# Early Head Start Research and Evaluation Project



TALKING POINTS:
OVERALL FINDINGS PRESENTATION
"LONG" VERSION

#### SLIDE 1:

Overall Findings and Implications for Programs from the Early Head Start Research and Evaluation Project



Introduction: I [We] are very happy to be here with you today. This presentation tells the story of the recently completed Early Head Start Research and Evaluation Project. The story brings good news, and I [we] want to share that with you. I [We] will describe the ways in which the Early Head Start program is having positive impacts on children and parents in a number of areas.

First, I will tell you who I am [we are] and what I am [we are] going to cover today. [insert information about presenters]

Today, I'll [we'll] begin with an overview that gives a quick snapshot of the Early Head Start program and the Early Head Start Research and Evaluation Project to provide some context for the program and study; I [we] will then summarize the *overall* findings.

- Next I [we] will present findings related to how impacts differed for different groups of families.
- Then I [we] will present findings related to how impacts differed by characteristics of programs.
- [Insert other special topics as appropriate]

The Early Head Start Research and Evaluation Project began in 1995the same time the Early Head Start Program began. These talking points accompany the PowerPoint presentation that describes the overall findings from the research. Material for this presentation was drawn from the report completed in June 2002, *Making a Difference in* the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start, Volumes I, II, and III.

These reports are located online at the following URL: http://www.acf.hhs.gov/programs/core/ongoing\_research/ehs/ehs\_intro.html

#### **DISCUSSION QUESTIONS:**

 Are you familiar with the Early Head Start Research and Evaluation Project? Have you read any of the reports from this project?

# SLIDE 2: The Early Head Start Program



Let us review the features of Early Head Start to be sure everyone understands the basics about the program. The program began in 1995 and in 2003 has grown to over 700 programs serving more than 62,000 children. Early Head Start is funded at about 10% of the Head Start budget.

Early Head Start programs are all Head Start programs, but ones that serve pregnant women and their husbands or partners and families with children from birth through age 3.

As such, all Early Head Start programs are required to follow the high standards set by the Head Start Program Performance Standards. The Performance Standards reflect the best thinking from many fields about what is important to include in a high quality early childhood development program.

While all programs follow the Performance Standards, every program tailors its approach to the community it serves. Services provided usually fall into one of three program approaches—home-based, center-based, or mixed-approach (combining both home-based and center-based approaches). In some mixed-approach programs, the same families receive both home-based and center-based services; in other mixed programs, the same families receive one or the other.

[If there is an Early Head Start program in your community, provide a few facts about the local program.]

The Head Start Performance Standards were revised in 1995 when Early Head Start was initiated. The new Standards became official in 1998. They were developed with input from thousands of experts, including early childhood specialists, doctors and nurses, social workers, psychologists, and parents.

Refer to the *Early Head Start Information Kit* for more background information on the Early Head Start program.

#### **DISCUSSION QUESTIONS:**

• Identify the Early Head Start programs in your area.

# SLIDE 3: Early Head Start is an Intensive, Two-Generation Program



Early Head Start is a two-generation program that serves both children and parents.

Early Head Start seeks to promote positive development in children directly by providing services to the children.

The program supports parents in their parenting.

It also promotes their self-sufficiency and healthy family functioning.

Programs provide activities and services that directly promote children's development. For example, programs provide child care, conduct developmental assessments, and encourage parent involvement in child development services, health services (provided either directly or through referrals), and group socializations (in homebased programs). All services must be both linguistically and developmentally appropriate and include children with disabilities.

Programs also focus on strengthening parenting though activities such as home visits, parenting education, and group activities with both parents and children. Programs develop individualized family partnership agreements that set goals for families and ensure access to community services and resources.

Programs encourage parental self-sufficiency by providing access to education and job-training activities and health services.

- What does it mean for a program to be "comprehensive?" What can be gained by offering comprehensive services?
- Why might two-generation services be important?

# SLIDE 4: The Early Head Start Research and Evaluation Project



The Early Head Start Research and Evaluation Project began in fall 1995, at same time the first 68 Early Head Start programs were funded.

The project included both an implementation study and an impact study.

The implementation study consisted of 3 rounds of site visits to the 17 research programs, one near the time of funding in 1996 and again in 1997 and 1999. The study gathered very rich data on the implementation of these first Early Head Start programs. Programs were very dynamic–findings are reported in 2 reports–*Leading the Way* and *Pathways to Quality*. The findings were also important in understanding the findings from the impact study, as you will see shortly.

The impact study followed 3,001 children from enrollment to age 3.

When the families applied to the Early Head Start program, programs accepted applications for twice as many children as could be enrolled. Half were randomly assigned to a control group and half were assigned to a program group. Control group families could not participate in Early Head Start but could receive other community services. So, both groups were the same, except that the program group received Early Head Start and the control group did not. This is important because any differences between the two groups can be attributed to Early Head Start.

Impacts on children and families were examined when children were 2 and 3 years old.

Many people are interested in how random assignment was carried out in the Early Head Start Research and Evaluation Project. The programs recruited and enrolled families as they normally would. However, they recruited twice as many families as they could serve. Names were sent to Mathematica Policy Research in Princeton, NJ, who randomly assigned families to the program and control groups. Families were then informed about whether they were in the program or control group. In order for the study to apply to all the families that Early Head Start serves, no groups or individuals were granted exemptions from the random assignment process. This included children with disabilities.

Random assignment is difficult to complete successfully. Thanks to the cooperation between the programs, local research teams, and national contractor, random assignment was successful in this study. The program and the control groups were equivalent to each other at baseline (in the beginning) and at each assessment. Some families did drop out of the study but drop-outs were fairly equivalent across the program and control groups.

Some ask about the services the control group families received. Many control group families were enrolled in community services (e.g., home visiting programs, health care, and child care). Many control group families indicated they enjoyed participating in the research and especially enjoyed the annual assessments of their child. While they were not given the results of their child's test scores, which were for research purposes only, they enjoyed watching the child assessment. In many of the locations the local research team made copies of the videotapes for the parents. Parents received payment for their participation in the research.

Approximately one quarter of the families enrolled in Early Head Start before the child was born; the other children enrolled before the child was 1 year old.

- Random assignment designs are considered the most rigorous designs for testing whether an intervention works. Many funders do not find data credible if the study does not include a control group. Why do you think a random assignment design is considered so powerful?
- Some scientists think that a random assignment design is ethically possible when a community cannot meet all families' needs for the program under normal circumstances. During this time, an important question can be answered that could be helpful to creating better services for the long term. How can people in communities come to understand the long-term value of a random assignment study? Are there times when such a study would not be justified even if the community had not reached saturation? Are there times when it would be justified?

### SLIDE 5: Research Conducted by Early Head Start Research Consortium



The research was conducted by the Early Head Start Research Consortium—a group of approximately 80 people. The research was carried out based on partnerships—partnerships between program staff and researchers and partnerships between local and national researchers. The researchers included:

- National contractors: Mathematica Policy Research and its subcontractor Columbia University Center for Children and Families
- Federal staff
- 17 program sites
- 15 university-based research teams.

Each site partnered with a local research team.

This slide shows how many people were involved in planning and carrying out the research. The researchers include many leading scientists in the area of infancy and intervention studies. [Highlight names of local researchers as appropriate.]

The Early Head Start Research Consortium included the following members:

#### **National Evaluators**

- Mathematica Policy Research
- Columbia University Teachers College, Center for Children and Families

#### 15 University-Based Research Teams

- University Affiliated Program of Arkansas
- University of California, Los Angeles
- University of Colorado Health Sciences Center (along with Denver University and the Erikson Institute)
- Iowa State University
- University of Kansas
- Michigan State University
- University of Missouri-Columbia
- New York University
- University of Pittsburgh
- Medical University of South Carolina
- Utah State University
- The Catholic University of America
- Harvard University
- University of Washington (two research teams)

#### **Federal Staff**

- Head Start Bureau, Administration on Children, Youth and Families, Administration for Children and Families, DHHS
- Child Outcomes Research and Evaluation, Office of Planning, Research and Evaluation, Administration for Children and Families, DHHS
- The National Institute of Child Health and Human Development and the Office of the Assistant Secretary for Planning and Evaluation, DHHS, as well as the Ford Foundation. [These organizations participated in the Father studies.]

- The research built on recommendations of earlier advisory committees for program and local research partnerships in communities. These advisory committees believe that Head Start capacity is enhanced when programs work with local universities to collect outcome data and to address questions of local interest. In the Early Head Start study local researchers collected national data under contract to Mathematica Policy Research (to ensure consistent data across all sites) and local data under grants.
- Have you been involved in a local research-program partnership? What are the benefits? What do programs and universities need to keep in mind for such partnerships to be successful?

### SLIDE 6: Early Head Start Research Sites



This map shows where the research sites were located. As noted, there were 17 research sites altogether, selected from the Early Head Start programs funded in 1995 and 1996.

The research programs were selected to reflect geographic diversity (with research sites in all regions). The 17 programs were also selected to reflect:

- Different program approaches.
- · Racial/ethnic diversity.
- Different program auspices (whether Head Start programs, former Comprehensive Child Development Programs (CCDP), former Parent Child Centers (PCC), and community-based programs).
- Rural and urban diversity.

Sites were located in the following localities (from West to East Coast):

- King County, Washington
- Sunnyvale, Washington
- Venice, California
- Denver, Colorado (2)
- Logan, Utah
- Kansas City, Kansas
- ♦ Kansas City, Missouri
- Marshalltown, Iowa
- Russellville. Arkansas
- McKenzie, Tennessee
- Jackson, Michigan
- Pittsburgh, Pennsylvania
- New York, New York
- Brattleboro, Vermont
- Fairfax, Virginia
- Sumter, South Carolina

Research sites were also selected based on the quality of local research proposed. The sites were not "demonstration" sites, nor were they selected at random. Instead, the research sites were selected to be reflective of typical Early Head Start programs funded in 1995 and 1996.

All Early Head Start programs funded in 1995 and 1996 agreed to participate in the random assignment study if selected as a research site. As it turned out, programs were allowed to apply to participate in the research. Most of the sites funded in 1995 that met the minimum size requirements of being able to recruit at least 150 families for the study did apply to participate in for the research study so there was a good array of committed sites for selection for the research.

- Have sites in your area participated in a national research study? What would it take for this participation to be successful?
- What do you think advantages of participation in research would be?
- What do you think are the advantages of studying "typical" programs?

### SLIDE 7: Many Measures Used in the Project

Many Measures Used in the Project

Implementation data, including ratings
Family service use data 7, 16, and 28 months after enrollment (both program and control)
Child and family data collected when children were 14, 24, and 36 months old
Videolapad observations of parent-child interaction
Interviewer observations
Parent interview
Child assessments

The evaluation measured both process (in the implementation study) and outcomes.

To measure the services families received, parents were interviewed 3 times after they enrolled in the Early Head Start program, at an average of 7, 16, and 28 months into the program. These service interviews were conducted with both the program and control groups.

Children and primary caregivers were assessed at 3 ages—at about 1 year old (14 months), 2 years old (24 months), and 3 years old (36 months). These assessments spanned multiple methods (videotaped interactions, direct assessments, parent reports, and assessor ratings).

Fathers were interviewed in 12 sites and observed in 7 of these sites when the children were 2 years old (24 months) and 3 years old (36 months).

The process evaluation assessed implementation both qualitatively (by creating program profiles and rich descriptions of services and contexts in the implementation reports) and quantitatively (by creating ratings based on key components of the Head Start Program Performance Standards). Programs were also asked to identify their theories of change—that is, they were asked to articulate their intended outcomes and their plan for achieving those outcomes.

The family service use interview included extensive information on health services, education and training, employment, Part C (early intervention), and child care.

The research used many well-established measures of early development and parenting so results could be compared with other studies. Measures also focused on areas that programs named in their theories of change as intended outcomes. The measures included several different perspectives on the child's behavior and development (parent, assessor, trained coders, as well as the assessment).

The researchers are following the children in the sample as they enter Kindergarten to see where they receive early childhood services after Early Head Start and to determine how they are doing as they prepare to transition into a more formal learning environment.

A list of key measures used in the national study can be found in Table 1 of the Executive Summary-Making a Difference in the Lives of Infants and Toddlers and Their Families on the Research to Practice Compact Disk.

Local research studies were conducted at each research site to gather information beyond that collected as part of the national evaluation and to address local research questions. Some local researchers measured attachment, emotional regulation, language development, nutrition, and more. Parents completed the Head Start Family Information System (HSFIS) measure when they applied to Early Head Start (and the study). In addition, a number of local researchers completed more in-depth baseline measures that included such things as depressive symptoms and perceived parenting stress.

#### **DISCUSSION QUESTIONS:**

- Do you monitor program implementation? How do you do that?
- What measures do you use for assessing program services?
- What measures do you use for assessing children in your program?
- How do you assess changes in parents, parenting, and children's home environments?
- What are the main outcomes your program seeks to affect? How do you measure these?
- How do you use this information for continuous program improvement? How is the information aggregated and reported back to staff and funders?

**Resource:** Forthcoming publication, *Resources for Measuring Services*, and *Outcomes in Head Start Programs Serving Infants and Toddlers*.

# SLIDE 8: Policy Context Changes During the EHS Research & Evaluation Project



The 17 Early Head Start programs participating in this research study began enrolling their families in the same month that welfare reform was enacted—summer of 1996. Welfare reform had a number of effects on the programs:

- In many cases, welfare reform increased families' needs for child care and affected their availability for some Early Head Start services such as home visiting.
- In some states child care subsidies may have become more available, providing opportunities for paying for needed child care.
- Program strategies—particularly home visiting, often had to be rethought, and modified in ways that would enable programs to provide home-based services around families' increasing education and work schedules. Some programs added centerbased options for some families.

State pre-kindergarten programs were expanding in many states, offering new job opportunities to the best Early Head Start teachers.

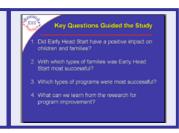
The federal Fatherhood Initiative began around the same time, and many programs greatly increased their efforts to engage men in the lives of their children, families, and the Early Head Start program.

With low unemployment in most Early Head Start locations, there were opportunities for jobs that might not exist in another time period.

Welfare regulations are increasingly requiring stricter work requirements. The requirements differ by state (and sometimes at the county level). Programs should check with their state office for information about these regulations. In particular, note whether your state or county exempts mothers with infants under 1 year of age from the work requirements.

- What were the effects of welfare reform in your area?
- What public policies affect Early Head Start programs today?
- What are the welfare requirements in your area that affect Early Head Start families?

### SLIDE 9: Key Questions Guided the Study



The impact study addressed a number of questions, but the four main questions are:

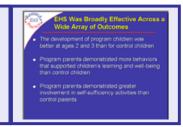
- 1. Did Early Head Start have a positive impact on children and families?
- 2. With which types of families was Early Head Start most successful?
- 3. Which types of programs were most successful?
- 4. What can we learn from the research for program improvement?

In the rest of our presentation we show what we learned about the answers to each of these questions.

Question 4 (i.e., What can we learn from the research for program improvement?) is a question that the Advisory Committee on Services to Families with Infants and Toddlers emphasized. This Committee wanted programs to collect data and apply the lessons learned through a continuous improvement process. They believed if programs practiced this procedure each year, they would grow towards excellence.

- What would be key questions for research in your program or area?
- If you could add any questions, what would they be?

### SLIDE 10: EHS Was Broadly Effective Across a Wide Array of Outcomes



This slide summarizes the main overall impacts of Early Head Start. The bottom line of the study is that Early Head Start was broadly effective across a wide array of outcomes. The impacts for the program were not large, but they were significant and they spread over many measures in nearly every area assessed.

The differences found between the control and program groups mean that the program group had more favorable scores on many measures than the control group.

- Children benefited from their participation—across many areas of development.
- Parents enrolled in Early Head Start were more able to support their children's development (compared with control group parents).
- Program parents also benefited by becoming more involved in various self-sufficiency activities than control group parents.

The next slides provide details.

It is possible to conclude the Early Head Start program was effective because outcome scores were significantly higher (or sometimes lower—on items such as aggressive behaviors) and more favorable for the program group than for the control group. Significance is a statistical term that means scores are enough higher or lower that the differences would not be attributed to chance.

The effect sizes (size of the difference between the program and control groups) were in the 10-20% range. There is little consensus about what an important effect size is for a program for infants and toddlers. However, by general standards this size of effect is considered modest. What is notable about the Early Head Start Research and Evaluation Project is that there were so many significant favorable effects. As can be seen later in this presentation, some of the subgroups show the potential of the Early Head Start program for larger effect sizes in the future.

Some will compare the effect sizes of Early Head Start Research and Evaluation Project to those of other studies. The Abecedarian Study, conducted in North Carolina several decades ago, found much larger effect sizes than the overall Early Head Start impact findings. However, that study was conducted at a time when few control group children received services beyond health services, which was not true in the Early Head Start Research and Evaluation Project. Many children in the Early Head Start study control group attended child care and many control group parents received home visiting as well as health services. Effect sizes in several subgroups (as seen later in this presentation) are closer to those found in the Abecedarian study than are overall effects sizes. Additionally, most previous intervention studies assessed a small program with only one type of population. The Early Head Start Research and Evaluation Project assessed outcomes across many programs with a heterogeneous population.

- What types of outcomes do you think are possible from Early Head Start programs? How closely do the outcomes found match what you would expect?
- What do you think is the value of modest impacts over a range of child, parenting, self-sufficiency and family well-being outcomes?

# SLIDE 11: Positive Impacts: Multiple Dimensions of Children's Development



This slide summarizes the impacts that Early Head Start had on the children. All the differences were significant.

**Health:** There were small but still statistically significant impacts on immunization rates. Ninety-nine percent of Early Head Start vs. 98% of control children were immunized.

Fewer Early Head Start children were hospitalized for accident or injury (0.4% vs. 1.6%). In general in the area of health, there were few impacts overall. One reason for this is that the control group families also received high levels of health services.

**Cognitive development:** Being able to solve problems and understanding basic concepts are central to children's overall development. Using a widely used standardized assessment—the Bayley Scales of Infant Development (with a score called the Mental Development Index, or MDI), the study found two important results:

- Early Head Start children scored higher on average than the control group.
- Early Head Start children were less likely to score in the "at risk" range (under 85 on the MDI).

The scores on the Bayley Scales of Infant Development (with a score called the Mental Development Index, or MDI) and the Peabody Picture Vocabulary Test—III (PPVT-III) remained below national averages.

- What center-based activities do you use to encourage growth in cognitive development?
- What do your home visitors do to stimulate children's cognitive development?
- How is children's development promoted through a combination of center-based and parenting activities? How does each contribute? How do they enhance each other?

# SLIDE 12: Positive Impacts: Multiple Dimensions of Children's Development (cont.)



Language development: At age 3, Early Head Start children had larger vocabularies than control children, using a widely used standardized assessment—the Peabody Picture Vocabulary Test-III (PPVT-III). And, as with the Bayley—a smaller percentage of 3-year-old Early Head Start children scored in the lower, at-risk range.

**Social-emotional development:** These findings are also crucial to children's well-being. The programs made a difference in multiple aspects of social-emotional development. This suggests that by the time they turn 3 years old, Early Head Start children behave differently from the control children in important ways. These include:

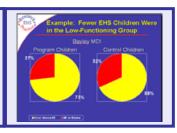
- Lower levels of aggressive behavior problems
- Higher levels of sustained attention with objects in a play situation
- Greater degree of engagement of their parents—also in a play interaction
- Less negativity toward their parents.

Language development was measured at 36 months using the Peabody Picture Vocabulary Test—III (PPVT-III), a test of receptive language. When children were 24 months old, the program group also had significantly higher language development scores than the control group. The measures used at 24 months were from parent report of children's vocabulary and sentence length.

Measures of social-emotional development were completed in a variety of ways. Using multiple methods gives confidence about the results. Aggressive behavior was measured by parent report. Sustained attention, engagement with parents, and negativity toward parents were assessed from videotaped observations of semistructured parent-child play.

- How do you stimulate and encourage language development in your program?
- What aspects of social-emotional development does your program especially value? What aspects of children's social development are you most interested in promoting? How does your program do that?

# SLIDE 13: Example: Fewer EHS Children Were in the LowFunctioning Group



This slide graphically shows an important finding in the area of cognitive development.

This slide shows an **example** of one child development impact—in cognitive development.

It shows that a **smaller** percentage of Early Head Start children compared with the control group scored in the at-risk range of developmental functioning (below 85).

Compare the red sections of the two pie charts. The left pie chart represents Early Head Start children. You can see that the red section is smaller (27%) than in the right-hand pie chart, which is the control group, where the red section represents 32% of children scoring in the at-risk range.

By moving more children out of the lowest functioning group, Early Head Start programs may be reducing the need for special education services and the risk of poor cognitive and school outcomes later on.

The bottom line on child impacts: Before turning to parenting outcomes, we will summarize that Early Head Start had positive impacts on all areas of child development. Taken together, these changes in cognitive, language, and social-emotional development can be very important—both for how children behave when they are 3—but also with implications for how they might behave as they get older.

Remember that Early Head Start children scored higher, on average, on a standardized assessment of cognitive development (the Bayley Scales of Infant Development Mental Development Index—MDI). This slide shows that fewer children also scored at the "at risk" level.

One interpretation of the findings is that Early Head Start is preventing a percentage of children entering the "at risk" level for cognitive development. A similar finding was reported for language development. Different states have different official qualifying scores on the Bayley MDI for determining for Part C services. While a score of 85 on the MDI is slightly higher than the cut off point in most states, it does identify children who area lower functioning and "at risk" for needing special services, such as Part C.

Interestingly, while fewer Early Head Start children might meet criteria for receiving Part C services (early intervention), the research shows that eligible Early Head Start children were more likely to be identified and be receiving Part C services.

- How can programs best ensure that all children who have a diagnosed disability receive the Part C services they need?
- What are the implications of findings that fewer children scored at the at-risk level for cognitive (and language development)?
- Think about the implications of the broad impacts found when children were 3 years old. Is it possible that they will enter Head Start or another preschool program better able to benefit from the stimulation it might provide?

# SLIDE 14: Positive Impacts in Many Areas of Parenting



Parents are major influences on children's development. Early Head Start programs aim to enhance parenting.

Evaluations of families participating in the Early Head Start Research and Evaluation Project included several components. One task was a play situation in which the researchers brought the toys into the house and videotaped the parent–child interactions that were later coded on a number of dimensions. Researchers also conducted detailed observation of the home environment and, finally, parents were asked about their activities and behaviors.

- Early Head Start parents were found to have greater warmth and supportiveness towards their children than control group parents.
- Early Head Start parents showed less detachment.
- They reported more time spent in play with their child.
- They provided more stimulating home environments.
- They provided more support for language and learning.
- Early Head Start parents were more likely than control parents to read daily to their children.
- Early Head Start parents were less likely to spank their children (both mothers and fathers)—and reported a greater repertoire of discipline strategies than control group families.

**The bottom line on parenting impacts:** Early Head Start parents showed higher levels of positive parenting and lower levels of negative aspects of parenting, compared with the control group parents.

The next two slides show examples.

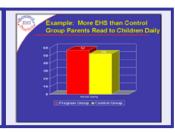
The evaluation carefully considered what aspects of parenting and the home environment to measure. Most of the measures have been used extensively in other studies.

Some of the measures of parenting behaviors in the study included:

- A measure of the home environment--The Home Observation for Measurement of the Environment (HOME). The HOME yielded an overall score and several factors (e.g., a measure of support for language and learning and warmth).
- Self-report of parent reading, activities with the child, and responses to situations requiring discipline.
- Videotaped observation, which included several tasks. One was known as the "three bag" task. The parent was told to play with the child any way she/he wanted using the bags. Another was a task that involved the parent teaching the child a new skill. The videotapes of these parent-child tasks were later coded for a number of parenting behaviors (e.g., supportiveness, stimulation, detachment and intrusiveness).

- What is your theory of change with respect to how changes in parenting may influence children's development?
- What kinds of parenting attitudes and behaviors should an Early Head Start program measure? Are measures available in all of these areas?

# SLIDE 15: Example: More EHS than Control Group Parents Read to Children Daily



When children were 3 years old, 57% of Early Head Start parents read daily to their child compared to 52% of the control group parents.

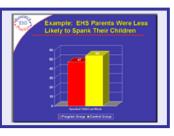
Not only did a higher percentage of Early Head Start parents report reading to their child every day, they provided more support for language and literacy in many other ways (e.g., they had more children's books in the home and talked with them more in ways that encouraged their language development).

Early Head Start parents also played more with their children.

The Early Head Start Research and Evaluation Project also found that the impact Early Head Start programs had on daily reading when the children were 2 years old led to (mediated) the impact on their cognitive development at age 3.

- Do all families have children's books in the home (e.g., what about those who need to read to their children in a language other than English)?
- Are there books that can be made available for parents with limited reading ability to read to their children?
- Why do you think that reading to children is so important to children's development?
- What do Early Head Start programs do to encourage parents to read to children?

# SLIDE 16: Example: EHS Parents Were Less Likely to Spank Their Children



Early Head Start parents were less likely to spank their children; 47% of Early Head Start vs. 54% of control group parents reported spanking their child during the previous week.

Parents were also asked what they would do in a hypothetical discipline situation; Early Head Start parents were less likely to suggest they would use physical punishment and were more likely to say they would use only mild forms of discipline.

Mediated analyses showed some associations between the impact of Early Head Start on spanking at 2 years of age (less spanking) and reduced child aggressive behavior at 3 years. That is, less parental spanking at 2 was associated with (mediated) less child aggression at age 3.

- How does the Early Head Start program in your area help parents reduce spanking and find alternatives in discipline situations?
- What is the link between parent spanking and child aggressive behavior? (Why do you think there is a link?)

# SLIDE 17: The Program Had Positive Effects on Aspects of Parent Self-Sufficiency



Early Head Start is primarily a child development program, yet the Performance Standards recognize that if parents become more self-sufficient, they can also do a better job of providing for their children.

The program demonstrated some important impacts on parent selfsufficiency by the time parents had been enrolled for 28 months (on average):

- Education and training—Early Head Start parents were more likely than control parents to participate in an education or job training program; 60% of Early Head Start parents vs. 51% of the control parents ever participated in such a program during first 28 months in the program.
- **Employment**—Early Head Start parents were slightly but significantly more likely to have been employed at some point during the evaluation period (through 28 months after enrollment), in contrast with the control group parents (87% vs. 83%).
- Repeat births—Early Head Start families delayed subsequent child bearing, perhaps as they became more engaged in selfsufficiency activities (23% vs. 27%).

The program did not have an impact on welfare cash assistance receipt (except in some subgroups) or on overall income. Welfare cash assistance decreased in both the program and control groups and income increased for both.

Some healthy family functioning outcomes did not show impacts when children were 36 months old (except in some subgroups, as will be seen later). Some of these include depressive symptoms, parenting stress, and family conflict. There were overall impacts on parenting stress and family conflict when children were 24 months old (stress and conflict were lower in the Early Head Start families than the control group families at that time).

- What types of self-sufficiency outcomes do you expect the Early Head Start program to affect?
- Why do you think the program had greater impacts on training and education than on employment?

# SLIDE 18: Consistent Impacts on Participation in Education & Training Programs



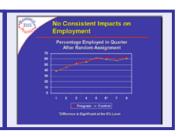
This graph shows the percentage of program and control parents who were participating in education or job training programs during the 2-year period following random assignment (that is, after enrollment in the Early Head Start program). The red line represents the Early Head Start program group, which was consistently higher than the control group in quarters 3 through 8 (or from about 7 through 24 months after enrollment).

By the 8<sup>th</sup> quarter after enrollment, 26% of the Early Head Start parents were in education or training programs as compared to 20% of the control group parents.

Most Early Head Start programs indicated they helped parents complete education or training programs as needed. These included vocational education programs, GED and high school, and specialized training programs.

- What do Early Head Start programs do to promote education and training in your area?
- In your experience, what benefits follow when parents complete education and training programs?

## SLIDE 19: No Consistent Impacts on Employment



In contrast to the previous graph, employment rates for the two groups were not significantly different *except* during the sixth quarter (between 16 and 18 months after enrollment). It seems clear that Early Head Start programs had a larger impact on education and training than on employment.

Overall, Early Head Start parents were somewhat more likely to have had a job at some time during the first 28 months of their enrollment than control group parents (87% Early Head Start parents vs. 83% for the control group parents).

Note that the employment picture improved for *both* the program and control groups, which probably indicates the effect that welfare reform had in getting more low-income parents into jobs and the availability of jobs given the strong economy.

Early Head Start programs reported variability in jobs available for Early Head Start parents, even during the period of a relatively strong economy.

- What do Early Head Start programs in your area do to support parental employment?
- What kinds of jobs are available for Early Head Start parents? What is being done to create opportunities for parents to obtain better jobs (e.g., with benefits and that lead to higher pay over time)?

## SLIDE 20: The Program Had Beneficial Impacts for Early Head Start Fathers



Fathers benefited from the Early Head Start program in a number of ways.

They reported that they spanked their child less (25% of program fathers reported spanking their child in the past week, compared with 36% of control group fathers).

Early Head Start fathers were also rated as being somewhat less intrusive when interacting with their child in the videotaped puzzle task.

In addition, Early Head Start children were rated as having higher levels of engagement with their father during the father-child play situation.

Early Head Start programs were just starting to involve fathers in regular program activities during the evaluation period. Some programs involved many fathers, but in most cases, fathers were not as involved as mothers.

Nevertheless, Early Head Start fathers were more involved in program activities than the control group fathers. Early Head Start fathers were more involved in home visits, parenting education, and support groups than was true for control group fathers.

- How are fathers involved in the Early Head Start programs in your areas?
- How do you think Early Head Start programs benefit fathers?
- How do benefits for fathers translate to benefits for children and families?

## **SLIDE 21:** Family Subgroups



The slides presented so far reviewed the background and purposes of the study and the *overall* findings. These are the results that apply **on average** to all Early Head Start children and families. But, we know that all families are not alike, and there are many differences across programs. As we will see, impacts for some groups are larger. We will also see that there are some lessons for program improvement.

## SLIDE 22: Early Head Start Serves Many Different Types of Families



Remember, across the country, Early Head Start serves a wide diversity of families. This slide reminds us that Early Head Start families are not homogeneous.

## **DISCUSSION QUESTIONS:**

 What are the demographic characteristics of families that programs serve in your area?

# SLIDE 23: Most Types of Families Benefited from EHS Participation



Twenty-seven different family subgroups were studied. The groups are listed on the next two slides. The subgroups were defined based on families' and children's characteristics at the time they applied to Early Head Start.

- Families who enroll when the mother is pregnant and those whose children are already born (no child in the Early Head Start study was more than a year old at the time of enrollment).
- Mothers who are teens and those who are older.
- First-born and later-born children.
- African Americans, Hispanics and Whites (the analyses was confined to these 3 racial/ethnic groups, though other racial/ethnic groups were included in the sample).
- Number of family "risk" factors. The study examined 5 risk factors—single parent; teenage mother; receiving public assistance; neither working nor in school; no high school diploma or GED. A sum score of risk factors was developed and 3 groups were created, those families with 0-2, 3, and 4-5 risk factors.

Risk can be determined in many different ways. In this study five of the key demographic risks were summed.

## **DISCUSSION QUESTIONS:**

What do you think constitutes "at risk"?

# SLIDE 24: Most Types of Families Benefited from EHS Participation (cont.)



The study (and Early Head Start) also included:

- Primary caregivers at risk for depression when the study began and those who were not at risk for depression.
- Primary caregivers lacking a high school diploma or GED and those with education beyond this basic level.
- Those living with a spouse or with other adults and those living alone.
- Those receiving AFDC or TANF when they enrolled and those who were not.
- Those whose main language was English and those who were not English speaking.
- Parents of boys and girls.

The subgroup studies showed that Early Head Start impacts were broad-based; that is, they were not concentrated in just a few groups of families and children.

In all of the subgroups listed, the Early Head Start families received significantly more child development and family support services than families in the control group.

Families and children in 24 of the 27 subgroups experienced some favorable program impacts on child development, parenting, and family self-sufficiency.

The extent and pattern of program impacts varied among the subgroups. Some groups experienced stronger patterns of impacts than others. These variations offer insights that may help Early Head Start programs improve.

The following slides highlight some of the key variations that offer useful insights for programs.

The Early Head Start Research and Evaluation Project is one of the few to study a large federal initiative with such diversity in programs and families. Most evaluations of early childhood programs have studied the effects of a program on one or two homogeneous groups.

While they can offer insights, the differences in impacts across different groups of families must be interpreted with caution. The variations in Early Head Start impacts among the subgroups may be due to the characteristic itself or to other differences between the subgroups that researchers were not able to measure.

- Are there some subgroups that are harder to recruit into Early Head Start?
- How many different groups does your program work with? Do you believe that your program affects these different population groups in different ways? If so, in what ways?

## SLIDE 25: Impacts Were Larger in 3 Groups



There were three groups with notably larger impacts.

Children and parents in families who enrolled when the mother was pregnant showed stronger impacts. Previous research suggests that there is something special about beginning to work with a family before the child is born. The stronger impacts among families enrolled during pregnancy could reflect the fact that they were enrolled in Early Head Start an average of 3 months longer than families who enrolled after their child was born (25 months versus 22 months). The Early Head Start evaluation results suggest that enrollment during pregnancy does lead to stronger impacts. However, keep in mind that Early Head Start also had significant favorable impacts on children and parents who enrolled after their child was born.

Early Head Start impacts on child and family outcomes were notably stronger among African Americans. For example, Early Head Start appears to have improved language development among African American and Hispanic children, but the impacts on White children were not significant. Overall, the program did have impacts in a favorable direction on (a) Hispanic children and families and (b) White children and families, but the impacts on African American children and families were particularly strong. These findings may, in part, be due to the fact that many child and family outcomes in the African American control group were lower than was true for other groups, which set the stage for programs to make a larger difference.

All Early Head Start families are at risk of poor outcomes due to poverty. Some are at greater risk than others, however. To identify families with different levels of risk, a composite was created of the number of demographic risk factors that families had when they enrolled. Families who had a moderate number of demographic risk factors—three out of five—also showed a pattern of larger effect sizes. (The study examined 0 to 5 combinations of five risk factors—single parent; teenage mother; receiving public assistance; neither working nor in school; no high school diploma or GED.)

**Enrollment During Pregnancy.** A quarter of families in the research sample enrolled during the mother's pregnancy. Of these, about half enrolled before their third trimester.

Opportunities for improving child outcomes may be maximized when program staff begin working with families prenatally because they can help ensure that women receive prenatal care and education, and pregnancy may be a time when parents are more open to intervention services as they work through changes in their lives. The differences between the program and control groups in the types and intensity of services they received tended to be larger among families who enrolled prenatally. This was especially true for receipt of home visits.

Families who enroll during pregnancy remain eligible for and may participate in Early Head Start for the longest period. In the evaluation, families who enrolled during pregnancy remained enrolled for an average of 25 months, compared with 22 months among families who enrolled after their child was born.

Most impacts were favorable when mothers enrolled during pregnancy. However, there was some evidence that Early Head Start children whose mothers enrolled during pregnancy were less likely than control group children to experience the continuous presence of biological fathers through the infant and toddler years.

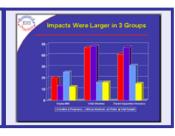
Those families who enrolled during pregnancy were also more likely to be in mixed-approach programs (45% mixed-approach vs. 25% center-based and 35% home-based programs).

Race/Ethnicity. The differences between program and control families in levels and intensity of services were greatest among Hispanic families, primarily because Hispanic control group families were much less likely than other control families to receive services in their communities. For most services, the differences between Early Head Start and control families were smaller among African American families, because control families were more likely to obtain services in their communities.

Early Head Start had few impacts on White children and families. White parents were more likely than African American and Hispanic parents to report symptoms of depression, and this may have contributed to greater challenges for programs in serving White families. White families in the control group were also more likely than other control group families to report that their child was eligible for and received early intervention services. The early intervention services received by some White control group families and children were probably comprehensive and similar in many ways to the Early Head Start services received by program group families. (Additional Information continued following the next slide.)

- Why do you think programs generally produced larger impacts when mothers enrolled during pregnancy? Are mothers more open to intervention services if they enroll during pregnancy?
- What does it take to successfully engage parents during pregnancy and keep them engaged until children reach age 3? Does trying to enroll parents during pregnancy present special challenges for programs? How can Early Head Start programs engage fathers when mothers enroll during pregnancy?

## SLIDE 26: Impacts Were Larger in 3 Groups



This slide demonstrates the larger effect sizes found in these three groups. We've selected 3 outcomes to illustrate the point—Bayley MDI scores, child sustained attention, and parent supportive presence during play. The bars show the size of the impact--how much higher Early Head Start children or families scored relative to the control group. The yellow bar refers to the overall sample. From this graph you can see that bars for the 3 groups we are describing are generally higher than the overall bar (yellow).

The bars show effect size, a metric of the amount of difference between the program and control group. The larger the effect size, the greater the impact of the program. [Note to presenter: you may decide to stop here.]

Enrolled During Pregnancy. Now, look at the red bars representing outcomes for families enrolled during pregnancy. Among children not yet born at enrollment, the Early Head Start impact on Bayley MDI scores was almost twice as large as for the sample overall (compare red to yellow in the first set of bars). Impact on children's sustained attention with objects was over three times that of the sample overall, and impact on parents' emotional support of their child during play was about two and a half times that of the sample overall (compare red to yellow in the second and third sets of bars). (Families enrolled during pregnancy *also* showed strong effects on child engagement of the parent during play, and reduced children's negativity toward the parent during play, parent detachment interaction, and spanking [but these latter findings are not shown in the graph.])

African American Families. The purple bars represent impacts on African American families. The Early Head Start impact on the Bayley for African American families was comparable to that of the sample overall but impacts on sustained attention and parent supportive presence were three times as for the total sample. (As noted earlier [not shown here], Early Head Start also had strong impacts on language development of children, aspects of the home environment including stimulation of language and learning, daily reading, and the severity of discipline strategies.)

**Moderate Risk.** The Early Head Start impacts on child and family outcomes were relatively larger among moderate-risk families (light blue bars) and were about twice the size of overall impacts on the Bayley and on parent supportive presence. (There were also relatively larger impacts on daily reading and reduced parent detachment and parenting stress among this group of families [not shown here].)

The status of African American control group children and families relative to control families in other racial and ethnic groups may have set the stage for the Early Head Start programs to make a larger difference in the lives of African American children and parents. The cognitive and language development of African American children in the control group lagged behind that of other control group children, and African American parents in the control group tended to demonstrate the least favorable parenting behaviors compared with other control group parents.

Significant favorable impacts for Hispanics were found for some parenting behaviors and daily reading. Again, the impacts for White families were favorable but many did not reach significance.

**Risk.** Families with a moderate number of demographic risks comprised about one third of the sample.

- How can Early Head Start continue to work with cultural differences and differential potential for impacts in ways that are sensitive, appropriate and effective?
- Why do you think that families at moderate levels of demographic risk benefited most from Early Head Start relative to those at lower and higher levels of risk?

## SLIDE 27: EHS Did Not Appear to Benefit One Group of Families



One group did not appear to benefit from Early Head Start, those with the highest number of demographic risk factors—4 or 5. In fact, consistent with some other research, a few impacts among the higher-risk families were unfavorable. Specifically, unfavorable impacts were found in child vocabulary and some aspects of negative parenting behavior (increased harshness and intrusiveness in play interactions).

The higher-risk families were more likely to be in home-based or mixed-approach programs that were not fully implemented right away, and it is possible that the staff turnover and disruptions in staff-family relationships in some of these programs had an adverse effect on the more vulnerable families in the sample.

It is also possible that program participation added to the challenges and stress that parents in this group faced. In fact, program staff reported that higher-risk families were more difficult to engage and serve.

Although the general pattern of impacts on higher risk families was unfavorable, the Early Head Start families did significantly delay subsequent births.

One-fourth of the families in the study were in the higher-risk group, with 4 or 5 risk factors.

The differences between program and control groups in the level and intensity of services they received were generally smallest among higher-risk, compared with families with fewer risk factors. Compared with program families with fewer risks, higher-risk program families were harder to serve and received fewer and less intensive services, and in the control group, higher-risk families were more likely than families with fewer risk factors to receive some kind of services from other sources in their communities.

- Why do you think that Early Head Start did not benefit families at highest levels of risk?
- What types of services would be needed to benefit these families?
- Do you serve families with multiple risk factors in your program? How do you engage them in services?

## SLIDE 28: EHS Benefited Some Groups That Have Been Hard to Serve



Two groups were notable because Early Head Start was somewhat successful with them and they have been difficult to serve as reported in other studies: teen mothers and mothers who were depressed when they enrolled. We are especially interested in these two groups because they are associated with poorer child outcomes.

#### **Teen Parents**

More interventions with teen mothers have shown greater success with self-sufficiency activities rather than for child outcomes.

Early Head Start had a significant favorable impact on Bayley MDI scores and the proportion of children who received low Bayley MDI scores, as well as significant favorable impacts on several social-emotional outcomes that were larger than those for children of older mothers.

In terms of parenting, the programs had significant favorable impacts on supportiveness and spanking among teenage mothers.

Early Head Start also increased teenage mothers' participation in education activities and toward the end of the follow-up period, reduced welfare receipt.

#### Mothers Who Were Depressed When They Enrolled

In 8 of the 17 research sites, primary caregivers were asked about symptoms of depression at the time they enrolled in the study. In these sites, approximately half of the mothers were at risk of depression at the time they enrolled.

Program staff reported that mothers at risk of depression were more difficult to serve. Despite the challenges of engaging these families, Early Head Start had notable favorable impacts on their children's social-emotional development and on several aspects of their parenting behavior. Among parents at risk for depression, Early Head Start had significant favorable impacts on parent supportiveness in play, parent detachment and negative regard during play, bedtime routines, and spanking. Among the children, Early Head Start children were more likely to engage their parent, pay attention to objects longer, and were less likely to show negativity. These behaviors were all observed in play with their parent.

These findings suggest that Early Head Start was a protective factor in the lives of children of depressed mothers.

#### **Teen Parents**

One third of the mothers in the total sample were teens under 20.

The pattern of impacts on parenting outcomes was broader for older mothers, but was notable for teen mothers because of the challenges generally reported in serving teens.

Despite the challenges they reported in serving teenage parents, the Early Head Start programs were able to provide substantially more services to teenage parents than they would have obtained on their own in their communities.

Program staff regarded teenage mothers as harder to serve. Compared with older mothers, staff reported fewer teenage mothers were consistently highly involved in the program.

The Early Head Start impacts on teenage parents compare favorably with those of recent large-scale programs for disadvantaged teenage parents, including the Teenage Parent Demonstration and the New Chance program. Like those programs, Early Head Start increased teenage parents' participation in self-sufficiency-oriented activities, but unlike those programs, Early Head Start also enhanced their parenting and their children's development.

The Early Head Start impacts on teenage parents also compare favorably with those of recent smaller-scale programs, including the nurse home visiting program designed by David Olds.

#### Depression

The differences between program and control groups in the level of services they received were smaller among families in which the primary caregiver was at risk for depression at the time of enrollment.

These findings are promising in light of recent evaluations of welfare to work programs that have been found to increase mothers' depressive symptoms and reduce their feelings of warmth toward their children, which may have contributed to the unfavorable impacts on children's behavior problems that were observed.

- Does Early Head Start serve teen parents in your area? What have you learned about how to be successful with teen parents?
- How prevalent is depression among parents who enroll in Early Head Start in your area? What have you learned about how to be successful with parents who come into the program with depressive symptoms?

## SLIDE 29: Program Approaches and Implementing the Head Start Program Performance Standards



Now we would like to turn your attention to characteristics of the programs themselves. We'll talk first about program approaches and outcomes and then discuss patterns of implementation and outcomes.

Program staff members were asked to name their program's key intended outcomes and to identify how the program services led to the intended outcomes. This information from staff was collected on more than one occasion.

## **DISCUSSION QUESTIONS:**

 What program factors do you think affect child and family outcomes? Affect service provision?

## SLIDE 30: Program Models Fit Community Needs



Most programs tend to provide services in one of three ways characterized here.

Center-based programs provide all services to families through the Head Start **center-based option.** For these programs, the child development center is the heart of the program. They also offer at least two home visits to each family every year and parent education and health services.

Home-based programs provide services through the **home-based option**. This includes weekly home visits and two group socializations for every family (both parents and children) each month.

For research purposes, we identified programs that provide a mixture of center- and home-based services as **mixed-approach** programs. Some families are served through the center-based option and some through the home-based option, or by providing services to families through the Head Start combination or locally designed options.

Programs can provide a mix of services in a variety of ways to **maximize their flexibility** in serving families—by targeting different types of services to different families, by providing a mix of services for individual families, or by changing the services individual families receive as their needs change over time.

See *Pathways to Quality*, the Early Head Start evaluation's final implementation report for details about how programs serve families and how the patterns of service delivery often change over time (ACF 2002).

- How have programs in your area selected their program models?
- Have the approaches changed over time as families' needs have changed?
- What have you learned about program approaches and flexibility in meeting family needs?

## SLIDE 31: All Program Approaches Had Favorable Impacts



The researchers looked at how impacts differed across program approach and found that all program approaches had positive impacts, but that the *pattern of impacts* varied by approach.

Center-based programs tended to have impacts on children in cognitive and some aspects of social-emotional development. Center-based programs also appeared to reduce physical punishment and to some extent enhanced learning environments in the home.

Home-based programs had more impacts on parenting (including structuring of the home environment, supportiveness in semi-structured play, reduction in stress associated with parenting) and children's social-emotional development (notably child engagement of parent during semi-structured play) and on self-sufficiency activities.

Mixed-approach programs had the broadest range of impacts, with positive impacts on child language, social-emotional development (engagement of parents and attention to objects—both observed during semi-structured play with their parent), as well as several aspects of parenting (observed parenting during play, home environment, physical punishment) and on self-sufficiency activities.

Center-based programs offered services through one or several central Early Head Start centers. Home-based programs offered weekly home visiting services and group socializations.

Some mixed-approach programs provided families with either home- or center- based services; some mixed programs provided both services to the same family, either providing both services at the same time or sequentially over time. Thus, there were several ways to be a mixed-approach program. It is important to note that the term "mixed approach" is not one of the official Head Start options. There was a pattern for more and more programs— especially home-based programs—to become "mixed" over the course of the evaluation. In 1997, there were 6 mixed-approach programs among the research sites, and by 1999, there were 11. Only 2 programs were exclusively home-based by the later date.

The impacts found by program approaches tended to fit with the theories of change articulated by the programs.

Home-based programs tended to expect changes in children's development to occur through the home environments and parenting while center-based programs expected children's development to be affected through direct services offered to the child.

Mixed-approach programs varied in what they expected but usually both parents and children were emphasized.

The theory of change directed the services the programs offered to children and families and in turn was reflected in the impacts observed, with home-based programs having more parenting impacts and center-based programs having more child impacts and mixed-approach having a strong pattern of impacts on both.

These patterns were particularly pronounced when children were 2.

- Why do you think the outcomes are different for children and families participating in different program options?
- Do you think that types of programs have different theories of change?
- Why do you think the broadest pattern of impacts was found in mixed-approach programs?

## SLIDE 32: Implementing Head Start Performance Standards Strengthened Impacts



Program implementation was studied through the Early Head Start Implementation study.

Data were collected in 3 rounds of site visits: in 1996, 1997, and 1999.

Using site visit data, expert panelists independently rated each program on 24 key indicators related to the Performance Standards.

According to the implementation ratings, six programs were rated as fully implemented in 1997 (early implementers), six were rated as not fully implemented in 1997 but were rated as fully implemented in 1999 (late implementers), and five were not rated as fully implemented at either time point (incomplete implementers).

When children were 2 years old, the early implementers had the strongest pattern of impacts on child and family outcomes.

By the time children were 3, the pattern by implementation was a little less clear, with all three categories having some important impacts.

However, the early implementers still had the broadest pattern of impacts, with impacts on child outcomes (particularly cognitive development), parent-child interactions (both child and parent behavior) and parenting, as well as parent mental health and self-sufficiency (both education and employment).

The implementation ratings were completed both in 1997 and 1999 so changes in implementation over time could be studied.

As part of the implementation study, program staff provided information about their program's theories of change and intended outcomes.

The incomplete implementers either emphasized family support (with less emphasis on child development) or faced difficult implementation challenges (such as early staff turnover in leadership positions or partnerships that did not work out).

To validate the implementation study, a member of the peer review team who had visited all the research sites for monitoring purposes independently rated the research sites using the research criteria for full implementation. The ratings were nearly identical to those of the expert rating team.

## **DISCUSSION QUESTIONS:**

 Why is it so important for the Performance Standards to be implemented to demonstrate results for parents and children?

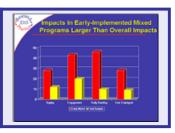
## SLIDE 33: Strongest Impacts Found in Early-Implemented Mixed Programs



As noted above, in general, mixed-approach programs demonstrated a pattern of strong and pervasive impacts. Among the six mixed-approach programs there were three that were early implementers and three that were later or incomplete implementers. Thus, it was possible to examine variations in impacts by implementation pattern within the mixed-approach programs.

Mixed-approach programs that were early implementers demonstrated a consistently strong pattern of impacts in every area, including child, parenting and family self-sufficiency outcomes. In fact, mixed-approach programs demonstrated the strongest and most pervasive pattern of favorable impacts found in the study.

## SLIDE 34: Impacts in Early-Implemented Mixed Programs Larger Than Overall Impacts



This slide illustrates the larger impacts for the mixed-approach early-implemented programs. Outcomes have been selected to emphasize these larger impacts across several areas. Here, the yellow bar shows the effect size (a metric of the amount of difference between program and control group) for the overall sample in four selected outcomes. Then we compare the impacts for the early-implemented mixed-approach programs (red bar).

The first two bar sets are for **child outcomes**. Impacts on the two child outcomes selected in this graph—Bayley MDI scores and child engagement of the parent during play—were nearly twice as large for the early-implemented mixed-approach programs as for programs overall. Remember, overall effects on these two outcomes were significant; they are just much larger for the early-implemented mixed-approach programs. These contrasts could also be shown for child language and other areas of social emotional development.

There was also a general pattern for larger effects on **parenting outcomes** among early-implemented mixed-approach programs. The parenting outcome we've selected here to illustrate this point is parental daily reading to children. Effects for daily reading to children were over four times greater for early-implemented mixed-approach programs than for the sample overall. These contrasts could also be shown for parent supportiveness, parent detachment and selecting mild discipline as a discipline strategy.

The last set of bars is in the area of **self-sufficiency** and the example is whether parents were ever employed. Effect sizes on employment were three times greater for mixed-approach early-implemented programs than for programs overall. These contrasts could also be shown for education and subsequent pregnancies.

Summary: The larger effect sizes for early-implemented mixedapproach programs are considerably larger than the effect sizes for the program overall.

Some believe that mixed-approach programs are particularly effective when fully implemented early on because they are able to meet family needs with flexibility. The study found that families in some of these programs were able to move quickly from home-based to center-based services when they needed child care; other families were provided both center-based and home-based services as needed.

- Do you think that the larger impacts found for the earlyimplemented mixed-approach programs are possible for all programs in the future?
- Why do you think the impacts were so much larger for earlyimplemented mixed-approach programs than for programs overall?

## **SLIDE 35:** Conclusions



Early Head Start was broadly effective across a wide array of outcomes and family subgroups.

In several subgroups impacts were larger as well as broad, demonstrating the potential of the program for the future.

The evaluation points to ways the program can build on a good beginning.

## SLIDE 36: How Can Early Head Start Build on a Good Beginning?



How can Early Head Start build on a good beginning?

- Intensify and specialize services for families with greatest numbers of demographic risk factors.
- Provide more intensive services for <u>children</u> in home-based programs and for <u>parents</u> in center-based programs. Learn from the mixed-approach model.
- Begin services early, during pregnancy if possible.
- Implement the Performance Standards well and early.

- Do you agree with the conclusions drawn from the study?
- What do you think is the potential for impacts in the future?
   What will this depend upon?
- Do you agree about the areas for improvement?
- How can services be intensified and specialized for families with the most risk factors?
- Is it reasonable to begin services for many families during pregnancy? Are there any disadvantages?
- How can programs be helped to implement the standards early and maintain a high level of compliance?

## SLIDE 37: For More Information...



All of the Early Head Start national research reports are available at http://www.acf.hhs.gov/programs/core/ongoing\_research/ehs/ehs\_intro.html Reports include the following:

Leading the Way: Characteristics and Early Experiences of Selected Early Head Start Programs

- Volume I: Cross-Site Perspectives
- Volume II: Program Profiles
- Volume III: Program Implementation
- Executive Summary Volumes I, II, and III

Building Their Futures: How Early Head Start Programs Are Enhancing the Lives of Infants and Toddlers in Low-Income Families

- Summary Report
- Volume I: Technical Report
- Volume II: Technical Report, Appendixes

Making a Difference in the Lives of Infants and Toddlers and Their Families: The Impacts of Early Head Start

- Executive Summary
- Volume I: Final Technical Report
- Volume II: Final Technical Report Appendixes
- Volume III: Local Contributions to Understanding Programs and Their Impacts