a local program level?

We will address longitudinal questions about how children and families are faring over time and what associations there might be between service use and quality and outcomes in later reports. Table 1 provides an overview of the measures used in the study; findings on the properties of these measures are presented in Volume II, Appendix C. We follow the table with a summary of key findings from the spring 2009 research.

Table 1. Key Measures Used in This Report

Program Model and Implementation: Chapter 3	
Program Approach: Program Level	Program approach at the program level is based on director responses to questions regarding the types of services their programs offer (center-based, home-based, or combination) and, separately for each service option, the frequency of services offered.
Program Approach: Family Level	Program approach at the family level is based on information collected during interviews with parents. Parents were asked whether they receive center-based services, home-based services, family child care services, or another type of service.[a] Parents also indicated the frequency of center attendance and home visits received.
Program Implementation	Program implementation was collected via an adaptation of a rating form developed for the Early Head Start Research and Evaluation Project (EHSREP) implementation study. It was included in the program director self-administered questionnaire (SAQ) and asked directors to rate their programs' implementation on elements within each of the four cornerstones (community, staff, family, and child development). Each element is tied to the Head Start Program Performance Standards and rated on a scale of 1 (low) to 5 (enhanced) implementation. Scores of 4 indicate full compliance with the performance standards.
Center, Home Visitor, and Staff Measures: Chapter 4	
The Center for Epidemiologic Studies Depression Scale—Short Form (CESD-SF) (Radloff 1977; Ross et al. 1983)	The CESD-SF is the short form of the full-version CESD, which is a self-administered screening tool used to identify symptoms of depression or psychological distress.
Parent-Caregiver Relationship Scale (PCRS) (Elicker et al. 1997)	The PCRS measures the perceived relationship between the parent and the primary caregiver (that is, provider, teacher, or home visitor) of infants and toddlers. Items capture important dimensions of the parent-caregiver relationship, including trust and confidence, communication, respect/acceptance, caring, competence/knowledge, partnership/collaboration, and shared values.
Staff Demographic Characteristics	The teacher and home visitor interviews included sections with items that broadly covered parent participation in the program, staff training and supervision, staff benefits and morale, languages spoken (by the staff member and by families in the classroom or caseload), racial/ethnic group membership, and education.

Table I *(continued)*

Quality Measures: Chapter 5	
Infant/Toddler Environment Rating Scale - Revised (ITERS-R) (Harms, Cryer, and Clifford 2003)	Center-based observations included ITERS-R, a global rating scale of classroom quality based on structural features of the classroom. The ITERS-R measures the quality of center-based child care for infants and toddlers up to 30 months. The full ITERS-R consists of 39 items organized under 7 subscales.
Child-Adult Ratio	Center-based observations also included child-adult ratios and group sizes.
Home Visit Rating Scale-Adapted (HOVRS-A) (Roggman et al. 2009), modified from HOVRS (Roggman, Cook, Jump Norman, Christiansen, Boyce, and Innocenti 2008)	Observations of home visits used the HOVRS-A, an adaptation of the HOVRS (Roggman et al. 2008). The HOVRS-A consists of seven items measuring the quality of home visitor strategies and effectiveness at involving and engaging the family during home visits.
Home Visit Characteristics and Content (Boller et al. 2009)	During structured observations of home visits, field staff also collected data on the topics covered, activities, and structure of the home visit.
Child and Family Characteristics: Chapter 6	
Financial Difficulties (SIPP 1996)	Parents were asked to report if they encountered any of five different financial difficulties, including not being able to pay rent and bills, having services disconnected, and being evicted.
Food Security (United States Food Security/Hunger Survey Module) (USDA 2008)	Parents were asked to report if they encountered any of five different food security difficulties, including not being able to afford balanced meals, relying on low-cost food, and being worried that food would run out.
Maternal Demographic Risk Index (ACF 2001)	The maternal demographic risk index captures the multiple dimensions of risk of poor developmental outcomes a child may face as a consequence of his or her mother's socioeconomic circumstances. The index comprises three risk groups (low, moderate, and high). The index was constructed by summing the number of the following risk factors that the mother faced: (1) being a teenage mother, (2) having no high school credential, (3) receiving public assistance, (4) not being employed or in school or training, and (5) being a single mother.
Maternal and Family Characteristics	The parent interview also included sections that broadly covered many different aspects of the family and home environment, including family racial/ethnic membership, languages spoken in the home, program services received, parent and child health, family routines, income and housing, and income and needs.
Child Development and Parent Well-Being: Chapter 7	
MacArthur-Bates Communicative Development Inventories—Infant Short Form (CDI) (Fenson et al. 2000)	The CDI is designed to assess children's early receptive and expressive language and communication skills through parent report. Two measures were derived from this form: vocabulary comprehension and vocabulary production.
Ages & Stages Questionnaires, Third Edition (ASQ-3) (Squires, Twombly, Bricker, and Potter 2009)	The ASQ-3 is a parent-report tool for screening children from 1 month through 5-1/2 years of age for developmental delays in five key developmental areas: (1) communication, (2) gross motor, (3) fine motor, (4) personal-social, and (5) problem solving.

The Brief Infant Toddler Social Emotional Assessment (BITSEA) (Briggs-Gowan and Carter 2006)	The BITSEA is the screener version of the longer ITSEA, which is designed to detect delays in the acquisition of social-emotional competencies as well as social-emotional and behavior problems in children 12 to 36 months old.
The Center for Epidemiologic Studies Depression Scale—Short Form (CESD-SF) (Radloff 1977; Ross et al. 1983)	The CESD-SF is the short form of the full-version CESD, which is a self-administered screening tool used to identify symptoms of depression or psychological distress.
The Parenting Stress Index—Short Form (PSI-SF) (Abidin 1995)	The PSI-SF measures the degree of stress in parent-child relationships. We included two subscales in Baby FACES: (1) the Parental Distress subscale measures the level of distress the parent is feeling in his or her role as a parent; and (2) the Parent-Child Dysfunctional Interaction subscale measures the parent's perception that the child does not meet expectations and that interactions with the child do not reinforce the parent.
The Family Environment Scale, Family Conflict Subscale (FES) (Moos 2002)	The FES was designed to measure the social and environmental characteristics of families. The Family Conflict subscale measures the extent to which the open expression of anger and aggression and conflict-filled interactions are characteristic of the family.
The Parenting Alliance Measure (PAM) (Abidin 1999)	The PAM measures the parent's perspective on how cooperative, communicative, and mutually respectful they are with their partner in regard to caring for their children.
Social Support (developed for Baby FACES)	Social support is measured by asking parents questions about whether there is someone they can count on for physical and emotional help.
Problems with People (developed for Baby FACES)	Parents reported whether they are having problems with a range of different people in their lives. We present the proportion of parents who reported *not* having problems with any of these people.
Community Participation (developed for Baby FACES)	Parents are asked about their participation in a range of community organizations. We present the proportion of parents who reported that they participated in any of these organizations.
The Parental Modernity Scale (PMS) (Schaefer 1985)	The PMS measures parents' attitudes toward children and child-rearing practices (traditional, authoritarian parental beliefs and progressive, democratic beliefs).
Spanking (item from EHSREP)	Parents reported whether they used physical punishment in the past week by spanking the child.

Table I *(continued)*

Note: Each chapter presents additional information about the measures used in it. Volume II, Appendix C describes the psychometric properties of each constructed variable.

[a] Pregnant mothers and parents of newborns (Newborn Cohort) were not asked questions about program services in the parent interview.

Programs Provide Diverse Services to Address Family Needs

We begin by describing approaches programs take to offering core child development services and then summarize other types of services programs provide to address family needs. Next, we present families' reports of services actually received and describe use of curricula and assessments, individualization of services, and the use of data systems. Finally, we present findings on the extent to which programs serve high-risk families, as indicated by the concentration in programs of families with demographic and psychological risk factors.

Almost three-quarters of programs in the Baby FACES study offer more than one service option. The performance standards specify five program service models or options that programs may use to serve families: (1) *center-based*, in which child development services are provided in a child care center for a full or partial day four or five days a week and families receive a minimum of two home visits a year; (2) *home-based*, in which families receive weekly home visits and bimonthly group socialization experiences; (3) *combination*, offering both center-based and home-based services; (4) a *locally designed* option (which requires ACF approval); and (5) a *family child care* option.[1,2] In earlier research we developed a new characterization of the program service delivery model to describe programs that offer both home- and center-based services, termed *multiple-approach programs*. Families that receive both home- and center-based services simultaneously are considered to be in a combination option.

In the current study we found that programs offering multiple approaches are the most common (71 percent). Nearly equal proportions of study programs are exclusively center-based (15 percent) or home-based (14 percent). These findings show increased incidence of multiple-approach programs compared to the Survey of Early Head Start Programs (SEHSP), where multiple-approach programs were also the majority, but at a lower rate (51 percent), followed by the center-based and home-based approaches (23 percent and 17 percent, respectively [Vogel et al. 2006]). The predominance of multiple-approach programs may reflect a response to the circumstances of parents receiving welfare, who are required to work or be in school (and thus need child care); to findings from the EHSREP that the broadest pattern of impacts at age 3 was in multiple-approach programs; or to efforts to individualize services for families.

Programs offering multiple service options consider family needs and preferences, as well as the availability of slots, when enrolling families into a specific option. Of the 60 multiple-approach programs in the Baby FACES study, 52 (90 percent) offer center- and home-based services—that is, some families are in one option and some in the other, with few families simultaneously receiving both home- and center-based services (the combination option). Two programs (4 percent of the multiple-approach group) offer home-based and combination services, and 8 programs (6 percent of multiple-approach programs) offer three approaches—center-based, home-based, and combination services. Programs enroll families in a specific option based on family-reported needs or preferences, the availability of slots, and other considerations. Slightly more than half of families of 1-year-olds (52 percent) in the Baby FACES sample are enrolled in home-based services, 44 percent are enrolled in center-based services, and 4 percent are enrolled in combination services.

[1] We omitted family child care-only programs because they are few in number and there would be too few children to make comparisons across options.

[2] Two locally designed programs met our eligibility criteria and are included in the sample. They meet our definition of multiple-approach programs based on the services the directors reported they offer.

Core child development services are provided at a frequency that meets performance standards, on average, according to director reports. The performance standards specify how frequently programs must provide core child development services to each child, including center services and home visits. The center-based option must include center services four or five days per week and at least 2 home visits annually. Requirements for the home-based option are a minimum of one home visit per week (and at least 32 home visits per year) and two group socializations per month. For the combination option, standards establish acceptable combinations of minimum numbers of class sessions and home visits per year. Directors of home-based programs in the Baby FACES study reported offering families weekly home visits, on average (100 percent indicated they offer weekly visits). Center-based programs reported an average of 5 center sessions per week and 2.7 home visits per year. Finally, programs offer families in the combination option an average of 18 home visits per year and center services 3.3 days per week.

All or nearly all programs report offering services to support family self-sufficiency and address child and adult health care needs. Programs make referrals to other providers for most types of self-sufficiency, health, and mental health services. More than one-third of programs maintain at least one formal partnership with a child care provider, and about 25 percent of children in these programs, on average, are served through these partners.

Parent reports of service receipt indicate that parents of newborns received a range of services from Early Head Start and community providers. Most mothers of newborns (80 percent) reported receiving services provided by Early Head Start during their pregnancies, with pregnancy-related information being the service most frequently received. Most parents (up to two-thirds) were involved in Early Head Start activities at least once in the past year. The levels of involvement are more frequent for some activities than for others. In terms of child care arrangements, care in a provider's home is the most common type of child care other than Early Head Start. Approximately one-quarter of children received more than one type of child care. Children spent an average of 25 hours per week in nonparental care.

Use of curricula is widespread among programs. All programs offering center-based services and nearly all offering home-based services reported that they use a curriculum to plan services.[3] The Creative Curriculum is the most widely used for center-based services (87 percent of programs). For the home-based option, large proportions of programs use Parents as Teachers (44 percent) and Partners for a Healthy Baby (41 percent).

Programs use a combination of methods to assess family needs and individualize services. Programs identify and assess the concerns and needs of families through a mix of formal and informal methods. Family self-report, parent surveys, staff meetings with parents, and ongoing assessments during home visits are each used by 95 percent or more of programs. Use of Individualized Family Partnership Agreements (IFPAs) is nearly universal among Early Head Start programs in the Baby FACES study. Directors reported that IFPAs have been created for 97 percent of program families, on average. These agreements are updated approximately once every two months, on average. Most programs also individualize services by trying to match most of their families with staff based on cultural background and language.

[3] Percentages include the curricula reported by multiple-approach programs in centers and in home visits.

Programs serve a range of families, but almost all programs maintain a waiting list and use a point system to prioritize family enrollment. The majority of programs appear to focus recruitment efforts broadly rather than primarily serving specific types of families. Nearly all programs (98 percent) enroll and provide services to pregnant women and a large majority of programs—79 percent—serve DLLs. In keeping with program performance standards, programs assign families priority for enrollment through a system that awards points for specific family characteristics. Programs vary to some extent in the criteria they consider in these rating systems. Nearly all programs (98 percent) take children with special needs into consideration, and a similarly large proportion award priority to families with a teen mother (93 percent of programs) or to families that receive public assistance (91 percent of programs).

Nearly all programs can access reports on program operations, but access to progress reports on individual children is less common. The vast majority of programs (96 percent or more) reported being able to access information such as reports on enrollment, family characteristics, services provided, and child health. Fewer programs (72 percent) have access to reports with data on the progress of individual children (although some programs reported that they create reports on the progress of all children in a class).

Programs commonly have low to moderate concentrations of highest-risk families. Early Head Start targets a population at elevated risk for poor outcomes, but even within this at-risk population are families with higher numbers of risk factors. Program directors reported on the relative proportion of highest-risk families in their total enrollment. Among demographic risk factors we considered (single parent, teenage mother, no high school credential, family receiving welfare, and unemployed parent), programs most commonly reported serving high or very high concentrations of single-parent families. All study programs have at least a moderate concentration of single-parent families, and nearly half (47 percent) have a high or very high concentration of these families. A high concentration of families with any single psychological risk was unusual among programs in the Baby FACES study. Within this category of risk factors, programs were most likely to have families residing in an unsafe neighborhood; nearly one-fifth of programs reported high or very high concentrations of these families.

Early Head Start Staff Is Well Qualified but Turnover Rates Are High

Using data from teachers, home visitors, and program directors, we focus on characteristics of Early Head Start staff serving infants and toddlers in the Newborn and 1-year-old Cohorts. Whereas program directors reported on the staffing of the program as a whole, we also have detailed information on a subset of staff: those who are caring for Baby FACES study children.

Programs employ more teachers than home visitors and other staff members. On average, programs employed 23 full-time frontline staff and 5 part-time staff. Among core staff, programs mostly employ teachers (15), with a smaller number of home visitors (6) and managers/supervisors (5).

Programs have high staff turnover rates and retention problems. Programs reported that roughly equal proportions of teachers (17 percent) and home visitors (16 percent) had left the program in the past year. Almost half of all programs (44 percent) reported losing at least one director, manager, or coordinator in the past year, with personal reasons being the most common cause of departure. Teachers' seniority in surveyed programs ranges from 1 to 10 years, while home visitors' seniority ranged from 2 to 7 years and directors' seniority ranges from 8 to 11 years. Programs most commonly have unfilled positions for teachers (48 percent), managers/supervisors

(29 percent), and home visitors (20 percent). Ninety percent of programs fill vacancies within three months. Staff members most commonly leave for higher compensation or other benefits. About one-quarter of programs have staff salaries and benefits below the average of the surrounding area.

Management staff are well educated. More than half of directors/assistant directors in programs have a graduate or professional degree. About half of all managers/supervisors have a bachelor's degree, and a quarter have a graduate degree or higher. A larger percentage of home visitors than teachers have a bachelor's or associate's degree. Program directors reported that many staff members have increased their credentials since being hired, with teachers the most likely (43 percent) to do so. On average, fewer than nine frontline staff members are without an associate's degree and are working toward their degree.

Programs seek well-qualified staff, including those who are multilingual. Almost all programs recruit staff with previous early childhood experience and among former Early Head Start parents. Programs also seek and are successful in recruiting bilingual staff. Three-quarters have bilingual staff members, whose proficiency they typically assess with an interview in the native language (66 percent) and community feedback (73 percent).

Programs provide a number of training and professional development activities. About 21 to 25 hours of in-house training are provided to staff per year, more than the amount required by the performance standards. More hours of training are provided for home visitors and teachers than for management staff. Programs also provide a number of accommodations, such as payment of registration fees and travel expenses, for staff to attend training outside the program.

English and Spanish are the most common languages spoken in classrooms and on home visits. Thirty-nine percent of infants and toddlers have a home visitor who speaks a language other than English. More families receiving home-based services have a home visitor who speaks Spanish than do children receiving center-based services. (Home-based families are also more likely to have a Hispanic home visitor than children receiving center-based services are to have a Hispanic teacher.) Following English, Spanish and Arabic are the most frequently spoken languages in the homes of children. English is the language spoken most often by adults in classrooms and for communication during home visits. Teaching staff are more likely than teachers or assistant teachers to use a language other than English in the classroom.

Most children have staff who use their home language to provide services. Among all families, 95 percent have their home language used during home visits, and 96 percent have their home language used in the classroom. Ninety percent of children from Spanish-speaking homes who receive home-based services have a home visitor who speaks Spanish. Eighty-eight percent of children from Spanish-speaking homes who receive center-based services have a teacher or other adult in the classroom who speaks Spanish. Teachers and home visitors use a variety of strategies to communicate with families who speak a language that they do not speak.

Most Baby FACES children have a teacher or home visitor with a college degree and with experience working with infants and toddlers. Self-reports by teachers of children in the Baby FACES study broadly match reports by program directors about the education level of teachers in a program as a whole. Most center-based teachers have earned either a child development associate credential or a state-awarded preschool certificate. Surveyed home visitors of Baby FACES children typically have more experience working with young children than the surveyed teachers.

Children's teachers and home visitors participate in a number of professional development activities. Teachers of center-based children reported attending 48 hours of training annually, while home visitors reported attending 70 hours of training annually. Most teachers and home visitors of children in the study receive both one-on-one and group supervision.

Children's teachers and home visitors report positive feelings about their jobs and few mental health problems. Most children have teachers or home visitors who report that they are very likely to stay in their job. Most teachers also report receiving a range of benefits. Although few teachers or home visitors reported severe depression symptoms, about one-quarter of children did have a teacher with an elevated number of depression symptoms.

Home Visits and Classrooms Score in the Mid-Range of Quality

This section describes both structural and process characteristics of children's classrooms. We observed home visits with the Home Visit Rating Scale-Adapted or HOVRS-A (Roggman et al. 2010). The HOVRS-A, originally developed for training Early Head Start home visitors, is based on a theoretical perspective of an optimal model of home visits focusing more on parent-child interaction and less on one-on-one interaction with either the parent or child singly. It has not been used in Early Head Start programs on a large scale before. In addition to the HOVRS-A, we recorded the content and characteristics of the home visit. For classroom observations, we used the Infant/Toddler Environment Rating Scale-Revised (ITERS-R) (Harms, Cryer, and Clifford 2003).

Most children and families served by home visits receive visits that score in the mid-range on the scale. One-year-olds and their parents[4,5] have home visits scoring in the moderate range (mean = 3.4) on the total HOVRS-A score. Scores are highest in the areas of Child Engagement (4.3) and Relationship with the Family (4.0), and lowest in Non-Intrusiveness (2.9) and Facilitation of Parent-Child Interaction (3.0). Visit quality is modestly correlated with other home visitor and program characteristics, such as the home visitor having a state-awarded credential and high job satisfaction (with higher satisfaction associated with higher HOVRS-A scores) and the program having unfilled positions (with more unfilled positions associated with lower HOVRS-A scores).

Children and families receiving home visits participate in a variety of activities during visits. About half the time during home visits is spent on child-focused activities, close to 20 percent of the time is focused on parents and family activities, and 14 percent of the time involves parent-child activities. The most common activity during the visit is play (80 percent of visits), followed by child/parent observation and assessment (65 percent). Relatively few visits (8 percent) involved crisis intervention. Home visitors reported that the activities performed on visits were highly aligned with those they had planned.

[4] We conducted classroom and home visit observations only for children in the 1-year-old Cohort. Although many children were in classrooms with peers younger than that age, mean classroom scores reflect those of children in the 1-year-old Cohort, not the Newborn Cohort.

[5] Because home visits, unlike center-based services, are aimed at children and family members, we reference "children and their parents" or "children and their families" when describing the characteristics of visits and home visitors.

One-year-olds served in centers are in classrooms with observed group sizes and ratios within the performance standards and professional recommendations. In center-based care, ratios of children to adults are quite low, with average ratios more than 1.5 children below the maximum the performance standards allow (2.4 versus 4). Group sizes are also smaller than the maximum allowed (5.3 versus 8).

Relatively wide age ranges in classrooms are common. Many classrooms included a fairly wide range of ages, with an average 15-month span between oldest and youngest child in the classroom. To understand the proportion of classrooms in the sample that are mixed age, we looked at the percentage of classrooms that included children outside of a 15-month age band (that is, children either younger than 5 months or older than 20 months), and found that 65 percent of classrooms have at least one child outside of this age bracket. Twenty-one percent of these mixed-age classrooms included children younger than 5 months of age, and 52 percent included children older than 20 months (17 classrooms had children outside both the younger and older ends of the band).

Most 1-year-olds receiving center-based services are in classrooms that score in the mid-range of quality. Children are in classrooms scoring in the minimal-to-adequate range (mean = 3.8) on the ITERS-R, using the developer-provided definitions of those scores. This version of the ITERS has not been used in a large-scale study of Early Head Start previously. Classrooms score highest in the area of Social Interactions and lowest for Personal Care Routines. Classroom ratios and staff turnover are positively correlated with ITERS scores.

Parents and staff have positive relationships with one another. Parents and staff endorse positive statements about their relationships at roughly similar rates, with parents providing a mean rating of 4.5 (on a 5-point scale) and staff giving a mean rating of 4.2. Relationship quality was not correlated with observed quality of the home visits or the classrooms.

Early Head Start Families Are Characterized by Ethnic Diversity and Financial Difficulty

Using information from parent interviews, we describe demographic and psychosocial characteristics of children and parents in the study. First, we describe household size, composition, and income. Next, we summarize key demographic characteristics of children and their parents and then briefly describe languages spoken in households. Finally, we discuss families' financial difficulties, food security, and living situations and maternal demographic risk.

Households are characterized by moderate size, non-residential fathers, and low income. Families in the study tend to be comprised of about four members; about half of children in the study live without their biological fathers. Those children who live without their biological father also rarely have a father figure in the home. The median annual income is $14,400 and $17,500 for the Newborn and 1-year-old Cohorts, respectively. About one-third of fathers and one-half of mothers responded that they were not currently employed; roughly 60 percent of mothers and 55 percent of fathers have at least a high school degree.

Parents and children in Early Head Start are ethnically diverse. The sample is nearly evenly divided among Hispanic and white families, with African Americans making up about one-fifth of the sample. Children are more likely than their parents to be multiracial. Nearly one-fourth of parents were born outside of the United States, but almost all children in the study were born here.

English and Spanish are the most common household languages. Almost one-third of households report speaking a language other than or in addition to English. Seventeen percent of households reported speaking exclusively or primarily Spanish, while others reported speaking Spanish as well as English. Very few households spoke a language other than English or Spanish.

Families face financial difficulties and food insecurity. Large portions of families reported having trouble paying bills and using a wide range of public assistance—particularly WIC and food stamps. A substantial number of families also reported food insecurity concerns. Hispanic families appear to have higher levels of financial difficulties and food insecurity than other ethnicities.

About half of mothers have medium or high levels of maternal demographic risk. All Early Head Start families are at elevated risk, however some families may have an accumulation of risk factors that put them at even greater risk. Therefore, we created a demographic risk index to assess the level of maternal risk. About half of families have lower risk, but 28 and 18 percent are at medium and highest risk, respectively. Hispanic and African American families appear to have higher levels of maternal demographic risk than other ethnicities. In addition, a high proportion of teen mothers also are at highest demographic risk.

Children Are Off to a Good Start in Most Developmental Domains and Most Families Are Functioning Well

We provide a snapshot of child and family well-being using parent and staff reports of children's development. First, we describe health, access to health care, then cognitive, language, and social-emotional development of infants enrolled in the Early Head Start program in spring 2009. Next, we focus on the health, well-being, and functioning of families enrolled in Early Head Start.

One-year-olds enrolled in Early Head Start in spring 2009 are off to a good start in most of the developmental domains assessed. Levels of premature birth (9 percent) and low birth weight (7 percent) among Early Head Start children are comparable to national norms. A large majority of parents (79 percent) reported that a majority of children have very good or excellent health, and nearly all 1-year-olds have access to a health care provider. Ninety-eight percent of children have visited the doctor for a checkup in the past six months, and 92 percent are reported as having up-to-date immunizations. Almost all children also have health insurance, with most receiving public coverage. About 3 percent of children have had a disability diagnosis, and three-quarters of those families are receiving disability services.

In language development, children's vocabulary comprehension is comparable to national norms while vocabulary production is slightly behind normative levels; these findings are based on reports from Early Head Start staff. Children's vocabulary comprehension increases with age. Children from English-speaking homes comprehend more English words than DLLs, and DLLs understand more words in Spanish than in English. DLLs understand more total words, including both English and Spanish words, than non-DLL children.

Although social-emotional development scores differed on parent and teacher reports and are uncorrelated, children are at the national norms in social-emotional competence and problems according to both sets of respondents. Parents tend to score children as doing better in the competence domain, while teachers view children as doing better in the problems domain. According to parent reports, Early Head Start children may face more developmental risks on domains measured by ASQ-3 than children in normative samples. In particular, children were at risk in the Fine Motor and Problem Solving domains (21 and 14 percent, respectively).

Many families of children enrolled in Early Head Start in spring 2009 are faring well. More than half of Early Head Start parents are in good physical and mental health, and the majority (93 percent) of families have health insurance coverage. Most families receive public health insurance. However, some families experienced times when they needed health care but could not obtain it. Rates of moderate to severe maternal depression are lower than found in the EHSREP (18 percent versus 32 percent, respectively). Overall, parents scored 5.4 on average, which indicates a mild level of depressive symptoms. Parents reported moderate levels of parental distress and parent-child dysfunctional interaction, similar to or lower than levels found in the EHSREP at 14 months. Rates of smoking (12 percent) and drinking (less than 2 percent) during pregnancy are much lower than national norms for pregnant women. The rates of smoking, drinking, and drug use among mothers at the time of the interview are much lower than the norms for female adults in national studies. Study parents reported a low level of family conflict, and most cohabiting biological parents maintain good parenting relationships with one another regarding parenting practices. Parents also reported high levels of social support and low levels of conflict with other people.

Early Head Start parents reported favorable parenting behaviors. These behaviors include maintaining regular family routines, such as set meal times (95 percent) and regular bed times (78 percent). Parents also reported following good child safety practices to prevent child injury. Parents reported high levels of both traditional, authoritarian parental beliefs and progressive, democratic beliefs, and some parents reported spanking (11 percent).

Developmental Outcomes and Family Functioning Differ Across Key Subgroups

We examined child and family characteristics and functioning within key family subgroups (race/ethnicity, maternal demographic risk, family psychological risk, and DLL status). Understanding how the experiences of families are the same or different by family characteristics is useful for programs to shape services that address the needs of all. Note that these characteristics are interrelated, but if there are differences unique to key subgroups, looking at them individually will help us to understand the needs specific to these groups.

We found some evidence that patterns of family strengths and needs vary across key subgroups.

Major differences by race/ethnicity. More than one-third of children in the study are Hispanic, another one-third are white, and about one-fifth are African American. Hispanic parents are least likely to report substance use problems, and along with African American parents, more likely to report participating in Early Head Start activities. Hispanic children are more likely to be uninsured than children in other groups and are also more likely to have somewhat poorer health. Staff reported that Hispanic children understand and say fewer English words than other children (although see findings for the DLL subgroup). According to parent reports, more Hispanic children are at risk in their social-emotional development; according to staff reports, more African American children are at risk in this area. Hispanic parents reported fewer depressive symptoms but more parenting stress than parents of other children. Hispanic parents reported poorer health and less access to health care than other parents.

African American children are at lower developmental risk than Hispanic and white children, according to parent reports on the ASQ-3. African American mothers are more likely to report receiving services from Early Head Start during pregnancy or from community agencies. African American parents are more likely to use spanking as a discipline strategy.

Major differences by maternal demographic risk. We assessed demographic risk with the following characteristics: household receives public assistance , or is a single-parent household, having a teenage mother, and having a mother who did not complete high school or who is unemployed. Fifty-three percent of mothers have two or fewer risk factors (lower risk), 28 percent have three (medium risk), and 18 percent of mothers have four or more risk factors (highest risk).

Mothers with the highest risk factors are most likely to be teenage mothers, single mothers, or have less than a high school education. Children of highest-risk mothers were less likely to participate in an early intervention program or to be helped by Early Head Start in getting disability services.[6] Children's general development (measured by the ASQ-3) does not differ by number of maternal demographic risk factors; however, children in the highest-risk group were more likely to reach cut points (at risk or in the monitoring zone) for Gross and Fine Motor, and Personal-Social domains. Staff rated the children of highest-risk mothers as understanding fewer Spanish words than their low-risk peers.[7] Parents in the highest-risk group reported that their children were more likely to reach the cutoff score for social-emotional behavior problems, but staff ratings on this dimension are not associated with maternal risk. Medium- and highest-risk parents are more likely to report poor mental health. Parents with medium or highest risk are somewhat more likely to report smoking during pregnancy, but lower-risk parents are more likely to report current drinking.

Major differences by family psychological risk. Family psychological risk is based on moderate or severe depressive symptoms, high parenting stress, and current or past substance use problems. Sixty percent of families had no risk factors (lower risk), 31 percent had one risk factor, (medium risk) and 9 percent had two or more risk factors (highest risk). Households with one or more psychological risk factors are characterized by single parents and low educational attainment. Households with high psychological risk also have higher rates of food insecurity or financial problems.

Children from families with more psychological risk factors are more likely to have poorer birth outcomes or worse general health and are less likely to be insured. Children from families with more psychological risk factors are more likely to be rated by their parents as at risk in general development (ASQ-3 scores). Psychological risk factors are not associated with children's English CDI scores; however, they are associated with Spanish-speaking children's Spanish CDI scores reported by staff. Having more psychological risks is associated with poorer social-emotional development, as rated by parents, but not by staff. Parents with more psychological risk factors reported poorer health and are less likely to be insured. Parents with two or more risk factors are more likely to report spanking their children. Parents with more psychological risks are more likely to report receiving services from Early Head Start or community agencies.

Major differences by DLL status. We defined DLL status as children in homes in which Spanish is spoken (either solely or in addition to English); one-third of 1-year-olds are DLLs. As expected, DLL characteristics are similar to those of Hispanics. DLL children tend to have poorer health than non-DLLs. Parents reported children's ASQ-3 general development scores similarly except for in the Gross Motor and Personal-Social domains, where DLLs perform more poorly.

[6] This is based only on the 1-year-old Cohort and includes a small number of children.

[7] This is relevant only for children exposed to Spanish who also had a staff member who could speak Spanish and therefore complete the Spanish CDI.

Early Head Start staff reported that DLL children understand and say fewer English words than children from English-speaking homes, but, as with Hispanic children, DLLs know more words overall across both English and Spanish than non-DLLs. DLL children are more likely to have delays in social-emotional competence than children from English-speaking homes. Parents of DLLs reported their own health as poorer than that of parents of children from English-speaking homes. English-speaking parents are more likely to report a substance use problem than parents of DLL children. Parents of DLLs are less likely to use spanking as a discipline strategy than are English-speaking parents. DLL parents are more likely than English-speaking parents to report participating in activities at Early Head Start.

Service Approach Varies Based on Family Needs

We examined the characteristics of families enrolled in different service options and whether family needs predict the type of services families receive in programs that offer more than one option. We also examined whether specific needs reported by parents are met with services targeted toward those needs by programs.

Programs offering different service options serve families from different backgrounds. Programs choosing to offer multiple service options tend to serve more Hispanic families, and DLL or immigrant families. Those programs choosing to provide all home-based services tend to be located in rural areas and to serve more white families and mothers who are not employed, in school, or in training. Programs that offer multiple service options or home-based services exclusively are more likely to serve families with elevated economic risk. Finally, those programs choosing to provide all center-based services tend to serve more African American families, families with low economic risk, and single or teenage mothers.

Programs that have multiple services available appear to select options to provide to families based in part on family characteristics. Home-based and combination options seem to serve children and families with higher levels of needs, such as children who have health or developmentally related concerns and families with parental demographic and psychological risk factors. Findings are mixed based on parental demographic factors, some of which are associated with home-based or combination options and some with the center-based option. The home-based option is more likely in rural areas; DLL families are more likely to be served with either home-based or combination options. Conversely, within multiple-approach programs, unlike programs offering only the center-based option, those in center-based options are more likely to be at high economic risk, without health insurance, be single or teenage mothers, or be employed. Interestingly, staff in center-based services rate children as having more social-emotional problems; this might reflect the greater amount of time that staff spend with these children or the fact that staff see them in a group setting, in which problem behaviors are more likely to be observed. Children in home-based services are more likely to be rated by their parents as having social-emotional problems.

Early Head Start programs appear to direct services to families with particular demographic and psychological risk factors. Financial or housing services are more likely to be offered to families with higher economic risk or those that receive welfare. Mothers who are employed, in school, or in training are more likely to receive help in finding good child care. Mothers who are employed, in school, or in training are more likely to report receiving education or job training. DLL families are more likely to be offered help learning English. Parents with moderate or severe depressive symptoms are more likely to receive mental health services. In addition, parents with health needs are more likely to receive health services. Child health and developmental needs are not associated with the specific services families receive.

Next Steps/Looking Ahead

Spring 2010 includes the first set of direct child assessments of 2-year-olds and videotaped parent-child interactions, as well as a second data point for parent interviews, SCRs, observations of home visits and classrooms, and teacher and home visitor interviews. We will have data on all 1-year-olds as the Newborn Cohort will have reached that age, enabling us to combine data on this age group across waves. We will also have collected program implementation information from program directors in a new way, and we will have exit interview information from families who left the program before their child turned 3 years old.

The topics we will address in the next report will include the following:

1. Exploring new ways to characterize program implementation objectively through program director interviews
2. Looking for linkages between program implementation and quality of observed services
3. Looking at family needs over time and how those needs change
4. Looking at child outcomes (including direct child assessments for 2-year-olds) to determine how children are faring
5. Characterizing parent-child relationships and exploring whether those relationships are associated with child outcomes
6. Exploring the linkage between service quality and child and family outcomes. For example, we shall attempt to see if some aspects of quality are more important than others. We will explore whether there seem to be thresholds of quality that are needed for associations with outcomes. Among the areas of study are whether classroom interactions are more important than structural features and whether particular aspects of home visits are more strongly associated with outcomes than others. We will also see how these findings mesh with the literature and prior research.

We caution that our ability to explore all possible questions of interest in future reports is limited by the size of the sample. However, we believe we can answer the questions posed above. Further, to the extent that differences are associated with moderate-size changes in child and family outcomes that are likely to be of practical and policy importance, we should be able to detect them. As always, we remind the reader that the rich data provided by this descriptive study is just that: descriptive. As such, we cannot untangle the direction of associations we find. However, the in-depth information Baby FACES provides should be useful for many audiences, including program staff, the federal government, and researchers.

I. BABY FACES IS THE LATEST STUDY IN A COMPREHENSIVE EARLY HEAD START RESEARCH AGENDA

The Early Head Start Family and Child Experiences Survey, or Baby FACES, is the latest contribution to an ongoing research effort that began with the inception of the Early Head Start program. The Office of Planning, Research & Evaluation (OPRE) in the Administration for Children and Families (ACF), U.S. Department of Health and Human Services, contracted with Mathematica and its partners to implement a study that builds on the body of Early Head Start research and provides new information to guide program implementation and improvement.

In this chapter we describe the multiple evolving contexts that Early Head Start operates within and has been shaped by, highlighting recent policy changes and economic trends that provided the motivation for the current study. The chapter ends with a road map to the report as a guide to the reader.

The Policy, Program, and Research Contexts for Baby FACES

The Obama administration has focused much attention and many resources on early childhood programs and Early Head Start in particular. With expansion funds as part of the American Reinvestment and Recovery Act of 2009 (ARRA) ($1.1B specifically for Early Head Start), the program added nearly 50,000 slots in fiscal year 2009–2010 (ACF 2010). Our study comes at an opportune moment, as Baby FACES baseline data were collected the year before the expansion funds were appropriated. The recent expansion reverses prior policies, which provided an essentially flat funding stream without increases to counter inflation or increase the number of available slots.[1]

ARRA and the Early Head Start expansion have grown out of a global economic downturn and financial crisis on a scale that may be without precedent. It is likely that more families than ever before will qualify for services like Early Head Start, which are reserved for those living in poverty. For effective policymaking and program improvement, it becomes even more important to understand the evolving needs of families, the services available to them, whether and how they use these services, and how families using services fare over time.

The Baby FACES study provides a range of information that no national studies of Early Head Start to date have done. Prior studies have provided one or more of the data elements that Baby FACES does, but Baby FACES provides up-to-date data on programs, families, and children using a nationally representative sample of programs and of children in two age cohorts (perinatal and 1-year-olds) enrolled in spring 2009 Early Head Start services. This study provides information on program operations and management; characteristics and educational background of program staff (teachers and home visitors); quality of the classrooms and home visits that children attend; family characteristics, functioning, and well-being; and children's developmental progress. The wealth of information from so many different vantage points allows us not only to make recommendations for national planning and technical assistance efforts, but also to provide examples of data collection

[1] The Improving Head Start for School Readiness Act of 2007 funded the program through 2012, but did not allocate sufficient resources to counter inflation. The Center on Budget Policy Priorities estimated the funding level in 2008 to be 11 percent below the 2002 level, after adjusting for inflation (http://www.cbpp.org/cms/?fa=view&id=1151).

instruments and practices that could be useful on a smaller scale for local program self-assessment and improvement efforts. Not the least of the study's benefits is the rich source of data on low-income families and children it supplies, which provides researchers with insight into pathways to better outcomes for children.

A Brief History of the Early Head Start Program

Early Head Start is a two-generation program that began in 1995 as a federal initiative designed for low-income pregnant women and families who have infants and toddlers 3 years of age or younger. From the initial 68 Early Head Start grantees funded in 1995, the program has grown to more than 700 programs today serving more than 60,000 children and families (Early Head Start National Resource Center 2010). As noted earlier, by this time next year the number of both programs and families will grow as a result of the ARRA funding.

Early Head Start programs provide a wide range of services. These include child development services, child care, parenting education, case management, health care and referrals, and family support. In addition to providing many services directly, programs form partnerships with other community service providers as vehicles for delivering some services.

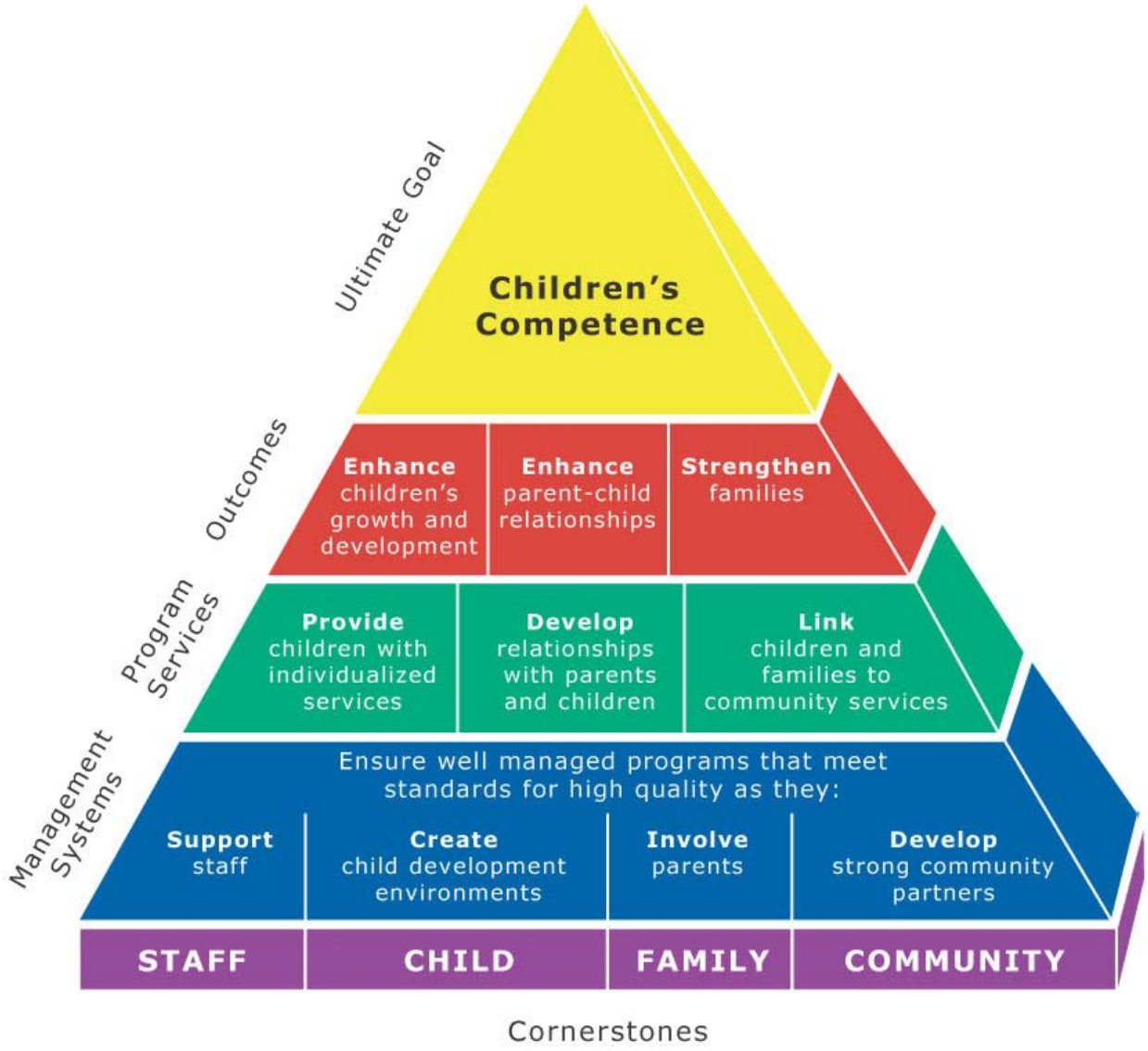
To ensure the quality of their offerings, Early Head Start programs adhere to two key institutional benchmarks. The Head Start Program Performance Standards (hereafter performance standards) are the rules and regulations that explicitly identify what programs must do to ensure that services are of high quality (for example, they specify child-adult ratios in child care centers, educational requirements for staff, and the types of services that must be offered) (ACF 1996). Apart from the structural features of programs that the performance standards identify, the performance measures framework is a conceptual model that describes the mechanisms by which high-quality programs are thought to affect children's outcomes. The performance measures framework is structured as a pyramid and rests on a foundation of four cornerstones (community, staff, family, and child development) that the Advisory Committee on Services for Infants and Toddlers deemed essential for quality Early Head Start programs (ACF 1994). On this foundation, the framework builds four layers, with management systems at the base supporting program services; these services bring about positive family and child outcomes, which contribute to the ultimate goal of children's competence (Figure I.1).

The performance standards define five service delivery options that programs can use based on the unique needs of families:

1. Home-based—families receive weekly home visits and at least two group socializations per month
2. Center-based—families receive center-based child care plus other activities
3. Combination—families receive both home visits and center experiences
4. Locally designed (requiring official approval from the Office of Head Start)
5. Family child care—families are served through family child care homes

A program can choose to deliver one option to all families or different combinations to different families, based on its determination of the best mix of services for meeting families' needs.

Figure I.1. Early Head Start Conceptual Framework



The Early Head Start program has served as a national laboratory by incorporating ongoing research to inform program improvement, which has evolved along with the program. The next section gives an overview of past research that serves as the foundation for the current study.

Key Research Efforts and Their Lessons

The Early Head Start Research and Evaluation Project (EHSREP) was launched at the inception of the Early Head Start program. The project provided evidence of the effectiveness of the initial Early Head Start programs, as well as insight into their implementation and quality. The EHSREP was a collaboration among many stakeholders, including the Administration on Children, Youth and Families (ACYF, later ACF), Mathematica Policy Research, Columbia University's Center for Children and Families at Teachers College, and the Early Head Start Research Consortium. It included rigorous impact and implementation studies. Overall, the impact study found that Early Head Start programs had a broad range of effects on child and parent outcomes when children were 24 and 36 months old (ACYF 2001; ACF 2002a), some of which were sustained two years after the program ended, when children were about 5 years old (ACF 2006, Love et al. unpublished

manuscript). The implementation study found that many of these initial programs changed their service approach after beginning to serve families, as family needs changed with the advent of Temporary Assistance for Needy Families (TANF). Further, the study documented that programs varied in their ability to fully implement the comprehensive Head Start Program Performance Standards. The impact study validated the performance standards, finding that programs that fully implemented them had broader impacts for children and families at age 3. We last collected data for the EHSREP when children in the study were in fifth grade (about 10 years old). We did not find continued impacts for the group overall, although there were some impacts in some of the subgroups we examined (ACF 2010). See Box I.1 for a fuller discussion of the results of successive rounds of the impact study.

In turn, the Survey of Early Head Start Programs (SEHSP) built on the EHSREP. This descriptive study was a census of Early Head Start programs (Vogel et al. 2006). We asked program directors extensive questions about their operations, staffing, and management and about the characteristics of enrolled families. The objective was to better understand how programs served families approximately 10 years after inception, and about 6 years after our last site visits to the original study programs. The questions we asked focused on the bottom two layers of the conceptual framework: management systems and program services (Figure I.1). Key findings from the SEHSP included these:

- About 20 percent of programs served a high concentration of families with multiple demographic risks (including three or more of the following: unemployment/not attending school, single parenthood, teen parenthood, receiving welfare, and lack of a high school credential).
- Fifteen percent of programs served a high concentration of families with elevated psychological risk (including two or more of the following: mental health problems, family violence, substance abuse, or living in an unsafe neighborhood).
- Sixty percent of programs were in areas characterized as moderate or high in cultural diversity, and 42 percent indicated that diversity of their communities had increased in the past five years.
- Most programs offered both center- and home-based services, which we term "multiple-approach programs"), and a few (less than 10 percent) offered both center- and home-based services to <u>all</u> enrolled families; we called these "combination" programs to distinguish the simultaneous nature of the services to all families. In earlier research both types of programs were called "mixed-approach programs."[2]
- Nearly all programs had established partnerships with community service providers and with providers who gave care under Part C of the Individuals with Disabilities Education

[2] Past research used the term "mixed-approach programs" to refer to programs offering both home-and center-based service options. In the SEHSP, this definition was further refined and the term "multiple-approach programs" was applied to those programs that offered both home-based and center-based options but did not offer both types of services simultaneously to <u>all</u> families. The term "combination" program was applied to programs that offered both home- and center-based services to all families (no programs met this definition in the Baby FACES sample). This report uses the "multiple-approach" term except when referencing past research findings, where we use the term "mixed-approach" as it had been used then.

Act (IDEA).[3] Less than half had formal partnerships with child care providers, and more than three-quarters had partnerships with health or mental health providers.

Box I.1. Key Findings from the Early Head Start Research and Evaluation Project (EHSREP)

The EHSREP randomly assigned 3,001 families in 17 programs to either Early Head Start or a control group (ACYF 2001; ACF 2002a). We followed families over time and collected data when children were 14, 24, and 36 months of age, at approximately age 5 (in the months before children entered kindergarten), and most recently when they were in fifth grade. In addition to direct child assessments, we interviewed parents and videotaped semi-structured parent-child interactions. By the time children were 3 years old, the Early Head Start program group had experienced modest positive impacts across a broad range of child and parent outcomes. Overall, program children performed better on measures of cognition, language, health, and social-emotional functioning compared with control group children. Further, parents in the program group showed more support than control group parents for their child's emotional, cognitive, and language development. The programs had some impacts on self-sufficiency as well: program parents were more likely to be in school or job training. We examined impacts within subgroups based on family and program characteristics. We found that African American families, those enrolling during pregnancy, and families with a moderate number of demographic risks benefited most from the program, though all but one subgroup showed at least some positive impacts. The exception was children from families with the most risk factors. Programs that fully implemented the performance standards and programs that offered both home- and center-based services (termed "mixed-approach programs" in this early research) had the largest impacts.

At approximately age 5 (two years after the program ended), the evaluation team once again gathered information from study children and families (ACF 2006; Love et al. forthcoming). This study continued to find favorable impacts of the program on children's social-emotional development, specifically reduced behavior problems and improved approaches toward learning. There were no impacts on behavior in play with a parent. For language outcomes, we found significantly better receptive vocabulary among Spanish-speaking children, although not among native English speakers. There were no impacts on children's academic skills. The program group was also significantly more likely to be in a formal early care and education program when they were between 3 and 5 years of age. Among parents, Early Head Start continued to have positive impacts on support for children's learning (reading daily and doing teaching activities). There was no impact on other parenting behaviors, but there was a decreased risk of maternal depression. Some subgroups, notably African American children, continued to show some sustained impacts from 36 months, and the highest demographic risk group saw modest positive impacts for the first time. Levels of program implementation no longer showed differences in impacts. Program approach had impacts, however; at prekindergarten, home-based rather than mixed-approach programs had the strongest effects.

We continued to follow participants in the EHSREP with the most recent followup when children were in fifth grade, or about 10 years old. We found that Early Head Start did not continue to affect child and family outcomes for the group at large, although a few impacts remained for some subgroups. Within some subgroups, we found evidence suggesting that when earlier impacts were larger, they were more likely to persist as children got older. In previous waves of followup, the Early Head Start programs had the strongest impacts on African American children. Similarly at grade 5, we found the most favorable impacts for African Americans, some of which were consistent with earlier findings. The analyses did not reveal significant positive impacts of Early Head Start on children and parents in the highest-risk families. Similar to the age 5 followup, home-based programs had the most positive impacts.

[3] Part C of IDEA stipulates that early intervention services be provided to infants from birth to age 2.

Baby FACES Overview

Baby FACES is a longitudinal descriptive study of Early Head Start that goes beyond the earlier descriptive work of the SEHSP to capture family- and child-level information in addition to program-level characteristics. From a nationally representative sample of 89 programs, we enrolled parents of children in two age cohorts in spring 2009: the Newborn Cohort, which includes pregnant women and children up to 8 weeks old, and the 1-year-old Cohort, which includes children ages 10 to 15 months. (Chapter II provides a more detailed presentation of the study design and sample.) As with the SEHSP, we gathered detailed information from program directors on program operations, services, and management and on characteristics of staff and enrolled families. In addition to this overall program-level information, we also gathered targeted information on participant families from parent interviews, Staff-Child Reports (SCRs) completed by teachers or home visitors, individual interviews with those teachers and home visitors, and observations of study children's classrooms and home visitors. All these data are presented and analyzed in this report.

In the coming years Baby FACES will collect information on children's development and their activities after Early Head Start. When children are 2 and 3 years old, we will conduct direct child assessments to measure cognitive and language development and to record children's interactions with their parents. The first direct child assessments will occur in spring 2010 with 1-year-old Cohort children. We will conduct a final interview with parents of 1-year-old Cohort children who remain in Early Head Start until their children are 3 years old to learn about what services they receive after Early Head Start, their experiences with transition planning, and their satisfaction with the program. In the event that children leave the program before they are 3, we will conduct a brief one-time parent interview to learn their reasons for leaving, where they go, and their satisfaction with Early Head Start. We are also collecting information directly from program staff on the services that families receive on a weekly basis and will present it in future reports.

Road Map to the Report

We have attempted to include information in this report that will be useful to a wide audience. For this reason, we emphasize the conclusions and key findings in this volume. Recognizing, however, that the "devil is in the details," we also provide a Technical Appendix (Volume II) with a full discussion of the measures we used and how we selected them, psychometric information, our sample design, nonresponse, and the weights we used to account for it all, and other details about how we classified children's primary service providers. We include the following information in this volume:

- Chapter II discusses our research questions, methods, measures, and analytic approaches.
- Chapter III describes Early Head Start programs' approaches to service delivery, other services provided to families, program management (recruiting strategies and means of individualizing services), and use of curricula and assessment tools. It also provides information from parent reports on the services they receive from Early Head Start.
- Chapter IV describes the characteristics of staff serving children in the study in spring 2009.
- Chapter V presents findings based on our observations of children's classrooms and home visits.

- Chapter VI details the demographic characteristics of families enrolled in our study.
- Chapter VII describes the developmental functioning of enrolled children.
- Chapter VIII examines selected outcomes within several important subgroups (race/ethnicity, level of risk, dual language learner status, whether the child has an identified disability, and families' service model).
- Chapter IX studies the characteristics of families receiving different types of Early Head Start service approaches and, among multiple-approach programs, considers how family characteristics are related to service approach. It also examines the alignment of family needs and services received.
- Chapter X summarizes the findings and describes next steps.

II. THE STUDY'S DESIGN PROVIDES A SNAPSHOT OF EARLY HEAD START PROGRAMS, INFANTS AND TODDLERS, AND THEIR FAMILIES

In this chapter we provide an overview of the Baby FACES design process, research questions, methods, and the analytic approach used in this report on the first data collection wave as well as the plans for future analyses. Volume II includes additional details about the design of the study.

Expert Input Informed the Study Design and Analyses

The Baby FACES design represents the culmination of an iterative planning process that included input from a number of key stakeholders. The design planning built on ACF's vision for the study and its overarching goal of meeting the policy and programmatic needs of the agency as well as meeting the needs of local Early Head Start programs (for example, by using measures that program staff in sites not participating in the study could administer and score easily, thus facilitating local benchmarking against the nationally representative sample). In addition, the study design was to serve as a foundation for research the agency might fund in the future to provide an ongoing description of Early Head Start and allow for performance measurement and analysis of trends over time.

The design process included working closely with ACF, program and research experts, and representatives from local programs. First, Mathematica developed detailed memos for OPRE about the sample selection and measurement options in each area of interest (program and staff characteristics, family service needs and use, parenting, and child and family well-being). Next, on behalf of OPRE, Mathematica arranged for a group of nine experts to participate as members of the Baby FACES technical work group (TWG). In December 2007, the Mathematica team requested that members of the TWG provide their feedback and design recommendations during a two-day in-person meeting held in January 2008. Based on the options and recommendations discussed during this meeting and on ACF preferences, the Mathematica team revised key design parameters.[1] For example, the sample size was increased from 60 to 90 programs; and, to compensate for the additional costs resulting from that decision, one of the three proposed cohorts (the 2-year-old Cohort) was eliminated from the study. The TWG members also recommended that the study add an ongoing services tracking system. During 2008, the study team worked closely with four programs to develop and pilot the Family Service Tracking System and to test the feasibility of the revised sampling approach. We also conducted focus groups with eight Early Head Start staff members at the annual Birth To Three conference in August 2008 to solicit input on the study design and program director interview component.

Also in 2008, the study team developed the Baby FACES data collection and analysis plans, which were implemented in 2009. As needed, the team obtained expert input from TWG members and other program and research leaders. For example, we worked with experts in the development of infants' communication skills to plan the data collection approach for children who are dual language learners (DLLs). Finally, during data analysis, the Baby FACES team consulted with TWG

[1] Volume II, Appendix A describes the sample design in detail.

members and other researchers to address variable construction, technical, and administration issues relevant to specific measures and analytic strategies. The design of the study and this report benefited from an exchange of ideas as well as formal feedback provided by these experts.

Descriptive Research Questions Guide the Study and the Organization of This Report

As described in Chapter I, OPRE and the Office of Head Start seek to use information from Baby FACES to inform Early Head Start policy and program decisions at the federal and local levels. The study provides important programmatic information about family service needs and use as well as staff characteristics and service quality. Over time, as the infants in the study progress through the program and the annual data collection tracks them and their families through age 3, the study will describe the children, families, and the services they receive. The study will (1) provide annual snapshots of the program, staff, children, and families; and (2) support analyses of change over time. Taken together, these cross-sectional and longitudinal approaches will yield a comprehensive picture of Early Head Start and the families it serves.

The guiding research questions for the study include those focused on the types of cross-sectional analyses presented in this first report as well as the longitudinal questions. The study questions are grouped in four overarching areas: (1) Early Head Start and program services and staff, (2) the population served by the program, (3) the relations between program services to child and family outcomes, and (4) the properties of measures used in the study. Box II.1 lists the overarching areas, specific research questions under each, and the report chapter that addresses each question. The research questions addressed by this report on the spring 2009 findings are shown in italics. This report provides the descriptive foundation for the subsequent reports and analyses of change over time.

As described in more detail in the next section, one of the strongest features of the study is the ability to analyze the data from both cohorts (the Newborn Cohort, or Cohort 0, and the 1-year-old Cohort, or Cohort 1)[2] together and thus increase the sample size for particular research questions. Given that this report includes only one round of data collection for each cohort, the sample size introduces some limitations in regard to (1) answering questions that involve small subgroups, and (2) conducting multivariate modeling of the relationships among program and family characteristics and needs and child development. In subsequent reports we will take advantage of this design and combine data across cohorts for a given age. For example, the Newborn Cohort children will be 1-year-olds at the time of the spring 2010 data collection. In the next report, we will be able to combine the data for all 1-year-olds (collected in 2009 from Cohort 1 and in 2010 from Cohort 0)

[2] Although we refer to the cohorts by the age of the children throughout the report (i.e., Newborn Cohort and 1-year-old Cohort), in this chapter, for the sake of clarity, we periodically will refer to Cohort 0 and 1, particularly when describing how we plan to combine data across time.

Box II.1 Baby FACES Research Questions

Describing Early Head Start and Program Services (Chapters III, IV, and V)

- What is Early Head Start? What are the program models employed, the qualifications of staff, and other important program features and characteristics?
- What is the overall status of program implementation and quality?[1]
- What specific services are delivered to families and how are these services individualized to meet the needs of each child and family?

Describing the Population Served (Chapters VI and VII)

- What are the characteristics of the families Early Head Start serves (includes demographic, household, and family characteristics; needs; and risk factors)?
- How are Early Head Start children and families faring over time?[2]

Relating Program Services to Child and Family Outcomes (Chapters VIII and IX)

- How are child and family needs and outcomes associated with services received over time? Are there relationships between program features and outcomes?
- What are the characteristics of and services for special populations and subgroups? Examples of subgroups include children with identified special needs, highest-risk families, mothers with depression, DLLs, and mothers pregnant at program enrollment.[2]
- What family and child characteristics are linked to services received? What characteristics are linked to outcomes?

Assessing Measures Used in Baby FACES (Volume II, Appendix C)

Compared with the measures used in research projects, what are the psychometric properties (including concurrent and predictive validity) of measures routinely used by Early Head Start programs? What have we learned from fielding these instruments that can help inform their use at a local program level?

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[1] The data collection approach in this study requires that we present the program quality findings at the child level. As described further in Chapter V, we can only make statements about the quality of care received by children in the study, and not draw conclusions about the quality of care in programs overall.

[2] The longitudinal questions cannot be addressed in this report but will be the focus of later reports.

and thereby increase our analysis sample. This larger sample size will allow us to address more complex research questions using more sophisticated analytic techniques.

In this report, although we may at times refer to "outcomes," we are in fact referencing baseline measures of functioning and not anything that connotes effects of program participation or a change in status over time that cannot be addressed now. We make a distinction between (1) cross-sectional family and child needs and well-being when families start or are early in their program participation (as is the case for the pregnant women and newborns in Cohort 0 and for the 1-year-olds in Cohort 1 when data collection began in spring 2009), and (2) family and child outcomes collected after a longer period of participation. Given that this study is descriptive and not an experiment comparing

a program group to a no-program control group, it is important to remember that we will only be able to explore associations over time among program service use and outcomes. We will not be able to make causal inferences nor draw causal conclusions. For example, we will not be able to say that a certain level of program participation or service quality caused children to have better communication skills. Rather, we will identify the strength of the association between program characteristics and experiences and these outcomes. In this report, we do explore some relationships among program characteristics and family and child well-being in spring 2009 using simple descriptive techniques (for example, cross-tabulations and correlations). Subsequent reports will explore these associations using more sophisticated techniques (described in the data analysis section below). The next section describes the Baby FACES sampling approach.

The Data Collection Approach Provides Comprehensive Information from Multiple Sources

This section provides a brief overview of the study participants and the data collection approach and sources used to address the study's research questions. Details about the measures used and the data collection activities are described below and in Volume II, Appendix B.

We defined the Baby FACES eligible age windows for the two cohorts of children to be enrolled in the study as follows: (1) Cohort 0/the Newborn Cohort included pregnant women within 2 months of their due date and newborns less than 2 months old; (2) Cohort 1/the 1-year-old Cohort was infants 10 to 15 months old. Our objective for following cohorts was to describe children in key age groups served by Early Head Start while also constraining the number of age-specific child development measures needed to assess them. Table II.1 depicts the two age cohorts and their progression through the longitudinal study, as well as the study data sources.

Data collection began in spring 2009 and will continue annually until children reach age 3, or leave the program. Box II.2 describes the data sources and key components as well as the differences in what is collected over time. Note that this report only includes data from the spring 2009 respondents and collection activities.

We Selected a Nationally Representative Sample of Programs

We designed the Baby FACES sample of Early Head Start programs to be representative of the population of programs nationally. Within programs, the families being served by the Early Head Start program represent the population of parents of newborn and 1-year-old children enrolled in Early Head Start in spring 2009. To achieve the goal of an efficient, representative national sample of sufficient size to detect developmental or programmatically meaningful differences over time

Table II.1. Data Collection Approach by Data Source, Year, and Cohort

	Parent Interview[a]	Direct Child Assessment and Home Observation[a]	Parent-Child and Assessor-Child Interaction[a]	Staff-Child Report (SCR)[a]	Home Visitor/ Teacher Interview	Classroom Quality Observation	Home Visit Quality Observation	Program Director Interview	Family Service Tracking[a]
Spring 2009									
Newborn Cohort (Perinatal)	✓	X	X	✓	✓	X	✓	✓	✓
1-year-old Cohort (Age 1)	✓	X	X	✓	✓	✓	✓	✓	✓
Spring 2010									
Newborn Cohort (at 12 mo)	✓	X	X	✓	✓	✓	✓	✓	✓
1-year-old Cohort (at 24 mo)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spring 2011									
Newborn Cohort (at 24 mo)	✓	✓	✓	✓	✓	✓	✓	✓	✓
1-year-old Cohort (at 36 mo)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spring 2012									
Newborn Cohort (at 36 mo)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fall 2012									
1-year-old Cohort (at 42 mo)	✓								

Note: All parents of children who exit the program before age 3 will be contacted to complete a brief exit interview and then dropped from further rounds of data collection. We plan a brief 42-month follow-up parent interview for those in the 1-year-old Cohort who remain in the program until age 3.

[a] Information collected at the child level.

✓ = Data collection occurs at this time point.

X = Data not collected at this time point.

[a] Information collected at the child level.

Box II.2 Overview of Baby FACES Data Sources and Measurement Approach

Parent Interview. This interview asks the person with primary responsibility for the care of the study child (how this child is identified is described below) about the demographic characteristics of the family and child, about their service needs and use, and about their well-being and that of the child. It also asks about the child's exposure to environmental health risks as well as environmental and routine supports for the child's growth and development. Parents also are asked to rate their child's development and behavior on a few assessments of their child's development (Ages & Stages Questionnaires [ASQ] (Squires et al. 2009), MacArthur-Bates Communicative Development Inventory [CDI] (Fenson et al. 2000), and the Brief Infant Toddler Social Emotional Assessment [BITSEA] (Briggs-Gowan and Carter 2006) and the quality of their relationship with the child's home visitor or teacher. The interview is conducted by telephone and was designed to take 45 minutes to complete. The specific components of the interview vary by data collection period. To streamline the telephone interview, we will take advantage of being in the child's home at ages 2 and 3 (2010 through 2012) and move some of the child development rating scales to a self-administered questionnaire we ask the parent to complete while we conduct the direct child assessment. Volume II, Appendix B describes the components of each data collection instrument by wave.

Direct Child Assessment and Home Observation. Mathematica field staff conduct the child assessment home visits when the children are 2 years old and again when they are 3. The assessments include administration of the Preschool Language Scale-4 Receptive subscale (Zimmerman et al. 2002) and measurement of height and weight. While in the home, the field interviewer also observes the child's ability to focus on the tasks provided, the interactions between the child and parents, and the quality of the home environment as supports for children's safety and development (both internal and external). These observation measures include the Bayley Behavior Rating Scale (BRS) (Bayley 2006), the Home Observation for Measuring the Environment (HOME) (Caldwell et al. 2003), and scales drawn from a study of neighborhoods in Chicago (Ross et al. 2008).

Parent-Child and Assessor-Child Interaction. At ages 2 and 3, children participate in two semistructured interaction activities that involve playing with two different sets of toys. These interactions are videotaped for later coding of target behaviors. First, the parent and child are asked to sit on a mat and play with the contents of two bags of toys (this is the Two-Bag task, an adaptation of the parent-child interaction task used in the EHSREP and the Early Childhood Longitudinal Study-Birth Cohort [ECLS-B]). Second, the field interviewer and the child play with another set of toys, with the interviewer following a standardized protocol (the Early Communication Indicator [ECI] [Greenwood et al. 2006]).

Staff-Child Report. At all data collection waves, the home visitors and teachers of study children complete a child-specific rating with details on the characteristics and behavior of the families and children. Staff members also rate the quality of their relationship with the parents of study children.

Home Visitor/Teacher Interview. Depending on the service approach a family receives (primarily home visiting or center-based Early Head Start services), we interview either the child's home visitor or teacher to determine the teacher's demographic characteristics, tenure working for the program, the work environment, the teacher's well-being, and training and education experiences provided by the program. We update this information at each data collection wave. As children are served by new staff members over time, we interview those staff members. We only interview staff members working with study children at the time of each data collection wave (we do not follow staff members across time unless they are still working with one or more study children).

Classroom Quality Observation. To assess the quality of center-based services study children receive, a Mathematica field staff member observes the quality of children's classrooms using a set of measures. These include the number of children and adults caring for them as well as measures of the quality of the materials and the interactions between children and their teachers. When the children are 1 year old, observers use the

Infant/Toddler Environment Rating Scale-Revised (ITERS-R) (Harms et al. 2003) to measure environment and process quality. When the children are 2 years old, they will use the Toddler CLASS (Pianta et al. 2010). Experience from previous data collection waves will inform the measures selected for age 3. It is important to note that at any one data collection wave, these observations only assess the quality of care received by the study children and are not necessarily representative of the quality of care received by all children in the program. As described below, we sampled programs and attempted to recruit all children in our age eligibility windows into the study; we did not sample at the classroom or home visitor level. This limits the ability to generalize from the findings to the quality of care in the Early Head Start program overall. Especially in this first report, it is important to keep in mind that we are only presenting findings about the care received by 1-year-olds in our study sample. As the children get older, the quality data should become more representative of the program as a whole.[1] To conserve resources, if more than one study child is in the same classroom, we only conduct one observation per data collection round.

Home Visit Quality Observation. To assess the quality of the home visits study children receive, field interviewers observe the home visitors who provide services to children in the study sample using the Home Visit Rating Scales-Adapted (HOVRS-A) (Roggman et al. 2010) and a form that assesses the content and characteristics of the visit. The home visit observations have the same generalizabiltiy limitations as the classroom observations just described. We schedule an observation of each home visitor who had a study child on his or her caseload but do not observe a home visit for each child in the home visiting option.[2]

Program Director Interview. Through a semistructured telephone interview and a self-administered questionnaire, program directors report on their demographic characteristics, credentials, and training; the work climate and staff benefits; family characteristics and needs; services offered; and staffing and turnover.

Family Service Tracking (FST). To capture the services received by families, Early Head Start home visitors and teachers of study children complete a weekly service tracking form that details the number of expected service experiences (home visits or days in care) study children received as well as any referrals for family or child services provided that week. Experiences collecting these data in 2009 and lessons learned are described in Volume II, Appendix B. Given that we implemented the FST system on a rolling basis after the field period in each site, we will present these data in subsequent reports.

[1]The data collection approach requires that we present the program quality findings at the child level. As described further in Chapter V, we can only make statements about the quality of care received by children in the study.

[2]Before deciding on this approach (observing one visit per home visitor rather than one visit per child), we consulted with Lori Roggman, one of the developers of the home visit observation tool we used, to better understand how much variability within a home visitor we might expect to see. It was Dr. Roggman's experience that home visitors tend not to vary much in their quality ratings over different families (personal communication, April 2009). That is, that home visitors possess a given level of quality and adeptness at conducting a home visit; that quality level is independent of the family they were visiting. Given the enormous constraints in scheduling observations of visits during the brief time we had on-site, we opted to observe each home visitor only once and apply those ratings to all the study children on that home visitor's caseload, much as we did for observations of classrooms with more than one study child in attendance.

or by key subgroups, we used a stratified clustered sample design.[3,4] We selected all children receiving center- or home-based services, or both, from selected programs who fell within the study-defined windows based on date of birth or due date for expectant mothers as of the spring 2009 data collection visit to each grantee.[5] We hoped to enroll 90 programs into the study.

The sampling frame we used to select programs was the most recently available Head Start PIR data available, which at the time of sampling was from program year 2006–2007. All Head Start and Early Head Start programs must submit the PIR data annually, and it is a reliable source of information about the programs and the types of families they serve (for example, the number of children served and the demographic characteristics of families). The sampling unit was the PIR reporting level, the program. According to the 2006–2007 PIR, there were 640 Early Head Start programs that met the study eligibility criteria. Although they serve infants and toddlers, Migrant and Seasonal Head Start programs were not included in this study as they often operate on a much shorter timeframe than Early Head Start programs; American Indian/Alaska Native programs were also not included in the sample frame. The Office of Head Start and OPRE are funding other study activities to address the unique needs of these programs. For reasons of cost, programs in Alaska and Hawaii were also not included. We excluded other Early Head Start programs from the frame due to program size. (Volume II, Appendix A describes the eligibility criteria in more detail.) From experience conducting similar studies, we anticipated that some programs would refuse to participate or be found to be ineligible after sampling. To address this, we paired each program with a similar program and identified one as the primary program and the other as its backup.

Once the programs were sampled in fall 2008, we verified that programs were in good standing (a condition of eligibility) with the Office of Head Start and the ACF regional offices, explained the study to programs, and recruited them for participation.[6] We also requested programs provide a list of Early Head Start centers, home visitors, classrooms, and the children served by each home visitor and in each classroom (children receiving both home visits and some classroom services were randomly assigned to one or the other for the observation, teacher/home visitor interview, and SCR). When, based on an "eligibility roster" of all enrolled children, a sampled program was projected to have too few eligible families during our study period to make a data collection visit worth the costs, we excluded the program from the study as ineligible and released its sampled pair.

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[3] By stratified, we mean that important characteristics of programs and families are taken into account before selection of the programs with the goal of ensuring that programs with these characteristics are included in the sample in proportion to their frequency in the universe of programs. A clustered design means that children are grouped either within classrooms or by home visitors, which must be accounted for statistically before analyzing the data. This design is described in more detail below and in Volume II, Appendix B.

[4] We created four strata based on the size of the study-eligible population and sampled with equal probability from each stratum. Within each stratum we implicitly stratified (sorted) based by program service approach (center-based, home-based, or mixed), then by the urban setting (Metropolitan Statistical Area [MSA] versus non-MSA) and ACF regional office. Using Program Information Report (PIR) data, we ascertained that we should obtain sufficient DLL children in our sample without the need to oversample them.

[5] Note that centers, classes, teachers, and home visitors became part of the sample only if they provided services to a study-eligible child.

[6] The section on Baby FACES coordinators later in this chapter provides more detail about the recruiting process.

The eligibility threshold we set was a minimum of five children in either of the specified age ranges for the cohorts in at least one of the data collection weeks. We constrained the eligible programs in this way because of concerns about attrition. If a program had only a small number of eligible children, it would be more likely to drop out of the study early if those children left the program before age 3. We projected the number of children who would be eligible by computing how old each child on the eligibility roster would be during each of the 16 data collection weeks. These eligibility criteria required us to substitute 22 of the originally selected programs (16 due to eligibility and 6 for refusal to participate in the study).[7] The six times that a program and its match were both ineligible, we selected a wildcard program from among unused program matches. Our consent rate for programs was 93.7 percent, with a final sample of 89 programs participating.[8]

About two weeks before visiting each program in spring 2009, we asked the programs for an updated list of all enrolled families that included children's birth dates and the name of each child's main service provider or the address of the center if the child received center-based services. The lists included pregnant women and their expected due dates.

From these lists, we identified the children and pregnant women whose birth dates or due dates qualified them to be in one of the two cohorts for this study, using the date of the planned spring 2009 program visit to calculate age (gestational age for children who were not yet born). Because we took all children in the sampled programs whose birth dates fell within the specified age windows as eligible for the study, the resulting census of children in each cohort represents families and children of these ages enrolled in Early Head Start in spring 2009.

To minimize burden on individual families, if a family had more than one child eligible for the study, we randomly selected only one to participate in Baby FACES.

Stratification of the Sample Maximized the Number of Children Included in the Study and Ensured Representation of Important Subgroups

One challenge we faced was the need to balance statistical issues related to sampling a large number of programs and including a large number of children with the per program cost of sending data collection staff to many programs. In addition, ACF sought to draw a sample that included a large enough number of children with important characteristics to support subgroup analyses, especially by examining child and family characteristics by program approach to service delivery and family primary language. To address these needs and maximize the number of children included in the sample per program, we oversampled larger programs by stratifying the frame based on annual enrollment as reported in PIRs and using an optimal allocation across strata, which balanced variance and per program unit cost. We divided all Early Head Start programs into four strata according to size (estimated number of study-eligible families), with stratum 1 containing the

[7] Among the excluded programs were two that served a transient population. Staff at these programs reported that the population was unlikely to be in the program for more than 18 months.

[8] One program agreed to participate but was not able to obtain consent from its institutional review board (IRB) in time for data collection.

smallest programs and stratum 4 containing the largest programs (see Table II.2). In this design, programs are sampled with equal probability within each stratum.

Of particular policy concern—and emphasized in the recent Head Start Reauthorization Act—are children with limited English proficiency. We wanted to ensure that we did not by chance select a sample with too few DLLs in the sample to analyze them as a separate subgroup. We estimated the expected size of the DLL sample from PIR and decided that oversampling programs with large numbers of DLLs would not be necessary for subgroup analysis. Although oversampling was not necessary, to ensure the sample would adequately represent DLLs, we created strata that included whether the program had a majority of DLL children (resulting in 8 strata overall).

In addition to using an explicit stratification approach (based on size of study-eligible population and majority/minority DLL), we also implicitly stratified by program service approach (center-based, home-based, or mixed)[9], then by urban setting (MSA versus non-MSA) and ACF region. This helped the sample better resemble the population in terms of these characteristics. The sampling strategy was successful and the resulting sampled programs closely resemble the population of eligible Early Head Start programs on a variety of characteristics, including all of the explicit and implicit stratification variables (except for program size, as we oversampled larger programs). (See Volume II, Appendix A for comparisons of our sample to the population of Early Head Start programs eligible for this study.)

Table II.2. Estimates of Dual Language Learner (DLL) Sample by Sampling Strata

Stratum	Program Size (1 = Smallest, 4 = Largest)	Majority DLL	Sampled Programs	Study-Eligible Children in Sampled Programs	Study-Eligible DLL Children in Sampled Programs
1	1	No	11	81	6
2	1	Yes	2	11	9
3	2	No	15	200	19
4	2	Yes	3	40	28
5	3	No	21	421	44
6	3	Yes	2	41	27
7	4	No	32	1,223	180
8	4	Yes	4	192	127
Total	**n.a.**	**n.a.**	**90**	**2,209**	**441**
Effective Sample Size				**933**	**274**

n.a. = not applicable.

[9] For the purpose of sampling, the mixed category included programs that offered both home- and center-based options and those with locally designed options. We omitted the few programs that offered family child care as the only service option because the service type was different and the group of children would be too small to make comparisons across options.

We Defined Cohorts by Children's Age at the Time of the Data Collection Visit

Within each selected program, we included all children and pregnant women who fell within our study eligibility windows in the study sample. The Monday of the site visit week identified for each program (which we will refer to as the "focus date") was used to determine the eligibility window for the Newborn Cohort (although it included pregnant women as well as newborns) and 1-year-old Cohort. The Newborn Cohort included babies up to age 2 months at the time of the spring 2009 data collection visit, as well as any pregnancies likely to result in a baby who would be between 10 and 14 months at the time of the spring 2010 visit. The 1-year-old Cohort included children who were between 10 and 15 months of age at the time of the spring 2009 data collection visit; that is, the visit was within 2 months before the child's first birthday, or the child's first birthday was less than or equal to 3 months before the site visit.

The Sample Design Accounts for Attrition and Inability to Locate Families

Both sample cohorts will be followed up each spring until the children are within the defined window of their third birthday. We projected that 15 percent of the children (and their parents) would leave the Early Head Start program each year before they reach age 3.[10] For those who leave the program since our last contact with them, we will conduct a brief telephone survey at the next scheduled data collection period. We will not collect other data from those who have left the program and will not continue to follow them in our sample. We estimate that, despite our best locating efforts, we will be unable to contact approximately 10 percent of the sample still in the program at each one-year interval (and 5 percent between age 3 and 3½). Table II.3 provides estimates of sample attrition across the data collection period by cohort and for both cohorts combined.

Our estimates of the eligible sample in each age cohort at the design stage were larger than those we found in reality. Although the size of the sample we enrolled in the study is sufficient for meaningful subgroup comparisons (described in the next section), if higher-than-expected attrition or inability to locate participants occur in subsequent years, it will affect the ability to detect small or

Table II.3. Sample Sizes at Each Baby FACES Data Collection Wave

	Data Collection Respondent	Projected Number Responding				
		Spring 2009 (Actual)	Spring 2010	Spring 2011	Spring 2012	Age 3½ (Fall 2011)
Newborn Cohort	Parent	175	158	121	92	
	Child		148	114	87	
1-year-old Cohort	Parent	719	647	495		435
	Child		599	458		
Both Cohorts	Parent	894	805	616	92	435
	Child		747	572	87	

[10] Early findings from the spring 2010 data collection suggest an attrition rate of between 20 and 25 percent.

moderate differences (described later in this chapter). Because the actual sample is smaller than we expected, we used PIR data and program rosters to investigate and reached the following conclusions:

Comparing 2007–2008 and 2006–2007 PIR data (the latter being the one used for sampling), the programs in our sample seem to be reporting fewer enrolled pregnant women and children age 1 and younger, a higher number of enrolled children age 2 and older, and lower enrollments overall. For the population overall, we also saw a decrease in the number of pregnant women and an increase in the number of children age 2 and older, suggesting a population-wide trend. We also overestimated the size of the Newborn Cohort because, in our sample design, we summed two PIR variables that include (1) all pregnant women, and (2) infants who enroll over the course of the year. This will overestimate newborn enrollment if their mothers were also served by the programs during pregnancy.

Further, because we collected rosters from programs over the fall 2008 recruiting period to determine program eligibility for the study, we were able to compare the number of children who would have been in our age windows had we conducted data collection in the fall rather than in the spring.[11] We then obtained updated rosters just before the spring 2009 visits (and field staff confirmed these while on-site to ensure any newly enrolled eligible children could be included in the study). We found evidence of seasonality in births, with a greater number of children eligible for Baby FACES given a fall data collection, compared to one in the spring. That is, fewer children in our sample programs have spring birth dates than have fall birth dates.

The Sample Is Still of Sufficient Size to Detect Meaningful Differences in Child Outcomes for Key Child-Defined Subgroups

As described above, the study is designed to support statistical comparisons of child-level outcomes across subgroups of children/families and child-level characteristics based on subgroups of programs. In this section, we discuss the statistical power to detect these differences.

Power for Child-Level Analysis. The sample should be large enough to detect developmentally meaningful differences, given various assumptions about the sample design and its impact on the variance of estimates. The total sample size of enrolled families is 976, with 194 in the Newborn Cohort and 782 in the 1-year-old Cohort.[12]

- *Point-in-Time Comparisons by Cohort.* At the child level, if we compared standardized assessment scores (mean of 100, standard deviation of 15) of Cohort 1 (the 1-year-old Cohort) children when they are 3 years old for two approximately equal-sized program-defined subgroups, this design would allow us to detect a minimum difference of 4.6

[11] The spring data collection was necessitated by the receipt of OMB clearance in September 2008.

[12] The sample size was 977 until we discovered we had an error in one child's birth date, placing him outside the eligibility window.

assessment points with 80 percent power (or an effect size of .30). Comparisons within the Newborn Cohort will be limited by the small size of the group.

- *Point-in-Time Comparisons Combining Cohorts.* We can detect smaller differences in analyses that combine cohorts and examine outcomes at a given age (as small as .24 of a standard deviation). Although differences smaller than a quarter of a standard deviation are likely to exist in this study, they have a small probability of being detected with the current sample size.

- *Change over Time Comparisons.* If we compare a child outcome, such as the percentage screening positive on the BITSEA over time (age 1 to age 3) for children in Cohort 1, we would be able to detect a minimum difference of .074 points (an effect size of .15). Change over time comparisons will be more difficult for Newborn Cohort children because of the small sample size, which is likely to grow even smaller due to attrition; however, combining the two cohorts to look at change over time will maximize the power of these types of comparisons.

Power for Program-Level Analysis. If we want to compare two unequal-sized subgroups of programs, for example those that offer home-based services compared to all others (approximately 15 versus 85 percent), we will be able to detect a difference of about .80 of a standard deviation. These detectable differences and effect sizes are fairly large, which is to be expected for a sample size of 89 programs.

Power for Classroom and Home Visit Quality Analysis. For estimates and analyses based on classroom and home visit quality measures, for Cohort 1, we can detect a quality measure effect size at the child level between one-third versus two-thirds of children in program-defined subgroups at age 3 of .44. An example of this type of analysis is comparing the quality of home visits of children in urban versus rural programs. Similar minimum detectable effect sizes are possible when subgroups are defined at the child level rather than at the program level. For child-level subgroups, for Cohort 1, we can detect a difference of .41 between a subgroup representing about 33 percent of the population (say, children whose mothers are employed or in school or training) and 67 percent (children whose mothers are not employed or in school or training). An example of this is an analysis comparing the quality of classrooms for children whose mothers are employed or in school or training relative to other children.

Weighting at the Program and Child Levels Allows for Population-Level Estimates

We constructed analysis weights at the program and child levels to make the responding sample representative of the target population by adjusting for differential probabilities of selection and response patterns.

Program Weights. The program-level weight can be used for analysis of the 89 participating programs, and it is also used as a building block for the child-level weights. After excluding the ineligible programs, the program weights sum to 570 programs. This represents our best estimate of the total number of Early Head Start programs that met our study's eligibility criteria.

Child Weights. The number of children confirmed as enrolled and born within the defined windows at the time of the data collection visit to the 89 programs was 1,108. The sum of the

sibling-adjusted weights for these 1,108 eligible children is 6,229, which is our best estimate of the number of study-eligible children being served by study-eligible Early Head Start programs. Among these 1,108 eligible children, we obtained parental consent for 976 children to participate in the study (an 88.1 percent consent rate). The next step in the weighting process was to adjust the children whose parents consented to account for those whose parents did not consent to participate. We examined all the implicit and explicit stratification variables along with the cohort and found that size stratum and service type were the only significant predictors of consent. The sum of the consent-adjusted weights for the 976 consented children is 6,224.

We then created two child-level weights for the children with consent based on responses to the parent interview, SCR, teacher or home visitor interview, and completion of the classroom (ITERS-R) or home visitor (HOVRS-A) observation. One weight is for analysis involving child-specific information obtained in the parent interview or SCR, and is positive if either of these was completed. The sum of this weight for the 973 children with at least one of these instruments completed is 6,224.

Data on the quality of the services the child receives can be obtained from either the teacher or home visitor interview or the classroom or home visitor observation. This next weight is for analysis involving both child-specific information (as found in the parent interview or SCR) and this quality information. This weight is positive if we have (1) either the parent interview or SCR, and (2) either the teacher/home visitor interview or the classroom/home visitor observation. Significant predictors of response were age cohort, size stratum, and service type. The sum of this nonresponse-adjusted weight for the 951 children is 6,224.

Measurement and Data Collection Approaches Provide a Multi-Dimensional View of Programs, Children, and Families

This section presents the principles that guided measurement selection, the measures presented in this report by chapter, and the training and data collection procedures.

We Followed Six Guiding Principles in Selecting Measures

The Baby FACES approach to selecting child and family measures was based on six guiding principles:

1. ***Relevance to Intervention Goals and Key Hypotheses.*** The measures we chose were concentrated in areas that are important for children and families that the Early Head Start program seeks to influence (and that the program affected in the EHSREP) or for which we had strong hypotheses about the program's short-term effects.

2. ***Appropriateness to Children's Age and Developmental Level.*** Because developmental change is rapid during the early years that are the focus of this study, the appropriate measures of child development tend to be appropriate for a relatively narrow age range. Thus, to measure a particular developmental construct at different ages, we often had to use different assessments to measure it. In addition, a relatively large proportion of children from economically disadvantaged families exhibit developmental lags. Therefore, we considered the developmental level as well as the chronological age of the children when choosing measures.

3. *Appropriateness for the Early Head Start Population.* Many of the families in the sample have low income and represent racial, ethnic, and linguistic minority groups. Therefore, our goal was to choose measures available in Spanish (apart from English, Spanish is the predominant language among Early Head Start families) and normed or used with samples that include a variety of ethnic groups and children from economically disadvantaged families. In addition, we chose measures to be appropriate to parents' expected reading and comprehension levels as well as their cultural backgrounds.

4. *Adequacy of Psychometric Properties.* We chose measures with adequate reliability and validity for children from low-income families and for a number of racial and ethnic groups. In general we chose measures with a demonstrated internal consistency reliability (Coefficient alpha) of .70 or higher (this level is generally accepted as an adequate demonstration of reliability).

5. *Prior Use in Large-Scale Surveys and Intervention Evaluations.* To reduce measurement development efforts and increase comparability with other national studies and intervention evaluations (including the ECLS-B, Head Start's Family and Child Experiences Survey [FACES], and the EHSREP), many of the measures we chose have been used in other studies with demonstrated ease of administration and adequate psychometric properties. When deciding to use a measure that had not been used on a large scale before (for example, the HOVRS-A), we worked with the author of the measure to determine whether we could expect it to work well in a national study and with our population.

6. *Low Cost, Low Burden, and Program Friendliness.* The measures we chose had to be administered reliably by trained interviewers rather than require administration by an experienced clinician. We also chose measures that placed minimal burden on the parents and children. Because we anticipate that programs will look to Baby FACES measures for their own data collection, we also wanted to ensure that the measures could potentially be useful to and used by programs.

Key Measures Provide Information from Spring 2009 on Program Model, Centers, Home Visits, Service Quality, Staff, Families, and Children's Development

We drew the findings in this report from the comprehensive battery of measures administered in spring 2009. Table II.4 provides information about key measures used in this report by chapter. Findings based on program model are presented and discussed in Chapter III; center, home visitor, and staff findings are presented and discussed in Chapter IV; quality findings are presented and discussed in Chapter V; child and family characteristics are presented and discussed in Chapter VI; and child developmental status, parent well-being, and family service use are presented and discussed in Chapter VII. Volume II, Appendix C presents a detailed table of all measures used in analyses for this report, including sample size; mean; possible and actual range; standard deviation; and internal consistency of measures when appropriate.

A Cadre of Baby FACES Coordinators Worked to Secure Program and Family Participation

Given the complexity and longitudinal nature of the study, we worked to establish personal relationships between researchers and Early Head Start program staff to ensure good ongoing communication between the Mathematica team and the programs. We achieved these relationships

with a staffing structure that includes a cadre of 10 trained Mathematica staff who act as Baby FACES coordinators (BFCs). We assigned each BFC a set of programs to recruit and work with closely throughout the life of the study.[13]

[13] Each BFC is responsible for 9 programs on average (ranging from 1 to 15).

Table II.4. Key Measures Used in This Report

Program Model and Implementation: Chapter 3	
Program Approach: Program Level	Program approach at the program level is based on director responses to questions regarding the types of services their programs offer (center-based, home-based, or combination) and, separately for each service option, the frequency of services offered.
Program Approach: Family Level	Program approach at the family level is based on information collected during interviews with parents. Parents were asked whether they receive center-based services, home-based services, family child care services, or another type of service.[a] Parents also indicated the frequency of center attendance and home visits received.
Program Implementation	Program implementation was collected via an adaptation of a rating form developed for the EHSREP implementation study. It was included in the program director self-administered questionnaire (SAQ) and asked directors to rate their program's implementation on elements within each of the four cornerstones (community, staff, family, and child development). Each element is tied to the Head Start Program Performance Standards and rated on a scale of 1 (low) to 5 (enhanced) implementation. Scores of 4 indicate full compliance with the performance standards.
Center, Home Visitor, and Staff Measures: Chapter 4	
The Center for Epidemiologic Studies Depression Scale—Short Form (CESD-SF; Radloff 1977; Ross et al. 1983)	The CESD-SF is the short form of the full-version CESD, which is a self-administered screening tool used to identify symptoms of depression or psychological distress.
Parent-Caregiver Relationship Scale (PCRS; Elicker et al. 1997)	The PCRS measures the perceived relationship between the parent and the primary caregiver (i.e., provider, teacher, or home visitor) of infants and toddlers. Items capture important dimensions of the parent-caregiver relationship, including trust and confidence, communication, respect/acceptance, caring, competence/knowledge, partnership/collaboration, and shared values.
Staff Demographic Characteristics	The teacher and home visitor interviews included sections with items that broadly covered: parent participation in the program, staff training and supervision, staff benefits and morale, languages spoken (by the staff member and by families in the classroom or caseload), racial/ethnic group membership, and education.
Quality Measures: Chapter 5	
Infant/Toddler Environment Rating Scale - Revised (ITERS-R; Harms, Cryer, and Clifford 2003)	Center-based observations included ITERS-R, a global rating scale of classroom quality based on structural features of the classroom. The ITERS-R measures the quality of center-based child care for infants and toddlers up to 30 months. The full ITERS-R consists of 39 items organized under 7 subscales.
Child-Adult Ratio	Center-based observations also included child-adult ratios and group sizes.

Table II.4 *(continued)*

Home Visit Rating Scale-Adapted (HOVRS-A; Roggman et al. 2010), modified from the HOVRS (Roggman, Cook, Jump Norman, Christiansen, Boyce and Innocenti 2008)	Observations of home visits used the HOVRS-A, an adaptation of the HOVRS (Roggman et al. 2008). The HOVRS-A consists of 7 items measuring the quality of home visitor strategies and effectiveness at involving and engaging the family during home visits.
Home Visit Characteristics and Content (Boller et al. 2009)	During structured observations of home visits, field staff also collected data on the topics covered, activities, and structure of the home visit.
Child and Family Characteristics: Chapter 6	
Financial Difficulties (SIPP 1996)	Parents were asked to report if they encountered any of five different financial difficulties, including not being able to pay rent and bills, having services disconnected, or being evicted.
Food Security (United States Food Security/Hunger Survey Module, USDA 2008)	Parents were asked to report if they encountered any of five different food security difficulties, including not being able to afford balanced meals, relying on low-cost food, and being worried that food would run out.
Maternal Demographic Risk Index (ACF 2001)	The maternal demographic risk index captures the multiple dimensions of risk of poor developmental outcomes a child may face as a consequence of his or her mother's socioeconomic circumstances. The index comprises three risk groups (lower, medium, and highest). The index was constructed by summing the number of the following risk factors that the mother faced: (1) being a teenage mother, (2) having no high school credential, (3) receiving public assistance, (4) not being employed or in school or training, and (5) being a single mother.
Maternal and Family Characteristics	The parent interview also included sections that broadly covered many different aspects of the family and home environment, including family racial/ethnic membership, languages spoken in the home, program services received, parent and child health, family routines, income and housing, and income and needs.
Child Development and Parent Well-Being: Chapter 7	
MacArthur-Bates Communicative Development Inventories—Infant Short Form (CDI; Fenson et al. 2000)	The CDI is designed to assess children's early receptive and expressive language and communication skills through parent report. Two measures were derived from this form: vocabulary comprehension and vocabulary production.
Ages & Stages Questionnaires, Third Edition (ASQ-3; Squires et al. 2009)	The ASQ-3 is a parent-report tool for screening children from 1 month through 5-1/2 years of age for developmental delays in five key developmental areas: (1) communication, (2) gross motor, (3) fine motor, (4) personal-social, and (5) problem solving.
The Brief Infant Toddler Social Emotional Assessment (BITSEA; Briggs-Gowan and Carter 2006)	The BITSEA is the screener version of the longer ITSEA, which is designed to detect delays in the acquisition of social-emotional competencies as well as social-emotional and behavior problems in children 12 to 36 months old.

Table II.4 *(continued)*

The Center for Epidemiologic Studies Depression Scale—Short Form (CESD-SF; Radloff 1977; Ross et al. 1983)	The CESD-SF is the short form of the full-version CESD, which is a self-administered screening tool used to identify symptoms of depression or psychological distress.
The Parenting Stress Index—Short Form (PSI-SF; Abidin 1995)	The PSI-SF measures the degree of stress in parent-child relationships. We included two subscales in Baby FACES: (1) the Parental Distress subscale measures the level of distress the parent is feeling in his or her role as a parent; and (2) the Parent-Child Dysfunctional Interaction subscale measures the parent's perception that the child does not meet expectations and that interactions with the child do not reinforce the parent.
The Family Environment Scale, Family Conflict Subscale (FES) (Moos 2002)	The FES was designed to measure the social and environmental characteristics of families. The Family Conflict subscale measures the extent to which the open expression of anger and aggression and conflict-filled interactions are characteristic of the family.
The Parenting Alliance Measure (PAM) (Abidin 1999)	The PAM measures the parent's perspective on how cooperative, communicative, and mutually respectful they are with their partner in regard to caring for their children.
Social Support (developed for Baby FACES)	Social support is measured by asking parents questions about whether there is someone they can count on for physical and emotional help.
Problems with People (developed for Baby FACES)	Parents reported whether they are having problems with a range of different people in their lives. We present the proportion of parents who reported *not* having problems with any of these people.
Community Participation (developed for Baby FACES)	Parents are asked about their participation in a range of community organizations. We present the proportion of parents who reported that they did participate in any of these organizations.
The Parental Modernity Scale (PMS) (Schaefer and Edgerton 1985)	The PMS measures parents' attitudes toward children and childrearing practices (traditional, authoritarian parental beliefs and progressive, democratic beliefs).
Spanking (item from EHSREP)	Parents reported whether they used physical punishment in the past week by spanking the child.

Note: Each chapter presents additional information about the measures used in it. Volume II, Appendix C describes the psychometric properties of each constructed variable.

[a] Pregnant mothers and parents of newborns (Newborn Cohort) were not asked questions about program services in the parent interview.

The recruiting process began as soon as we selected the sample of programs and confirmed that they were in good standing with the Office of Head Start (in fall 2008). Shortly after we mailed program directors a packet of information about the study, BFCs contacted program directors to recruit them into the study. As discussed in the sampling section, it was at this point that BFCs asked program directors to provide a preliminary roster of children and pregnant women receiving Early Head Start services, along with their birth or due dates, to determine the program's eligibility for the study. Once a program agreed to participate and eligibility was confirmed, BFCs asked directors to confirm a potential site visit week for data collection, and to designate an on-site coordinator (OSC) that the BFC could work with throughout the duration of the study. BFCs recruited programs from November 2008 through February 2009.

The BFCs and OSCs conducted telephone planning meetings in the months leading up to data collection. In these meetings, they confirmed the visit week and worked out the logistics of the visit, including procedures for scheduling observations and teacher/home visitor interviews and for obtaining informed consent from potential study participants. For seven programs, part of that work also included helping programs meet local IRB requirements needed for participation in the study.[14] The result of this process was a data collection plan for the Mathematica field team to follow. The data collection plan detailed the location and time of each classroom session scheduled for observation and the name and contact information of each home visitor to be observed.

Approximately one week before the program visits, the BFC confirmed the roster of eligible children and mailed parent consent forms to OSCs. The OSC distributed these forms to parents along with information about the study and gathered signed forms. OSCs faxed signed consent forms back to the BFC at Mathematica, and the BFC entered them into the sample management system (SMS).

Data Collection Staff Training, Certification, and Quality Assurance Procedures Ensure High-Quality Information

To prepare for the spring 2009 interviewer training, we trained a group of lead trainers for each measure and data collection approach, certified a set of gold standard service quality observers, and hired and trained staff. Mathematica's experience collecting similar data inform these steps, which conform to or exceed data collection quality standards in the field.

Pretraining Preparation for Field Staff Trainers and Quality Assurance Staff. We took a number of steps to prepare for training field staff. In mid-January 2009, the authors of the ITERS-R came to Mathematica's Princeton, New Jersey, office to train our group leaders for the field staff training and gold standard quality assurance observers.[15,16] The Mathematica staff member responsible for developing the HOVRS-A training served as the gold standard for all observers and developed a video-based training sequence for the field staff training.

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[14] All but one of the seven programs obtained local IRB approval and participated in the study.

[15] Reliability for a gold standard observer as defined by the ITERS-R authors is 95 percent reliability within one point on each item.

[16] Of the nine gold standard quality assurance observers on the HOVRS-A and ITERS-R, three are bilingual.

Field Staff Hiring and Training. In January 2009, we recruited 10 2-person teams and 7 additional "floaters" for a total of 27 people to conduct the first round of data collection. To minimize long-distance travel, team members came from around the country. Each team had a designated team leader responsible for managing on-site activities, including scheduling home visit and classroom quality observations. Team leaders were also the main point of contact with the OSC during the site visit week. Twelve of the team members are bilingual in Spanish and English. All are experienced data collectors; 17 of them worked on similar early education data collection projects either for Mathematica or other organizations.

The field training lasted seven days and took place in Princeton between February 15 and 21, 2009, two weeks prior to the start of baseline data collection. Field staff received a total of 40 hours of training over the course of the week. Training included both lectures and in-field practice sessions.

Prior to the in-person training, field staff received the Baby FACES observer manual and a DVD of an Early Head Start home visit. We asked them to watch the DVD before training to familiarize themselves with the aspects of a home visit. All received 18 hours of training on conducting home visit observations and administering the HOVRS-A. The 10 hours of training consisted of watching videos of home visits and practicing coding each of the seven items on the HOVRS-A separately. Observers practiced 2 to 3 hours a day and on the third day watched and rated a new home visit segment to establish reliability. We offered help sessions in the evenings to answer questions on an individual basis. All observers became reliable and received certification to conduct the HOVRS-A.

Training on the ITERS-R spanned three days: one day of classroom presentation by Mathematica staff previously trained by Thelma Harms to gold standard reliability, video segment review, and quizzes; one day of practice in actual classrooms followed by group discussion; and one day for certification. Gold standard trainers and groups of three trainees visited two local child care centers—the first day for practice and the second to establish reliability. Trainees who did not meet reliability standards established by the developers of the ITERS-R (80 percent agreement within one rating point with author-certified gold standard group leaders) conducted additional practice observations until certified. By the end of training, all trainees except one were certified to conduct the ITERS-R.

In-Field Quality Assurance. We obtained high reliability on the HOVRS-A and ITERS-R observation measures in the field. Quality assurance visits occurred in data collection weeks 7 through 12, and the 9 quality assurance observers visited a total of 15 sites. QA staff were on-site an average of 2 days and observed all but two team members conducting observations. In total, we observed 23 field staff for quality assurance. We were able to observe 13 staff members on both the HOVRS-A and the ITERS-R; for 3 we observed the HOVRS-A only, and for 7 the ITERS-R only.[17] Eighty-one percent of the field staff who were monitored on the HOVRS-A and 95 percent of the field staff who were monitored on the ITERS-R were reliable on 80 percent of the items or better.

[17] Two field staff had stopped conducting site visits by the time the quality assurance visits began and thus could not be observed.

Parent Telephone Survey. Two different groups of telephone interviewers (daytime and evening interviewers) received 4 hours of training for the parent survey in April 2009. We trained a total of 31 telephone interviewers to conduct the interviews (10 are bilingual in English and Spanish). In addition, 5 interview monitors (3 of whom are bilingual) and 3 telephone supervisors participated in the training sessions. At the conclusion of the formal training, interviewers paired up and did mock interviews with one another under the supervision of trainers. The practice interviews were conducted using the Computer-Assisted Telephone Interview (CATI) instrument. During the first weeks of telephone interviewing, each interviewer was monitored and given immediate feedback. Ongoing monitoring of 10 percent of the interviews continued throughout the telephone field period. We monitored bilingual interviewers in both English and Spanish.

Program Director Telephone Survey. In late March 2009, the Baby FACES project and survey directors trained two researchers to conduct the program director survey. The project director conducted and taped the first interview and reviewed it together with the two researchers. She also listened to tapes of the first interviews by each researcher and debriefed them. Because the program director interview was along the lines of a semistructured executive interview, the interviewers recorded extensive additional information on spreadsheets to capture information that went outside the questionnaire form and would help the research team fully understand program activities.

Data Collection Details and Logistics

After they were certified as reliable to collect the data, teams of field interviewers visited 89 sites over a 15-week period during spring 2009. Teams consisted of a team leader and one or more field interviewers.[18] If children in a particular program received any services in Spanish, at least one bilingual member was assigned to the team visiting that program. Upon arrival at the site, the team leader met with the OSC to schedule classroom and home visit observations and the in-person interviews with teachers and home visitors.

Classroom Observations. We conducted observations of teachers providing services to 1-year-old study children for about a 2- to 3-hour period during the study week.[19] Whenever possible, we scheduled this classroom observation in the morning. Only two observations had to be conducted in afternoons. During each observation, the field interviewer conducted the ITERS-R. The observers also completed two counts of children and adults (spaced at least one hour apart) and completed post-visit ratings. We gave a gift bag of classroom supplies worth $25 to the teacher in each observed classroom.

Home Visit Observations. We also conducted an observation of a home visit by home visitors providing services to 1-year-old Cohort study children using the HOVRS-A. (As noted earlier, we treated home visitors like classrooms, observing one visit per home visitor, rather than

[18] Forty-one programs were visited by a single field interviewer, and 32 programs were visited by teams of 2 field interviewers. Larger teams of 3, 4, and 5 members visited 15 programs, and one very large program required a team of 13 field interviewers.

[19] Home visits lasted roughly 90 minutes and classroom observations lasted 3 hours.

per child.) On average, each home visit, and therefore each HOVRS-A, lasted an average of 1.5 hours. We gave home visitors we observed a gift bag of classroom supplies identical to those given to teachers.

Teacher/Home Visitor Interview and Staff Child Report (SCR). The in-person teacher and home visitor interviews lasted approximately 30 minutes and focused on their own background and training, the services they provided to families, and the expectations the program placed on them. The field interviewer conducted the interview and recorded the teacher/home visitor's responses onto a paper questionnaire for later data entry.

At the start of the visit week we gave each teacher and home visitor working with study children SCR forms to complete as an SAQ about each specific child and family. Whenever possible, we collected completed SCRs prior to the end of the visit week. The forms took about 15 minutes to complete for each child. Teachers and home visitors received $5 for each completed form. On average, each teacher/home visitor completed 1.7 SCR forms, with 295 teachers/home visitors completing only 1 SCR and 256 completing multiple forms.

Parent Interviews. The parent interview covered such areas as household composition, languages spoken, services received, parent well-being, child development, social supports and self-sufficiency, among others; although not all respondents were asked questions in every section. We sent parents an advance letter about the interview on the Thursday prior to the week they were scheduled to be called. We released sample on a weekly basis throughout the field period, timed to lag a week behind the program visits. We did not begin interviewing parents until at least a week after we visited the program in person. We conducted parent interviews between April 13 and July 27, 2009. The average length of the parent interview across cohorts was 109 minutes, with 1-year-old Cohort interviews taking 120 minutes on average and Newborn Cohort interviews lasting 65 minutes. Spanish interviews took longer than English (overall 121 minutes), with the 1-year-old Cohort taking 134 minutes and the Newborn Cohort taking 77 minutes on average. All respondents that completed any part of the interview received a $35 thank-you check, usually within two weeks of the interview. [20] We have worked to shorten the interview for future rounds of data collection

Program Director Interviews. We gathered program-level information in two ways: with an hour-long telephone interview and with a self-administered questionnaire. The interview focused on program structure, involvement with community partners, approaches for DLLs, and program goals. We included in the self-administered questionnaire any questions that might have required review of records or consultation with others.

We conducted program director telephone interviews between April and July. In most cases (79 out of 89), we conducted the interview with the program director. In the other 10 cases, the OSC or a person designated by the program director completed the telephone interview. In four cases, more than one respondent participated in the telephone interview. Programs that participate in the study

[20] In a few instances we learned that parents used prepaid cell phone minutes to complete the telephone interview. We sent those parents a separate check at 12 cents per minute of the interview.

receive $500 annually. We sent the checks to programs once the program director interview was completed.

Family Service Tracking System. Mathematica developed an instrument—the Family Service Tracking (FST) system—to track the services each study family receives over time. The FST asks the staff member with primary responsibility for study children (either a teacher or home visitor) to complete a brief weekly report of the services provided to each study child, including:

- Whether there was a change in their service type or teacher/home visitor
- The child's expected and actual attendance in the program on a week-to-week basis
- Reasons for any absence
- Any referrals made or special events or activities attended

We introduced the FST to programs on a rolling basis; the first seven programs received their materials and instructions in late April 2009 and the last program in July 2009.[21] Before sending information to programs, BFCs introduced the topic during regular telephone calls with the OSC, sent a packet of information including a cover letter that described how to complete the forms, provided web log-in IDs and passwords for each teacher and home visitor serving study children, and sent a packet of labeled paper forms to distribute among staff. Based on feedback from programs, we devised a user manual and added a set of frequently asked questions and answers to the web system. We asked programs to begin the FST reporting after all on-site data collection was completed.

We provide staff with many options for completing the forms. They can use paper copies of the forms or a web-based form. Staff can complete the paper form during the program day and enter it at the website later; some programs collect forms from staff over a period of time and have a designated staff member enter all of them at the website in one session; other programs collect their forms and mail them to Mathematica for entry. A few programs send their own in-house forms that contain the information asked by the FST to Mathematica and staff here enter the data into the web-based form. We continue to work with programs to complete the FST regularly for all study children and to work through questions as they occur. Because this data collection began later, it is not included in this report.

Baby FACES Achieved High Consent and Completion Rates

Recruiting and data collection were successful. As noted earlier, we were able to recruit 89 programs into the study, with a consent rate of 93.7 percent (Table II.5). Within those programs we approached families of children in our age cohort windows, and obtained consent from 88.1 percent (976 of 1,108).

[21] Two sites requested that they begin the FST in September rather than during the summer; these sites were mailed materials in September 2009.

Table II.5. Response Rates

	Number	Percentage
Program Participation		
Participating	89	
Ineligible	16	
Refused	6	93.7
Child-level consent	**976**	**88.1**
Sample Size	**1,108**	
Child-Level Instruments		
Parent interview	894	91.5
Staff-Child Report	934	95.6
Teacher/home visitor interview	944	96.6
HOVRS-A	423	73.4
ITERS-R	374	93.3
Parent interview *or* Staff-Child Report	973	99.6
Teacher/home visitor interview *or* ITERS/HOVRS complete	955	97.7
Parent interview *or* Staff-Child Report *and* Teacher/home visitor interview *or* ITERS/HOVRS complete	951	97.3
Sample Size	**401–976**	
Staff-Level Instruments		
Teacher/home visitor interview	552	96.3
ITERS-R	223	93.3
HOVRS-A	242	89.0
Sample Size	**239–573**	
Program Director		
Program director interview	89	100
Program director self-administered questionnaire	86	96.6
Sample Size	**89**	

Among families who gave consent, we conducted parent interviews between mid-April and July 2009, completing interviews with 84.6 percent of them. Among those who gave consent, 88 percent of Newborn Cohort parents completed the parent interview, as did 84 percent of 1-year-old Cohort parents. We completed a total of 130 interviews in Spanish (22 from the Newborn Cohort and 108 from the 1-year-old Cohort).

We observed 94.9 percent of the classrooms (223 of 235), and 89.3 percent of home visitors of 1-year-old Cohort study children (242 of 271). We completed 95.2 percent of teacher/home visitor interviews (552 of 580) and received SCR forms on 95.8 percent of children (934).

We were able to conduct telephone interviews of program directors with all 89 programs (100 percent). We received a total of 86 self-administered program director interviews (97 percent).

III. EARLY HEAD START PROGRAMS PROVIDE DIVERSE SERVICES TO ADDRESS FAMILY NEEDS

The effects of Early Head Start on families and children are linked to the services programs provide. The Early Head Start Research and Evaluation Project (EHSREP) found that all service approaches—center-based, home-based, and mixed—had positive impacts on children and families but the impacts differed somewhat by program approach (ACF 2002a). For example, only center-based programs were found to have a positive impact on the Bayley Mental Development Index, while positive effects on language development were found only in home-based and mixed-approach programs. Evidence from the EHSREP also suggests that high levels of family involvement and engagement in services (as reported by staff) are associated with positive outcomes, including better parenting and higher scores on measures of child cognitive and language development (Chazan-Cohen et al. 2009).

As links between Early Head Start services and family outcomes have become clearer, program services have evolved. The Survey of Early Head Start Programs (SEHSP) found that programs offering both home- and center-based services had become more prevalent compared to the early days of the program (Vogel et al. 2006). Baby FACES provides an up-to-date look at the state of program services and management just before the program experienced a major change: the expansion funds distributed in late 2009 and the additional 50,000 enrollment slots added.

In this chapter we present findings on the characteristics of Early Head Start programs, particularly the services they provide and how they are managed. We begin by describing approaches to offering core child development services among programs in the study. We then summarize other types of services programs provide to address family needs—such as parenting education, assistance to support family self-sufficiency, and health and mental health services—and examine the extent to which programs use partnerships in providing these services. Next, we present families' reports of services actually received and describe features related to program operation and management, including program goals, use of curricula and assessments, individualization of services, and the use of data systems. Finally, we present findings on the extent to which programs serve highest-risk families.

Most Programs Offer Multiple Service Options

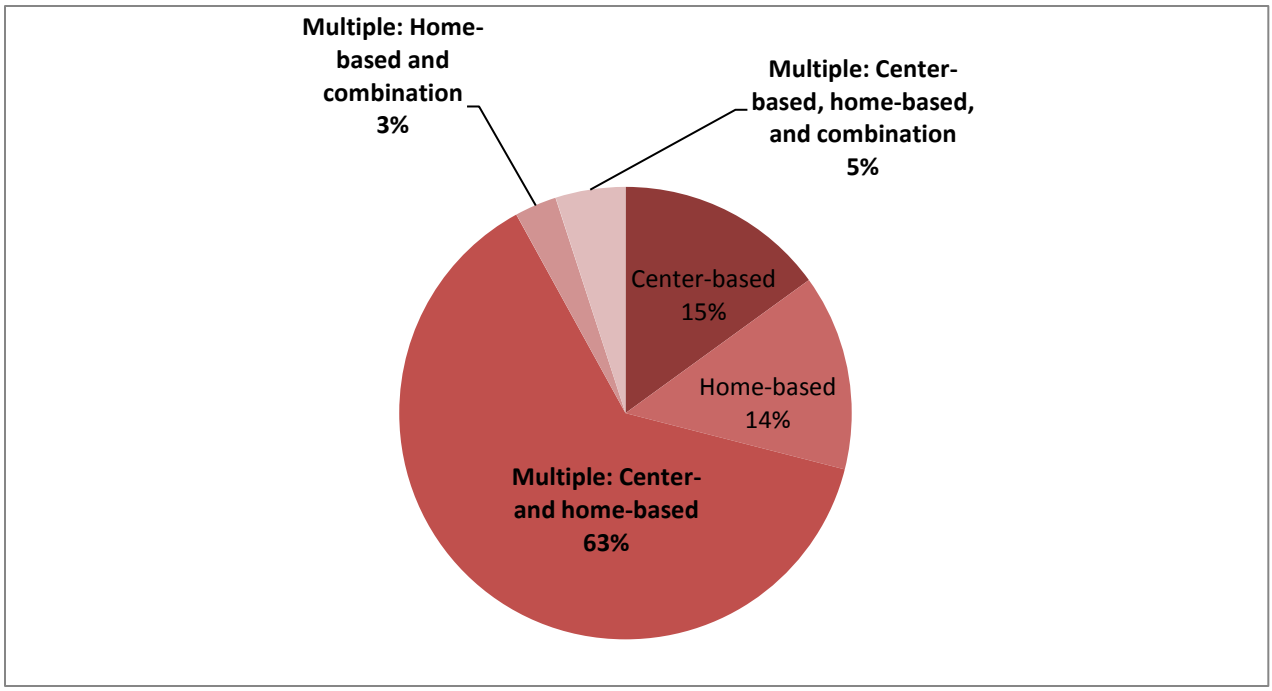
The performance standards specify five program service models or options that programs may use to serve families: (1) *center-based*, in which child development services are provided in a child care center for a full or partial day four or five days a week and families receive a minimum of two home visits a year; (2) *home-based*, in which families receive weekly home visits and bimonthly group socialization experiences; (3) *combination*, offering both center-based and home-based services; (4) a *locally designed* option (requiring ACF approval); and (5) a *family child care* option.[1] In the SEHSP study we developed a new characterization of program service delivery model to describe programs that

[1] As we described elsewhere, we omitted programs whose only service approach was family child care because there were too few for meaningful comparisons. There were two locally designed programs that met our eligibility criteria and are included in the multiple-approach group according to their program directors' reports of the service approach.

offer both home- and center-based services, termed "multiple-approach" programs. These programs offer both home-and center-based services, usually to different families (that is, some families are in the home-based and some in the center-based option). Some families in multiple-approach programs may receive home- and center-based services simultaneously or consecutively.[2] In this section, we present key findings on program service models and family enrollment in different service options.

Nearly three-quarters of programs offer more than one service option. Figure III.1 presents the proportions of study programs using each service option. Programs offering multiple service options comprise the largest group (71 percent). Nearly equal proportions of study programs are exclusively center-based (15 percent) or home-based (14 percent). These findings show increased incidence of multiple-approach programs compared to the SEHSP, where multiple-approach programs were also the majority, but at a lower rate (51 percent), followed by the center-based and home-based approaches (23 percent and 17 percent, respectively [Vogel et al. 2006]). The predominance of multiple-approach programs may reflect a response to the circumstances of parents receiving public assistance, who are required to work or be in school (and thus need child care), to findings from the EHSREP that the broadest pattern of impacts at age 3 was in multiple-approach programs, or to efforts to individualize services for families.

Figure III.1. Programs Offering Multiple Service Options Are Most Common



Source: Spring 2009 Program Director Interview.

Sample Size: 89 programs.

[2] The SEHSP used the term "combination" program to refer to programs that offer both home- and center-based services to *all enrolled families*. These programs provide center-based care plus home visits monthly or more often (Vogel et al. 2006). This option is rare, reported by less than 10 percent of programs in the SEHSP and no programs in the Baby FACES sample. We refer to programs that offer both home- and center-based services or home-based, center-based, and combination-type services as multiple-approach programs.

Of the 60 multiple-approach programs in the Baby FACES study, 52 (90 percent of all programs of this type) offer center- and home-based services—that is, some families are in one option and some in the other, with few families simultaneously receiving both home- and center-based services (the combination option; not shown). Two programs (4 percent of the multiple-approach group) offer home-based and combination services, and eight programs (6 percent of multiple-approach programs) offer three approaches—center-based, home-based, and combination services.[3] Generally, multiple-approach programs concentrate family enrollment in one of the program's service options, rather than dividing families evenly among options. In three-quarters (76 percent) of multiple-approach programs, one of the available service options accounts for 60 percent or more of family enrollment, and in nearly one-quarter of them (24 percent), one option accounts for 75 percent of enrollment or more (not shown).

More than two-fifths of programs (42 percent) change their services during summer months by not operating for a period of time or by switching from center-based services to home-based services (Table III.1).[4] Among programs that change their services, most (86 percent) have at least one site that is closed entirely. These closures average 4.2 weeks in length. The remaining programs in the group that changes services offer only home visits to at least some children for a period of 9.5 weeks, on average. Reasons that programs note for service changes include a lack of demand for services by parents, in-service sessions or time off for staff, or lack of access to school facilities during summer months.

Programs enroll families in a specific option based on family-reported needs or preferences, the availability of slots, and other considerations. In programs with multiple-service approaches, staff must determine the option into which a family should be directed. According to program directors, both family characteristics and program circumstances affect these decisions. As Table III.2 indicates, nearly all programs (93 percent) take family preferences into account. In the same large

Table III.1. Changes in Program Service Approach During Summer Months

	Percentage of Programs
Program changes services during summer months	41.6
Program has at least one site that is closed	36.0
Program switches from center-based to home-based services	5.6
Average period of closure among programs with closed sites (in weeks)	4.2
Average period of service change among programs that change services (in weeks)	9.5
Sample Size	**89**

Source: Early Head Start program staff.

Note: Information gathered during calls to schedule spring 2009 site visits.

[3] Although no programs offered combination services to *all* enrolled families, programs did report that some families received center-based care and home visits at least monthly.

[4] Only one of these programs is home-based; the others are center-based or multiple-approach programs. These figures are not weighted, unlike the rest of the findings in this report, and therefore might not generalize to all Early Head Start programs. We elected not to weight because the data were not collected in a systematic way, but were instead taken from notes collected by Baby FACES coordinators as part of the site visit scheduling process.

Table III.2. Multiple-Approach Programs Balance Enrollment in Service Options According to Family Needs and Program Capacity

Factor Program Considers	Weighted Percentage of Programs (Standard Error)[a]
Family's self-reported needs or preferences	93.1 (2.8)
Availability of slots in each service option	92.6 (3.4)
Parent's employment status or schooling	77.8 (5.8)
Staff assessment of family's needs	77.5 (6.3)
Age of the child or pregnancy status of parent	75.4 (6.3)
State subsidy criteria	42.6 (7.1)
Other	41.3 (6.7)
Sample Size	**60**

Source: Spring 2009 Program Director Interview.

Note: Multiple responses are possible.

[a]Among programs with multiple service options.

proportion of programs (93 percent), the availability of slots influences which option a family enters. This finding suggests that staff must sometimes balance competing factors, since the option with slots available may not always be the same option a family prefers. Other factors that programs commonly take into account include parents' employment or school attendance, staff assessment of family needs, and the age of the child or the pregnancy status of the parent.

Nearly all programs with multiple service options (93 percent) allow families to shift from one option to another (not shown). The reasons for such changes reported most frequently among multiple-approach programs are the same as the factors most commonly cited for initial enrollment decisions: changes in family needs or preferences (95 percent of programs) or changes in the availability of slots (89 percent). About three-quarters of multiple-approach programs also reported that switches from one option to another can be based on changes in parents' employment status (77 percent), staff reassessment of family needs (75 percent), and the age of the child or the parent's pregnancy status (74 percent).

Among 1-year-old Cohort families, enrollment in home-based services is most common, with 52 percent of families in this option (not shown).[5] Forty-four percent of families in this cohort receive center-based services. Only 4 percent of families are enrolled in combination (both home and center) services, reflecting the relatively small number of study programs that provide this option.

[5] Analysis of family enrollment in service options is limited to parents of 1-year-olds because only these families were asked questions regarding program services. We will obtain this information from Newborn Cohort parents in the next round of data collection, when those children are 1 year old.

Programs Provide Wide-Ranging Services and Engage in Partnerships to Enhance Service Offerings

As a comprehensive, two-generation program, Early Head Start programs provide a range of services aimed at enhancing children's development and supporting families. These include child development services, child care, parenting education, case management, health care and referrals, and family support. The Head Start Program Performance Standards stipulate that programs must engage in this wide scope of activities to accomplish Early Head Start goals, and research has demonstrated that full implementation of the performance standards benefits children and families. The EHSREP found that programs that fully implemented the performance standards had impacts that were larger and broader than those of programs that did not achieve full implementation (ACF 2009).

To meet the needs of families, Early Head Start programs are encouraged to collaborate with other service providers in their communities. Early Head Start programs typically establish formal (written) or informal partnerships with a variety of community agencies, such as child care providers, health and mental health providers, and social services agencies. The purpose of these partnerships is to promote efficient linkages between Early Head Start families and partner-provided services. Programs may also create referral relationships with outside service providers without establishing formal partnerships. In essence, partnerships and similar relationships with other service providers allow families who enroll in Early Head Start to be connected to social services without the need to seek out each separate service on their own. This section describes findings on the nature of services that Early Head Start programs offer and the characteristics of their partnerships with other service providers and agencies. (The following section summarizes families' reports of services they actually received.)

The Average Frequency of Core Child Development Services Meets Performance Standards

The performance standards specify how frequently programs must provide core child development services to each child, including center services and home visits. These standards differ for each program option. The center-based option must include center services 4 or 5 days per week and at least 2 home visits annually. Requirements for the home-based option are a minimum of 1 home visit per week (and at least 32 home visits per year) and 2 group socializations per month. For the combination option, standards establish acceptable combinations of minimum numbers of class sessions and home visits per year. We asked directors of home-based programs about the frequency at which they offer home visits; 100 percent reported offering weekly visits (not shown). Center-based programs reported an average of 5 center sessions per week and 2.7 home visits per year. Finally, programs offer families in the combination option an average of 18 home visits per year and center services 3.3 days per week, on average.

All Programs Reported Organizing Family Activities, Such as Group Socializations and Events

Efforts to engage families through socializations and events are universal among study programs (Table III.3). Family activities offered include outings, arts and crafts sessions, discussion groups, and resource fairs or conferences. In addition, nearly all programs reported offering parenting workshops (99 percent) and education on infant/toddler sleep practices (97 percent). Although nearly all programs (97 percent) reported making efforts to encourage fathers to

Table III.3. Family Activities and Events Are Offered by All Programs, but Not All Offer Activities Specifically for Fathers

Type of Activity	Weighted Percentage of Programs Offering Service (Standard Error)
Group socializations[a]	100.0 (0.0)
Events for the entire family	100.0 (0.0)
Workshops on parenting	99.2 (0.8)
Materials or workshops on child sleep practices	97.2 (1.6)
Other[b]	55.0 (6.2)
Activities to involve fathers or father figures	
Efforts to include fathers in home visits or group socializations	97.1 (2.9)
Events or activities specifically for fathers	73.8 (5.5)
Employment or job training services specifically for fathers	41.4 (5.4)
Sample Size	**89**

Source: Spring 2009 Program Director Interview.

Note: Respondents could indicate more than one type of activity.

[a]Among home-based or multiple-approach programs.

[b]Most frequently mentioned among the "other" responses were family literacy (10 percent) and transition preparation (5 percent). Both percentages are among all programs.

participate in home visits or group socializations, less than three-quarters (74 percent) organize events or activities exclusively for fathers. Employment assistance or training specifically for fathers is offered by two-fifths (41 percent) of programs.

All Programs Reported Offering a Variety of Services to Support Family Self-Sufficiency, Typically Through Referral

One way that programs support families is by helping them overcome obstacles to self-sufficiency. All programs indicated that they provide or can help families access a range of services for this purpose (Table III.4). Services offered by all programs include financial counseling, family literacy assistance, and assistance with housing issues. Nearly all programs (98 to 99 percent) indicated that they offer education or job training, employment assistance, or legal assistance. A majority of programs reported that they provide most of these types of assistance through referral, with the exception of services intended to promote family literacy, which Early Head Start staff provides directly in most programs. Programs are particularly likely to use their partnerships with community agencies to provide housing assistance or education and job training, either on- or off-site.

Table III.4. Programs Offer Family Self-Sufficiency Services Mainly Through Referrals to Community Partners and Other Agencies

Type of Service	Weighted Percentage of Programs Offering Service (Standard Error)	Method of Provision (Weighted Percentage of Programs)[a]			
		Directly by Early Head Start Staff (Standard Error)	By Referral (Standard Error)	By Community Partner, On-Site (Standard Error)	By Community Partner, Off-Site (Standard Error)
Family literacy services	100.0 (0.0)	70.8 (5.1)	43.2 (6.2)	12.8 (4.0)	28.0 (5.7)
Financial counseling	100.0 (0.0)	36.9 (5.8)	64.0 (5.9)	10.8 (4.0)	22.7 (5.1)
Housing assistance	100.0 (0.0)	15.0 (4.2)	69.4 (5.6)	10.6 (3.9)	38.8 (5.9)
Education or job training	98.8 (1.2)	38.6 (6.0)	59.3 (5.7)	12.2 (3.7)	39.3 (6.2)
Employment assistance	97.6 (1.7)	39.0 (6.2)	67.8 (6.0)	3.6 (2.0)	27.7 (5.6)
Legal assistance	97.6 (1.5)	2.9 (2.0)	79.5 (5.4)	6.5 (3.1)	21.0 (5.4)
Sample Size	**89**	**89**	**89**	**89**	**89**

Source: Spring 2009 Program Director Interview.

Note: Respondents could indicate more than one type of service.

[a]Individual programs may provide services by more than one method.

Nearly All Programs Provide Child and Adult Health Care Services Through Referral

Almost all programs (95 to 98 percent) offer key health care services, including pediatrician services, adult health care and disability services, and dental care (Table III.5). By and large, these services are offered through referral rather than directly by Early Head Start staff. Early Head Start staff directly provides pediatrician services and adult health care services in less than 10 percent of programs and disability services for adults in less than one-quarter of programs (24 percent). Programs are far more likely to have community partnerships with dental care providers than other types of health care providers, and dental care is more likely than other service types to be provided on-site. In two-thirds of programs (67 percent), dental services are provided on-site, either directly by Early Head Start staff or by a community partner. By comparison, pediatrician and adult health care services are provided on-site by 10 percent of programs or less.

Most Programs Directly Offer Screenings for Mental Health Services and Make Referrals for Therapy when Needed

It is also nearly universal for programs to offer, or connect families with, a range of mental health services, including substance abuse prevention and treatment, mental health screenings and assessments, therapy, and care coordination (which typically involves development of a care plan and assistance accessing services), and followup. As shown in Table III.5, large proportions of Early Head Start programs offer mental health screenings to families (77 percent) and/or staff consultation and followup (87 percent). Services such as substance abuse treatment or mental health

Table III.5. Programs Offer Many Types of Physical and Mental Health Services

Type of Service	Weighted Percentage of Programs Offering Service (Standard Error)	Method of Provision (Weighted Percentage of Programs)[a]: Directly by Early Head Start Staff (Standard Error)	By Referral (Standard Error)	By Community Partner, On-Site (Standard Error)	By Community Partner, Off-Site (Standard Error)	By Mental Health Consultant (Standard Error)
Staff consultation/ followup	100.0 (0.0)	87.0 (4.2)	17.8 (4.6)	32.4 (5.7)	18.3 (5.0)	5.9 (3.4)
Mental health assessments	100.0 (0.0)	41.6 (6.0)	21.3 (4.3)	45.5 (5.7)	25.0 (5.6)	15.0 (4.7)
Therapy	100.0 (0.0)	25.9 (5.4)	48.9 (6.0)	42.0 (6.4)	43.8 (6.1)	5.4 (3.3)
Substance abuse services	98.8 (1.2)	13.0 (3.3)	67.0 (5.8)	12.4 (3.9)	34.7 (6.0)	n.a.
Mental health screenings	98.8 (1.2)	76.6 (5.3)	10.3 (4.0)	33.1 (6.2)	9.8 (3.5)	8.0 (3.6)
Pediatrician services	97.8 (1.4)	1.6 (1.1)	74.4 (4.8)	8.3 (3.5)	29.6 (5.1)	n.a.
Dental care	97.5 (2.5)	9.0 (3.7)	51.6 (5.7)	58.4 (6.0)	39.7 (5.8)	n.a.
Adult health care	95.9 (2.3)	3.0 (1.5)	82.7 (4.1)	6.0 (2.4)	18.4 (4.2)	n.a.
Care coordination	95.5 (2.2)	55.9 (6.2)	29.7 (5.2)	28.0 (5.9)	30.1 (6.0)	5.6 (3.4)
Disability services for parents	94.7 (2.2)	23.8 (5.4)	71.7 (5.3)	9.2 (3.3)	13.8 (3.4)	n.a.
Other mental health service	47.8 (6.2)	23.3 (5.3)	4.1 (2.8)	17.8 (5.0)	12.0 (4.3)	3.3 (2.0)
Sample Size	**89**	**89**	**89**	**89**	**89**	**89**

Source: Spring 2009 Program Director Interview.

Note: Respondents could indicate more than one type of service.

[a]Individual programs may provide services by more than one method.

n.a. = not applicable.

therapy, on the other hand, are more likely to be offered through referral or by a community partner or both. It is relatively common for mental health assessments and therapy to be offered on-site by a community partner; this occurs in 46 percent and 42 percent of programs, respectively. Just 13 percent of programs reported that Early Head Start staff offers substance abuse treatment, while staff directly provides therapy in approximately one-quarter (26 percent) of programs. Nearly half of all programs (48 percent) reported offering some other type of health-related service. These services included, for example, building awareness of specific mental health-related issues among families and staff and providing support to families and staff in addressing mental health issues.

More than one-third of programs maintain at least one formal child care partnership. Early Head Start programs may pursue partnerships with child care providers in the community to provide center-based, or less frequently, family child care slots to enrolled children. Some center-based

programs directly operate all centers, while others rely on partners to provide some or all of their center-based services. Formal partnerships to provide child care services are relatively common, with 35 percent of programs indicating that they maintain such arrangements (Table III.6). Among programs with partnerships, that partner serves 23 percent of children. Communication is generally frequent between programs and child care partners. Three-quarters of programs with formal child care partnerships communicate with the partner more than once a month, and 16 percent communicate monthly (not shown).

Some partnerships are unused, however. Among programs that have a child care partnership, about one-fifth (7 percent of all programs) indicate that at least one of those partnerships is inactive. The reasons for inactivity vary and include lack of available slots (30 percent), insufficient quality (25 percent), being in a geographic location with no current need of slots (18 percent), or having a new and not yet active partnership (18 percent) (not shown).

Partnerships with Part C providers are very common. Ninety-three percent of programs reported that they have a formal written partnership with a Part C provider (not shown). (Another 3 percent of programs provide these services directly.) Communication between Part C providers and Early Head Start programs is quite frequent, with nearly three-quarters of programs (73 percent) reporting that they have contact at least monthly with the Part C agency.

Services Families Receive from Early Head Start and Community Agencies

We asked parents of children in both cohorts to describe the services their family received from Early Head Start and community agencies. This section describes these services, as well as families' participation in Early Head Start, and their child care arrangements.

Most Mothers of Newborns Received Information and Services Provided by Early Head Start During Their Pregnancy

We asked mothers of both cohorts to report whether they received many types of information and services from Early Head Start during their pregnancy with the Baby FACES focus child.

Table III.6. About One-Third of Programs Have Child Care Partnerships

Characteristic	Weighted Percentage or Mean (Standard Error)	Range
Percentage of programs with formal written partnership with child care provider	35.1 (5.1)	
Mean number of formal written partnerships[a]	6.3 (2.2)	1–23
Mean percentage of children served through partnerships[a]	23.3 (3.7)	3–100
Percentage of programs with at least one inactive partnership	6.7	
Sample Size	**89**	

Source: Spring 2009 Program Director Interview.

[a]Among programs with formal written partnerships.

Because mothers of 1-year-olds could have enrolled after the focus child's birth, reports of pregnancy-related service receipt could be underestimated, however. Therefore, we include only mothers of newborns, who were more likely to be enrolled during pregnancy.[6]

Most mothers of newborns (80 percent) reported receiving any of these types of information or services from Early Head Start (Table III.7). Of these, mothers reported receiving pregnancy-related information most frequently (approximately 75–80 percent). This included information on breastfeeding, nutrition, how to prepare the home for a new baby, how to take care of babies, how to take care of themselves during pregnancy, and how children grow and develop.

With regard to pregnancy-related services provided by Early Head Start, more than half of mothers got the chance to get together with other pregnant women or mothers or received help finding baby clothes, a stroller, or other baby care items. Approximately 40–50 percent of mothers reported attending parenting classes or getting a referral for childbirth classes or for help with

Table III.7. Services Mothers of Newborns Received from Early Head Start During Pregnancy

Items	Percentage	Standard Error
Received any information or services from Early Head Start	80.36	3.19
Nutrition information	79.58	3.13
Information on how to take care of yourself during pregnancy	79.55	3.34
Information on how children grow and develop	77.41	3.41
Information on breastfeeding	76.34	3.54
Information on how to take care of babies	74.58	3.32
Information on how to prepare your home for a new baby	74.12	3.47
Chance to get together with other pregnant women or mothers	63.90	4.04
Help finding clothes, a stroller, or other baby care items	58.02	4.67
Referral for childbirth classes	51.34	4.72
Parenting classes	49.01	4.31
Referral to someone to help with breastfeeding	39.70	3.58
Referral to a pediatrician for the baby	36.83	4.41
Referral to a doctor for yourself	34.79	4.29
Referral for smoking cessation services	28.17	3.91
Referral for a doula	14.31	3.95
Any other services	15.97	2.77
Sample Size	**174**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to parents of newborns.

[6] We are in the process of gathering date of enrollment from all study parents and, in later reports, will be able to examine pregnancy services receipt, taking that information into account.

breastfeeding. More than one-third of mothers reported receiving a referral to a doctor for themselves or to a pediatrician for the baby. Approximately 30 percent of mothers reported smoking before pregnancy, and almost all of them (28 percent of the total sample) reported receiving a referral for smoking cessation services during pregnancy. Approximately 16 percent of mothers received other services, such as information about WIC and car seat safety.

There is better correspondence between mothers' reports of services received and program director reports of services provided for some services than for others. There is reasonable alignment between program directors' and mothers' reports for providing and receiving information on breastfeeding, nutrition information, chances to get together with other pregnant women, and information on child development and on preparing a home for a baby. In these cases, more than 90 percent of programs provided the services and 75 to 80 percent of mothers reported receiving them. Both program directors and mothers reported a low incidence of providing or receiving referrals to doulas. The largest discrepancies between program director and mother reports are on the following items: help finding baby items (99 percent of programs versus 58 percent of mothers of newborns), referrals to a lactation consultant (95 versus 40 percent), referral for child birth classes (95 versus 51 percent), referral to a doctor for the mother (98 versus 35 percent), referral to a pediatrician (94 versus 37 percent), a referral for smoking cessation (92 versus 28 percent), and parenting classes (94 versus 49 percent). These differences may be due in part to the likelihood that not all mothers may have been in need of these services and therefore did not use them.

Families Reported Receiving Services Directly from Early Head Start or Being Referred to Community Agencies

Apart from services specifically related to pregnancy, parents of both cohorts also reported a range of services they received from Early Head Start or from community agencies in the year preceding their interview. For each service they received, we asked them to report further whether their Early Head Start program provided the service directly or referred them to another agency for it (Table III.8).

The services that families received most frequently include health services, help finding good child care, and short-term help getting or paying for things needed in an emergency, with 16 to 21 percent of families receiving these services.

- About one-third of parents who received health services or emergency help reported that their Early Head Start program provided the services directly; about half of parents reported receiving referrals from Early Head Start to another agency for these services.
- For families that received help in finding good child care, 45 percent reported the program provided the help directly, and 41 percent reported that Early Head Start referred them to another agency.

Relatively few families received transportation assistance, help with a job search or job training, financial supports, English classes, mental health services, or a variety of other services.

Table III.8. Services Families Received from Community Agencies in the Past Year

Items	Weighted Percentage of Families Receiving Services	For Services Received: Program Provided Service Directly	Referred to Another Agency	Program Not Involved in Service	Other
Health services	21.37	30.18	46.81	20.52	2.48
Help finding good child care	18.71	44.99	40.81	12.91	1.28
Short-term help getting or paying for things needed in an emergency	16.23	32.06	52.62	13.16	2.16
Help getting to and from work or other places	13.75	70.36	23.85	4.71	1.08
Help finding or paying for housing	10.94	25.54	47.37	22.44	4.65
Counseling on how to manage money	10.32	64.69	26.77	6.25	2.30
Education or job training	10.07	53.21	27.01	17.30	2.48
Help finding a job	9.98	50.23	29.61	16.42	3.74
Classes to learn English	7.53	40.11	45.47	13.08	1.34
Mental health services	7.21	23.58	55.15	19.87	1.40
Disability services	5.68	29.47	34.93	31.09	4.51
Help with a legal problem	4.89	26.03	61.27	7.58	5.12
Training on how to read and write	2.79	63.97	32.42	3.61	.
Some other services	4.20	.	.	.	.
Sample Size	**857**				

Source: Spring 2009 Parent Interview.

- Around 10 percent of families received help with finding a job, education or job training, help with finding or paying for housing, or counseling on how to manage money.
  - Half to two-thirds of the families receiving these services reported that the Early Head Start program provided the services directly.
  - One-quarter to one-third of these families were referred elsewhere.
- Six to 8 percent of families reported attending classes to learn English or receiving mental health services or disability services.
  - For families attending English classes, nearly equal proportions got classes at the program (40 percent) and via referral (45 percent).
  - About a quarter of the families receiving mental health services were served by the program directly, and 55 percent were referred to another agency.
  - For families that received disability services, approximately one-third were served by the Early Head Start program directly and another one-third were via referral.

- Only 3 to 5 percent of families received help with a legal problem, training on how to read and write, or some other services such as welfare and child protective services.
  - Most (61 percent) families received help with a legal problem via referral; only a quarter reported getting the service from the program directly.
  - Most (64 percent) families received reading and writing training from the program directly; about one-third were referred to another agency.

Most Parents Were Involved in Early Head Start Activities in the Past Year

Parents reported that they participated in a range of Early Head Start activities over the past year. The levels of involvement are more frequent for some activities than for others. The most frequent is attending group activities for parents and their children, where 29 percent of parents reported attending once or twice in the prior year, and 40 percent attending three or more times (Table III.9). Attending an Early Head Start social event is the next most frequent activity reported, with more than one-third of parents participating once or twice and a quarter participating three or more times. Less than half of parents attended parent education meetings or workshops on raising children or volunteered in an Early Head Start classroom at least once. A substantial proportion of parents (more than 80 percent) reported they did not participate in workshops on job skills, events just for men/fathers, the program's policy council, and volunteering for the program (excluding in a classroom or on the Policy Council). Approximately 15 percent of parents reported that they took part in center activities in some other way, such as through fundraisers and field trips.

Table III.9. Family Participation in Activities at Early Head Start

	Weighted Percentage		
Items	Not at All	Once or Twice	Three or More Times
Attended group activities for parents and their children	30.72	29.23	40.05
Attended an Early Head Start social event	40.83	34.52	24.65
Volunteered in an Early Head Start classroom	64.03	16.30	19.67
Attended parent education meetings or workshops on raising children	57.83	26.89	15.28
Attended workshops on job skills	82.82	11.24	5.95
Attended events just for men/fathers	86.62	10.62	2.76
Participated on the Program Policy Council	85.66	8.29	6.05
Volunteered to help out at program or served on a committee, but not in a classroom or on Policy Council	83.22	10.40	6.38
Took part in center activities in some other way	85.47	10.01	4.51
Sample Size	**856**		

Source: Spring 2009 Parent Interview.

Note: Only parents whose children are in the center-based option are included in the center-specific items.

Care in a Provider's Home Is the Most Common Type of Child Care Other than Early Head Start

Research has shown that children's experiences in nonparental care are associated with their developmental progress and well-being (ACF 2004; NICHD 2002). As a result, we asked parents of 1-year-olds about the care they arranged for their children as well as the care they received directly from Early Head Start (Table III.10). Parents reported whether children receive care regularly from someone other than their parent, including a relative, a nonrelative, Early Head Start, and other center-based care. For children who receive relative or nonrelative care, parents also reported whether the care was provided in the child's own home or another person's home. We classified receipt of child care in another home (not a center) as care in a provider's home regardless of whether the child was cared for by a relative or not.

Approximately three-quarters (72 percent) of 1-year-olds receive regular nonparental care. This is markedly higher than the approximately half of infants who received regular nonparental care in a nationally representative sample in the ECLS-B (Flanagan and West 2004). Center-based Early Head Start is the most common child care arrangement in this sample, reaching about half (51 percent) of children. Care in a provider's home by a relative or nonrelative is the next most common type of child care arrangement, received by approximately one-quarter (24 percent) of children.

Table III.10. Child Care Arrangements

Items	Weighted Mean/Percentage	Range	Standard Error
Received nonparental care	72.07	n.a.	2.52
Current child care on a regular basis[a]			
Attended Early Head Start center	50.83	n.a.	3.62
Received care in a provider's home	24.42	n.a.	2.07
Received child care in child's own home	18.44	n.a.	1.80
Attended other child care center or formal program	4.67	n.a.	1.06
Number of child care arrangements			
No nonparental care	27.93	n.a.	2.52
One type of child care	46.50	n.a.	2.38
Two types of child care	24.86	n.a.	2.77
Three types of child care	0.71	n.a.	0.40
Total number of hours in child care	24.86	1–102	1.16
Hours per week in each type of child care			
Early Head Start	22.43	1–50	1.38
Other child care center or formal program	21.24	3–45	2.67
Care in a provider's home	14.49	1–72	1.01
Care in child's own home	11.39	1–57	1.60
Sample Size	**654**		

Source: Spring 2009 Parent Interview.

Note: Sample restricted to parents of 1-year-olds.

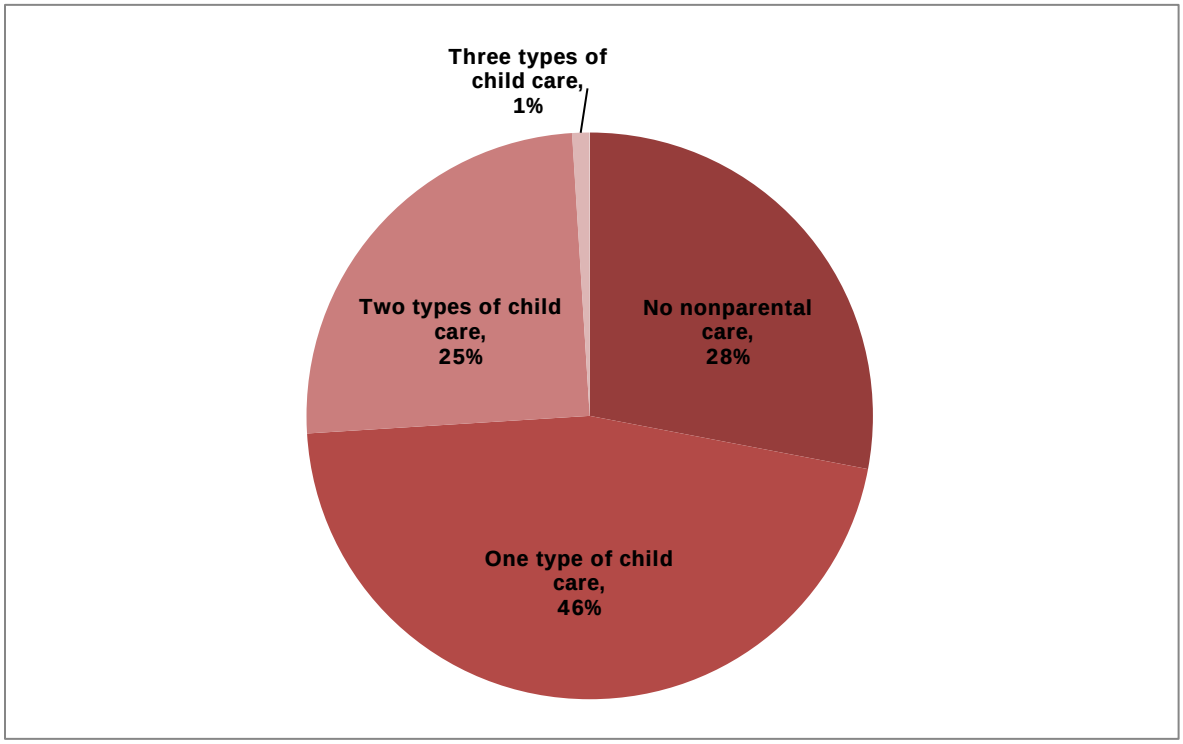
[a]The estimates are not mutually exclusive and hence sum to more than the estimated percentage of children in nonparental care.

n.a. = not applicable.

Eighteen percent of children receive care in their own homes (by either a relative or nonrelative). Only 5 percent of children attend a non–Early Head Start child care center or formal program. Approximately one-quarter of children receive more than one type of child care (Figure III.2), with the majority (91 percent) of these children receiving another child care arrangement in addition to Early Head Start. For comparison, in the ECLS-B, only 9 percent of infants received center-based care, which includes Early Head Start or other center-based care; 41 percent of infants were cared for in a provider's home or the child's home. The proportion of Baby FACES children who are cared for in a provider's home or the child's own home is consistent with the ECLS-B finding.

On average, parents reported children spend 25 hours a week in nonparental care (ranging from 1 to 102 hours). Children attend Early Head Start for 22 hours per week (nearly 4.5 hours a day), with a range of 1 to 50 hours. Children spend an average of 21 hours per week in other center-based child care or formal programs, with a range from 3 to 45 hours. Children spend about 14 hours a week in a care provider's home, ranging from 1 to 72 hours. Children who receive nonparental care in their own homes did so for 11 hours a week, ranging from 1 to 57 hours. On average, children spend 25 hours in out-of-home care.

Figure III.2. Number of Types of Child Care Arrangements



Source: Spring 2009 Parent Interview.

Note: Sample restricted to the 1-year-old Cohort. Child care types include Early Head Start, care in a provider's home, care in child's own home, and other child care center or formal program.

Sample Size: 654 parents of 1-year-olds.

The type of child care arrangements and times spent in nonparental care vary by family service option. Not surprisingly, formal programs are most often attended by children in the center-based or combination options (Table III.11).[7] Similar proportions of children across the three program options receive informal child care in their homes or someone else's. However, among children in informal care arrangements, the amount of time spent in them varies by program option, with children in home-based and combination options spending much more time compared to children in the center-based option.

Program Curricula and Child Assessments Help Structure Services

Early Head Start programs are free to choose the curricula and assessment tools they use in serving children. These resources provide structure for child development services and thus are an important aspect of program operation. Performance standards require that programs conduct child assessments at least three times a year. The SEHSP found that programs commonly use information from ongoing assessments in lesson planning for individual children and classes, making referrals for additional services, and planning activities for home visits (Vogel et al. 2006).

Table III.11. Child Care Arrangement by Program Option

Outcome	Center-Based		Home-Based[a]		Combination	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Current Child Care on a Regular Basis:						
Attends Early Head Start center	90.89	2.20	13.66	2.53	100.00	0.00
Attends other child care center or formal program	1.37	0.87	7.64	1.88	3.05	2.61
Receives home-based care	28.75	3.22	20.85	2.36	25.92	9.30
Receives child care in own home	18.78	2.88	17.53	2.62	20.03	9.44
Total number of hours in child care	31.07	0.90	15.53	1.16	23.54	6.56
Hours per Week in Child Care (Among Those in Each Type of Care):						
Early Head Start	27.67	0.84	2.16	0.35	9.85	3.28
Other child care center or formal program	21.00	6.91	21.88	2.76	3.00	0.00
Home-based care	9.95	1.40	18.75	1.28	25.26	5.10
Care in own home	8.98	1.35	11.43	1.82	35.21	2.22
Sample Size	**293**		**325**		**29**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to the 1-year-old cohort.

[a] Parents reporting that their child attended Early Head Start center-based care in programs that the director categorized as offering only home-based services were classified as being in the home-based option.

[7] Some parents reported attending an Early Head Start program despite the fact that the program director reported offering only home-based services. Following the director's report, we coded these parents as being in the home-based option; the parents may have confused attendance at another formal program as attending Early Head Start.

We asked program directors to report on the curricula and assessments they use in center-based or home-based settings (calculations include responses from multiple-approach programs about center- and home-based curricula). Tables III.12 and III.13 summarize their responses. All programs offering center-based services use some type of curriculum, and nearly all programs offering home-based services (97 percent) do so (not shown). All programs also reported using some type of child assessment tool.

Most Early Head Start Centers Use the Creative Curriculum

Programs reported using many different curricula in center-based settings, but only a few are used by substantial numbers of programs. The Creative Curriculum is the most popular; 87 percent of programs with center-based services use this curriculum. Other curricula, used by much smaller proportions of programs, include Games to Play with Babies and Games to Play with Toddlers (both 11 percent), High/Scope (9 percent), and the Hawaii Early Learning Profile (8 percent). Use of an agency-created curriculum is relatively rare: just 6 percent of programs reported doing so.

Programs Use a Variety of Curricula for Home Visits

As with center-based services, programs use a wide variety of curricula for home visits, but a few curricula are common. Parents as Teachers and Partners for a Healthy Baby are used by 44 and 41 percent of programs, respectively. About one-fifth of programs (21 percent) use the Creative Curriculum for home-based services. A small proportion of programs (14 percent) use a curriculum created by the agency itself. Three percent of programs reported that they use no curriculum for home visits.

Programs Use a Wide Variety of Assessment Tools, but Creative Curriculum and the Ages & Stages Questionnaires Are Most Common

Across programs, a wide number of different assessment instruments are used, and most by only a few programs. The Ages & Stages Questionnaires (ASQ) and the Creative Curriculum Tools are employed by a relatively large percentage of programs (34 percent and 27 percent, respectively).[8] Smaller proportions of programs use such assessments as the Early Learning Accomplishment Profile (16 percent), the Ounce Scale (11 percent), the Denver II (10 percent), the Desired Results Developmental Profile[9] (7 percent), and High/Scope COR (7 percent).

[8] Typographical errors in the director self-administered questionnaire merged response options in two places. First "agency created screening assessment" and "Ages & Stages Questionnaires," and second "Creative Curriculum Tools" and "DECA." In the first example, 26 percent of programs chose that option, and we opted to report here only the percentage of programs that indicated using the ASQ in the other/specify option; actual use may be higher. In the second case, 28 percent of programs endorsed the Creative Curriculum option and only two programs indicated that they used the DECA in the other/specify category. In this case we opted to report those that endorsed the main option and omit the programs that indicated DECA in the other/specify; actual use may be lower.

[9] The Desired Results Developmental Profile is an assessment tool developed for use by the California Department of Education.

Table III.12. Center and Home Visit Curricula Used in Early Head Start Programs

	Weighted Percentage of Programs (Standard Error)
Curriculum/curricula program uses in centers[a]	
Creative Curriculum	86.7 (4.0)
Games to Play with Babies	11.4 (3.7)
Games to Play with Toddlers	11.4 (3.7)
High/Scope	9.2 (3.5)
Hawaii Early Learning Profile (HELP)	8.0 (3.2)
Agency-created curriculum	5.9 (2.8)
Assessment, Evaluation and Programming System (AEPS)	5.5 (3.9)
Early Learning Accomplishments Profile	4.8 (2.4)
Program for Infant/Toddler Care	3.8 (2.2)
Reggio Emilia	3.4 (2.6)
Playtime Learning Games for Young Children	3.4 (2.3)
Beautiful Beginnings	3.3 (2.5)
The Anti-Bias Curriculum	2.9 (1.6)
Talking to Your Baby	2.4 (1.7)
Ones and Twos	2.1 (1.3)
Parents as Primary Caregivers	2.0 (2.0)
Learning Activities for Infants	1.9 (1.1)
Parents as Teachers	1.4 (1.0)
Emotional Beginnings	0.0 (0.0)
Montessori	0.0 (0.0)
Partners in Learning	0.0 (0.0)
Resources for Infant Educators	0.0 (0.0)
Other	14.8 (4.8)
None	0.0 (0.0)
Sample Size[b]	**73**
Curriculum/curricula program uses in home visit services	
Parents as Teachers	44.2 (6.4)
Partners for a Healthy Baby	41.0 (6.8)
Creative Curriculum	20.7 (5.9)
Agency-created curriculum	14.0 (4.8)
Games to Play with Babies	10.9 (3.6)
Games to Play with Toddlers	10.9 (3.6)
Beautiful Beginnings	9.4 (3.8)
Hawaii Early Learning Profile (HELP)	9.2 (3.2)
Early Head Start Program for Infant/Toddler Caregivers	9.1 (3.9)
Early Learning Accomplishments Profile	6.2 (3.5)
The Portage Project: Growing B-3	6.0 (3.7)
Ones and Twos	4.2 (2.1)
Partners in Parenting Education	3.8 (2.3)
Partners in Learning	1.9 (1.9)
Learning Activities for Infants	1.9 (1.1)
Talking to Your Baby	1.4 (1.4)
Healthy Families America	1.0 (1.0)
Home Instruction for Parents of Preschool Youngsters (HIPPY)	0.0 (0.0)
Parents as Primary Caregivers	0.0 (0.0)
Playtime Learning Games for Young Children	0.0 (0.0)
Resources for Infant Educators	0.0 (0.0)
Jackson Home Visiting	0.0 (0.0)
Other	19.3 (4.7)
None	2.9 (2.9)
Sample Size[b]	**75**

Source: Spring 2009 Program Director Interview.

[a]Among programs with center-based curricula.

[b]Three programs did not complete a self-administered questionnaire (SAQ).

Table III.13. Child Assessment Tools Used in Early Head Start Programs

	Weighted Percentage of Programs Using Assessment (Standard Error)
Assessment used:	
Ages & Stages	33.9 (5.8)
Creative Curriculum Tools	27.3 (6.1)
Agency-created screening assessment	25.6 (5.6)
Early Learning Accomplishment Profile	15.9 (4.5)
The Ounce Scale	11.3 (3.4)
Denver II	10.1 (4.0)
Desired Results Developmental Profiles-R (DRDP-R)	7.0 (2.8)
High/Scope COR	6.8 (2.9)
Preschool Language Scale (PLS-3)	5.3 (3.1)
Infant Toddler Social Emotional Assessment (ITSEA/BITSEA)	3.5 (2.3)
Achenbach Child Behavior List (CBCL)	2.5 (1.9)
Bayley Mental Development Index (MDI)	2.5 (1.9)
Infant Toddler Developmental Assessment	2.5 (1.5)
Woodcock-Johnson	2.1 (2.1)
Bayley Behavior Rating Scale (BRS)	2.1 (1.2)
Mullen Scales of Early Learning	1.6 (1.1)
Temperament and Atypical Behavior Scale	1.3 (1.3)
Macarthur Communicative Development Inventories	0.4 (0.4)
Leiter International Performance Scale-Revised	0.0 (0.0)
Receptive/Expressive Emergent Language Test-2nd Edition	0.0 (0.0)
Vineland Adaptive Behavior Scales	0.0 (0.0)
Vineland Social-Emotional Early Childhood Scales	0.0 (0.0)
Other	23.1 (4.2)
None	0.0 (0.0)
Sample Size	**86**

Source: Spring 2009 Program Director Interview.

Service Individualization for Families Occurs Through Assessment and Matching

A fundamental principle of Early Head Start is that services must be individualized to address the needs and goals of each family. This emphasis on individualization is reflected in the performance standards and in the ways program staff interact with families. Assessment of a child's strengths and needs and of a family's priorities and concerns is at the core of the process of individualizing services. Through the family partnership process, Early Head Start programs are charged with working with families to identify family needs and create specific goals and strategies for addressing them. Finally, individualization of services may include efforts to match families with staff members who are familiar with their linguistic and cultural background. This section elaborates on the activities that programs engage in to individualize services for families as reported by program directors. Box III.1 describes the ways program directors identify and individualize services for children with disabilities.

Box III.1. Identifying and Individualizing Services for Children with Disabilities

Service individualization for children and families is a defining feature of Early Head Start programs. Head Start's performance standards require that child development services take into account the developmental trajectories, temperaments, cultural backgrounds, and learning styles of individual children. In the area of family development, programs must tailor services to each family's particular needs and goals.

Programs must also individualize services when working with children with disabilities. To better understand how programs determine the needs of children and families and customize services in response, we asked program directors to describe the steps their programs would take to gain intervention services for a child recently screened for a developmental concern, such as a speech problem. Here, we present an analysis of directors' open-ended description of this process, highlighting common and unusual features among programs.

By and large, program directors described a six-step process for determining a child's needs and gaining intervention services:

1. ***Conducting a Screening.*** Programs use several methods of identifying developmental issues. In addition to conducting regularly screenings, programs rely on interviews with parents to gather information on a child's health and developmental history, observations by program staff, or concerns expressed by family members or doctors.

2. ***Reviewing Results with Parents and Staff.*** Once a screening is completed, staff typically discuss the results with parents. If further evaluation appears warranted, programs work to secure permission from parents to make a referral to Part C. Directors noted that parents do not always immediately agree to a referral, in which case program staff continue to monitor the child (and conduct repeat screenings) and then revisits the issue with parents.

3. ***Making a Referral to Part C.*** In referring children to Part C, programs often provide some level of service coordination, such as helping parents complete paperwork or providing transportation. Some directors noted that their programs follow the parents' lead in this regard, offering assistance if the parents request it or appear to need it. Some programs help parents prepare for the referral, explaining what will occur.

4. ***Creating an Individual Family Service Plan (IFSP).*** Some program directors noted that staff participate in the process of creating an IFSP that outlines the services to be provided to the child and family. This participation may involve, for example, joint meetings with parents and Part C staff.

5. ***Provision and Coordination of Services.*** Program staff generally partner with parents to implement the IFSP, meeting with them to ensure that the plan is on track. Features of the plan are incorporated into the curriculum for that child. Part C services may be provided in the classroom or in the family's home.

6. ***Periodic Reassessment and Updating of the IFSP.*** Children's progress is monitored so that the plan for providing services can be modified as their developmental progress and family needs change.

The process described by some program directors included distinctive features. The director of one program emphasized that a child with disabilities is not isolated in the classroom, even as she or he receives Part C services. For instance, all the children in a class may learn sign language alongside a hearing-impaired child. The director of another program described it as very focused on the intervention process, so that the staff does all it can before making a referral to Part C.

Programs Use a Combination of Methods to Assess Family Needs

Programs identify and assess the concerns and needs of families through a mix of formal and informal methods. Family self-report, parent surveys, staff meetings with parents, and ongoing assessments during home visits are each used by 95 percent or more of programs (Table III.14). The process of creating Individual Family Partnership Agreements (IFPAs) also includes an assessment component; 42 percent of programs indicated that assessment of family needs occurs through this process. In addition, most programs use formal family assessment tools (not shown). Formal assessment tools created by programs themselves are the most common, used by 30 percent of programs. Smaller proportions of programs use other specific tools, such as the Family Needs Scale (Dunst et al. 1994) (9 percent) and the Edinburgh Postnatal Depression Scale (Cox et al. 1987) (7 percent). About 5 percent of programs say that they do not use any specific assessment tools.

Table III.14. Programs Use a Combination of Methods and Assessments to Identify Family Needs

Methods of Identifying Family Needs	Weighted Percentage of Programs (Standard Error)
Family service worker or advocate meetings with parents	98.0 (1.3)
Family self-report	96.7 (2.3)
Formal surveys of parents	95.9 (2.2)
Assessments conducted during home visits	95.1 (3.0)
Family partnership agreement process	43.2 (6.1)
Staff observation	12.2 (4.3)
Other methods	3.9 (1.6)
Type(s) of assessments used:	
Agency-created assessment	30.0 (4.7)
Family Needs Scale	8.8 (3.8)
Ages & Stages Questionnaires	7.5 (3.5)
Edinburgh Postnatal Depression Scale	6.5 (2.6)
Home Observation for Measurement of the Environment (HOME)	3.1 (2.2)
Beck Depression Inventory	2.4 (1.9)
Family Support Scale (FSS)	1.8 (1.8)
Adult-Adolescent Parenting Inventory	1.7 (1.2)
CES-D Depression Scale	1.7 (1.2)
Other	32.0 (5.3)
None	5.7 (3.3)
Sample Size	**89**

Source: Spring 2009 Program Director Interview and SAQ.

Note: Multiple methods and assessment types possible.

All Programs Reported Creating IFPAs with Families

IFPAs typically provide a structure for identifying family strengths and needs and establishing goals. These agreements also often delineate the steps that families will take to achieve their goals and the program or community resources that may be used to support them. Completing an agreement is one part of the ongoing family partnership process, and agreements are intended to be updated regularly to reflect changes in family circumstances and to document progress. Use of IFPAs is universal among Early Head Start programs. Directors also reported that IFPAs have been created for a very high percentage of families in their programs: 97 percent of program families, on average (not shown). These agreements are updated approximately once every two months, on average.

Most Programs Try to Match Families with Staff Based on Cultural Background and Language

Connecting families with staff who speak their language or understand their cultural background can support family development. Staff members who share a family's language or culture are likely to be able to ascertain the family's needs more completely and provide services that address those needs more effectively. Cultural competence is also an important part of the performance measures framework for Early Head Start; programs are expected to understand the cultural differences among families and design their programs to support families' home cultures. For example, a staff member might provide information on recommended sleep practices for infants and toddlers while taking into account such customs as co-sleeping. A large majority of programs (78 percent) reported that they make an effort to match families and staff based on cultural background and language.[10] Programs that do such matching estimate that 79 percent of families are successfully matched, on average.[11]

Programs Recruit a Range of Families, but Almost All Have Waiting Lists

Each Early Head Start program establishes its own recruitment strategies, selection criteria, and enrollment process within guidelines outlined in the program performance standards and the legal authorization for Head Start. Regulations require that the majority of families enrolled in a program have incomes below the federal poverty threshold. Up to 35 percent of families may have incomes between 100 and 130 percent of the poverty threshold, and at least 10 percent of enrollment opportunities must be available to children with disabilities. In fulfilling these requirements, programs may prioritize enrollment of certain types of families or establish enrollment criteria that reflect particular needs identified in the community. Programs must implement a formal process for prioritizing enrollment among applicants.

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[10] In responding to items related to cultural and language matching, some directors of programs with families and staff all from the same cultural and language background indicated that they matched families and staff in this way. We amended the response categories in the director interview to allow directors to indicate that matching was not applicable because all staff and parents shared the same cultural and language heritage. Although differing interpretations of the item prior to this change may have affected the precision of our estimates, we believe that any differences are small due to the in-depth nature of the interview.

[11] See Chapter IV for information on program practices regarding hiring multilingual and culturally competent staff.

The Most Common Methods for Recruitment Are Referrals, Word of Mouth, and Community Outreach

Nearly all programs use multiple recruitment methods, as presented in Table III.15. Referrals from community partners and word of mouth are noted by the largest percentage of programs (98 percent). Community outreach is nearly as common a strategy (95 percent). More than four-fifths of programs (85 percent) reported that they advertise locally. Just 2 percent of programs say they have no need to recruit families, presumably because families in the community are already aware of their services.

Almost All Programs Maintain a Waiting List and Use a Point System to Prioritize Enrollment

In keeping with program performance standards, 99 percent of programs reported that they have a waiting list of families and assign families priority for enrollment through a system that awards points for specific family characteristics. Programs vary to some extent in the criteria they consider in their rating or scoring systems. Nearly all programs (98 percent) take children with special needs into consideration, and a similarly large proportion award priority to families with a teen mother (93 percent of programs) or that receive public assistance (91 percent of programs). The wide range of other factors that programs take into consideration is presented in Table III.15.

Most Programs Do Not Focus on Serving a Special Population of Families

The majority of programs appear to focus recruitment efforts broadly, rather than primarily serving specific types of families. Nearly all programs focus recruitment efforts on children who are younger than 1 year old (98percent of programs) and on pregnant women (95 percent of programs). One-year-olds are recruited by a slightly smaller percentage of programs (92 percent), and 2-year-olds are recruited by less than 80 percent of programs. Most programs (59 percent) say they do not primarily serve any particular special group of families. About one-fifth of programs primarily serve teen mothers. A small percentage of programs (7 percent or less) indicate that they primarily serve other specific groups, including homeless families, children with disabilities, or military families.

Nearly All Programs Enroll and Provide Services to Pregnant Women

Ninety-eight percent of programs provide services to pregnant women (Table III.16). In most programs, fewer than 10 pregnant women are typically enrolled, according to director reports. Forty-five percent of programs reported that they typically have 5 or fewer pregnant women enrolled at any time, and 24 percent of programs reported typical enrollment of pregnant women at 6 to 10. A large majority of programs (93 percent) provide services to pregnant women through home visits. Other specific services that programs offer vary. All programs reported, for example, that they offer information on breastfeeding, nutrition, how to take care of a baby, how a mother can take care of herself, and how children grow and develop. Help with practical matters such as finding baby care items, referrals to doctors, and referrals to parenting or lactation classes are also very common. Less common services for pregnant women include referrals to a doula (31 percent of programs), mental health services (27 percent), and dental services (11 percent).

Table III.15. Programs Recruit Families Through Referrals and Outreach While Maintaining Waiting Lists

Characteristic	Weighted Percentage of Programs (Standard Error)
Program recruits families through:	
Word of mouth	98.4 (1.3)
Referrals from community agencies/partners	97.9 (1.5)
Outreach efforts in the community	94.6 (3.0)
Local advertising	84.6 (3.9)
Other	11.5 (4.3)
No need to recruit	1.6 (1.1)
Program has a waiting list	99.2 (0.8)
Program prioritizes enrollment using a rating or scoring system	99.6 (0.4)
Factors considered in rating or scoring system:[a]	
Child special needs	97.9 (1.5)
Teen mother	93.3 (3.3)
On welfare/TANF	91.0 (3.6)
Single parent	79.5 (4.7)
Family violence	72.6 (5.8)
Mental health	70.8 (5.8)
Substance use	70.0 (5.8)
Language needs	58.2 (6.4)
Parent/guardian unemployed	50.4 (5.9)
Number of children in family	42.2 (6.6)
Homelessness	33.4 (6.1)
Involved in Child Protective Services/foster child	22.6 (5.1)
Incarcerated parent	9.1 (3.6)
Parent working or in school	6.7 (2.5)
Other	30.2 (5.4)
Program focuses recruitment efforts on:	
Less than 1-year-olds	97.6 (15.4)
Pregnant women	95.2 (21.5)
1-year-olds	91.6 (28.0)
2-year-olds	79.5 (40.6)
Program primarily serves:	
Teen parents	20.7 (40.7)
Homeless families	6.9 (25.5)
Children with disabilities	4.6 (21.1)
Military families	2.3 (15.1)
Other	21.8 (41.6)
No special groups	58.6 (49.5)
Sample Size	**89**

Source: Spring 2009 Program Director Interview.

Note: More than one response possible.

[a]Among programs using a rating or scoring system.

Table III.16. Services Provided to Pregnant Women

	Weighted Percentage of Programs (Standard Error)
Program provides services to pregnant women	97.7 (15.1)
Typical enrollment of pregnant women[a]	
1–5	44.7 (2.7)
6–10	23.5 (5.1)
11–15	17.6 (4.0)
16–20	5.9 (3.2)
More than 20	8.2 (2.0)
Mode of service delivery to pregnant women	
Home visits	93.1(3.3)
Other	6.9 (3.3)
Services typically offered[a]	
Information on breastfeeding	100.0 (0.0)
Nutrition information	100.0 (0.0)
Information on how to take care of a baby	100.0 (0.0)
Information on how to care for yourself during pregnancy	100.0 (0.0)
Information on how children grow and develop	100.0 (0.0)
Help finding clothes, a stroller, or other baby care items	98.9 (10.7)
Referral to a doctor for the mother	97.7 (15.0)
Information on preparing a home for a new baby	97.7 (15.0)
Referral to lactation consultant	95.4 (21.1)
Referral for childbirth classes	95.3 (21.2)
Referral to a pediatrician for the baby	94.3 (23.3)
Parenting classes	94.3 (23.3)
Referral for smoking cessation	92.0 (27.4)
Meetings with other pregnant women or mothers	83.9 (37.0)
Referral to a doula	30.7 (46.4)
Mental health services	27.3 (44.8)
Dental services	11.4 (31.9)
Information on infant safety	10.9 (3.3)
Referral to social services	10.3 (4.0)
Substance abuse prevention/education	9.1 (3.6)
Nurse home visits	8.8 (2.7)
Violence prevention	4.6 (2.9)
Other services	17.4 (4.5)
Sample Size	**89**

Source: Spring 2009 Program Director Interview.

Note: Multiple service types possible.

[a]Among programs offering services to pregnant women.

Nearly Four-Fifths of Programs Reported Serving Dual Language Learners (DLLs)

A large proportion of programs—79 percent—serve DLLs (Table III.17). These programs target an array of services to such families. Provision of information and health-related assistance are very common. Over 90 percent of programs serving DLLs offer such services as providing information on Head Start (95 percent), providing information on community resources (94 percent), assistance obtaining health care (95 percent), or assistance applying for health insurance (92 percent). Many programs also provide information on ESL or adult education classes (90 percent) or assistance in scheduling appointments for prekindergarten screenings (83 percent).

Table III.17. A Large Majority of Programs Serve Dual Language Learners (DLLs)

Service	Weighted Percentage of Programs (Standard Error)
Program serves DLLs	78.5 (5.1)
Services offered[a]	
Information about Head Start	94.9 (2.9)
Assistance in obtaining health services	94.9 (2.9)
Information about community resources	93.9 (3.1)
Assistance in applying for medical insurance	91.9 (3.4)
Information about adult ESL or education	90.4 (3.8)
Assistance in scheduling appointments for pre-kindergarten screening	83.1 (4.5)
Assessment of basic reading and writing skills	52.4 (5.9)
Assessment of English language skills	50.8 (5.7)
Activities and workshops for parents of DLLs	47.6 (5.9)
Sample Size	**89**

Source: Spring 2009 Program Director Interview.

[a]Among programs offering services to DLLs.

Enrollment Is Highest During August and September; Nearly Half of Families Enroll Before Children Are 1 Year Old

We analyzed enrollment data from 83 programs that could provide detailed enrollment information.[12] In these programs, 46 percent of families enrolled in August or September (not shown). Families were least likely to enroll in December; just 3 percent of families did so. Although children were enrolled in the program at various ages, more than a quarter (26 percent) entered between the ages of 0 and 6 months. Including families that enrolled during pregnancy, nearly half of enrolled children (49 percent) entered Early Head Start before the age of 1.[13]

Programs Commonly Have Low to Moderate Concentrations of Highest-Risk Families

All Early Head Start families are at risk because Early Head Start primarily serves families with incomes at or near the poverty threshold. However, even within a group at elevated risk, some families have an accumulation of risk factors placing them at even higher risk. We created two indices of risk, one based on demographic characteristics and one on psychological characteristics. Demographic risk factors we included are single parenthood, teen parenthood, public assistance receipt, unemployment, and low educational attainment.[14] Psychological risk factors include mental

[12] We obtained full enrollment rosters from 83 of the 89 programs in fall 2009 that included birth dates and enrollment dates of the children. Findings on enrollment include all children in the programs, not only the Baby FACES study children.

[13] The Baby FACES study excluded programs that focus on serving 2-year-old children.

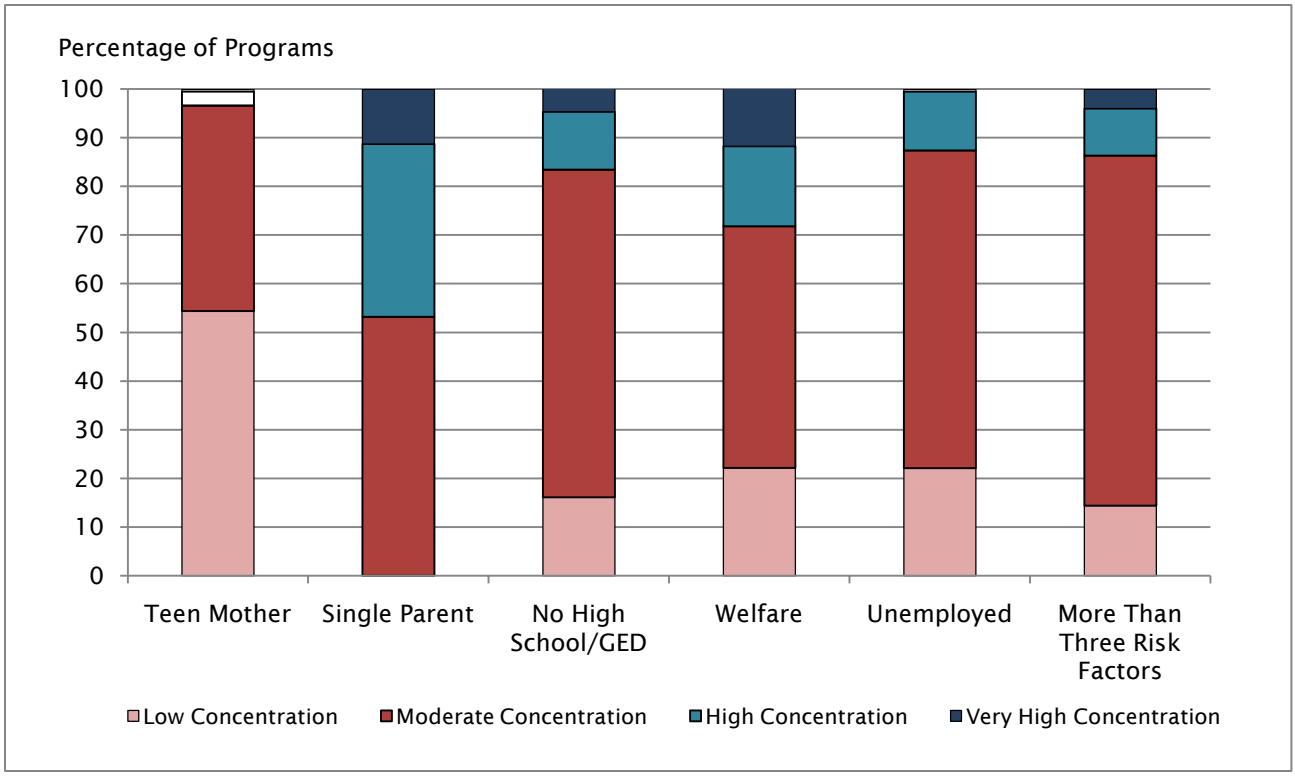
[14] These risk factors are modeled on those used to classify risk in the EHSREP study and at the program level in the SEHSP.

health and substance abuse problems, living in an unsafe neighborhood, and experiencing family violence.

In the EHSREP impact study, researchers found a high rate of both demographic and psychological risks among Early Head Start families. Patterns of impacts differed by the number of demographic risk factors families faced, with the largest and most positive impacts concentrated among families with three risk factors (compared to families with up to two risk factors and families with four or five risk factors) (ACF 2002). The SEHSP found that programs varied in the relative concentrations of different types of risk among enrolled families. Families that face many risks are likely to be more difficult to serve—staff may be frequently forced to address crises rather than adhere to planned activities, or children may miss center days as a result. An understanding of the concentration of high-risk families in a program may help prepare staff to proactively address needs and identify necessary supports. At a national level, understanding family risk within programs may inform technical assistance.

Programs in the Baby FACES study reported the concentration of families they serve facing specific demographic or psychological risk factors. Concentrations were characterized as low (less than 10 percent of families), moderate (10 to 50 percent of families), high (51 to 75 percent of families), or very high (76 percent or more of enrolled families). Directors were also asked to indicate concentrations of families with multiple risk factors. Figures III.3 and III.4 summarize findings on family risk factors.

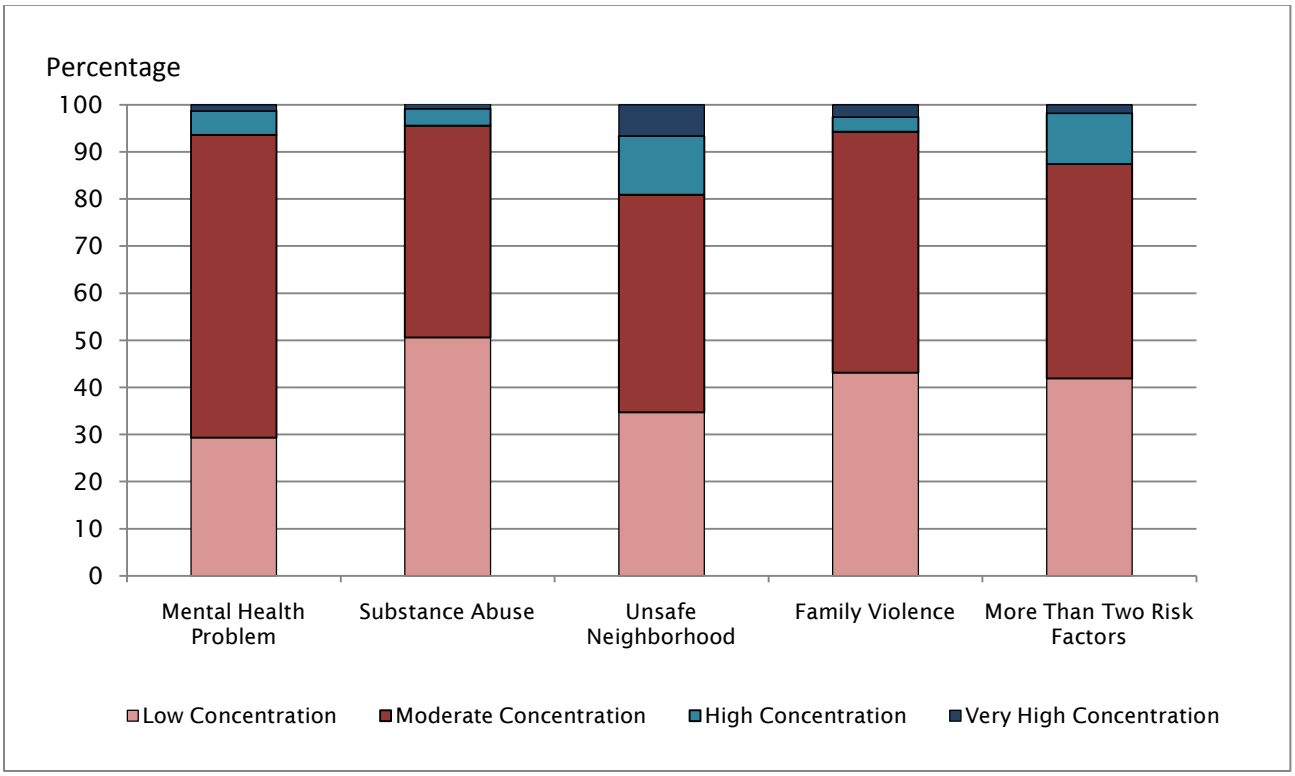
Figure III.3. Demographic Risk Factors: Programs Serve High or Very High Concentrations of Single-Parent Families



Source: Spring 2009 Program Director Interview.

Sample Size: 89 programs.

Figure III.4 Psychological Risk Factors: High or Very High Concentrations of Families Facing Psychological Risks Are Uncommon



Source: Spring 2009 Program Director Interview.

Among Demographic Risk Factors, Programs Most Commonly Reported Serving High or Very High Concentrations of Single-Parent Families

All study programs have at least a moderate concentration of single-parent families, and nearly half (47 percent) have a high or very high concentration of families with this risk factor. Welfare receipt is also a relatively prevalent demographic risk factor among Early Head Start families. Three in 10 programs reported having a high or very high concentration of families receiving cash assistance. Most programs do not have high or very high concentrations of families with more than three demographic risk factors. Just 14 percent of programs fall into this category; a much larger proportion (72 percent) reported serving a moderate concentration of these families. These findings are similar to those of the SEHSP, in which just over half of programs (54 percent) reported high or very high concentrations of single-parent families, and about one-fifth of programs (22 percent) reported having high or very high concentrations of families with three or more demographic risk factors.

A Minority of Programs Reported High or Very High Concentrations of Families Facing Psychological Risk Factors

A high concentration of families with any single psychological risk was unusual. Within this category of risk factors, programs were most likely to have families residing in an unsafe neighborhood; nearly one-fifth of programs reported high or very high concentrations of these

families. The SEHSP also found living in an unsafe neighborhood to be a common psychological risk factor, with 24 percent of programs having high or very high concentrations of these families. High concentrations of families with other psychological risk factors appear to be less common, but substantial proportions of programs reported having at least a moderate concentration of families with mental health issues (71 percent) or experiencing family violence (57 percent). About 13 percent of programs have a high or very high concentration of families facing more than two psychological risk factors, a finding identical with the SEHSP.

Program Management Activities Include Goal-Setting and Use of Data

Two key elements of Early Head Start management are specifying program goals and using data to monitor and improve program operations and services. We explored the topic of goal-setting with program directors by asking them to indicate the three most important goals for their programs in the current program year. On the topic of data use, we asked what types of reports on program operation directors have available and how frequently these reports are accessed. We explored measurement of program implementation via program director reports and describe those findings in Box III.2.

Program Directors Most Frequently Named Expansion as a Goal for the Program and Enhancing Child Development as a Goal for Families and Children

Increasing the size of a program to meet community needs was the goal noted by the largest proportion of directors (37 percent) (not shown). A substantial proportion of directors (28 percent) mentioned the addition of new services as a primary goal for the current year. Directors are also focused on improving the skills of their staff: 33 percent mentioned a goal related to staff training or development. Goals related to families such as "enhancing overall child development" or "promoting child health and physical development" were mentioned by 30 percent of directors; 28 percent of directors noted such family development goals as "improving parenting skills" or "promoting positive, nurturing parent-child relationships."

Nearly All Programs Have Access to Various Reports on Program Operations, but Access to Individual Child Progress Reports Is Less Common

The vast majority of programs (96 percent or more) reported that they have access to reports on enrollment, family characteristics, services provided, and child health (not shown). Program directors were not asked to specify whether this information is stored electronically or on paper. Enrollment reports are reviewed most frequently, with over half of programs reporting that they access such reports at least weekly. In our analysis of enrollment patterns, we discovered that the accessibility of roster information and enrollment data collected by programs varies widely. For example, we collected the rosters for the 83 programs with difficulty over a period of several months (we experienced similar difficulties obtaining rosters to determine eligibility of programs and families for the study). Some programs were unable to provide original enrollment dates for children and families who were enrolled in previous years; several programs annually reset the date of enrollment to reflect the start of the new year. Fewer programs (72 percent) have access to reports with data on the progress of individual children, although some programs create reports on the progress of all children in a class. Program directors mentioned using a variety of other report types, including reports on attendance, finances, waiting lists and family recruitment, and nutrition (for example, numbers of meals served).

Box III.2 Program Level Implementation

We have explored ways to collect information on program implementation in the Baby FACES sample. In the EHSREP, researchers developed elements of program implementation derived from the performance standards and from the conceptual framework. The cornerstones include child development, family development, staff development, community building, and management systems and procedures.[1] After intensive site visits that included interviews and record reviews, researchers used a consensus process to rate implementation on each cornerstone element and then create cornerstone ratings that average elements within each cornerstone. Final classification of programs' implementation in the EHSREP averaged cornerstone ratings, with the child development cornerstone weighted twice as much as the others. These ratings have been very useful as a program subgroup in the impact study; we hoped we could use the rating forms as an SAQ that program directors completed on their own.

We asked directors to evaluate their programs on an SAQ using the same overall rating form with labeled columns for rating each element on a scale of 1 to 5, from low to enhanced implementation (see Volume II, Appendix D).

Results of the implementation ratings indicated that most programs are generally very well implemented in every cornerstone, although some programs indicated they were not fully implemented in all areas (most often this was the family development cornerstone, with 10.5 percent of programs rating themselves below full implementation). However, overall variability is limited. To address our concern about relatively low variability in the ratings, we examined overall and cornerstone scores relative to other, related items in the director survey. We found limited correspondence between either individual element ratings, cornerstone scores, or overall implementation and related items (for example, rate of staff turnover, quality outcomes, and parental participation).

In part because of low variability in ratings and low correspondence between ratings and related interview items, we speculate that the format and presentation of the implementation items may have created a positive response demand. That is, because directors completed the form without any assistance or guidance and because responses to all cornerstone items were ordered and labeled from low to high implementation, directors might have been very conscious of how their responses to cornerstone items would affect their overall implementation scores. We present the ratings here, but given the low variability and relatively low correlation with other program characteristics, we do not recommend that they be considered a definitive measure of program implementation at this stage. In future rounds of Baby FACES data collection, we will explore alternative ways to collect implementation information from program directors.

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[1]The child development cornerstone elements are the following: frequency of child development services and developmental assessments, availability of health services, child care and group socializations, the level of parent involvement in child development services, and the degree of individualization of services. The family development cornerstone focused on the presence of Individualized Family Partnership Agreements, the availability and frequency of family development services, and the level of parent involvement in the program. The staff development cornerstone consists of amount of supervision, training, and turnover. The community-building cornerstone involves the quantity and quality of collaborative relationships between the program and other service providers and the existence of transition plans for children approaching their third birthday. The management systems and procedures cornerstone elements were existence and quality of a communication system, goals and objectives, a self-assessment, and a community needs assessment.

Summary of Key Findings

- Three-quarters of programs offer multiple service options.
  - Programs offering multiple service options consider family needs and preferences, as well as the availability of slots, when enrolling families into a specific option.
  - Just over half of families (52 percent) in the Baby FACES sample are enrolled in home-based services, 44 percent are enrolled in center-based services, and 4 percent are enrolled in combination services.
- Programs provide wide-ranging services and engage in partnerships to enhance service offerings.
  - Core child development services are offered at a frequency that meets performance standards, according to director reports.
  - All or nearly all programs report offering services to support family self-sufficiency and address child and adult health care needs. Programs make referrals to other providers for most types of services concerning self-sufficiency, health, and mental health.
  - More than one-third of programs maintain at least one formal partnership with a child care provider, and about 25 percent of children in these programs are served through these partners.
- Parents of newborns received a range of services from Early Head Start and community agencies.
  - Most mothers of newborns (80 percent) reported receiving services provided by Early Head Start during their pregnancy, with pregnancy-related information received most frequently.
  - Most parents (up to two-thirds) were involved in Early Head Start at least once in the past year. The levels of involvement are more frequent for some activities than for others.
  - Care in a provider's home is the most common type of child care other than Early Head Start. Approximately one-quarter of children received more than one type of child care. Children spent an average of 25 hours per week in nonparental care.
- All programs offering center-based services and nearly all offering home-based services use a curriculum.
  - The Creative Curriculum is the most widely used for center-based services (87 percent of programs). For the home-based option, large proportions of programs use Parents as Teachers (44 percent) and Partners for a Healthy Baby (41 percent).
- Programs use a combination of methods to assess family needs and to individualize services.

  - To assess family needs, family self-report, parent surveys, staff meetings with parents, and ongoing assessments during home visits are each used by 95 percent or more of programs.
  - All programs reported creating IFPAs with families.

- Programs recruit a range of families, but almost all have waiting lists.
  - Nearly all programs (95 to 98 percent) recruit families through referrals from community agencies, word of mouth, and community outreach.
  - Almost all programs maintain a waiting list and use a point system to prioritize family enrollment. Programs consider a variety of family characteristics in their rating or scoring systems, but nearly all programs (98 percent) take children with special needs into consideration, and a similarly large proportion award priority to families with a teen mother (93 percent of programs) or that receive welfare (91 percent of programs).
- Programs commonly have low to moderate concentrations of highest-risk families.
  - Among demographic risk factors, programs most commonly reported serving high or very high concentrations of single-parent families. A high concentration of families with more than two psychological risks was unusual among study programs.
- Program management activities include goal-setting and use of data.
  - Programs most frequently indicated that expansion of the program was their overarching goal, along with adding new services and increasing staff skills.
  - Nearly all programs can access reports on program operations, but access to progress reports on individual children is less common.
  - We found that programs had difficulty producing enrollment rosters quickly. It is unclear if that is due to inaccessibility of the data or the degree to which the staff is busy. Several programs do not keep original enrollment dates but reset them annually to reflect the start of the new year.

IV. CHILDREN ARE SERVED BY WELL-QUALIFIED STAFF FROM DIVERSE BACKGROUNDS

An important aspect of the Head Start performance measurement framework is the relationship between the provision of high-quality services and children's growth and development. Accordingly, Baby FACES provides important information about the overall quality of classrooms and home-based services for families and children and about classroom and home visit characteristics that relate to quality, including the characteristics of teachers and home visitors serving children and families. In fact, one of the cornerstones of the performance measures pyramid is staff, which includes the hiring of well-trained staff and their ongoing training and support. In this chapter, using data provided by teachers, home visitors, and program directors, we focus on characteristics of Early Head Start staff serving children in the Newborn and 1-year-old Cohorts. Program directors reported on the staffing of the program they oversee as a whole, but we also collected detailed information on those staff caring for Baby FACES study children.[1] We will make clear when we are reporting data from this smaller group of individual staff members or in aggregate about the program from program directors.

Program Directors Provide Insight on Staffing in Early Head Start Programs

To examine teacher and home visitor characteristics that influence the quality of child care, the teacher and home visitor interviews consist of questions asking teachers and home visitors about themselves, including socio-demographic information, education and training, and professional experience. Program directors provided staffing information on the program as a whole, including the number of staff in various positions; efforts to improve quality (for example, through professional development); and the educational background and qualifications of directors, managers, teachers, and home visitors.[2] In this chapter, we describe the information reported by program directors on overall staffing, hiring and retention, and training first, before discussing the characteristics of those teachers and home visitors who serve children in Baby FACES.

[1] We examined what proportion of all teachers and home visitors in our sample programs are assigned to children in the study. Perhaps because there are fewer home visitors on average, we have a higher proportion of the home visitors in the programs in the Baby FACES study, with an average of 61 percent assigned to study children and interviewed (the range is between 0 and 100 percent of home visitors having Baby FACES children across programs) compared with an average of 22 percent of all teachers (the range is 0 to 88 percent). To calculate these percentages, we omitted several cases in which we interviewed more home visitors in a given program than the program director reported were employed in the program.

[2] Early Head Start programs employ a variety of frontline and management staff members. These include, but are not limited to, teachers, home visitors, directors, assistant directors, managers, coordinators, and specialists. Teachers include all staff who have primary responsibility for all or some children in a classroom, and home visitors include all staff whose primary function is to make regular home visits to families and children. Frontline staff members include all staff who work directly with children and families, which typically include teachers in center-based programs, home visitors in home-based programs, and both in multiple-approach programs. Management staff are responsible for monitoring programs' progress toward goals and overseeing implementation of program services.

Programs Employ More Teachers than Home Visitors

Data from program director interviews indicate that programs, on average, employ approximately 23 full-time frontline staff and 5 part-time staff (Table IV.1). The number of staff differs according to program size,[3] with larger programs employing more staff. For example, small programs employ a mean of 15 full-time frontline staff members, medium-size programs employ 23 full-time frontline staff members, and large programs employ 39 full-time frontline staff members. Among core staff, programs most commonly employ teachers (15) and a smaller number of home visitors (6) and managers/supervisors (5) (all figures are averages). Program directors reported that their programs have 2 directors/assistant directors on average.[4]

Programs Have High Staff Turnover Rates and Retention Problems

Staff turnover is a challenge for Early Head Start programs. Program directors reported that 17 percent of teachers and 16 percent of home visitors left the program in the past year (see Table IV.2). Forty-four percent of programs had a director, coordinator, or manager leave during that same period; among these programs, between 1 and 2 (1.4) program directors, managers, or coordinators left on average. In Early Head Start programs surveyed in 2004 (Vogel et al. 2006), few programs (12 percent) had lost their director in the previous year, and only a handful (5 percent) had lost both a director and manager in that period. Turnover rates among teachers and home visitors in that survey were higher, however, at 20 and 24 percent on average. Among programs in our study in which a coordinator or manager left during the prior year, directors reported that close to half (46 percent) left for personal reasons. Thirty percent left for higher compensation or better benefits, 19 percent for a change in career, 14 percent due to a firing or layoff, 8 percent for maternity leave, and another 8 percent for "other" reasons.

Table IV.1. Programs Employ More Teachers than Home Visitors

Characteristics	Weighted Means (Standard Error)
Mean Number of Part-Time Frontline Staff	5.3 (1.1)
Mean Number of Full-Time Frontline Staff	23.2 (1.4)
Mean Number of Core Staff	
Directors/assistant directors	1.9 (0.2)
Managers/supervisors	4.5 (0.3)
Teachers	15.3 (1.2)
Home visitors	5.6 (0.5)
Sample Size	**89**

Source: Spring 2009 Program Director self-administered questionnaire (SAQ).

[3] Using the original enrollment rosters provided by sampled Early Head Start programs, we defined programs as small, medium, and large in size, creating three equal-size categories of programs. The smallest programs enroll from 18 to 93 children, medium programs enroll 94 to 145, and large programs enroll 146 to 299.

[4] The question asked about the number of directors/assistant directors. When there are two, this means there is one director and one assistant director.

Table IV.2. Programs Have High Staff Turnover Rates

	Weighted Percentage or Mean (Standard Error)
Turnover Rate Among Frontline Staff (percentage of staff that left program in past 12 months)	
Teachers	17.1 (2.7)
Home visitors	16.3 (3.4)
Percentage of Programs in Which a Director, Coordinator, or Manager Left in the Past 12 Months	44.2 (6.2)
Mean Number of Directors, Coordinators, or Managers That Left in the Past 12 Months[a]	1.4 (0.1)
Reasons Coordinators/Managers Left (percentage of programs)[a]	
Personal reasons	46.0 (9.6)
Higher compensation/better benefits	29.9 (9.4)
Change in careers	19.0 (6.6)
Firing/layoff	14.2 (4.2)
Maternity leave	8.1 (4.3)
Other	7.8 (2.6)
Range in Seniority Among Teachers	
Low end of range (mean years)	0.7 (0.1)
High end of range (mean years)	9.8 (0.8)
Range in Seniority Among Home Visitors	
Low end of range (mean years)	1.8 (0.3)
High end of range (mean years)	7.3 (0.4)
Range in Seniority Among Directors/Assistant Directors	
Low end of range (mean years)	8.2 (1.0)
High end of range (mean years)	10.8 (1.1)
Range in Seniority Among Coordinators	
Low end of range (mean years)	3.8 (0.6)
High end of range (mean years)	10.8 (0.7)
Sample Size	**89**

Source: Spring 2009 Program Director Interview.

[a]Among programs in which directors/coordinators left.

The seniority among staff varies across position, with teachers and home visitors being at the program for fewer years on average than management staff. Seniority ranges from 1 to 10 years for teachers and from 2 to 7 years for home visitors.[5] Among coordinators, seniority ranges from 4 to 11 years. Among directors and assistant director, seniority ranges from 8 to 11 years.

Twenty-eight percent of programs have unfilled full-time staff positions (Table IV.3). Most commonly, programs have unfilled positions for teachers (48 percent), managers/supervisors (29

[5] Program directors were asked to report the range in seniority among staff members, noting the lowest and highest years of experience of staff.

Table IV.3. Programs Have Difficulty Retaining Staff

	Weighted Percentage or Mean (Standard Error)
Program Currently Has Unfilled Full-Time Staff Position(s) (percentage of programs)	28.2 (5.6)
Mean Number of Full-Time Positions Currently Unfilled	1.5 (0.2)
Type of Position Unfilled (percentage of programs)	
Director	4.3 (3.1)
Manager/supervisor	28.9 (9.4)
Teacher	47.9 (9.0)
Home visitor	19.9 (8.3)
Other	17.5 (6.7)
Average Length of Time a Position Goes Unfilled (percentage of programs)[a]	
Less than 1 month	24.6 (9.2)
1–3 month	66.9 (9.3)
3–6 months	7.1 (3.9)
More than 6 months	1.4 (1.4)
Staff Recruitment Strategies (percentage of programs)	
Advertise on internet	85.0 (4.6)
Advertise in newspaper	82.3 (4.6)
Recruit from local colleges	82.8 (5.1)
Recruit among parents of enrolled children	96.8 (1.7)
Word of mouth	27.1 (5.4)
Internal postings	24.9 (5.2)
Notify community partners	22.7 (5.2)
Recruitment fairs/job fairs	12.4 (4.2)
Notify workforce development agency	6.8 (2.7)
Other	9.1 (3.7)
Level of Staff Salaries and Benefits (percentage of programs)	
Below the average in the surrounding area	24.8 (5.7)
About the same as the average in the surrounding area	40.2 (6.4)
Above the average in the surrounding area	34.9 (5.5)
Program Has Difficulty Retaining Staff After They Obtain Higher Credentials	41.9 (6.1)
Sample Size	**89**

Source: Spring 2009 Program Director Interview.

[a]Among programs with unfilled full-time positions.

percent), and home visitors (20 percent). Only 4 percent of programs have unfilled director positions. Most programs' positions do not remain unfilled for long, however. More than 90 percent of programs fill vacancies within three months: two-thirds fill positions in one to three months and one-quarter fill them in less than a month. Programs use a variety of strategies to recruit staff, including most commonly recruiting among parents of enrolled children (97 percent), advertising on the internet (85 percent) or in the newspaper (82 percent), and recruiting from local colleges (83 percent).

A challenge for retaining staff in some programs may lie in the fact that about one-quarter of programs pay salaries and benefits below the average for the surrounding area, according to program directors. Forty percent of programs pay salaries and benefits that are about the same as the surrounding area, and 35 percent pay above the average. Staff retention may also be complicated by

the fact that 42 percent of programs have difficulty retaining staff after they obtain higher credentials.

Programs Seek Well-Qualified Staff, Including Males and Multilingual Staff

Programs seek to hire staff with a variety of qualifications and characteristics (Table IV.4). All seek staff with prior experience working in early childhood settings, as well as people from the local community. Most also look to hire people with a degree in early childhood education (98 percent) and parents of Early Head Start children (98 percent). Directors reported that they are looking to hire males (86 percent) but that this remains a challenge (29 percent reported never being able to hire males). Many also seek staff who are multilingual (83 percent) or who speak a specific language (72 percent). Programs are successful in recruiting bilingual staff, as approximately three-quarters have bilingual staff members (Table IV.5). Programs most commonly assess applicants' bilingual proficiency by conducting interviews in the native language (66 percent) and by seeking feedback from people in the community (73 percent). About one-quarter use language proficiency tests (25 percent).

Table IV.4. Programs Seek Well-Qualified Staff

Qualification/Characteristic	Weighted Percentage of Programs Seeking Staff with This Characteristic (Standard Error)	Program Is Able to Hire People with This Characteristic			
		Always	Usually	Sometimes	Never
Prior experience working in early childhood settings	100.0 (0.0)	18.5	52.1	28.5	0.8
Degree in early childhood education or other credential	97.5 (2.5)	26.7	43.6	27.2	2.5
Prior management experience	79.8 (5.3)	37.5	37.2	23.7	1.5
Other qualifications	51.4 (5.8)	29.7	57.7	12.6	0.0
People from the community	100.0 (0.0)	38.3	48.8	13.0	0.0
Parents of Early Head Start children	98.0 (1.4)	0.0	16.1	76.7	7.2
Males	86.4 (4.5)	0.0	2.7	68.8	28.5
People who are multilingual	82.9 (4.7)	7.7	35.7	50.3	6.3
People who speak a specific language	72.0 (5.2)	9.7	36.8	46.6	6.9
People with other attributes	44.3 (6.2)	17.5	65.0	17.5	0.0
Program is able to retain people considered to be highly qualified	n.a.	14.9	69.0	16.2	0.0
Sample Size	**89**	**89**	**89**	**89**	**89**

Source: Spring 2009 Program Director Interview.

n.a. = not applicable.

Table IV.5. Programs Use Multiple Methods to Assess Staff's Bilingual Proficiency

	Weighted Percentage of Programs (Standard Error)
Program Has Bilingual Staff Members	76.7 (5.3)
Methods Used to Assess Applicants' Bilingual Proficiency[a]	
Language proficiency tests	25.1 (5.8)
Interviews in their language	66.0 (6.4)
Feedback from people in the community	73.0 (6.7)
Other assessments	30.6 (5.8)
Sample Size	**89**

Source: Spring 2009 Program Director Interview.

[a]Among programs with bilingual staff members.

Management Staff in Early Head Start Programs Are Well Educated

Head Start has placed a heavy emphasis on staff educational attainment. The reauthorization of the Head Start Act requires that, nationally, 50 percent of teachers have a bachelor's degree in early childhood education or a related degree with experience by September 30, 2013 (U.S. Congress, H.R. 1429 Conference Report 2007). Home visitors in Early Head Start are required to have at least an associate's degree (AA), with a bachelor's degree (BA) in child development or social work preferred.

The educational background of core staff in programs varies across positions, with directors/assistant directors having higher degree attainment (see Table IV.6). Program directors reported that more than half (59 percent) of directors/assistant directors in their programs have a graduate or professional degree. An additional 32 percent of directors have a bachelor's degree. About half (54 percent) of managers/supervisors have a bachelor's degree, and one-quarter have a graduate degree or higher.

According to program directors, 60 percent of teachers have an associate's degree (34 percent) or bachelor's degree (26 percent). More than one-third have a high school diploma or equivalent. Most home visitors have AA or BA degrees. However, a larger percentage of home visitors than teachers—nearly three-quarters—have a BA (43 percent) or AA (31 percent) degree.[6] Although direct comparisons to the Survey of Early Head Start Programs (SEHSP) are not possible,[7] in that study home visitors also had higher levels of education than teachers.

[6] Although direct comparisons with the EHSREP are not possible, these estimates are higher than in that study. Among Early Head Start frontline staff in the EHSREP study, 55 percent had at least a two-year degree, and 41 had at least a four-year degree (ACF 2002). Separate estimates on educational levels for home visitors and teachers in that study are not available.

[7] The SEHSP reported staff education at the program level. In that study, all home visitors had an associate's degree or higher in 47 percent of programs; for teachers, it was 13 percent of programs.

Program directors reported that many staff members have increased their credentials since being hired. Teachers are most likely to have done so (44 percent), followed by home visitors (33 percent) and managers/supervisors (31 percent). About one-quarter of directors have increased their credentials since being employed. On average, 5 teachers, 1 home visitor, and less than 1 manager/supervisor and director/assistant director are without an AA and are working toward that degree. It takes about 33 months for teachers and home visitors working toward an AA to earn their degree.[8]

Table IV.6. Staff Are Well Educated

Characteristics	Weighted Means or Percentages (Standard Error)			
	Directors/ Assistant Directors	Managers/ Supervisors	Teachers	Home Visitors
Mean Number of Core Staff	1.9 (0.2)	4.5 (0.3)	15.3 (1.2)	5.6 (0.5)
Highest Level of Education (percentage)				
High school or equivalent	2.7 (1.3)	8.5 (2.0)	40.2 (3.5)	21.8 (3.5)
Associate's degree	6.4 (2.6)	15.1 (2.5)	33.7 (3.8)	30.5 (4.1)
Bachelor's degree	31.5 (4.8)	53.5 (3.6)	25.6 (2.9)	42.5 (4.3)
Graduate/professional degree or higher	59.4 (5.5)	23.6 (3.9)	1.8 (1.0)	5.7 (1.9)
Mean Number of Staff Without Associate's Degree Working Toward ECE or Related Degree	0.1(0.0)	0.5 (0.2)	5.0 (1.0)	1.4 (0.5)
Mean Number of Months Taken to Earn Associate's Degree[a]	n.a.	n.a.	32.9 (1.5)	32.9 (1.5)
Has a CDA (percentage)	0.0 (0.0)	1.5 (0.8)	23.2 (2.5)	11.1 (2.8)
Has State-Awarded Preschool Certificate or License (percentage)	1.3 (0.9)	3.1 (1.4)	4.7 (1.7)	4.6 (2.0)
Has Increased Credentials Since Hire (percentage)	26.3 (5.4)	31.4 (4.1)	44.4 (4.8)	32.5 (4.9)
Sample Size	**89**	**89**	**75**	**76**

Source: Spring 2009 Program Director SAQ.

[a]Program directors do not report these estimates separately for teachers and home visitors.

CDA = Child Development Associate credential; ECE = early childhood education.

n.a. = not applicable.

[8] We asked program directors to report on the number of months it typically takes teachers or home visitors to earn an AA. We did not ask them to report this information for other staff.

Programs Provide a Number of Training and Professional Development Activities

Most Early Head Start programs provide more than the required number of training hours in-house. About 21 to 25 hours of training are required by programs per year (see Table IV.7), with slightly more required hours for teachers (25 hours), home visitors (24 hours), and managers/supervisors (23 hours) than for directors/assistant directors (21 hours). More hours of training are provided annually for teachers (53 hours) and home visitors (48 hours) than for managers/supervisors (43 hours) and directors/assistant directors (39 hours). In addition, although training opportunities are provided frequently during the year, they are provided slightly more often for teachers, home visitors, and managers/supervisors than for directors/assistant directors.

Program directors reported on the range of topics covered in staff training. The most common topics include child development (100 percent), health and first aid (100 percent), mental health (98 percent), updates on Office of Head Start (OHS) monitoring protocols or policy revisions (96 percent), assessing family needs or setting goals (96 percent), nutrition or obesity prevention (95 percent), and classroom management (90 percent). Half of programs provided training on teaching strategies for working with dual language learners (DLLs).[9] Staff also may attend trainings outside of the program and we asked directors about accommodations for staff to attend these trainings.[10] Nearly all (99 percent) pay for registration fees, and most pay for travel (94 percent), provide tuition reimbursement (91 percent), and provide staff coverage (90 percent).

Teachers and Home Visitors Provided Information on Background Characteristics Related to Service Quality

Research has linked staff characteristics to child outcomes, and indeed, Early Head Start's conceptual framework illustrates such a pathway (see Figure I.1). Important staff characteristics associated with the quality of care include amount and type of education and training, beliefs, and job satisfaction (Burchinal et al. 2000). Although teacher education has been associated with children's cognitive and social-emotional development (Burchinal et al. 1996; Clarke-Stewart 1989; Hayes et al. 1990; Ruopp et al. 1979; Whitebook et al. 1989; Zaslow 1991), these relations are typically weak (Bogard et al. 2008; Early et al. 2006). As noted earlier, the teacher and home visitor interviews provide information about frontline staff; based on these interviews, we describe these staff characteristics and discuss them in terms of the quality of services they provide to parents and children. In other words, we provide estimates of the quality of care at the child and family level by describing the percentage of children having staff with specific characteristics.[11] In this section, we use teacher and home visitor reports to describe the characteristics of teachers and home visitors working with children in both cohorts.

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[9] OHS defines DLLs as children who are learning two (or more) languages at the same time, as well as children learning a second language, while continuing to develop their first (or home) language (http://eclkc.ohs.acf.hhs.gov/hslc/Dual%20Language%20Learners/DLL_%20Resources/OHSDefinitionof.htm).

[10] All directors were asked to report on the accommodations they make for staff to attend training outside of the program. Thus, estimates are not conditioned on whether or not programs send staff out for training.

[11] Because we did not sample teachers or home visitors, we must provide overall estimates as a percentage of children rather than as a percentage of teachers and home visitors.

Table IV.7. Programs Provide a Number of Training and Professional Development Activities

	Weighted Mean or Percentage of Programs (Standard Error)
Program Staff Members Have Individual Career Development Plans (percentage of programs)	96.2 (2.2)
Mean Number of Hours of Training *Required* per Year, by Position	
Directors/assistant directors	21.2 (3.1)
Managers/supervisors	23.3 (2.7)
Teachers	24.9 (2.5)
Home visitors	24.4 (2.5)
Mean Number of Hours of Training *Provided* per Year, by Position	
Directors/assistant directors	39.4 (5.3)
Managers/supervisors	43.4 (4.8)
Teachers	52.6 (6.4)
Home visitors	47.8 (6.0)
Mean Number of Times per Year Training Is Provided, by Position	
Directors/assistant directors	9.2 (1.0)
Managers/supervisors	10.7 (1.1)
Teachers	13.1 (2.1)
Home visitors	11.6 (1.4)
Training Topics in the Past Year (percentage of programs)	
Child development	100.0 (0.0)
Health, first aid, CPR, or MAT	100.0 (0.0)
Mental health	97.6 (1.8)
Assessing family needs or setting goals	96.0 (2.2)
Updates on OHS monitoring protocols or policy revisions	95.7 (2.4)
Nutrition or obesity prevention	95.0 (3.1)
Classroom management	90.0 (3.2)
Parent and community relations	87.6 (4.1)
Professionalism in the workplace	86.4 (3.4)
Sleep routines or needs	66.9 (5.4)
Time management	55.5 (6.1)
Teaching strategies for working with DLLs	49.9 (5.4)
Abuse and neglect	19.7 (5.1)
Teaching strategies and curriculum development	19.5 (5.0)
Safety and emergency preparedness	17.9 (4.0)
Working with children with disabilities	16.0 (4.5)
Use of specific curricula	12.9 (4.0)
Literacy training	12.6 (4.2)
Behavior management	9.3 (3.5)
Poverty training	6.0 (2.7)
Domestic violence	5.2 (2.6)
Other	25.3 (4.3)
Accommodations Made for Staff to Attend Training Outside the Program (percentage of programs)	
Pay registration fees	99.2 (0.8)
Pay for travel	94.1 (3.4)
Provide tuition reimbursement	90.8 (3.3)
Provide staff coverage	89.9 (3.6)
Pay per diem	22.6 (5.2)
Pay for books	17.9 (4.8)
Provide release time or flex time	10.9 (3.6)
Provide transportation	3.0 (1.7)
Other	14.9 (4.6)
Sample Size	**89**

Source: Spring 2009 Program Director Interview.

CPR = cardiopulmonary resuscitation; DLLs = dual language learners; MAT = medication administration training; OHS = Office of Head Start.

Children Have Diverse Teachers and Home Visitors

Based on data from teacher and home visit interviews, nearly all study children have a teacher (100 percent) or home visitor (99 percent) who is female (see Table IV.8). About half the children in center-based care have a teacher who is white, with the percentages having African American or Hispanic[12] teachers very similar (23 and 20 percent, respectively). Seven percent have a teacher from other racial/ethnic backgrounds. Among home visitors, slightly more than half the children have a white home visitor, about one-third have a Hispanic home visitor, 8 percent have an African American home visitor, and 9 percent have a home visitor from another racial/ethnic background. Thus, a larger percentage of children receiving home-based services have a Hispanic teacher than do children receiving center-based services.

Table IV.8. Children Have Diverse Teachers and Home Visitors

	Weighted Means or Percentages (Standard Error)	
Characteristics	Teachers	Home Visitors
Female (percentage)	100.0 (0.00)	99.3 (0.51)
Race/Ethnicity (percentage)		
White, non-Hispanic	50.8 (5.91)	53.8 (4.64)
African American, non-Hispanic	22.7 (4.91)	8.4 (2.48)
Hispanic/Latino	19.8 (5.45)	29.3 (4.29)
Other	6.7 (1.84)	8.5 (2.95)
Sample Size	**382–382**	**556–556**

Sources: Spring 2009 Teacher Interview, Spring 2009 Home Visitor Interview.

English and Spanish Are the Most Common Languages Spoken in Classrooms and on Home Visits

Many children have a teacher or home visitor who speaks a language other than English, and in both settings that language is likely to be Spanish (see Table IV.9). Overall, 39 percent of children receiving home-based services and 32 percent of children receiving center-based services have a home visitor or teacher speaking a language other than English.[13] More children receiving home-based services (35 percent) have a Spanish-speaking home visitor than children receiving center-based services (29 percent) have a Spanish-speaking teacher. Similar percentages of children have a teacher (5 percent) or home visitor (6 percent) who speaks a language other than English or Spanish.

[12] Throughout this report, we use the term *Hispanic* to refer to staff members with Hispanic or Latino racial/ethnic background.

[13] This is an average across all children, not conditioned on those who speak a language other than English.

Table IV.9. Many Children, Families, and Staff Speak a Language Other than English

Characteristics	Weighted Means or Percentages (Standard Error)	
	Teachers	Home Visitors
Speaks Language Other than English (percentage)	31.5 (5.49)	38.7 (4.13)
Spanish	29.0 (5.47)	34.6 (4.27)
Other	5.0 (1.51)	6.4 (1.62)
Number of Families in Classroom/Home Visit Caseload Speaking		
English only	5.1 (0.33)	7.3 (0.59)
English and another language	1.6 (0.33)	2.1 (0.28)
Only another language	0.5 (0.17)	2.1 (0.38)
Non-English Languages Spoken by Families (percentage)		
Spanish	44.2 (6.34)	58.9 (4.73)
Arabic	2.6 (1.33)	7.7 (2.40)
Asian languages	1.3 (0.55)	5.4 (1.66)
Other	10.2 (3.46)	13.3 (2.95)
Languages Used for Communication During Home Visits (percentage)		
English	n.a.	91.6 (2.01)
Spanish	n.a.	36.5 (4.23)
Other	n.a.	2.1 (0.96)
Languages Spoken by Adults[a] in Classroom (percentage)		
English	99.4 (0.56)	n.a.
Spanish	42.1 (6.30)	n.a.
Other	4.1 (1.64)	n.a.
Non-English Language Spoken in Classroom by (percentage)		
Teacher	33.6 (6.02)	n.a.
Assistant teacher	23.6 (4.80)	n.a.
Classroom aide	12.1 (4.00)	n.a.
Volunteer/nonstaff	6.6 (2.14)	n.a.
Language Used Most Often to Read to Children in Classroom (percentage)		
English	97.4 (1.22)	n.a.
Spanish	2.6 (1.22)	n.a.
Other	0.0 (0.00)	n.a.
Teacher Communicates with Families Speaking Non-English Languages (percentage)		
Only in English	66.8 (4.55)	67.8 (4.13)
Uses an informal interpreter	63.8 (5.27)	70.6 (4.10)
Uses physical cues or hand gestures	59.9 (4.45)	75.0 (4.04)
Uses bilingual newsletters/flyers/handouts	6.2 (1.78)	5.9 (1.87)
Uses books/dictionary	0.5 (0.34)	5.3 (1.32)
Uses pictures/draws pictures	2.6 (0.75)	6.4 (2.07)
Uses any other ways	15.8 (2.71)	13.4 (2.11)
Sample Size	**309–382**	**474–557**

Sources: Spring 2009 Teacher Interview, Spring 2009 Home Visitor Interview.

[a] Adults include the lead teacher, assistant teacher, classroom aide, or volunteer/nonstaff.

n.a. = not applicable.

On average, children served primarily through center-based care are in classrooms in which about two children speak a language other than English. The languages other than English most frequently spoken in children's homes are Spanish followed by Arabic; this is true for children in classrooms and home-based services.[14] Close to half of center-based children have teachers reporting that the children's families speak Spanish.

English is the language most often spoken by adults[15] in classrooms and during home visits. Most children (99 percent for those with teachers and 92 percent for those with home visitors) have teachers who reported that adults use English in the classroom or for communication during home visits. However, for 42 percent of center-based children and 37 percent of home-based children and their families, Spanish was reported to be spoken by adults in the classroom or used for communication during home visits. Among center-based staff, teaching staff are most likely to use a language other than English in the classroom (34 percent of teachers and 24 percent of assistant teachers). Other staff also speak non-English languages, but at lower frequencies: classroom aides in the case of 12 percent of children and volunteers or nonstaff members in the case of 7 percent of children. Nearly all children (97 percent) are in classrooms in which English is most often used when reading to children; Spanish is most often used for the other 3 percent.

Most Children Have Staff Who Use Their Home Language to Provide Services

The question of whether there is a language match between staff and the families they serve is arguably the most important, particularly important in home-based care, where home visitors need to be able to communicate with parents. The match between teacher and families' language is more complex to examine because teachers in classrooms may serve children speaking more than one language other than English. In these cases, teachers need another adult to help translate or communicate with children in languages they do not speak.

Among all families, 95 percent of children have their home language used during home visits, and 96 percent have their home language used in the classroom. Considering only Spanish-speaking families, 90 percent of children in home-based services have a home visitor who speaks Spanish. Among center-based children from Spanish-speaking homes, 88 percent have either a teacher or another adult in the classroom who speaks Spanish.

Teachers and home visitors reported using a variety of strategies to communicate with families who speak a language they do not speak. These findings apply to all the families served by the teachers and home visitors we interviewed, not only the children and families in the study sample. About two-thirds of children have teachers and home visitors who reported communicating only in English with families.[16] Similar percentages have a teacher or home visitor who reported using an informal interpreter (64 and 71 percent, respectively). Meanwhile, many children have a teacher (60 percent) or home visitor (75 percent) who reported using physical cues or hand gestures for

[14] Between 10 and 13 percent report that families speak approximately 15 languages other than those listed by name.

[15] Adults in the classroom included in these estimates are the lead teacher, assistant teacher, classroom aide, or volunteer/nonstaff.

[16] As discussed in Chapter VI, 23 percent of children are spoken to in a language other than English at home.

communication with families. We discuss parents' perspectives on their experiences communicating with staff in Chapter VI.

Most Baby FACES Children Have a Teacher or Home Visitor with a College Degree and with Experience Working with Infants and Toddlers

A higher percentage of home-based children than center-based children are being served by a staff member with at least a bachelor's degree (see Table IV.10). More than half of children receiving home-based services (54 percent) have a home visitor with a BA or higher; that is true of only 30 percent of children receiving center-based services. An additional 26 percent have a home visitor with an AA, compared to 34 percent of those in the center-based option. These self-reports are consistent with what program directors report for staff program-wide.

Many children have teachers and home visitors with training in child development and teaching in addition to whatever degree they have. About two-thirds of children have a teacher or home visitor with a degree in early childhood education or child development. Fifty-six percent of center-based children have a teacher who has earned a Child Development Associate (CDA) credential, 38 percent have one with a state-awarded preschool certificate, and 52 percent have a teacher currently enrolled in child care-related training. Comparatively, about 40 percent of home-based children have a home visitor who reports having a CDA certificate, and a similar percentage have a home visitor with a teaching certificate or license from their state. About one-third of children have a home visitor who is currently enrolled in child care-related training.

On average, home-based children and their parents have home visitors with more years of experience working with young children than do center-based children (see Table IV.10). Home visitors typically have 9 years of experience working with infants and toddlers; center-based children's teachers have 7 years of experience (the median across both groups is 7 years). Children have home visitors and teachers who have been working in Early Head Start for approximately 5 years (the median is 4).

Teachers and Home Visitors Participate in a Number of Professional Development Activities

Although program directors reported on the training and professional development activities provided and required by the program (see Table IV.7), teachers and home visitors also reported on their participation in these activities (see Table IV.10). These teachers and home visitors reported receiving substantial hours of staff training per year. Center-based teachers reported attending an average of 48 hours of staff training annually, and home visitors reported an average of 70 hours. This is more than the number of hours that program directors reported as being required of teachers and home visitors (about 24 hours annually). For teachers the totals are in line with the number of hours of training that program directors reported making available to staff (53 hours). The number of training hours reported by home visitors, however, is in excess of those that program directors reported providing to that group (48 hours on average). It is likely that staff supplement in-house training with training offered outside of the program.

About 80 percent of children have a teacher or home visitor who receives both one-on-one and group supervision. By most reports, supervision meetings are held at least once a month. Thirty-eight percent of center-based children have a teacher with an assigned mentor/coach, and 44

Table IV.10. Children's Teachers and Home Visitors Are Well Qualified and Experienced

Characteristics	Weighted Percentages (Standard Error)	
	Teachers	Home Visitors
Highest Level of Education (percentage)		
Less than high school	2.3 (1.55)	1.2 (0.83)
High school or equivalent	7.7 (2.89)	1.8 (0.78)
Some college but no degree	25.7 (4.47)	17.2 (3.58)
Associate's degree	34.4 (3.98)	25.5 (3.14)
Bachelor's degree	29.4 (3.90)	46.0 (4.67)
Graduate degree or higher	0.6 (0.32)	8.3 (2.10)
Field of Study Includes Early Childhood Education or Child Development (percentage)	59.4 (5.17)	70.3 (3.15)
Has a CDA (percentage)	55.5 (4.64)	40.0 (4.24)
Has State-Awarded Preschool Certificate or License (percentage)	38.2 (4.00)	37.7 (4.44)
Currently Enrolled in Child Care-Related Training (percentage)	51.6 (4.86)	35.3 (4.00)
Years in Teaching/Caring for Infants/Toddlers	7.2 (0.71)	9.3 (0.64)
Years Working in Early Head Start	4.8 (0.29)	5.1 (0.27)
Mean Hours of Staff Training per Year	47.5 (4.01)	70.1 (10.4)
Has Career or Professional Development Plan (percentage)	87.5 (2.98)	89.8 (2.01)
Supervision Meetings (percentage)		
One-on-one supervision	9.9 (2.58)	15.6 (3.10)
Group supervision	9.8 (2.25)	3.5 (1.30)
Both	78.7 (3.58)	80.1 (3.62)
None	1.6 (1.30)	0.8 (0.49)
Frequency of Supervision Meetings (percentage)		
At least once a month	83.8 (4.24)	85.9 (2.98)
Once every 1–3 months	6.8 (2.05)	7.8 (2.35)
One every 4–6 months	5.1 (2.80)	4.6 (2.07)
Once a year	2.4 (1.50)	0.8 (0.60)
Never	1.8 (1.47)	0.8 (0.51)
Has Mentor or Coach (percentage)	37.9 (5.71)	44.2.(3.78)
Frequency Meet with Mentor or Coach (percentage)		
Daily	11.7 (3.62)	21.7 (5.16)
Weekly	21.5 (5.73)	25.0 (4.72)
A few times a month	27.4 (6.51)	22.1 (5.33)
Once a month	26.6 (5.05)	17.7 (3.67)
More than once a year	8.7 (2.87)	10.8 (2.84)
Once a year	0.6 (0.44)	2.0 (1.96)
Never	3.4 (2.44)	0.7 (0.66)
Sample Size	**141–382**	**252–557**

Sources: Spring 2009 Teacher Interview, Spring 2009 Home Visitor Interview.

CDA = Child Development Associate credential.

percent of home-based children and families have a home visitor with an assigned mentor or coach. The frequency of meeting with these coaches varies, but more than 80 percent of teachers and home visitors meet with coaches at least once a month.

Children's Teachers and Home Visitors Report Positive Feelings About Their Current Job and Few Mental Health Problems

Children have teachers and home visitors who are generally positive about their profession and work in programs that offer a variety of benefits (see Table IV.11). Most children have a teacher (92 percent) or home visitor (91 percent) who reported that they are very likely to stay in their job. More than 80 percent of children's teachers and home visitors reported receiving paid sick leave, paid holidays, paid vacations, retirement/pension plans, life insurance, and health insurance.

Table IV.11. Teachers and Home Visitors Report Positive Feelings About Their Current Jobs, Receipt of Many Benefits, and Few Mental Health Problems

	Weighted Percentages (Standard Error)	
Characteristics	Teachers	Home Visitors
Very Likely to Stay in Job (percentage)	92.2 (2.72)	90.8 (2.38)
Paid Sick Leave	97.4 (1.04)	96.7 (1.34)
Paid Holidays	97.3 (1.16)	93.9 (2.95)
Retirement/Pension Plan	90.8 (2.30)	93.1 (2.03)
Paid Vacations	87.4 (2.77)	95.5 (1.51)
Life Insurance	86.8 (3.09)	89.7 (2.60)
Paid Health Insurance	85.5 (3.15)	84.6 (3.08)
Educational Stipends to Cover Workshops	73.8 (4.77)	79.3 (2.75)
Paid Maternity Leave	70.5 (5.08)	67.0 (4.63)
Dental Insurance	65.9 (5.29)	75.2 (4.25)
Personal/Bonus Days	10.1 (2.62)	6.9 (2.28)
Mileage	2.0 (0.93)	10.6 (2.54)
Vision Care	2.2 (1.17)	6.6 (1.96)
Bereavement/Family Leave	2.3 (1.18)	2.6 (1.09)
CES-D Short Form Score	3.2 (0.35)	3.4 (0.30)
CES-D Short Form Categories (percentage)		
No/Low number of symptoms	90.5 (1.97)	93.1 (1.79)
Moderate/Severe number of symptoms	6.9 (1.79)	9.5 (1.97)
Sample Size	**297-382**	**434-557**

Sources: Spring 2009 Teacher Interview, Spring 2009 Home Visitor Interview.

Note: The Center for Epidemiologic Studies–Depression Scale Short Form (CESD-SF) (Ross et al. 1983) uses 12 items to measure levels of symptoms of depression among adults. Scores range from 0 to 36.0–9 = No or mild number of depressive symptoms; 10 or more = Moderate to severe number of depressive symptoms.

Because teachers play an important role in children's lives, self-reports of their mental health provide critical information about the environment of Early Head Start classrooms and teachers' interactions with children and families. In fact, research has documented links between teacher psychological well-being and the quality of care children receive (Gerber et al. 2007). Most Early Head Start children have teachers (91percent) or home visitors (93 percent) who reported no or mild symptoms of depression (see Table IV.11). However, between 7 and 10 percent of children have a home visitor or teacher who reported elevated (moderate or severe) numbers of symptoms.

Summary of Key Findings

- Programs employ more teachers than home visitors.
- Programs have high staff turnover rates and retention problems.
  - Programs most commonly have unfilled positions for teachers (48 percent), managers/supervisors (29 percent), and home visitors (20 percent).
  - Most programs fill vacancies within three months.
  - Staff members most commonly leave for personal reasons or higher compensation or other benefits.
- Programs seek well-qualified staff, including males and multilingual staff.
  - Programs find it challenging to hire male staff.
  - Programs are successful in recruiting bilingual staff. Three-quarters have bilingual staff members.
- Management staff in Early Head Start programs are well educated.
  - More than half of directors/assistant directors in programs have a graduate or professional degree.
  - More home visitors than teachers have a college degree.
- Programs provide a number of training and professional development activities.
  - Programs provide more than the 21 to 25 hours of training required for staff per year.
  - Programs provide more hours of training for home visitors and teachers than for management staff.
- Children have diverse teachers and home visitors.
  - A larger percentage of children in home-based care have a home visitor who is Hispanic than children in the center-based option have Hispanic teachers.
  - Many children have a teacher or home visitor who speaks a language other than English.
  - More children receiving home-based services have a teacher who speaks Spanish than do children receiving center-based services.
- English and Spanish are the most common languages spoken in classrooms and on home visits.
  - Following English, Spanish and Arabic are the most frequently spoken languages in children's homes.
  - English is the language spoken most often by adults in classrooms and for communication during home visits.

- Most children have staff who use their home language to provide services.
  - Ninety percent of children from Spanish-speaking homes who receive home-based services have a home visitor who speaks Spanish.
  - Eighty-eight percent of children from Spanish-speaking homes who receive center-based services have a teacher or other adult in the classroom who speaks Spanish.
  - Teachers and home visitors use a variety of strategies to communicate with families who speak a language that they do not speak.
- Many children have a teacher or home visitor with a college degree and with experience working with infants and toddlers.
- Children's teachers and home visitors participate in a number of professional development activities.
- Children's teachers and home visitors report positive feelings about their current jobs and few mental health problems.

V. EARLY HEAD START HOME VISITS AND CLASSROOMS ARE OF MODERATE QUALITY

The quality of early childhood service is multidimensional and includes not only characteristics of staff (described in Chapter IV) but also the quality of the interactions and relationships among staff members and the children and parents with whom they work. The leading measures of service quality include observations of center-based classroom environment quality and the quality and content of home visits; such observations were carried out in the Baby FACES study. (Box V.1 provides information on the measures used to assess the key aspects of quality for both home- and center-based services.) We begin this chapter by offering a brief overview of what is known about the relationships among observed quality, teacher characteristics, and children's development.

For families served by Early Head Start in home-based settings, home visiting is intended to provide support for children's development, parenting outcomes (including lower parenting stress and more developmentally supportive parenting), and the parent-child relationship, although approaches vary in achieving these goals (Roggman et al. 2008; Sweet and Applebaum 2004). In the EHSREP, parents in home visiting programs provided more stimulating home environments, reported less parenting stress, and were more involved in education and training activities compared to control group parents when children were 3 years old (ACF 2002). Further, there were additional impacts on children's cognitive and language development in home visiting programs that fully implemented the performance standards. Others have found associations with child outcomes when home visits are child- rather than adult-focused (Raikes et al. 2006). All of these findings suggest that the content of home visits could be important for enhancing child outcomes.

Comprehensive assessment of the effectiveness of home visiting initiatives is a newer area of study, with the first comprehensive meta-analysis occurring less than a decade ago (Sweet and Applebaum 2004). Although evidence for the efficacy of home visiting strategies is mixed, stronger effectiveness is likely when the quality of the home visit is high and when the relationship between the home visitor and the family is strong. The home visitor–parent relationship is also associated with parents' engagement and involvement in visits and with children's vocabulary at 36 months (Roggman et al. 2008). In addition, qualitative research highlights the importance of home visitor conscientiousness (coming through on commitments to parents) and the match between home visitor and parent life experiences (Brookes et al. 2006).

Research on factors in early childhood classroom settings that contribute to children's development provides persuasive evidence for the important contribution made by process factors (including teacher behavior, teacher-child interactions, and quality of instruction) and structural factors (including child-teacher ratios, group sizes, and teacher education) (Love et al. 2005). For example, modest associations between observed classroom quality and child outcomes for low-income infants, toddlers, and preschoolers have been found in individual studies and meta-analyses (Burchinal et al. 1996, 2008a, 2009). Sensitive and responsive interactions with teachers are particularly important for children's learning and social-emotional development (NICHD Early Child Care Research Network 1996, 1997, 1998, 2006). In fact, process characteristics, such as sensitive and stimulating interactions with teachers, are associated with prekindergarten children's language, preacademic, and social skills (Burchinal et al. 2008b). The positive association between a low adult-to-child ratio in child care and child outcomes has been well documented (Burchinal et al. 1996; Scarr et al. 1994; Whitebook et al. 1989). With more children and fewer adults in a classroom,

Box V.1 Measures of Home Visit and Classroom Quality

To assess key aspects of the quality of both home- and center-based child care,[1] field staff conducted structured observational assessments of home visits and classrooms of 1-year-olds. We observed home visits for those receiving child development services primarily through home visits and observed center-based classrooms for 1-year-old children receiving child development services primarily through center-based care. We observed one home visit per home visitor (not one per child).[2] For home visits, we used the Home Visit Rating Scale-Adapted (HOVRS-A) (Roggman et al. 2009) and its manual (Hallgren et al. 2009), an adaptation of HOVRS (Roggman et al. 2008). For classroom observations, we used the Infant/Toddler Environment Rating Scale-Revised (ITERS-R) (Harms et al. 2003).

HOVRS-A, originally developed for training Early Head Start home visitors, is based on a theoretical perspective of an optimal model of home visiting. In this model, home visitors facilitate developmentally appropriate parenting behaviors and build upon parents' skills and resources to support child development (Roggman et al. 2008). This approach focuses more on the parent-child interaction and less on one-on-one interaction with either the parent or child singly. Higher scores on the HOVRS-A have been associated with higher scores on a measure of the quality of the home environment (Roggman et al. 2006), and the quality of the home environment has been found to mediate children's language development (Tamis Le-Monda et al. 2005).

HOVRS-A consists of seven items, which can be combined to form a total score and two subscale scores: Visitor Strategies (four items) and Visitor Effectiveness (three items). Visitor Strategies items include (1) the home visitor's responsiveness to the family, (2) the home visitor–family relationship, (3) the home visitor's facilitation of parent-child interaction, and (4) the home visitor's nonintrusiveness. Visitor Effectiveness includes (1) parent-child interaction during the visit, (2) parent engagement, and (3) child engagement. Items on HOVRS-A are rated from 1 to 5, based on indicators defined for each item and with anchor ratings of 1, 3, and 5. A 3 rating indicates that the observer saw a sufficient level of indicators of the model of home visiting that aims to facilitate parent-child interaction. Because of the clear theoretical underpinnings of this instrument, home visiting programs that adhere to alternative models of home visiting and that stress different types of behaviors (such as home visitor–child interactions) will not score as highly on the HOVRS-A.

During observations of home visits, field staff also collected data on the content and characteristics of the home visit, including topics (such as the child's health and development, parenting, the parent's health and well-being, parent employment and education, and community services); activities (including assessment, provision of information, goal-setting, and crisis intervention); and structure (for example, participating children and adults and languages used) (Boller et al. 2009).

We observed classrooms with the ITERS-R, which consists of 39 items organized under seven subscales: (1) Space and Furnishings (5 items); (2) Personal Care Routines (6 items); (3) Listening and Talking (3 items); (4) Activities (10 items); (5) Interaction (4 items); (6) Program Structure (4 items); and (7) Parents and Staff (7 items). Items on the ITERS-R are ranked from 1 to 7, with descriptors provided by the authors for ratings of 1 (minimal); 3 (moderate); 5 (good practice); and 7 (excellent). The Baby FACES study used a modified 32-item ITERS-R scale that excluded all parent and staff subscale items. These items were excluded because they rely heavily on staff reports rather than observations.

Classroom observations also included counts of infants and toddlers and the adults caring for them, which we used to compute child-adult ratios and group sizes.

For both ITERS-R and HOVRS-A, observers look for certain indicators as they rate each item. The unweighted means, standard deviations, and range for each subscale are presented next. Appendix C has more detail on the structured observations.

Box V.1 (continued)

Spring 2009 HOVRS-A and ITERS-R Scores, Unweighted

Domain	Mean	Standard Deviation	Range
	HOVRS-A		
HOVRS-A Overall Quality	3.34	0.87	1.00–5.00
Visitor Strategies quality	3.18	0.98	1.00–5.00
Visitor Effectiveness quality	3.56	0.95	1.00–5.00
	ITERS-R		
ITERS-R Total	3.83	0.80	1.86–5.84
Personal Care	3.12	1.13	1.17–6.50
Furnishings	3.94	1.07	1.60–7.00
Listening and Talking	4.36	1.20	1.33–7.00
Activities	3.51	0.96	1.57–6.11
Interaction	4.68	1.14	1.50–7.00
Program Structure	4.19	1.32	1.33–7.00
Sample Size	**366–369**		

Source: Spring 2009 home visit observation; spring 2009 classroom observation.

Note: Observations were conducted only for the 1-year-old Cohort.

HOVRS-A = Home Visit Rating Scale-Adapted; ITERS-R = Infant/Toddler Environment Rating Scale-Revised.

[1] For the purposes of this chapter, center-based settings are classrooms, whereas home-based settings are home visits.

[2] Our decision to observe one visit per home visitor rather than per child was based on two considerations. The first was the logistical difficulty of scheduling an observation of each child's home visit in the site visit week (five days). The second was that prior research suggested that home visitors tend to have low intra-visitor variability; in other words, home visitors tend to provide home visits of a consistently similar quality (Lori Roggman, personal communication 2008). Low intra-visitor variability provides justification for observing only one visit per home visitor in this study.

teachers are less able to give children individual attention or prevent negative behavior and are less able to create opportunities for learning during children's play. Studies point to strong associations between process and structural features of classrooms serving infants, toddlers, and preschoolers (Phillips et al. 2000; Phillipsen et al. 1997).

In this chapter, we provide information on key aspects of children's home visits. We also describe both structural and process characteristics of children's classrooms.

Children and Families Receiving Home Visits Participate in a Variety of Activities During Visits

Home visits are designed to address family and child needs within the parameters required in performance standards. The standards require that families receiving home-based services receive weekly home visits that last 90 minutes (see http://www.ehsnrc.org/PDFfiles/EHS-Home-AdminChk.pdf). Based on our home visit observations, the length of the home visits provided to 1-year-olds and their families is close to 90 minutes, on average (mean = 84 minutes; range = 30 to 165 minutes; see Table V.1). Home visitors are encouraged to meet family needs by engaging those present during the visits. For example, if the family has more than one child, the home visitor may be able to address the needs of both the child in the program and the other child by engaging parents in activities with both children or by answering parent questions about siblings and their

Table V.1. Children and Families Primarily Served by Home Visits Participate in a Variety of Activities During Visits

Characteristics	Weighted Means or Percentages (Standard Error)
Length of Home Visit (minutes)	83.7 (2.13)
Number of Children Participating in Visit	0.7 (0.06)
Number of Adults Participating in Visit	1.4 (0.06)
Home Visit Conducted in (percentage)	
English	77.7 (4.40)
Spanish	27.6 (5.24)
Other language	2.0 (1.32)
If Home Visit Conducted in Language Other than English, Interpreter Used (percentage)	3.4 (1.86)
Proportion of Home Visit Time per Activity (percentage)	
Child-focused	48.9 (1.98)
Parent/family-focused	17.9 (1.40)
Parent-child-focused	14.2 (1.15)
Staff-family relationship-building	14.1 (1.11)
Crisis management	4.8 (0.64)
Activities During Home Visit[a] (percentage)	
Play	79.5 (3.53)
Provision of education and/or information	71.5 (3.93)
Child/parent observation/assessment	64.3 (4.79)
Goal setting/planning	51.7 (5.08)
Model or demonstrate interaction with child/facilitate parent-child interactions	46.6 (4.67)
Evaluation/feedback on parent-child interactions	42.8 (3.80)
Problem solving	40.3 (4.79)
Observation of teacher-child interactions	40.1 (4.45)
Provision of emotional support to parent	32.9 (3.83)
Crisis intervention	8.3 (2.22)
Other	4.6 (1.42)
Alignment of Home Visit Activities with Planned Activities[b]	4.3 (0.07)
Sample Size	**97-366**

Source: Spring 2009 home visit observation.

Note: Observations were conducted only for the 1-year-old Cohort.

[a] Activity categories do not sum to 100 because more than one activity could occur during the home visit.

[b] Rated on a scale of 1 to 5, with 5 "very well aligned" with planned activities.

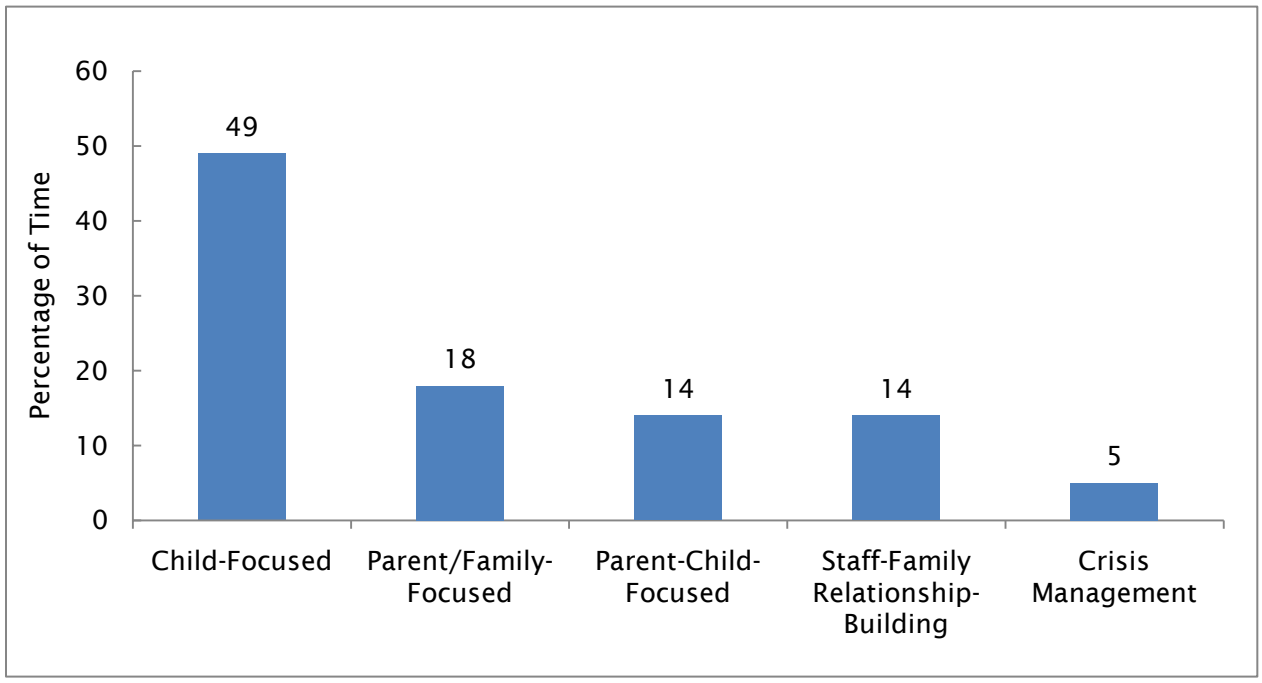
development. On average, we observed one child other than the focal child and one adult working with the home visitor. About 80 percent of the time, the child's mother or female guardian was the adult present during the home visit.

Programs strive to provide home visiting services in the language parents and children are most comfortable speaking. Most of the children and families (78 percent) receive visits conducted in English; however, 28 percent receive visits conducted in Spanish and 2 percent receive them in a

language other than English or Spanish. Approximately 90 percent of children from homes in which Spanish is primarily spoken have a home visit conducted in Spanish.[1]

Early Head Start home visits may include activities that are focused primarily on the parent, on the child, or on the two together. From our observations, the largest proportion of time spent during home visits is on child-focused activities, although we acknowledge that our presence observing the visit could influence the content and relationship dynamics of the home visit. Based on our observations, about half (49 percent) of the time during home visits is focused on the child (see Figure V.1), close to 20 percent of the time is focused on parents and family activities, and 14 percent of the time involves parent-child activities.

Figure V.1. Proportion of Time Spent on Home Visit Activities



Source: Baby FACES Spring 2009 home visit observation.

Sample size: 359.

Home visits include many different types of activities. For example, home visits most commonly involve play (80 percent) and child-parent observation and assessment (65 percent). At least half of the home visitors provide education or information and address goal setting and planning. Visits also include time spent modeling or facilitating parent-child interactions (47 percent), evaluating or providing feedback on parent-child interactions (43 percent), observation of parent-child interactions (40 percent), and providing emotional support to the parent (33 percent). Although relatively few visits (8 percent) included crisis intervention, 40 percent of visits included

[1] The information presented here is drawn from different questions about family language and service delivery approaches. Thus, the responses do not necessarily total to 100 percent.

problem-solving activities or conversation (again, the presence of an observer might have inhibited discussion of sensitive issues with the parent). After the visits were completed, home visitors reported that observed visits were highly aligned with the activities they had planned—they were able to cover the topics and perform the activities they had set out to do.

Most Children and Families Primarily Served by Home Visits Receive Visits in the Mid-Range of Quality

Using the HOVRS-A to assess the extent to which home visits focus on the parent-child relationship, we find that 1-year-olds and their parents[2, 3] have home visits scoring in the 3-point range (weighted mean = 3.4; see Table V.2). Average HOVRS-A scores range from 1 to 5, with the majority (91 percent) of children having a visit scoring between a 2 and 4. Nine percent of children and parents receiving home-based services have a home visit with a score in the 1 range, and fewer than 1 percent have a visit scoring 5 (see Figure V.2). On the Visitor Strategies subscale of the HOVRS-A, home visits were in the moderate range, on average. This scale includes four items that capture the home visitor's interactions and relationship with the parent and child. Having scores in the moderate range on this scale means that home visitors occasionally use strategies in their interactions that demonstrate responsiveness (for example, the home visitor plans and executes the

Table V.2. Most Children and Families Primarily Served by Home Visits Receive Visits of Moderate Quality

Scales	Weighted Mean (Standard Error)
HOVRS-A Overall Quality	3.4 (0.10)
Visitor Strategies Quality	3.2 (0.11)
Responsiveness to family	3.1 (0.12)
Relationship with family	4.0 (0.09)
Facilitation of parent-child interaction	3.0 (0.15)
Nonintrusiveness	2.9 (0.14)
Effectiveness Quality	3.6 (0.09)
Parent-child interaction	3.3 (0.13)
Parent engagement	3.3 (0.11)
Child engagement	4.3 (0.09)
Observer Rating of Visit Quality	3.4 (0.12)
Sample Size	**360–366**

Source: Spring 2009 home visit observation.

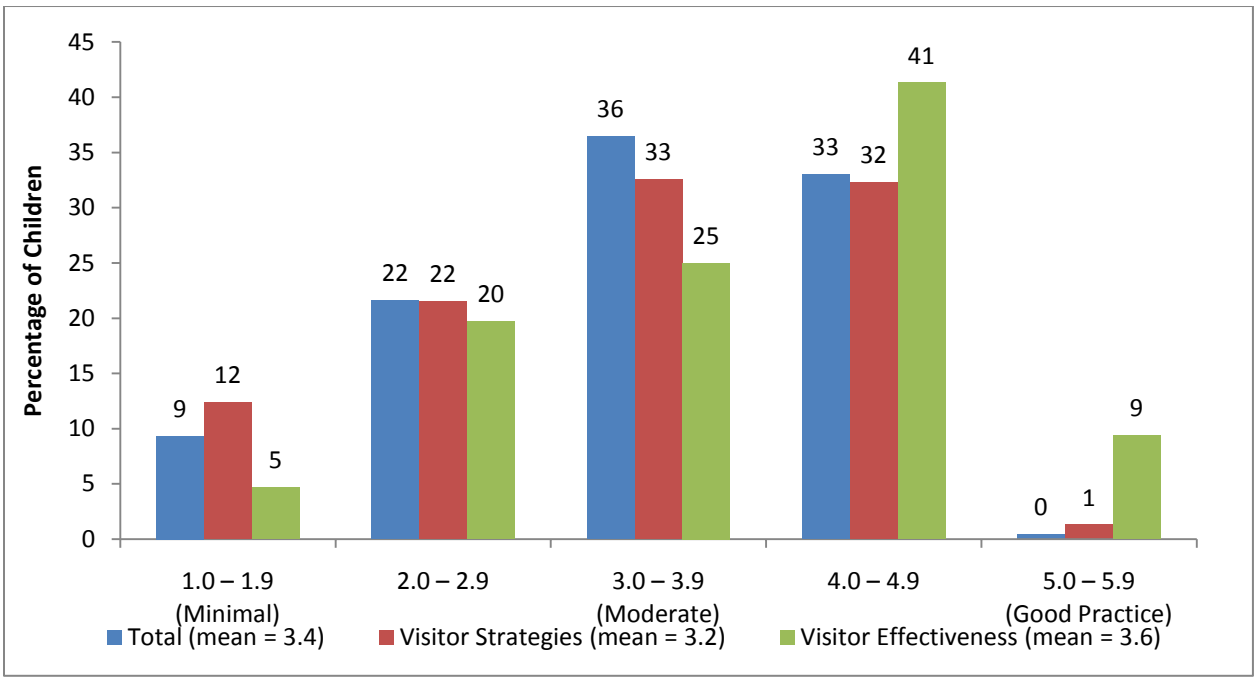
Note: Observations were conducted only for the 1-year-old Cohort.

HOVRS-A = Home Visit Rating Scale-Adapted.

[2] We conducted classroom and home visit observations only for children in the 1-year-old Cohort. Although many children were in classrooms with peers younger than that age, mean classroom scores reflect those of children in the 1-year-old Cohort, not the Newborn Cohort.

[3] Because home visits, unlike center-based services, are aimed at children and family members, we reference "children and their parents" or "children and their families" when describing the characteristics of visits and home visitors.

Figure V.2. Distribution of HOVRS-A Scores



Source: Baby FACES Spring 2009 Home Visit Observation

Note: Observations were conducted only for the 1-year-old Cohort.

Sample size: 363.

HOVRS-A = Home Visit Rating Scale-Adapted.

home visit with the needs of the family in mind or the home visitor changes the pace of activities to meet family interests or needs) and that help develop relationships with parents and children (for example, the home visitor and family interact sociably and are warm and respectful with one another). It also means that the home visitor occasionally tries to facilitate and reinforce parent-child interactions rather than interacting solely with the parent or child and also occasionally guides aspects of parent-child interactions rather than controlling them. In the area of Visitor Effectiveness, which captures the home visitor's effectiveness in involving and engaging the family, the average subscale score is 3.6, somewhat higher than the average score on the Visitor Strategies subscale. Half of families have a home visit scoring at a 4 or higher on this subscale. These average scores suggest that families have home visitors who are relatively effective at engaging parents and children with each other and with the activities of the home visit. On this scale, visits score highest in infant/toddler engagement (mean of 4.3) compared to the other two scale items. This means that during home visits, 1-year-olds at least occasionally interact with the parent or home visitor and demonstrate interest in home visit activities (for example, through gaze or body language). Both subscales indicate that the home visitor might benefit from coaching to improve further.

Correlational analyses[4] indicate that visit quality, including the total HOVRS-A score and the two subscale scores, is modestly associated with other features of the home visitors and the program

[4] In correlational analyses, we examined the relationship of home visit quality with the number of children and adults participating in the visit; percentage of visit time spent on crisis management; visit length; whether the program

(see Box V.2). Although there was no association between formal educational degree and quality, there was a positive relationship between the HOVRS-A overall and each subscale and whether the home visitor has a state-awarded credential. The total HOVRS-A and Visitor Strategies scores are related to home visitors' risk of depression, as seen in elevated number of symptoms, and home visitors' job satisfaction, with higher risk of depression and less satisfaction related to lower home visit quality scores. In addition, there is a negative relationship between these measures of quality and whether the program has unfilled staff positions, meaning that quality is lower in programs with unfilled positions. This is consistent with the idea that staff turnover and the potentially higher caseloads that may result may be disruptive to the quality of the home visitor–parent relationship and the quality of home visits overall. All statistically significant correlations are modest in magnitude, ranging from 0.14 to 0.20.

In keeping with the theoretical perspective of the HOVRS-A, correlations with overall and subscale scores and the percentage of time spent on different activities (child-focused, parent-family activities, parent-child activities, staff-family relationship building, and crisis management) are related in expected ways. The strongest associations between HOVRS-A and time spent on activities in the visit are with parent-child activities, meaning that the more time spent on these activities, the higher the quality overall and on both subscales (r's from .28 to .34, p's < .001). Conversely, there is a moderately strong *negative* association between HOVRS-A overall quality and Visitor Strategies and time spent on staff-family relationship building (r's -.23 and -.26, p's < .001). There are also weaker negative associations between HOVRS-A scores and proportion of time spent on parent-family activities (r's from -.14 to -.13, p's < .05). No associations between HOVRS-A scores and time spent on child-focused activities or crisis management are significant.

Finally, we examined the total HOVRS-A score and the two subscale scores for associations with other features of the visits and found that quality is negatively related to the number of children other than the focus child participating in the visit (see Box V.2). That is, the involvement of additional children in the home visit activities is associated with lower quality visits. No other statistically significant relationships emerged between home visit quality and visit activities.

We undertook a further examination of total HOVRS-A scores, classifying them into visits that scored 1 to 2 (N = 118), 3 (N = 135), and 4 to 5 (N = 113). We then examined mean and frequency distribution of the characteristics of visits within each of the three groups.[5] Classifying scores in this

(continued)

has unfilled positions; and program turnover of home visitors, teachers, and management staff. Analyses also examined the relationship of visit quality to the home visitor's years of experience working with young children; educational level (including categorical educational level and dummy codes for whether the home visitor has a high school degree plus some college, an AA degree, and at least a BA degree), training (that is, whether the home visitor has a degree in early childhood education and whether he or she is currently participating in child care-related training), and credentials (that is, whether home visitor has a CDA or state-awarded credential); depressive symptoms (that is, whether the home visitor has moderate or severe levels of depressive symptoms); job satisfaction; and reported relationship with the parent.

[5] To assess the statistical significance of differences across the three groups, we used a chi-square test for categorical variables to test for an association between the variable and HOVRS-A quality group. For continuous variables, p-values are the result of an F-test testing the hypothesis that the means across the three HOVRS-A groups are equivalent.

Box V.2 Correlations of Home Visit Quality with Home Visitor Characteristics, Program Characteristics, and Home Visit Activities

HOVRS-A Scale	Overall Quality	Visitor Strategies Quality	Visitor Effectiveness Quality
Home Visitor Characteristics			
Home visitor has state-awarded credential	0.18**	0.14*	0.19**
Home visitor is at risk of moderate or severe depression	-0.14*	-0.14*	-0.11
Home visitor is very likely to return to job next year	0.15*	0.18**	0.07
Program Characteristics			
Program has unfilled staff positions	-0.18**	-0.18**	-0.13*
Home Visit Activities			
Number of children participating in home visit	-0.21**	-0.20**	-0.17**
Percentage of visit spent on			
Parent-child activities	0.34***	0.32***	0.28***
Staff-family relationship	-0.23***	-0.26***	-0.13
Parent-family activities	-0.14*	-0.13*	-0.13
Child-focused activities	0.11	0.11	0.10
Crisis management	-0.03	0.03	-0.10
Sample Size	**230–238**	**231–239**	**230–238**

Source: Spring 2009 Home Visit Observation, Home Visitor Interview, and Program Director Interview.

Note: Observations were conducted only for the 1-year-old Cohort. Only statistically significant correlations are presented.

*p < .05; **p < .01; ***p < .001.

way suggests that visits scoring lower (1 to 2) on the HOVRS-A are less likely to include time spent on providing feedback on parent-child interactions, engaging in goal-setting/planning and crisis intervention, modeling interactions with the child for the parent, and observation of interactions. More time is spent engaged in "other" activities. In the lower-scoring visits, a greater proportion of time is spent on staff-family relationship-building activities than in visits of higher quality. Meanwhile, higher quality visits (4 to 5) are more likely to have been aligned with the visitor's plans for the visit (not shown).

Children Are in Classrooms with Group Sizes and Ratios Within the Performance Standards and Professional Recommendations

One-year-olds are in Early Head Start classrooms with average observed child-teacher ratios of 2.4 children per teacher and average group sizes of 5.3 children (Table V.3). These fall within performance standards (4 children per adult and a maximum group size of 8; see NCCIC 2008).

Table V.3. Most Children Served in Centers Are in Classrooms in the Mid-Range of Quality

Scales	Weighted Mean (Standard Error)
Group Size	5.3 (0.19)
Child-Adult Ratio	2.4 (0.09)
ITERS-R Total	3.8 (0.10)
Personal Care	3.1 (0.13)
Furnishings	3.9 (0.10)
Listening and Talking	4.3 (0.13)
Activities	3.5 (0.13)
Interaction	4.6 (0.10)
Program Structure	4.2 (0.15)
Sample Size	**364-367**

Source: Spring 2009 Classroom Observation.

Note: Observations were conducted only for the 1-year-old Cohort.

ITERS-R = Infant/Toddler Environment Rating Scale-Revised.

Nearly all Baby FACES 1-year-olds (99 percent) are in classes with observed group sizes of 8 or fewer children, and 99 percent are in classes with ratios of 4 to 1 or better. This is a slightly smaller ratio than we observed at 14 months in the EHSREP (2.6 children per adult).

Relatively Wide Age Ranges Are Common in Classrooms

Many classrooms we observed included a fairly wide range of ages, with an average span of almost 16 months.[6] In 48 percent of classrooms with infants 6 months or younger, the oldest children were between 13 and 18 months old, in 26 percent they were between 19 and 30 months old, and in 16 percent they were 31 to 42 months old. Ten percent of classrooms included children no older than 12 months. To understand the proportion of classrooms in the sample that are "mixed age," we looked at the percentage of classrooms that included children outside of a 15-month age band (5 months on either side of our 10- to 15-month window) and found that 65 percent of classrooms have at least one child outside of this age bracket. Twenty-one percent of these mixed age classrooms included children younger than 5 months of age and 67 percent included children older than 20 months (12 percent had children outside both the younger and older ends of the band).

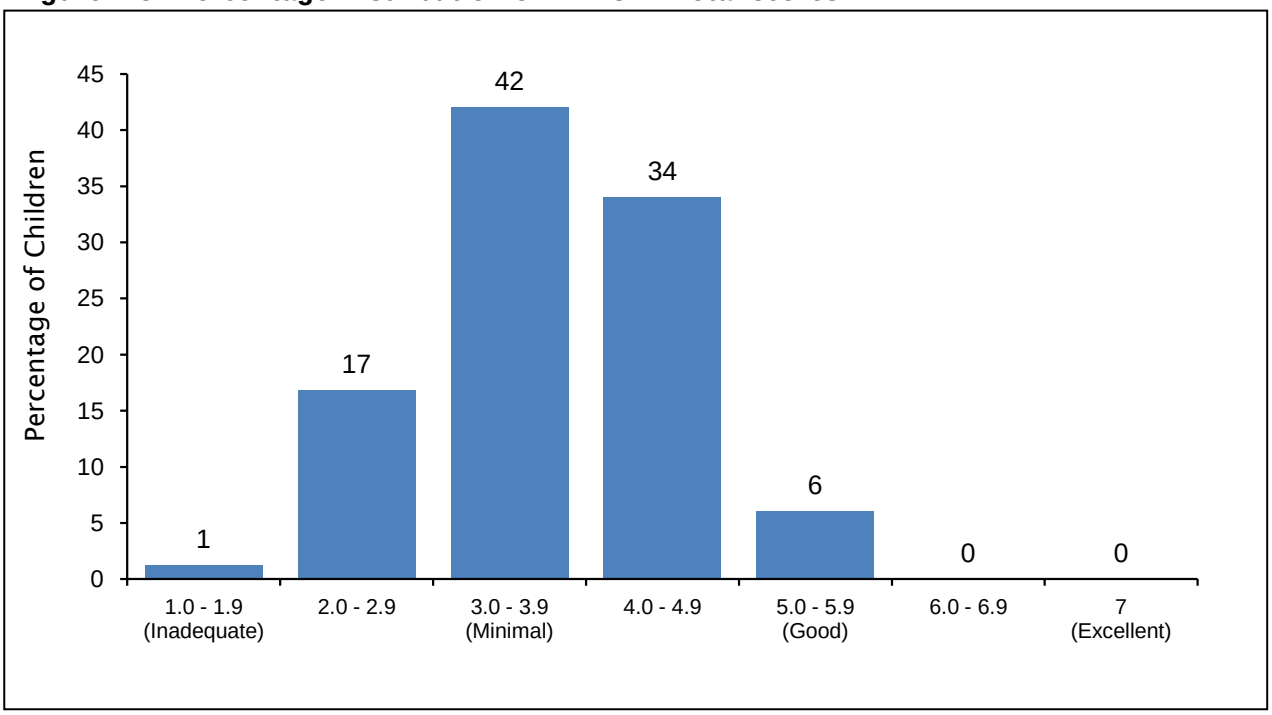
Most Children in Center-Based Programs Are in Classrooms in the Mid-Range of Quality

As described earlier, child care quality is associated with child outcomes and is an important performance measure for Early Head Start programs. On average, 1-year-olds are in classrooms that score a mean of about 3.8 out of 7 on the ITERS-R total score (Table V.3).[7] The majority of children (76 percent) have a classroom falling in the minimal-to-good range, using the developer-provided definitions of these scores (see Figure V.3).

[6] This finding omits an outlier (one classroom that included 11-month-olds and 60-month-olds).

[7] The median is 3.9 for the total score.

Figure V.3. Percentage Distribution of ITERS-R Total Scores



Source: Baby FACES classroom observation.

Note: The overall mean ITERS-R total score was 3.8.

Sample size: 367.

ITERS-R = Infant/Toddler Environment Rating Scale-Revised.

Classroom quality scores fall in a relatively narrow range: 18 percent of 1-year-olds are in classrooms scoring below a 3, even fewer (6 percent) are in classrooms scoring between 5 and 6, and no children were in classrooms rated 6 or higher. Previous ITERS scores from the EHSREP (ACF 2004) of classroom quality among Early Head Start centers serving 14-month-old children was 5.0, in the good range (note that this analysis used the original ITERS, the earlier version of the ITERS-R that we used in Baby FACES).[8] Appendix D provides a more complete description of our analysis of the ITERS-R and an item-by-item comparison of ITERS-R and ITERS. In general we note that the ITERS-R provides more detail, examples, and guidance to observers for some of the indicators; in several items, ITERS-R introduces higher benchmarks and additional conditions for classrooms to reach minimum, good, and excellent levels. Using ITERS-R scores, we find that the quality of

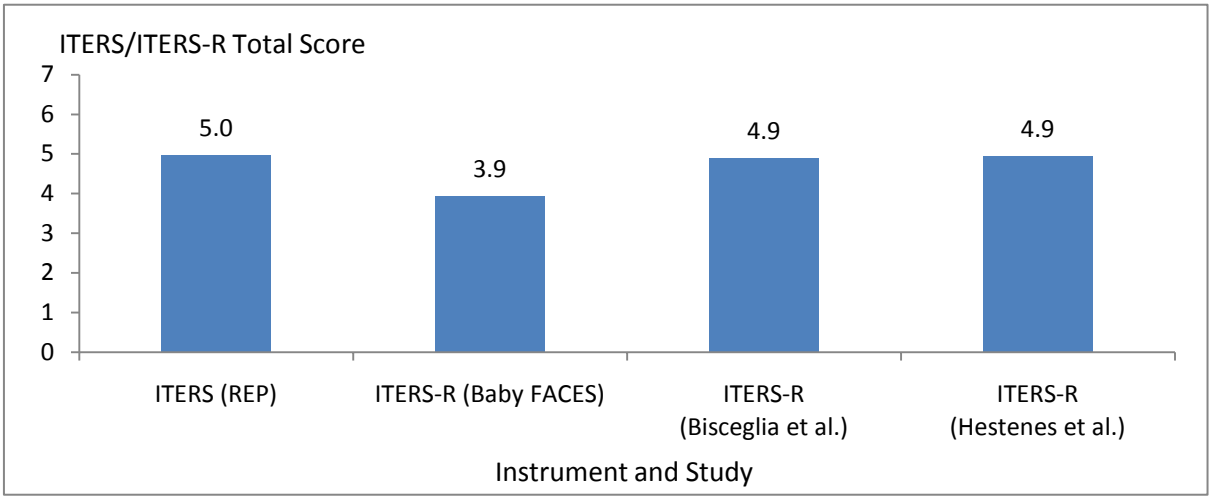
[8] The issues prohibiting an equivalent comparison include the following: (1) the EHSREP used the previous version of the ITERS, which for some items and indicators was less clearly defined than the ITERS-R is now and seems somewhat less stringent; and (2) the EHSREP version of the ITERS had 35 items (3 more than Baby FACES), including a few items from the adult needs subscale that we did not include in Baby FACES. To our knowledge, and that of the ITERS-R authors, there are no studies that have done a direct comparison of observations of the same classrooms using the ITERS and ITERS-R (Richard Clifford, personal communication March 2010). Although such studies have been conducted using the ECERS and ECERS-R and find a 0.4 point lower score on ECERS-R than on ECERS, we cannot generalize these findings to the ITERS because the measures are different.

classrooms serving 1-year-olds in Baby FACES in 2009 is lower than that found in the EHSREP using the ITERS (Box V.3). Notably, Head Start classrooms have shown a similar decline in the average ECERS scores over time (5.1 in spring 1998 [ACF 2001], 4.9 in 2001 [ACF 2006], 4.2 in spring 2004 [ACF 2008], and 3.6 in spring 2007 [Tarullo and Ross 2009]).[9] In subsequent rounds of data collection, we will be able to examine relations between specific levels of quality and child outcomes.

Box V.3 Comparing ITERS and ITERS-R Across Studies

We compared the ITERS-R total scores from Baby FACES to other studies that used either the ITERS or ITERS-R to try to place our findings in a larger context. The following table contrasts our findings with studies that have used the ITERS-R in child care settings serving roughly similar populations. A key dissimilarity between these studies and Baby FACES is the age of the children in the observed classrooms. Baby FACES included the youngest children among the three comparison studies (we observed classrooms serving children ages 10 to 15 months), although older and younger children were also present in them. Because younger children are more difficult to serve at a high level of quality, the younger age of our sample may contribute to lower scores (Richard Clifford, personal communication March 2010).

Comparison of ITERS and ITERS-R Scores Across Four Studies



Comparison of Four Studies Using ITERS and ITERS-R

	ITERS (EHSREP)	ITERS-R (Baby FACES)	ITERS-R (Bisceglia et al. 2009)	ITERS-R (Hestenes et al. 2007)
Full score	4.97	3.93	4.90	4.94
Year	1996–2002	2009	2007–2008	2003–2004
Type of centers	Early Head Start	Early Head Start	For-profit and non-profit	For-profit, nonprofit, EHS, early intervention
Geographic location	15 states	38 states	Colorado	North Carolina
Ages observed	14-month-olds	10–15-month-olds	< 30-month-olds	12–21-month-olds
Child/family characteristics	Low-income	Low-income	Low-income recipients of child care subsidies	Low-income; some children with disabilities
Sample size	**214**	**223**	**153**	**464**

ITERS=Infant/Toddler Environment Rating Scale; ITERS-R=Infant/Toddler Environment Rating Scale-Revised.

On ITERS-R subscales, center-based 1-year-olds are in classrooms achieving minimal-to-good quality in all areas. Classrooms are strongest in the area of Social Interactions, with 39 percent of children in classrooms having scores in the good-to-excellent range on the subscale. In contrast, classrooms score lowest in the area of Personal Care Routines. Other recent studies have found similarly low ratings in the area of Personal Care Routines in classrooms (Bisceglia et al. 2009; Hestenes et al. 2007).[10, 11]

We examined the association between ITERS-R scores, group size, child-staff ratios, and other measures that might be related to quality. We found correlations are generally small to modest, but several are statistically significant. Observed classroom ratios are related to the total ITERS-R score and to all but the Space and Furnishings subscale of the ITERS-R (see Box V.4). Total ITERS-R scores, Listening and Talking scores, and Activities and Program Structure scores are higher when children have teachers reporting higher likelihood of returning to their job in the coming year. Unexpectedly, both teacher and program director turnover is correlated with higher quality as measured by the ITERS-R total score and a few of the subscale scores (see Box V.4).[12] It is not clear why this is the case. In addition, teacher education and credentials were unrelated to classroom quality (not shown).

[10] In correlational analyses, we examined classroom quality in relation to whether the program has unfilled positions and program turnover of teachers and management staff. We also correlated classroom quality with teacher years of experience working with young children; educational level (including categorical educational level and dummy codes for whether the home visitor has a high school degree plus some college, an AA degree, and at least a BA degree), training (that is, whether the teacher has a degree in early childhood education and whether he or she is currently participating in child care-related training), and credentials (that is, whether the teacher has a CDA or state-awarded credential); depressive symptoms (that is, whether the home visitor has moderate or severe levels of depressive symptoms); job satisfaction; and the teachers' reported relationship with the parent. Additional analyses examined the relationship of the same characteristics with ITERS-R total quality rated good or better and each of the four factor scores resulting from our earlier factor analysis.

[11] We cannot tell yet if or how individual subscales of the ITERS-R predict child outcomes, which is ultimately of most interest. However it would appear that programs interested in improving their ITERS-R scores might best focus efforts on activities related to child health (Personal Care Routines) and teacher-child interaction (Listening and Talking, and Interaction), rather than on structural features of the classroom.

[12] We also examined the relationship between ITERS-R subscale scores and key children's development outcomes. Most subscale scores had nonsignificant relationships with social-emotional development scales. Interestingly, the following subscale scores had significant *negative* correlations with children's outcomes, meaning that higher quality was associated with lower development scores: the activities subscale sore was negatively correlated with the Communicative Development Inventory (CDI) Spanish Comprehension score (-0.33), and the Listening and Talking subscale score was negatively correlated with the CDI English Comprehension score (-0.14). These negative correlations could be related to selection issues: high quality teachers and classrooms might be more likely to serve children with lower levels of development. In the absence of additional data, however, we cannot explore this negative relationship between quality and child development.

Lastly, we examined the correlations between our measures of quality of home visits (HOVRS-A) and classrooms (ITERS-R) in relation to program approaches to service delivery. We calculated two separate *t*-tests to compare the average total scores on (1) HOVRS-R in home-only programs versus multiple approach programs and (2) ITERS-R total scores in center-only programs versus multiple-approach programs. Results showed that for HOVRS-R, multiple-approach programs scored higher than home-only programs (means 3.4 versus 3.0, $p < .05$). Conversely, for ITERS-R, classrooms in multiple-approach programs scored lower overall than those in center-only programs (means 3.8 versus 4.1, $p < .05$).

Box V.4 Correlations of Classroom Quality with Teacher, Program, and Classroom Characteristics

ITERS-R Scale	Total Quality	Personal Care	Space and Furnishings	Listening and Talking	Activities	Interaction	Program Structure
			Teacher Characteristics				
Teacher is very likely to return to job next year	0.20**	0.09	0.10	0.17*	0.25***	0.10	0.18**
			Program Characteristics				
Number of teachers who left the program in the past year	0.15*	-0.04	0.24***	0.08	0.21**	0.05	0.08
Director/ manager/ coordinator left program in the past year	0.17*	0.11	0.13	0.21**	0.11	0.14*	0.04
Overall implementation	0.20**	0.01	-0.25***	-0.07	-0.22***	-0.12	-0.19**
Child development cornerstone	-0.12	-0.00	-0.22***	0.03	-0.13	-0.02	-0.14*
Family development cornerstone	-0.22**	-0.06	-0.27***	-0.07	-0.26***	-0.10	-0.14*
Staff development cornerstone	-0.12	-0.08	-0.13	-0.09	-0.13	-0.16*	-0.18**
			Classroom Characteristics				
Observed adult-child ratios	-0.23***	-0.19**	-0.04	-0.22**	-0.18**	-0.16*	-0.23***
Sample Size	**211–223**	**211–223**	**211–223**	**211–223**	**211–223**	**211–223**	**211–223**

Source: Spring 2009 Classroom Observation, Teacher Interview, Program Director Interview, and Program Director Self-Administered Questionnaire.

Note: Observations were conducted only for the 1-year-old Cohort. Only statistically significant correlations are presented.

*$p < .05$; **$p < .01$; ***$p < .001$.

Parents and Staff Have Positive Relationships with One Another

Communication between parents and teachers or home visitors, as well as agreement between parents and these teachers on child-rearing philosophy, has been related to child outcomes. Particularly with home visiting services, the quality of the relationship between the home visitor and the parent may influence the effectiveness of care and the extent and quality of parent engagement and involvement (Korfmacher et al. 2007; Korfmacher et al. 2008; Roggman et al. 2008). Accordingly, we included items from the Parent-Caregiver Relationship Scale (PCRS) (Elicker et al. 1997) in Baby FACES to assess the quality of these (see Box V.5).

On average, parents agree or strongly agree (mean = 4.6 and 4.4 for those receiving home visits and those with children in centers, respectively; see Table V.4) with positive statements about the quality of relationships with their home visitor or teacher. For example, they typically agree or strongly agree with statements such as "If there is a problem, my child's teacher or home visitor and I always talk about it soon" and "I feel that my child's home visitor or teacher genuinely cares for [my child]." Teachers and home visitors express similar positive attitudes, although at slightly lower levels, about their relationship with the child's parent (mean = 4.1 and 4.3, respectively).

Box V.5 Measuring the Parent-Staff Relationship

The Parent-Caregiver Relationship Scale (PCRS) (Elicker et al. 1997) measures the perceived relationship between the parent and the Early Head Start staff member who delivers the primary service to the child and family (that is, the teacher or the home visitor). Items capture important dimensions of the parent-staff relationship, including trust and confidence, communication, respect and acceptance, caring, competence and knowledge, partnership and collaboration, and shared values. The spring 2009 Baby FACES instruments included items across these dimensions, adapted for use with home visitors from the original version developed primarily for center-based teachers. Parents and staff rated items on a scale from 1 to 5 (that is, from strongly disagree to strongly agree). Scale scores represent the average across a subset of these items (six and seven items for staff and parents, respectively).

Spring 2009 Staff-Parent Relationship Quality Scores, Unweighted

Domain	Mean	Standard Deviation	Range
Staff-Parent Relationship Quality Scores for Children Receiving Services by Home Visits			
Parent report[a]	4.59	0.43	3.00–5.00
Home visitor report[b]	4.24	0.53	2.00–5.00
Staff-Parent Relationship Quality Scores for Children Served in Centers			
Parent report[c]	4.41	0.52	1.43–5.00
Teacher report[d]	4.13	0.60	2.17–5.00
Sample Size	**691–736**		

Source: Spring 2009 Staff-Child Report, Spring 2009 Parent Interview.

Note: Scores are reported only for staff and parents of children in the 1-year-old Cohort.

[a]Sample size of 368.

[b]Sample size of 381.

[c]Sample size of 323.

[d]Sample size of 355.

PCRS = Parent-Caregiver Relationship Scale.

Correlations between parent and teacher or home visitor ratings suggest moderate agreement between parent and staff respondents. However, relationship quality was not associated with our observations of home visit and classroom quality.

Summary of Key Findings

- Children and families receiving home visits participate in a variety of activities during visits.
  - The largest proportion of home visit time is spent on child-focused activities, followed by parent-family activities and then parent-child activities. Parent-child activities are those that are most associated with higher HOVRS-A scores, reflecting the theoretical perspective of the model of home visiting the HOVRS-A aims to measure.
  - Although most home visits are conducted in English, 28 percent are conducted in Spanish.
- Most children and families primarily served by home visits receive visits in the mid-range of quality.
  - Families have home visits scoring in the moderate range (mean = 3.4) on the total HOVRS-A score. Scores are highest in the areas of child engagement (4.3) and relationship with the family (4.0) and lowest in nonintrusiveness (2.9) and facilitation of parent-child interaction (3.0).
- Children are in classrooms with group sizes and ratios within the performance standards and professional recommendations.
  - Ratios of children to adults are quite low, with average ratios that are more than 1.5 children fewer than the maximum allowed per adult (2.4 versus 4). Group sizes are also smaller than the maximum allowed (5.3 versus 8).
- Relatively wide age ranges are common in classrooms.
  - Many classrooms include a fairly wide range of ages, with an average 15 month span between oldest and youngest.
  - Sixty-five percent of the 1-year-old's classrooms we observed are mixed age and include children either younger than 5 months or older than 20 months. Of those, 67 percent include children older than 20 months, and 21 percent include children younger than 5 months (12 percent have children on the outside edges of the older and younger ends of the age band).
- Most children in center-based programs are in classrooms in the mid-range of quality.
  - Children are in classrooms scoring in the minimal-to-adequate range (mean = 3.8) on the ITERS-R. Scores are in a narrow range and are lower than those among Early Head Start programs in the EHSREP and other more recent studies.
- Parents and staff have positive relationships with one another.
  - Parents and staff endorse positive statements about their relationship at roughly similar rates, with parents having a mean rating of relationship quality of 4.5 on a 5-point scale and staff having a mean rating of 4.2.
  - Relationship quality is not associated with observed quality of the home visits or the classrooms.

VI. DEMOGRAPHIC CHARACTERISTICS OF FAMILIES SERVED BY EARLY HEAD START

One purpose of the Baby FACES study is to describe the population served by Early Head Start. Specifically, we are interested in the characteristics of children and families served by Early Head Start and how these families and children are faring. In this chapter, we discuss the demographic and psychosocial characteristics of the children and parents in the study. First, we describe household size, composition, and income. Next, we summarize key demographic characteristics of children and their parents and briefly describe languages spoken in households. Last, we discuss families' financial difficulties, food security, living situations, and maternal demographic risk. When relevant, we present and analyze demographic characteristics according to age cohort, race/ethnicity, and program service approach.

We collected demographic information from families enrolled in Early Head Start in spring 2009—a period of acute economic crisis throughout the nation. In November 2009, the national unemployment rate reached 10 percent (National Bureau of Labor Statistics 2009). In response to job losses and other financial difficulties, use of public assistance reached record high levels during this period. In November 2009, the *New York Times* reported that one in eight Americans, and one in four children, received food stamps (DeParle and Gebeloff 2009). This study's findings reflect these two national trends: high unemployment and widespread use of public assistance.

Study Households Are Characterized by Moderate Size, Nonresidential Fathers, and Low Incomes

According to parent interviews, most children in the study live in moderate-sized households with very limited incomes. Low income in our study families is expected because eligibility for Early Head Start is determined in part by being at or below federal poverty guidelines. Table VI.1 provides basic demographic characteristics for all households that completed a parent interview. The findings are presented by cohort. Key findings include the following:

- ***Households commonly comprise four people.*** Surveyed families reported approximately two adults and between two and three children per household. For both cohorts, the average family size is slightly more than four people. Less than one-fifth of households surveyed are intergenerational.[1]
- ***Fewer than half of children in the study live with both biological parents.*** Almost all children in the study live with their birth mother, but slightly fewer than half of children live with their biological father (see Table VI.1 and Figures VI.1 and VI.2).[2, 3] African American

[1] Intergenerational households are households in which children live with at least one parent and at least one grandparent.

[2] Children in the Newborn Cohort who were not yet born at the time of the survey are included because the question was rephrased to ask with whom the child would live when she or he was born.

[3] This is similar to ACF (2002), which found that between 39 and 46 percent of children enrolled in Early Head Start resided in a two-parent household.

Table VI.1. Household Characteristics (Percentages Unless Otherwise Indicated)

	Newborn Cohort (Standard Error)	1-Year-Old Cohort (Standard Error)
Mother Has Given Birth to Child	80.2 (4.2)	100.0 (0.0)
Child Lives with		
Two biological parents	48.7 (4.3)	49.5 (2.8)
Married	22.7	20.5
Unmarried	26.0	29.0
One biological parent		
Birth mother only	51.3 (4.3)	47.6 (2.9)
Birth father only	0.0 (0.0)	0.7 (0.4)
No biological parents	0.0 (0.0)	2.1 (0.6)
Among Children Living Without Birth Father		
Child lives with father figure[a]	6.3 (2.3)	12.9 (1.6)
Mean Number of Adults in Household	1.7 (0.1)	1.9 (0.0)
Mean Number of Children in Household	2.5 (0.2)	2.5 (0.1)
Average Household Size	4.2 (0.2)	4.4 (0.1)
Child Lives in Intergenerational Household	18.8 (3.1)	16.9 (2.0)
Average Household Income	$20,004 (4062.2)	$25,787 (2134.7)
Median Household Income[b]	$14,400	$17,500
Household Income[b]		
$0–$9,999	33.1 (4.1)	22.5 (1.9)
$10,000–$17,499	29.8 (3.8)	23.6 (1.8)
$17,500–$24,999	18.4 (4.2)	21.2 (2.1)
$25,000 or more	18.7 (3.3)	32.6 (1.9)
Household Income as a Percentage of the Poverty Level[b,c]		
0–50	37.4 (4.7)	26.5 (2.0)
51–100	36.5 (4.5)	41.0 (2.5)
101–130[d]	14.1 (3.1)	12.3 (1.3)
131–higher	12.0 (2.4)	20.1 (1.8)
Average Number of People Contributing to Household Income	1.5 (0.1)	1.6 (0.0)
Parent Interview	**174**	**683**

Source: Spring 2009 Parent Interview.

[a] Sample size of 81 for the Newborn Cohort and 289 for the 1-year-old Cohort.

[b] Income related questions had higher rates of refusal and missing responses than other parent interview variables. There were 17 missing values for income-related questions among Newborn Cohort parents (10 percent missing) and 60 missing values among 1-year-old Cohort parents (9 percent missing).

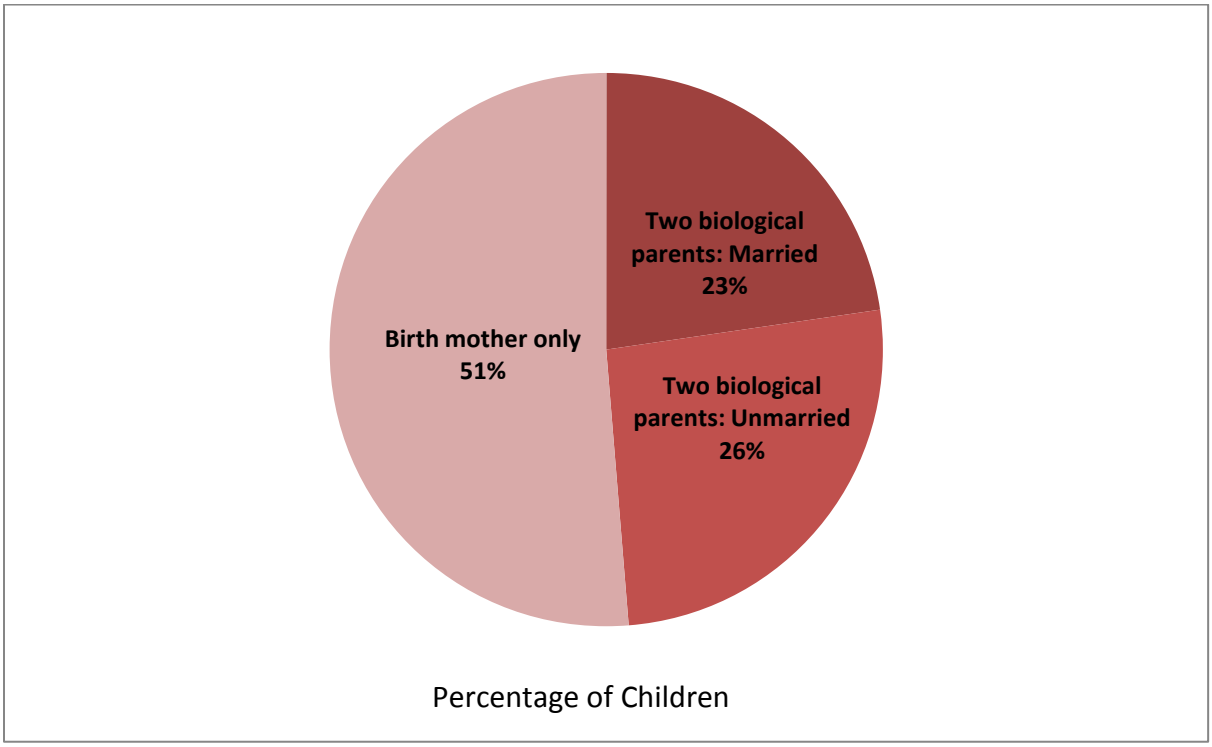
[c] Poverty level is adjusted for household size according to 2009 HHS poverty guidelines.

[d] 130 percent of the poverty level is a common eligibility threshold for Head Start, food stamps, and free school lunch. Families over 130 percent of poverty are not eligible to receive Early Head Start services.

children are much less likely than other children to reside with both biological parents; 21 percent of African American children reside with both biological parents versus 51 percent of white children and 65 percent of Hispanic children (see Table VI.2).[4] However, of African American children who did not reside with their fathers, 37 percent had contact with their father every day or almost every day in the past three months, compared to 24 percent of Hispanic children and 29 percent of white children. Conversely, only 22 percent of African American children never had contact with their father in the last three months, opposed to 32 percent of Hispanic children and 31 percent of white children.

- ***Father figures are scarce among children not living with biological fathers.*** Only 6 percent of newborn children not living with his or her biological father has a father figure who resides in the home (see Table VI.1). Similarly, only 13 percent of 1-year-olds not living with their biological father have a father figure residing in the home. The majority of father figures are the husbands or boyfriends of biological mothers.

Figure VI.1. Slightly Fewer than Half of Newborn Children Live with Both Biological Parents

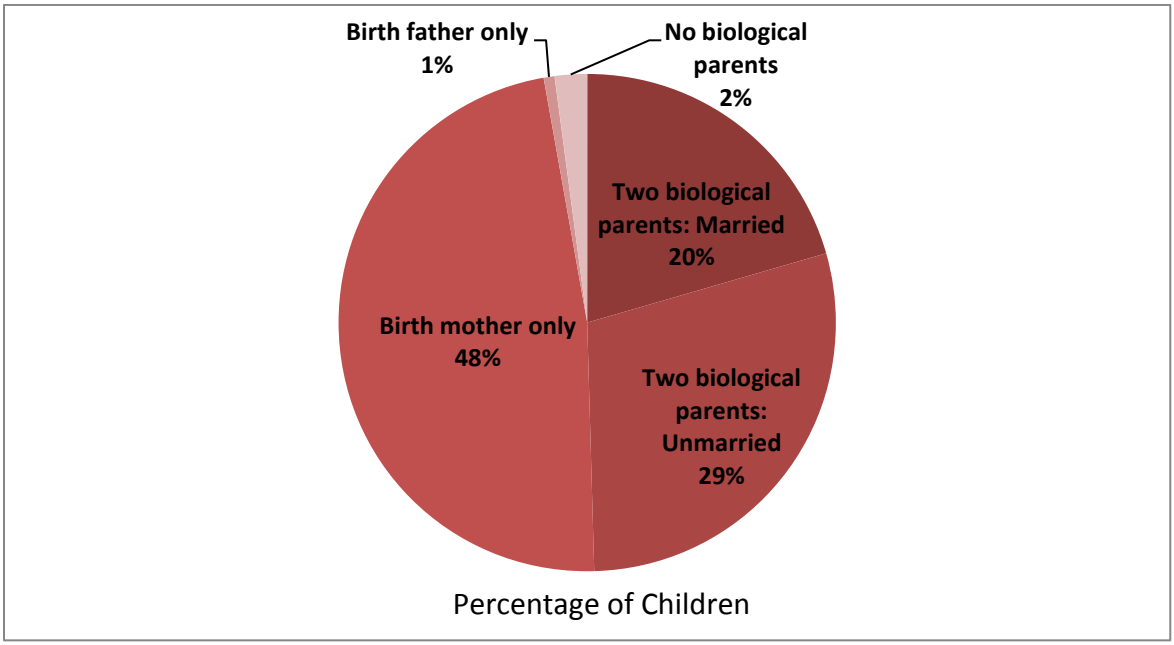


Source: Spring 2009 Parent Interview.

Sample Size = 174.

[4] As explained in Chapter IV, we use the term *Hispanic* to refer to those of Latin American heritage.

Figure VI.2. Nearly Half of 1-Year-Olds Live with Both Biological Parents



Source: Spring 2009 Parent Interview.

Sample size = 683.

- ***All families report low annual income.*** The average annual household income is about $20,000 and $25,800 for the Newborn and 1-year-old Cohorts, respectively (see Table VI.1). However, this is inflated by a few families with somewhat higher incomes; the median annual income is quite a bit lower at $14,400 and $17,500 for the Newborn and 1-year-old Cohorts, respectively. About one-quarter of Newborn Cohort households and nearly one-third of 1-year-old Cohort households are above the poverty line. This is a slightly higher proportion of families above the poverty line than reported by previous studies. This increase might be related to the 2009 Head Start family income guidelines published on January 23, 2009 (*Federal Register* 74, no. 14, pp. 4199–4201), which allow for 35 percent of recipient families to be between 100 and 130 percent of the poverty level, which is about $22,000 for a family of four. This 35 percent of eligible families is in addition to the 10 percent of "over income" families allowed under existing Head Start regulations. However, the guidelines do not explain the portion of families in the sample with incomes higher than 130 percent of the poverty threshold (12 percent in the Newborn Cohort and 20 percent in the 1-year-old Cohort), which should mean that these families are ineligible for Early Head Start services. It is possible there are errors in parent reports or flux in household composition over time. Another possibility for the high proportion of families above the poverty line is that these families' income was lower when they qualified for Early Head Start services but has since improved, possibly as a result of Early Head Start employment services and referrals. At the low end of the income distribution, about one-third of households in the Newborn Cohort have household incomes less than 50 percent of the poverty line; the same is true of about one-fourth of households in the 1-year-old Cohort. Across both cohorts, Hispanic households have the lowest average household incomes (see Table VI.2). However, African American households have a much lower median annual household income than white or Hispanic households ($13,600 versus $20,000 and $17,000, respectively).

Table VI.2. Household Characteristics by Child's Race/Ethnicity (Percentages Unless Otherwise Indicated)

	White (Standard Error)	African American (Standard Error)	Hispanic (Standard Error)	Other (Standard Error)
Child Lives With				
Two biological parents	51.0 (3.6)	21.3 (3.6)	64.9 (3.8)	35.9 (6.4)
Married	32.0	12.6	34.6	18.8
Unmarried	19.0	8.5	30.3	17.1
One biological parent				
Birth mother only	45.6 (3.8)	77.0 (3.9)	34.1 (3.8)	59.5 (6.6)
Birth father only	1.5 (0.9)	0.0 (0.0)	0.0 (0.0)	0.9 (0.9)
No biological parents	1.9 (1.0)	1.7 (1.2)	1.0 (0.7)	3.6 (2.6)
Mean Number of Adults in Household	1.9 (0.1)	1.5 (0.1)	2.0 (0.1)	1.7 (0.1)
Mean Number of Children in Household	2.4 (0.1)	2.4 (0.1)	2.8 (0.1)	2.4 (0.2)
Average Household Size	4.3 (0.1)	3.9 (0.1)	4.8 (0.1)	4.1 (0.2)
Child Lives in Intergenerational Household	18.1 (2.5)	18.9 (3.7)	17.0 (2.8)	15.4 (4.8)
Average Household Income[a]	$27,390 (2,788.0)	$26,562 (5,763.9)	$20,342 (1,063.8)	$32,228 (1,3053)
Median Household Income[a]	$20,000	$13,600	$17,040	$12,750
Household Income[a]				
$0–$9,999	18.6 (2.7)	34.5 (3.0)	20.3 (2.7)	36.3 (6.7)
$10,000–$17,499	20.5 (2.9)	26.5 (3.5)	29.8 (3.2)	18.0 (4.4)
$17,500–$24,999	19.7 (3.3)	15.2 (2.7)	24.3 (3.3)	18.2 (7.0)
$25,000 or more	41.2 (3.7)	23.8 (3.5)	25.6 (3.0)	27.5 (7.5)
Household Income as a Percentage of the Poverty Level[a, b]				
0–50	21.5 (2.7)	35.9 (3.3)	28.9 (2.8)	35.9 (7.0)
51–100	39.0 (3.8)	38.4 (3.7)	44.2 (4.0)	33.8 (6.4)
101–130[c]	12.7 (2.2)	7.4 (2.1)	14.9 (2.5)	11.5 (3.9)
131 or higher	26.8 (3.0)	18.2 (3.6)	12.0 (1.9)	18.7 (6.2)
Average Number of People Contributing to Household Income	1.7 (0.1)	1.4 (0.0)	1.6 (0.1)	1.4 (0.1)
Parent Interview	**263**	**160**	**325**	**81**

Source: Spring 2009 Parent Interview.

[a]Income related questions had higher rates of refusal and missing responses than other parent interview variables. There were 47 missing values for income-related questions among white parents (15 percent missing), 13 missing values among African American parents (8 percent missing), 49 missing values among Hispanic parents (15 percent missing), and 37 missing values among respondents reporting another race/ethnicity (46 percent missing).

[b]Poverty level is adjusted for household size according to 2009 HHS poverty guidelines.

[c]130 percent of the poverty level is a common eligibility threshold for Head Start, food stamps, and free school lunch. Families over 130 percent of poverty are not eligible to receive Early Head Start services.

Parents and Children in Early Head Start Are Ethnically Diverse

Hispanic and white parents and children are nearly equally represented in Early Head Start. African Americans and those of other race/ethnicity make up a smaller percentage (see Tables VI.3 and VI.4). The following items summarize key points regarding parent and child race and ethnicity.[5]

- ***Close to one-third of parents and children are Hispanic.*** Between 32 and 37 percent of mothers and fathers are Hispanic across both cohorts. Similarly, about one-third of children in both cohorts are Hispanic (36 percent in the Newborn Cohort and 37 percent in the 1-year-old Cohort, as shown in Figures VI.3 and VI.4).[6]
- ***About one-third of parents and children in the study are white.*** Across both cohorts, between 29 and 45 percent of birth mothers and fathers are white. Twenty-six percent of children in the Newborn Cohort and 37 percent in the 1-year-old Cohort are white.[7] Although whites represent the largest ethnic group among parents, whites are the second-largest demographic group among children, behind Hispanics.
- ***Overall, fewer than one-fifth of parents and children are African American, but African Americans are more prevalent in the Newborn Cohort.*** The proportion of African American parents varies between parents and cohorts, ranging from 16 percent for birth mothers in the 1-year-old Cohort to 34 percent for birth fathers in the Newborn Cohort. Twenty-three and 16 percent of children are African American in the Newborn and 1-year-old Cohorts, respectively.[8]
- ***Children are more likely than their parents to be multiracial, and children in the Newborn Cohort particularly so.*** A sizable portion of children in both cohorts are multiracial (12 percent in the Newborn Cohort and 7 percent in the 1-year-old Cohort).[9] In contrast, no more than 4 percent of mothers or fathers in any cohort are multiracial.

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[5] The primary respondents to the telephone interview (the mother in 98 percent of cases) reported on their own characteristics as well as the characteristics of the other parent.

[6] The proportion of Hispanic children reported here is similar to the proportion in the Program Information Report (ACF 2009), which is 30 percent. This is also similar to a 2008 estimate by the U.S. Census Bureau (Gabe 2009) that 27.6 percent of people in the United States living below the poverty line are Hispanic. Because most families enrolled in Early Head Start are at or near the poverty line, they constitute a population that is somewhat comparable to families below the poverty line at the national level.

[7] Previous studies reported similar percentages of white mothers and children in Early Head Start. For example, 37 percent of primary caregivers and their children were white in ACF (2002).

[8] Previous studies reported higher percentages of African American mothers and children in Early Head Start. For example, ACF (2002) found that 33 to 34 percent of primary caregivers and their children were African American in the EHSREP project.

[9] "Multiracial" is defined as selecting more than one race/ethnicity unless one of the choices is Hispanic. If Hispanic is selected as well as another race/ethnicity, the child or parent is classified as Hispanic.

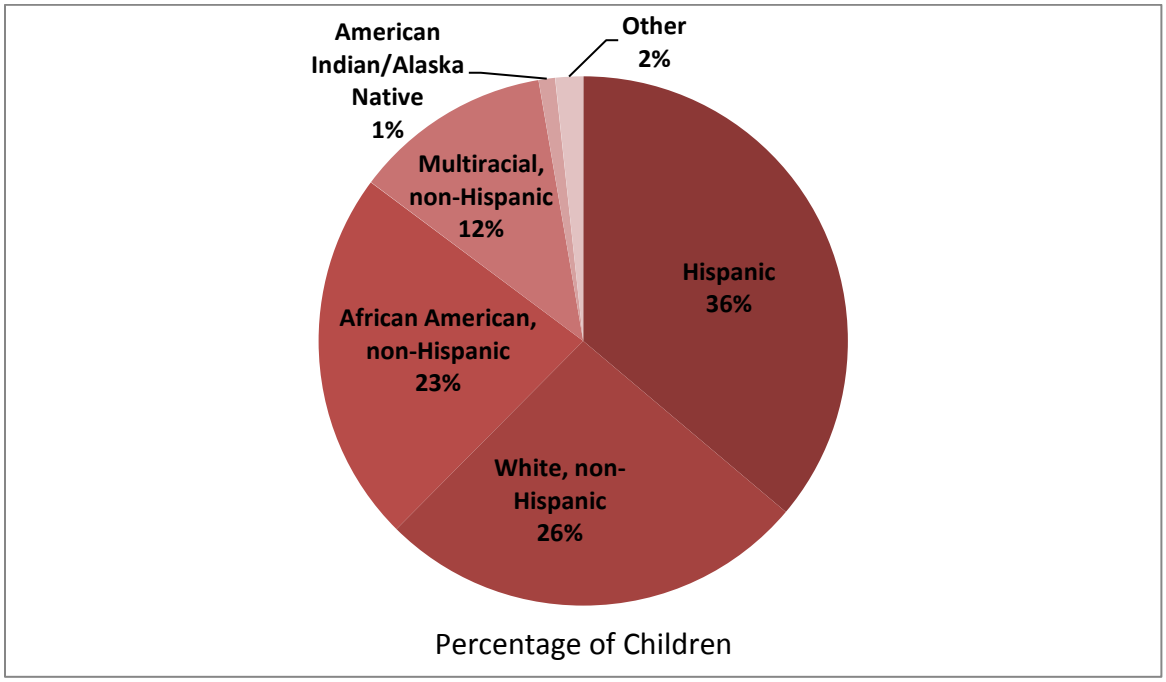
Table VI.3. Child Characteristics (Percentages Unless Otherwise Indicated)

	Newborn Cohort (Standard Error)	1-Year-Old Cohort (Standard Error)
Female	47.2 (3.9)	47.2 (2.2)
Average Age in Months	1.6 (0.2)	13.8 (0.1)
Race/Ethnicity		
Hispanic	36.2 (5.4)	36.8 (3.9)
White, non-Hispanic	26.3 (4.6)	36.6 (3.6)
African American, non-Hispanic	22.8 (5.4)	16.3 (2.7)
Multiracial, non-Hispanic	12.1 (3.5)	7.4 (1.5)
American Indian/Alaska Native	1.0 (0.9)	1.6 (0.7)
Other	1.6 (0.9)	1.3 (0.5)
Birth Country		
U.S.A.	100.0 (0.0)	99.8 (0.2)
Mexico	0.0 (0.0)	0.2 (0.2)
Parent Immigrant Status		
Both parents born in U.S.	71.7 (3.5)	70.1 (3.3)
One parent born outside U.S.	14.7 (2.8)	9.2 (1.1)
Both parents born outside U.S.	13.7 (2.9)	20.7 (3.1)
Sample Size	**174**	**683**

Source: Spring 2009 Parent Interview.

Note: Among non-Hispanic multiracial children, most are white and African American (66 and 63 percent for the Newborn and 1-year-old Cohorts, respectively), followed by white and Asian (10 and 18 percent for the Newborn and 1-year-old Cohorts, respectively).

Figure VI.3. About One-Third of Newborn Children Are Hispanic



Source: Spring 2009 Parent Interview.

Sample size = 174.

Table VI.4. Mother and Father Characteristics (Percentages Unless Otherwise Indicated)

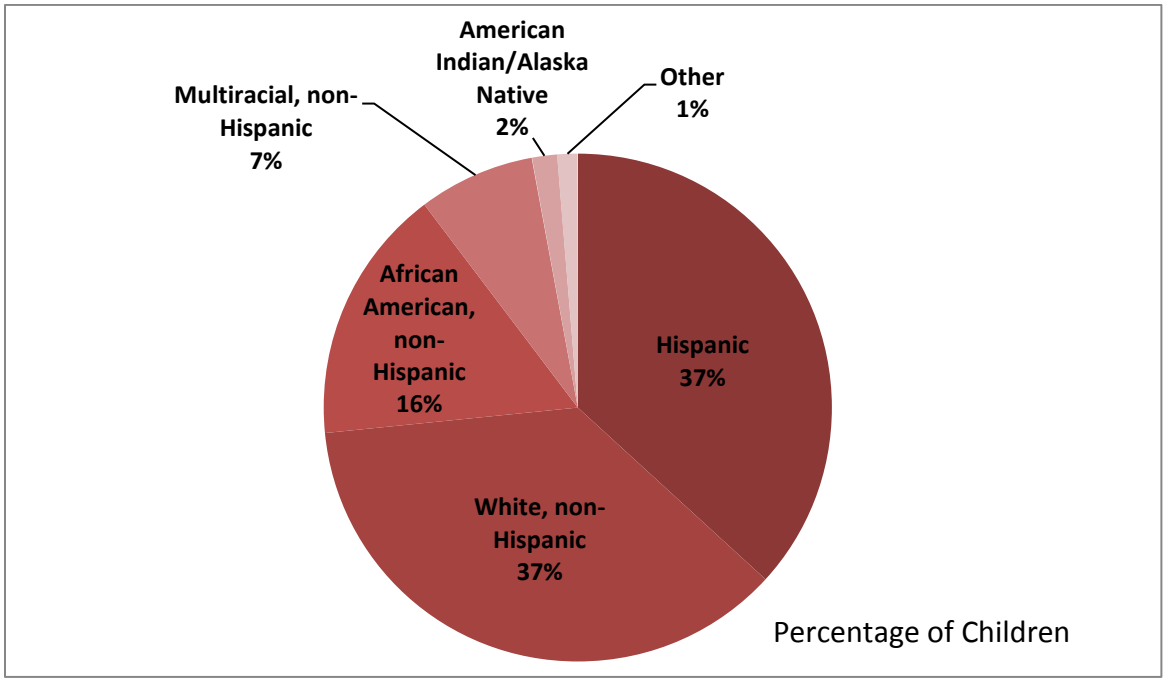
	Birth Mother		Birth Father	
	Newborn Cohort (Standard Error)	1-Year-Old Cohort (Standard Error)	Newborn Cohort (Standard Error)	1-Year-Old Cohort (Standard Error)
Average Age in Years	24.4 (0.6)	26.2 (0.3)	27.1 (0.9)	29.1 (0.4)
Age in Years				
17 or younger	14.0 (3.9)	4.5 (1.0)	6.2 (2.3)	0.9 (0.4)
18–19	14.5 (3.5)	11.9 (1.7)	13.2 (3.8)	6.3 (1.7)
20–24	28.0 (3.9)	29.0 (1.8)	25.1 (4.3)	24.5 (2.2)
25–29	25.4 (3.9)	28.2 (2.2)	29.5 (4.3)	28.7 (2.1)
30 or older	18.0 (3.3)	26.3 (2.1)	26.0 (5.0)	39.5 (2.7)
Average Age in Years at Child's Birth	23.7 (0.6)	24.6 (0.3)	26.4 (0.9)	27.5 (0.4)
Age in Years at First Child's Birth[a]				
17 or younger	n.a.	26.9 (2.5)	n.a.	n.a.
18–19	n.a.	23.7 (1.8)	n.a.	n.a.
20–24	n.a.	33.1 (2.1)	n.a.	n.a.
25–29	n.a.	12.1 (1.5)	n.a.	n.a.
30 or older	n.a.	4.2 (0.9)	n.a.	n.a.
Average Age in Years at First Child's Birth	n.a.	20.4 (0.2)	n.a.	n.a.
Race				
White, non-Hispanic	37.2 (4.7)	45.3 (4.0)	28.7 (4.6)	35.6 (3.6)
Hispanic	33.0 (4.2)	32.9 (3.9)	32.0 (4.9)	36.8 (3.9)
African American, non-Hispanic	23.3 (5.0)	16.4 (2.7)	33.7 (6.1)	21.1 (3.0)
American Indian/Alaska Native	0.7 (0.8)	1.5 (0.8)	1.6 (1.0)	3.5 (1.3)
Multiracial, non-Hispanic	3.8 (1.7)	3.2 (0.9)	3.5 (1.4)	2.1 (0.6)
Other	1.8 (0.9)	0.7 (0.3)	0.5 (0.5)	0.8 (0.4)
Birth Country				
United States	80.8 (3.2)	77.5 (3.1)	77.5 (3.4)	72.2 (3.3)
Mexico	15.6 (3.2)	17.3 (2.7)	18.4 (3.3)	21.2 (2.8)
Central or South America or Caribbean	1.8 (1.2)	1.8 (0.7)	2.4 (1.2)	4.7 (1.2)
Other country	1.8 (1.3)	3.4 (0.9)	1.8 (1.0)	1.9 (0.7)
Time in U.S. if Born Elsewhere				
5 years or fewer	34.3 (7.6)	27.2 (3.2)	25.1 (8.0)	19.6 (2.4)
6 to 10 years	37.9 (6.9)	42.8 (5.1)	31.9 (8.8)	36.7 (3.9)
More than 10 years	27.9 (6.5)	29.9 (3.8)	43.0 (9.2)	43.7 (4.8)
Average Years in U.S. if Born Elsewhere	9.3 (1.2)	9.5 (0.4)	11.9 (1.8)	12.3 (0.7)
Sample Size	**174**	**683**	**174**	**683**

Source: Spring 2009 Parent Interview.

[a] Reported only for mothers of children in the 1-year-old Cohort.

n.a. = not applicable.

Figure VI.4. More Than Two-Thirds of 1-Year-Olds Are Hispanic or White



Source: Spring 2009 Parent Interview.

Sample size = 683.

- ***A substantial minority of parents (particularly of 1-year-olds) were born outside the United States, but nearly all children were born here.*** About one-fourth of mothers and fathers in both cohorts were born outside the United States. The large majority of mothers and fathers not born in the United States were born in Mexico. Approximately three-fourths of parents born outside the United States reported living here for six or more years. With the exception of one 1-year-old child, all children in both cohorts were born in the United States. However, more than one-quarter of children had one or more parents born outside the country.

Parents Are Relatively Young; Children's Ages and Gender Reflect the Study's Sampling Design

The study's sampling design used eligibility windows to obtain a census of newborns (Newborn Cohort) and 1-year-olds (1-year-old Cohort) from Early Head Start families enrolled in spring 2009. The ages and genders of children in the sample are shown in Table VI.3, and the ages of their parents are shown in Table VI.4. Key findings include the following:

- ***Most parents are under the age of 30, and many are teens.*** Parents in the Newborn Cohort tend to be in their mid-20s (Table VI.4). On average, mothers and fathers are 24 and 27 years old, respectively. Mothers and fathers of 1-year-olds are 26 and 29, respectively. (However, the median age for fathers of 1-year-olds is lower at 27.) The proportion of teen mothers in both cohorts is high: about 29 percent of mothers with newborns are teens, and 16 percent of mothers with 1-year-olds are teens. Teen parents are more prevalent among African Americans (62 percent) in our sample than among whites (47 percent) or Hispanics

(54 percent). This may account for the lower prevalence of living with a biological father in that group.

- ***On average, children in the Newborn Cohort are less than 2 months old, and children in 1-year-old Cohort are nearly 14 months old.*** Children in the Newborn Cohort are younger than 2 months old (standard deviation of 1.3 months). At the time of the parent interview, 20 percent of mothers had not yet given birth to the study child.[10] Children in the 1-year-old Cohort are between the ages of 12 and 16 months (standard deviation of 1.7 months). These distributions of children's ages reflect the study's use of four- and five-month eligibility windows for the two cohorts, respectively.
- ***Children are slightly more likely to be male.*** Both cohorts have slightly more males than females (53 versus 47 percent).

English and Spanish Are the Most Common Household Languages Spoken to Child

Nearly all parents surveyed reported speaking either English or Spanish at home (see Table VI.5). Key findings regarding household languages include the following:

- ***English is spoken exclusively to children in more than two-thirds of households, and Spanish is spoken exclusively or primarily to children in 17 percent of households.*** Sixty-nine percent of all parents surveyed reported speaking *only* English to the study child, 17 percent of all parents surveyed reported speaking exclusively or primarily Spanish, and 12 percent reported speaking primarily English and some Spanish (see Figure VI.5).[11] Examining languages spoken among different racial/ethnic groups, we found 25 percent of Hispanic households reported speaking *only* English to children at home, compared to 98 percent and 92 percent of whites and African Americans, respectively (see Table VI.6).

[10] We did not collect enrollment dates in this data collection wave and therefore cannot ascertain the percentages of all parents who were enrolled during pregnancy with the study child. We will have this information for a later report.

[11] Based on parent interview responses, we created five categories of household language spoken to the child: (1) English only, (2) Spanish only or primarily, (3) English primarily and some Spanish, (4) English primarily and another language, and (5) other language only or primarily. The following variables were used to assign each child to one of these categories: language(s) that the respondent spoke to the child at home, language most frequently spoken to the child, and how often the child hears the language at home. Some children in the Spanish only or primarily category and all children in the English primarily and some Spanish category hear both English and Spanish in the home. However, children in the Spanish only or primarily category hear Spanish most or all of the time at home or have parents who speak only Spanish or speak Spanish most often. In contrast, children in the English primarily and some Spanish category hear English most or all of the time at home or have parents who speak only English or speak English most often, although Spanish is also spoken to them. Children in the English primarily and some other language category hear English most or all of the time at home or have parents who speak only English or speak English most often, although another language, neither English nor Spanish, is also spoken to them. In contrast, children in the other language only or primarily category hear a language other than English or Spanish most or all of the time at home or have parents who speak only a language other than English or Spanish or who speak a language other than English or Spanish most often.

Table VI.5. Languages Spoken to the Child

Language	Percentage (Standard Error)
Language Spoken to the Child	
English only[a]	68.8 (3.4)
Spanish (only or primarily)[b]	16.7 (2.6)
English (primarily) and Spanish[c]	11.6 (1.8)
English (primarily) and other language[d]	2.0 (0.6)
Other language (only or primarily)[e]	0.9 (0.4)
Among Spanish-Speaking Households, Child Hears Spanish in Household[f]	
All or most of the time	99.0 (0.5)
Some of the time or very little	1.0 (0.5)
Among Other Language-Speaking Households, Child Hears Other Language in Household[g]	
All or most of the time	99.0 (0.5)
Some of the time or very little	1.0 (0.5)
Sample Size	**857**

Source: Spring 2009 Parent Interview.

[a] Includes children to whom parents reported speaking English only at home.

[b] Includes children to whom parents reported speaking Spanish only or most often or who hear Spanish most or all of the time at home.

[c] Includes children to whom parents reported speaking English most often or who hear English most or all of the time at home, although Spanish was also spoken to them.

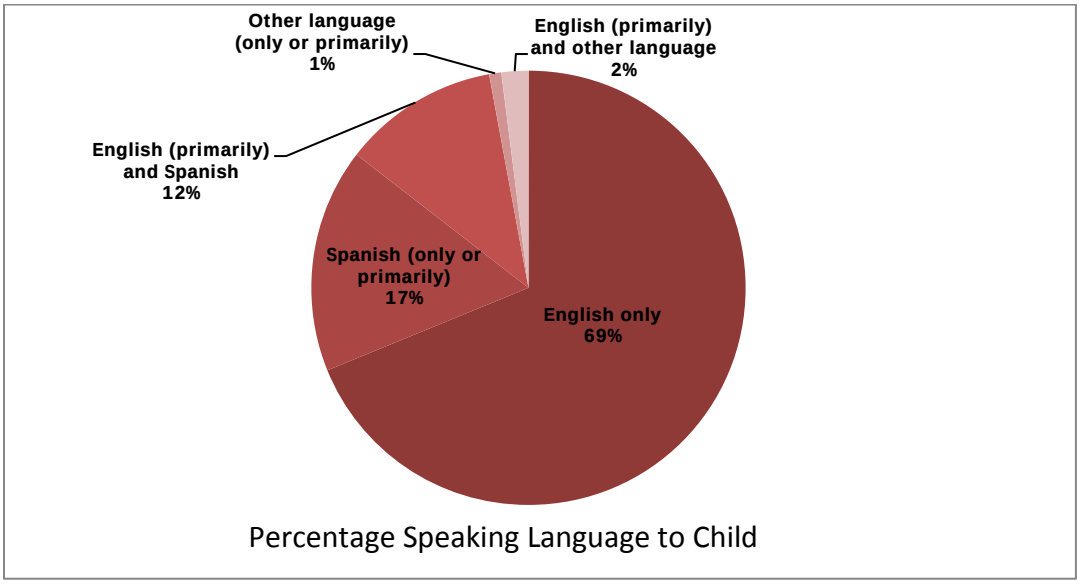
[d] Includes children to whom parents reported speaking English most often or who hear English most or all of the time at home, although another language was also spoken to them.

[e] Includes children not in the four preceding groups.

[f] Sample size equals 250 (number of primarily Spanish speakers in the 1-year-old Cohort).

[g] Sample size equals 31 (number of other language speakers in the 1-year-old Cohort).

Figure VI.5. English and Spanish Are the Most Common Household Languages Spoken to Child



Source: Spring 2009 Parent Interview.
Sample size = 857.

Table VI.6. Language Spoken to the Child by Child's Race/Ethnicity (Percentages)

Language Spoken to the Child	White (Standard Error)	African American (Standard Error)	Hispanic (Standard Error)	Other (Standard Error)
English only	98.4 (0.8)	92.1 (3.1)	24.9 (3.4)	83.8 (4.5)
Spanish (only or primarily)	0.3 (0.3)	0.0 (0.0)	45.2 (4.5)	0.0 (0.0)
English (primarily) and Spanish	0.6 (0.6)	3.6 (2.6)	29.3 (3.5)	0.0 (0.0)
English (primarily) and other language	0.7 (0.5)	2.5 (1.4)	0.3 (0.3)	11.9 (4.3)
Other language (only or primarily)	0.0 (0.0)	1.8 (1.3)	0.3 (0.3)	4.3 (2.6)
Sample Size	**263**	**160**	**325**	**81**

Source: Spring 2009 Parent Interview.

- ***Languages other than English and Spanish are not commonly spoken.*** A language other than English or Spanish is spoken to children in only 3 percent of households. Fewer than half of children in households that speak a language other than Spanish hear that language all the time. All children in households that speak a language other than Spanish also hear English at least sometimes.

- ***Fathers are more likely than mothers or grandparents to speak to 1-year-old children in Spanish.*** Thirty-eight percent of biological fathers speak to their children in Spanish, versus 29 percent of biological mothers, 29 percent of other children in the household, and 26 percent of grandparents (see Table VI.7).

Parents Reported Moderate Levels of Education and Low Levels of Employment

Early Head Start parents reported low to moderate educational attainment and employment in jobs that were often not full-time. Basic education and employment information about mothers and fathers is provided in Table VI.8. Key findings include the following points:

- ***Mothers have slightly more education than fathers, and many are continuing their education.*** About 60 percent of mothers in both cohorts reported having a high school education or higher, compared to about 55 percent of fathers. More than 25 percent of mothers in both cohorts have an AA or some college, compared to about 15 percent of fathers. Fewer than 6 percent of mothers and fathers in both cohorts have a BA or higher degree. However, 29 percent of birth mothers and about 15 percent of birth fathers were taking classes at the time of the survey.

- ***About one-third of fathers are currently unemployed, as are more than half of mothers.*** Across both cohorts about half of birth fathers work full-time, and fewer than 15 percent work part-time. More than one-third of birth fathers in both cohorts are either looking for work or not in the labor-force. About one-fifth of mothers in the 1-year-old Cohort work full-time. On the face of it, there seems to be a discrepancy between the substantial proportion of families above the poverty line and the relatively low employment rate among families in the study. However, this reflects the heterogeneity of the sample concerning employment and income. Families living above the poverty line are more likely to be employed than families living below the poverty line. Eighty-one percent of families living above the poverty line report at least one parent being employed, whereas only 65 percent of families living below the poverty line report at least one parent being employed.

Table VI.7. Language Spoken to 1-Year-Old Child by Family Members (Percentages)

	Birth Mother (Standard Error)	Birth Father (Standard Error)	Grandparent (Standard Error)
English	83.5 (2.2)	72.6 (3.6)	80.1 (5.7)
Spanish	29.3 (3.5)	37.6 (4.8)	25.6 (6.1)
Other language	2.8 (0.7)	1.7 (0.9)	2.0 (1.5)
Sample Size	**667**	**340**	**129**

Source: Spring 2009 Parent Interview.

[a] Percentages add to more than 100 because each family member could speak to his or her child in more than one language.

Table VI.8. Mother and Father Education and Employment (Percentages Unless Otherwise Indicated)

	Birth Mother		Birth Father	
	Newborn Cohort (Standard Error)	1-Year-Old Cohort (Standard Error)	Newborn Cohort (Standard Error)	1-Year-Old Cohort (Standard Error)
Highest Education Completed				
Less than high school	40.9 (5.3)	38.4 (2.7)	50.0 (4.0)	42.1 (2.9)
High school diploma or equivalent	33.8 (4.0)	32.4 (2.3)	37.8 (4.3)	40.2 (2.6)
Some college or AA	21.8 (3.9)	24.7 (2.2)	10.1 (2.8)	12.4 (1.4)
BA or higher	3.6 (1.5)	4.5 (1.0)	2.0 (1.3)	5.3 (1.1)
Currently Taking Classes	28.5 (3.7)	29.1 (2.6)	22.0 (3.7)	13.0 (1.5)
Currently in Job Training	5.7 (2.2)	5.3 (0.9)	8.7 (2.3)	4.2 (0.9)
Employed in Last 12 Months	44.9 (4.2)	56.6 (2.4)	82.6 (3.4)	82.3 (1.9)
Employment Status				
Full-time (more than 35 hours per week)	n.a.[a]	18.9 (1.8)	46.2 (5.0)	51.3 (2.1)
Part-time (less than 35 hours per week)	n.a.	22.2 (2.0)	12.4 (3.1)	14.3 (1.7)
Looking for work	n.a.	20.5 (1.8)	22.7 (4.5)	14.3 (1.8)
Not in the labor force	n.a.	38.3 (2.5)	18.7 (3.6)	20.1 (2.2)
Average Number of Hours Worked per Week	n.a.	29.7 (0.7)	38.0 (1.0)	38.8 (0.6)
Sample Size	**174**	**683**	**156**	**596**

Source: Spring 2009 Parent Interview.

[a] This information is unavailable for this round of data collection due to the survey instrument's skip logic.

Families Face Financial Difficulties and Food Insecurity

Half of Early Head Start families in the study experience serious obstacles to financial independence, good physical health, and psychological well-being. Tables VI.9 through VI.14 provide basic information on financial difficulties, food security, and family living situation. Key findings include the following points:

- ***Families experience financial difficulties and many use public assistance.*** Nearly one-third of all parents reported at least two financial difficulties, with Hispanics being slightly more likely than other ethnicities to report at least two (see Tables VI.9 and VI.10). More than 30 percent of parents reported that they could not pay the full amount of rent or mortgage or of their energy bills. Six percent of parents reported having been evicted from their homes. Parents who reported one financial difficulty were likely to report additional difficulties. For example, 87 percent of parents that had the energy disconnected also had difficulty paying energy bills, and 69 percent of parents that had difficulties with housing payments also had difficulty with energy bills.

- ***Early Head Start families appear to be receiving assistance to meet their needs***. Nearly 9 of 10 families receive WIC services, nearly two-thirds of families use food stamps, and nearly one-third of families receive public assistance. Rates of public assistance differ by race/ethnicity, with only 50 percent of Hispanic mothers receiving food stamps, compared to 64 and 72 percent of white and African American mothers, respectively (see Table VI.10). Also, only 7 percent of Hispanic mothers reported receiving Social Security benefits, compared to 15 and 16 percent of white and African American mothers, respectively. As expected, families reporting at least two financial difficulties tend to have lower annual incomes as a percentage of poverty (see Table VI.11). Families reporting at least two financial difficulties are also more likely to receive WIC, food stamps, welfare, and SSI benefits.

- ***Families reported moderate levels of food security.*** More than 35 percent of families reported at least two food security difficulties. Nearly 40 percent of families reported that they were worried that food would run out, about 29 percent reported that food did not last and they did not have money to buy more, and about 26 percent could not afford balanced meals and relied on a few kinds of low-cost foods to feed their children (see Table VI.12). Parents who reported one instance of food insecurity were likely to report additional instances. For example, 91 percent of parents who reported food did not last also worried that food would run out, and 88 percent of parents who could not feed children balanced meals also relied on low-cost foods. Hispanic families were much more likely than other ethnicities to report at least two food security difficulties (48 percent versus 30 and 24 percent among whites and African Americans, respectively; see Table VI.13).

- ***Many families reported moving in the past year; rates of homelessness and evictions are low.*** About one-third of families interviewed reported moving in the past year (see Table VI.14). Families that moved reported moving an average of 1.5 times in the past 12 months. Two percent reported they are living in transitional or temporary housing, and 6 percent are living with another family.

Table VI.9. Financial Difficulties and Public Assistance

Type of Hardship	Percentage (Standard Error)
Could Not Pay the Full Amount of Gas, Oil, or Electricity Bills	33.4 (1.8)
Could Not Pay the Full Amount of Rent or Mortgage	30.5 (1.8)
Had Service Disconnected by the Telephone Company for Nonpayment	19.1 (1.6)
Had Services Turned off by the Gas or Electric Company, or Oil Company Would Not Deliver Oil	8.9 (1.1)
Was Evicted from Home or Apartment	6.0 (0.9)
Parent Has	
Zero or one financial difficulty	68.7 (1.8)
Two or three financial difficulties	25.7 (1.8)
Four or five financial difficulties	5.6 (0.9)
Family Receives	
WIC	87.4 (1.4)
Food stamps	61.0 (2.3)
Welfare	31.1 (2.5)
SSI	12.0 (1.5)
Sample Size	**825**

Source: Spring 2009 Parent Interview.

SSI = Supplemental Security Income; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Table VI.10. Financial Difficulties and Public Assistance by Mother's Race/Ethnicity (Percentages)

Type of Hardship	White (Standard Error)	African American (Standard Error)	Hispanic (Standard Error)	Other (Standard Error)
Could Not Pay the Full Amount of Gas, Oil, or Electricity Bills	35.9 (3.1)	32.7 (4.8)	31.2 (2.2)	29.4 (7.3)
Could Not Pay the Full Amount of Rent or Mortgage	28.7 (2.8)	22.6 (3.4)	34.0 (2.9)	47.3 (10.2)
Had Service Disconnected by the Telephone Company for Nonpayment	15.4 (2.2)	22.1 (4.0)	20.4 (2.3)	30.3 (8.4)
Had Services Turned off by the Gas or Electric Company, or Oil Company Would Not Deliver Oil	8.4 (1.5)	12.1 (2.3)	7.3 (2.0)	11.1 (5.2)
Was Evicted from Home or Apartment	8.1 (1.8)	5.7 (2.3)	4.0 (1.4)	3.3 (2.7)
Parent Has				
Zero or one financial difficulty	70.2 (2.6)	75.4 (4.2)	65.5 (2.4)	56.1 (8.4)
Two or three financial difficulties	24.5 (2.4)	15.3 (3.8)	31.2 (2.6)	35.4 (9.9)
Four or five financial difficulties	5.3 (1.3)	9.3 (2.1)	3.2 (1.2)	8.6 (4.6)
Family Receives				
WIC	85.7 (2.3)	82.9 (3.3)	91.4 (2.2)	94.8 (3.6)
Food stamps	63.5 (3.5)	71.5 (3.8)	50.3 (4.5)	71.7 (8.3)
Welfare	30.0 (3.8)	35.9 (5.2)	28.4 (3.1)	39.2 (7.8)
SSI	14.9 (2.9)	15.6 (2.6)	6.7 (1.7)	6.1 (3.9)
Sample Size	**323**	**156**	**295**	**46**

Source: Spring 2009 Parent Interview.

SSI = Supplemental Security Income; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Table VI.11. Financial Difficulties by Annual Household Income (Percentages Unless Otherwise Indicated)

Respondent	Zero or One Financial Difficulty (Standard Error)	Two or Three Financial Difficulties (Standard Error)	Four or Five Financial Difficulties (Standard Error)
Average Household Income	$24,081 (1,749.4)	$25,366 (5,679.0)	$29,468 (10,986.0)
Median Household Income	$17,500	$15,600	$15,800
Household Income as a Percentage of the Poverty Level[a]			
0–50	26.8 (2.2)	30.3 (3.7)	40.3 (7.6)
50–100	37.5 (2.3)	48.0 (4.2)	37.1 (8.4)
101–130	13.9 (1.4)	9.5 (2.7)	13.0 (6.1)
131 or higher	21.9 (1.9)	12.2 (2.9)	9.6 (4.1)
Family Receives			
WIC	85.9 (1.9)	90.7 (2.7)	90.9 (4.6)
Food stamps	56.5 (2.5)	70.5 (4.4)	71.7 (7.1)
Welfare	25.7 (2.6)	41.4 (4.0)	48.8 (7.9)
SSI	10.9 (1.5)	14.2 (2.5)	16.7 (6.2)
Sample Size	**570**	**209**	**46**

Source: Spring 2009 Parent Interview.

[a] 130 percent of the poverty level is a common eligibility threshold for Head Start, food stamps, and free school lunch. Families more than 130 percent of poverty are not eligible to receive Early Head Start services.

SSI = Supplemental Security Income; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Table VI.12. Food Security

Type of Food Security Problem	Percentage (Standard Error)
Worried Food May Run Out	38.1 (2.0)
Food Didn't Last and Didn't Have Money to Get More	29.4 (1.9)
Relied on Only a Few Kinds of Low-Cost Foods to Feed Children Because of Financial Reasons	25.8 (2.2)
Couldn't Afford to Eat Balanced Meals	24.9 (2.1)
Couldn't Feed Children a Balanced Meal for Financial Reasons	18.6 (1.7)
Parent Has	
Zero or one food security difficulty	64.5 (2.1)
Two or three food security difficulties	17.6 (1.4)
Four or five food security difficulties	17.9 (1.9)
Sample Size	**825**

Source: Spring 2009 Parent Interview.

Table VI.13. Food Security by Mothers' Race/Ethnicity (Percentages)

Respondent	White (Standard Error)	African American (Standard Error)	Hispanic (Standard Error)	Other (Standard Error)
Is Worried Food May Run Out	32.9 (3.3)	33.4 (4.0)	46.6 (3.4)	40.2(8.2)
Food Didn't Last and Didn't Have Money to Get More	24.9 (3.2)	22.5 (3.0)	37.4 (3.3)	36.0 (7.9)
Relied on Only a Few Kinds of Low-Cost Foods to Feed Children Because of Financial Reasons	21.2 (3.1)	14.8 (3.1)	36.7 (2.6)	28.3 (6.7)
Couldn't Afford to Eat Balanced Meals	18.8 (2.9)	16.5 (3.0)	36.3 (3.0)	28.2 (6.1)
Couldn't Feed Children a Balanced Meal for Financial Reasons	16.0 (2.7)	6.7 (2.1)	28.7 (3.0)	13.9 (4.7)
Parent Has				
Zero or one food security difficulty	70.4 (3.5)	76.3 (3.3)	52.3 (2.9)	56.4 (7.6)
Two or three food security difficulties	15.2 (2.4)	14.6 (2.9)	21.4 (2.4)	25.4 (7.4)
Four or five food security difficulties	14.4 (2.9)	9.1 (2.2)	26.4 (2.8)	18.2 (6.7)
Sample Size	**323**	**156**	**295**	**46**

Source: Spring 2009 Parent Interview.

Table VI.14. Living Situation (Percentages Unless Otherwise Indicated)

Living Arrangement	Percentage (Standard Error)
Parent Lives in	
House, apartment, or trailer with family only	91.4 (1.1)
House, apartment, or trailer shared with another family	5.8 (1.0)
Transitional housing or homeless shelter	1.7 (0.5)
Somewhere else	1.0 (0.4)
Parent Has Moved in the Past Year	32.2 (1.7)
If Parent Has Moved, Average Number of Times Moved	1.5 (0.1)
Sample Size	**825**

Source: Spring 2009 Parent Interview.

Families' Economic Risk Is Related to Race/Ethnicity

We aggregated parents' reports of financial difficulties and food security difficulties (each measured with five items) into an economic risk index. We coded families into one of three categories of risk. Parents with fewer than two financial difficulties and fewer than two food security difficulties were classified as being at lower economic risk. Parents with two or three financial difficulties *or* two or three food security difficulties were classified as being at medium economic risk. Parents with at least four difficulties in either category were classified as being at highest economic risk.

- ***Hispanics are more likely to be at highest economic risk.*** Hispanic families are much more likely than white and African American families to have medium or high economic risk (see Table VI.15).

- ***We did not find a strong relationship between families' annual income and food insecurity.*** Families reporting two or more instances of food insecurity reported only slightly lower incomes as a percentage of poverty than families reporting zero or one instance of food insecurity. However, Hispanic ethnicity (and other race) is a stronger predictor of economic risk than are traditional demographic risk factors, such as unemployment, giving birth as a teen, being a single parent, and receipt of public assistance.

Table VI.15. Economic Risk by Mothers' Race/Ethnicity (Percentages)

Parent Has	All (Standard Error)	White (Standard Error)	African American (Standard Error)	Hispanic (Standard Error)	Other (Standard Error)
Lower economic risk[a]	51.8 (2.2)	55.8 (3.5)	62.9 (4.4)	43.6 (2.7)	36.8 (7.0)
Medium economic risk	27.1 (1.7)	28.0 (2.7)	20.4 (3.9)	28.4 (3.1)	36.2 (6.8)
Highest economic risk	21.1 (2.0)	16.2 (3.0)	16.7 (2.9)	28.1 (3.2)	26.9 (6.8)
Sample Size	**824**	**323**	**156**	**295**	**45**

Source: Spring 2009 Parent Interviews.

[a] Economic risk is an index that aggregates financial difficulties and food security difficulties. Parents with fewer than two financial difficulties and fewer than two food security difficulties were classified as at lower economic risk. Parents with two or three financial difficulties or two or three food security difficulties were classified as at medium economic risk. Parents with at least four difficulties in either category were classified as at highest economic risk.

About Half of Mothers Have Medium or High Maternal Demographic Risk

Although Early Head Start targets families at elevated risk of poor outcomes, even within this group the number of risk factors varies, and some families have multiple risk factors. To assess the level of maternal risk, we created a demographic risk index for mothers of 1-year-olds (see Table VI.16).[12] This index is a general measure of risk for suboptimal child outcomes and is modeled after the cumulative measure of risk from the EHSREP.[13] The index comprises the following five risk factors: (1) being a teenage mother,[14] (2) not having a high school credential, (3) receiving public assistance, (4) not being employed or in school or training, and (5) being a single mother.[15] Primary findings regarding the maternal demographic risk index include these points:

[12] Due to missing values in the Newborn Cohort data, we calculated maternal risk only for the 1-year-old Cohort. We will present the index for the Newborn Cohort (Cohort 0) in the next Baby FACES report.

[13] We created the maternal demographic index to capture the multiple dimensions of risk of poorer developmental outcomes a child may face as a consequence of a mother's socioeconomic circumstances. The index comprises three risk groups (low, at zero to two risks; moderate, at three risks; and high, at four to five risks).

[14] Teenage mothers were defined as women who were teenage mothers at *first* birth, regardless of whether their first child was the child in the study.

[15] The person of reference for each of the five composite factors depended on who the respondent was and whether a non-birth mother respondent lived with the birth mother (and study child). Fifteen respondents were non-birth mothers who did not live with the birth mother, and five respondents were non-birth mothers who did live with

- ***About half of mothers have lower demographic risk, but 18 percent are at highest risk.*** Fifty-three percent of children's mothers have fewer than three risk factors and are categorized as having lower demographic risk (see Figure IV.6). Twenty-eight percent of mothers are in the medium risk category (three risk factors), and 18 percent are highest risk (four or five risk factors).[16]

- ***Many teen mothers face difficult life situations.*** About 33 percent of teen mothers fall into the highest level of demographic risk (four or five risk factors). Thirty-six percent of teen mothers are not employed, in school, or in training. In addition, 72 percent of teen mothers receive public assistance. Conversely, nearly all mothers with a high level of risk (91 percent) are teen mothers.

- ***Hispanic and African American mothers have higher demographic risk than white mothers.*** Fifty percent of Hispanic mothers are in the medium or highest risk (three or more risk factors) categories, compared to 37 percent of whites (see Table VI.17). Hispanic mothers were relatively more likely than other ethnicities to report not having a high school credential (56 percent) and not being employed, in school, or in training (47 percent). Similar to Hispanics, 63 percent of African American mothers are in the moderate or high risk category (three or more risk factors). Compared to other ethnicities, African American mothers were relatively more likely to report being a single mother (75 percent) and a teenage mother (60 percent).

Table VI.16. Maternal Demographic Risk Among Mothers of 1-Year-Olds (Percentages)

Risk Factor	Percentage (Standard Error)
Single Mother	44.7 (2.5)
Teenage Mother	51.5 (2.5)
No High School Credential	37.6. (2.6)
Receive Public Assistance	69.2 (2.5)
Not Employed, in School, or in Training	37.2 (2.5)
Maternal Demographic Risk Index[a]	
0–2 (lower risk)	53.4 (2.2)
3 (medium risk)	28.3 (2.1)
4–5 (highest risk)	18.3 (1.7)
Sample Size	**670**

Source: Spring 2009 Parent Interview.

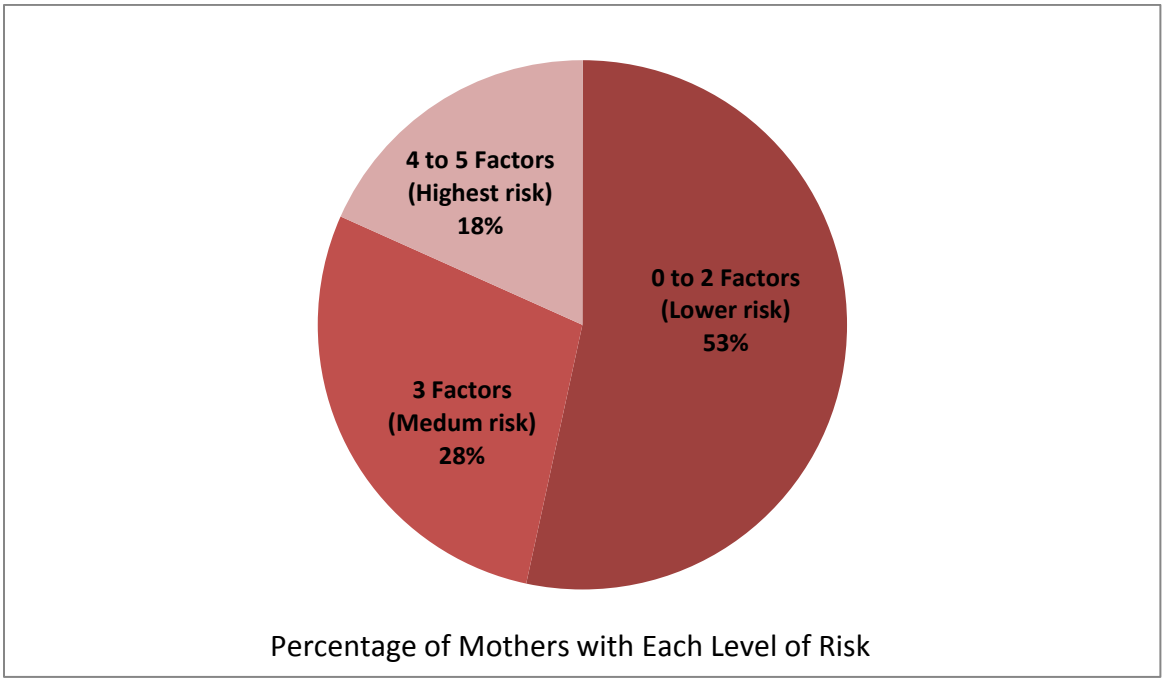
[a] This index was constructed by summing the five risk factors enumerated in the top portion of the table. Maternal demographic risk was calculated only for mothers of 1-year-olds.

(continued)

the birth mother. In all cases, teen mother status is a measure of whether the birth mother was a teenager when she gave birth to her first child. Two other factors – not having a high school credential and not being employed or in school or training – were based on birth mother's characteristics if she lived in the home, regardless of whether she was the respondent, and were the respondent's characteristics if the mother was not living in the home. The remaining two factors – being a single mother and receiving public assistance – were based on the respondent's characteristics, regardless of where the birth mother resided. When the respondent was not the birth mother, information about the birth mother is based on the respondent's best assessment of the birth mother's characteristics.

[16] This portion of mothers with the highest level of risk (18 percent) is lower than the percentage of mothers with the highest risk level in the EHSREP (25 percent).

Figure VI.6. About Half of Mothers of 1-Year-Olds Have Lower Levels of Demographic Risk



Source: Spring 2009 Parent Interview.
Sample size = 683.

Table VI.17. Maternal Demographic Risk by Mother's Race/Ethnicity (Percentages)

Risk Factor	White (Standard Error)	African American (Standard Error)	Hispanic (Standard Error)	Other (Standard Error)
Single Mother	44.2 (3.7)	75.1 (4.3)	29.0 (3.9)	53.3 (11.2)
Teenage Mother	47.4 (3.8)	60.3 (5.2)	52.5 (3.6)	46.0 (6.6)
No High School Credential	24.4 (3.1)	37.4 (4.0)	55.8 (4.3)	29.4 (7.5)
Receive Public Assistance	71.4 (4.2)	79.1 (4.7)	59.8 (4.4)	84.0 (6.6)
Not Employed, in School, or in Training	33.5 (3.7)	28.7 (4.7)	47.0 (4.4)	23.4 (7.4)
Maternal Demographic Risk Index[a]				
0–2 (lower risk)	62.8 (3.6)	37.5 (4.5)	50.2 (3.5)	56.4 (9.4)
3 (medium risk)	24.5 (3.2)	35.4(5.8)	28.9 (3.3)	19.6(11.1)
4–5 (highest risk)	12.7 (2.1)	27.1 (4.4)	20.8 (3.2)	24.0 (8.6)
Sample Size	**258**	**118**	**239**	**34**

Source: Spring 2009 Parent Interview.

[a] This index was constructed by summing the five risk factors enumerated in the top portion of the table. Maternal demographic risk was calculated only for mothers of 1-year-olds.

Summary of Key Findings

- Study households are characterized by moderate size, nonresidential fathers, and low incomes.
  - Families in the study tend to comprise about four members, and about half of children in the study live without their biological fathers. Substantial minorities of children who do not live with their biological fathers do see him on a regular basis.
- Parents and children in Early Head Start are ethnically diverse.
  - The sample is nearly evenly divided between Hispanic and white families, at about one-third each. African American families make up one-fifth of the sample. Almost one-third of households report speaking a language other than English.
- Families face financial difficulties and food insecurity.
  - About one-third and one-half of fathers and mothers, respectively, are not currently employed, and families report annual incomes at or near the poverty level. Large portions of families also report having trouble paying bills and using a wide range of public assistance—particularly WIC and food stamps.
- Families' economic risk is related to race/ethnicity.
  - Hispanic families appear to have higher levels of financial difficulties, food insecurity, and maternal demographic risk than do other ethnicities.
- About half of mothers have medium or high demographic risk.
  - However, risk is concentrated in some groups. A high proportion of teen mothers demonstrate high maternal demographic risk. And Hispanics and African Americans are more likely to be in the medium or highest risk groups, relative to whites.

VII. EARLY HEAD START CHILDREN ARE OFF TO A GOOD START IN MOST DEVELOPMENTAL DOMAINS AND MOST FAMILIES ARE FUNCTIONING WELL

One of the most critical research questions Baby FACES asks is about how families and children enrolled in Early Head Start are doing across multiple dimensions. In this chapter we provide a snapshot of child and family well-being. The first section of the chapter describes health; access to health care; and the cognitive, language, and social-emotional development of infants enrolled in the Early Head Start program in spring 2009. The information about child well-being was obtained primarily through parent interviews and will be enriched in subsequent years with longitudinal data that will include direct child assessments. Early Head Start teachers and home visitors provided additional information about children's social-emotional and language development through the Staff-Child Report (SCR). The second section of the chapter focuses on the health, well-being, and functioning of families enrolled in Early Head Start. Parents provided this information through interviews. Where relevant for context, we compare our findings to national averages or norms or to studies of other similar populations, such as the Early Head Start Research Evaluation Project (EHSREP).

Children Enrolled in Early Head Start in Spring 2009 Are Off to a Good Start in most Developmental Domains

Overall, newborns and 1-year-olds enrolled in Early Head Start in spring 2009 are off to a good start in most developmental domains. The sections that follow present a snapshot of children's health, developmental status, vocabulary, and social-emotional competence.

The Majority of Children Are Healthy and Have Access to Health Care

Parents reported on several aspects of children's health, including birth outcomes, general health status, disability status, and health care access. Table VII.1 presents the weighted means and percentages of these measures of children's health.

For both newborns and 1-year-olds, parents reported when the child was born relative to his or her due date and the child's birth weight (only a few mothers in the sample had not yet given birth by the time of the parent interview). We defined prematurity as having been born more than three weeks preterm. Low birth weight was more than 1.5 kg but less than 2.5 kg, and very low birth weight was less than 1.5 kg. Approximately 9 percent of the children enrolled in the Early Head Start program in spring 2009 were premature; 7 percent were low birth weight, and 1 percent was very low birth weight. The birth weight findings are consistent with the national data on babies born in 2007 (Federal Interagency Forum on Child and Family Statistics 2009), which show that 7 percent were low birth weight and 1.5 percent were very low birth weight; the rate of preterm birth is slightly lower than the national rate of 13 percent.[1]

[1] Next year we will be able to examine birth weights comparing children whose mothers were or were not enrolled during pregnancy regardless of cohort (because some in the 1-year-old Cohort could have been enrolled during pregnancy). The spring 2010 data collection includes gathering date of enrollment for all families in the study.

Table VII.1. Children Are Healthy and Have Access to Health Care

Child Characteristics	Weighted Means or Percentages (Standard Error)		
	Overall	Newborn Cohort	1-Year-Old Cohort
Child Born Premature[a]	8.9 (1.2)	3.9 (1.8)	9.9 (1.4)
Birth Weight[a]			
Percentage low birth weight	7.5 (1.3)	4.2 (1.9)	8.1 (1.6)
Percentage very low birth weight	0.9 (0.3)	0.0 (0.0)	1.1 (0.4)
Health Status[a]	1.8 (0.0)	1.4 (0.1)	1.8 (0.0)
Percentage Excellent or Very Good Health[a]	79.2 (1.7)	88.6 (2.5)	77.4 (2.0)
Percentage Fair or Poor Health[a]	5.4 (1.0)	1.9 (1.1)	6.1 (1.2)
Percentage Have Regular Health Care Provider	97.9 (0.6)	--	--
Percentage Received Any Health Services	99.8 (0.2)	--	--
Child Has Ever Visited		--	--
A doctor for a check-up (percentage)	100.0 (0.0)		
A dentist (percentage)	23.7 (2.8)		
Child's Last Regular Doctor Check-Up Was Fewer than 6 Months Ago (percentage)	98.1 (0.6)	--	--
Frequency of Well-Child Check-Ups (percentage)		--	--
Never	0.8 (0.4)	--	--
Once or twice	5.3 (1.4)	--	--
3–4 times	20.7 (2.2)	--	--
5–9 times	45.0 (2.4)	--	--
10 times or more	28.3 (2.2)	--	--
Percentage Have Sufficient Well-Child Doctor Visits	73.3 (2.0)	--	--
Child's Immunization Status Is "Completely Up to Date" (percentage)	91.6 (1.2)	--	--
Percentage Ever Been Hospitalized[a]	17.1 (1.3)	5.3 (1.9)	19.3 (1.5)
Number of Hospitalizations[a]	1.5 (0.1)	1.2 (0.1)	1.5 (0.1)
Number of Nights Hospitalized[a]	8.7 (2.3)	3.4 (0.8)	8.9 (2.4)
Child's Health Insurance Status[a, b] (percentage)			
A private health insurance plan	32.3 (1.8)	25.3 (3.8)	33.9 (1.9)
A public/government insurance	83.9 (1.4)	74.0 (4.0)	86.2 (1.4)
No health insurance	6.3 (1.1)	17.0 (4.0)	3.8 (0.9)
Child has dental insurance coverage	43.7 (2.6)	35.4 (4.7)	45.6 (2.9)
Sample Size			
Parent Interview	**761–826**	**139–171**	**640–680**

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-olds unless noted. We defined prematurity as having been born more than three weeks preterm, low birth weight as weighing less than 2.5 kg, and very low birth weight as weighing less than 1.5 kg.

[a] Sample includes newborns.

[b] The estimates are not mutually exclusive and hence sum to more than the estimated percentage of children with coverage.

Parents reported children's general health status on a 5-point scale ranging from excellent to poor. The mean ratings are between excellent and very good. The majority (79 percent) of Early Head Start children are rated as having excellent or very good health. Only a small proportion (5 percent) of children has fair or poor general health. Newborns are in better physical health than 1-year-olds—parents of newborns are more likely to rate their children as having excellent or very good health and less likely to consider their children's health as fair or poor than are parents of 1-year-olds. We did not find a relationship between ratings of health and birth outcomes (birth weight and preterm birth) or other indicators of children's well-being, such as having an Individualized Education Plan (IEP). Because very few children were rated as having poor or fair health, however, comparisons are difficult to make.

To some extent, the health of children depends on their access to health services. Parents report that nearly all 1-year-olds (98 percent) have a regular health care provider, which might facilitate the timely and appropriate use of pediatric services. Accordingly, almost all children in the 1-year-old Cohort (99.8 percent) have received some type of health services, including doctor visits, immunizations, or evaluation for disabilities. All children have visited a doctor for a checkup. Approximately 98 percent of children had their last regular checkup within the previous six months. About three-quarters have had more than four well-child doctor visits.[2] Fewer than 1 percent of children have never had a well-child checkup. Approximately 92 percent of 1-year-olds are reported as having completely up-to-date immunizations. About one-quarter of children have visited a dentist.

Parents of both cohorts reported children's hospitalizations and health insurance coverage. Approximately 17 percent of children have been hospitalized at least once (not including at birth). Children who had been hospitalized averaged fewer than two (1.5) hospitalizations and stayed in the hospital an average of almost 9 nights (ranging from 1 to 190 nights, with a median of 3 nights). Five children were hospitalized for more than one month; three of them were born prematurely. One-year-olds are more likely to have been hospitalized than are newborns and have therefore more hospital days on average.

Only 6 percent of children have no health insurance coverage. About one-third of children are covered by private health insurance and 84 percent are covered by public plans (the estimates include the children covered by both public and private plans; hence, the estimates sum to more than the estimated percentage of children with coverage). Newborns are somewhat less likely than 1-year-olds to have health insurance coverage of any type. Fewer than half (44 percent) of children have dental insurance coverage.

Parents of 1-year-olds also reported on child disabilities and early intervention services (see Table VII.2).[3] Approximately 7 percent of children are reported by their parents as having been evaluated for some disability, including hearing or speech problems, visual problems, or motor

[2] Although there is no set standard for the number of recommended well-baby visits in the first year of life, somewhere between five and six visits are commonly recommended (for example, within the first month and then at 2, 4, 6, 9, and 12 months; see, for example, http://www.marchofdimes.com/pnhec/298_29655.asp).

[3] We did not ask these questions of parents of newborns.

Table VII.2. Receipt of Early Intervention Services by 1-Year-Olds

Characteristics	Weighted Percentages	(Standard Error)
Children Evaluated for Any Disabilities	7.3	(1.2)
Children with a Diagnosis of Any Disabilities	2.9	(0.7)
Hearing or speech problems	0.5	(0.3)
Visual problems	0.2	(0.1)
Motor problems	2.4	(0.6)
Children's Activities Restricted as a Result of Any Impairment	2.3	(0.7)
Children Who Have Received Disability Services[a]	73.7	(12.3)
Early Head Start Has Helped Family and Child Get Disability Services[b]	53.9	(16.4)
Children Currently Participating in an Early Intervention Program[b]	57.7	(12.6)
Children Who Have an IEP/IFSP	37.0	(2.5)
Sample Size	**15–678**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-olds.

[a] Among those with a diagnosis.

[b] Among those who received disability services.

IEP = individualized education program or plan; IFSP = individual family service plan.

problems, and about 3 percent have a diagnosed problem. Most of the problems are motor impairment. About 2 percent of parents reported that an impairment restricted children's activities. Approximately three-quarters of children with a diagnosis have received services to help with their special needs; more than half of families received help from Early Head Start in obtaining these services. Fewer than two-thirds of children who have a diagnosis are currently participating in an early intervention program. Slightly more than one-third (37 percent) of children have an IEP or Individualized Family Service Plan (IFSP).

As Reported by Parents, Early Head Start Children May Face More Developmental Risks Than Do Children in Normative Samples

The *Ages & Stages Questionnaires, Third Edition* (ASQ-3; Squires et al. 2009), a developmental screening tool used by many Early Head Start programs, were completed by parents of 1-year-olds to assess children's cognitive, communicative, and motor development and to identify children who might be at risk in these developmental areas. About 16 percent of parents completed the ASQ in Spanish (see Table VII.3). In the first round of Baby FACES data collection, the children ranged in age from 10 to 18 months at the time of the parent interview. Depending on the age of the child on the day of the parent interview, the 10-, 12-, 14-, 16-, or 18-month questionnaire was administered. Because of an administration error, parents of children ages 11 and 12 months have only Communication scores. Further analyses indicate that children in this group are not different from those in other age groups in terms of race/ethnicity, dual language learner (DLL)

Table VII.3. Children's Developmental Status and Vocabulary at Age 1

Measures	Weighted Means or Percentages	(Standard Error)
ASQ-3[a] Raw Score (mean)		
Communication	40.3	(0.6)
Gross Motor	51.2	(0.7)
Fine Motor	43.5	(0.7)
Problem Solving	40.3	(0.6)
Personal-Social	43.0	(0.6)
Total Score	217.3	(2.3)
ASQ in the At-Risk Range (2 SDs below the mean or lower) (percentage)		
Communication	7.1	(1.3)
Gross Motor	9.8	(1.4)
Fine Motor	14.1	(1.8)
Problem Solving	20.9	(1.8)
Personal-Social	8.8	(1.5)
ASQ in the Monitoring Zone (1 to 2 SDs below the mean) (percentage)		
Communication	22.7	(1.8)
Gross Motor	8.7	(1.4)
Fine Motor	17.9	(1.9)
Problem Solving	20.1	(2.4)
Personal-Social	24.3	(3.0)
CDI[b] (English) Raw Score (mean)		
Vocabulary Comprehension	30.6	(1.3)
Vocabulary Production	2.9	(0.3)
CDI[b] (Spanish) Raw Score		
Vocabulary Comprehension	35.8	(2.8)
Vocabulary Production	2.2	(0.5)
CDI Conceptual Score (English and Spanish) (mean)		
Vocabulary Comprehension	40.0	(2.5)
Vocabulary Production	3.0	(0.5)
Sample Size		
Parent Interview ASQ-3	**674**	
Parent Interview ASQ-3[c]	**460**	
SCR English CDI	**691**	
SCR Spanish CDI	**113**	

Source: Spring 2009 Parent Interview and Staff-Child Report (SCR).

Note: Sample restricted to the 1-year-old Cohort. Depending on the age of the child on the day of the parent interview, the age range of children at the baseline required administration of the ASQ-3 10-, 12-, 14-, 16-, or 18-month questionnaire. Because of an administration error, parents of children ages 11 and 12 months have only Communication scores. Conceptual scoring gives credit to words children understand or say in English and/or Spanish.

[a] Parent report.

[b] Teacher/home visitor report.

[c] Pertains to ASQ Gross Motor, Fine Motor, Problem Solving, and Personal-Social. Excludes 12-month group.

ASQ-3 = Ages & Stages Questionnaires (Third Edition); CDI = MacArthur-Bates Communicative Development Inventories; SD = standard deviation.

status, or maternal demographic risk factors. However, sample sizes for the other domains are smaller as a result and are also smaller within other age forms (for example, the 10-month-old form includes 36 children).

As defined by the ASQ-3 authors, children whose scores fall two standard deviations or more below the mean might be at risk and require further assessment. Those whose scores fall between one and two standard deviations below the mean are in the monitoring zone. These children might need further observation and might benefit from practicing skills in a specific area of development. (See Box VII.1 for a description of the ASQ-3 scores and scoring procedures.)

Box. VII.1. Measures of Child Cognitive and Language and Social-Emotional Development

- **Ages & Stages Questionnaires, Third Edition** (ASQ-3; Squires et al. 2009). The ASQ-3 is a parent-report tool for screening infants and young children for developmental delays. The 21 questionnaires included in the ASQ-3, which are appropriate for children from 1 month through 5-1/2 years of age, focus on assessment of five key developmental areas: (1) Communication, (2) Gross Motor, (3) Fine Motor, (4) Personal-Social, and (5) Problem Solving. Parents are asked to rate not yet, sometimes, or most of the time on questions such as "Does your child walk along furniture while holding on with only one hand?" There are six items in each of the five developmental areas. The raw score in each developmental area can range from 0 to 60, and the total ASQ-3 score can range from 0 to 300. For 1-year-olds in Baby FACES, the unweighted mean for the total ASQ-3 score is 216.2 (SD = 50.5). For the developmental area scores, the unweighted means range from 40.2 to 50.7 (with SD ranges from 12.9 to 14.2).
  - The cutoff points, which vary by age and indicate the need for further assessment, were derived by subtracting two standard deviations from the mean for each area of development. Children scoring two standard deviations below the mean or lower are in the at-risk range. For example, the cutoff point in Communication is 22.87 for the 10-month and 15.64 for the 12-month scores. The cutoff point of two standard deviations has a sensitivity and specificity of .86. In other words, children whose scores are two standard deviations below the mean or lower have an 86 percent chance of being identified for further assessment. Children whose scores fall in the monitoring zone—defined by the ASQ-3 authors as between one and two standard deviations below the mean—might benefit from practicing skills in a specific area of development. As would be expected, the cutoff point of one standard deviation has a high sensitivity (.98) but a low specificity (.59) (Squires et al. 2009). (Details on the ASQ-3 norming sample and the psychometric properties observed in this study are included in Volume II, Appendix C.)
- **MacArthur-Bates Communicative Development Inventories—Infant Short Form** (CDI) (Fenson et al. 2000). The CDI is designed to assess children's early receptive and expressive language and communication skills through parent report. In the baseline wave of Baby FACES data collection, teachers and home visitors completed the English Infant Short Form (an 89-word vocabulary checklist for 8- to 18-month-olds) for all children. Two measures were derived from this form:
  - Vocabulary Comprehension measures the number of words the child understands. Teachers and home visitors were asked whether the child understands or both understands and says each of 89 specific words. The Baby FACES 1-year-old Cohort's unweighted means are 30.3 (SD = 20.9) and 35.9 (SD = 22.5) for English and Spanish Vocabulary Comprehension, respectively.
  - Vocabulary Production measures the number of words in the child's spoken vocabulary. Early Head Start teachers and home visitors reported whether the child understands and says each of 89 specific words. The raw scores for both Vocabulary Comprehension and Vocabulary Production range from 0 to 89. The Baby FACES 1-year-old Cohort's unweighted means are

2.9 (SD = 6.3) and 2.2 (SD = 3.7) for English and Spanish Vocabulary Production, respectively.

- Baby FACES used the Spanish infant form from the EHSREP, which is a direct translation of the English form. Teachers and home visitors who reported they spoke Spanish completed the English form and also completed the Spanish form for children identified as understanding Spanish (137 Spanish CDIs were completed by staff, and 24 of those were not scored due to extensive missing items). (Details on the CDI norming sample and the psychometric properties observed in this study are included in Volume II, Appendix C.)
- We also derived the CDI conceptual scores for Spanish-speaking children; that is, for each word in the 89-word checklist, we coded the child as understanding or producing the word concept if the Early Head Start staff reported that the child understood or produced the word in English and/or in Spanish. The conceptual scores range from 0 to 89. The unweighted means are 41.4 (SD = 22.0) and 3.0 (SD = 4.8) for Comprehension and Production conceptual scores, respectively.

Measures of Child Social-Emotional Development

- **The Brief Infant Toddler Social Emotional Assessment** (BITSEA) (Briggs-Gowan and Carter 2006) is the screener version of the longer ITSEA, which is designed to detect delays in the acquisition of social-emotional competencies as well as social-emotional and behavior problems and in children 12 to 36 months old. The 42-item parent and staff report focuses on the development of competencies (for example, "hugs or feeds dolls or stuffed animals") as well as problem behaviors (for example, "avoids physical contact").

  - The 31-item BITSEA Problem scale assesses social-emotional and behavioral problems such as aggression, defiance, overactivity, negative emotionality, anxiety, and withdrawal. Higher scores indicate more problems. The 11-item BITSEA Competence scale assesses social-emotional abilities such as empathy, prosocial behaviors, and compliance. Lower scores indicate lesser competence. Respondents are asked to rate each item as not true/rarely, somewhat true/sometimes, or very true/often. The BITSEA is available in both English and Spanish and was administered to both parents and teachers/home visitors in the baseline data collection. The raw score ranges from 0 to 22 for the Competence domain and 0 to 62 for the Problem domain. At Baby FACES baseline, the scores on the BITSEA Parent Form have unweighted means of 10.6 (SD = 6.3) and 16.2 (SD = 3.4) for the Problem and Competence scales, respectively; the scores on the BITSEA Childcare Provider Form have unweighted means of 6.3 (SD = 4.7) and 12.8 (SD = 3.5) for the Problems and Competence scales, respectively.

  - We created cutoff scores to indicate high problems or low competence. Cutoff points were calculated in six-month age bands according to child gender by using cutoff points established with the national standardization sample. For the BITSEA problem scale, the cutoff point is set at scores at the 75th percentile or higher. For the BITSEA competence scale, the cutoff point was set at the 15th percentile or lower. Scoring in the cutoff range in at least one domain indicates screening positive on the BITSEA. (Details on the BITSEA norming sample and the psychometric properties observed in this study are included in Volume II, Appendix C.)

We report the ASQ-3 scores with the following caveat. The ASQ-3 is meant to be distributed to parents prior to discussion with a staff person or interviewer so that they can see from illustrations in the instrument what types of skills or activities are covered and have the opportunities to try out the skills and activities with their children before completing the assessment. In the Baby FACES baseline data collection, the parent interview was conducted by telephone and parents could not see

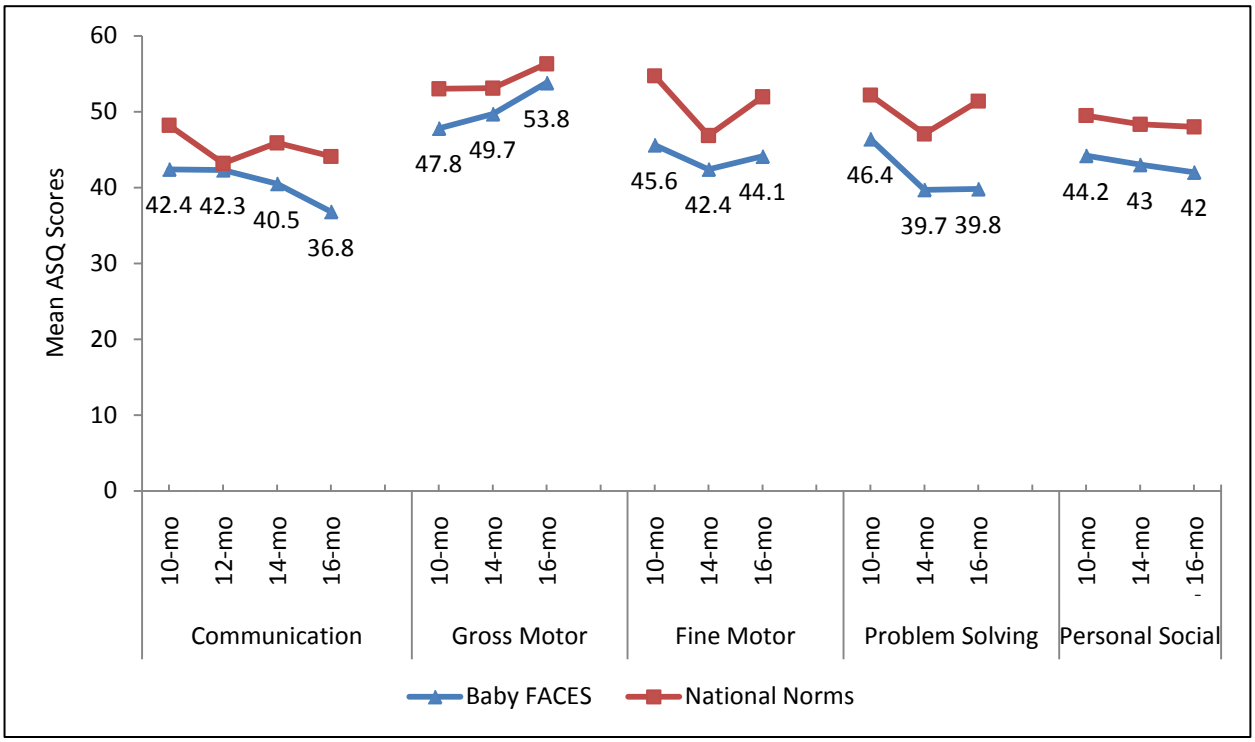
the items and their illustrations. Due to the complexities in scheduling the interview and the uncertainty over the child's age when we reached the parent (and thus the correct form to use), we could not send the forms to parents in advance. Therefore, parents did not know the types of skills or activities covered in the ASQ-3 until the time of the interview. All these factors may contribute to underestimates of children's skills as compared to the ASQ-3 norming sample.

On average, Early Head Start children scored lower than the normative sample within each domain (see Figure VII.1). Children scored about 40 out of a possible 60 for all areas except Gross Motor, for which the mean score is 51. The average ASQ total score for the 1-year-old Cohort is 217 out of a possible 300. Most commonly children scored below the at-risk cutoff in the areas of Fine Motor and Problem Solving (14 and 21, respectively). Approximately 7 to 10 percent of children have scores below the at-risk cutoff in Communication, Personal-Social, and Gross Motor. This is more than the 4 to 6 percent of children in the normative sample with scores below the cutoffs across the developmental areas.[4] More than one-third (36 percent) of children have at least one area below the at-risk cutoff, which is more than twice as much than in the normative sample (15 percent).

About 20 to 25 percent of children have scores in the monitoring zone for the Communication, Fine Motor, Problem Solving, and Personal-Social areas. The percentage of children scoring in the monitoring zone is the lowest in the Gross Motor area (9 percent). Approximately 63 percent of children have at least one area scored in the monitoring zone, which is about twice as much as in the normative sample (32 percent). In Box VII.2 we provide further detail on our cross sectional ASQ findings for the 1-year-old Cohort by age group and compare our findings to norms.

[4] Reports on total score and all subscale scores except Communication omit the 11- to 12-month-old children who received the incorrect form.

Figure VII.1. Comparison of ASQ-3 Mean Score for Each Developmental Area in Baby FACES to National Norms, by Age Within the 1-Year-Old Cohort



Source: Spring 2009 Parent Interview.

Note: Sample restricted to only 10-, 14-, and 16-month-olds in the 1-year-old Cohort except for Communication, which includes all cohort children. The 18-month group has only nine children and was not included in the figure. Depending on the age of the child on the day of the parent interview, the age range of children at the baseline required administration of the ASQ-3 10-, 12-, 14-, 16-, or 18-month questionnaire. Because of an administration error, parents of children ages 11 and 12 months have only Communication scores. The values in the graph are for the Baby FACES sample.

Sample sizes by age group:
10-month: N = 36.
12-month: N = 214.
14-month: N = 248.
16-month: N = 167.

ASQ-3 = Ages & Stages Questionnaires (Third Edition).

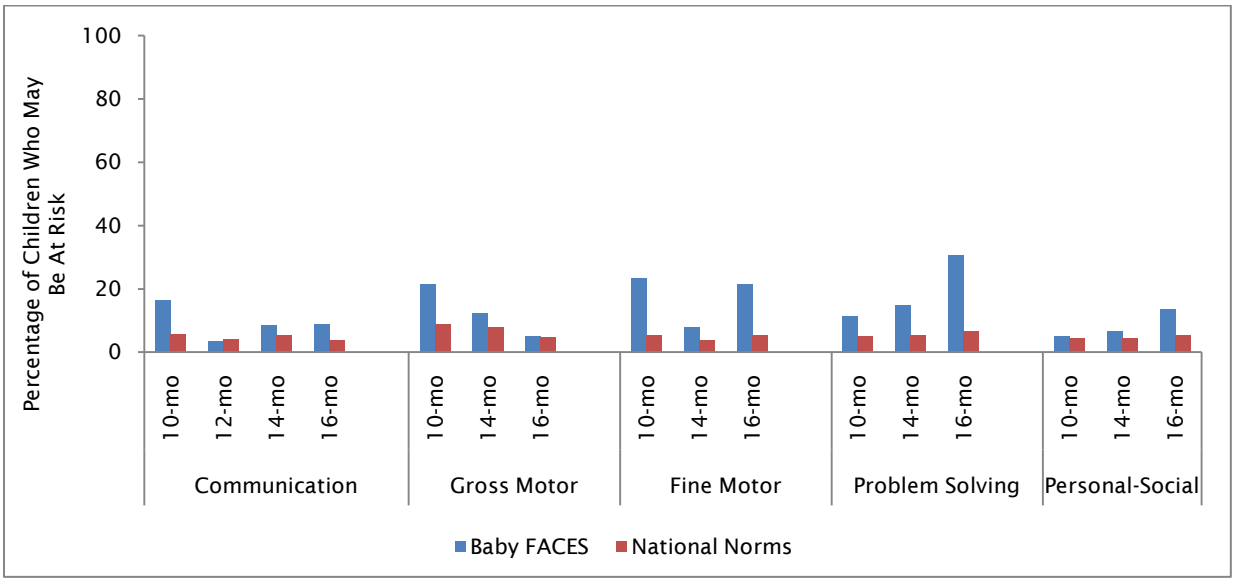
Box VII.2 Variations in the Percentage of Children At-Risk or in the Monitoring Zone and Comparison to National Norms by Age Within the 1-Year-Old Cohort

The percentage of children who may be at risk or are in the monitoring zone varies across age groups but it is not clear if these differences are meaningful. As the first figure shows, for Communication, the at-risk rate is lowest for children in the 12-month-old group and highest for children in the 10-month-old group. For Gross Motor, the rate is highest for children in the 10-month group and lowest for children in the 16-month group. For Fine Motor, fewer children in the 14-month group score below the cutoffs than in the other age groups. For Problem Solving and Personal-Social, more children in the 16-month group might be at risk than in the other two age groups. In summary, the 10-month-old group is more likely to be at risk in Communication and Gross motor, the 16-month-old group is more likely to be at risk in Problem Solving and Personal-Social, and both groups are more likely to be at risk in Fine Motor. In contrast, the at-risk rate in the normative sample does not vary as much. Generally, the at-risk rate is higher across age groups within the 1-year-old cohort than the national norms.

As shown in the second figure, patterns of scores falling in the monitoring zone by age are somewhat different from those described earlier for the at-risk range. The 16-month-old group's scores are more likely to be in the monitoring zone in Communication and Gross Motor; the 10-month-old group in Personal-Social; and both 10- and 16-month-old groups are more likely to be in the monitoring zone in Fine Motor and Problem Solving than is the 14-month-old group. In summary, the 10- and 16-month-old groups are more likely than are 14-month-olds to score in the range for which further monitoring is recommended. However, this pattern is not observed for the national norms. In general, the percentage of children scoring in the monitoring zone is higher than the national norms across age groups.

Because we have relatively small sample sizes within any given age form and because we have a single observation for each child, we cannot tell at this point whether children will continue to score in the at-risk or monitoring zones as they mature. This is a point we will be able to explore in future reports.

Percentage of Children Scoring in the At-Risk Range in Each ASQ-3 Developmental Area Compared to National Norms, Within the 1-Year-Old Cohort

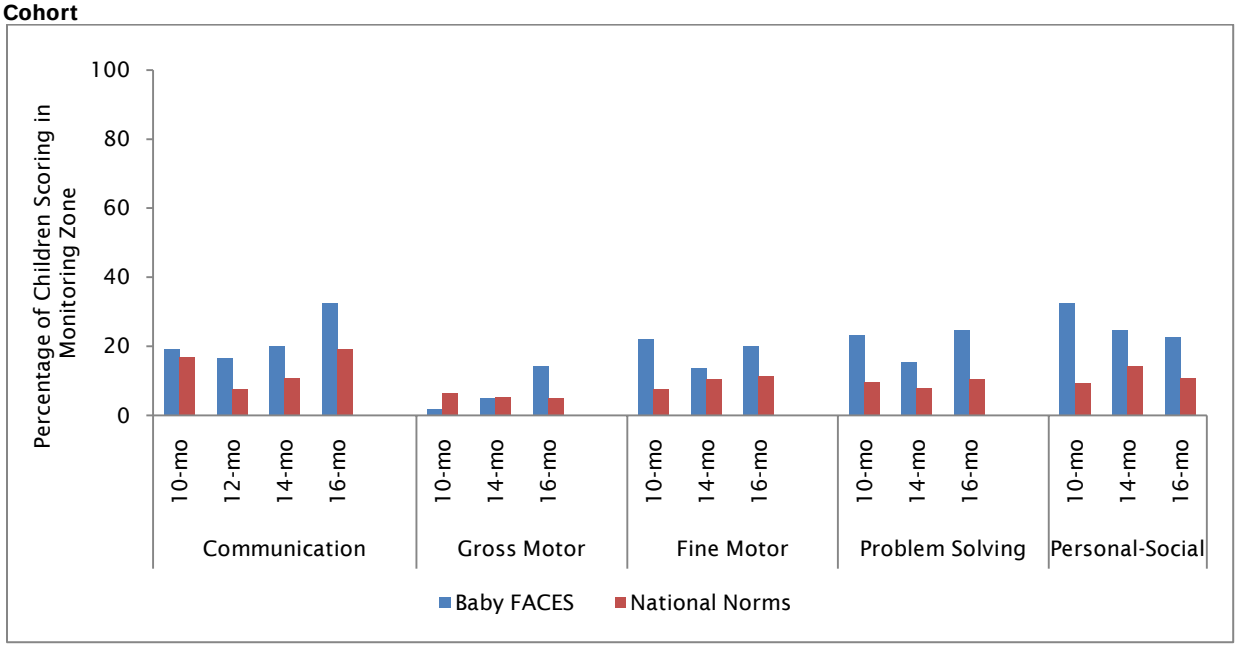


Source: Spring 2009 Parent Interview.

Note: The at-risk range is defined as two standard deviations below the mean or lower. Sample restricted to only 10-, 14-, and 16-month-olds in the 1-year-old Cohort except for Communication, which includes all cohort children. The 18-month group has only 9 children and was not included in the figure. Depending on the age of the child on the day of the parent interview, the age range of children at the baseline required administration of the ASQ-3 10-, 12-, 14-, 16-, or 18-month questionnaire. Because of an administration error, parents of children ages 11 and 12 months only have Communication scores.

Sample sizes by age group: 10-month: N = 36; 12-month: N = 214; 14-month: N = 248; 16-month: N = 167.

ASQ-3 = Ages & Stages Questionnaires (Third Edition).Percentage of Children in the Monitoring Zone as Reported by Parents in Each ASQ-3 Developmental Area Compared to National Norms Within the 1-Year-Old Cohort



Source: Spring 2009 Parent Interview.

Note: The monitoring range is defined as scores between one and two standard deviations below the mean. Sample restricted to the only 10-, 14-, and 16-month-olds in the 1-year-old Cohort except for Communication, which includes all cohort children. The 18-month group has only nine children and was not included in the figure. Depending on the age of the child on the day of the parent interview, the age range of children at the baseline required administration of the ASQ-3 10-, 12-, 14-, 16-, or 18-month questionnaire. Because of an administration error, parents of children ages 11 and 12 months have only Communication scores.

Sample sizes by age group: 10-month: N = 36; 12-month: N = 214; 14-month: N = 248; 16-month: N = 167.
ASQ-3 = Ages & Stages Questionnaires (Third Edition).

According to Staff Reports, Children's Vocabulary Comprehension Is Comparable to National Norms Whereas Vocabulary Production Is Slightly Behind Normative Levels

Language acquisition is key to children's cognitive development and later success in school, and as such we placed a premium on assessing language acquisition in Baby FACES. In the spring 2009 baseline data collection, we relied on Early Head Start staff (children's teachers and home visitors) to report on vocabulary comprehension and production using the Short Form: Level I (for infants) of the MacArthur–Bates Communicative Development Inventories (CDI) (Fenson et al. 2000).[5] Children who were identified as understanding Spanish and whose Early Head Start teacher or home visitor also spoke Spanish were rated using the direct Spanish translation of the English infant form that was used in the EHSREP.[6] Approximately 18 percent of the 1-year-olds were rated on the Spanish version.

Although CDI has norms, we diverged from the usual administration of the instrument in this round of Baby FACES in several ways, making comparisons to norms potentially less meaningful than an examination of raw scores. First, the CDI infant form was originally designed as a parent-report instrument for assessing infants' communicative skills. In this study, however, to reduce the burden on parents, and to obtain a national sample of staff reports, we asked Early Head Start staff to complete it. Second, the norming sample for the Spanish form was drawn from Mexico rather than the United States and norms might not be applicable to the scores we derived from staff reports in Baby FACES. The description of children's CDI scores in this section focuses on raw scores (see Table VII.3); we conclude with a comparison to normative scores.[7] Because young children's language develops rapidly and the age span in the 1-year-old Cohort is predominantly from 10 to 15 months, in this section we also present children's vocabulary comprehension and production by their age at the time of the staff report. (See Box VII.1 for a description of the CDI scores and scoring procedures.)

General Development in Vocabulary Comprehension and Production. Overall, of the 89 words included in the CDI, 1-year-olds understand 31 English words (the median is 28) and say 3 words (the median is 0.2). Children from homes in which English is the only language spoken scored higher on the English CDI than did dual language learners (DLLs) (33 versus 24 on comprehension and 4 versus 2 on production).[8] Children exposed to Spanish at home and who have

[5] In future rounds of data collection, we will include parent reports on the CDI as well as direct assessments of children's language.

[6] There is a current, official, 104-item version of the Spanish short form (Jackson-Maldonado et al. 2003) and the norms are being finalized and summarized in a forthcoming publication (Donna Jackson, personal communication October 2009). We administered the EHSREP version of the Spanish form, which is a direct translation of the 89-item English short form (when the EHSREP was conducted, there was no official Spanish version of the CDI short form). We have a Spanish CDI for 137 of the 1-year-old Cohort children (this is 66 percent of the children identified as speaking Spanish at home). For future rounds of data collection, we will be using the official CDI short form for toddlers.

[7] There are 86 words in the Baby FACES Spanish CDI form administered at the baseline that overlap with the full version official Spanish CDI. The developer of the official Spanish CDI helped us create the virtual norms for the Baby FACES Spanish CDI by using those 86 overlapping words. The Baby FACES Spanish CDI scores that are compared to the normative scores are based on these 86 words.

[8] Here we included children from families where any language other than English is spoken in the DLL definition.

a Spanish-speaking Early Head Start teacher or home visitor on average understand 35 of the 89 words translated into Spanish (with a median of 35) and say 2 words (with a median of 0). Children in Spanish-speaking homes understand more words overall across languages than children in English-speaking homes (vocabulary comprehension conceptual scores[9] averaged 40 and the vocabulary production scores averaged 3 compared to 33 words understood by children in English-speaking homes).[10]

Vocabulary Comprehension by Age. As expected, children's receptive language skills increase with age. English vocabulary comprehension scores for children from English- and Spanish-speaking homes are generally higher for older children in our sample (see Figure VII.2; note that age groups with fewer than 10 children are not included in the figure). One exception is English vocabulary comprehension for children in Spanish-speaking homes at 15 months. For this group, the mean score is lower than that at 14 months. Older children in Spanish-speaking homes have higher Spanish vocabulary comprehension scores, and conceptual scores in comprehension are also higher, with an exception at 11 months, when the scores are lower than are those at 10 months. The sample size for the Spanish CDI is relatively small—most of the age groups have about 20 to 25 children. The 15-month-old children's comprehension scores in English and Spanish and conceptually scored were almost twice those of the 10-month-olds, which shows rapid growth in vocabulary comprehension in this period.

Vocabulary Comprehension by DLL Status. Early Head Start staff reported that children from English-speaking homes understand more English words than do children in Spanish-speaking homes (see Figure VII.2). Staff also reported that children in Spanish-speaking homes understand more words in Spanish than in English for all ages except 11 months, when they reported that children understand about an equal number of words in both languages. However, children in Spanish-speaking homes understand more words in Spanish and more word concepts (as captured by the comprehension conceptual scores) than children from English-speaking homes understand in English.[11]

Expressive Language by Age and DLL Status. Children's expressive language skills develop more slowly than their comprehension. Vocabulary production for the 1-year-old Cohort assessed by staff before 12 months in either English or Spanish was very low; regardless of age, no children spoke more than 8 of the CDI words on average. However, we note differences in expressive language by home language. By 15 months, children from Spanish-speaking homes say fewer words than children from English-speaking homes, even with conceptual scoring.[12]

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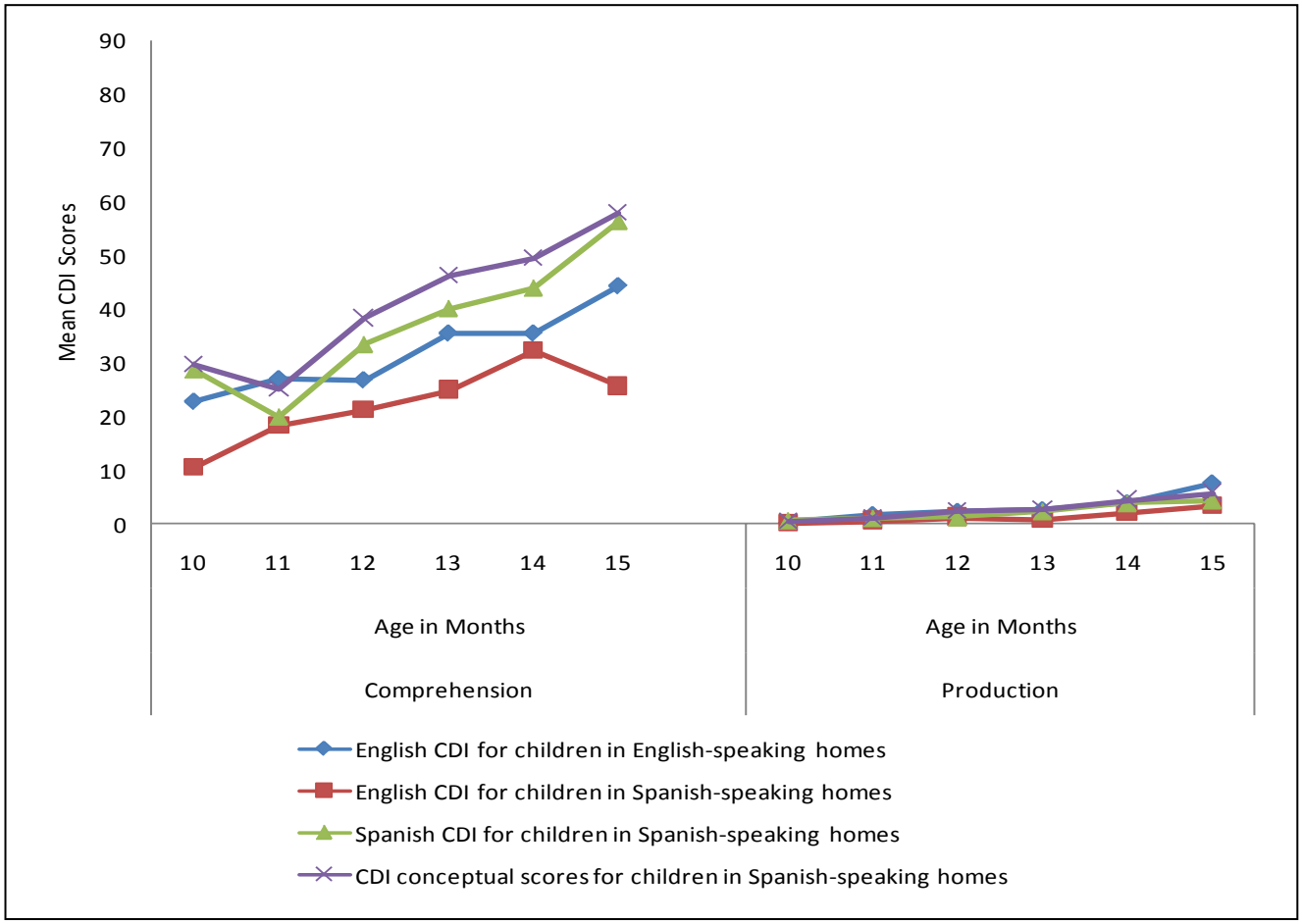
[9] In conceptual scoring, we coded a child as understanding or producing the word concept if the Early Head Start staff reported that the child understood or produced the word in English and/or Spanish for each word in the 89-word checklist.

[10] Generally we will refer to "children in English-speaking homes" to indicate children who are exposed only to English and "children in Spanish-speaking homes" to refer to children in environments in which Spanish is spoken, although English may be spoken as well.

[11] Because the total number of words children know varies with age, here we describe overall trends; the figures show the total number of words at each age.

[12] For these comparisons we omitted the children in homes speaking languages other than English or Spanish.

Figure VII.2. Mean English and Spanish CDI Scores, by Age Within the 1-Year-Old Cohort



Source: Spring 2009 Staff-Child Report.

Note: Sample restricted to the 1-year-old Cohort. Groups with fewer than 10 children (16-, 17-, and 18-month-olds) are not shown in the figure. Each symbol represents a different age group of children in the Baby FACES sample.

Sample sizes of children in English-speaking homes on English CDI by age group: 10-month: N = 62; 11-month: N = 126; 12-month: N = 120; 13-month: N = 117; 14-month: N = 150; 15-month: N = 88.

Sample size of children in Spanish-speaking homes on English CDI by age group: 10-month: N = 16; 11-month: N = 40; 12-month: N = 37; 13-month: N = 31; 14-month: N = 39; 15-month: N = 39.

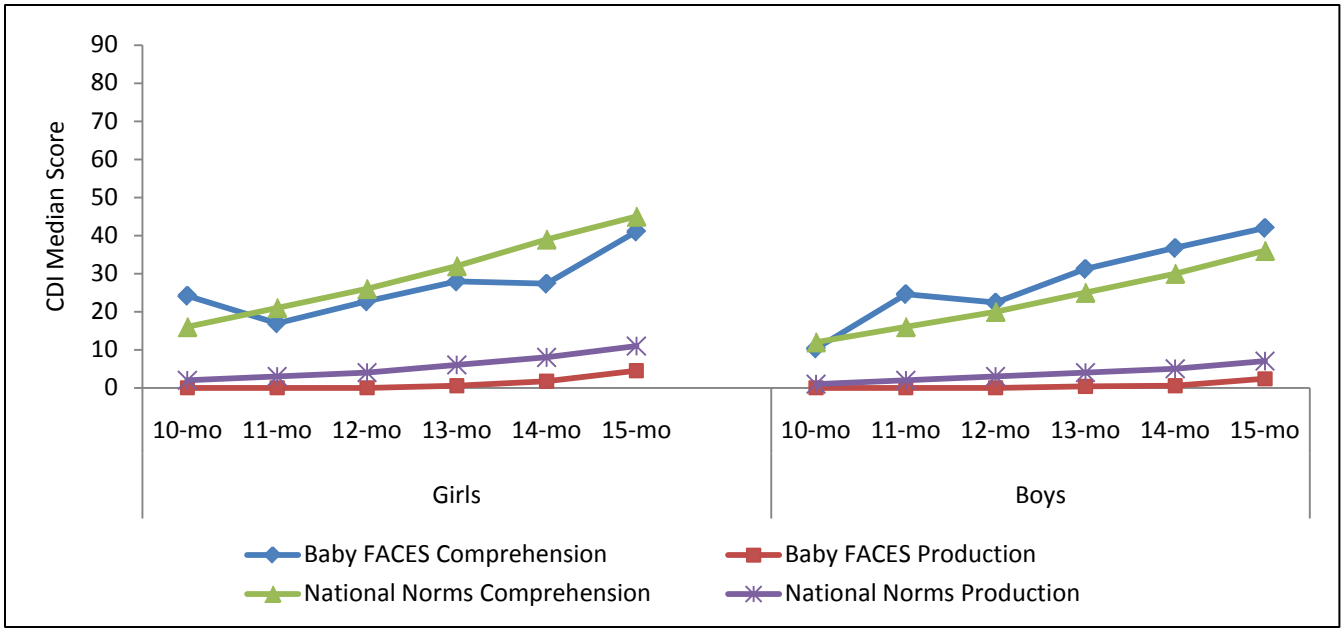
Sample sizes of children in Spanish-speaking homes on Spanish CDI by age group: 10-month: N = 11; 11-month: N = 21; 12-month: N = 20; 13-month: N = 20; 14-month: N = 23; 15-month: N = 12.

Sample sizes of children in Spanish-speaking homes on Spanish CDI by age group: 10-month: N = 11; 11-month: N = 22; 12-month: N = 22; 13-month: N = 21; 14-month: N = 25; 15-month: N = 15.

CDI = MacArthur-Bates Communicative Development Inventories.

Comparison to National Norms. Compared to the national norms, Early Head Start children's vocabulary comprehension is slightly lower for girls and slightly higher for boys in English and higher or comparable in Spanish. Figures VII.3 and VII.4 compare the CDI median scores of study children to the national norms by gender. Age groups with fewer than 10 children are not included in these figures. Early Head Start staff rated Spanish comprehension of girls older than 12 months even higher than the national norms. With regard to vocabulary production, the normative sample children are just starting to say words, whereas most of our Early Head Start children (especially the children rated in Spanish) in this age range have not started talking yet and fall slightly behind the norms.

Figure VII.3. Median English CDI Scores, by Age and Gender Within the 1-Year-Old Cohort



Source: Spring 2009 Staff-Child Report.

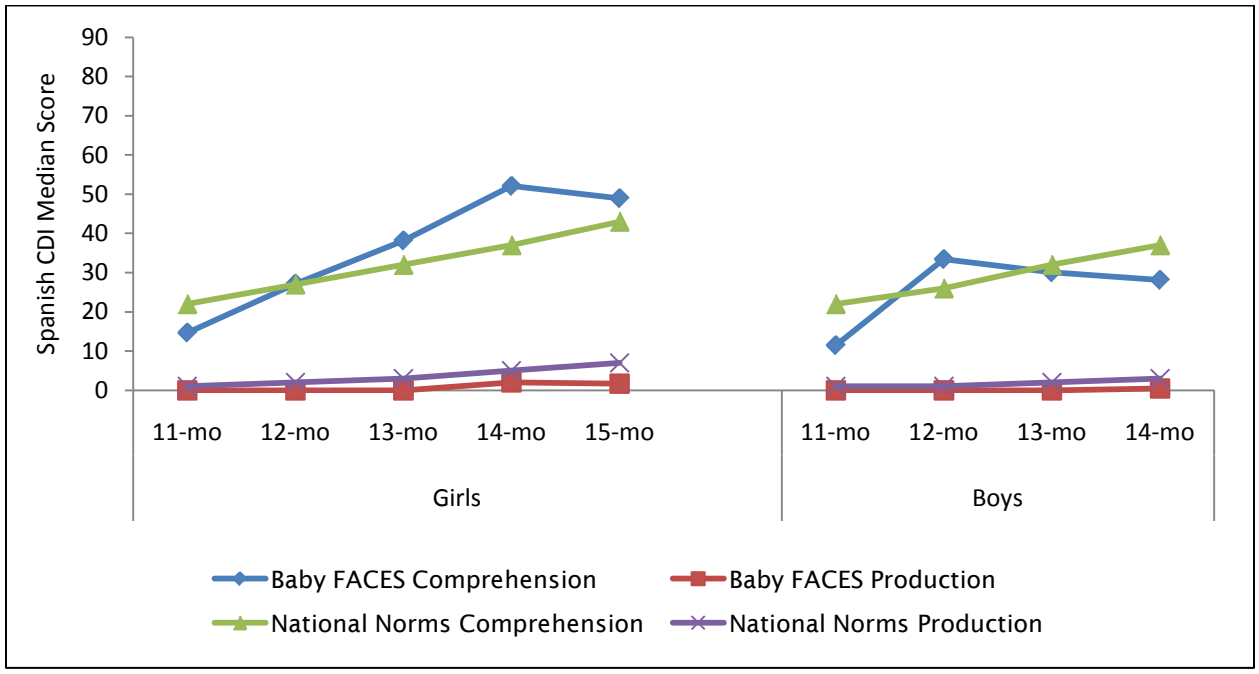
Note: Sample restricted to the 1-year-old Cohort. Groups with fewer than 10 children (16-, 17-, and 18-month-olds) are not shown in the figure.

Sample sizes for girls by age group:
10-month: N = 31.
11-month: N = 59.
12-month: N = 61.
13-month: N = 59.
14-month: N = 82.
15-month: N = 44.

Sample sizes for boys by age group:
10-month: N = 38.
11-month: N = 78.
12-month: N = 69.
13-month: N = 64.
14-month: N = 81.
15-month: N = 49.

CDI = MacArthur-Bates Communicative Development Inventories.

Figure VII.4. Median Spanish CDI Scores, by Age and Gender Within the 1-Year-Old Cohort



Source: Spring 2009 Staff-Child Report.

Note: Sample restricted to the 1-year-old Cohort. Groups with fewer than 10 children (10-, 16-, 17-, and 18-month-olds for both girls and boys and 15-month-olds for boys) are not shown in the figure. We omitted children in homes that did not speak English or Spanish.

Sample sizes for girls by age group:
11-month: N = 10.
12-month: N = 12.
13-month: N = 10.
14-month: N = 15.
15-month: N = 12.

Sample sizes for boys by age group:
11-month: N = 16.
12-month: N = 15.
13-month: N = 14.
14-month: N = 12.

CDI = MacArthur-Bates Communicative Development Inventories.

Early Head Start Children Are at the National Norms for Social-Emotional Competence and Problems

We gathered information on children's social-emotional development both from parents and teachers and home visitors using the Brief Infant Toddler Social Emotional Assessment (BITSEA) (Briggs-Gowan and Carter 2006). The BITSEA measures children's emerging social-emotional competence as well as social-emotional and behavior problems. (See Box VII.1 for a description of the BITSEA scores and scoring procedures.) Parents and staff rated 1-year-olds' competence and problems using the parent and staff forms, respectively. We report the raw scores as well as the cutoff scores that indicate problems for both forms. For the BITSEA Problem scale, the cutoff point indicates scores in the 75th percentile or higher in the national standardization sample. For the Competence scale, the cutoff point indicates scores at or lower than the 15th percentile in the

national standardization sample, which may suggest delays in social-emotional competence. Combining the cutoffs in both domains (that is, high levels of problems or low competence) yields a positive screening indicator for the BITSEA. Here we report the percentage of children who screen positive on both the parent and staff forms (see Table VII.4).

Parents reported children as having more problems but greater competence than did teachers and home visitors. According to parents, approximately one-quarter of children score above the cutoff score on the Problem scale, comparable to the national norm of 25 percent. In contrast, staff ratings placed only 13 percent of children above the cutoff score on this scale. On the Competence scale, parents reported only 10 percent of children have scores below the cutoffs whereas staff reported 16 percent of children having scores below cutoffs (staff ratings are closer to the national norm of 15 percent). Based on parent reports, approximately one-third of the 1-year-olds screen positive on the BITSEA; according to staff ratings, only one-quarter of children do. Although not in complete alignment, ratings from parents and Early Head Start staff might provide different perspectives on children's social-emotional competence and problems because the children are observed in different

Table VII.4. Child Social-Emotional Development at Age 1

Measures	Weighted Means or Percentages	(Standard Error)
Parent-Reported BITSEA Raw Score		
Problem domain	10.3	(0.3)
Competence domain	16.1	(0.2)
Staff-Reported BITSEA Raw Score		
Problem domain	6.2	(0.3)
Competence domain	12.8	(0.2)
Parent-Reported BITSEA Cutoff Score		
Percentage above Problem domain cutoff	26.4	(2.2)
Percentage below Competence domain cutoff	10.3	(1.7)
Staff-Reported BITSEA Cutoff Score		
Percentage above Problem domain cutoff	13.1	(1.9)
Percentage below Competence domain cutoff	16.0	(1.6)
Parent-Reported BITSEA Screening Positive (percentage)	33.2	(2.8)
Staff-Reported BITSEA Screening Positive (percentage)	24.8	(2.0)
Sample Size		
Parent interview	**673–679**	
SCR	**628–739**	

Source: Spring 2009 Parent Interview and Staff-Child Report (SCR).

Note: Sample restricted to the 1-year-old Cohort. BITSEA raw scores range from 0 to 22 for the Competence domain and 0 to 62 for the Problem domain. The Problem domain cutoff score is defined as scores at the 75th percentile or higher. The Competence domain cutoff score is defined as scores at the 15th percentile or lower. A positive screening on the BITSEA indicates that children may have delays in social-emotional development.

BITSEA = Brief Infant-Toddler Social and Emotional Assessment.

contexts. The parents' report is not correlated with staff reports on the Problem scale ($r = 0.01$; n.s.), and the correlations between the two ratings on the Competence scale are low ($r = 0.20$; $p < .001$). These correlations are lower than those found in the BITSEA validation study (Briggs-Gowan et al. 2004), which shows that the parent and child care provider correlation was 0.59 for Competence and 0.28 for Problems. Despite the differences in parent and staff reports, children enrolled in Early Head Start in spring 2009 score as well as or even better than the national norms in social-emotional development as measured by the BITSEA.[13] (See Box VII.3 for a comparison of BITSEA scores by staff self-reported depressive symptoms.)

Box VII.3. Staff Depressive Symptoms and Child Social-Emotional and Language Development as Reported by Early Head Start Staff

We examined the relationships between Early Head Start staff's self-reported depressive symptoms and their reports of children's social-emotional and language development. Some research evidence demonstrates links between caregivers' psychological well-being and their interactions with children (Gerber et al. 2007). Our interest was to learn if there were relationships to child development. On one hand, caregivers' depressive symptoms might pose risks for children's functioning. On the other hand, depression might alter staff perceptions of children's development—a causal question that we cannot answer here. Overall findings show that there are no differences across groups of staff no or mild versus moderate or severe depressive symptoms in their reports of children's social-emotional and language development. However, when we examine the cutoff scores, staff with moderate or severe are more likely to rate children as screening positive on the BITSEA. Again, we cannot determine the nature or direction of these relationships, and given a nonsignificant overall comparison we are cautious in our interpretation. It is possible that staff with more depressive symptoms are less able to facilitate children's development, that staff with these symptoms perceive children to have lower abilities than they do, or that there is a third variable associated with both depressive symptoms and development (one example might be that working in less supportive environments could negatively affect both staff depression and child development). We summarize our findings below.

Social-Emotional Development

A one-way *t*-test indicates that staff-reported BITSEA raw scores were not associated with their levels of depressive symptoms.

Staff who reported moderate or severe depressive symptoms are more likely to rate children as screening positive on BITSEA than are those who reported mild or no depressive symptoms (41 and 24 percent of children, respectively, were rated as screening positive by staff reporting moderate to severe and no to mild depressive symptoms).

Language Development

A *t*-test indicates that staff-reported Vocabulary Comprehension and Production scores do not differ by their levels of depressive symptoms.

[13] To explore the question of whether home visitors would be more like parents in their ratings because they see children in a similar environmental context, we correlated parent and home visitor ratings separately from teachers' ratings. Although the correlations for problem behaviors are higher than the correlation that included all staff, it was still quite low ($r = 0.13$), as was the correlation for competence ($r = 0.17$).

Most Families Enrolled in Early Head Start in Spring 2009 Are Functioning Well

Understanding the health, well-being, and functioning of families enrolled in Early Head Start provides insight into the strengths and needs that families bring to the program. Parents' health status and health care practices may influence children's well-being directly or may be associated with children's well-being through the physical and emotional resources that parents can provide for their children. Parents' mental health and family functioning may also affect parents' interactions with children (Egeland and Kruetzer 1991; Kahn et al. 2004). Programs work to find ways to build upon these strengths and address needs. In this chapter, we describe parents' well-being in these areas. Parents of both newborns and 1-year-olds in the Baby FACES sample provided this information. Future work will use this information to understand whether Early Head Start services are associated with family needs and how family well-being is associated with child outcomes.

Parents Generally Are in Good Physical and Mental Health

At baseline, parents reported they are in good to very good health. Parents reported their general health status on a 5-point scale ranging from excellent to poor. The mean ratings are between good and very good (see Table VII.5). More than half (53 percent) of parents described their physical health as excellent or very good, and 11 percent reported fair or poor health. Slightly more parents of 1-year-olds reported fair or poor health than parents of newborns (12 versus 8 percent; $p < .10$). Most (80 percent) families have a regular health care provider (which is similar to the 82 percent who reported having a regular health care provider in the EHSREP at 14 months), and 79 percent have at least one family member who visited a dentist in the past year (slightly lower than the 88 percent reported in the EHSREP at 14 months).

Nearly all families have some type of health insurance. The majority (79 percent) of families are covered by public health insurance (Medicaid, the Children's Health Insurance Program [CHIP], Military Health System, and Indian Health Service), and fewer than half (42 percent) of families have private health insurance. Approximately 7 percent of the families do not have any health insurance. Of those with health insurance, 9 percent of parents noted that Early Head Start assisted them in finding it. About 7 percent of parents reported that there were times in the past year when family members needed health care but could not obtain it due to financial or insurance issues. Interestingly, this group had some form of health insurance.

Parental Depression. We asked parents to report symptoms of depression in the previous week using the Center for Epidemiologic Studies Depression Scale-Short Form (CESD-SF) (Ross et al. 1983). Overall, parents scored 5.4 on average, which is in the mildly depressed range. Most (82 percent) of parents across both cohorts have scores below the level indicating moderate to severe depressive symptoms (see Table VII.6). Approximately 18 percent of parents reported moderate to severe depressive symptoms. This percentage is substantially lower than the rate in EHSREP; when their children were 14 months old, 32 percent of EHSREP respondents—the mother in almost all cases—reported moderate to severe symptoms of depression. In the Baby FACES study,

Table VII.5. Family Health Status Is Average or Better; Most Have Accessed Health Care Services in the Past Year

Parent Characteristics	Weighted Means or Percentages[a] (Standard Error)		
	Overall	Newborn Cohort	1-year-old Cohort
Parent's Health Status (mean rating)	2.3 (0.0)	2.2 (0.1)	2.4 (0.0)
Percentage Parents in Excellent or Very Good Health	53.6 (1.8)	59.7 (4.7)	52.1 (2.0)
Percentage Parents in Fair or Poor Health	11.3 (1.4)	8.0 (2.3)	12.1 (1.6)
Percentage of Families that Have a Regular Health Care Provider	79.6 (2.1)	82.8 (2.5)	78.5 (2.3)
Percentage of Families in Which at Least One Family Member Has Visited a Dentist in the Past Year	78.7 (1.7)	77.3 (4.3)	78.9 (1.8)
Family's Health Insurance Status[b] (percentage)			
A public/government insurance	79.2 (1.7)	84.1 (3.0)	78.0 (1.8)
A private health insurance plan	42.3 (1.8)	35.0 (4.6)	44.0 (1.7)
No health insurance	7.1 (1.1)	5.3 (1.8)	7.6 (1.3)
Early Head Start Has Helped to Find Health Insurance for Those Who Have It[c] (percentage)	9.3 (1.1)	8.3 (2.4)	9.5 (1.2)
Family Member Needs Health Care but Could Not Obtain It (percentage)	6.8 (0.9)	5.5 (1.8)	7.2 (1.0)
Sample Size	**813–841**	**165–173**	**648–669**

Source: Spring 2009 Parent Interview.

[a] All table entries are percentages unless noted otherwise.

[b] The estimates are not mutually exclusive and hence sum to more than the estimated percentage of parents with coverage.

[c] N = 764 overall.

mothers of newborns were more slightly more likely to report moderate to severe levels of depressive symptoms than were mothers of 1-year-olds (23 versus 16 percent; $p < .10$)[14], possibly due to postpartum issues. Mothers of newborns also reported higher CESD-SF raw scores than did mothers of 1-year-olds (6.4 versus 5.2; $p < .05$). See Box VII.4 for a description of parent well-being measures.

Parenting Stress and Dysfunctional Interactions. Parental psychological stress and problems in the parent-child relationship are moderate in parents of Early Head Start children. The degree of stress in parent-child relationships is measured through the parents' reports on the Parenting Stress Index–Short Form (PSI-SF) (Abidin 1995). We include two subscales in the Baby FACES study: Parental Distress and Parent-Child Dysfunctional Interaction. On average, parents reported moderate parental psychological distress and dysfunctional interactions, with means of 11 and 9, respectively. The levels of parent-child dysfunctional interaction in Baby FACES are similar

[14] Based on a chi-square: $\chi^2_{(3, 823)} = 9.11$.

to those reported in the EHSREP 14-month followup; however, parent-reported parental distress is lower in Baby FACES than in the EHSREP (in which the mean was 14). This is consistent with the depression finding reported earlier. It is not clear why reported depressive symptoms and parenting stress are lower in parents of children in Baby FACES than was reported by parents in the EHSREP.

Table VII.6. Parents Report Moderate Rates of Depression and Low Levels of Substance Use

Measures	Weighted Means or Percentages[a] (Standard Error)		
	Overall	Newborn Cohort	1-Year-Old Cohort
Parent Depression and Stress			
CESD-SF raw score	5.4 (0.2)	6.4 (0.6)	5.2 (0.2)
CESD-SF: moderate to severe depressive symptoms (percentage)	17.6 (1.3)	23.4 (3.8)	16.3 (1.5)
CESD-SF: no or mild depressive symptoms (percentage)	82.4 (1.3)	76.6 (3.8)	83.7 (1.5)
PSI: parental distress raw score	10.8 (0.3)	--	--
PSI: parent-child dysfunctional interaction raw score	8.7 (0.2)	--	--
Parent Substance Use (Percentages)			
Smoking during pregnancy	12.0 (1.6)	14.6 (3.5)	11.5 (1.7)
Drinking during pregnancy	1.6 (0.5)	2.0 (1.5)	1.5 (0.5)
Smoking inside the home	17.2 (2.8)	13.9 (5.6)	17.9 (3.0)
Currently smoking	22.2 (1.9)	19.1 (3.6)	22.9 (2.0)
Currently drinking	21.8 (1.8)	14.3 (2.8)	23.6 (2.2)
5 or more drinks per day	1.3 (0.4)	0.2 (0.2)	1.5 (0.5)
Drug use in the past year	3.2 (0.7)	6.9 (2.1)	2.3 (0.6)
Ever had had a drinking or drug problem	7.2 (1.3)	8.6 (2.1)	6.8 (1.5)
Parents Received (percentages)			
Any mental health treatment	20.0 (2.0)	21.1 (4.3)	19.8 (2.0)
Treatment for an emotional, personal, or mental problem	16.2 (1.7)	15.3 (3.9)	16.5 (1.7)
Treatment for a drug or alcohol problem	7.8 (1.3)	8.0 (2.7)	7.7 (1.4)
Percentage Early Head Start Helped to Get the Treatment for Those Who Received Treatment[b]	20.1 (3.0)	23.3 (6.6)	19.3 (3.6)
Sample Size	**649–825**	**143–171**	**631–654**

Source: Spring 2009 Parent Interview.

Note: CESD-SF severe depressive symptoms are defined as scores of 15 or higher; moderate depressive symptoms as scores of 10 or higher but lower than 15; mild depressive symptoms as scores of 5 or higher but lower than 10; no depressive symptoms as scores lower than 5.

[a] All table entries are percentages unless noted otherwise.

[b] N = 165 overall.

CESD-SF = Center for Epidemiologic Studies Depression Scale–Short Form; PSI = Parenting Stress Index.

Box VII.4. Measures of Parent Mental Health and Family Functioning

- The **Center for Epidemiologic Studies Depression Scale** (CES-D) (Radloff 1977) is a self-administered screening tool used to identify symptoms of depression or psychological distress. The full version of the CES-D consists of 20 items, and the short form (CESD-SF) (Ross et al. 1983) has 12 items. Respondents are asked to rate how often each of the items applied to them in the past week, on a 4-point scale from rarely or never (score of 0) to most or all of the time (score of 3). Symptoms include poor appetite, restless sleep, loneliness, sadness, and lack of energy. Raw scores range from 0 to 36 for the short form, with higher scores indicating more depressive symptoms. The unweighted mean for raw scores is 5.5 (SD = 5.6).

  Parents with scores on the CES-D short form of 10 or higher are identified as having moderate to severe depressive symptoms; those with scores 9 or lower are identified as having no or mild depressive symptoms.

- The **Parenting Stress Index–Short Form** (PSI-SF) measures the degree of stress in parent-child relationships stemming from three possible sources: (1) the child's challenging temperament, (2) parental depression, and (3) negatively reinforcing parent-child interactions (Abidin 1995). We included two subscales in Baby FACES:

  - The Parental Distress subscale (5 items) measures the level of distress the parent is feeling in his or her role as a parent, including a low sense of competence and stress because of perceived restrictions stemming from parenting. The parent answers whether or not he or she agrees with statements such as "You have been unable to do new and different things" and "You feel trapped by your responsibilities as a parent." Parents rate each item on a 5-point scale from strongly disagree to strongly agree. Scores can range from 5 to 25. Higher scores indicate high levels of parental distress. The unweighted mean for Baby FACES parent ratings of Parental Distress is 10.9 (SD = 4.6).
  - The Parent-Child Dysfunctional Interaction subscale (6 items) measures the parent's perception that the child does not meet expectations and that interactions with the child do not reinforce the parent. The parent answers whether he or she agrees or disagrees with statements such as "Most times, you feel that your child does not like you and does not want to be close to you" and "When you do things for your child you get the feeling that your efforts are not appreciated very much." Parents rate each item on a 5-point scale from strongly disagree to strongly agree. Scores can range from 6 to 30. Higher scores indicate higher levels of parent-child dysfunctional interaction. The unweighted mean for Parent-Child Dysfunctional Interaction is 8.8 (SD = 4.2).

- The **Family Environment Scale, Family Conflict Subscale** (FES) (Moos and Moos 2002) was designed to measure the social and environmental characteristics of families, including family relationships, emphases within the family on aspects of personal development that can be supported by families, and maintenance of the family system. The Family Conflict subscale measures the extent to which the open expression of anger and aggression and conflict-filled interactions are characteristic of the family. Parents rated items on a 4-point scale, in which 4 indicates higher levels of agreement with statements such as "We fight a lot" and "We sometimes hit each other." The unweighted mean for Family Conflict as reported by Baby FACES parents is 1.6 (SD = 0.5).

- The **Parenting Alliance Measure** (PAM) (Abidin and Konold 1999) is a 20-item self-report instrument that measures a parent's perspective on how cooperative, communicative, and mutually respectful he or she is with his or her partner in regard to caring for their children. We included 10 items of the PAM in Baby FACES. Parents responded to the items such as "(The father/mother) and I are a good team" and "(The father/mother) makes my job of being a parent easier" on a 5-point rating scale ranging from strongly agree to strongly disagree." The items are reverse coded and raw scores range from 10 to 50, with higher scores indicate stronger and more positive parenting alliance. The unweighted mean for the PAM is 46.0 (SD = 5.8).

- **Social support** is measured by asking parents questions about whether there is someone they can count on for physical and emotional help. Parents rated the 13 items on a 3-point scale, with possible

responses of not at all, sometimes, or all or most of the time. Raw scores range from 13 to 39, with higher scores indicating higher levels of social support. The unweighted mean is 30.9 (SD = 7.4).

- **Problems with people** are measured by parents' report of whether they are having problems with a range of different people, including neighbors, landlord, current or past spouse or partner, others living in the home, bill collectors, or coworkers. We present the proportion of parents who reported they are having no problems with any of these people.
- **Community participation** is measured by asking parents about their participation in community organizations spanning many different areas (religious groups; a community group, such as a tenants' association; a school group, such as PTA, Early Head Start, or another early childhood parent group; or a political advocacy group). We present the proportion of parents who reported that they participated in any of these organizations.

Smoking and Substance Use. Parents also reported whether they smoked or drank alcohol during pregnancy and at the time of their interview and if they had any current substance use problems (see Table VII.6). Twelve percent of mothers reported smoking in the last three months of their pregnancy. The prevalence of drinking during pregnancy was much lower, at only 2 percent. The rates of smoking and drinking during pregnancy among study mothers are considerably lower than the national rates among pregnant women, which are 22 and 11 percent for smoking and drinking, respectively (Substance Abuse and Mental Health Services Administration 2009).

Slightly more than 20 percent of parents reported smoking at the time of their interview, although fewer (17 percent) reported that either they or someone else smokes inside their home. More than 20 percent of parents reported drinking at the time of their interview. Only about 1 percent of parents reported usually having five or more drinks when they drank alcohol. Three percent of parents have used drugs in the past year. Seven percent reported having ever had a drinking or drug problem. The prevalence of current substance use among Early Head Start mothers is substantively lower than the national data on current substance use rate among female adults (32, 58, and 6 percent for smoking, drinking, and drug use, respectively) (Substance Abuse and Mental Health Services Administration 2009).

Mental Health and Substance Abuse Treatment. Approximately 20 percent of parents received some type of mental health treatment in the prior year: 16 percent of them were treated for an emotional, personal, or mental problem, and 8 percent were treated for a drug or alcohol problem. (Note that these reporting categories were not mutually exclusive.) Early Head Start helped 20 percent of these families in obtaining treatment.

Early Head Start Parents Reported Positive Family Functioning

The family functioning measures we used in Baby FACES include parent reports of family conflict, attitudes toward the other parent about raising the child, level of social support, problems and conflict with others, and level of community participation (see Box VII.4). Early Head Start parents reported positive interpersonal and family functioning and high levels of social support (see Table VII.7). Parents reported a low level of family conflict, averaging 1.6 on a scale of 1 to 4 on the Family Conflict Scale (Moos and Moos 2002). Thirteen percent of parents reported a Family Conflict Scale score higher than 2.

Table VII.7. Parents Report High Family Functioning and Social Supports, Low Community Participation

Measures	Weighted Means or Percentages (Standard Error)		
	Overall	Newborn Cohort	1-year-old Cohort
FES-Family Conflict Raw Score	1.6 (0.1)	--	--
Percentage with FES Score over 2	13.3 (3.3)	--	--
Parenting Alliance Measure (PAM) Raw Score	46.0 (0.3)	--	--
Social Support Raw Score	30.8 (0.3)	31.5 (0.8)	30.6 (0.4)
Percentage with No Problems with Key People	71.6 (1.9)	68.1 (4.0)	72.4 (2.0)
Percentage with Any Community Participation	19.8 (1.6)	18.2 (4.0)	20.2 (1.6)
Sample Size			
Parent Interview	**825**	**171**	**654**
FES-Family Conflict[a]	**155**		

Source: Spring 2009 Parent Interview.

Note: The Family Environment Scale Family Conflict score can range from 1 to 4, with 4 meaning more conflict. The Parenting Alliance Measure can range from 10 to 50, with higher scores indicating stronger parenting alliance. Social support can range from 13 to 39, and higher scores indicate more social support.

[a] Asked only of parents of newborns in spring 2009.

FES = Family Environment Scale.

Parents of 1-year-olds were also positive in their assessments of their relationship with coparents regarding cooperatively raising a child. As described in Chapter VI, nearly half of children in Baby FACES live with both biological parents. On the Parenting Alliance Measure (Abidin and Konold 1999), parents living in two-parent households reported a mean of 46 out of 50, suggesting good coparent relationships.[15]

Parents have high levels of support both for practical day-to-day tasks necessary to keep a household running and for emotional support (mean of 31 out of 39 on our social support measure). They have low levels of conflict with a variety of people including housemates, neighbors, and coworkers; more than two-thirds (72 percent) are not having problems with any of the people we asked about. However, parents are relatively uninvolved in community organizations, with only 20 percent reporting involvement in any community groups (including Early Head Start parent groups). This suggests an opportunity to connect parents to their community supports.

[15] The Parenting Alliance Measure was only administered if the child was living with both biological parents.

Early Head Start Parents Reported Favorable Routines and Safety Precautions; Parenting Beliefs Are a Mix of Traditional and Progressive

Children's families and home environments can strongly influence their development. Accordingly, we asked parents of 1-year-olds to tell us about their family routines, parenting behavior and beliefs, and family safety practices (see Box VII.5).

Box VII.5 Measures of Parenting Knowledge and Behavior

- The **Parental Modernity Scale** (PMS) (Schaefer and Edgerton 1985) is a 30-item measure of parents' attitudes toward children and child-rearing practices (traditional, authoritarian parental beliefs and progressive, democratic beliefs). Parents responded to items on a 5-point scale ranging from strongly disagree to strongly agree. We included 10 of the 30 items in Baby FACES that yield two subscales: (1) Traditional Beliefs and (2) Progressive Beliefs. Raw scores range from 5 to 25 for each scale, with higher scores indicating more traditional beliefs and more progressive beliefs, respectively. The unweighted means are 19.8 (SD = 3.6) and 20.1 (SD = 3.5) for Traditional and Progressive Beliefs, respectively.
- **Spanked Child in Past Week** measures parent's report that she or he used physical punishment in the past week by spanking the child.

Most Families Maintain Regular Family Routines. Families typically eat dinner together and children eat meals at regular times throughout the day. On average, parents reported eating dinner with their family more than five days per week (see Table VII.8). Approximately half of families eat dinner together every day, one-quarter eat dinner together five or six days a week, and only 7 percent reported eating dinner together one or two days a week. Further, nearly all families (95 percent) feed their children at regular times in a typical day. Parents reported that children about 12 months old eat three meals and two snacks in a typical day.

One-year-olds have a regular bed time and go to bed at that time almost every day from Monday through Friday (according to parent reports about the past week). More than three-quarters (78 percent) of 1-year-old children go to bed at a regular time every day; 18 percent go to bed at a regular time 3 or 4 weekdays; only 3 percent go to bed at a regular time only 1 or 2 weekdays. On average, children wake up once during the night and need someone to help them settle back to sleep. Approximately half of parents (48 percent) reported that their child sleeps through the night, although 19 percent wake up twice or more during night. Parents reported that children sleep an average of about 10 hours per night and take two naps in a typical day. Each nap lasts a little more than 1.5 hours.

Most Parents Reported Adopting Child Safety Practices to Prevent Child Injury. The majority of parents of 1-year-olds reported following good practices for child safety, with a few exceptions (see Table VII.9). Virtually all families use a car seat with their child, and 96 percent use a safety gate or door at the top of stairs and have a working smoke alarm in the home. More than 90 percent of families cover electrical outlets that the child can reach. Approximately 88 percent of parents reported that they know how to find the telephone number for the poison control center; however, fewer than half (42 percent) post that number. Only 28 percent of families have guards or gates for windows.

Table VII.8. Most Families Follow Eating and Sleeping Routines

Measures	Weighted Means or Percentages	(Standard Error)
Number of Days per Week Family Eats Dinner Together	5.4	(0.1)
Percentage of Families that Eat Dinner Together		
Every day	50.3	(2.2)
Five or six days per week	22.7	(1.7)
One or two days per week	7.3	(1.3)
Child Is Fed at Regular Times in a Typical Day (%)	94.8	(0.8)
Number of Meals Child Eats in a Typical Day	3.3	(0.0)
Number of Snacks Child Eats in a Typical Day	2.5	(0.0)
Number of Days per Week Child Goes to Bed at Regular Bedtime, Monday Through Friday	4.7	(0.0)
Percentage of Children Who Go to Bed at a Regular Bedtime		
Every day	78.3	(1.9)
Three or four days per week	18.4	(1.6)
One or two days per week	3.3	(1.0)
Number of Times Child Wakes Up During Night	0.8	(0.0)
Percentage of Children Who		
Sleep through the night	48.2	(2.0)
Wake up once	33.0	(2.0)
Wake up twice or more	18.8	(1.7)
Number of Hours Child Sleeps per Night	9.6	(0.1)
Number of Naps Child Takes in a Typical Day	1.7	(0.0)
Number of Hours Child Naps	1.5	(0.0)
Sample Size	**660**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to parents of 1-year-olds.

Table VII.9. Families of 1-Year-Olds Follow Most Child Safety Practices

Measures	Weighted Percentages	(Standard Error)
Family Uses a Car Seat for Child	99.7	(0.2)
Family Uses a Gate or Door at the Top of Stairs	96.0	(1.0)
Family's Home Has Working Smoke Alarms	95.7	(0.9)
Family Has Covers on Electrical Outlets that Child Can Reach	90.9	(1.5)
Parent/Guardian Knows How to Find the Telephone Number for the Poison Control Center	87.5	(2.0)
Has the number available	42.2	(2.8)
Family Uses Guards or Gates for Windows	27.8	(2.4)
Sample Size	**506**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to parents of 1-year-olds.

Parents Reported a Mix of Traditional and Progressive Beliefs and Some Parents Reported Spanking. Parents of 1-year-olds reported a mix of parenting beliefs (see Table VII.10). Parents' childrearing beliefs are found to be associated with children's developmental outcomes (Schaefer 1991); traditional, authoritarian beliefs are associated with negative outcomes in children, whereas progressive, democratic beliefs are associated with favorable child outcomes. Parents of 1-year-olds reported relatively high levels of either traditional, authoritarian parental beliefs or progressive, democratic beliefs (with a mean of 20 out of 25 for each set of beliefs). Parents' scores on these two measures are not correlated ($r = 0.01$), suggesting little relationship between the sets of attitudes (that is, parents high on one set are not necessarily low or high on the other). Eleven percent of parents reported spanking their child in the previous week. This is much lower than the 32 percent who reported spanking in the past week in the EHSREP at 14 months.

Table VII.10. Parenting Beliefs and Behavior a Mix of Traditional and Progressive

Measures	Weighted Means or Percentages	(Standard Error)
Parental Modernity Scale (PMS)		
Traditional Beliefs raw score	19.8	(0.2)
Progressive Beliefs raw score	20.2	(0.2)
Percentage Spanked Child in the Past Week	11.3	(1.7)
Sample Size	**662**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to parents of 1-year-olds. The Parental Modernity Scale Traditional Beliefs and Progressive Beliefs scores can range from 5 to 25.

Summary of Key Findings

- One-year-olds enrolled in Early Head Start in spring 2009 are off to a good start in most of the developmental domains assessed.
  - Most children are in good health and have access to health care.
  - In language development, children's vocabulary comprehension is comparable to national norms, although vocabulary production, as reported by Early Head Start staff, is slightly behind norms.
  - Although social-emotional development scores reported by parents and staff differed, children are at the national norms in social-emotional competence and problems. However, according to parent report, Early Head Start children may face more developmental risks than children in normative samples.
- Many families of children enrolled in Early Head Start in spring 2009 are faring well. More than half of Early Head Start parents are in good physical and mental health, and the majority (93 percent) of families have health insurance coverage. However, for some of the families, there have been times when they needed health care but could not obtain it.
  - Early Head Start parents reported a low level of family conflict and most parents maintain good relationships with their partners regarding parenting.

  - Parents also reported high levels of social support; however, only a small proportion (20 percent) of parents is actively involved in community organizations.

- Early Head Start parents reported favorable parenting behaviors, such as maintaining regular family routines and following good child safety practices to prevent child injury.
  - Parents reported high levels of either traditional, authoritarian parental beliefs or progressive, democratic beliefs. Some parents reported spanking.

VIII. SUBGROUP DIFFERENCES IN CHILD FUNCTIONING AND FAMILY WELL-BEING

Chapter VII of the report presents child functioning and family well-being for the Baby FACES sample overall. In this chapter we show how, overall, strengths, needs, and services vary across key groups of children and families. The next chapter will explore links between services and family strengths and needs at the level of individual families. By understanding how the experiences of families are the same or different by key, easily measured family characteristics, programs can shape the services they offer to address the needs of families enrolled in Early Head Start. Accordingly, in this chapter we provide extensive descriptive information on child and family functioning and parents' reported participation in Early Head Start and use of program services, organized by important subgroups of families. This process promotes a broader understanding of how family circumstances and child developmental functioning differ across demographic subgroups.

We include subgroups defined by race/ethnicity, maternal demographic risk factors, family psychological risk factors, and dual language learner (DLL) status. It is important to note that these subgroups are interrelated, as shown in Tables VIII.1 to VIII.3. For example, African American and Hispanic children are more likely than white children to have mothers with high maternal demographic risk. Hispanic families also have more psychological risk factors. Families with more maternal demographic risk factors also tend to have more psychological risks. Because the majority of DLL children are Hispanic, these children are also more likely to have higher family psychological risk. However, there might be some differences unique to each of the key subgroups, and looking at them individually will help our understanding of their use of and need for Early Head Start services.

The comparisons across the subgroups focus on selected measures in each of the domains reported in Chapter VII, including child health status and health care; cognitive and language development; social-emotional development; parent health status and health care access; mental health; family functioning and parenting; and participation in Early Head Start activities, service use, and child care arrangements. We do not conduct statistical tests to determine the statistical significance of differences in this initial analysis across subgroups. Instead we identify differences of meaningful magnitude based on the characteristic or functioning in question and that provide potential lessons for policy and program improvement efforts.

Race/Ethnicity

Box VIII.1. Distribution of Race/Ethnicity in Baby FACES Children

- More than one-third (37 percent) of children are Hispanic.
- Another one-third (35 percent) of children are white.
- Fewer than one-fifth (17 percent) of children are African American.
- Only 11 percent of children are of another race, or multiple races. They are not included in the subgroup analyses.

Hispanic Children Are Most Likely to Be Uninsured and Have Somewhat Poorer Health

Most Early Head Start children have health insurance regardless of their race/ethnicity, although the type of coverage and the likelihood of being uninsured varies among these subgroups (see Table VIII.4). Among those with coverage, Hispanic children are least likely to have a private plan, and white children are most likely to have such a plan. There are smaller differences in the proportion that have a public plan, with African American children most likely to be covered this way, and the other groups having roughly similar lower rates of public coverage. Hispanic children are least likely to have health insurance.

Parents' reports of children's general health status and birth outcomes differ, but not greatly, by race/ethnicity (Table VIII.4). Disparities by race/ethnicity in parent ratings of children's health are greatest, with Hispanics most likely to be rated as being in fair or poor health, and African Americans least likely. Conversely, Hispanic children are least likely to be rated as having excellent or very good health. In terms of the rate of low birth weight (fewer than 2,500 grams or 5 pounds, 8 ounces), Hispanic Early Head Start children have a somewhat higher rate compared to white and African American children. This is in contrast to research showing that Hispanic mothers had rates of low birth weight similar to white mothers (Fuller et al. 2010). However, rates of very low birth weight (fewer than 1,500 grams or 3 pounds, 4 ounces) are similar across all groups, although they are somewhat lower for Hispanic children.

Among Children with a Disability Diagnosis, African Americans Are Most Likely to Receive Disability Services

As expected given the young age of children in the study, parents reported a low overall frequency of children being evaluated for and diagnosed with a disability, and this differs little by race/ethnicity. However, among those with such a diagnosis, the likelihood of receiving early intervention services varies greatly by race/ethnicity (although the small sample sizes make small differences in absolute numbers equate to large proportional differences) (see Table VIII.5). Among children with a diagnosis, all African American children received disability services, compared to fewer than 60 percent of both white and Hispanic children. Although they were less likely to receive services than African Americans, all parents of Hispanic children who received disability services[1] reported that Early Head Start helped them to get these services, compared to only a quarter of whites and more than half of African Americans.

Among children who have a diagnosis, African American and Hispanic children are more likely than white children to be currently participating in an early intervention program. Hispanic children are somewhat less likely to have either an Individualized Education Plan (IEP) or an individual family service plan (IFSP) than African American or white children.

Parents Reported That African American Children Are at the Least Developmental Risk

There are some indications of racial/ethnic differences based on parent reports of 1-year-old children's general development using the Ages and Stages Questionnaire (ASQ-3) (see Table VIII.6). Across all developmental areas, white and Hispanic children performed roughly the same while

[1] N = 3.

African American children scored higher in Communication, Gross Motor, and Personal-Social areas. Scores in Fine Motor and Problem Solving are similar across racial/ethnic groups. These findings are not surprising when considered in the context of previous studies. Some research evidence shows that perceptions of child functioning among African American parents appear to differ from those of white parents, with African American parents less likely to endorse children's problems (Hillemeier et al. 2007). In the EHSREP, African American parents rated their children as having fewer behavior problems than did white and Hispanic parents.

When we consider the proportion of children rated by their parents as being in the at-risk range (two standard deviations or more below the mean) on the ASQ-3, we see bigger differences by race/ethnicity (see Table VIII.6), with African American children less likely than others to be at risk in two developmental areas. African American children are least likely to be in the at-risk range in communication (2 percent), compared to white children, who were most likely (9 percent), and Hispanic children (8 percent). Similarly, in gross motor development, African American children are lower in risk status (6 percent) than Hispanic (13 percent) and white (9 percent) children. There were few differences in Fine Motor and Problem Solving. In the Personal-Social area, Hispanic children were least likely of the three groups to be rated as being at risk.

The likelihood of a parent reporting his or her child as being within the monitoring zone (one to two standard deviations below the mean) also varies by racial/ethnic group (see Table VIII.6). In the Communication and Gross Motor areas, the pattern of differences by race/ethnicity is consistent with that of the at-risk range. In Fine Motor, Personal-Social, and Problem Solving, Hispanic children are most likely to be in the monitoring zone. African Americans were least likely to score in the monitoring zone or below in Personal-Social. Generally, Hispanic children are more likely to be in the monitoring zone than white and African American children.

Staff Reported That Hispanic Children Understand and Say Fewer English Words Than Other Children

We found differences across race/ethnicity in staff reports of 1-year-olds' vocabulary comprehension and production using the MacArthur-Bates Communicative Development Inventory (CDI) (see Table VIII.6). On average, staff rated white children as understanding more English words (about 35 words) than African American (28 words) or Hispanic (24 words) children. Across racial/ethnic groups, Early Head Start staff reported that children say very few words (fewer than 5 words overall), and Hispanic children say fewer English words (about 2 on average) than African American or white children (approximately 4 words for both groups). However, looking only at English words obscures overall language development among children learning two languages (see the section on DLL children later in the chapter).

Parents Reported Hispanic Children Are Most at Risk for Social-Emotional Development; Staff Reported African American Children Are Most at Risk

We see differences in the cutoff scores by race/ethnicity for 1-year-olds both within and between parent and staff reports on BITSEA (see Table VIII.7). According to parent reports, white children are least likely to be above the cutoff on the problem scale, while in the staff report, both white and Hispanic children are less likely to meet the cutoff than African American children. In the competence domain, Hispanic children are most likely to be reported by their parents as having delays in social-emotional competence. In contrast, staff rated children similarly across racial/ethnic groups. When considering screening positive on the BITSEA (on the Problem or Competence

domains), Hispanic children are most likely to be reported by their parents as screening positive, followed by African American children. According to staff reports, African American children are more likely to be reported as screening positive than other children.

Hispanic Parents Reported Poorer Health and Less Access to Health Care Than Other Parents

Parents from different racial/ethnic groups varied in their ratings of their general health (see Table VIII.8). African American parents are more likely to report excellent or very good health than other parents. Hispanic parents are more likely to report fair or poor health than white or African American parents.

There are also racial/ethnic differences in family health care access (see Table VIII.8). Hispanic parents are less likely than other parents to have a regular health care provider. Similar to the pattern of racial/ethnic differences in child private health insurance coverage, white parents are most likely to have private health insurance coverage and Hispanic parents are least likely. The rates of public health insurance coverage are similar across racial/ethnic groups. Hispanic parents are most likely to be without health insurance coverage, followed by African American parents.

White parents are less likely than other parents to report receiving help from Early Head Start in finding health insurance. Although they report the lowest rate of being uninsured, white parents are slightly more likely than African American and Hispanic parents to report a time in the past year when family members needed health care but could not obtain it due to financial or insurance issues.

Hispanic Parents Reported Fewer Depressive Symptoms but More Parenting Stress Than Other Parents

There are few differences in the mean scores of parent-reported depressive symptoms on the Center for Epidemiologic Studies Depression Scale—Short Form (CESD-SF) by race/ethnicity. However, there is variation in the CESD cutoff scores by race/ethnicity (see Table VIII.9). Hispanic parents are more likely to report having no or mild depressive symptoms compared to white parents and are less likely than white parents to report moderate and severe symptoms. In contrast, Hispanic parents report higher levels of parenting stress than both other groups and higher levels of parent-child dysfunctional interaction than white parents (see Table VIII.9).

White Parents Are Most Likely to Report Substance Use Problems; Hispanic Parents Are Least Likely to Report These Problems

There are racial differences in reports of maternal substance use during pregnancy with the study focus child (see Table VIII.9). White mothers are far more likely to report smoking during pregnancy than Hispanic and African American parents. The prevalence of drinking during pregnancy is low across racial/ethnic groups, but white mothers are less likely to report drinking during pregnancy than other mothers.

Parent reports of current or past substance use differ by race/ethnicity as well. The pattern of racial differences in parent reports of current smoking is similar to that for smoking during pregnancy: white parents are markedly more likely than other parents to report smoking in the month prior to the parent interview. Hispanic parents are least likely to report that either they or someone else smokes inside their home. Hispanic parents are also least likely to report current

drinking. The rate of drug use in the year prior to the parent interview is low, but white parents are most likely to report drug use. White parents are also more likely than other parents to report having ever had a drinking or drug use problem.

There are also racial differences in receipt of mental health treatment (see Table VIII.9). White parents are more likely to receive mental health treatment than African American and Hispanic parents. However, among those who received treatment, they are the least likely to report that Early Head Start helped them get it. Hispanic parents are most likely to report receiving help from Early Head Start in accessing mental health treatment services.

Parent Reports of Family Functioning Do Not Differ Much Across Racial/Ethnic Groups

Parents across racial/ethnic groups report similar levels of family conflict, social support, and parenting alliance in raising their children (not shown). Hispanic parents are least likely to report having problems with a range of people and are least likely to participate in community organizations (see Table VIII.9). African American parents are most likely to be involved in community groups (for example, religious or school groups).

African American Parents Are Most Likely to Use Spanking for Discipline

We examined several aspects of parenting by race/ethnicity, including adherence to routines and parenting attitudes. We found that families adhered to routines regardless of racial/ethnic group and that all parents had similar rates of traditional or progressive attitudes toward child-rearing (see Table VIII.10). However, notable differences are observed in parent-reported discipline strategies (see Table VIII.11). African American parents (25 percent) are far more likely to report spanking their children than either white or Hispanic parents (8 percent each).

African American Mothers Are Most Likely to Report Receiving Services from Early Head Start During Pregnancy or from Community Agencies

African American mothers are more likely than white or Hispanic parents to report receiving any information from Early Head Start during their pregnancy, including information on breastfeeding, nutrition, how to prepare the home for a new baby, how to care for babies, how to care for themselves during pregnancy, and how children grow and develop (see Table VIII.12). There is also a similar clear pattern across racial groups in parent reports of services received during pregnancy. African American parents are most likely to report receiving the following services from Early Head Start: a referral for help with breastfeeding; a referral for a doula; a referral to a doctor for themselves or to a pediatrician; a referral for childbirth classes; a chance to get together with pregnant women or mothers; help finding clothes, a stroller, or other baby care items; and parenting classes (see Table VIII.12).

In terms of services received from community agencies, similar percentages of parents across racial/ethnic groups reported receiving help with finding good child care, transportation, and disability services; short-term help getting or paying for things needed in an emergency; counseling on how to manage money; and help with a legal problem (not shown). However, there are differences by race/ethnicity in the proportion of parents who reported receiving other types of services from community agencies (see Table VIII.13). African American parents are more likely than white and Hispanic parents to report receiving help finding a job and finding or paying for housing. In addition, African American and Hispanic parents are more likely than white parents to

get education or job training. As would be expected because of the high number of DLLs in the group, Hispanic parents are more likely to receive training on how to read and write and classes to learn English. They are also more likely than white and African American parents to report receiving health services. White and Hispanic parents are more likely to report receiving mental health services than African American parents.

Hispanic Parents and African American Parents Are More Likely to Report Participating in Activities at Early Head Start Than White Parents

We find differences across racial/ethnic groups in the levels of involvement in Early Head Start activities (see Table VIII.14). Hispanic parents, followed by African American parents, reported participating in the following activities most frequently: group activities for parents and their children; workshops on job skills, parent education meetings or workshops on raising children; and events only for men/fathers. African American parents, followed by Hispanic parents, are most likely to report participating in the following activities: volunteering in an Early Head Start classroom; participating on the Program Policy Council; and volunteering to help out at the program or serving on a committee (but not in a classroom or on the Policy Council). African American parents and white parents reported being involved in center activities in some other way (such as through fundraisers or field trips) more frequently than Hispanic parents. There are no racial/ethnic differences in parent reports of the frequency of attending an Early Head Start social event. Parents across racial/ethnic groups all report positive relationships with Early Head Start staff.

African American Children Are Most Likely to Be in Nonparental Care and to Spend More Hours There

Parents of 1-year-olds across racial/ethnic groups reported differently on the types of child care arrangements used (see Table VIII.15). Overall, African American children are most likely to receive nonparental care, followed by white children. In terms of specific types of child care, African American children are most likely to attend center-based Early Head Start. White and African American children are more likely to be cared for in a provider's home than Hispanic children. In addition, white children are more likely than African American or Hispanic children to be cared for in the child's own home or to attend a non–Early Head Start child care center.

There are also differences across racial/ethnic groups in parents' report of time in child care per week (see Table VIII.15). Overall, African American children spent more hours in nonparental care than other children. Specifically, they spent more hours in Early Head Start centers or in their home with care providers. However, African American children spent far fewer hours in other child care centers, formal programs, or being cared for in a provider's home than other children.

Table VIII.1. Maternal Demographic Risks, Family Psychological Risks, and DLL Status Are Related to Race/Ethnicity

	Race/Ethnicity		
	White	African American	Hispanic
Maternal Demographic Risk Factors[a]	• Less likely to be highest risk than African Americans and Hispanics (13 versus 27–21 percent) • More likely to be lower risk than African Americans and Hispanics (63 versus 38–50 percent)	• More likely to be highest risk than whites (27 versus 13 percent) • Less likely to be lower risk than whites (38 versus 63 percent)	• More likely to be highest risk than whites (21 versus 13 percent) • Less likely to be lower risk than whites (50versus 63 percent)
Family Psychological Risks[b]	• More likely to have none of the risks than Hispanics (64 versus 52 percent) • Less likely to have one or more risks than Hispanics (36 versus 48 percent)	• More likely to have none of the risks than Hispanics (66 versus 52 percent) • Less likely to have one or more risks than Hispanics (34 versus 48 percent)	• More likely to have one or more risks than whites and African Americans (48 versus 34–36 percent) • Less likely to have no risk than whites and African Americans (52 versus 64-66 percent)
DLL Status[c]	• More likely to have English spoken in the household than Hispanics (94 versus 16 percent) • Less likely to have Spanish spoken in the household than Hispanics (4 versus 83 percent)	• More likely to have English spoken in the household than Hispanics (92 versus 16 percent) • Less likely to have Spanish spoken in the household (4 versus 83 percent)	• More likely to have Spanish spoken in the household than whites and African Americans (83 versus 4 percent) • Less likely to have English spoken in the household (16 versus 92–94 percent)

Source: Spring 2009 Parent Interview.

[a] This index was constructed by summing the number of the following risk factors that the mother faced: (1) being a teenage mother, (2) having no high school credential, (3) receiving public assistance, (4) not being employed or in school or training, and (5) being a single mother. Maternal demographic risk was calculated only for mothers of 1-year-olds.

[b] Family psychological risk index is a measure of cumulative family risk of poor parental mental health and unfavorable family functioning, measured at baseline. The number of risks is based on the following measures: (1) moderate or severe depressive symptoms; (2) parenting stress, which indicates a score of 1 standard deviation above the mean on either of Parenting Stress Index subscales (Parental Distress or Parent-Child Dysfunctional Interaction); and (3) substance use problems, which include parent reports of drug use in the past year or ever having had a drug or drinking problem.

[c] DLL status is defined as a language other than English being spoken in the household.

DLL = dual language learner.

Table VIII.2. Psychological but Not Demographic Risks Are Related to DLL Status

	DLL Status[b]	
	English-Speaking	Spanish-Speaking
Family Psychological Risks[a]	• More likely to have no psychological risk than Spanish-speaking homes (65 versus 52 percent) • Less likely to have one or more risks than Spanish-speaking homes (35 versus 48 percent)	• More likely to have one or more risks than English-speaking homes (48 versus 35 percent) • Less likely to have no psychological risk than English-speaking homes (52 versus 65 percent)

Source: Spring 2009 Parent Interview.

[a] Family psychological risk index is a measure of cumulative family risk of poor parental mental health and unfavorable family functioning, measured at baseline. The number of risks is based on the following measures: (1) moderate or severe depressive symptoms; (2) parenting stress, which indicates a score of 1 standard deviation above the mean on either of Parenting Stress Index subscales (Parental Distress or Parent-Child Dysfunctional Interaction); and (3) substance use problems, which include parent reports of drug use in the past year or ever having had a drug or drinking problem.

[b] DLL status is defined as a language other than English being spoken in the household.

DLL = dual language learner.

Table VIII.3. Family Psychological Risks Are Related to Maternal Demographic Risks

	Maternal Demographic Risks[b]		
	Lower Risk	Medium Risk	Highest Risk
Family Psychological Risks[a]	• Less likely to have one or more psychological risks than families with medium or highest maternal demographic risks (34 versus 48–47 percent) • More likely to have no psychological risk than families with medium or highest maternal demographic risks (66 versus 52–53 percent)	• More likely to have one or more psychological risks than families with lower maternal demographic risks (48 versus 34 percent) • Less likely to have no psychological risk than families with lower maternal demographic risks (52 versus 66 percent)	• More likely to have one or more psychological risks than families with lower maternal demographic risks (47 versus 34 percent) • Less likely to have no psychological risk than families with lower maternal demographic risks (53 versus 66 percent)

Source: Spring 2009 Parent Interview.

[a] This index was constructed by summing the number of the following risk factors that the mother faced: (1) being a teenage mother, (2) having no high school credential, (3) receiving public assistance, (4) not being employed or in school or training, and (5) being a single mother. Maternal demographic risk was calculated only for mothers of 1-year-olds.

[b] Family psychological risk index is a measure of cumulative family risk of poor parental mental health and unfavorable family functioning, measured at baseline. The number of risks is based on the following measures: (1) moderate or severe depressive symptoms; (2) parenting stress, which indicates a score of 1 standard deviation above the mean on either Parenting Stress Index subscales (Parental Distress or Parent-Child Dysfunctional Interaction); and (3) substance use problems, which include parent reports of drug use in the past year or ever having had a drug or drinking problem.

Table VIII.4. Child Health Status and Health Care Outcomes, by Race/Ethnicity

Outcome	White		African American		Hispanic	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Child's Health Insurance Status						
A private health insurance plan	44.20	3.41	31.71	3.71	24.83	2.26
A public/government insurance	83.87	2.93	92.49	2.04	84.63	2.05
No health insurance	2.41	1.12	1.17	0.77	6.15	1.41
Child in Excellent or Very Good Health	80.86	3.16	83.44	3.10	72.48	2.41
Child in Fair or Poor Health	5.07	1.61	3.71	1.60	7.52	1.93
Child Birth Weight						
Low birth weight	6.51	1.68	6.37	2.30	8.91	2.66
Very low birth weight	1.15	0.73	1.48	0.84	0.69	0.41
Child Born Premature	8.34	1.67	6.60	1.95	9.81	2.04
Sample Size	**250–261**		**149–160**		**309–325**	

Source: Spring 2009 Parent Interview.

Table VIII.5. Receipt of Early Intervention Services, by Race/Ethnicity

Outcome	White		African American		Hispanic	
	Percentage	Standard Error	Percentage	Standard Error	Percentage	Standard Error
Children evaluated for any disabilities	7.98	2.17	5.45	2.30	6.30	1.51
Children with a diagnosis of any disabilities	3.13	1.15	3.75	2.08	1.65	0.80
Children who have received disability services	56.75	20.50	100.00	0.00	58.67	25.00
Early Head Start helped family and child get disability services	26.04	17.73	59.10	29.33	100.00	0.00
Children currently participating in an early intervention program	42.46	19.55	71.27	25.56	68.82	20.57
Children who have an IEP/IFSP	38.83	3.93	40.26	5.07	33.14	3.57
Sample Size	**214–226**		**118–125**		**245–258**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

IEP = Individualized Education Program or Plan; IFSP = Individual Family Service Plan.

Table VIII.6. Child Cognitive and Language Development, by Race/Ethnicity

Outcome	White		African American		Hispanic	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
ASQ-3[a] Raw Score						
Communication	39.27	0.92	43.75	1.31	39.25	1.09
Gross Motor	52.06	0.98	54.03	1.27	48.50	0.95
Fine Motor	43.11	1.15	44.67	1.51	43.29	1.25
Problem Solving	40.40	1.21	39.32	1.39	40.56	0.85
Personal-Social	41.81	1.23	45.14	1.23	42.92	0.96
Total Score	215.09	3.97	226.77	4.90	214.12	4.20
ASQ Cutoff Score (2 SDs below the mean or lower)						
Communication	8.52	1.98	1.57	0.95	8.45	2.90
Gross Motor	8.85	1.87	6.28	3.15	13.19	2.17
Fine Motor	15.29	2.95	13.15	4.64	13.18	2.65
Problem Solving	19.46	3.68	20.94	4.34	21.46	2.70
Personal-Social	11.81	2.84	9.86	3.34	6.27	2.09
ASQ in the Monitoring Zone (1–2 SDs below the mean)						
Communication	25.94	2.79	18.88	4.12	21.69	3.31
Gross Motor	6.33	2.19	5.14	2.12	12.21	2.45
Fine Motor	15.27	2.75	18.41	4.02	20.62	3.70
Problem Solving	16.83	3.43	21.50	3.64	24.12	4.11
Personal-Social	20.32	4.39	13.57	3.59	32.90	4.98
CDI[b] (English) Raw Score						
Vocabulary Comprehension	34.68	2.11	27.84	2.60	24.02	1.85
Vocabulary Production	3.46	0.49	4.29	1.05	1.57	0.24
Sample Size						
Parent Interview	**228**		**122**		**265**	
Parent Interview[c]	**158**		**86**		**179**	
SCR	**215**		**115**		**219**	

Source: Spring 2009 Parent Interview and Staff Child Report (SCR).

Note: Sample restricted to 1-year-old Cohort. Depending on the age of the child on the day of the parent interview, the age range of children at the baseline required administration of the ASQ-3 10-, 12-, 14-, 16-, or 18-month questionnaire. In error we administered the wrong version of the ASQ to parents of 11- and 12-month-olds in all domains except Communication, and therefore report only Communication scores for this group of children.

[a] Parent report.

[b] Teacher/home visitor report.

[c] Pertains to ASQ Gross Motor, Fine Motor, Problem Solving, and Personal-Social. Excludes 11- and 12-month-olds.

ASQ-3 = Ages & Stages Questionnaires (Third Edition); CDI = MacArthur-Bates Communicative Development Inventories.

Table VIII.7. Child Social-Emotional Development, by Race/Ethnicity

Outcome	White		African American		Hispanic	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parent-Reported BITSEA Raw Score						
Problem domain	9.39	0.46	10.85	0.57	11.04	0.33
Competence domain	16.36	0.19	16.14	0.42	15.94	0.28
SCR BITSEA Raw Score						
Problem domain	5.85	0.42	7.51	0.51	5.42	0.33
Competence domain	12.73	0.24	12.45	0.50	12.90	0.37
Parent-Reported BITSEA Cutoff Score						
Problem domain	21.87	3.47	29.71	4.50	30.83	2.75
Competence domain	6.25	1.44	9.85	3.33	15.04	3.13
SCR BITSEA Cutoff Score						
Problem domain	11.96	2.66	20.63	4.22	8.54	1.87
Competence domain	13.59	2.21	17.95	4.51	16.62	3.10
Parent-Reported BITSEA Screen Positive	25.76	3.66	37.31	5.62	40.64	3.39
SCR BITSEA Screen Positive	23.13	2.76	33.29	5.48	22.14	3.00
Sample Size						
Parent Interview	**226–228**		**123–124**		**267–268**	
SCR	**218–222**		**118–124**		**239–242**	

Source: Spring 2009 Parent Interview and Staff-Child Report (SCR).

Note: Sample restricted to 1-year-old Cohort.

BITSEA = Brief Infant-Toddler Social and Emotional Assessment; SCR = Staff Child Report.

Table VIII.8. Family Health Care Services and Health Status, by Race/Ethnicity

Outcome	White		African American		Hispanic	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parent in Excellent or Very Good Health	52.31	3.18	62.96	4.01	51.74	2.65
Parent in Fair or Poor Health	7.46	1.22	9.10	2.21	16.66	2.68
Families That Have a Regular Health Care Provider	87.81	2.48	87.36	2.56	62.40	3.64
Family's Health Insurance Status						
A private health insurance plan	55.08	3.02	40.19	3.85	34.12	2.37
A public/government insurance	79.41	3.30	82.19	3.21	77.20	2.60
No health insurance	3.60	1.41	6.72	2.21	10.64	2.49
Early Head Start Helped to Find Health Insurance[a]	4.65	1.21	11.27	2.86	11.86	2.06
Family Member Needed Health Care but Couldn't Obtain It	8.89	1.85	5.49	2.11	4.96	1.32
Sample Size						
Parent Interview	**248–256**		**149–157**		**310–320**	
Parents Insured	**238**		**144**		**281**	

Source: Spring 2009 Parent Interview.

[a] For parents who were insured.

Table VIII.9. Parent Mental Health and Family Functioning, by Race/Ethnicity

Outcome	White		African American		Hispanic	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parent's Mental Health						
PSI: Parental Distress	9.86	0.37	10.48	0.42	12.11	0.45
PSI: Parent-Child Dysfunctional Interaction	7.31	0.19	8.71	0.32	9.95	0.41
CESD-SF raw score	5.91	0.36	5.60	0.41	4.52	0.37
CESD-SF: Moderate to severe depressive symptoms	20.27	2.59	15.85	2.84	14.72	2.36
CESD-SF: No or mild depressive symptoms	79.73	2.59	84.15	2.84	85.28	2.36
Parent Substance Use						
Smoking during pregnancy	24.54	3.38	3.46	1.45	3.36	1.25
Drinking during pregnancy	0.47	0.47	1.66	0.93	2.13	0.88
Smoking inside the home	18.07	4.19	15.70	6.03	10.56	3.61
Currently smoking	40.24	3.72	11.84	2.64	11.07	1.81
Currently drinking	26.30	2.99	24.47	4.52	15.20	2.50
Drug use in the past year	3.59	1.16	2.35	0.97	2.94	1.11
Ever had a drinking or drug problem	12.56	2.30	3.58	1.85	4.83	1.43
Parents Received:						
Any mental health treatment	34.17	3.47	8.55	2.40	13.66	2.32
EHS Helped to Get the Treatment[a]	15.19	3.50	22.24	11.13	38.56	8.75
Family Functioning						
FES-Family Conflict[b]	1.53	0.08	1.49	0.07	1.58	0.07
Social support	32.40	0.56	30.82	0.64	29.63	0.44
No problems with people	66.84	3.51	64.08	3.81	80.51	2.32
Community participation	19.81	2.53	30.21	3.61	15.10	2.16
Parenting Alliance Measure	45.42	0.62	46.46	0.84	46.55	0.38
Sample Size						
Parent Interview	**138–251**		**31–153**		**178–314**	
Parents Who Received Mental Health Treatment	**85**		**15**		**47**	

Source: Spring 2009 Parent Interview.

Note: Severe depressive symptoms = scores of 15 or higher; moderate depressive symptoms = scores of 10 or higher but lower than 15; mild depressive symptoms = scores of 5 or higher but lower than 10; no depressive symptoms = scores lower than 5.

[a] For parents who received mental health treatment.

[b] Asked only of Newborn Cohort in Spring 2009.

CESD-SF = Center for Epidemiologic Studies Depression Scale Short Form; FES = Family Environment Scale; PSI = Parenting Stress Index.

Table VIII.10. Family Routines, by Race/Ethnicity

Outcome	White		African American		Hispanic	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Number of days per week family eats dinner together	5.63	0.17	4.96	0.17	5.51	0.11
Child is fed at regular times in a typical day	96.66	1.00	96.64	1.49	92.25	1.58
Number of meals child eats in a typical day	3.22	0.05	3.39	0.06	3.21	0.03
Number of snacks child eats in a typical day	2.41	0.05	2.46	0.07	2.59	0.08
Number of days per week child goes to bed at regular bedtime	4.81	0.03	4.51	0.12	4.62	0.07
Number of times child wakes up during night	0.66	0.08	0.81	0.09	0.83	0.07
Number of hours child sleeps per night	9.73	0.14	8.87	0.17	9.76	0.13
Number of naps child takes in a typical day	1.54	0.05	1.82	0.06	1.69	0.06
Number of hours child naps	1.53	0.06	1.35	0.07	1.54	0.05
Sample Size	**208–219**		**115–121**		**244–262**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

Table VIII.11. Parenting Beliefs and Behavior, by Race/Ethnicity

Outcome	White		African American		Hispanic	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parental Modernity Scale						
Traditional Attitudes	19.66	0.31	20.12	0.35	20.01	0.24
Progressive Attitudes	21.48	0.21	18.61	0.35	19.58	0.20
Parent Spanked the Child in the Past Week	8.38	1.79	25.43	4.35	8.19	1.93
Sample Size	**216–219**		**118–122**		**257–262**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

Table VIII.12. Services Mothers Received from Early Head Start During Pregnancy, by Race/Ethnicity

Items	White		African American		Hispanic	
	Percentage	Standard Error	Percentage	Standard Error	Percentage	Standard Error
Received any information or services from Early Head Start	39.70	3.11	45.38	5.01	39.08	3.69
Information on breastfeeding	34.20	3.05	41.82	5.31	35.21	3.71
A referral to someone to help with breastfeeding	20.86	2.45	30.38	5.21	18.90	2.80
Nutrition information	36.63	3.18	43.08	5.07	35.54	3.80
The chance to get together with other pregnant women or mothers	25.22	2.93	37.51	5.10	27.18	3.72
A referral for a doula	4.26	1.46	14.44	3.46	10.61	2.34
Information on how to prepare your home for a new baby	34.30	3.21	38.54	4.64	33.28	3.98
Help finding clothes, a stroller, or other baby care items	26.11	2.71	31.36	4.37	25.39	3.55
Information on how to take care of babies	33.22	3.09	40.43	4.79	35.12	3.64
Information on how to take care of yourself during pregnancy	36.02	3.30	41.61	5.12	35.22	3.93
A referral for childbirth classes	24.56	3.15	33.38	5.24	23.83	2.99
A referral to a doctor for yourself	13.40	2.14	21.21	3.73	18.85	2.92
A referral to a pediatrician for the baby	15.34	2.66	23.18	4.38	17.64	2.77
A referral to quit smoking	14.11	2.64	11.80	3.01	10.17	1.53
Information on how children grow and develop	37.37	3.23	43.32	5.18	36.11	3.61
Parenting classes	21.10	2.77	29.44	4.60	24.43	3.43
Any other services	5.56	1.56	6.88	2.30	8.98	2.07
Sample Size	**247–249**		**151–155**		**314–316**	

Source: Spring 2009 Parent Interview.

Table VIII.13. Services Families Received from Community Agencies, by Race/Ethnicity

Items	White		African American		Hispanic	
	Percentage	Standard Error	Percentage	Standard Error	Percentage	Standard Error
Help finding good child care	16.51	2.40	21.96	3.99	20.13	3.29
Help getting to and from work or other places	14.31	2.25	12.40	2.78	14.92	3.23
Disability services	6.45	1.44	4.20	1.59	6.20	1.48
Short-term help getting or paying for things needed in an emergency	18.02	2.83	17.00	3.70	13.80	2.92
Help finding a job	6.85	1.51	15.43	2.98	10.17	1.83
Education or job training	5.43	1.45	10.45	2.31	10.60	2.03
Help with a legal problem	6.56	1.60	5.12	1.93	4.87	1.38
Help finding or paying for housing	8.87	2.01	14.76	3.38	8.21	1.85
Counseling on how to manage money	11.40	2.05	9.80	2.36	9.42	2.37
Training on how to read and write	0.97	0.56	1.99	1.08	4.61	1.38
Classes to learn English	0.39	0.30	2.01	1.47	17.63	2.98
Health services	16.35	2.37	14.94	3.34	27.92	3.19
Mental health services	10.45	2.14	4.88	2.22	8.41	1.58
Some other services	4.49	1.42	1.12	0.67	5.85	1.47
Sample Size	**262–263**		**158–160**		**323–325**	

Source: Spring 2009 Parent Interview.

Table VIII.14. Family Participation in Activities at Early Head Start in the Past Year, by Race/Ethnicity

	White			African American			Hispanic		
Items	Not at All	Once or Twice	Three or More Times	Not at All	Once or Twice	Three or More Times	Not at All	Once or Twice	Three or More Times
Attend group activities for parents and their children	37.85	29.10	33.04	30.15	28.13	41.72	23.94	26.90	49.16
Attend workshops on job skills	90.31	7.32	2.37	79.34	13.68	6.99	75.16	14.71	10.12
Attend parent education meetings or workshops on raising children	70.32	21.07	8.61	54.80	30.04	15.16	47.07	30.59	22.34
Attend events only for men/fathers	91.34	6.25	2.42	87.40	11.73	0.87	81.44	14.07	4.50
Volunteered in an Early Head Start classroom	68.55	14.21	17.25	51.24	19.84	28.91	58.58	19.44	21.98
Attended an Early Head Start social event	42.72	33.99	23.29	41.67	30.49	27.84	40.31	34.22	25.47
Participated on the Program Policy Council	89.18	6.63	4.19	80.27	10.65	9.09	84.70	9.41	5.89
Volunteered to help out at program or served on a committee, but not in a classroom or on Policy Council	86.49	9.75	3.75	72.59	17.74	9.67	82.58	8.51	8.91
Takes part in center activities in some other way	82.24	11.71	6.04	81.83	12.52	5.65	89.00	7.16	3.85
Sample Size	**259–263**			**159–160**			**314–325**		

Source: Spring 2009 Parent Interview.

Table VIII.15. Child Care Arrangements, by Race/Ethnicity

Outcome	White		African American		Hispanic	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Nonparental Care	72.51	3.69	89.55	3.18	65.28	4.48
Current Child Care on a Regular Basis						
Attends Early Head Start center	45.62	4.53	75.75	5.72	49.58	5.56
Attends other child care center or formal program	6.54	1.97	1.85	1.30	3.05	1.01
Receives care in a provider's home	27.09	4.06	29.02	4.07	20.71	2.66
Receives child care in own home	19.90	3.11	15.20	3.19	16.31	2.69
Total Number of Hours in Child Care	24.17	1.73	29.04	1.75	24.39	2.24
Hours per Week in Child Care						
Early Head Start	21.69	2.27	26.27	1.53	20.42	2.42
Other child care center or formal program	22.84	3.46	4.00	0.00	20.49	4.64
Care in a provider's home	16.87	1.88	10.96	2.03	14.99	1.48
Care in child's own home	9.75	1.59	18.87	4.78	12.57	3.03
Sample Size	**157–217**		**108–120**		**174–258**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

Maternal Demographic Risk Factors

Coming from a low-income family or single-parent household, having a teenage mother, and having a mother who did not complete high school or who is unemployed are identified as risk factors for poor developmental outcomes in children (Rathburn and West 2004; Zill and West 2001). There is research evidence indicating that the presence of more than one risk factor can have a negative influence on children's development (Appleyard, Egeland, van Dulmen, and Sroufe 2005; Sameroff, Seifer, Zax, and Barocas 1987). The EHSREP found that families with the highest levels of demographic risk are harder to engage in services and more likely to drop out of the program. In this section, we compare child and family functioning and service use by the number of maternal demographic risk factors. The sample is restricted to 1-year-olds and their families because at baseline all components of the maternal demographic risk measure were asked only of those parents.

Box VIII.2. Maternal Demographic Risk Factors

We created a maternal demographic risk index to measure cumulative family risk for suboptimal child outcomes using information collected at baseline. The index is comprised of the following five risk factors for mothers of 1-year-olds (discussed in Chapter VI): (1) being a teenage mother, (2) having no high school credential, (3) receiving public assistance, (4) not being employed or in school or training, or (5) being a single mother. We categorized the risk index into three groups:

- Lower risk (fewer than three risk factors): 53 percent of mothers
- Medium risk (three risk factors): 28 percent of mothers
- Highest risk (four or more risk factors): 18 percent of mothers

Teenage Mothers, Single Mothers, and Mothers with Less Than High School Education Are Predominant Among Those with Highest Demographic Risk

Mothers with highest risk are most likely to be teenage mothers, single mothers, or have less than a high school education. For mothers with highest risk, 91 percent are teenage mothers; in contrast, only 28 percent of mothers with lower risk are teenage mothers. Seventy-three percent of mothers with highest risk are single mothers, while 28 percent of mothers with lower risk are single mothers. The percentage with less than high school education is 86 for highest-risk mothers but only 16 for lower-risk mothers. As defined by the maternal demographic risk index, mothers with highest risk are also more likely to receive public assistance or to be unemployed.

Children of Mothers with Medium Demographic Risk Had Poorer Birth Outcomes; Children of Highest-Risk Mothers Were Less Likely to Participate in an Early Intervention Program or to Be Helped by Early Head Start in Getting Services

Parent ratings of children's general health status are similar across risk groups. However, children's birth outcomes vary by the number of maternal demographic risk factors (see Table VIII.16). Children with medium maternal risk are more likely to have low birth weight than children with lower or highest maternal risk. Very low birth weight is rare and groups do not differ markedly on this outcome. Children with medium maternal demographic risk are more likely to be born prematurely than children with lower or highest maternal risk.

The rate of uninsurance was similar across risk groups, although children in the highest maternal risk group are less likely than children with fewer maternal risk factors to have private health insurance coverage (see Table VIII.16). Children in the lower-risk group are less likely to have public insurance coverage.

The percentages of children who are evaluated for any disability or have a diagnosis of any problems do not differ by number of maternal demographic risk factors.[2] However, the number of risk factors is associated with whether children received intervention services (see Table VIII.17). Children with highest maternal risk who have a diagnosis have all received disability services; however, only approximately 69 percent of medium-risk children and 71 percent of lower-risk children with a diagnosis have received disability services. Among children who received disability services, those with medium and lower maternal risk are most likely to have received help from Early Head Start in getting the services, while those with highest maternal risk are least likely to report receiving help. Among children who have a diagnosis, 60 percent of lower-risk children and 62 percent of medium-risk children are currently participating in an early intervention program; however, only 36 percent of the highest-risk children are currently participating in such a program.[3] Parents with highest risk are less likely to report that their children have an IEP or IFSP than parents with fewer risk factors.

Children's General Development Differs by Maternal Demographic Risk

The number of maternal demographic risk factors is not associated with ASQ-3 raw scores in any of the developmental areas. However, there are differences in cutoff scores by risk level, although at times in unexpected directions. Children of highest-risk mothers are least likely to score at risk in Communication, but most likely to score at risk in Problem Solving that the other two groups. For Fine Motor, both highest- and medium-risk children are more likely to score at risk than those in the lowest risk group. For Personal-Social those in the highest-risk group are more likely to score at risk than the medium-risk group (see Table VIII.18). For probability of being in the monitoring zone, children in the medium-risk group had inconsistent results—they were less likely for Communication, but more likely for Problem Solving and Personal-Social than their lower- or highest-risk counterparts. Children in the highest-risk group are more likely than those in the lower-risk group to have scores in the monitoring zone in Gross Motor.

Staff Rated Children of Mothers with Highest Demographic Risk as Understanding Fewer Spanish Words Than Lower-Risk Peers

According to staff reports, the numbers of English words children understand do not change with the number of maternal risk factors (see Table VIII.18). The numbers of Spanish words children understand is lowest for children in the medium-risk group.[4] Children in the highest-risk group are reported to understand fewer Spanish words than children in the lower-risk group. The

[2] Few of the 1-year-olds in our sample have been evaluated for a disability or have a diagnosis, and the numbers within subgroups are even smaller.

[3] Note that there are five or fewer children in these groups.

[4] Knowledge of Spanish words is only relevant for children exposed to Spanish (and whose staff member also speaks Spanish and could complete a Spanish CDI). This number ranges from 24 in the highest risk group to 48 in the lowest.

numbers of words children are reported to produce are quite low in both English and Spanish and do not differ greatly by risk factors.

Mothers with Highest Demographic Risk Reported Their Children Are More Likely to Reach the Cutoff Score for Behavior Problems; Staff Ratings Are Not Associated with Maternal Demographic Risk

The mean scores of either parent or staff reports of children's problems or competence on BITSEA do not differ by the number of maternal demographic risk factors. However, scores at the upper or lower ends of the distribution (cutoff scores and the rate of screening positive) are associated with risk factors (see Table VIII.19). According to parent reports, the percentage of children above the cutoff on the Problem Scale and the rate of screening positive on the BITSEA increase with the number of maternal demographic risk factors. Children in the highest-risk group are more likely to be rated as above the cutoff or to screen positive by their parents. However, according to staff reports, the proportion of children above the cutoff on the Problem Scale or who screen positive does not differ across the risk groups. According to both parent and staff reports, children's social-emotional competence is not associated with the number of maternal risk factors.

Mothers with Lower Demographic Risk Are More Likely to Have a Regular Health Care Provider Than Medium-Risk Mothers

Mothers' report of their general health status does not differ by the number of maternal demographic risk factors (see Table VIII.20). Families' health insurance coverage and health care access do not differ by number of risk factors. Lower- and medium-risk families are more likely to have private health insurance coverage compared to families with high risk factors. Lower-risk families are less likely to have public health insurance coverage than medium- or highest-risk families. Lower-risk mothers are less likely to report that they have a regular health care provider than those at medium risk.

Mothers with Medium and Highest Demographic Risk Are More Likely Than Lower-Risk Mothers to Report Poor Mental Health

The mean scores of parent-reported depressive symptoms on the CESD-SF do not differ by number of risk factors. However, the CESD cutoff scores reported by parents do vary across risk groups (see Table VIII.21). Medium- to highest-risk parents are more likely to report moderate to severe depressive symptoms and less likely to report mild to no depressive symptoms than parents with lower risk. Parents across risk groups reported similar levels of parental distress or parent-child dysfunctional interaction.

Mothers with Medium or Highest Demographic Risk Are More Likely to Report Smoking During Pregnancy; Lower-Risk Mothers Are More Likely to Report Current Drinking

Mothers' report of substance use during pregnancy differs somewhat by maternal demographic risk factors (see Table VIII.21). Because these behaviors are relatively infrequent overall but potentially very injurious, we point out smaller differences than in other comparisons. During pregnancy with the focus child, mothers with medium or highest risk are more likely than lower-risk mothers to report smoking, whereas mothers with lower and medium risk are more likely to report drinking while pregnant with the study focus child.

Maternal demographic risk factors are associated with parents' report of current or past substance use. Lower-risk parents are more likely to report drinking at the time of the interview than parents with more risk factors, and more likely to smoke than those at highest risk. Parents with medium or highest risk are more likely than lower-risk parents to report using drugs in the past year, and parents with lower or medium risk are more likely than those at highest risk to report having ever had a drug or drinking problem.

A higher proportion of mothers with medium risk reported receiving mental health treatment in the year prior to the time of the parent interview than the other risk groups. Similarly, a higher proportion of mothers with medium risk reported having received help from Early Head Start in getting the treatment. Though mothers with higher risk were less likely to report receiving mental health treatment than those with lower risk, more mothers with medium and higher risk reported having received help from Early Head Start than those with lower risk, potentially due to the program focusing such efforts on more fragile families (see Table VIII.21).

Family Functioning Is Similar by Demographic Risk Group; Lower-Risk Families Have More Community Involvement, Medium- and Highest-Risk Families Have Fewer Conflicts with Others

Mothers across demographic risk groups reported similar levels of social support and parenting alliance in child-rearing. However, mothers' report of their relationships with other people and community participation differ by risk factors (see Table VIII.21). Medium- and highest-risk mothers are more likely to report having no problems with other people than parents with lowest risk. Lower-risk mothers are however, more likely to report participating in community organizations than parents with more risk factors.

Highest-Risk Mothers Are More Likely to Spank Their Children Than Lower-Risk Ones

There are no differences in mothers' report of adherence to family routines, suggesting that all families maintain regular family routines (not shown). Mothers across risk groups also reported similar traditional or progressive attitudes towards childrearing (see Table VIII.22). Mothers with highest risk are somewhat more likely than those with fewer to report spanking their child in the week prior to the parent interview (see Table VIII.22).

Mothers with Highest Demographic Risk Are Less Likely to Receive Services from Early Head Start During Pregnancy Than Lower-Risk Mothers

Maternal demographic risk factors are associated with some of the information and services mothers received from Early Head Start during pregnancy. For most services, a higher proportion of lower- and medium-risk mothers than other mothers reported receiving services (including receiving any information, information on nutrition, how children grow and develop, and referrals for childbirth classes, help with breastfeeding, or to quit smoking [see Table VIII.23]).

Families with Medium or Highest Maternal Demographic Risk Are More Likely to Receive Services from Community Agencies Than Lower-Risk Families

Mothers across demographic risk groups received a range of services from community agencies. There are no differences across risk groups in the percentages who report receiving many different types of services. However, there are differences in some types of services and this might be related to the nature of the needs of families in different risk categories (see Table VIII.24). Families with

more risk factors are more likely to receive help with transportation, help finding a job, or help or paying for housing. Families with medium risk are more likely than lower- or highest-risk families to receive short-term help getting or paying for things needed in an emergency, and mental health services. Highest-risk families are more likely than families with fewer risk factors to receive health services.

Family Participation in Activities at Early Head Start Does Not Vary Greatly Across Levels of Maternal Demographic Risk

There is minor variation in the frequency of family involvement in Early Head Start activities by maternal risk factors. However, parents' reported participation in a few activities does differ more across levels of risk (see Table VIII.25). Mothers with lower or highest risk most frequently attend group activities for parents and their children, but attend Early Head Start social events less frequently. Those at highest risk were most likely to participate frequently on the program Policy Council than the other groups. Parents report positive relationships with Early Head Start staff at all levels of maternal demographic risk.

Children in the Highest-Risk Group Are More Likely to Be Cared for in Their Own Homes Than Children with Fewer Maternal Demographic Risks; Children in the Lower-Risk Group Are Less Likely to Be in an Early Head Start Center Than Children with Medium Risk

Parents' use of nonparental care, including Early Head Start, did not differ by level of risk, although the types of care used do differ. Children in the lower-risk group are less likely to attend an Early Head Start center than those with more risks. Those at highest risk are least likely to be cared for in a provider's home or other (non-Early Head Start) center and most likely to be cared for in their own home than children with fewer risk factors (see Table VIII.26).

Children in the highest-risk group spent the least amount of time both in nonparental care overall and in Early Head Start (see Table VIII.26). Similar to their higher likelihood of receiving care in their own home, children in the highest-risk group spent the most time in this arrangement. Children in the lower- and medium-risk group spent more hours in other non–Early Head Start child care centers than children in the highest-risk group.

Table VIII.16. Child Health Status and Health Care Outcomes, by Maternal Demographic Risk

Outcome	Lower Risk (0–1)		Medium Risk (2–3)		Highest Risk (4–5)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Child in Excellent or Very Good Health	77.39	3.02	78.73	3.19	75.75	4.11
Child in Fair or Poor Health	6.10	1.69	6.83	2.04	4.29	1.92
Child Birth Weight						
Low birth weight	6.98	1.70	11.15	3.57	6.48	2.61
Very low birth weight	1.12	0.50	1.27	0.94	0.63	0.45
Child Born Premature	8.25	1.56	15.37	3.35	5.88	1.63
Child's Health Insurance Status						
A private health insurance plan	36.45	2.86	34.79	3.66	24.69	4.33
A public/government insurance	82.66	2.30	89.96	2.46	90.67	2.79
No health insurance	4.68	1.39	3.06	1.47	2.42	1.10
Sample Size	**329-332**		**185-189**		**129-132**	

Source: Spring 2009 Parent Interview.

Table VIII.17. Receipt of Early Intervention Services, by Maternal Demographic Risk

Outcome	Lower Risk (0–1)		Medium Risk (2–3)		Highest Risk (4–5)	
	Percentage	Standard Error	Percentage	Standard Error	Percentage	Standard Error
Children evaluated for any disabilities	7.45	1.51	9.17	3.05	3.78	1.46
Children with a diagnosis of any disabilities	3.16	0.95	2.80	1.38	1.98	1.23
Children who have received disability services	70.51	15.47	68.99	25.04	100.00	0.00
Early Head Start helped family and child get disability services	69.34	18.29	44.49	30.43	16.10	16.74
Children currently participating in an early intervention program	60.30	16.00	61.71	23.97	35.52	29.33
Children who have an IEP/IFSP	36.44	3.16	42.23	4.42	29.16	4.71
Sample Size	**319-331**		**175-189**		**129-131**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

IEP = Individualized Education Program or Plan; IFSP = Individual Family Service Plan.

Table VIII.18. Child Cognitive and Language Development, by Maternal Demographic Risk

Outcome	Lower Risk (0–1)		Medium Risk (2–3)		Highest Risk (4–5)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
ASQ-3[a] Raw Score						
Communication	40.10	0.81	40.31	1.05	40.04	1.27
Gross Motor	51.75	1.15	50.25	1.31	50.23	1.44
Fine Motor	44.09	0.97	42.74	1.41	42.05	1.31
Problem Solving	40.93	1.03	39.86	1.20	37.80	1.55
Personal-Social	42.47	1.10	43.67	1.10	42.34	1.70
Total Score	218.81	3.83	214.72	4.67	211.53	5.27
ASQ Cutoff Score (2 SDs below the mean or lower)						
Communication	6.60	1.47	10.51	2.39	4.20	1.72
Gross Motor	10.07	2.40	10.60	3.11	9.27	3.08
Fine Motor	11.20	2.49	16.75	4.16	17.78	3.85
Problem Solving	20.75	2.88	20.07	4.05	25.80	5.79
Personal-Social	9.11	2.32	6.74	2.72	12.54	3.95
ASQ in the Monitoring Zone (1–2 SDs below the mean)						
Communication	24.91	2.54	17.46	2.90	23.80	4.23
Gross Motor	6.48	1.60	11.07	3.21	12.18	3.71
Fine Motor	18.96	2.79	17.29	3.28	18.15	4.45
Problem Solving	18.05	3.03	24.55	6.43	19.38	3.67
Personal-Social	24.29	4.09	27.20	5.90	22.21	6.33
CDI[b] (English) Raw Score						
Vocabulary Comprehension	30.99	1.71	27.97	1.88	29.20	2.18
Vocabulary Production	2.82	0.38	3.18	0.62	1.99	0.41
CDI[b] (Spanish) Raw Score						
Vocabulary Comprehension	39.51	2.37	28.65	5.59	36.23	3.44
Vocabulary Production	2.69	0.63	1.84	0.60	1.68	0.41
Sample Size						
Parent Interview	**335**		**191**		**136**	
Parent Interview[c]	**231**		**135**		**85**	
SCR	**301**		**168**		**124**	
SCR Spanish CDI	**48**		**26**		**24**	

Source: Spring 2009 Parent Interview and Staff-Child Report (SCR).

Table VIII.18 *(continued)*

Note: Sample restricted to 1-year-old Cohort. Depending on the age of the child on the day of the parent interview, the age range of children at the baseline required administration of the ASQ-3 10-, 12-, 14-, 16-, or 18-month questionnaire.

In error we administered the wrong version of the ASQ to parents of 11- and 12-month-olds in all domains except Communication, and therefore report only Communication scores for this group of children.

[a] Parent report.

[b] Teacher/home visitor report.

[c] Pertains to ASQ Gross Motor, Fine Motor, Problem Solving, and Personal-Social. Excludes 11- and 12-month-olds.

ASQ-3 = Ages and Stages Questionnaires (Third Edition); CDI = MacArthur-Bates Communicative Development Inventories.

Table VIII.19. Child Social-Emotional Development, by Maternal Demographic Risk

Outcome	Lower Risk (0–1)		Medium Risk (2–3)		Highest Risk (4–5)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parent-Reported BITSEA Raw Score						
Problem domain	9.71	0.41	10.96	0.45	11.09	0.60
Competence domain	16.25	0.20	15..88	0.31	16.07	0.34
SCR BITSEA Raw Score						
Problem domain	6.08	0.35	6.09	0.38	6.53	0.55
Competence domain	12.84	0.21	12.74	0.34	12.40	0.34
Parent-Reported BITSEA Cutoff Score						
Problem domain	25.11	2.85	25.92	3.90	30.03	4.59
Competence domain	9.54	2.12	12.68	3.27	9.24	2.57
SCR BITSEA Cutoff Score						
Problem domain	13.32	2.63	12.33	2.68	14.35	3.80
Competence domain	16.23	2.19	16.01	3.09	15.65	3.39
Parent-Reported BITSEA Screen Positive	31.43	3.54	34.11	4.17	36.63	4.88
SCR BITSEA Screen Positive	24.77	2.58	24.06	3.30	27.23	4.78
Sample Size						
Parent Interview	**335-339**		**189-191**		**136-136**	
SCR	**309-321**		**177-181**		**131-132**	

Source: Spring 2009 Parent Interview and Staff-Child Report (SCR).

Note: Sample restricted to 1-year-old Cohort.

BITSEA = Brief Infant-Toddler Social and Emotional Assessment; SCR = Staff-Child Report.

Table VIII.20. Family Health Care Services and Health Status, by Maternal Demographic Risk

Outcome	Lower Risk (0–1)		Medium Risk (2–3)		Highest Risk (4–5)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parent in Excellent or Very Good Health	52.74	3.24	53.29	4.62	48.87	5.05
Parent in Fair or Poor Health	11.33	2.23	12.60	3.19	12.95	3.28
Families That Have a Regular Health Care Provider	76.47	3.51	81.65	3.32	79.42	4.59
Family's Health Insurance Status						
A private health insurance plan	46.62	2.71	48.25	3.40	28.59	4.41
A public/government insurance	75.20	2.52	80.40	2.84	83.07	4.01
No health insurance	8.74	1.89	5.15	1.31	8.04	2.73
Early Head Start Helped to Find Health Insurance[a]	9.93	1.83	9.32	2.19	8.45	2.57
Family Member Needed Health Care but Couldn't Obtain It	7.80	1.45	6.31	2.25	6.60	2.17
Sample Size						
Parent Interview	**329-340**		**185-191**		**130-136**	
Parents Insured	**304**		**176**		**119**	

Source: Spring 2009 Parent Interview.

[a] For parents who were insured.

Table VIII.21. Parent Mental Health and Family Functioning, by Maternal Demographic Risk

Outcome	Lower Risk (0–1)		Medium Risk (2–3)		Highest Risk (4–5)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parent's Mental Health						
PSI: Parental Distress	10.77	0.33	10.94	0.55	10.85	0.47
PSI: Parent-Child Dysfunctional Interaction	8.17	0.32	8.97	0.31	9.71	0.44
CESD-SF raw score	4.57	0.31	5.75	0.50	6.02	0.50
CESD-SF: Moderate to severe depressive symptoms	13.40	2.06	20.46	3.54	18.35	3.32
CESD-SF: No or mild depressive symptoms	86.60	2.06	79.54	3.54	81.65	3.32
Parent Substance Use						
Smoking during pregnancy	9.16	1.81	15.29	3.31	12.85	4.04
Drinking during pregnancy	1.22	0.54	2.72	1.67	0.33	0.33
Smoking inside the home	18.30	4.70	17.74	5.91	16.63	5.34
Currently smoking	24.43	2.27	22.27	4.01	19.32	4.80
Currently drinking	27.14	3.12	22.46	3.63	15.07	4.12
Drug use in the past year	1.27	0.64	4.03	1.79	2.78	1.43
Ever had a drinking or drug problem	6.29	1.74	8.74	2.29	5.49	2.12
Parents Received:						
Any mental health treatment	18.18	2.44	24.69	3.85	16.78	3.58
Early Head Start Helped to Get the Treatment[a]	10.47	3.97	30.29	7.79	22.00	8.47
Family Functioning						
Social support	31.56	0.48	29.17	0.72	30.02	0.62
No problems with people	69.47	2.95	76.77	3.53	74.18	4.62
Community participation	23.10	2.38	17.83	3.09	14.72	2.77
Parenting Alliance Measure	46.22	0.36	45.48	0.85	46.08	0.94
Sample Size						
Parent Interview	**242-332**		**87-189**		**45-132**	
Parents Who Received Mental Health Treatment	**60**		**45**		**24**	

Source: Spring 2009 Parent Interview.

Note: Severe depressive symptoms = scores of 15 or higher; moderate depressive symptoms = scores of 10 or higher but lower than 15; mild depressive symptoms = scores of 5 or higher but lower than 10; no depressive symptoms = scores lower than 5.

[a] For parents who received mental health treatment.

[b] Asked only of Newborn Cohort in Spring 2009.

CESD-SF = Center for Epidemiologic Studies Depression Scale Short Form; FES = Family Environment Scale; PSI = Parenting Stress Index.

Table VIII.22. Parenting Beliefs and Behavior, by Maternal Demographic Risk

Outcome	Lower Risk (0–1)		Medium Risk (2–3)		Highest Risk (4–5)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parental Modernity Scale						
Traditional Attitudes	19.40	0.27	20.40	0.24	20.10	0.34
Progressive Attitudes	20.30	0.20	20.11	0.29	19.95	0.37
Parent Spanked the Child in the Past Week	10.21	2.04	11.92	2.49	15.74	3.65
Sample Size	**331-338**		**186-189**		**130-133**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

Table VIII.23. Services Mothers Received from Early Head Start During Pregnancy, by Maternal Demographic Risk

Items	Lower Risk (0–1)		Medium Risk (2–3)		Highest Risk (4–5)	
	Percentage	Standard Error	Percentage	Standard Error	Percentage	Standard Error
Received any information or services from Early Head Start	35.55	3.43	34.42	3.81	29.76	3.91
Information on breastfeeding	29.54	3.43	31.07	3.49	27.88	3.98
A referral to someone to help with breastfeeding	19.72	2.49	19.09	3.10	14.33	3.21
Nutrition information	32.45	3.35	30.34	3.65	26.36	3.58
The chance to get together with other pregnant women or mothers	24.16	3.56	24.22	3.46	21.38	3.48
A referral for a doula	8.46	1.90	7.90	2.15	7.44	2.65
Information on how to prepare your home for a new baby	29.35	3.36	28.44	3.71	26.39	3.74
Help finding clothes, a stroller, or other baby care items	22.95	2.90	21.63	3.46	19.03	3.64
Information on how to take care of babies	29.75	3.42	30.21	3.64	26.34	3.87
Information on how to take care of yourself during pregnancy	31.09	3.68	30.89	3.61	27.01	3.85
A referral for childbirth classes	21.63	2.84	23.96	3.73	16.87	3.62
A referral to a doctor for yourself	13.67	2.14	17.09	2.95	14.04	3.22
A referral to a pediatrician for the baby	13.73	2.13	16.63	2.94	14.02	3.11
A referral to quit smoking	8.57	1.70	15.25	2.75	7.03	2.18
Information on how children grow and develop	32.46	3.49	33.54	3.78	28.40	3.87
Parenting classes	21.28	3.01	20.44	3.28	17.32	3.37
Any other services	7.46	1.60	5.04	1.75	1.97	1.08
Sample Size	**327-330**		**177-180**		**131-134**	

Source: Spring 2009 Parent Interview.

Table VIII.24. Services Families Received from Community Agencies, by Maternal Demographic Risk

Items	Lower Risk (0–1)		Medium Risk (2–3)		Highest Risk (4–5)	
	Percentage	Standard Error	Percentage	Standard Error	Percentage	Standard Error
Help finding good child care	20.58	2.12	18.59	3.35	17.54	3.50
Help getting to and from work or other places	10.64	1.95	16.30	3.08	18.52	3.76
Disability services	4.96	1.20	6.98	1.94	5.47	1.85
Short-term help getting or paying for things needed in an emergency	13.99	2.69	21.88	3.59	13.06	3.54
Help finding a job	7.27	1.55	12.23	2.37	12.19	3.43
Education or job training	10.69	1.66	10.44	2.35	8.04	3.13
Help with a legal problem	5.74	1.26	5.45	1.69	4.25	1.87
Help finding or paying for housing	7.74	1.84	12.05	2.68	13.95	3.58
Counseling on how to manage money	8.69	1.63	12.51	3.58	9.04	2.59
Training on how to read and write	1.79	0.60	4.42	1.88	4.24	2.25
Classes to learn English	8.69	1.87	6.80	3.40	8.61	2.91
Health services	22.95	2.60	24.44	3.88	16.41	3.19
Mental health services	5.56	1.20	10.62	2.60	6.09	1.93
Some other services	4.62	0.95	6.01	2.13	3.57	1.73
Sample Size	**338-340**		**190-192**		**137-138**	

Source: Spring 2009 Parent Interview.

Table VIII.25. Family Participation in Activities at Early Head Start in the Past Year, by Maternal Demographic Risk

	Lower Risk (0–1)			Medium Risk (2–3)			Highest Risk (4–5)		
Items	Not at All	Once or Twice	Three or More Times	Not at All	Once or Twice	Three or More Times	Not at All	Once or Twice	Three or More Times
Attend group activities for parents and their children	29.32	27.24	43.45	30.63	30.68	38.69	23.21	31.94	44.85
Attend workshops on job skills	80.48	12.09	7.44	80.34	13.27	6.39	85.49	8.81	5.69
Attend parent education meetings or workshops on raising children	54.56	32.38	13.06	56.55	24.17	19.28	64.09	17.90	18.01
Attend events only for men/fathers	84.51	11.95	3.55	88.29	8.64	3.07	82.84	15.17	1.99
Volunteered in an Early Head Start classroom	56.29	20.36	23.34	62.20	16.65	21.16	64.56	13.27	22.17
Attended an Early Head Start social event	37.17	38.26	24.57	40.22	29.03	30.75	39.92	35.09	24.99
Participated on the Program Policy Council	84.55	8.78	6.67	83.87	11.45	4.67	81.77	8.01	10.22
Volunteered to help out at program or served on a committee, but not in a classroom or on Policy Council	79.58	12.91	7.51	84.14	9.13	6.73	79.49	14.43	6.08
Take part in center activities in some other way	83.41	12.19	4.40	79.28	13.10	7.62	89.76	5.45	4.79
Sample Size	**332-340**			**188-192**			**135-138**		

Source: Spring 2009 Parent Interview.

Table VIII.26. Child Care Arrangements, by Maternal Demographic Risk

Outcome	Lower Risk (0–1)		Medium Risk (2–3)		Highest Risk (4–5)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Nonparental Care	71.52	2.86	73.78	4.25	70.80	5.99
Current Child Care on a Regular Basis						
Attends Early Head Start center	48.74	4.19	54.86	5.04	50.28	6.09
Attends other child care center or formal program	3.68	1.07	5.07	1.95	7.02	2.57
Receives child care in a provider's home	28.27	3.39	24.52	3.20	12.81	3.02
Receives child care in own home	18.58	2.26	14.96	2.81	23.74	3.73
Total Number of Hours in Child Care	25.55	1.41	24.82	1.78	22.62	2.33
Hours per Week in Child Care						
Early Head Start	23.48	1.85	22.32	1.75	19.29	2.42
Other child care center or formal program	22.65	4.23	23.13	4.17	17.36	5.08
Care in a provider's home	15.72	1.43	12.49	1.68	12.20	2.52
Care in child's own home	9.30	2.34	12.26	2.43	15.44	3.12
Sample Size	**241-332**		**142-189**		**94-132**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

Maternal Psychological Risk Factors

The mental health of parents and family functioning are relevant to parental well-being and to parents' interactions with their children. This could influence children's developmental outcomes (Cummings and Davies 1994; Egeland and Kreutzer 1991). More psychological risk factors might be related to poorer outcomes. In this section, we examine child and family well-being by family psychological risk factors.

Box VIII.3. Maternal Psychological Risk Factors

We created a psychological risk index to measure cumulative family risk of poor parental mental health and unfavorable family functioning, measured at baseline (the mother was the interview respondent in most cases). The number of risks is based on the following measures: (1) moderate or severe depressive symptoms; (2) parenting stress, which indicates a score of one standard deviation above the mean on either of the Parenting Stress Index subscales (Parental Distress or Parent-Child Dysfunctional Interaction); and (3) substance use problems, which include parent reports of drug use in the past year or ever having had a drug or drinking problem. We classify the psychological risk index into three categories (noting that sample sizes become very small for the highest risk group):

- No risk factors: 60 percent of families
- One risk factor: 31 percent of families
- Two or more risk factors: 9 percent of families

Households with One or More Maternal Psychological Risk Factors Are Characterized by Single Parents and Low Educational Attainment

Maternal demographic risk factors—namely single-parent families and low educational attainment—are also correlated with maternal psychological risk factors (depressive symptoms, parenting stress or parent-child dysfunctional interaction, or substance use problems). All of these factors put children at risk for suboptimal development. Some key findings regarding the intersection between psychological risks and family demographics are described in Tables VIII.27 through VIII.30.

Children are less likely to live with both biological parents in households with one or more psychological risk factors. Children live with both biological parents in about 57 percent of families with no psychological risk factors but in only 46 percent of families with at least one risk factor (see Table VIII.27).

Parents in families with one or more psychological risk factor are less likely to have a high school education. In families with no psychological risk factors, only 31 percent of mothers and 36 percent of fathers report less than a high school education. In contrast, in families with one or more risk factors, between 47 and 49 percent of mothers and between 48 and 54 percent of fathers report less than a high school education (see Table VIII.29).

Highest demographic risk is associated with high psychological risk. In families with no psychological risk factors, only 41 percent of mothers have moderate or high maternal risk (three or more risk factors). In families with one or more psychological risk factors, between 53 and 55 percent of mothers have medium or highest maternal risk (see Table VIII.30).

Households with High Psychological Risk Have Higher Economic Risk

Family economic risk is associated with psychological risk. Approximately 19 percent of households with high economic risk have two or more psychological risk factors; for families with lower or medium economic risk, on the other hand, only 5 to 8 percent have two or more psychological risk factors.

Children from Families with More Psychological Risk Factors Are More Likely to Have Poorer Birth Outcomes or General Health and Are Least Likely to Be Insured

Parents with more psychological risks rated their children as less likely to have good or excellent health and more likely to have fair or poor health than parents with one or no risks (see Table VIII.31). Children with parents who report one or more psychological risks are also more likely to be born prematurely than children in the low-risk group. Children in the moderate-risk group were more likely to have low birth weight than children in other groups. Children in the highest psychological risk group are most likely to be uninsured (see Table VIII.31). Rates of private insurance are relatively similar across levels of risk, but parents with two or more risks report lower rates of receiving public insurance.

Similar proportions of children across risk groups are evaluated for disabilities and have a diagnosis, although many more children in the highest risk group have an IEP/IFSP (see Table VIII.32) However, children from high-risk families with diagnoses of a disability are less likely to receive disability services or participate in an early intervention.[5] Among children who are receiving services, the highest- and lowest-risk groups are equally more likely than the moderate-risk group to report having Early Head Start help them to receive services.

Children from Families with More Psychological Risk Factors Are Most Likely to Be at Risk for General Development

Family psychological risk appears to be related to parent reports of general child development for 1-year-olds in several of the ASQ-3 areas. Higher proportions of children from families with more risks scored in the at-risk range in Gross Motor, Fine Motor, and Problem Solving (see Table VIII.33). There were no differences in Communication or Personal-Social by psychological risk level (see Table VIII.33). Contrary to the at-risk findings, children with more risks are more likely to score in the monitoring zone in Communication, Gross Motor, Fine Motor, and Personal-Social (see Table VIII.33). Children with moderate risk (one risk factor) are more likely to score in the monitoring zone in Problem Solving than other children.

Family Psychological Risk Factors Are Not Associated with Children's English CDI Scores; Family Psychological Risk Factors Are Associated with Spanish-Speaking Children's Spanish CDI Scores

Scores for 1-year-olds on the English CDI remained constant for both comprehension and production across risk factors (see Table VIII.33). Among DLLs, children with two risks scored

[5] We note again that there is a low incidence of identified disabilities, and within subgroups the numbers are even smaller. For example, only one child in the high-risk group has a diagnosis.

lower in Spanish CDI in both Comprehension and Production than other children, but children with one risk scored higher than children with no risks.

More Psychological Risk Factors Are Associated with Poorer Social-Emotional Development According to Parents, but Not Early Head Start Staff

Parent-reported scores on the BITSEA for 1-year-olds differ based on varying categories of psychological risk, while staff-reported BITSEA scores did not show such differences. According to parent reports, more psychological risk factors are associated with higher ratings on the Problem scale (see Table VIII.34). There is no difference in staff-reported problems. Both parent- and staff-reported social-emotional competence raw scores also do not vary by number of psychological risk factors. According to parent reports, children with more risks are more likely to meet the cutoffs for the Problem and Competence domains or to be rated as screening positive (see Table VIII.34). However, according to staff reports, children with one risk factor are more likely to meet the cutoffs in either domain or to be rated as screen positive than other children. It is unclear whether these differences are based on distorted parental perceptions of their children's behavior or if dysfunctional interaction between parent and child fosters poorer behavior (or possibly some combination of the two).

Parents with More Psychological Risk Factors Reported Poorer Health and Are Less Likely to Be Insured

Having more psychological risks is associated with negative parental reports of their own health. Parents with more psychological risks are markedly less likely to rate themselves as having excellent or very good health (35 percent) than parents with no risks (55 percent), but they are more likely to report themselves as having fair or poor health (see Table VIII.35).

The number of psychological risks also relates to the likelihood of having insurance or a health care provider. Parents with more psychological risks are less likely to have a regular health care provider or to be covered by public insurance (see Table VIII.35). Parents with more risks are more likely to have no health insurance coverage and to report that there have been times in the past year when family members needed health care but could not obtain it. Parents with more risks are less likely to report getting help from Early Head Start in finding health insurance. However, they are more likely to report having a private plan (55 percent) than parents with one or no risks (40 percent)

Parents Reported Similar Levels of Family Functioning Regardless of Psychological Risks

Parents with varying levels of psychological risk reported similar levels of family conflict, social support, community participation, and parenting alliance in raising their children (not shown). The only difference we find is in parent reports of getting along with a range of key people (including their neighbors, landlord, current or past spouse or partner, others living in the home, bill collectors, or coworkers). Parents with more psychological risks are more likely to report having problems with these types of people (see Table VIII.36).

Parents with Two or More Psychological Risk Factors Are Most Likely to Report Spanking Their Children

We examined several aspects of parenting by psychological risk factors, including family routines and parenting attitudes. We found that families maintain regular family routines regardless

of levels of psychological risk (see Table VIII.37). Parents with varying levels of psychological risk also reported no differences in either traditional or progressive parenting attitudes (see Table VIII.38). However, parents with two or more risks are more than twice as likely to report spanking their child in the week prior to the interview compared to the other two groups (see Table VIII.38).

Parents with More Psychological Risks Are More Likely to Report Receiving Services from Early Head Start or Community Agencies

Level of psychological risk is related to the likelihood of mothers receiving services or information during pregnancy. Mothers with more psychological risks are more likely to report receiving information or services from Early Head Start during their pregnancies (see Table VIII.39). In general, the more risks, the more likely mothers were to report receiving services.

The same pattern generally holds for receiving services from community agencies (see Table VIII.40). Parents with more risk report receiving more help finding good child care, transportation and job assistance, more help with disability services, health and mental health services, and more literacy training. Parents with one or more psychological risk are more likely to receive ESL classes and short-term help than parents with no risk factors. The exception is the level of receipt of help with a legal problem, with those at higher risk being less likely to receive that service.

Parents with two or more risks are more likely to use nonparental care than other parents, specifically care in a provider's home (see Table VIII.40). There are few differences in parent reports of using Early Head Start care, care in the child's own home, or other child care center by psychological risks. Psychological risk factors are not associated with the total number of hours in nonparental care (see Table VIII.40). Children from families with no risk or two or more risks spent more hours in center-based care, including Early Head Start or other child care center. Children of parents with one psychological risk spent more hours receiving care in a provider's home or in their own homes than other children did.

Family Participation in Activities at Early Head Start Vary Across Levels of Psychological Risk

The patterns of differences in family participation by levels of psychological risks are mixed (see Table VIII.41). Parents with two or more risks reported participating in the following activities less frequently than parents in other groups: attending group activities for parents and their children, participating on the program Policy Council, and volunteering to help out at program or serve on a committee (but not in a classroom or on the Policy Council). However, parents with two or more risks reported attending parent education meetings or workshops on raising children more frequently than parents in other groups. Parents with two or more risks reported attending workshops on job skills most frequently, followed by parents with one risk. Parents with two or more risks also reported volunteering in an Early Head Start classroom most frequently, followed by parents with no risk. Parents with one risk reported attending an Early Head Start social event or taking part in center activities less frequently than parents in other groups. Parents reported positive relationships with Early Head Start staff regardless of the levels of psychological risk.

Table VIII.27. Household Characteristics, by Psychological Risk (Percentages Unless Otherwise Indicated)

	Low Risk (0)	Moderate Risk (1)	Highest Risk (2+)
Child Lives with			
Two Biological Parents	56.5	45.5	45.5
Married	34.7	23.5	26.0
Unmarried	21.8	22.0	19.5
One Biological Parent			
Birth mother only	41.6	52.5	51.3
Birth father only	0.3	0.4	1.9
No Biological Parents	1.7	1.6	1.4
Average Number of Adults in Household	1.9	1.8	1.8
Average Number of Children in Household	2.6	2.6	2.2
Average Household Size	4.5	4.4	4.1
Child Lives in Intergenerational Household	15.2	16.9	26.4
Average Household Income	$27,550	$23,207	$24,027
Household Income as a Percentage of the Poverty Level			
0–50	27.6	21.8	33.0
50–100	39.0	46.2	36.7
101–130	11.7	14.6	10.0
131 or higher	21.7	17.4	20.4
Average Number of People Contributing to Household Income	1.6	1.6	1.5
Sample Size	**387**	**201**	**62**

Source: Spring 2009 Parent Interview.

Note: Data are weighted to be representative of the population of families being served by the Early Head Start program at the national level.

Table VIII.28. Child's Race/Ethnicity, by Psychological Risk (Percentages Unless Otherwise Indicated)

	Low Risk (0)	Moderate Risk (1)	High Risk (2+)
White, non-Hispanic	45.7	31.7	39.3
African American	30.4	45.7	39.3
Hispanic	18.2	18.1	14.8
Other	5.7	4.5	6.6
Sample size	**387**	**201**	**62**

Source: Spring 2009 Parent Interview.

Note: Data are weighted to be representative of the population of families being served by the Early Head Start program at the national level.

Table VIII.29. Parent Characteristics, by Psychological Risk (Percentages Unless Otherwise Indicated)

	Birth Mother			Birth Father		
	Low Risk (0)	Moderate Risk (1)	High Risk (2+)	Low Risk (0)	Moderate Risk (1)	High Risk (2+)
Average Age in Years	26.0	26.9	26.0	28.6	29.9	30.2
Birth Country						
U.S.A.	82.5	67.5	71.8	79.7	60.8	62.0
Mexico	14.0	25.4	18.5	16.9	27.8	27.8
Central or South America or Caribbean	2.6	3.7	2.7	3.2	8.4	7.3
Other country	0.8	3.4	5.5	0.2	3.0	2.8
Time in U.S. if Born Elsewhere						
5 years or fewer	32.5	22.6	17.1	12.3	27.1	15.3
6–10 years	46.9	55.2	47.1	43.4	33.2	33.0
More than 10 years	20.6	22.1	35.7	44.3	39.7	51.7
Average Years in U.S. if Born Elsewhere	9.1	9.5	11.2	12.1	12.3	13.7
Highest Education Completed						
Less than high school	31.0	49.4	47.1	35.9	54.0	48.0
High school diploma or equivalent	35.7	24.8	35.0	44.4	29.3	42.3
Some college or AA	27.9	22.1	15.1	13.3	12.5	6.4
BA or higher	5.4	3.8	2.8	6.4	4.2	3.2
Sample Size	**387**	**201**	**62**	**387**	**201**	**62**

Source: Spring 2009 Parent Interview.

Note: Data are weighted to be representative of the population of families being served by the Early Head Start program at the national level.

Table VIII.30. Maternal Risk, by Psychological Risk (Percentages)[a]

	Low Risk (0)	Moderate Risk (1)	High Risk (2+)
Single Mother	39.0	48.0	48.4
Teenage Mother	52.0	51.1	39.5
No High School Credential	30.4	48.1	48.4
Receive Public Assistance	67.7	70.5	74.0
Not Employed, in School, or in Training	34.3	42.1	45.1
Maternal Demographic Risk Index			
0–2 (lower risk)	59.3	45.5	47.2
3 (medium risk)	25.0	33.0	34.8
4–5 (highest risk)	15.7	21.5	18.0
Sample Size[a]	**387**	**201**	**62**

Source: Spring 2009 Parent Interview.

Note: Data are weighted to be representative of the population of families being served by the Early Head Start program at the national level.

[a] Sample is limited to 1-year-old Cohort parents.

Table VIII.31. Child Health Status and Health Care Outcomes, by Psychological Risk

Outcome	Low Risk (0)		Moderate Risk (1)		High Risk (2+)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Child in Excellent or Very Good Health	79.01	2.28	78.39	3.61	61.81	7.00
Child in Fair or Poor Health	5.36	1.39	4.33	1.79	17.51	6.42
Child Birth Weight						
Low birth weight	6.70	1.76	11.82	2.58	4.75	2.54
Very low birth weight	0.61	0.29	1.75	0.95	1.87	1.87
Child Born Prematurely	6.29	1.34	15.34	3.48	12.80	4.87
Child's Health Insurance Status						
A private health insurance plan	33.70	2.36	34.92	3.17	33.53	7.59
A public/government insurance	87.10	1.69	86.30	2.58	80.16	6.08
No health insurance	3.03	0.94	2.95	1.13	10.88	4.80
Sample Size						
Parent Interview	**379–387**		**199–201**		**58–62**	

Source: Spring 2009 Parent Interview.

Table VIII.32. Receipt of Early Intervention Services, by Psychological Risk

Outcome	Low Risk (0)		Moderate Risk (1)		High Risk (2+)	
	Percentage	Standard Error	Percentage	Standard Error	Percentage	Standard Error
Children evaluated for any disabilities	6.77	1.52	9.08	2.11	4.77	2.70
Children with a diagnosis of any disabilities	2.65	0.83	3.49	1.32	2.02	2.01
Children who have received disability services	80.41	14.76	59.62	19.57	100.00	0.00
Early Head Start helped family and child get disability services	61.24	18.68	54.77	25.34	0.00	0.00
Children currently participating in an early intervention program	68.92	15.96	51.03	20.09	0.00	0.00
Children who have an IEP/IFSP	39.67	3.28	30.71	4.47	41.31	7.15
Sample Size	**369–387**		**184–201**		**55–62**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

IEP = Individualized Education Program or Plan; IFSP = Individual Family Service Plan.

Table VIII.33. Child Cognitive and Language Development, by Psychological Risk

Outcome	Low Risk (0)		Moderate Risk (1)		High Risk (2+)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
ASQ-3[a] Raw Score						
Communication	40.07	0.73	40.24	1.39	39.03	1.65
Gross Motor	51.56	0.96	50.73	0.93	47.62	2.87
Fine Motor	44.16	0.94	41.71	1.44	41.71	2.03
Problem Solving	40.91	0.88	38.35	1.46	39.63	2.70
Personal-Social	43.46	0.82	41.22	1.24	43.15	2.34
Total Score	219.75	3.11	209.87	5.16	210.08	9.18
ASQ Cutoff Score (2 SDs below the mean or lower)						
Communication	7.33	1.43	8.39	3.22	4.10	2.09
Gross Motor	10.07	2.05	9.10	2.63	14.44	6.62
Fine Motor	11.97	2.34	18.41	3.74	14.77	5.61
Problem Solving	19.74	2.37	23.85	4.17	30.63	7.85
Personal-Social	7.51	1.71	11.29	3.20	10.32	4.64
ASQ in the Monitoring Zone (1–2 SDs below the mean)						
Communication	23.52	2.60	20.60	3.17	29.69	7.16
Gross Motor	8.63	2.00	8.57	2.69	10.82	6.80
Fine Motor	17.69	2.93	16.92	3.11	32.23	9.32
Problem Solving	18.66	2.98	23.82	3.57	13.82	7.14
Personal-Social	23.32	3.41	28.88	4.78	23.94	8.66
CDI[b] (English) Raw Score						
Vocabulary Comprehension	30.33	1.56	28.44	1.91	27.05	2.73
Vocabulary Production	2.29	0.27	3.03	0.56	3.47	0.95
CDI[b] (Spanish) Raw Score						
Vocabulary Comprehension	34.79	3.03	38.36	4.52	29.18	8.69
Vocabulary Production	1.26	0.28	3.64	0.77	1.51	0.89
Sample Size						
Parent Interview	**383**		**200**		**60**	
Parent Interview[c]	**265**		**136**		**37**	
SCR	**359**		**167**		**52**	
SCR Spanish CDI	**52**		**37**		**7**	

Source: Spring 2009 Parent Interview and Staff-Child Report (SCR).

Table VIII.33 *(continued)*

Note: Sample restricted to 1-year-old Cohort. Depending on the age of the child on the day of the parent interview, the age range of children at the baseline required administration of the ASQ-3 10-, 12-, 14-, 16-, or 18-month questionnaire.

In error we administered the wrong version of the ASQ to parents of 11- and 12-month-olds in all domains except Communication, and therefore report only ommunication scores for this group of children.

[a] Parent report.

[b] Teacher/home visitor report.

[c] Pertains to ASQ Gross Motor, Fine Motor, Problem Solving, and Personal-Social. Excludes 11- and 12-month-olds.

ASQ-3 = Ages and Stages Questionnaires (Third Edition); CDI = MacArthur-Bates Communicative Development Inventories; SD = standard deviation.

Table VIII.34. Child Social-Emotional Development, by Psychological Risk

Outcome	Low Risk (0)		Moderate Risk (1)		High Risk (2+)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parent-Reported BITSEA Raw Score						
Problem domain	8.84	0.38	11.80	0.45	15.07	0.99
Competence domain	16.36	0.18	15.67	0.29	15.57	0.46
SCR BITSEA Raw Score						
Problem domain	6.11	0.34	6.33	0.44	5.72	0.53
Competence domain	12.82	0.20	12.30	0.34	13.34	0.68
Parent-Reported BITSEA Cutoff Score						
Problem domain	17.74	2.78	34.96	3.72	55.92	7.14
Competence domain	9.81	1.72	10.89	3.17	14.23	4.72
SCR BITSEA Cutoff Score						
Problem domain	12.12	2.26	17.78	3.43	2.91	1.77
Competence domain	14.36	1.89	21.99	3.72	11.91	6.08
Parent-Reported BITSEA Screen Positive	25.07	3.46	41.52	4.04	61.95	6.65
SCR BITSEA Screen Positive	23.54	2.41	31.66	3.67	13.78	6.03
Sample Size						
Parent Interview	**384–387**		**200–201**		**60–61**	
SCR	**364–374**		**183–188**		**54–56**	

Source: Spring 2009 Parent Interview and Teacher Child Report (SCR).

Note: Sample restricted to Cohort 1.

BITSEA = Brief Infant-Toddler Social and Emotional Assessment; SCR = Staff-Child Report.

Table VIII.35. Family Health Care Services and Health Status, by Psychological Risk

Outcome	Low Risk (0)		Moderate Risk (1)		High Risk (2+)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parent in Excellent or Very Good Health	55.23	2.86	51.29	4.85	34.02	7.27
Parent in Fair or Poor Health	8.31	1.67	17.88	2.70	17.54	4.93
Families That Have a Regular Health Care Provider	81.49	3.09	75.07	3.84	73.21	6.60
Family's Health Insurance Status						
A private health insurance plan	44.40	2.35	41.04	3.26	54.10	7.19
A public/government insurance	80.72	1.99	76.25	3.69	65.83	7.23
No health insurance	6.14	1.28	9.12	2.27	10.93	4.46
Early Head Start Helped to Find Health Insurance[a]	10.15	1.72	9.25	2.06	6.21	2.93
Family Member Needed Health Care but Couldn't Obtain It	6.37	1.19	7.23	2.12	12.59	5.01
Sample Size						
Parent Interview	**383–387**		**200–201**		**61–62**	
Parents Insured	**362**		**180**		**55**	

Source: Spring 2009 Parent Interview.

[a] For parents who were insured.

Table VIII.36. Family Functioning, by Psychological Risk

Outcome	Low Risk (0)		Moderate Risk (1)		High Risk (2+)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Family Functioning						
FES-Family Conflict[a]						
Social support	31.87	0.45	28.82	0.54	28.27	1.09
No problems with people	75.27	2.14	71.06	3.44	56.70	7.43
Community participation	20.79	2.08	19.30	2.93	18.84	5.19
Parenting Alliance Measure	46.72	0.37	45.18	0.76	43.81	0.90
Sample Size	**230–387**		**108–201**		**35–62**	

Source: Spring 2009 Parent Interview.

[a] Asked only of Newborn Cohort in Spring 2009.

FES = Family Environment Scale.

Table VIII.37. Family Routines, by Psychological Risk

Items	Low Risk (0)		Moderate Risk (1)		High Risk (2+)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Number of days per week family eats dinner together	5.60	0.12	5.35	0.17	4.73	0.30
Child is fed at regular times in a typical day	95.33	1.12	94.26	1.40	92.41	3.62
Number of meals child eats in a typical day	3.25	0.04	3.31	0.05	3.13	0.11
Number of snacks child eats in a typical day	2.44	0.05	2.54	0.08	2.43	0.17
Number of days per week child goes to bed at regular bedtime	4.71	0.04	4.59	0.07	4.63	0.13
Number of times child wakes up during night	0.72	0.05	0.83	0.07	1.25	0.23
Number of hours child sleeps per night	9.62	0.12	9.61	0.15	9.24	0.37
Number of naps child takes in a typical day	1.62	0.03	1.67	0.06	1.82	0.10
Number of hours child naps	1.53	0.04	1.50	0.06	1.37	0.11
Sample Size	**369–387**		**187–201**		**57–62**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

Table VIII.38. Parenting Beliefs and Behavior, by Psychological Risk

Outcome	Low Risk (0)		Moderate Risk (1)		High Risk (2+)	
	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parental Modernity Scale						
Traditional Attitudes	19.47	0.23	20.47	0.32	19.75	0.52
Progressive Attitudes	20.34	0.20	19.90	0.26	20.06	0.52
Parent Spanked the Child in the Past Week	9.65	1.71	10.84	2.55	23.63	6.55
Sample Size	**385–387**		**200–201**		**62–62**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to I-year-old Cohort.

Table VIII.39. Services Mothers Received from Early Head Start During Pregnancy, by Psychological Risk

Items	Low Risk (0)		Moderate Risk (1)		High Risk (2+)	
	Percentage	Standard Error	Percentage	Standard Error	Percentage	Standard Error
Received any information or services from Early Head Start	32.00	2.74	37.25	4.04	39.20	7.29
Information on breastfeeding	25.51	2.71	35.09	4.18	37.78	7.25
A referral to someone to help with breastfeeding	15.13	1.92	21.88	3.68	27.94	6.58
Nutrition information	28.12	2.76	33.85	4.01	37.50	7.23
The chance to get together with other pregnant women or mothers	21.84	2.75	24.93	4.26	32.44	7.16
A referral for a doula	7.44	1.85	8.85	2.40	12.86	4.65
Information on how to prepare your home for a new baby	25.78	2.85	31.63	3.79	36.30	7.09
Help finding clothes, a stroller, or other baby care items	17.91	2.39	27.60	4.05	25.82	5.62
Information on how to take care of babies	26.55	2.85	31.83	3.93	37.78	7.25
Information on how to take care of yourself during pregnancy	27.89	2.76	32.90	4.39	37.78	7.25
A referral for childbirth classes	18.12	2.36	25.26	3.94	29.35	6.85
A referral to a doctor for yourself	12.04	1.70	16.86	3.44	22.27	6.40
A referral to a pediatrician for the baby	11.51	1.73	17.95	3.23	20.83	5.95
A referral to quit smoking	8.04	1.58	9.63	2.37	23.31	6.63
Information on how children grow and develop	29.12	2.81	35.82	4.04	39.20	7.29
Parenting classes	16.74	2.46	23.33	3.82	32.80	6.96
Any other services	5.14	1.15	7.10	2.07	7.43	3.74
Sample Size	**368–371**		**194–195**		**57–60**	

Source: Spring 2009 Parent Interview.

Table VIII.40. Services Families Received from Community Agencies, by Psychological Risk

Outcome	Low Risk (0)		Moderate Risk (1)		High Risk (2+)	
	Percentage	Standard Error	Percentage	Standard Error	Percentage	Standard Error
Help finding good child care	17.46	2.04	21.05	3.46	28.61	7.08
Help getting to and from work or other places	11.15	2.01	16.10	3.40	15.91	5.61
Disability services	4.94	1.02	5.62	1.66	10.80	3.81
Short-term help getting or paying for things needed in an emergency	13.00	2.37	19.51	3.35	19.47	5.41
Help finding a job	8.12	1.65	10.23	2.28	18.47	5.04
Education or job training	9.61	1.76	9.94	2.44	11.84	4.04
Help with a legal problem	5.54	1.17	4.48	1.77	2.06	1.49
Help finding or paying for housing	8.89	1.94	12.68	2.82	8.75	2.85
Counseling on how to manage money	9.39	1.67	9.66	2.28	13.06	4.26
Training on how to read and write	2.22	0.87	4.28	1.75	4.67	2.69
Classes to learn English	6.23	1.58	12.10	3.17	9.98	4.32
Health services	21.35	2.53	20.90	3.37	30.92	6.99
Mental health services	4.28	1.20	9.64	2.32	11.78	4.04
Some other services	4.25	0.97	4.79	1.67	6.20	3.24
Sample Size	**385–387**		**200–201**		**61–62**	

Source: Spring 2009 Parent Interview.

Table VIII.41. Family Participation in Activities at Early Head Start in the Past Year, by Family Psychological Risk

	Low Risk (0)			Moderate Risk (1)			High Risk (2+)		
Items	Not at All	Once or Twice	Three or More Times	Not at All	Once or Twice	Three or More Times	Not at All	Once or Twice	Three or More Times
Attend group activities for parents and their children	27.79	30.52	41.68	28.12	28.36	43.52	36.41	24.13	39.46
Attend workshops on job skills	83.79	9.69	6.52	77.08	16.92	6.00	78.89	10.24	10.87
Attend parent education meetings or workshops on raising children	57.01	26.78	16.21	58.84	24.92	16.24	44.24	42.28	13.48
Attend events only for men/fathers	83.30	13.04	3.66	89.00	8.85	2.15	88.96	11.04	0
Volunteered in an Early Head Start classroom	59.68	15.46	24.86	62.24	23.00	14.76	56.86	12.73	30.40
Attended an Early Head Start social event	35.94	37.42	26.65	45.48	30.89	23.63	35.84	40.47	23.68
Participated on the Program Policy Council	85.71	7.68	6.61	81.62	10.87	7.51	83.09	16.21	0.70
Volunteered to help out at program or served on a committee, but not in a classroom or on Policy Council	80.63	12.37	6.99	81.82	10.43	7.75	83.92	14.15	1.93
Takes part in center activities in some other way	80.03	14.07	5.90	90.03	5.88	4.09	84.17	11.82	4.00
Sample Size	**382–387**			**196–201**			**60–62**		

Source: Spring 2009 Parent Interview.

Dual Language Learner Status

There has been an increase in the percentage of children enrolled in Early Head Start whose home language is not English (ACF 2008). It is important to understand their development and their families relative to children from monolingual English-speaking homes. In this section, we examine family characteristics and child and family well-being by dual language learner (DLL) status and describe the notable differences apart from the expected differences in race/ethnicity.[6] Because of the small sample size for DLLs from households in which a language other than English and Spanish is spoken, we focus on DLLs from households in which Spanish is the primary language spoken to the child.

Box VIII.4. Dual Language Learners in Early Head Start

DLL status is defined by the languages spoken at home:

- English is spoken exclusively in two-thirds of households. Children in these households are defined as non-DLLs.
- Spanish is spoken in one-third of households. Children in these households are defined as DLLs, although the groups range widely in terms of exposure to English.
- A language other than English or Spanish is spoken in only 3 percent of children's households and therefore is dropped from the analyses (although these children would technically be DLLs).

Children from English-Speaking Homes Have Better Health Than DLL Children

Parent reports of Early Head Start children's birth outcomes are similar for DLLs and children from English-speaking homes, but parent ratings of general health status differ by children's DLL status (see Table VIII.42). (Note that these ratings are consistent with differences already shown for Hispanic children compared to whites and African Americans.) DLLs are less likely to be rated by their parents as having excellent or very good health than their peers from English-speaking homes. Parent ratings of fair or poor health are not different by children's DLL status.

The proportions of children who are uninsured or have public coverage do not differ by DLL status. However, DLLs are less likely than children from English-speaking homes to have a private plan (see Table VIII.42).

Children from English-Speaking Homes Are More Likely to Receive Disability Services Than DLLs

The proportions of children reported by their parents as having been evaluated for and diagnosed with a problem are similar between DLLs and children from English-speaking homes; these findings are also mostly consistent with findings for Hispanic children. Among those with a diagnosis, DLL children are less likely to have received disability services or have an IEP/IFSP than children from English-speaking homes. However, DLLs with a diagnosis are more likely to be participating in early intervention programs than their counterparts from English-speaking homes

[6] More than 97 percent of DLLs in the sample are Hispanic (not shown).

(see Table VIII.43). Contrary to the findings for Hispanics, parents of DLLs who have received disability services[7] were less likely to report that Early Head Start helped them obtain the services than parents from English-speaking homes. Again, the small sample size means that small differences in number translate into large differences in proportions.

Parents of DLLs and Children from English-Speaking Homes Reported Children's ASQ-3 General Development Similarly Except in the Gross Motor and Personal-Social Domains

According to parent reports, children's raw scores on the Ages and Stages Questionnaire (ASQ-3) do not differ by DLL status in any of the developmental areas. When we consider the cutoff scores, there are some differences in the proportion of children rated by their parents as being in the at-risk range (two standard deviations below the mean or lower) on the ASQ-3 (see Table VIII.44). The largest difference between DLLs and children from English-speaking homes is observed in Gross Motor, in which the proportion of DLLs reported by their parents as in the at-risk range is twice the percentage for children from English-speaking homes. A smaller difference is that DLL children have a lower rate of being at-risk in Personal-Social relative to those from English-speaking homes. Both of these findings are consistent with those for Hispanic children.

When we consider the proportion of children whose ASQ-3 scores fall within the monitoring zone (one to two standard deviations below the mean), DLLs are more likely to be in the monitoring zone in Gross Motor as well as Personal-Social than children from English-speaking homes (see Table VIII.44). There are few differences in the areas of Communication, Fine Motor, and Problem Solving. This is also consistent with differences within race/ethnicity.

Early Head Start Staff Reported DLL Children Understand More Words Across Both English and Spanish Than Children from English-Speaking Homes

Perhaps unsurprisingly, we found substantial differences by DLL status in staff reports of children's English vocabulary comprehension and production using the MacArthur-Bates Communicative Development Inventory (CDI) (see Table VIII.44). DLL children's CDI scores are markedly lower than the scores of children from English-speaking homes. On average, staff reported children from English-speaking homes understand 10 more English words than DLL children. Children from English-speaking homes also say more than twice as many English words than DLLs. This is consistent with the literature, which demonstrates that DLL children's English vocabulary knowledge is below that of children from English-speaking homes early in children's development (Fernández et al. 1992; Oller and Eilers 2002). It is important to note that when we considered the words that staff reported the child understands in both English and Spanish, children in Spanish-speaking homes understand more words than children from English-speaking homes understand in English.

Parents Are More Likely Than Staff to Report Their DLL Children as Having Social-Emotional Problems

Both parents and staff rated children's social-emotional development using the BITSEA. We see a great deal of consistency with findings by race/ethnicity reported earlier. We found some differences by DLL status in the cutoff scores of parent and staff reports on the BITSEA, and the

[7] N = 3.

pattern of differences varies by reporter (see Table VIII.45). Across all three areas (Problems, Competence; and being above the cutoff point on either, or screening positive), DLL children were more likely to be above the cutoffs on the parent report. In contrast, staff reported that DLL children are less likely to be above the cutoff on the Problem scale. In the Competence domain, both parents and staff reported that DLL children are more likely to have delays in social-emotional competence than their peers from English-speaking homes, although the rate was higher for staff than parents. Prior research indicates that teachers tend to report that Hispanic children have lower levels of internalizing and externalizing behaviors than both white and African American peers (Crosnoe 2005). Parents' reports of more problems in their children might be due to different values within the Hispanic culture (Espinosa 2006).

Parents of DLLs Reported Poorer Health Than Parents of Children from English-Speaking Homes

Similar to the findings by race/ethnicity, parents of DLLs and children from English-speaking homes rated their general health differently (see Table VIII.46). Parents of DLLs are more than twice as likely as parents of English-speaking children to report fair or poor health. Parent ratings of excellent or very good health do not differ by DLL status.

There are also some differences by DLL status in parent reports of family health care access, which are also similar to the findings by race/ethnicity (see Table VIII.46). Parents of DLLs are less likely than parents of children from English-speaking homes to have a regular health care provider. Parents of DLLs are also less likely to have a private health insurance plan, although they are as likely as English-speaking parents to have public coverage. Parents of DLLs are twice as likely as parents of children from English-speaking homes to be uninsured, but they are also more likely to receive help from Early Head Start in finding the services. A similar proportion of parents from both groups reported that there have been times in the past year when family members needed health care but could not obtain it due to financial or insurance issues.

English-Speaking Parents Are More Likely to Report Substance Use Problems Than Parents of DLL Children

Parents of DLLs and children from English-speaking homes reported similar levels of parental distress and parent-child dysfunctional interaction. However, parent reports of depressive symptoms differ by DLL status (see Table VIII.47). DLL parents are less likely to report moderate to severe depressive symptoms and more likely to report having no or mild depressive symptoms. All findings are similar to those found by race/ethnicity.

We also see some differences by DLL status in parent reports of substance use and mental health treatment; again, these are similar to those found by race/ethnicity (see Table VIII.47). Parents of DLLs are considerably less likely than parents of children from English-speaking homes to report smoking during pregnancy, smoking and drinking at the time of the interview, or ever having had a drug or drinking problem. They are also less likely than parents of children from English-speaking homes to report that either they or someone else smokes inside their home. Parent reports of drinking during pregnancy or drug use in the past year do not differ by DLL status.

Parents of DLLs are less likely than parents of children from English-speaking homes to report receiving mental health treatment, but they are more likely to report that Early Head Start helped them get the treatment (see Table VIII.47).

Parents Reported Similar Levels of Family Functioning Regardless of DLL Status

Parents of DLLs and children from English-speaking homes reported similar levels of family conflict, social support, community participation, and parenting alliance in raising their child. The only difference we find is in parent reports of getting along with a range of key people (including neighbors, landlords, current or past spouse or partner, others living in the home, bill collectors, or coworkers). More than 80 percent of DLL parents reported having no problems with people, compared to two-thirds of English-speaking parents (see Table VIII.47). These findings are consistent with those by race/ethnicity.

Parents of DLLs Are Less Likely to Use Spanking as a Discipline Strategy Than English-Speaking Parents

Parent reports of traditional or progressive attitudes toward child-rearing do not differ by DLL status. However, notable differences are observed in parent-reported discipline strategies (see Table VIII.48). Parents of children from English-speaking homes are twice as likely as parents of DLLs to report spanking their children (14 versus 7 percent). This is consistent with prior findings by race/ethnicity.

Family Service Use Is Comparable by DLL Status

There are very few differences in mother reports of services they received during pregnancy or services the family receives from community agencies (see Table VIII.49 and Table VIII.50). The only differences we find are in parent reports of learning English and receiving health services (see Table VIII.50). As would be expected, DLL parents are more likely than English-speaking parents to attend training on how to read and write and to attend classes to learn English. In addition, they are also twice as likely as English-speaking parents to report receiving health services from community agencies.

DLL parents are less likely than English-speaking parents to report using nonparental care, which translates to less use of each type of child care (see Table VIII.51). Accordingly, the number of hours in different types of child care also varies by DLL status (see Table VIII.51). Generally, children from English-speaking homes spend more time in nonparental care than DLL children. In particular, English-speaking children spend more time in Early Head Start and other child care center or formal care than DLL children. The amount of time children are cared for in a provider's home or in the child's own home is similar by DLL status.

DLL Parents Are More Likely to Report Participating in Activities at Early Head Start Than English-Speaking Parents

Consistent with the findings about racial/ethnic differences, DLL parents reported participating in Early Head Start activities more frequently than English-speaking parents in the following activities (see Table VIII.52): attending group activities for parents and their children, attending workshops on job skills, attending parent education meetings or workshops on raising children, attending events only for men/fathers, and volunteering in an Early Head Start classroom. However, English-speaking parents reported being involved in center activities in some other way (such as through fundraisers or field trips) more frequently than DLL parents. DLL parents do not differ from English-speaking parents in attending an Early Head Start social event, participating on the Program Policy Council, or volunteering to help out at the program or serving on a committee but not in a classroom or on the program Policy Council (see Table VIII.52).

Table VIII.42. Child Health Status and Health Care Outcomes, by DLL Status

Outcome	Home Language: English Mean/ Percentage	English Standard Error	Spanish Mean/ Percentage	Spanish Standard Error
Child in Excellent or Very Good Health	82.56	2.24	71.65	2.37
Child in Fair or Poor Health	4.95	1.13	6.32	1.93
Child Birth Weight				
Low birth weight	6.53	1.20	9.01	2.89
Very low birth weight	0.95	0.46	0.76	0.46
Child Born Premature	7.66	1.25	10.16	2.07
Child's Health Insurance Status				
A private health insurance plan	35.60	2.33	25.68	2.65
A public/government insurance	84.51	1.84	83.41	2.11
No health insurance	6.06	1.44	6.60	1.49
Sample Size				
Parent Interview	**477–511**		**258–286**	

Source: Spring 2009 Parent Interview.

DLL = dual language learner.

Table VIII.43. Receipt of Early Intervention Services, by DLL Status

	Home Language			
	English		Spanish	
Outcome	Percentage	Standard Error	Percentage	Standard Error
Children evaluated for any disabilities	8.05	1.88	5.70	1.54
Children with a diagnosis of any disabilities	3.30	0.94	1.66	0.85
Children who have received disability services	72.92	14.60	65.75	24.12
Early Head Start helped family and child get disability services	55.79	16.52	32.93	27.07
Children currently participating in an early intervention program	59.10	15.13	65.75	24.12
Children who have an IEP/IFSP	36.98	3.26	33.68	3.93
Sample Size	**391–413**		**213–237**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

DLL = dual language learner; IEP = Individualized Education Program or Plan; IFSP = Individual Family Service Plan.

Table VIII.44. Child Cognitive and Language Development, by DLL Status

Outcome	Home Language: English Mean/ Percentage	English Standard Error	Spanish Mean/ Percentage	Spanish Standard Error
ASQ-3[a] Raw Score				
Communication	40.71	0.60	38.97	1.15
Gross Motor	52.87	0.78	47.68	0.98
Fine Motor	43.25	1.02	43.73	1.33
Problem Solving	39.76	0.92	41.24	1.02
Personal-Social	43.17	0.76	43.02	1.02
Total Score	218.34	2.97	214.47	4.51
ASQ Cutoff Score (2 SDs below the mean or lower)				
Communication	6.64	1.17	8.49	3.14
Gross Motor	7.85	1.65	14.63	2.15
Fine Motor	15.12	2.33	12.57	2.74
Problem Solving	21.09	2.66	20.60	3.06
Personal-Social	10.22	1.83	6.25	2.24
ASQ in the Monitoring Zone (1–2 SDs below the mean)				
Communication	23.41	2.39	21.77	3.58
Gross Motor	6.05	1.47	13.70	3.02
Fine Motor	17.22	2.41	19.71	3.71
Problem Solving	19.37	2.75	22.18	4.26
Personal-Social	18.60	3.09	32.71	5.23
CDI[b] (English) Raw Score				
Vocabulary Comprehension	33.02	1.61	22.96	1.90
Vocabulary Production	3.50	0.39	1.36	0.21
Sample Size				
Parent Interview	**412**		**235**	
Parent Interview[c]	**281**		**162**	
SCR	**391**		**192**	

Source: Spring 2009 Parent Interview and Staff-Child Report (SCR).

Note: Sample restricted to 1-year-old Cohort. Depending on the age of the child on the day of the parent interview, the age range of children at the baseline required administration of the ASQ-3 10-, 12-, 14-, 16-, or 18-month questionnaire. In error we administered the wrong version of the ASQ to parents of 11- and 12-month-olds in all domains except Communication, and therefore report only Communication scores for this group of children.

[a] Parent report.

[b] Teacher/home visitor report.

[c] Pertains to ASQ Gross Motor, Fine Motor, Problem Solving, and Personal-Social. Excludes 11- and 12-month-olds.

ASQ-3 = Ages and Stages Questionnaires (Third Edition); CDI = MacArthur-Bates Communicative Development Inventories; DLL = dual language learner.

Table VIII.45. Child Social-Emotional Development, by DLL Status

Outcome	Home Language: English Mean/ Percentage	English Standard Error	Spanish Mean/ Percentage	Spanish Standard Error
Parent-Reported BITSEA Raw Score				
Problem domain	9.60	0.35	11.42	0.34
Competence domain	16.21	0.18	16.08	0.29
Parent-Reported BITSEA Cutoff Score				
Problem domain	22.84	2.54	32.26	3.02
Competence domain	7.67	1.58	14.83	3.21
Parent-Reported BITSEA Screen Positive	28.50	2.99	41.28	3.68
SCR BITSEA Raw Score				
Problem domain	6.45	0.34	5.57	0.34
Competence domain	12.68	0.23	12.80	0.41
SCR BITSEA Cutoff Score				
Problem domain	15.28	2.55	8.09	1.93
Competence domain	13.78	1.85	19.38	3.64
SCR BITSEA Screen Positive	25.00	2.90	24.10	3.36
Sample Size				
Parent Interview	**412–416**		**236–237**	
SCR	**395–407**		**211–214**	

Source: Spring 2009 Parent Interview and Staff-Child Report (SCR).

Note: Sample restricted to 1-year-old Cohort.

BITSEA = Brief Infant-Toddler Social and Emotional Assessment; DLL = dual language learner; SCR = Staff-Child Report.

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Table VIII.46. Family Health Care Services and Health Status, by DLL Status

Outcome	Home Language: English Mean/ Percentage	English Standard Error	Home Language: Spanish Mean/ Percentage	Spanish Standard Error
Parent in Excellent or Very Good Health	54.72	2.28	50.84	3.07
Parent in Fair or Poor Health	7.99	0.96	17.71	2.82
Families That Have a Regular Health Care Provider	86.55	1.85	64.24	3.78
Family's Health Insurance Status				
A private health insurance plan	46.21	2.39	34.05	2.82
A public/government insurance	80.36	2.24	78.41	2.64
No health insurance	5.32	1.03	10.70	2.70
Family Member Needed Health Care but Couldn't Obtain It	7.64	1.38	5.08	1.05
Early Head Start Helped to Find Health Insurance	7.81	1.28	12.47	2.23
Sample Size				
Parent Interview	**503–522**		**281–290**	
Parents Insured	**481**		**257**	

Source: Spring 2009 Parent Interview.

DLL = dual language learner.

Table VIII.47. Parent Mental Health and Family Functioning, by DLL Status

Outcome	Home Language: English Mean/ Percentage	English Standard Error	Spanish Mean/ Percentage	Spanish Standard Error
Parent's Mental Health				
PSI: Parental Distress	10.00	0.26	12.26	0.48
PSI: Parent-Child Dysfunctional Interaction	7.84	0.20	10.02	0.45
CESD-SF raw score	5.82	0.25	4.43	0.41
CESD-SF: moderate to severe depressive symptoms	19.65	1.65	13.54	2.47
CESD-SF: no or mild depressive symptoms	80.35	1.65	86.46	2.47
Parent Substance Use				
Smoking during pregnancy	17.39	2.22	2.60	1.09
Drinking during pregnancy	1.55	0.73	1.74	0.76
Smoking inside the home	17.93	3.33	12.37	5.51
Currently smoking	28.66	2.48	10.14	1.92
Currently drinking	27.50	2.37	11.75	2.36
Drug use in the past year	3.17	0.84	3.17	1.28
Ever had a drinking or drug problem	9.60	1.88	3.28	1.20
Parents Received:				
Any mental health treatment	23.32	2.47	12.62	2.41
Early Head Start Helped to Get the Treatment[a]	13.34	2.53	41.02	9.83
Family Functioning				
FES-Family Conflict[b]	1.55	0.06	1.67	0.08
Social support	31.57	0.41	29.42	0.48
No problems with people	66.31	2.43	81.49	2.14
Community participation	20.91	1.93	16.61	2.45
Parenting Alliance Measure	45.82	0.54	46.48	0.42
Sample Size				
Parent Interview	**185–511**		**168–285**	
Parents Who Received Mental Health Treatment	**117**		**40**	

Source: Spring 2009 Parent Interview.

Note: Severe depressive symptoms = scores of 15 or higher; moderate depressive symptoms = scores of 10 or higher but lower than 15; mild depressive symptoms = scores of 5 or higher but lower than 10; no depressive symptoms = scores lower than 5.

[a] For parents who received mental health treatment.

[b] Asked only of Newborn Cohort in Spring 2009.

CESD-SF = Center for Epidemiologic Studies Depression Scale Short Form; DLL = dual language learner; FES = Family Environment Scale; PSI = Parenting Stress Index.

Table VIII.48. Parenting Beliefs and Behavior, by DLL Status

	Home Language			
	English		Spanish	
Outcome	Mean/ Percentage	Standard Error	Mean/ Percentage	Standard Error
Parental Modernity Scale				
Traditional Attitudes	19.71	0.25	20.07	0.26
Progressive Attitudes	20.56	0.20	19.70	0.19
Parent Spanked the Child in the Past Week	14.07	2.43	7.09	1.95
Sample Size	**395–402**		**228–232**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

DLL = dual language learner.

Table VIII.49. Services Mothers Received from Early Head Start During Pregnancy, by DLL Status

	Home Language			
	English		Spanish	
Items	Percentage	Standard Error	Percentage	Standard Error
Received any information or services from Early Head Start	41.51	2.65	41.75	3.94
Information on breastfeeding	38.43	2.71	39.54	3.86
A referral to someone to help with breastfeeding	24.57	1.83	19.28	2.89
Nutrition information	41.72	2.48	37.99	3.78
The chance to get together with other pregnant women or mothers	33.06	2.43	28.89	4.11
A referral for a doula	8.49	1.84	10.77	2.47
Information on how to prepare your home for a new baby	38.26	2.60	35.77	4.11
Help finding clothes, a stroller, or other baby care items	29.88	2.34	27.16	3.83
Information on how to take care of babies	37.64	2.49	38.86	3.82
Information on how to take care of yourself during pregnancy	40.55	2.55	38.80	4.05
A referral for childbirth classes	27.68	2.37	26.01	3.29
A referral to a doctor for yourself	18.33	1.90	19.68	3.14
A referral to a pediatrician for the baby	18.72	2.12	19.29	3.04
A referral to quit smoking	15.37	2.04	11.08	1.79
Information on how children grow and develop	41.24	2.53	39.90	3.72
Parenting classes	24.83	2.40	27.88	3.79
Any other services	6.37	1.06	10.44	2.36
Sample Size	**506–510**		**287–290**	

Source: Spring 2009 Parent Interview.

DLL = dual language learner.

Table VIII.50. Services Families Received from Community Agencies, by DLL Status

	Home Language			
	English		Spanish	
Items	Percentage	Standard Error	Percentage	Standard Error
Help finding good child care	19.29	1.93	19.22	3.30
Help getting to and from work or other places	13.33	1.63	14.76	3.44
Disability services	4.72	1.00	6.74	1.65
Short-term help getting or paying for things needed in an emergency	15.83	1.83	15.18	3.31
Help finding a job	9.06	1.26	10.86	2.18
Education or job training	9.44	1.41	10.68	2.13
Help with a legal problem	5.23	1.06	5.30	1.59
Help finding or paying for housing	11.00	1.61	8.34	1.83
Counseling on how to manage money	10.75	1.48	8.97	2.54
Training on how to read and write	1.52	0.51	4.64	1.46
Classes to learn English	0.89	0.36	18.88	3.06
Health services	15.18	1.68	30.82	3.41
Mental health services	7.18	1.29	8.65	1.66
Some other services	4.16	0.99	4.41	1.23
Sample Size	**530–533**		**292–294**	

Source: Spring 2009 Parent Interview.

DLL = dual language learner.

Table VIII.51. Child Care Arrangements, by DLL Status

Outcome	Home Language: English Mean/ Percentage	English Standard Error	Spanish Mean/ Percentage	Spanish Standard Error
Nonparental Care	76.77	3.03	64.72	4.72
Current Child Care on a Regular Basis				
Attends Early Head Start center	53.23	3.99	49.20	5.98
Attends other child care center or formal program	5.56	1.48	3.02	1.03
Receives care in a provider's home	26.52	2.67	21.44	2.68
Receives child care in child's own home	19.25	2.52	16.26	2.81
Total Number of Hours in Child Care	26.22	1.21	22.80	2.48
Hours per Week in Child Care				
Early Head Start	24.08	1.39	19.64	2.66
Other child care center or formal program	23.17	3.06	13.93	3.00
Care in a provider's home	14.70	1.32	13.85	1.44
Care in child's own home	12.06	1.61	10.47	3.11
Sample Size	**306–398**		**154–229**	

Source: Spring 2009 Parent Interview.

Note: Sample restricted to 1-year-old Cohort.

DLL = dual language learner.

Table VIII.52. Family Participation in Activities at Early Head Start in the Past Year, by DLL Status

	Home Language					
	English			Spanish		
Items	Not at All	Once or Twice	Three or More Times	Not at All	Once or Twice	Three or More Times
Attend group activities for parents and their children	34.72	30.12	35.16	21.98	29.10	48.91
Attend workshops on job skills	87.80	8.32	3.88	73.25	16.13	10.62
Attend parent education meetings or workshops on raising children	65.12	23.98	10.90	45.32	31.55	23.14
Attend events only for men/fathers	88.80	8.68	2.52	82.30	13.63	4.06
Volunteered in an Early Head Start classroom	66.87	15.19	17.94	55.55	19.76	24.69
Attended an Early Head Start social event	40.87	34.45	24.68	40.43	35.03	24.54
Participated on the Program Policy Council	86.32	7.71	5.97	84.07	9.26	6.67
Volunteered to help out at program or served on a committee, but not in a classroom or on Policy Council	83.90	10.83	5.27	80.55	10.39	9.06
Takes part in center activities in some other way	83.02	11.55	5.43	90.13	6.46	3.41
Sample Size	**528–533**			**282–294**		

Source: Spring 2009 Parent Interview.

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Summary of Key Findings

This chapter shows how patterns of family strengths and needs vary across key subgroups. Hispanic children and those children at the highest level of demographic and psychological risk report poorer health and lower levels of insurance than other groups. African American children have the lowest level of developmental risk while children from families with more psychological risk factors are more likely to be at risk for general development. Hispanic children and high demographic risk children had lower CDI scores than other groups. It appears that Hispanic parents and parents with high levels of demographic and psychological risk view their children as having more social-emotional problems than the children's teachers do. African American parents, white parents, and parents with a high number of demographic risk factors reported greater needs for mental health services.

Service use also varies across key subgroups. African American mothers are more likely to report receiving Early Head Start services during pregnancy and are more likely to receive services from community agencies as well. African American children are also most likely to be in nonparental care and spend the most time there. Mothers with more demographic and psychological risk are also more likely to receive services from Early Head Start or community agencies. Among children diagnosed with a disability, white children and children with high maternal demographic and psychological risk are least likely to be receiving intervention services.

Overall, these data can help alert programs to how different populations within Early Head Start have distinct needs to which programs can tailor their assessment, outreach, or service provision practices.

IX. RELATIONSHIPS BETWEEN FAMILY CHARACTERISTICS AND SERVICE OPTIONS

A unique feature of the Early Head Start program is that programs may tailor their services to meet the needs of families in local communities. As described in Chapter III, Early Head Start programs may use different service approaches or options to serve families. Two-thirds of programs in the Baby FACES study offer both center- and home-based service options to families. Another one-third of programs are divided nearly equally between exclusively offering center- or home-based services. Early Head Start programs also provide a wide range of specific services to families or refer them to community agencies for the services. The goals of this chapter are to examine (1) who is served in programs offering each of the different service options; (2) whether family needs predict the type of services families receive in programs that offer more than one option; and (3) whether families with specific needs are more likely to receive associated services, either through Early Head Start directly or a referral to another community agency by Early Head Start. The answers to these questions will help us understand how programs individualize services based on family needs and community characteristics.

We first examine the characteristics of families in each type of program to answer the question: Who is served in programs with these service approaches?[1] This will provide a general picture of the Early Head Start families served by each of the service approaches (center-based, home-based, and multiple-approach). We then focus on programs that offer both home- and center-based options to examine whether certain families are more likely to be enrolled in one type of service than another. In other words, we address the question of whether family needs predict families' placement in different service options. We start the analyses with bivariate explorations of the links between family needs and program service options, looking at each need separately. Building on the bivariate analyses, we next conducted a more complicated model (multinomial logistic regression) to answer the question of what family needs and community characteristics predict family service placement when all other needs are taken into account. We approach the question of associations between specific family needs and the corresponding services by using bivariate analyses.

Programs Offering Different Service Options Serve Families from Different Backgrounds

To determine who is served in programs with each of the different service approaches, we compared family demographic and household characteristics of our sample members across the three types of programs (Table IX.1). As in Chapter VIII, we highlight differences of 5 percentage points or greater, but do not conduct statistical tests for the bivariate analyses. We found a number of differences in the characteristics of families enrolled in each program type. Hispanic families are more likely to be enrolled in multiple-approach programs; white families are more likely to be enrolled in home-based programs; and African American families are more likely to be enrolled in center-based programs (Figure IX.1). Correspondingly, multiple-approach programs are more likely

[1] In other words, unlike our examination of families' use of services in Chapter III, in which we used families' report of their service option, here we examine the characteristics of families enrolled in programs using different approaches to service delivery.

Table IX.1. Programs Offering Different Service Options to Families from Different Backgrounds

Family Characteristics	Center-Based		Home-Based		Multiple	
	Weighted Percentages	(SE)	Weighted Percentages	(SE)	Weighted Percentages	(SE)
Race/Ethnicity						
Hispanic	33.5	(9.2)	27.0	(7.9)	39.1	(4.6)
White, non-Hispanic	14.2	(5.0)	66.3	(8.8)	34.3	(3.9)
African American, non-Hispanic	44.2	(9.5)	2.3	(1.3)	13.9	(2.8)
Multiracial, non-Hispanic	7.9	(2.5)	4.4	(2.6)	8.9	(1.9)
American Indian/Alaska Native	0.3	(0.3)	0.0	(0.0)	2.0	(0.9)
Other	0.0	(0.0)	0.0	(0.0)	1.9	(0.6)
Language Other than English Spoken in Household	32.1	(8.0)	24.2	(6.6)	39.0	(4.3)
Parent Immigrant Status						
Both parents born in U.S.	84.9	(3.3)	71.9	(5.9)	66.8	(4.1)
One parent born outside U.S.	7.8	(1.6)	13.6	(2.8)	10.1	(1.3)
Both parents born outside U.S.	7.3	(2.3)	14.5	(5.2)	23.1	(3.8)
Family Lives in Rural Area	41.0	(14.8)	53.7	(14.8)	29.9	(7.0)
Household Income as Percentage of Poverty Level[a,b]						
0–50	32.8	(5.1)	26.3	(3.4)	27.9	(2.2)
51–100	36.6	(3.3)	48.6	(4.7)	39.5	(2.6)
101–130[c]	11.3	(2.3)	9.7	(3.4)	13.5	(1.6)
131 or higher	19.3	(2.8)	15.4	(3.6)	19.1	(2.1)
Family Economic Risk[d]						
Low economic risk	61.6	(5.5)	48.7	(4.4)	50.1	(2.7)
Medium economic risk	25.3	(4.6)	31.9	(4.1)	26.7	(2.0)
High economic risk	13.2	(3.9)	19.4	(5.2)	23.2	(2.6)
Single Mother	59.5	(5.6)	30.9	(3.3)	45.6	(2.6)
Teenage Mother[e]	68.2	(5.9)	49.4	(5.5)	48.5	(2.7)
Mother Has No High School Credential	37.1	(4.9)	41.0	(5.9)	38.0	(2.9)
Family Receives Public Assistance	69.7	(3.7)	74.3	(5.0)	68.5	(3.0)
Mother Not Employed, in School, or in Training	26.8	(4.1)	55.7	(4.7)	40.7	(2.5)
Maternal Demographic Risk Index[e,f]						
0–2 (lower risk)	45.7	(6.2)	52.8	(5.1)	55.1	(2.6)
3 (medium risk)	33.1	(3.6)	29.3	(5.6)	27.1	(2.6)
4–5 (highest risk)	21.2	(4.0)	17.9	(3.9)	17.8	(2.1)
Family Psychological Risk Index[g]						
No risk	60.7	(5.5)	63.7	(4.7)	58.7	(3.5)
One risk	31.5	(4.7)	26.8	(4.6)	32.1	(3.0)
Two or more risks	7.8	(2.8)	9.6	(3.1)	9.3	(1.3)
Sample Size						
Parent Interview	**119–168**		**91–112**		**440–577**	
1-year-old Cohort only	**122–123**		**92–94**		**452–457**	

Table IX.1. *(continued)*

Source: Spring 2009 Parent Interview.

[a] Income-related questions had higher rates of refusal and missingness than other parent interview variables. There were 17 missing values for income-related questions among Newborn Cohort parents (10 percent missing) and 60 missing values among 1-year-old Cohort parents (9 percent missing).

[b] Poverty level is adjusted for household size according to 2009 HHS poverty guidelines.

[c] 130 percent of the poverty level is a common eligibility threshold for Head Start, food stamps, and free school lunch. Families with incomes greater than 130 percent of poverty are not eligible to receive Early Head Start services.

[d] The family economic risk index aggregates financial difficulties and food security difficulties. Parents with fewer than two financial difficulties and two food security difficulties were classified as low economic risk. Parents with more than two financial difficulties or two food security difficulties (but fewer than four difficulties across both categories) were classified as medium economic risk. Parents with at least four difficulties in either category were classified as high economic risk.

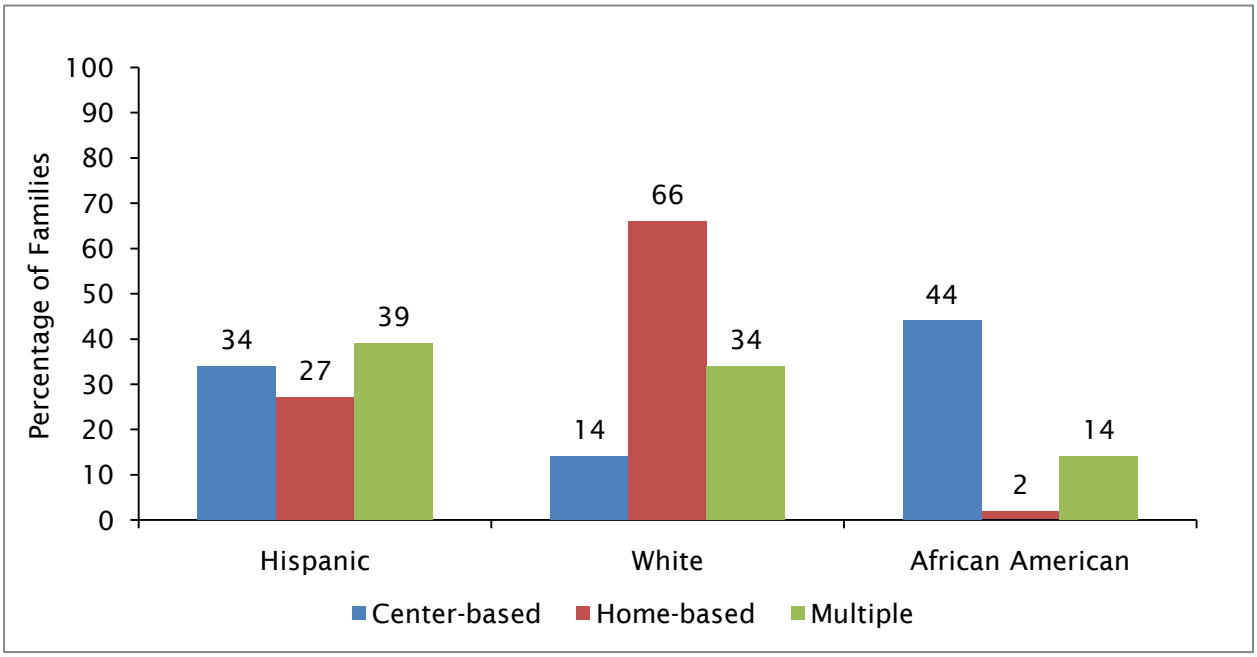
[e] Restricted to 1-year-old Cohort.

[f] The maternal demographic risk index was constructed by summing the number of the following risk factors faced by the mother: (1) being a teenage mother, (2) having no high school credential, (3) receiving public assistance, (4) not being employed or in school or training, and (5) being a single mother. Maternal demographic risk was calculated only for mothers of 1-year-olds.

[g] The family psychological risk index is a measure of cumulative family risk of poor parental mental health and unfavorable family functioning, measured at baseline. The number of risks is based on the following measures: (1) moderate or severe depressive symptoms, (2) parenting stress, which indicates a score of one standard deviation above the mean on either of the Parenting Stress Index subscales (Parental Distress or Parent-Child Dysfunctional Interaction), and (3) substance use problems, which include parent reports of drug use in the past year or ever had a drug/drinking problem.

HHS = Department of Health and Human Services; SE = standard error.

Figure IX.1. Family Racial/Ethnic Background Differs Across Program Options



Source: Baby FACES Spring 2009 Parent Interview.

Sample Size = 829.

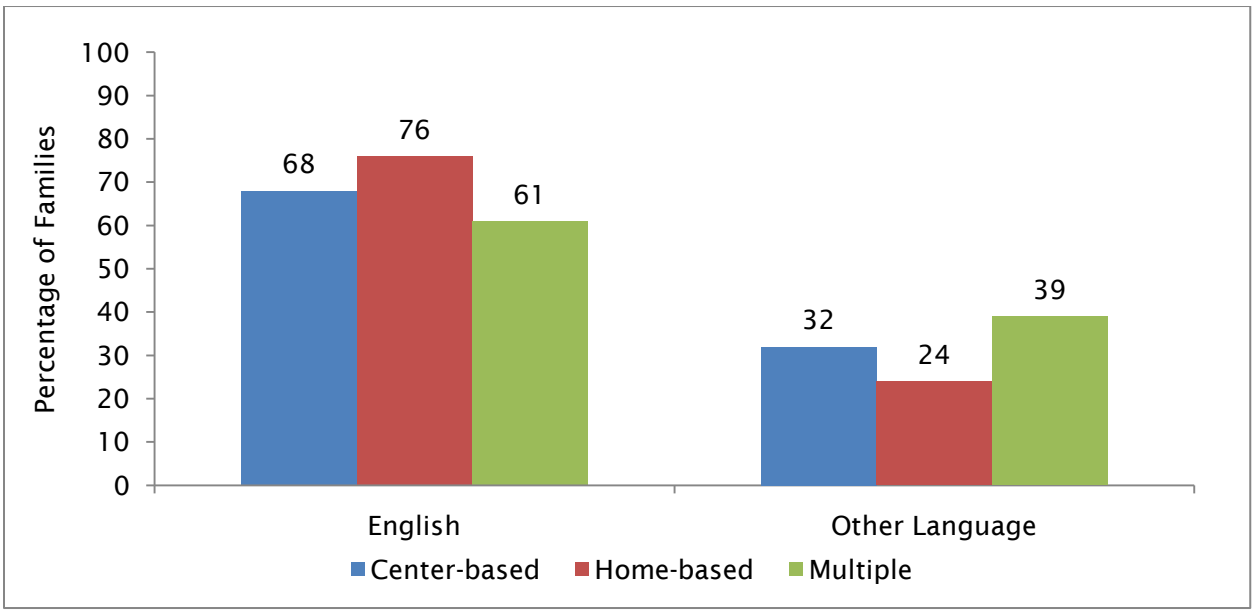
to serve families that speak a language other than English (Figure IX.2). Families with at least one parent born outside the United States are more likely to be enrolled in multiple-approach and home-based programs; families with two native-born parents are more likely to be enrolled in center-based programs (Figure IX.3).

Household income does not differ across different types of programs, with similar proportions of families in each of the income categories. Family economic risk, defined by parent reports of family financial and food security difficulties, does vary across program types. Families with low economic risk are more likely to be in center-based programs; those with medium or high economic risk are more likely to be in home-based and multiple-approach programs (Figure IX.4). This suggests that these are working families in need of child care.

Mothers do not differ considerably across types of programs when compared on the maternal demographic risk index except that those at lower risk are more likely to be in home-based or combination options. When the individual risk factors that make up the index are examined separately single and teen mothers are more likely to be enrolled in center-based programs; mothers who are not employed, in school, or in training are more often in home-based programs (possibly related to state subsidy requirements for center-based care) (Figure IX.5). Families receiving public assistance are more likely to be enrolled in home-based programs. There are no differences for mothers' educational level or family psychological risk factors across program types.

The community characteristic we examined was urbanicity: home-based programs are most likely to be located in rural areas, followed by center-based programs.

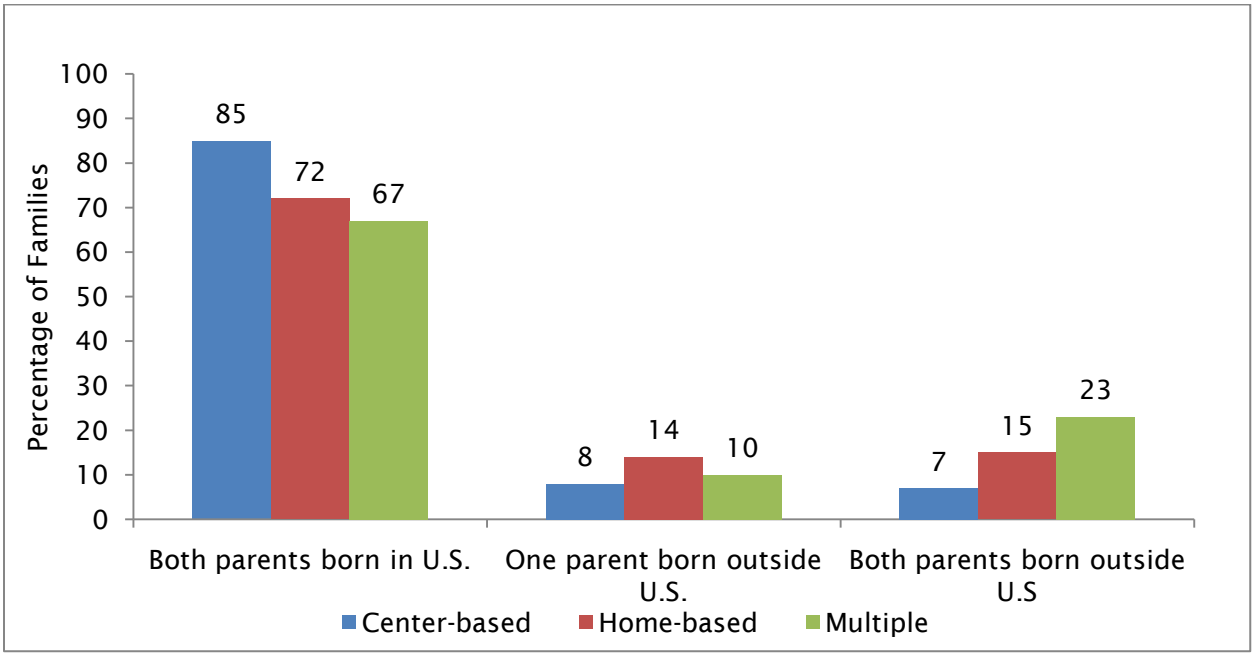
Figure IX.2. Household Language Differs Across Program Options



Source: Baby FACES Spring 2009 Parent Interview.

Sample Size = 857.

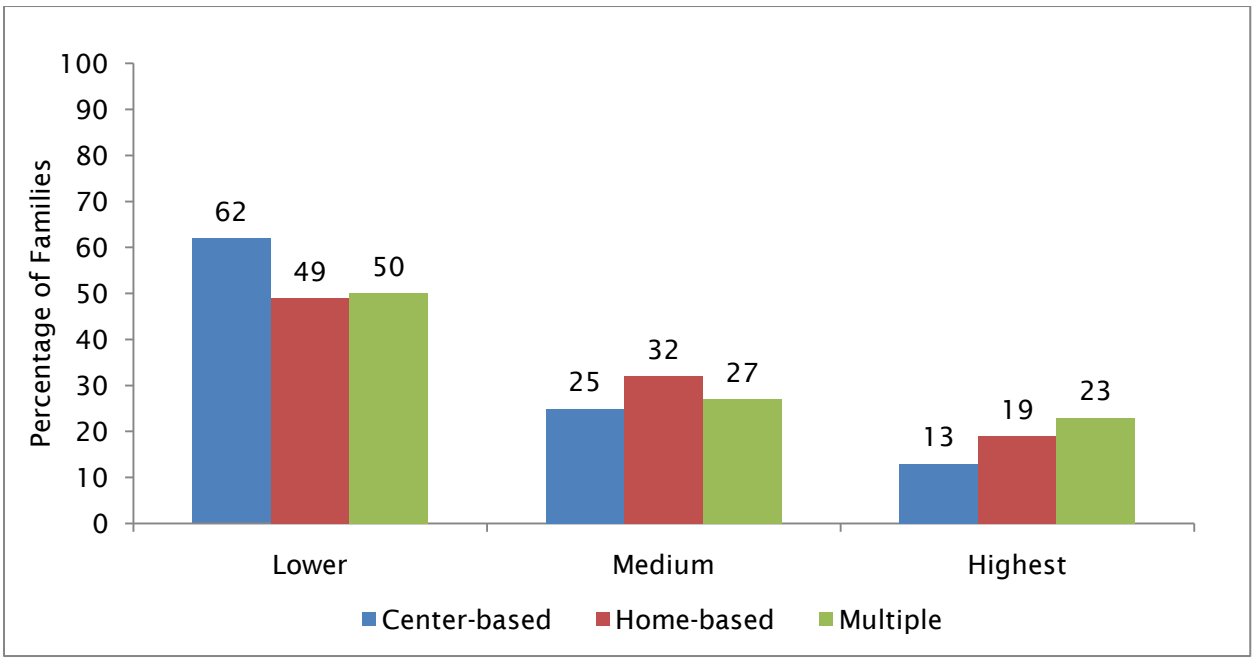
Figure IX.3. Parent Immigrant Status Differs Across Program Options



Source: Baby FACES Spring 2009 Parent Interview.

Sample Size = 817.

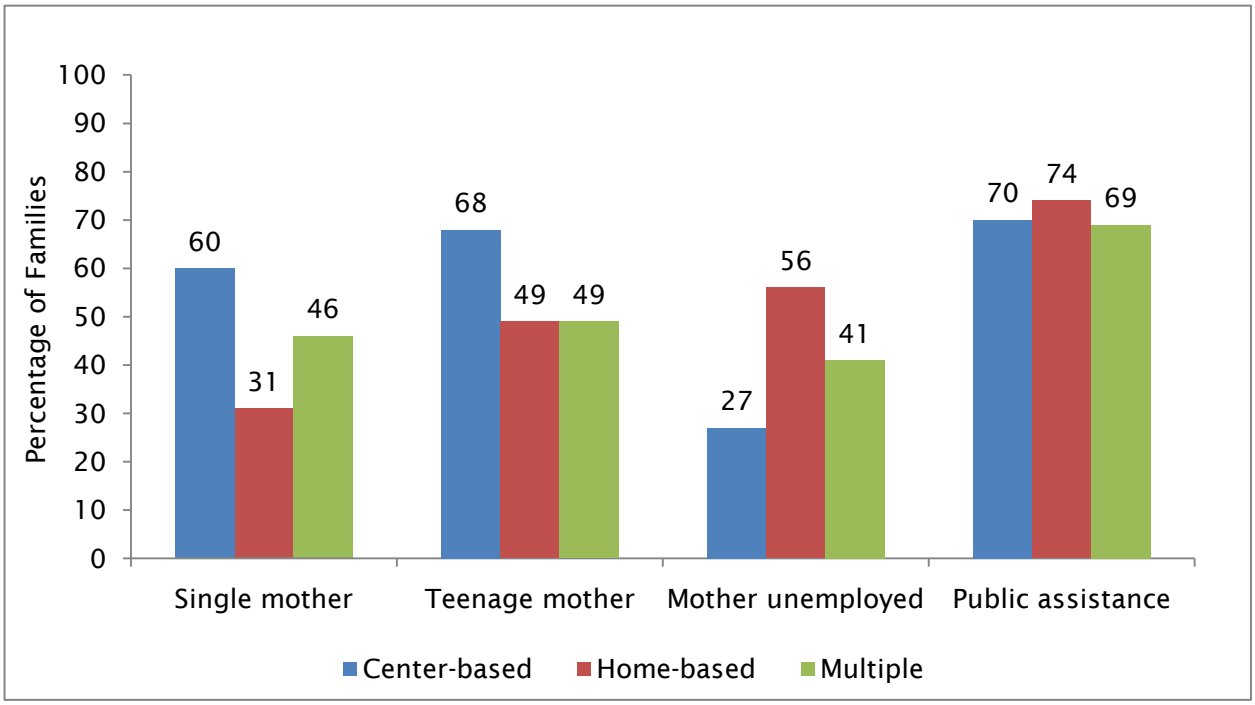
Figure IX.4. Family Economic Risk Differs Across Program Options



Source: Baby FACES Spring 2009 Parent Interview.

Sample Size = 824.

Figure IX.5. Maternal Risk Factors Differ Across Program Options



Source: Baby FACES Spring 2009 Parent Interview.

Sample Size = 821-856. Teenage mother is restricted to the 1-year-old Cohort and sample size is 674.

Many Families' Needs Are Associated with Which Type of Services They Receive in Multiple-Approach Programs

Unlike programs that offer a single service option, in multiple-approach programs staff must determine in which option to enroll a family. Program directors in multiple-approach programs reported that the service option a family receives depends on family-reported needs and preferences, parental employment or enrollment in school, availability of slots, and other factors. In an attempt to understand the relationships between family characteristics and the services families receive, we examine this question within programs that offer both home- and center-based options (that is, multiple-approach programs).

Analytic Sample Focuses on Children and Families in the 1-Year-Old Cohort

Among 455 families of 1-year-olds in multiple-approach programs, approximately half (54 percent) are enrolled in home-based services;[2] 40 percent of families receive center-based services. Only six percent of families (n = 28) are enrolled in home- and center-based services simultaneously.

Predictors Reflect a Range of Family Needs

We considered family and child needs in a range of domains as predictors of the type of services families receive:

- **Child Health:** includes low or very low birth weight, premature birth, child rated in poor or fair health, child lacking health insurance, and child has a disability diagnosis
- **Child Developmental Needs:** whether the child scores in the at-risk range on any of the domains on ASQ-3
- **Child Social-Emotional Development Needs:** indicators of whether the child screens positive on the parent- or staff-reported BITSEA
- **Maternal Demographic Risk Factors:** includes single mother; teenage mother; lack of a high school credential; family receives public assistance; or mother is not employed, in school, or in training
- **Family Economic Risk:** based on the number of financial difficulties and food security issues parents reported, and categorized as low, medium, or high risk
- **Parental Health Needs:** includes whether the parent reports being in poor or fair health and whether the parent has insurance
- **Psychological Risk Factors:** includes moderate or severe depressive symptoms, elevated Parenting Stress or Parent-Child Dysfunctional Interaction scores on the Parenting Stress Index (one standard deviation above the mean), and a substance use problem (either drug use in the past year or having ever had a drug or drinking problem).

[2] Analysis of family enrollment in service options is limited to parents of 1-year-olds because only these families were asked questions regarding program services. We will obtain this information from Newborn Cohort parents in the next round of data collection when those children are 1.

We Examined Needs and Service Option in Two Ways

We performed chi-square tests to examine the relationships between each of the individual family needs measures and program option. Because we saw significant bivariate relationships, next we conducted a multivariate, multinomial logistic regression to investigate whether these characteristics are predictive of which service option families are enrolled in when all family needs measures are taken into account.

Child Health and Developmental Needs and Maternal Employment and Schooling Are the Strongest Predictors of Home-Based or Combination Service Options

In our comparisons of service type by each need individually, we looked first at child then parent needs. We show the overall percentages of children and families with each need by service type (whether they are in a center- or home-based or combination option), and indicate significant differences.[3]

Child health predicts home-based services, but not social-emotional development. Low birth weight and premature birth are associated with a greater likelihood of being in the home-based service option (Table IX.2).[4] Families of children with developmental needs are more likely to be enrolled in home-based services. In the area of social-emotional development, neither parent- nor staff-reported child social-emotional needs are significantly related to service type.

Single mothers are more likely to receive center-based services; those in poorer health are more likely to receive home-based or combination services. Some maternal demographic risk factors are related to the type of services families receive. Education and maternal marital and employment status emerge as significant predictors: single mothers are more likely to receive center-based services, while mothers without a high school credential and mothers who are not employed, in school, or in training are less likely to receive center-based services. No other individual risk factor is associated with service option. Similarly, we see no differences for family economic risk or psychological risk factors. The only other need associated with program option is parental health: Parents in fair or poor health are more likely to be in home-based or combination services.

Multivariate Findings Indicate That Family Needs Are Still Associated with Service Option When Other Needs Are Taken into Account

We used multinomial logistic regression to predict the type of services that families receive, taking into account all the measures of family needs described earlier. Our objective is to understand whether associations are the same when all the other needs are taken into account simultaneously.[5] For the most part, needs that were associated with program option individually are associated in

[3] We used chi-square tests to determine significance.

[4] Chi-square tests require no empty cells. Because there are no children with very low birth weight among those who received combination services, we combined children with low and very low birth weight in the analysis. There are no uninsured children among those in the combination option, so we also omitted this variable in the multivariate analysis.

[5] In addition to the needs already described, the model controls for programs' urbanicity and household language (a language other than English spoken in the household).

Table IX.2. Percentage of Child and Family Needs in Multiple-Approach Programs, by Service Option

Family/Child Needs	Overall	Service Option		
		Center-Based	Home-Based	Combination
Child Health Needs				
Child birth weight				
Low birth weight	7.70	4.49	10.39*	6.11
Very low birth weight	0.86	0.66	1.12	0.00[d].
Low or very low birth weight	8.54	5.15	11.51**	6.11
Born prematurely	9.24	3.72	13.49**	3.05
Child in fair or poor health	7.20	9.11	5.10	16.12
Child not insured	3.26	2.05	4.58	0.00[d].
Child with a disability diagnosis	2.72	1.98	3.30	3.05
Child Developmental Needs (at risk on any ASQ-3 domain)	25.43	18.47	30.56*	24.95
Child Social-Emotional Needs				
Parent-reported BITSEA screening positive	32.56	28.22	35.39	39.41
Staff-reported BITSEA screening positive	25.45	32.48	21.22	20.69
Maternal Demographic Risk Factors				
Single mother	44.57	60.59***	33.53	31.70
Teenage mother	48.49	50.94	47.70	31.84
Mother has no high school credential	37.46	29.23	40.19	55.67**
Family receives public assistance	68.26	64.94	72.13	56.99
Mother not employed, in school, or in training	37.51	21.43	49.49***	34.75
Family economic risk[a]				
Low	50.07	55.89	46.93	38.22
Medium	27.05	22.31	29.96	32.70
High	22.89	21.81	23.11	29.08
Parent Health Needs				
Parent in fair or poor health	12.35	5.13	15.37	26.88**
Parent not insured	6.71	7.21	5.20	13.92
Family Psychological Risk Factors				
Moderate or severe depressive symptoms	16.27	17.75	14.19	13.07
Substance use[b]	8.46	7.21	10.23	2.94
Parenting stress[c]	27.12	21.98	28.04	45.95
Sample Size	**438–463**	**170-184**	**231–244**	**28–29**

Source: Spring 2009 Parent Interview and Staff Child Report (SCR).

Note: Sample restricted to the 1-year-old Cohort. We conducted chi-square tests to test significance.

[a] The family economic risk index aggregates financial and food security difficulties. Parents with fewer than two financial difficulties and fewer than two food security difficulties were classified as low economic risk. Parents with more than two financial difficulties or more than two food security difficulties (but fewer than four difficulties across categories) were classified as medium economic risk. Parents with at least four difficulties in either category were classified as high economic risk.

[b] Parent reports of drug use in the past year or ever having a drug or drinking problem.

[c] A score of one standard deviation above the mean on either of the Parenting Stress Index subscales (Parental Distress or Parent-Child Dysfunctional Interaction).

[d] Empty cell. No chi-square test done on this variable.

*$p < .05$; **$p < .01$; ***$p < .001$.

ASQ-3 = Ages and Stages Questionnaire; BITSEA = Brief Infant Toddler Social Emotional Assessment.

similar ways when other needs are taken into account. However, more family needs are associated with program option in the models that consider other needs (see Table IX.3). The exception is birth weight, which is no longer significant in conjunction with other needs. Additional needs that reached significance when all needs are considered together are maternal risk factors (teenage mother, receiving public assistance), medium or high economic risk, lack of parental insurance, and psychological risk factors (substance abuse and parenting stress). See Box IX.1 for a summary and Appendix E for supplemental tables.

When drawing broad conclusions about the intersection of family needs and service option, it is important to acknowledge that other factors—such as the availability of slots or state rules for child care subsidies—are likely to influence families' placement into an option. However, our examination of parent-reported needs and their service option showed that

- When considering child needs, it appears that those who have health or developmentally related concerns are more likely to be served in either home or combination options, which staff and parents might see as a more appropriate setting for those children.
- The story differs by reporter for children's developmental needs. This suggests that teachers who provide center-based services are more likely to rate children as having developmental needs than home visitors who provide home-based services or staff who provide combination services. Conversely, parents in the home-based option are more likely to rate their children as having developmental issues than are those in the center-based option. It is possible that having more opportunities to observe the child in a given setting (center or home) provides more opportunities to notice unwanted behaviors. However, we stress that we cannot determine the direction of the associations, only that we found them.
- In general, higher parental psychological risk factors tend to predict placement in home-based or combination options relative to center-based. Single mothers and those who are employed or in school are more likely to be in the center-based option.
- The control variables (urban or rural area and DLL) also predict placement in home-based or combination options. It is possible that rural home-based services offset transportation issues or long distances between homes. DLL families might prefer home-based services or be in need of more comprehensive services (and therefore receive the combination option).

Early Head Start Appears to Direct Some Services to Address Specific Family Needs

As described in Chapter III, Early Head Start provides a wide range of services to families or refers families to community agencies for services. Programs are charged with individualizing services to meet families' specific needs. We compared families' reports of their specific needs to receipt of services to address those needs. This section presents the results of analyses[6] that examine

[6] We conducted chi-square tests to determine the significance.

Table IX.3 Many Family Needs Are Associated with Service Option in Multiple-Approach Programs

Predictors	Odds Ratio	
	Combination	Home-Based
Constant	-3.25 (0.30)***	-0.69 (0.14)***
Control Variable		
Household language (non-English)	1.84 (0.22)***	0.49 (0.11)***
Urbanicity		
Rural	0.26 (0.21)	0.69 (0.11)***
Urban (reference)		
Child Health Needs		
Child birth weight		
Normal (reference)		
Low or very low birth weight	-0.31 (0.39)	-0.30 (0.22)
Born prematurely	-0.44 (0.52)	1.66 (0.23)***
Child in fair or poor health	0.19 (0.30)	-1.35 (0.22)***
Child with a disability diagnosis	0.44 (0.58)	0.71 (0.28)*
Child Developmental Needs (at risk on any ASQ-3 domain)	0.28 (0.22)	0.50 (0.11)***
Child Social-Emotional Needs		
Parent-reported BITSEA screening positive	0.24 (0.21)	0.39 (0.11)***
Staff-reported BITSEA screening positive	-0.57 (0.22)**	-0.72 (0.11)***
Maternal Demographic Risk Factors		
Single mother	-0.82 (0.21)***	-1.06 (0.10)***
Teenage mother	-0.78 (0.20)***	-0.19 (0.10)*
Mother has no high school credential	0.75 (0.20)***	0.39 (0.10)***
Family receives public assistance	0.70 (0.21)***	0.76 (0.11)***
Mother not employed, in school, or in training	0.00 (0.21)	0.86 (0.11)***
Family Economic Risk[a]		
Low (reference)		
Medium	0.53 (0.22)*	0.41 (0.12)***
High	-0.22 (0.25)	-0.32 (0.13)*
Parent Health Needs		
Parent in fair or poor health	1.40 (0.30)***	1.72 (0.21)***
Parent not insured	0.35 (0.32)	-0.59 (0.22)**
Family Psychological Risk Factors		
Moderate or severe depressive symptoms	-0.30 (0.28)	-0.20 (0.14)
Substance use[b]	-0.32 (0.48)	0.71 (0.17)***
Parenting stress[c]	0.56 (0.21)**	0.02 (0.13)

Source: Spring 2009 Parent Interview and Staff Child Report (SCR).

Note: Multinomial logistic regression is performed on a sample of 355 children and families in the 1-year-old Cohort. Table shows regression coefficients (log odds).

[a] The family economic risk index aggregates financial difficulties and food security difficulties. Parents with fewer than two financial difficulties and fewer than two food security difficulties were classified as low economic risk. Parents with more than two financial difficulties or more than two food security difficulties (but fewer than four difficulties in both categories) were classified as medium economic risk. Parents with at least four difficulties in either category were classified as high economic risk.

[b] Parent reports of drug use in the past year or ever having a drug or drinking problem.

[c] A score of one standard deviation above the mean on either of the Parenting Stress Index subscales (Parental Distress or Parent-Child Dysfunctional Interaction).

†$p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$.

ASQ-3 = Ages and Stages Questionnaire, Third Edition; BITSEA = Brief Infant Toddler Social Emotional Assessment; SE = standard error.

Box IX.1. Summary of Most Likely Program Option for Families with Different Needs

	Bivariate Comparison			Multivariate Comparison		
Need	Center	Home	Combination	Center	Home	Combination
Born prematurely		X			X	
Child with a disability diagnosis					X	
Child social-emotional needs				X (staff reported only)	X (parent reported only)	
Teenage mother				X		
Family receives public assistance					X	X
Parent in fair or poor health			X		X	X
Medium economic risk					X	X
Substance use					X	
Rural area					X	

whether services are more likely to be offered to families that need them most. Table IX.4 shows the measures of family needs and the associated services we expect to address those needs.

Child health is unrelated to receiving health services, but parent health is. We examined whether families with child or parental health needs are more likely than those without these reported needs to receive health services, either from Early Head Start or by a referral to another community agency. We find no association between receiving health services and any of the child health needs measures, including birth weight, premature birth, child in poor or fair health, child lacking health insurance, or disability diagnosis. There was also no association between child developmental needs or disability diagnosis and the likelihood of receiving disability services, or for parent insurance status. However, parents in fair or poor health are more likely to receive health services than parents in good to excellent health (24 versus 15 percent).[7]

[7] $\chi^2_{(1, 817)} = 3.32, p < .10$.

Table IX.4. Family Needs Measures and Associated Services

Family Needs	Associated Services[a]
• **Child Health Needs**: includes low or very low birth weight, premature birth, child rated in poor or fair health, child lacking health insurance, and child has a disability diagnosis • **Parental Health Needs**: includes whether the parent reports being in poor or fair health and whether the parent has insurance	• Health services
• Child has a disability diagnosis • Child has developmental needs	• Disability services
• Moderate or severe depressive symptoms • Substance use problem	• Mental health services
• DLL families	• Classes to learn English • Training on how to read and write
• Lack of a high school credential • Mother is not employed, in school, or in training	• Education or job training
• Mother is not employed, in school, or in training	• Help finding a job • Help finding good child care • Help getting to and from work or other places
• Single mother • Teenage mother	• Help finding good child care
• **Family Economic Risk**: based on the number of parents reported, and categorized as low, medium, or high risk • Family receives public assistance	• Short-term help obtaining or paying for things needed in an emergency • Help finding or paying for housing • Counseling on how to manage money

[a] Families received the services from Early Head Start or through referral to another agency.

DLL families receive literacy and English classes, but rates are low. As would be expected, DLL families are more likely to receive training on how to read or write than English-speaking families (5 versus 2 percent),[8] although the proportion receiving these services is quite low for all families. Similarly, DLL families are more likely to receive classes to learn English than English-speaking families (16 versus 1 percent).[9]

Those already employed or in school are more likely to receive education and job training. Mothers who are employed, in school, or in training are more likely to report receiving education or job training than those who are not (10 versus 5 percent).[10] However, they are no more

[8] $\chi^2_{(1, 856)} = 4.18, p < .05$.

[9] $\chi^2_{(1, 856)} = 20.34, p < .001$.

[10] $\chi^2_{(1, 838)} = 7.10, p < .01$.

likely to receive help with transportation or finding a job. Mothers with more or less education do not differ in their likelihood of receiving education or job training.

Older mothers are most likely to receive help finding child care. Teenage mothers are less likely than older ones to get help finding child care (14 versus 20 percent).[11]

Families in financial distress are more likely to receive financial support. Families with moderate or high economic risk are more likely to receive short-term help obtaining or paying for things needed in an emergency than families with lower risk (21 and 24 versus 5 percent).[12] Families with medium or high risk are also more likely to receive help finding or paying for housing (9 and 11 versus 6 percent)[13] or counseling on how to manage money (13 and 10 versus 7 percent)[14] than families with lower risk. Furthermore, families receiving public assistance are more likely to receive short-term help obtaining or paying for things needed in an emergency than families not receiving such assistance (25 versus 8 percent).[15] Families receiving public assistance are also more likely to receive help finding or paying for housing than families who are not (17 versus 5 percent).[16] They are also more likely to receive counseling on how to manage money (12 versus 4 percent).[17].

Parents with depressive symptoms are more likely to receive mental health services, but not those with substance use or parenting stress. Among family psychological risk factors, parents with moderate or severe depressive symptoms are more likely to receive mental health services than those with mild or no depressive symptoms (10 versus 5 percent).[18] However, substance use problems and parenting stress are not associated with the likelihood of receiving mental health services.

The findings from these analyses suggest that Early Head Start programs individualize services to meet family needs and community characteristics. Home-based and combination services appear to serve families with greater needs than do center-based. Some but not all of the services Early Head Start programs offered to families or for which Early Head Start referred families to another community agency are geared to families with specific needs.

Summary of Key Findings

- **Programs offering different service options serve families from different backgrounds.** Programs choosing to offer multiple services options tend to serve more Hispanic families, and DLL or immigrant families. Those programs choosing to provide all home-based services tend to be located in rural areas and to serve more white families,

[11] $\chi^2_{(1, 670)} = 4.10, p < .05$.

[12] $\chi^2_{(2, 823)} = 20.50, p < .001$.

[13] $\chi^2_{(2, 824)} = 6.88, p < .05$.

[14] $\chi^2_{(2, 823)} = 5.04, p < .10$.

[15] $\chi^2_{(1, 817)} = 17.96, p < .001$.

[16] $\chi^2_{(1, 820)} = 23.61, p < .001$.

[17] $\chi^2_{(1, 820)} = 13.51, p < .001$

[18] $\chi^2_{(1, 823)} = 4.04, p < .05$.

mothers who are not employed, in school, or in training, or receiving public assistance. Programs that offer multiple service options or home-based services exclusively are more likely to serve families with elevated economic risk. Finally, those programs choosing to provide all center-based services tend to serve more African American families, families with low economic risk, and single or teenage mothers.

- **Programs that have multiple services available appear to select options to provide to families based in part on family characteristics.** Home-based and combination options seem to serve children and families with higher levels of needs. For example, children who have health or developmentally related concerns are more likely to be served in either home- or center-based options. Similarly, parental psychological risk factors tend to be associated with home-based or combination options. Findings are mixed based on parental demographic risk factors, some of which are associated with home-based or combination options, and others are associated with the center-based option. The home-based option is more likely in rural areas; DLL families are more likely to be in either home-based or the combination options. Conversely, those in center-based options are more likely to be without health insurance, have high economic risk, be single or teenage mothers, and be employed. Interestingly, staff in center-based services rate children as having more social-emotional problems; this might reflect the additional time staff spend with children or seeing them in a group setting, in which problem behaviors are more likely to be observed. Children in home-based services are more likely to be rated by their parent as having social-emotional problems.
- **Early Head Start programs appear to direct services to families with particular demographic and psychological risk factors.** Financial or housing services are more likely to be offered to families with higher economic risk or receiving public assistance. Mothers who are employed, in school or training are more likely to report receiving education or job training. DLL families are more likely to be offered help learning English. Parents with moderate or severe depressive symptoms are more likely to receive mental health services. In addition, parents with health needs are more likely to receive health services. Child health and developmental needs are not associated with the specific services families receive.

X. HIGHLIGHTS OF FINDINGS AND NEXT STEPS

In this closing chapter, we summarize findings of particular importance (and discuss the limitations of those findings) and then conclude with a look ahead to the questions we will answer in future reports.

Program Strengths and Areas for Improvement

Through the program director, parent, and staff interviews, we learned about the organization of and services offered by programs and received by families, and the education and backgrounds of their staff.

- ***Early head start programs provide diverse services to address family needs.*** Programs have continued to expand their service options and now nearly three-quarters of programs offer more than one service option to families. Programs use curricula to guide their center- and home-based service in nearly all cases. The services programs offer are comprehensive and span a wide range of needs. Further, families receive the services that programs offer at high rates. About two-thirds of all parents reported some involvement in Early Head Start apart from participation in services in the past year.
- ***Children are served by well-qualified staff from diverse backgrounds.*** In terms of staff education, programs are progressing toward the goals in the Head Start Act, which require 50 percent of teachers to have a BA by 2013, and for home visitors to have at least an AA. Directors' reports of the education of all their staff are consistent with the statements made by staff who are serving Baby FACES children. At the program level, 26 percent of teachers have a BA and an additional 34 percent have an AA. Home visitors' education level is higher (also observed in the SEHSP), with 43 percent having a BA and an additional 31 percent with an AA. In addition to education credentials, programs offer many opportunities for staff training each year, and staff members we surveyed reported participating in multiple professional activities.
    - Nearly all children and families receive services in their home language (English and Spanish are the most commonly spoken languages). Ninety-five percent of home-based families received a visit in their home language as did 96 percent of children in center-based care. Among those from Spanish-speaking homes, 90 percent of families that receive home visits had those visits in Spanish, and 88 percent of those in center-based care received those services in Spanish.
    - Programs face challenges retaining staff. The rate of turnover of teachers and home visitors is about 16 percent, and 44 percent of programs had a person in a leadership position leave (director, coordinator, or manager) in the past year. It is not clear what is behind the turnover rates; staff we interviewed reported they are active in professional development activities, have experience working with infants and toddlers, have high levels of commitment to staying in their jobs, and have low levels of depressive symptoms. Three-quarters of program directors reported that salaries were either about the same as or higher than for similar positions in the community.
- ***Early Head Start home visits and classrooms are in the mid-range of quality.*** The quality of home visits we observed was moderate if we assume a model of home visiting that stresses working with parents to facilitate a positive parent-child relationship and interactions. Programs following other models, such as those that focus on providing

materials for activities to do with the child directly, will score lower on HOVRS-A. For programs intending to follow a model meant to support the parent-child relationship, home visits would receive higher quality scores if more time was spent on the parent and child together and less on interaction with either alone. Home visitors are strongest in engaging the child and establishing a relationship with the family, and these strengths may support efforts to enhance the parent-child relationship and reduce intrusiveness. One important caveat to these findings is that the HOVRS-A is a new measure, and we are still in the process of learning about its properties and how it might relate to outcomes, something we will explore further in the next report.

The quality of Early Head Start classrooms was highest in areas that concern interactions between teachers and infants, an important support for children's development. However, overall scores were lower than found in other studies of similar populations using the same measure, and lower than found in the EHSREP (albeit on an earlier version of the measure). Changes to the instrument (from ITERS for the EHSREP to ITERS-R for Baby FACES) make comparisons difficult to interpret. Based on information from the measure developer about work done with the ECERS and ECERS-R, it appears that further specifying item scoring rules could explain some of the decline in scores, although there may also be changes in classrooms that we cannot disentangle. The ultimate question of whether and how classroom quality predicts child development and what thresholds are important are questions that we cannot answer yet. Our examination of associations between ITERS-R and other indicators that would seem to be important for quality found a modest positive association with teacher job satisfaction and a negative one with child-staff ratio, but no strong associations in the expected directions with other features of programs, staff, or the relationship between staff and parents. The next report will examine associations between quality measures and child developmental outcomes to shed light on this important question.

- ***There are some relations between family characteristics and service option, and between needs and services received.*** Programs seem to consider family characteristics and needs when selecting the program option for them and when directing services to address specific needs. Among programs that offer both home- and center-based services, we found a pattern that suggests children and families with higher levels of needs tend to be served more often in home-based or combination options. Mothers who might be expected to be most in need of child care (those who are single or who are employed) are most likely to have children in the center-based option. When we consider individual family needs, programs appear to direct services to those who need them most (for example, those who are at high economic risk or receiving public assistance are most likely to receive financial help or help with housing, those reporting depressive symptoms are more likely to receive mental health services, and so on.)

Family and Infant Well-Being

- ***Families served by Early Head Start are diverse.*** Families enrolled in Early Head Start are diverse racially, ethnically, and in their home languages and have many different needs, primarily financial. Low income is of course a requisite for enrolling in Early Head Start, but even given that tendency, rates of unemployment are high and many families have difficulties paying their bills. Contributing to low income is the high incidence of nonresident fathers, with about half of children living without their biological fathers, although many of these children do see their fathers regularly.

  - Demographic risk is concentrated within some groups, particularly Hispanics and teen mothers. Hispanics tend to report more financial difficulties and food insecurity than other groups. Teen mothers are more likely to have high demographic risk in part because risk factors are highly correlated (teenage mothers are often single, have not completed their education—and may therefore be difficult to employ—and have a high rate of public assistance use).

- ***Early Head Start children are off to a good start in most developmental domains and most families are functioning well.*** Both children and families exhibit a number of strengths.
  - Most children were born healthy and without identified problems, have insurance coverage, and receive care as needed.
  - Language development is on par with norms in terms of vocabulary comprehension but slightly behind in production.
  - Based on parent and staff reports, social-emotional development is also at the normative level although parents saw more problems, but also more competence, than did staff.
  - Overall development as measured by ASQ-3 shows that children fall slightly below norms, although our telephone administration of the instrument may have contributed to lower scores.
  - Families have many strengths, including low levels of conflict and, among biological parents, good co-parenting relationships. Most families have a good social support network and engage in positive parenting behaviors. The vast majority of women refrained from smoking, drinking, and using drugs during pregnancy, and most do not do so currently. About one-fifth of children live in homes in which someone smokes, however.
  - A minority of parents report moderate to severe depressive symptoms, high parenting stress, dysfunctional parent-child interactions, and spanking.

- ***There are subgroup differences in child functioning and family well-being.*** We found some differences in strengths, needs, and service use across key subgroups. There were differences in terms of demographic and psychological risk and the relationship of these risks to greater need for services and to poorer child outcomes. In terms of racial/ethnic subgroups, Hispanic children tend to have somewhat poorer health, less insurance coverage, and more parent-reported social-emotional problems. African American children tend to have the lowest developmental risk, and their mothers were more likely to receive services during pregnancy. One important finding showed that although DLL children know fewer English words they know more words overall—including both English and Spanish—than those from English-speaking homes. Subgroup characteristics are correlated so different subgroups may in fact contain similar groups of people (for example, the majority of the DLL group is also in the Hispanic group, and findings across those groups were similar). However, understanding how groups differ might be helpful to programs aiming to tailor services to the families they serve.

Limitations

All studies have limitations, and Baby FACES is no different. First, because this is a descriptive study, although findings may suggest relations and associations, we cannot draw causal conclusions. When making comparisons across groups, in most cases we did not do statistical tests but instead focused on differences that were large and potentially practically meaningful.

Second, data by age are not yet complete. The data on 1-year-olds currently includes only those from the 1-year-old Cohort; next year we will have data from the Newborn Cohort at age 1. Related to this point is the fact that sample sizes in some subgroups are small. With fewer than 200 children in the Newborn Cohort, although we can understand the experiences of children who enrolled before or soon after birth, the group is too small to look at subgroups within this group (for example by program approach).

Finally, we administered some instruments in innovative ways--with the knowledge and consent of the developers of the instruments. For example, for the ASQ-3 we used a telephone administration (a data collection mode acceptable to the developers) and trained our interview staff to administer it to parents who could not see illustrations of the items. (Unfortunately, through an unrelated error we have incomplete data for the 12-month-old group.) We administered the CDI to Early Head Start staff rather than to parents to lessen the burden on them and to provide another perspective on children's development. This approach had the benefit of providing national data from staff reports that programs may find useful as they consider whether to use the measure themselves in a new way. We also used new instruments to test their viability for use in a large-scale study as well as to understand their properties and possibly how useful they might be to programs for measuring their own outcomes (the HOVRS-A and ITERS-R in particular). We view this work as important to inform the field and future research, however a tradeoff is a limited ability to compare to other studies.

Next Steps/Looking Ahead

This baseline report sets the stage for reports to follow. The spring 2010 data collection will include new data, including the first set of direct child assessments of 2-year-olds and videotaped parent-child interactions, as well as a second data point for parent interviews, Staff-Child Reports, observations of home visits and classrooms, and teacher/home visitor interviews. We are collecting program implementation information from program directors in a new way that we hope will provide a more nuanced view of how they are implemented and where strengths and needs for improvement lie. And, we will have collected exit interview information from families who left the program before their child turned 3. These data will enable a descriptive look at what traits are characteristic of families that leave the program early, why they leave, where they go, and what opinions they hold of Early Head Start. These findings may enable us to help programs understand what (if any) characteristics tend to be associated with early departure and provide an opportunity to engage these families early.

The broad objectives we will address in the next report will include the following:

- Exploring new ways to characterize program implementation objectively through program director interviews
- Looking for linkages between program implementation and the quality of observed services
- Looking at family needs over time and how those needs change
- Looking at child outcomes (including direct child assessments for 2-year-olds) to determine how children are faring
- Characterizing parent-child relationships and exploring whether those relationships are associated with child outcomes

- Exploring the linkage between service quality and child and family outcomes. For example, we shall attempt to see if some aspects of quality are more important than others. Among the areas of study are whether classroom interactions are more important than structural features and whether particular aspects of home visits are more strongly associated with outcomes than others. We will also see how these findings mesh with the literature and prior research.

We caution that our ability to explore these questions might be limited by the size of the sample, particularly when looking at data for subgroups. The eligible sample was smaller than we expected, and therefore we have less power to detect small differences. To the extent that differences are associated with moderate-size changes in child and family outcomes that are likely to be of practical and policy importance, however, we should be able to detect them.

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