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CENTER ON URBAN POVERTY AND SOCIAL CHANGE

Cuyahoga County Early Childhood Initiative Evaluation: Phase II Final Report

June 2005

Submitted by
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with
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List of Abbreviations and Acronyms

AAP	American Academy of Pediatrics
ACC	The Achievement Center for Children
ACS	Ambulatory Care Sensitive
ADA	Americans with Disabilities
AFDC	Aid for Families with Dependent Children
ASQ	Ages and Stages Questionnaire
BBA	Balanced Budget Act
BOCC	Board of County Commissioners
BSC	Baby Safety Checklist
CAP	Child Abuse Potential
CCDF	Child Care and Development Fund
CCEIC	Cuyahoga County Early Intervention Collaborative
CDA	Child Development Associate
CES-D	Center for Epidemiologic Studies-Depressed Mood Scale
CIS	Caregiver Interaction Scale
CPS	Children's Protective Services
CPV	Comprehensive Preventive Visit
CRIS-E	Client Registry Information System –Enhanced
DCFS	Department of Children and Family Services
ECI	Early Childhood Initiative
ED	Emergency Department
EFI	Ecocultural Family Interview
EFS	Employment and Family Services
EI	Early Intervention
ES	Early Start
FCCH	Family Child Care Home
FCFC	Family and Children First Council
FDCRS	Family Day Care Rating Scale
FFS	Fee-For-Service
FPL	Federal Poverty Level
GED	General Educational Development
HFA	Healthy Families America
HEDIS	Health Plan Employer Data and Information Set
HGM	Help Me Grow
HPC	Hannah Perkins Center
HRI	Helping Relationship Inventory
HS	Healthy Start
HST	Healthy Start
IDEA	Individuals with Disabilities Education Act
IFSP	Individualized Family Service Plan
KIDI	Knowledge of Infant Development Inventory
KIDS	Proprietary data set maintained by Help Me Grow
MCO	Managed Care Organization
MIS	Management Information System

List of Abbreviations and Acronyms (continued)

NAFCC	National Association for Family Child Care
NICHD	National Institute of Child Health and Human Development
ODJFS	Ohio Department of Job & Family Services
OFHS	Ohio Family Health Survey
OLS	Ordinary Least Squares
OWF	Ohio Works First
OWF-ES	Ohio Works First-Early Start
OWF/LIF	Ohio Works First/Low Income Families
PAT	Parents As Teachers
PEP	Positive Education Program
PRC	Prevention, Retention Contingency Funds
PRWORA	Personal Responsibility and Work Opportunity Reconciliation Act of 1996
PSOC	Parenting Sense of Competence Scale
PSOC-SK	Parenting Sense of Competence Scale – Skill/Knowledge Subscale
PSOC-VC	Parenting Sense of Competence Scale – Valuing/Comfort Subscale
PSS	Perceived Stress Scale
RMF	Recipient Master File
SAFE	Secured Assets Fund Earnings Program
SCPTPV	Supporting Care Providers Through Personal Visits
SCHIP	State Children's Health Insurance Program
SES	Socio-Economic Status
SNCC	Special Needs Child Care
SSB	Social Support Behaviors
SSI	Social Support Index
TA	Technical Assistance
TANF	Temporary Assistance for Needy Families
TEACH	Teacher Education and Compensation Helps
WH	Welcome Home
WH-ES	Welcome Home-Early Start
WIC	Supplemental Food Program for Women, Infants, & Children

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Executive Summary

Introduction

Since mid-1999, a bold initiative has been underway in Cuyahoga County, Ohio, to improve the well-being of the youngest members of the greater Cleveland community. A community-wide initiative targeting children from birth through age five and their families was launched in July 1999, and in the following 5 years demonstrated substantial success in developing a universal and comprehensive approach for supporting families with young children. The Cuyahoga County Early Childhood Initiative (ECI), renamed Invest in Children in late 2004, provides a powerful case example of how one urban community recognized the needs of its young children and their families and sought to address them in an ongoing, comprehensive, and multifaceted way. This executive summary highlights the core elements of the Initiative and describes the experiences of the collaborators in meeting the needs of young children and their families and improving the outcomes for children.

The main findings of the report include:

- A community-wide network of services for young children and their families has been established, and the apparatus of county government has been altered to directly support and coordinate early childhood services.
- More children under age six in Cuyahoga County are receiving needed services at earlier ages than ever before.
- Children and their parents are beginning to show benefits from the services provided through the Initiative.
- Efforts to deepen and extend the services, tailor them to individual needs, and assure continuing quality should continue.
- The public and private partners who established this Initiative have maintained their commitment for half a decade and recently recommitted to it, with a new strategic plan that outlines a continued focus on program improvement based on evaluation.

The evaluation identified areas of ongoing challenge and recommendations to address these include:

- Develop supplemental approaches to home-based strategies, involving individualized services tailored to caregiver characteristics, to engage (1) more at-risk families, and (2) family child care providers
- Develop a system to identify and intervene with families with a young child who lacks a consistent source of medical care (i.e., a medical home)
- Promote quality improvement strategies for family child care and home visiting that include attracting qualified and motivated individuals to deliver services
- Continue supports and services for children with special needs
- Continue efforts to expand newborn home visiting beyond first time and teen parents
- Advocate for high quality preschool programs and universal pre-kindergarten programs

Background on the Initiative

Origin and Development:

The Early Childhood Initiative emerged from a broadening interest in community-wide prevention strategies for young children. Research generated over the past 40 years has consistently shown the importance of children's early years in shaping their later accomplishments, the value of intervening early to prevent problems before they arise, and the benefits of such preventive programs to children, families, and society at large. As economists from the Federal Reserve have said, investment in high quality early childhood programs leads to "extraordinary public returns" with an estimated rate of return of approximately 12 percent.[1]

Compelled by the research evidence and guided by the recognition that no single agency alone could accomplish the ambitious task of preparing children for success in school and life, Cuyahoga County government and civic leaders began to plan a community-wide initiative. Gaps in existing services in the County were identified and strategies developed to address the identified needs. The Initiative was conceived as a preventive enterprise, launched at-scale, and aimed at assuring that all children under 6 years of age, not just those deemed to be "at-risk," would have access to the services and community supports that would prepare them to achieve their maximum potential in life.

The Cuyahoga Board of County Commissioners provided key leadership in creating a public-private partnership to guide the Initiative. In June 1999, they announced that more than 50 community service agencies, hospitals, private funders and departments of County, State and Federal government were partnering to launch a 3-year, projected $40-million Early Childhood Initiative. By July 1, 1999, the Initiative was officially in operation and all program components were in full effect beginning with infants born in 2000. From the beginning, the Partnership wanted to understand the extent to which services were being implemented as planned, were reaching children and families in need, and were having the desired impact on children, families and the community at large. The evaluation was seen as a vehicle for three key purposes: (1) to provide feedback to program administrators for program improvement, (2) to provide accountability to government officials, other funders, and the public, (3) to inform decision-making about maintaining, expanding, or shifting program services. With that in mind, the Center on Urban Poverty and Social Change, Case Western Reserve University was requested to lead an evaluation of the Initiative, an effort that also involved researchers from the Chapin Hall Center for Children at The University of Chicago and the Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill.

Targeting children from birth through age five and their parents, guardians and caregivers, the Initiative centered on achieving three specific goals: (1) promote effective parenting, (2) ensure children access to health care, and (3) guarantee the availability of quality child care. Though the Initiative's goals were simply stated, they were of unprecedented ambition. In a population center of 1.3 million, the ECI Partnership initially set out to reduce the incidence of child abuse and neglect, reduce the number of child deaths, increase family self-sufficiency, increase the proportion of children with health insurance and access to health care, and increase the proportion of children enrolled in preschool, Head Start, or certified child care. In addition, stakeholders anticipated that the Initiative would drive systemic change, ultimately leading to more supportive public policy toward children and families, a more seamless and

[1] Rolnick, A., & Grunewald, R. (2003). Early childhood development: Economic development with a high public return. *Fedgazette*. Minneapolis, MN: Federal Reserve Bank of Minneapolis.

responsive service delivery system, and a community more accepting of social responsibility for the well-being of young children. At the core of the Partnership's vision were at least four underlying operating principles: (1) interventions that begin earlier in a child's life are more likely to produce positive impacts, (2) prevention is more effective and less costly than intervention, (3) programs need to operate at scale in order to maximize impact, and (4) program models should be research-based, drawing on evidence and best practices from other places.

Brief Description of Programs:

From its inception, the framers of the Initiative recognized that it could achieve its goals only through the implementation of a wide range of coordinated strategies, supports, and activities, and through the engagement of a spectrum of public and private stakeholders. The Partnership examined a number of national models with the goal of learning from strategies that had proven successful in other places. The Partners were particularly influenced by research that the most successful early childhood interventions were those with comprehensive focus. Drawing on the results from these investigations, the Initiative encompasses six interrelated efforts—some of which were new to Cuyahoga County, some of which represented expansions or modifications of existing programs. These programmatic components are:

(a) Welcome Home—a one-time home visit by a Registered Nurse for all first-time and teen parents and their newborns;

(b) Early Start—ongoing home visits for families with children up to age three who were identified as being environmentally at-risk;

(c) Expansion and quality improvement of certified family child care;

(d) Training and support for child care providers to serve children with special needs;

(e) Expansion of government-subsidized health insurance coverage for children of low-income families through enrollment in Healthy Start/Medicaid; and

(f) Efforts to increase public awareness of the importance of a child's early years.

Upon the creation of a comprehensive, integrated, community-based system of services, the Partnership reasoned that all children -- and at-risk children in particular -- would benefit.

Effective Parenting

A central goal of the initiative is to support effective parenting, and the primary service strategy selected to address that goal has been home visiting interventions and supportive services. Newborn home visiting (Welcome Home) is a universal program providing a home visit to all first time and teen parents. Ongoing home visiting (Early Start) provides more extended home visiting for families with children birth to three that meet specific criteria that could put children at environmental risk for developmental delay. Early Intervention provides supports and services for children with special needs. All these services operate through the Help Me Grow Collaborative of Cuyahoga County which contracts with birthing hospitals and other community-based agencies to deliver the services. Help Me Grow is a state-wide program encompassing the core services of home visiting and early intervention.

Newborn Home Visiting: This strategy emerged from a national movement linked to research on brain development and outcome studies that support the importance and cost effectiveness of intervening as early as possible in a child's life. The newborn home visit,

conducted by a Registered Nurse, occurs shortly after the family leaves the hospital and includes services such as reviewing the baby's and mother's health status, providing parenting and resource information, and linking the family to appropriate community resources. The initial goal was to reach all first-time and teen parents in the County, nearly 7,800 births per year (42% of all births in the County annually).

Ongoing Home Visiting: This complementary strategy offers ongoing in-home parent education and support, developmental screenings, and aid in locating resources for at-risk families with a child under three years of age. The program's services and clientele have evolved over the years. Ongoing home visiting began as a voluntary program in 1996 for families whose children were at-risk for later problems in life, and the Cuyahoga County Early Intervention Collaborative (CCEIC)[2] contracted with community-based providers to deliver the ongoing home visiting services. The program became one of the support programs for Ohio Works First (OWF - Ohio's income support program), and, beginning in 1998, all OWF families with children 0-3 years of age were offered ongoing home visiting. During 2000, plans were developed to expand visits to families before the baby's birth. The piloting of a prenatal curriculum for this purpose began in 2001, and the new model began implementation in 2003.

Early Intervention Services: Early Intervention (EI) includes services for infants and toddlers that are designed to identify and help a child at biological risk for developmental delay as early as possible. Federal law identifies a wide range of services for Early Intervention including, but not limited to, hearing and vision services; family training and counseling; nutrition services; occupational, physical, and speech therapy; and, social work services and service coordination. The Ohio Department of Health in implementing the federal Individuals with Disabilities Education Act of 1997 required that families with children under the age of three who are eligible for Early Intervention Services be entitled to developmental evaluation, service coordination, and an Individualized Family Service Plan (IFSP).

Healthy Children

A second goal of the Initiative involved an emphasis on the health of young children, specifically focusing on ensuring public health insurance coverage for all eligible low-income families with children under age six.

Healthy Start/Medicaid: Concurrent with the State of Ohio's expansion of public health insurance through the State Children's Health Insurance Program (SCHIP), the Initiative sought to maximize the enrollment of eligible families in Cuyahoga County. This was done through enhanced outreach strategies (e.g., application hotline, using community agencies to enroll families, paid advertising) and streamlined application and re-determination procedures. In addition to ensuring health insurance, the Initiative sought to promote the utilization of a medical home (i.e., a consistent primary health care provider), age-appropriate immunizations, and adequate and appropriate medical care for all Cuyahoga County families with young children.

Quality Child Care

There are two components of the Initiative designed to support the goal of ensuring the availability of quality child care in Cuyahoga County. The Family Child Care Homes component sought to expand child care options for low-income families by increasing the availability of

[2] The CCEIC was renamed Help Me Grow of Cuyahoga County in 2001.

home-based child care and providing training and technical assistance to providers to increase the quality of care in those homes. Special Needs Child Care focused on meeting the needs of children with specific physical, emotional, or behavioral problems that require special support in a child care setting. Starting Point, the County's Child Care Resource and Referral Agency, served as the lead organization for the child care components and was tasked with developing a regional child care system to meet the goals.

Family Child Care Homes: The passage of welfare reform in Ohio in 1997 resulted in increased demand for child care slots, as more single parents entered the labor force. In addition, the federal welfare reform legislation, passed in 1996, had changed the structure of federal child care assistance by combining funding for the existing subsidy programs into the Child Care and Development Fund (CCDF). States were now required to contribute funding to draw down a proportion of their federal allotment, and this led to state-level expenditures for child care increasing by 55% between 1996 and 1998. In Cuyahoga County, earlier needs assessments had demonstrated that many parents prefer child care located within their own neighborhood. Initiative planners decided that the most direct way to expand the supply of care that would meet parental preferences for neighborhood care was to focus on family child care. The Initiative therefore set as one of its goals to certify 1,025 new family child care homes in the County and thereby create more than 6,000 new child care spaces for children. Four regional agencies provided the training and technical assistance necessary for family care providers to become certified and improve child care quality. A quality enhancement program, Care For Kids, was developed to promote quality improvement through in-home technical assistance and consultation to family care providers, as well as through training sessions and workshops.

Special Needs Child Care: As demands for child care for all children increased with the passage of the welfare reform, early studies indicated that many women on welfare had children with special needs. Without adequate child care, those women could not leave the welfare rolls for work and their children could not thrive. During the planning year for the Initiative, a needs assessment survey established that 4,000 requests for special needs child care were received by the County's Child Care Resource and Referral Agency from July 1998 to February 1999. The Initiative fostered coordination between CCEIC and Starting Point to address this need. A goal was set to serve approximately 500 children annually from 1999 to 2002 and increasing to 600 annually in 2003 and 2004, including children with behavioral issues, medical conditions, and other diagnoses.

Key Features of the Initiative:

The Initiative is a community-wide undertaking, distinguished by a number of key characteristics that set the Initiative apart from other early child-focused efforts that emerged during the same period around the country. These characteristics include:

Scope of the public/private partnership – Many efforts have merged public and private funds but this Initiative exhibited a unique funding partnership that included numerous private sector funders and agencies, and County government. Similarly, the operational structure of the Initiative represents an integrated service delivery approach, involving public and private sector elements.

Simultaneous use of universal and targeted services across program domains – Most other efforts focusing on newborns and their parents implemented either home visiting efforts or center-based services. Few other efforts have drawn together home visitation,

child care, and health care all within a single package in the way this Initiative has. This multi-sector approach, drawing on models of prevention and intervention, successfully wove together a diverse set of threads into a conceptually strong Initiative.

Commitment to evaluation – Most other community-wide efforts have used administrative data to track changes or conduct experimental pilot studies. Few have invested in meaningful, ongoing evaluation studies, including primary as well as administrative data, to assess implementation and outcomes for the purpose of making program improvements at the scale this effort has.

Continuous adaptability to changes in state and federal policy directives – During difficult economic and political times, the Initiative has demonstrated considerable flexibility in adapting its components. These adaptations have included altering child care reimbursement rates, expanding training programs, establishing quality assurance standards, dealing with management information systems challenges, and developing a prenatal expansion of the home visiting component. Throughout the 5 years, the leadership has faced and responded to the challenges inherent in implementing a complex initiative.

Governance structure – Though the developers of the Initiative sought to base the operational structure of the effort within County government, they also established input and active oversight from private sector funders. This was done through the formation of the Partnership Committee which was co-chaired by one of the County Commissioners and one representative of the private funders.

Accomplishments

This report is the product of over four years of research on the operations of the Early Childhood Initiative and the families that have been touched by its efforts. The evaluation involved tailored studies that examined each of the various strategies of the Initiative. The multiple studies in the evaluation were designed to answer a number of important questions relevant to each program or dimension. Greater detail on the findings of each study is provided in the full report. Some of the overall highlights of the report include:

<u>Building System Capacity: Reaching More Children Earlier in Their Lives:</u>

A core operating principle that provided a foundation for the Initiative was the idea that collectively its strategies should work quickly to reach a large number of children and families county-wide rather than limit the focus either in scale or geographic scope. This was not a cautious pilot project, but a bold approach that required the rapid building of an infrastructure to serve families with young children. In this, the Initiative succeeded, in that all initial service goals were met or exceeded. In its first 4.5 years, the programs of the Initiative reached over 116,000 Cuyahoga County children prenatal to six years of age. The number of children served annually grew from 45,000 to over 65,000 in the first 5 years. In fact, approximately 76% of children born between July 1999 and December 2003 received one or more Initiative services. But the Initiative was not restricted to newborns. Fully 40% of those children born July 1993 to June 1999, a few years before the Initiative began, received one or more of its services.

The programs of the Initiative have reached all communities within the County. Overall, 61% of the children reached were residents of the City of Cleveland, and 39% were residents of

the County outside the City boundaries. Programs of the Initiative targeted to the most at-risk families (e.g., ongoing home visiting, Healthy Start/Medicaid, subsidized family child care) reflect this in that more than two-thirds of the families they have served resided within the City of Cleveland. The more universal program strategies serve larger numbers of families outside the City (40-60%), reflecting greater geographic dispersion in the families they engage.

Beyond just creating a service delivery network, the developers also sought to enhance service access in a variety of ways. One way to improve the potential impact of early childhood efforts is to ensure that children are reached with needed services as early in their lives as possible - shifting to an emphasis on prevention. On this score the Initiative has also made considerable advancement: infants are being served earlier in life than ever before. For the most recent birth cohorts, 70% had contact with at least one Initiative service before reaching 3 months of age, up from 58% when the Initiative began. In addition, families are able to access multiple services within the network. Program planners had long sought to make sure that the Initiative would ensure a "no wrong door" policy towards families seeking services. That is, once a family received services from a single provider, the family would also be linked with services from other providers. Service data suggest that these linkages are occurring. Approximately 20% of all children under six and 28% of infants under one year who have been touched by the Initiative received multiple services, and the extent of cross-program usage within Initiative has increased sharply over the first 5 years.

Tracking Trends on a Range of Outcomes and Indicators:

The effects of the Initiative on children and families were measured at two levels: (1) at the individual level, for the children and adults involved in specific Initiative services such as home visiting or Medicaid; and (2) at the community-wide level. If services were benefiting enough individual children and families, and if the Initiative were reaching a significant number of children and families in the county, then county-wide markers of progress ought to show improvement over time.

Benefits for Families and Children Receiving Initiative Services. Many client groups showed key improvements and benefits from the services they received. For example, parents in ongoing home visiting who received 15 or more visits demonstrated significant improvement in level of depression, perception of stress, and sense of competence and comfort in caring for the child. In addition, infants born on Medicaid in Cuyahoga County were significantly more likely to receive a well-baby visit in the first month of life and more likely to have had more than six visits in their first year of life, compared to infants in a group of six other urban counties in Ohio. Lastly, over 80% of children with special needs whose caregivers received TA remained in their child care placement for 6 months or more.

County-Wide Indicators of Change. At the county level, a range of indicators have been tracked over time. Obviously, these indicators are the product of all the efforts taking place within the County as well as the larger economic trends affecting the region. They do not isolate the effects of the Initiative but rather reflect the environment in which the Initiative has operated. Some indicators show more clearly positive trends while others show more mixed results. Collectively, the indicators provide mixed evidence about the environment for young children in the County and how it has changed since the beginning of the Initiative.

Areas of positive trends:

- A substantial improvement occurred in health insurance coverage for young children between 1998 and 2004, with the estimated percentage of uninsured children under age six falling markedly from 10.5% to 4.4%.
- Enrollment of children under age three in regulated child care increased by about 30% since the inception of the Initiative. In 2004, 60% of 3- and 4-year-olds were enrolled in preschool (including Head Start), which compares favorably with both state and the national preschool enrollment rates (47% and 52%, respectively).
- Since the start of the Initiative, children with special needs are being identified and assessed at earlier ages through Early Intervention services, thereby increasing the likelihood that other needed services will be received. In 1997, 271 children were identified in their first year of life; this number more than tripled in 2002, when 902 children were identified.

Areas of mixed trends:

- Following national trends, the percentage of children under six in Cuyahoga County who were on cash welfare fell from almost 40% in 1992 to 8.8% in 2003. Over the same period, poverty rates for young children in Cuyahoga County fell slightly but have risen to 23% since the recession began in 2001. Thus, though many families have left cash welfare following welfare reform, often those families remain in poverty.
- The percentage of pregnant women with adequate prenatal care has risen to approximately 80%, but the rate of low birth weight births rose significantly from 9.1% in 1998 to 9.9% in 2002, (compared to 7.6% nationally in 1998 and 2000). This has been influenced in part by a national trend of increasing rates of preterm and low-birth-weight births since the 1980's resulting in increases in multiple births (which tend to be smaller than singletons) and improvements in medical technology (producing the ability to save the lives of many preterm babies that would have previously not survived).
- The proportion of children under age six with a substantiated/indicated abuse or neglect report showed a significant drop to 2.5% in 2003. Despite this, when the entire period of the Initiative since July 1999 is examined, statistical modeling suggests that children had a greater chance of being identified as maltreated. However, the analysis also showed that children born since the start of the Initiative had a lower chance of a second incident of abuse or neglect within one year of a first occurrence, suggesting a positive effect on secondary prevention. This may suggest that abused and neglected children are being identified earlier and are linked to services that lessen the chance of a second incident.

Collectively, these program-level and county-level indicators provide a basis for assessing the initial effects of the Initiative along with the context for families with young children in the County. The results thus far reflect only a portion of the first 5 years of the Initiative; due to the normal lag in data availability, many of the outcomes reported extend only through 2002 or 2003. From a birth cohort perspective, children born just after the start of the Initiative have only been tracked through 2003 (or their third birthday). Thus, the full effects of the Initiative cannot yet be assessed. Overall, the findings reflect the complexity of evaluating a community initiative and highlight areas of both positive change and continuing challenge.

Effectively Using Evaluation to Monitor and Improve Services:

From the outset, the Initiative's partners committed to the use of evaluation and monitoring to track progress. Embedded within this undertaking was a commitment to construct a learning partnership, an arrangement that would meet demands for public accountability but also inform practice and lead to continuous improvement in services. This approach involved features such as: (1) creation of program logic models to specify both the intentions of the program elements and to provide a framework for the evaluation of program effects; (2) provision for an ongoing external evaluation by university-based social science researchers actively involved in the partnership; and (3) formation of an Operations Management Committee including County officials, funders, program administrators, and researchers who engage in program refinement decision-making based on evaluation data and other input.

The knowledge gained from ongoing evaluation was seen as both informing the implementation of the Initiative, allowing for mid-course adjustments, and also as a way of documenting what the program developers set out to do and what was accomplished. This detailed record of programmatic and policy challenges confronted and surmounted would be invaluable to state and national policy makers and government officials who might later want to consider the Cuyahoga County example as a replicable model of successful early childhood intervention.

Solidifying a Network of Services and Supports:

As further evidence of the Initiative's progress in becoming a learning partnership, the partners launched an in-depth self examination process after the conclusion of the third year of work. A strategic planning process commenced in the fall of 2003 and resulted in the acceptance of a formal plan by the Board of County Commissioners in the fall of 2004.[3] Facilitated by a trio of external consultants, the process brought together the original partners with a range of allied professionals and organizations to discuss the future of the Initiative. The strategic plan resulted in a set of key decisions and a new vision statement: *All children in Cuyahoga County will reach their full potential, nurtured by families sensitive to their needs, and supported by a community committed to their success*. In addition, the mission of the Initiative was modified to: *The Early Childhood Initiative is a community-wide, public-private partnership that mobilizes resources and energy to: (1) assure the well-being of all young children in Cuyahoga County, (2) provide supportive services to parents and other persons who care for these children, and (3) build awareness, momentum, and advocacy in the community around children and family issues.*

The plan laid out an expansion in the existing network of services to create an early childhood system for children prenatal through age five. This envisioned system is framed by four interrelated goal areas supported by ten component strategies. A first goal area involves promoting *effective parents and families* within the County. To deliver on this goal, the plan calls for expanded home visiting services, enhanced service coordination and case management, and expanded mental health screening and services. A second goal area seeks to ensure *safe and healthy children* within the County. The strategies aligned with this goal include health

[3] Gomby, D. S., Klein, L., & Mitchell, M. M. (2004). Building an early childhood system for Cuyahoga County: The Cuyahoga County Early Childhood Initiative strategic plan: 2005 – 2009. Cleveland, OH: Invest in Children.

insurance enrollment, the promotion of a medical homes, and primary prevention of lead exposure. A third goal area is designed to result in *children prepared for school*. To accomplish this goal the plan calls for creating a high quality early care and education system for children birth through age five, with child care and preschool service expansions and quality improvement. A fourth and final goal area proposes that Cuyahoga County should strive to become *a community committed to children*. The plan will achieve this through community mobilization and advocacy efforts, positioning the Initiative as a Center of Excellence for early childhood programming, and fielding a comprehensive communications campaign. The plan provides a conceptual blueprint for continuing to build the service network envisioned by the original framers of the Initiative. The plan also provided a structural vision for the operation of the Initiative. This led to the creation of the County's Office of Early Childhood in fall 2004, as the administrative and fiscal agent for Invest in Children, along with the specification of appropriate staffing to manage the affairs of the Office.

Continuing Challenges

The ongoing evaluation of the Initiative included both a program-level and system-level examination. Over the first 5 years of the Initiative, three cross-cutting themes emerged that speak to the overall results and to the context in which they should be interpreted. These themes included: (1) promoting caregiver engagement, (2) enhancing service quality across domains, (3) being responsive to an ever-changing policy environment. The themes involve both positive aspects of developing and implementing the Initiative, as well as challenges that have emerged.

Promoting Caregiver Engagement:

A consistent theme across the strategies of the Initiative and throughout the field of early childhood is the challenge of recruiting, retaining, and engaging caregivers in the services offered. This has been an issue in providing ongoing home visiting to families, delivering technical assistance to family child care providers, and ensuring that parents access medical services for their children in a consistent manner (i.e., a medical home).

In Cuyahoga County, the newborn home visiting program has been tremendously successful in engaging targeted families (>85%) in a single home visit. In contrast, the ongoing home visiting program which is available to families up until the child reaches age three has shown lower engagement rates. On average, over a 12-month period families who were referred received 13 visits, approximately half the number of intended home visits (comparable to service levels achieved in similar home visiting programs across the county). Underlying this average are three distinct subgroups each comprising roughly one-third of the service population -- families who never receive a single visit, families who receive a modest number of visits (up to 15), and families who receive higher numbers of visits (15 or more). In addition, a key to understanding differential rates of engagement may lie in the considerable diversity of the families in Cuyahoga County in regard to such features as family structure, culture and tradition, and ethnicity. Program staff have begun to discuss how to individualize services so as to better engage more families.

The issue of engagement also has been a factor in the area of family child care where from the start of the Initiative, care providers have been invited to engage in quality enhancement activities. Inherent in the strategy was the idea that family child care providers would be more willing to participate in quality enhancement activities if they were conveniently provided to

them in their home. This resulted in a voluntary quality enhancement program (called Care for Kids) that offered in-home technical assistance and consultation based on a standardized curriculum. The targeted number of annual technical assistance visits for certified providers was initially set at 15 and subsequently adjusted to 11 (2000-2002) and then 8 (2002-2004). In the most recent period, the eight visits were to include three quality enhancement visits, three food program visits, and two visits in which the care quality was assessed.

The average number of technical assistance visits accepted by providers certified under the Initiative, however, never exceeded 65% of the intended number and has more frequently been less than half (excluding visits related to certification and the food program). The average number of completed quality visits per provider increased from 2.1 to 5.2 over the first 3 years of the Initiative and then dropped to 3.1 by the 5th year. Beginning in the 4th year of the Initiative, the goal was to deliver a minimum of three quality enhancement visits to providers; 44% of providers certified under the Initiative met this goal in the 4th year , and 39% did so in the 5th year. Two points are relevant to this level of engagement. First, the low rates of accepted visits among home-based care providers are comparable to the acceptance rate in the general area of home visiting and may reflect the general difficulty of engaging participants in that setting. Second, in addition to the voluntary quality enhancement visits home-based providers were also required to accept other in-home visits (i.e., County certification-related visits, US Department of Agriculture food program visits); the collective frequency and timing of these visits may have impacted the providers willingness to accept quality visits.

A third area in which caregiver engagement has been a challenge is in ensuring young children receive well-baby physician visits on the recommended schedule. Though the rates of enrollment in private insurance and Medicaid rose between 1997 and 2001, not all families used their coverage effectively. In 2001, only 30% of Medicaid children received all recommended well-child visits during the first year of life, and 5% received no visits at all. Though strictly comparable data are not available, based on the Health Plan Employer Data and Information Set (HEDIS) for 2002, the proportion of all children receiving the recommended number of visits was approximately 68% for Ohio and 60% for the 32 states represented in the system.[4] State-wide data on Medicaid children in North Carolina showed that approximately 46% of children received the recommended number of visits.[5] That is, in all locales simply providing health insurance coverage is not sufficient to ensure that children receive the preventive care they need.

Preventive care is clearly important. A study using Medicaid data from three states confirms that children who receive the recommended number of well-child visits during the first 2 years of life are more likely to avoid hospitalizations in the first 3 years of life.[6] Other research has shown that children who receive the recommended number of well-child visits are more likely to receive immunizations on schedule and to have vision, hearing, or developmental delays identified early, so that intervention can begin promptly.[7] Children who have a "medical home," a single, consistent source for medical care, are more likely to receive their preventive health

[4] McInerny, T. K., Cull, W. L., & Yudkowsky, B. K. (2005). Physician reimbursement levels and adherence to American Academy of Pediatrics well-visit and immunization recommendations. Pediatrics, 115(4), 833-838.
[5] Freed, G. L., Clark, S.J., Pathman, D. E., & Schectman, R. (1999). Influences of the receipt of well-child visits in the first two years of life. Pediatrics, 103(4), 864-869.
[6] Hakim, R. B., & Bye, B. V. (2001). Effectiveness of compliance with pediatric preventive care guidelines among Medicaid beneficiaries. Pediatrics, 108(1), 90-97.
[7] Regalado, M., & Halfon, N. (2001). Primary care services promoting optimal child development from birth to age 3 years. *Archives of Pediatric and Adolescent Medicine, 155*, 1311-1322.

care on time. The American Academy of Pediatrics' policy statement on medical homes states that care should be "…accessible, continuous, comprehensive, family centered, coordinated, compassionate, and culturally effective."[8] Efforts to ensure that all children have a medical home are therefore critical, and go well beyond the provision of insurance coverage. The strategic planning process in 2004 targeted medical homes as an area of emphasis and produced an initial set of approaches to further this goal.

Enhancing Service Quality Across Domains:

Since early on in the implementation of the Initiative, program planners have recognized the importance of service quality and specific strategies to enhance quality. In the three core service domains (home visiting, child care, health care), the discussion and pursuit of quality has faced different challenges and ultimately resulted in different tactics being used to pursue it. In ongoing home visiting, a primary challenge was in maintaining fidelity to a basic program model given the number (n=31) and diversity of the implementing agencies and the varied characteristics of their staff. The evaluation of the quality of these services examined the approaches used by home visitors as well as their delivery style and relationship with the families, and the results indicated a wide diversity in how the services were being delivered. Beginning in 2002, Help Me Grow commenced a quality assurance initiative that required all contracted home visiting agencies to document the fidelity of services delivered. This process led to a reduction in the number of agencies delivering the services, the adoption of ongoing systematic quality assurance procedures by all agencies, and some evidence that activities have begun to improve quality (e.g., decreased variation in how services were delivered, decreasing time between referral and first visits).

In the family child care component, the primary goal of the intervention was to improve the quality of care in homes, initially targeting homes that were newly certified under the Initiative and later expanding to all certified homes. The provision of voluntary in-home technical assistance along with off-site trainings was the primary vehicle for promoting quality care among family child care providers. Improving the quality of care in family child care homes ultimately proved difficult. The evaluation found that over a 12-month period, the overall quality of care remained poor in a sample of newly certified family child care homes. The lack of observable change in quality resulted in: (1) an examination of the content of the technical assistance, the training and background of the TA providers, and ultimately the selection of a new TA curriculum; (2) consideration of the policies that influence providers' willingness to participate in quality enhancement activities, and (3) advocacy efforts that led to modifications in State rules regarding family child care providers (e.g., requiring an additional 6 hours of training per year, and requiring new providers to have a high school diploma or a GED).

In the area of child health, the discussion of quality focused on the mechanisms by which the Initiative could promote not only early and continuous health insurance coverage for children but also the appropriate and timely use of health care providers and services. Since the Initiative's role was limited to the enrollment of families in Healthy Start/Medicaid (through Employment and Family Services) and the promotion of proper health care to families involved in other services of the initiative, it made sense to engage directly with the managed care organizations (MCOs) that provide the actual clinical care to families covered by Medicaid. The

[8] American Academy of Pediatrics. (2002). Policy Statement: The Medical Home. *Pediatrics*, *110*(1), 184-186.

partnering with MCOs on shared outcome goals progressed and was identified as a key area of emphasis in the new strategic plan under the medical home strategy.

Being Responsive to an Ever-Changing Policy Environment:

As a community-wide undertaking, the Initiative was launched and implemented within a broader social and political context. These external forces have simultaneously influenced the scope, scale, and ongoing implementation of the programs and affected the children and families of Cuyahoga County. These major factors included the implementation of welfare reform, the State budgetary situation and the economy, State policies relating to some program strategies (e.g., certification, program eligibility and coverage, reimbursement rates), and general labor market characteristics.

A significant influencing factor for the Initiative was welfare reform in Ohio, implemented in October 1997. Known as Ohio Works First (OWF), it required that parents receiving welfare assistance participate in work, and it limited receipt of cash assistance to 36 months. The number of children under six on OWF fell dramatically from approximately 32,000 in 1997 to under 10,000 in 2003. Welfare reform had many ramifications for families and for early childhood programs, notable among them the large increase in demand for child care. To meet this need, the County more than doubled the number of child care vouchers that it provided to the families on welfare and the working poor. Early on, many families were referred to Early Start as part of their OWF self-sufficiency plan, but as welfare caseloads fell rapidly, OWF became much less of a referral source for Initiative programs. Another important policy aspect of welfare reform was that falling caseloads freed up TANF funds to be used for other non-assistance purposes. Over time, the Initiative benefited from these flexible dollars in many of its programs, specifically the quality child care efforts. However, the availability and flexibility of TANF funds is unclear (as the full re-authorization of the TANF has been delayed), and these funds may be difficult to rely on in the future.

In regard to the State economic context, the Initiative has relied on several key funding streams to support its programs. During the initial phase of implementation, the northeast Ohio region and the nation experienced the greatest, sustained economic growth period in recent times. In Cuyahoga County, most people who left welfare were able to get jobs and earned more than they had received on welfare. The poverty rate for families with children under five headed by females fell by 10 percentage points. Nevertheless, the typical single female-headed family only earned enough to live at or near the poverty line (approximately $14,000 for a family of three). In late 2001, the nation and the region entered a recessionary period and since then gains have eroded. The State of Ohio's fiscal crisis led to increased funding pressures for Initiative programs beginning in 2002, though no reductions in service were required. In addition, the State's decision to withhold a large amount of TANF funding that had been designated for Cuyahoga County led to further difficulties in guaranteeing County-level funds for the Initiative.

As with all programs, the Initiative has been impacted by policies and requirements that originate from outside its structure. Over the course of the first 5 years, eligibility rules (e.g., Medicaid expansion; frequency of eligibility redetermination), and service coverage/reimbursement rates (e.g., State-level changes in child care per diem) have changed, affecting the agencies implementing Initiative's programs and the client families themselves. In 2003, the State lowered the eligibility level for child care vouchers from 185% to 150% of the poverty line, making it more difficult for many working families to retain their subsidized child

care. From June 2003 to December 2004, the number of children under six using child care vouchers in Cuyahoga County dropped from nearly 16,750 to 12,200, a reduction of 27%. Given that these families continue to need child care after losing their voucher, such policy shifts impact the system of care in the County, both in regard to the families needing child care and the providers who serve them. Over time, this situation could lead to a shrinking of the child care supply, as child care programs leave the market because they cannot keep their spaces filled.

The ability of the Initiative to combine federal and state funding streams with local funds has allowed for an important flexibility in the allocation resources. The Board of County Commissioners has provided financial leadership and support to the Initiative since its inception. The Board's ability to support the Initiative is contingent on the availability of funds from existing health and human service property levies and general fund revenues. In April 2003, the voters of Cuyahoga County approved a replacement health and human services levy which generated an additional $56 million in funds annually for a variety of County-sponsored core social welfare efforts. The Early Childhood Initiative figured prominently in the public campaign for the passage of the levy, and following its passage received a commitment of $5 million annually from the Board of County Commissioners.

Currently, the Initiative awaits the results of the State budgeting process for the next biennium (2005-2007) to better understand how that process will impact the programs of the Initiative over the next 2 years. Many of the changes under discussion could lead to reductions in eligibility for services for families, reductions in services, and/or changes in administrative rules and policies, the full impacts of which may be unforeseeable. Despite this, the partners of the Initiative are veteran observers and participants in the State budget process and have proven effective in representing the needs of children and families in Cuyahoga County.

Future Directions

Several issue areas emerge from a broad view of the Initiative after its first five years of implementation and provide a sense of where efforts should be placed going forward. Many of these proposed activities have already been incorporated into the strategic plan for the Initiative's next five years.

<u>Develop Specialized Strategies to Engage Caregivers:</u>

The issue of caregiver engagement is one which requires the Initiative to build upon the successes of the strategies employed over the first five years in the home visiting, child health, and child care areas. Given the challenges of engaging families in home visiting services, it is crucial for the partners to continue to develop strategies for outreach and retention. Possible approaches include employing different outreach and retention approaches tailored to population subgroups; altering the content or suggested frequency of visits to better meet family needs; or offering families a different program strategy (e.g., group-based services or a "home visit" in another setting such as a child care program or community agency). In addition, the development of an outreach team trained specifically to respond to those cases where enrollment is proving problematic may have merit.

In the area of family child care, it is clear that home-based technical assistance and group training each have strengths and weaknesses associated with them. Though intervening in the home allows a technical assistant to work with a provider in the actual caregiving environment,

the environment may be too distracting for substantive first-time learning to take place. Training opportunities that take place outside the home care setting should be considered as an avenue for consideration. Training in alternative settings could also allow for the use of group training, a strategy that can be effective if the size of the group is relatively small (i.e., <16 participants) to allow for discussion, the group facilitator is knowledgeable about adult learning styles as well as the subject matter, and the group sessions occur on a regular basis to allow for group cohesion to develop.[9] In such a scenario, group trainings outside the home are followed up with home-based review of the new material. This is supported by evidence that family child care providers are interested in alternative models, such as training in small groups, through home study courses and resource centers, and provider networks.[10] Any strategy that takes the training outside of the home setting will need to accommodate the schedules of family child care providers, either through weekend/evening offerings or through daytime opportunities where substitute care is arranged for the children in the provider care.

To increase the proportion of children receiving the schedule of well-child visits and immunizations recommended by the American Academy of Pediatrics, it is sensible to first promote the concept of a medical home. Access to a single and consistent care source, however, does not ensure that parents will adhere to the desired care schedule. The strategy should involve all the key players - the family, the health care provider (physicians and MCOs), the insurer (Medicaid), and the entities that ensure quality of care (County and State officials). In regard to the pursuit of a medical home for families, the key question relates to whether there are procedures and or incentives that could encourage parents to access appropriate care for their children in a timely way. Promotion of positive parental decision-making on child health by all allied partners is most likely to consistently reinforce this message to parents. For families in which a child misses a recommended visit, an immunization, or a lead screen, there should be a systematic method of identifying and intervening in these cases. Such a response system would ideally be multi-level, with families being approached by their pediatrician's office first and their health plan if needed. Given resource limitations at these levels, other strategies that are perhaps more centralized may need to be considered.

Build Quality Improvement Strategies Appropriate to Program/Policy Context:

Achieving the ambitious aims of ensuring the health and well-being of young children necessitates a focus on high quality early childhood programming. From early on, the Initiative has experienced the tension between delivering on the goal of "going to scale" while simultaneously ensuring quality. Both goals require substantial time and resources and an integrated approach across multiple organizational partners. Now, with the Initiative's core strategies fully in place and operating at scale, the pursuit of quality can be most effectively mounted, even while new strategies and expansions are being brought on line according to the strategic plan.

In a recent volume of The Future of Children focused on school readiness, Rouse, Brooks-Gunn, & McLanahan (2005) recommend increasing access to high-quality early education for all 3- and 4-year-olds. The hallmarks they identify for such programs include: low

[9] Weitzman, E., & Greenberg, J. (2002). Learning language and loving it: A guide to promoting children's social, language, and literacy development in early childhood settings. Toronto: Hanen Centre Publication.
[10] Hamm, K., & Jones-DeWeever, A. (2004). Family child care: Recent trends and new directions. Washington, DC: Institute for Women's Policy Research. Retrieved January 31, 2005 at http://www.iwpr.org/pdf/G716.pdf

staff-child ratio; well-trained caregivers with ability to work with children with special needs and identify health problems; inclusion of a parent-training and parent support; and integration with the kindergarten programs into which the children will eventually transition (p. 12).[11] Though these conclusions are targeted to preschool programming, they can be translated into the home visiting and family child care arenas and relate to the overall findings from the evaluation of the services of the Initiative.

The pursuit of quality should be grounded in the program, policy, and civic environment in which the effort is implemented, so that an attainable standard for services is established. For example, in the area of family child care, care quality was found to be poor or inadequate in 84% of the homes in a research sample using a standardized rating tool. In comparison, other studies of family child care have found more than 90% of sites having quality in the poor and inadequate range. These data suggest that overall most home-based care providers fare poorly in regard to attaining acceptable quality levels on such a scale. Though care quality was poor, the study did find that quality was correlated with factors that could be influenced by changes in policy, such as delivering a greater number of technical assistance visits, seeking providers who are motivated to provide care as a career, and reducing the number of children cared for by a provider at one time. Moving forward, the Initiative could explore a wider range of quality enhancement approaches, improving qualifications for technical assistance providers, and parent education, all in an effort to better enhance and retain quality. The negative relationship between care quality and the number of children in care is particularly challenging for at least two reasons: (1) under State regulations family child care providers are certified to care for as many as six children - a policy that relates more to minimum safety standards than the quality of care; and (2) recognizing that family child care providers are essentially small business owners, they have the incentive (and need) to have more children in care in order to meet their expenses. These challenges suggest that a broader discussion of the multiple goals of the family child care strategy may need to be engaged.

Though the determinants of program quality vary across the strategies of the Initiative, they all share at least two features: (1) the importance of well-trained and committed staff to deliver programs, and (2) the appropriateness of a given program model and its curriculum to the diverse circumstances of the populations they serve. In regard to the management of the Initiative, procedures should establish and reinforce mechanisms by which these features are ensured. In an ongoing way, the Initiative should be able to assess its success in these two areas and take action to improve its performance. Efforts underway to establish a routine performance indicator and monitoring system should provide a solid framework to reinforce quality assurance efforts across the strategies of the Initiative.

Extend Efforts to Build High Quality Care System as Sound Public Investment:

In recent years, the case for public investment in early childhood has become even more compelling, with direct support coming from the fields of economics and public finance (Aos, Lieb, Mayfield, Miller, & Pennucci, 2004; Calman & Tarr-Whelan, 2005; Heckman & Masterov, 2004; Lynch, 2004; Rolnick & Grunewald, 2003). For example, Aos, Lieb, Mayfield, Miller, and Pennucci (2004) studied the costs and benefits of a range of early intervention programs for youth, including home visiting and early education. They found that some home visiting

[11] Rouse, C., Brooks-Gunn, J., & McLanahan, S. (2005). Introducing the issue. School Readiness: Closing Racial and Ethnic Gaps. *The Future of Children, 15*(1), 1-13.

programs that target high-risk and/or low-income families are particularly effective, returning $6,000 to $17,000 per child served. They also found that early childhood education for low-income 3- and 4-year-olds (i.e., preschool) produced a return of nearly $10,000 per child served.[12] These findings are specifically relevant to mission of the core services of the Initiative.

Others have championed the wisdom of investment in a broad array of programs targeting early childhood development. Nobel Laureate James Heckman & colleague Dimitriy Masterov concluded that "(e)nriched pre-kindergarten programs available to disadvantaged children on a voluntary basis, coupled with home visitation programs, have a strong track record of promoting achievement for disadvantaged children, improving their labor market outcomes and reducing involvement with crime" (p.1).[13] Researchers at the Federal Reserve Bank of Minneapolis reported that "…the return on investment in early childhood development is extraordinary, resulting in better working schools, more educated workers, and less crime" (Rolick & Grunewald, 2003, p. 11). Lynch (2004) reported that investments in high quality early childhood development programs generate a $3 return for every $1 invested; he further projected that extending such programs to all 3- and 4-year olds in the US would have substantial benefits to society after an investment period of approximately 17 years[14].

Grunewald & Rolnick (2004) also suggested that large-scale early childhood development programs could best succeed if they possess three distinctive features: (1) a focus on at-risk children that encourages direct parental involvement, (2) a long-term commitment to early childhood development, and (3) mechanisms to reward successful outcomes thereby encouraging high quality and innovative practices (p.3).[15] Calman & Tarr-Whelan (2005) in a review of the available evidence, conclude that the data are clear about the return on investment and that new emphasis should be placed on educating policy makers and the public that early childhood education is "…important to the development of children and, equally, to the development of the economy" (p.43).[16] Broadly, these findings reinforce the Initiative's strategic plan in its goals of promoting high quality early care services and ultimately universal preschool programming. Continuing to weave the existing core services of the Initiative into the broader system for serving young children will likely improve efficiency and quality. Over time, further linking existing services to a developing set of universal preschool programs will deliver a greater continuity of care for young children.

[12] Aos, S., Lieb, R., Mayfield, J., Miller, M., & Pennucci, A. (2004). Benefits and costs of prevention and early intervention programs for youth. Olympia, WA: Washington State Institute for Public Policy.
[13] Heckman, J., & Masterov, D. (2004). The productivity argument for investing in young children. Working Paper 5, Invest in Kids Working Group. Washington, DC: Committee for Economic Development.
[14] Lynch, R.G. (2004) *Exceptional returns: Economic, fiscal, and social benefits of investment in early childhood development*. Washington, DC: Economic Policy Institute.
[15] Grunewald, R., & Rolnick, A. (2004). A proposal for achieving high returns on early childhood development. Minneapolis, MN: Federal Reserve Bank of Minneapolis.
[16] Calman, L. J., & Tarr-Whelan, L. (2005). Early childhood education for all: A wise investment. Recommendations arising from "The economic impacts of child care and early education: Financing solutions for the future" a conference sponsored by Legal Momentum's Family Initiative and the MIT Workplace Center.

Conclusion

This summary has sought to provide a meaningful overview of the evaluation results for the first five years of what is now known as Invest in Children. The core findings are that the system for serving young children and their families is now built: agencies are delivering services to thousands of families each year, the County government apparatus has now institutionalized a focus on early childhood, the partnership of public/private funders has been renewed and re-energized following a strategic planning effort. As expected, the evaluation points out that more is needed: more and different types of services, and more emphasis on quality and making sure that the right services reach families at the right time. The strategic plan, now in its first year of implementation, identified just these priorities and promises to provide the means to improve the services of the Initiative and broaden its impact, a hypothesis that the evaluation will continue to test in the coming years.

Chapter 1 - Introduction
Developing and Sustaining a Comprehensive Community Initiative on Early Childhood

Rob Fischer and Claudia Coulton

Chapter Summary

Cuyahoga County's Early Childhood Initiative (ECI), renamed Invest in Children in fall 2004, was forged by public and private stakeholders who were influenced by national, state, and local research, practice and policies. To understand the process of evaluating the Initiative and the findings themselves, it is essential to understand the origin of the Initiative and its structure. This chapter presents a brief description of the demographics of Cuyahoga County and history of the Initiative, as well as describes the Initiative's funding, organization, programs, and evaluation. The chapter also addresses developments related to the ECI since its initial launch in 1999 and discusses its current status as it moves beyond it initial five years.

A number of key points emerge within this presentation. These include:

- The Cuyahoga County Early Childhood Initiative developed within the context of a local, regional, and national movement to focus on and invest in the early development of young children.
- Funding for the first 5 years of the Initiative was secured from a Partnership of public and private funders. Governmental funding (over $46 million) included local general fund monies allocated by the Board of County Commissioners, as well as State and Federal monies flowing through the County. In addition, 23 private funders contributed approximately $14 million to the Initiative in its first 5 years.
- The initial organizational and decision making structure of the Initiative was multi-layered and provided leadership at both the policymaking and operational level. The Partnership Committee is the board-level group of funders who advise the County Commissioners on the Initiative. The Operations Management Committee, comprised of funder representatives, program heads, and County staff, is the group that oversees the routine implementation of the Initiative. The programs of the Initiative were implemented through three coordinating agencies (Help Me Grow, Starting Point, and Employment & Family Services) during the first 5 years.
- The evaluation of the Initiative was designed to achieve the dual goals of providing useful information for program improvement activities, as well as documenting the effects of the strategies. The evaluation drew on a variety of data sources, methodologies, and types of analyses to accomplish these goals.
- The Initiative undertook a major strategic planning effort in 2003-2004 that produced numerous recommendations, including a major expansion of core program strategies as well as the development of new strategies, and the creation of a new County Office of Early Childhood.
- The sustainability of the Initiative has been secured for the near-term, in that many recommendations of the strategic plan have been implemented, the budget for the next phase of the Initiative (through December 2007) has been approved, and the majority of funding has been committed.

Geographic Context of the ECI - Cuyahoga County, Ohio[1]

Cuyahoga County is the 23rd largest county in the United States and is the most populous county in Ohio, with one out of every eight people in Ohio residing in the County. The County comprises 458 square miles, and contains a total of 59 neighborhoods (within the City of Cleveland) and suburban municipalities. Cuyahoga County is located in northeastern Ohio and is bordered on the north by Lake Erie. See Figure 1.1 for a map of Cuyahoga County.

Based on 2000 Census data, Cuyahoga County has 1,393,978 residents. Between 1990 and 2000, the County experienced a 1.3% decline in its total population, a 2.9% increase in the child population under age 18, and a 8.1% decrease in the child population under age six (i.e., the ECI target population). This section provides a brief demographic sketch of the population of Cuyahoga County based on 2000 Census data.

Fully one-fourth of the County's residents are under the age of 18 (nearly 350,000 children and youth). Of those under age 18, 32% are under age 6, 24% are between ages 6 and 9, 29% are between ages 10 and 14, and 15% are between ages 15 and 17. Thus, the percent of children under age 6 (i.e., the Initiative's primary target population) makes up the largest segment of the population under age 18. In fact, children under age six represent one out of every three County residents under age 18, and one out of every twelve residents in Cuyahoga County.

The racial profile of the County is 67% non-Hispanic White, 27% African American, 2% Asian, <1% Native American, and 3% other races. The proportion of persons reporting Hispanic or Latino origin is 3%. A majority of households (62%) in the County are family households (i.e., related individuals residing together) and 38% are non-family households. Among the family households with children under 18, 63% are married-couple families and 31% are female-headed families.

Countywide, more than 80% of the population age 25 and over has a high school degree, and 25% has a Bachelor's degree or higher. The median household income is $39,168. This is lower than the median household income for the State and the nation, $40,956 and $41,994, respectively. One out of every ten families in Cuyahoga County lives in poverty. Twenty-two percent of families with children under age six live in poverty.

Sixty-two percent of the population age 16 and over is in the labor force. Sixty-five percent of females age 16 and over with children under age six, are in the labor force. Among children under age six, 60% reside with a parent (or both parents) in the labor force. The industries that employ the most Cuyahoga County residents are educational, health, and social services (21.7%), manufacturing (16.1%), retail trade (10.8%), and professional, scientific, management, and administrative services (10.1%).

[1] Portions of this chapter originally appeared in the introductory chapter to the Phase I Final Report on the Early Childhood Initiative (February 2003) and are repeated here in the interest of completeness.

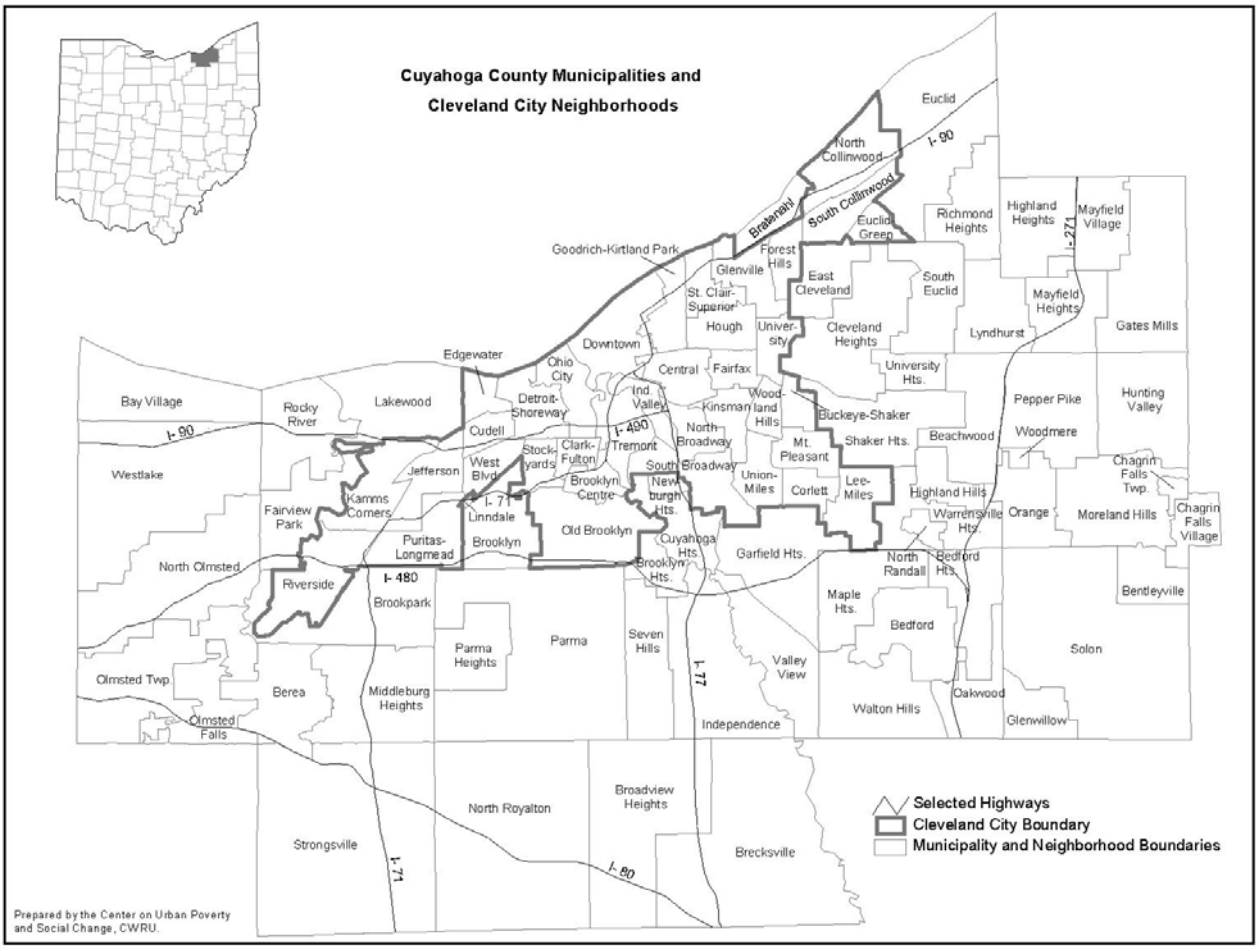


Figure 1.1 Map of Cuyahoga County

A Brief History of the Early Childhood Initiative

The Early Childhood Initiative emerged from an interest in community prevention strategies for young children. Preventive programs to intervene during the earliest years of life have been developed and studied over the last several decades. These studies raised awareness of both the cost savings as well as the positive impacts on children and families that could be achieved. The Carnegie Corporation's report, *Starting Points – Meeting the Needs of Our Youngest Children*, was released in 1994. It termed the American situation for young children a "quiet crisis," emphasizing the importance of early childhood interventions and promoting community collaboration. In addition, articles, such as Sharon Begley's "Your Child's Brain" in *Newsweek*, Feb. 19, 1996, promoted support for early intervention based upon neurological research on infants. The April 1997 White House *Conference on Early Childhood Development and Learning: What New Research on the Brain Tells Us About Our Youngest Children*, involved early childhood researchers addressing a diverse audience, including representatives of funding and policy organizations. One Cuyahoga County Commissioner attended the White House Conference.

As a result of heightened awareness of the importance of the earliest years of children's lives, foundations and state and local governments expanded their support of early intervention strategies. In 1998, early childhood was included on the agenda of the National Conference of State Legislatures, with particular emphasis on child care, school readiness, family support and home visits, maternal and child health, and early childhood program infrastructure and coordination. By 1998, 42 state governors had made early childhood an emphasis of state initiatives. These initiatives were characterized by public/private partnerships combined with executive-level, corporate-sector leadership. The focus had been to develop innovative strategies that target whole systems, not just individual programs. Different communities took varying approaches. United Way brokered some three hundred community-based public/private partnerships with such corporations as BankBoston, Honeywell Corporation, and Bank of America under the Success by Six program. Other programs included EduCare in Denver, the Early Childhood Initiative in Pittsburgh, and Family Smart/Kid Friendly in Racine, Wisconsin.

The ECI evolved out of this national awareness and the belief that community mobilization and partnership were essential to early intervention in the lives of children and families. Cuyahoga County's Early Childhood Initiative possesses many important strategies that entail system change and collaboration. ECI used a pro-active systems-wide approach to assure that all children 0 to 5 years of age, not just those deemed to be "at risk" of developing delays, get the best possible start as a base for achieving maximum potential in life. This involved reaching a consensus on gaps in existing services in the County and developing strategies to address the identified needs. An integrated approach was designed using five program components that focus on the three key goals: effective parenting, healthy children, and quality child care. The stakeholders identified a number of community-level indicators the ECI was designed to impact including: reducing child abuse and neglect, increasing economic self-sufficiency, promoting access to health insurance and health care, decreasing child deaths, and increasing enrollment in early childhood programs including Head Start, preschools and certified child care.

The development of the ECI was driven by serious concerns for the social, emotional, and physical well-being of young children in Cuyahoga County throughout the 1990s. In 1995, a series of "Threats to Children" community forums was held to gather information about the well-being of children in the County and design strategies to bring about system improvement (e.g., intervening earlier with young children and families and using community-based entities to reach families). Additionally, the County Child Fatality Review in 1996 to 1997 brought to light the high incidence of child morbidity and mortality in Cuyahoga County in comparison with many of the other counties in Ohio.

Cuyahoga County Commissioners, Tim McCormack, Jimmy Dimora, and Jane Campbell, initiated the movement to develop collaborative funding strategies to support a community-based Early Childhood Initiative. In January 1998, the Cuyahoga County Family and Children First Council met to begin planning the Initiative. By March 1998, the Early Childhood Advisory Committee had been formed and met to begin planning. This committee combined key public and private sector individuals, such as Jay Talbot of the Cleveland Foundation and Bette Meyer of Cuyahoga County Health and Human Services. As the planning year progressed, the Cleveland, Mt. Sinai, and TRW Foundations coordinated meetings with other interested private

funders, eventually developing a group of 23. Foundation and corporate commitments to providing the local funding needed for the ECI were finalized in May 1999.

In June 1999, the Cuyahoga Board of County Commissioners announced that Cuyahoga County was entering into a public-private partnership with more than 50 community service agencies, hospitals, private funders and departments of County, State and Federal government to launch a 3-year, projected $40-million Early Childhood Initiative (ECI). By July 1, 1999 the Early Childhood Initiative was officially in operation. All program components of the ECI were in full effect beginning with infants born in 2000. Shortly thereafter, the Center on Urban Poverty and Social Change, Case Western Reserve University was requested to lead an evaluation of the Initiative that also involved researchers from the Chapin Hall Center for Children at The University of Chicago and the Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill.

Targeting children from birth through age five, and their parents, guardians and caregivers, the Early Childhood Initiative is centered on achieving three specific goals:

- To promote effective parenting
- To ensure children access to health care
- To guarantee the availability of quality child care

See Figure 1.2 for a schematic that outlines the overall theory of the Initiative.

Though the Initiative's goals were simply stated, they were of unprecedented ambition. In a population center of 1.3 million, the ECI Partnership set out to reduce the incidence of child abuse and neglect, reduce the number of child deaths, increase the proportion of economically self-sufficient families, increase the proportion of children with health insurance and access to health care, and increase the proportion of children enrolled in pre-school, Head Start, or certified child care. In addition, stakeholders anticipated that the Initiative would drive systemic change, ultimately leading to more supportive public policy toward children and families, a more seamless and responsive service delivery system, and a community more accepting of social responsibility for the well-being of young children.

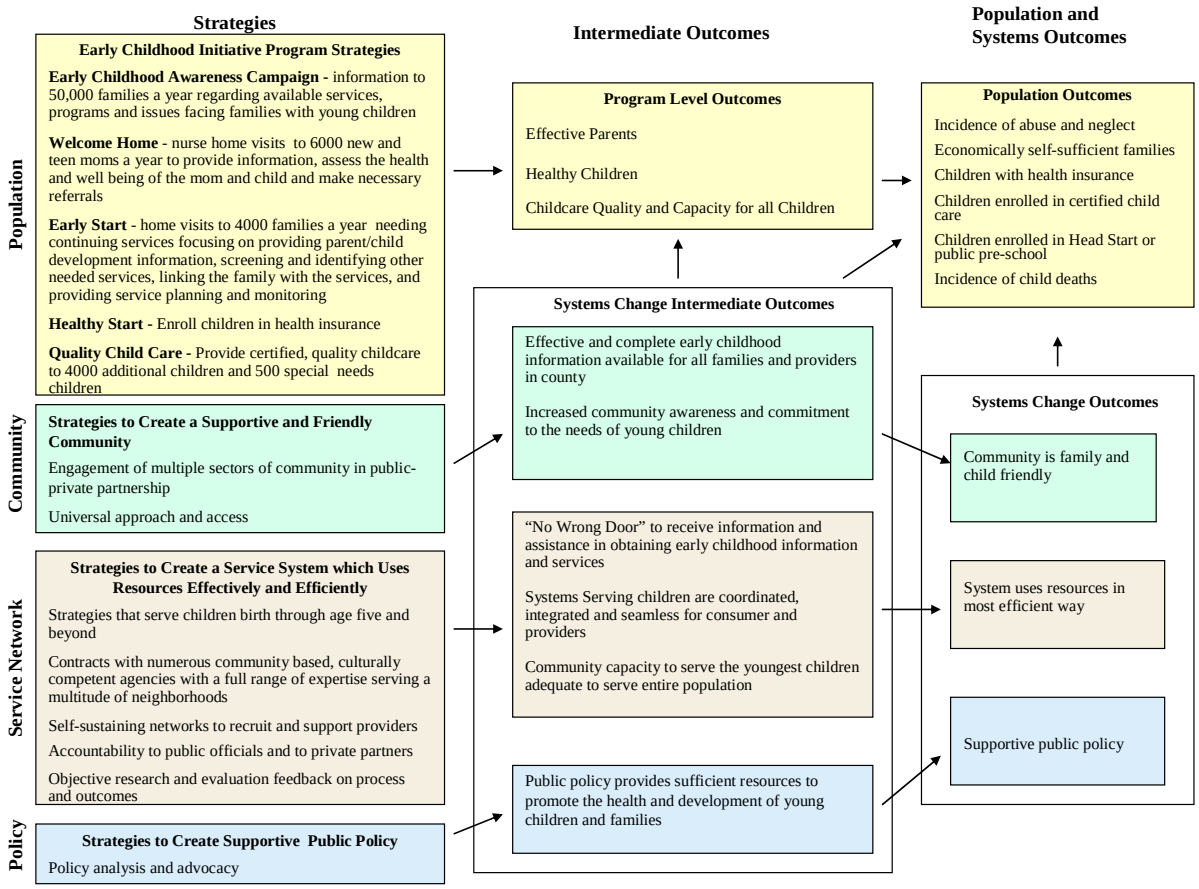


Figure 1.2 Logic Model for Initiative

The Creation of the Initiative

The Early Childhood Initiative was a massive undertaking that required considerable planning and organization and a unified vision among its collaborators. This section describes four key aspects of the Initiative: (a) the funding of the Initiative, (b) the organizational structure, (c) the programmatic components, and (d) the use of evaluation.

Funding of the Initiative:

A distinguishing feature of the ECI from its inception is its public/private funding approach. The developers of the Initiative believed that to achieve the goal of improving the system for serving young children and their families the approach needed to have a broad commitment from both the public and private sectors. The final budget for the first 3-year phase of the ECI totaled nearly $33 million, with nearly 26% of these funds coming from private and philanthropic partners. See Table 1.1. For the initial 3-year period, the budgeted funds were concentrated in the areas of effective parenting (54%) and quality child care (33%), with 0.6% allocated to the healthy children component and 12% for evaluation, operations and communications activities.

Table 1.1 Initiative Budgets for Phases I & II

	Phase I (Years 1-3) Revised: 07/01/99 – 06/30/02			Phase II (Years 4-5) Revised: 07/01/02 – 06/30/04		
Initiative Programs	**Total Budget**	**Public Funding**	**Private Funding**	**Total Budget**	**Public Funding**	**Private Funding**
Effective Parents						
Welcome Home	3,572,550	2,751,073	821,477	2,671,201	2,671,201	0
Early Start	14,279,212	14,279,212	0	13,311,136	13,311,136	0
TOTAL	17,851,762	17,030,285	821,477	15,982,337	15,982,337	0
Healthy Children						
Healthy Start Outreach	187,864	0	187,864	500,000	250,000	250,000
TOTAL	187,864	0	187,864	500,000	250,000	250,000
Quality Child Care						
Family Child Care Homes	7,748,192	5,098,192	2,650,000	5,394,437	4,774,718	619,719
Special Needs Child Care	3,052,702	1,644,735	1,407,967	2,590,432	958,856	1,631,576
TOTAL	10,800,894	6,742,927	4,057,967	7,984,869	5,733,574	2,251,295
Evaluation, Operations and Communications						
Evaluation	2,863,013	154,178	2,708,835	2,152,015	0	2,152,015
Operations/Communications	1,174,870	437,774	737,096	1,407,776	0	1,407,776
TOTAL	4,037,883	591,952	3,445,931	3,559,791	0	3,559,791
TOTAL	$32,878,403	$24,365,164	$8,513,239	$28,026,997	$21,965,911	$6,061,086

The final budget for the second 2-year phase of the Initiative totaled nearly $28 million, with nearly 22% of these funds coming from private and philanthropic partners. The budgeted funds were concentrated in the same areas of effective parenting (57%) and quality child care (29%), with 1.8% allocated to the healthy children component and 13% for evaluation, operations and communications activities.

When it was launched, the ECI had commitments from 23 private foundations and corporations that totaled nearly $10 million. Most of these private funds eventually supported expenses where governmental sources could not meet the need due to funding shortages or other restrictions (e.g., quality child care, evaluation). Governmental resources were secured from a variety of funding streams to meet the other requirements of the Initiative. State funding for the home visiting services came from the Ohio Department of Health and the Ohio Department of Job and Family Services, as part of the Help Me Grow program. Additional funds were committed to ECI by the Board of County Commissioners from the County's general fund and the Family and Children First Council, as well as from TANF nonassistance funds and money from the County's settlement in a lawsuit filed over the collapse of the Secured Assets Funds Earning (SAFE) investment program over which the Commissioners had discretion. Finally, other funds were secured from the Cuyahoga County Community Mental Health Board for special needs child care services.

As part of the Initiative strategic planning work that was undertaken in 2003-2004, the Initiative's goals were expanded. This resulted in a planned expansion of existing program strategies and the development of new strategies. Collectively, this resulted in a substantial increase in the resource needs of the Initiative. See Table 1.2. Compared to the first 5 years of the Initiative where the average annual budget was approximately $12 million, the next 3 years of the Initiative were projected to more than double in cost to over $24 million annually.

Table 1.2 ECI Proposed Budgets: 2005-2007 by Goal

GOAL	2005 Budget	2006 Budget	2007 Budget	2005-2007 Totals
Effective Parents and Families	$13,208,992	$14,226,302	$14,476,831	$41,912,125
Safe and Healthy Children	749,250	955,813	1,162,703	2,867,766
Children Prepared for School	7,080,789	7,425,098	7,781,952	22,287,839
Committed Community	530,000	589,000	648,270	1,767,270
Other Costs (core administration; evaluation)	1,577,000	1,641,900	1,709,277	4,928,177
TOTAL	**$23,146,031**	**$24,838,113**	**$25,779,033**	**$73,763,177**

Organizational Structure of the Initiative:

There are two primary structural dimensions to the Initiative. First, the leadership and decision making structure manages both the policy and vision-setting agenda for the ECI. Second, the operational structure manages the actual delivery of services. While these dimensions are closely intertwined in application, they are separated conceptually for the purpose of discussion. Figure 1.3 provides an abbreviated schematic of the Initiative's organizational structure during the first 5 years.

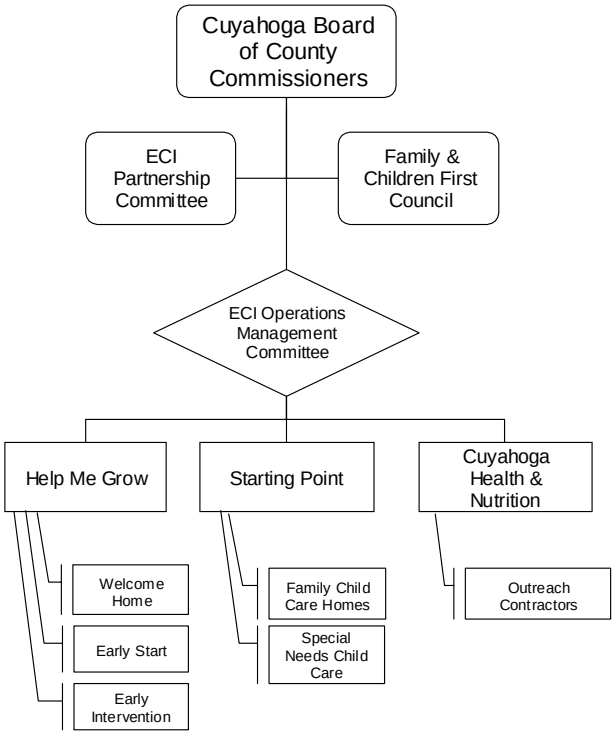


Figure 1.3 ECI Organizational Structure for the Initiative

Prior to the implementation of ECI, a number of active community partners were brought together to form the leadership and operational network for the Initiative. The active partners brought to the table a variety of skills and assets including strategic decision-making capacity (e.g., authority to change policy rules, regulations and structure), financial capacity (e.g., expressing commitment to the goals of the Initiative through monetary and/in-kind contributions), and operational capacity (e.g., serving as a direct service provider or technical assistance).

Leadership/Decision Making Structure

Though the ECI is administered by the Cuyahoga Board of County Commissioners (BOCC), from the outset the BOCC has shared oversight responsibilities with its funding partners. The Partnership Committee, comprised of representatives of all funders including Board representatives of the 23 private funders, the BOCC and representatives from the State, serves in an advisory capacity to the BOCC. The ECI Partnership Committee fulfills the following purposes: (a) to provide fiscal and programmatic oversight, (b) to assess effectiveness and impact of component strategies, (c) to determine future directions, and (d) to distribute information including evaluation findings to funding entities and other community organizations. Appendix 1.1 presents a listing of the Partnership representatives for the first 5 years of the Initiative (1999-2004). All three County Commissioners are members of the Partnership and one Commissioner serves as a co-chair of the committee along with a co-chair from a member organization chosen by the philanthropic members. This Committee meets on a quarterly basis to review updates on the Initiative, its program, and the evaluation, and to discuss current policy issues and future directions relevant to the ECI.

The County government provides day-to-day management of the Initiative through the ECI Operations Management Committee. During Phase I, the Deputy County Administrator for Health and Human Services served as the ECI Coordinator and chaired the Operations Management Committee. In addition, the Committee includes other Family and Children First Council staff, the three program directors in charge of the ECI components, as well as representatives of the private funders. This committee meets monthly (or on an as needed basis) to manage ongoing implementation of the Initiative and serves as the liaison group to the external evaluation team.

Operational Structure

During its first 5 years, the Initiative was administratively housed under the County's Family and Children First Council. The services of the ECI are delivered through three coordinating organizations under contract to the County. These entities are: (1) Help Me Grow of Cuyahoga County, which coordinates the effective parenting services delivered under Welcome Home, Early Start, and Early Intervention; (2) Starting Point, which coordinates the quality child care services in the areas of family child care and special needs child care; and (3) Employment & Family Services (a County agency), which coordinates the healthy child services through outreach and enrollment services of Healthy Start[2]. These organizations subcontract with a number of direct-service entities to deliver specific services. Help Me Grow contracts with 11 birthing hospitals to deliver Welcome Home and 28 agencies to deliver Early Start. Starting

[2] Note: Two previous County agencies, Cuyahoga Health and Nutrition and Cuyahoga Work and Training merged to form Employment & Family Services (EFS) in 2002. Throughout this report, the agency is referred to as EFS.

Point contracts with four agencies to deliver technical assistance to family child care providers, and five agencies to deliver special needs child care services (a sixth agency contracts directly with the County). Employment & Family Services contracts for Medicaid outreach. The nonprofit service sector was identified as a key partner for the Initiative early on because of its operational expertise in services as well as technical assistance. Many of the nonprofit entities had long-term existing relationships to build upon in implementing Initiative programs.

Formalizing the Structure of the Initiative

The strategic planning process identified the organization and operation of the Initiative as an area in which the Partnership needed to consider ways to ensure stability and continuity going forward. Specifically, the strategic plan recommended that an Office of Early Childhood be created, formally reporting to the Deputy County Administrator for Health and Human Services (see Figure 1.4). Activities of the Office of Early Childhood continue to be coordinated with those of the Family and Children First Council.

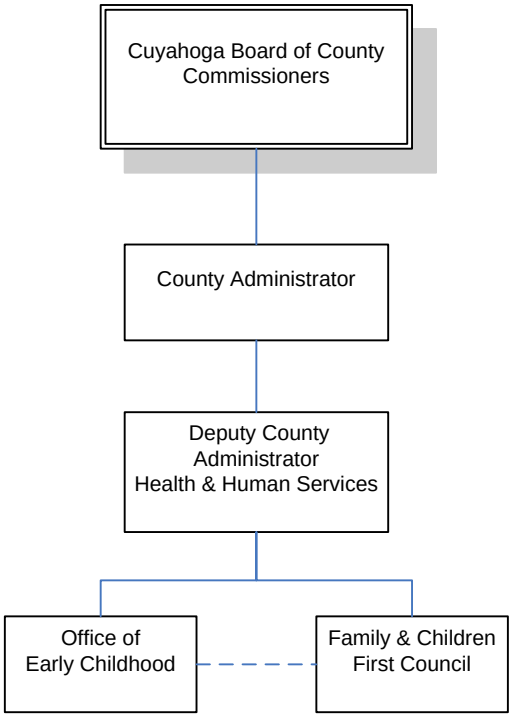


Figure 1.4 Administrative Structure: County Government and The Office of Early Childhood

This structure maintained the operational aspects of the prior mechanism in that the implementation of Initiative strategies are handled by lead agencies contracted by the Office of Early Childhood. In addition, the structure maintains the role of the Operations Management Committee (not shown) as the body that works with the Initiative's staff to direct and implement the existing strategies.

The strategic planning process also recommended that Invest in Children's oversight and governance structure be reconfigured by broadening the membership of the Partnership Committee. The expanded Partnership Committee is sought to involve a broader range of civic

and community leadership, which includes new perspectives and interests. The restructured Committee is responsible for: (a) financial monitoring and resource development; (b) communications and increased public awareness; (c) monitoring and evaluation; and (d) strategic planning.

Programmatic Components of the Initiative:

From its inception, the ECI Partnership recognized that it could achieve its goals of effective parenting, health care for children, and high-quality, readily available child care only through the implementation of a wide range of coordinated strategies, supports and activities, and through the engagement of a spectrum of public and private stakeholders. Thus, the Early Childhood Initiative is notable for its comprehensive approach, the inclusiveness of its governance structure and its desire for a broad base of community support and involvement. The ECI also stands out from other similarly themed initiatives undertaken elsewhere in that it offers assistance that is preventive, universally available, "at scale," and community-based. ECI services are delivered in the informal settings in which children live or are cared for, yet its programs are driven by prior research-based findings. The Partnership examined a number of national models with the goal of learning from strategies that have proven successful in other places. The partners were particularly influenced by research that showed less favorable results for early childhood interventions built around a narrow focus.

Drawing on the results of these investigations, the ECI encompasses six interrelated efforts—some of which are new to Cuyahoga County, some of which represent expansions or modifications of existing programs. These programmatic components are: (a) Welcome Home—a one-time home visit by a nurse for all first-time and teen mothers and their newborns; (b) Early Start—intensive home visits for families with children up to age three who have been identified as facing greater challenges; (c) expansion and quality improvement of certified home-based child care; (d) training and support for child care providers to serve children with special needs; (e) expansion of government-subsidized health insurance coverage for children of low-income families through enrollment in Healthy Start and other Medicaid programs; and (f) an effort to increase public awareness of the importance of a child's first few years of life. Upon the creation of such a comprehensive, community-based, and integrated system of services, the ECI Partnership reasoned, all children should benefit and at-risk children should not slip through the cracks.

Effective Parenting

A mission of the ECI is to support effective parenting through home visiting interventions. Welcome Home is a universal program providing a home visit to all first time and teen parents. Early Start provides more extended home visiting for families with children birth to three that meet specific criteria that could put children at risk for developmental delay. Early Intervention is provided for children with special needs.

Welcome Home: Welcome Home (WH) is part of a national movement linked to research on brain development and outcome studies that support the importance and cost effectiveness of intervening as early as possible in a child's life. The Healthy Families America (HFA) initiative, developed in 1992 by the National Committee to Prevent Child Abuse, promoted universal and intensive home visiting programs to prevent child maltreatment. The Welcome Home visit,

conducted by a Registered Nurse (RN), occurs shortly after leaving the hospital and includes the following services: reviewing the baby's and mother's health, sharing parenting and resource information, and linking the family to helpful community resources.

In 1998 the Ohio Department of Health made state seed money available through all the county Family and Children First Councils (FCFCs) for a home visit to all first-time and teen mothers. In Cuyahoga County, a major impetus for this program was as an extension of the ChildFind efforts to identify children in need of intervention during infancy. Further, in Cuyahoga County one guiding principle for the program was that home visits be conducted by the hospital of the family's choice. The FCFC developed a plan for this home visiting in Cuyahoga County to be coordinated through the community health services involved in labor and delivery. Each hospital would have a Welcome Home specialist on staff and would decide how to provide the home visiting services. Initially fifteen hospitals were involved, although two hospitals, Deaconess and St. Luke's, closed early in the pilot phase. It was tested in 13 hospitals from January to June, 1999 and fully implemented in July 1999, in all of these hospitals, except Mt. Sinai, which also closed.

As the ECI and Welcome Home got underway, it became evident that this component could be expanded. Eligibility criteria for Welcome Home visits were broadened to include legal custodians that were not birth parents and birth mothers who may have had previous pregnancies but never brought the infant home from the hospital, as well as to first-time mothers and teen mothers.

Early Start: Early childhood home visiting programs initially targeted only those children with diagnosed disabilities as supported by federal legislation. However, in 1991, when parts of the Individuals with Disabilities Education Act (IDEA) were reauthorized, and it was left up to the states to determine the populations that they would target for services. Some states had expanded home visiting services to families with risk factors such as low incomes and teen parents that were documented by research to correlate with a higher incidence of learning, emotional, and behavioral problems for the children later in their life.

Early Start (ES) is ongoing in-home parent education and support, developmental screenings, and aid in locating resources for at-risk families with a child under 3 years of age. It began as a voluntary program in 1996 and the Cuyahoga County Early Intervention Collaborative (CCEIC)[3] contracted with community-based providers to deliver ES. All referrals came through Interlink (the County's resource and referral site) at the CCEIC and were then sent out to a provider based on the geographic location and need of the family. Passage of federal welfare reform legislation in 1996, followed in 1997 by Ohio Works First (OWF) led to ES expansion in 1998. ES became one of the support programs for OWF. All OWF families with children under 1 year of age were contacted by ES, and all families with children 0-3 years of age were offered ES home visiting. All ES participants were able to draw upon County Prevention, Retention Contingency Funds (PRC) for services that support preparation for steady employment. Increased marketing of services and Early Start expansion were initiated in 1998 during the planning year for the ECI. This resulted in contracts with 27 different agencies in

[3] The CCEIC was renamed the Help Me Grow Collaborative of Cuyahoga County in 2001. Concurrently, Interlink became Interlink-Help Me Grow.

Cuyahoga County. Some of these agencies integrated Early Start into existing programs that served low-income children and their families. In addition, the need to engage families during the prenatal phase also was seen as vital early on in the program. During 2000, plans were developed for expanding visits to families before the baby's birth. The piloting of a curriculum for this purpose began at University Hospitals in 2001.

Early Intervention Services: Early Intervention (EI) includes services for infants and toddlers that are designed to identify and help a child with a delay as early as possible. Federal law identifies a wide range of services for Early Intervention including, but not limited to, hearing and vision services; family training and counseling; nutrition services; occupational, physical, and speech therapy; and, social work services and service coordination. The Ohio Department of Health in implementing the federal IDEA legislation required that families with children under the age of three who are eligible for Early Intervention Services be entitled to developmental evaluation, service coordination, and an Individualized Family Service Plan (IFSP).

Healthy Children

The ECI's emphasis on the health of young children focuses on ensuring public health insurance coverage for all eligible low-income families with children under age six.

Healthy Start/Medicaid: In the 1990s much attention was paid to the large number of low-income children in the United States who were not receiving adequate medical care. The Balanced Budget Act of 1997 (Title XXI) expanded public health insurance by creating the State Children's Health Insurance Program (SCHIP), a means-tested program to provide medical care for pregnant women and children under the age of 19 in families with incomes at or below 150% of federal poverty level (FPL). States were to submit individual plans to be eligible for these funds. Ohio submitted its plan for Healthy Start in December 1997 and the state program began in July 1999. Initially, applications for coverage were lower than expected and observers were concerned that some families needing coverage were unable to access it.

Effective July 1, 2000, Healthy Start program criteria were expanded to remedy difficulties in securing sufficient documentation to apply for the program and to meet the needs of low income families who had not qualified according to previous eligibility requirements. Under the new rules, uninsured pregnant women and children in families with incomes up to 200% of FPL were eligible for coverage. Documentation requirements included proof of income and, when applicable, proof of pregnancy, alien status, and/or other health insurance. From December 2000 through mid-2002, a pilot project took place in Cuyahoga County to streamline the procedure further by families qualifying through self-declaration of income without needing to provide income verification. The reapplication process is as follows: every 12 months for children on Healthy Start, every 6 months for parents and children on Healthy Families, and coverage up to 60 days after the birth of their baby for pregnant women.

The ECI has worked to bolster Healthy Start through its Healthy Children emphasis. It seeks to ensure health insurance, a medical home (i.e., a consistent primary health care provider), age-appropriate immunizations, and adequate and appropriate medical care for all Cuyahoga County families with young children. The ECI also works with the Northeast Ohio Pediatric

Society to support the ChildFind initiative by assisting pediatricians in the early identification and support of children with disabilities.

Quality Child Care

There are two components of the ECI that support the mission of ensuring the availability of quality child care in Cuyahoga County. The Family Child Care Homes (FCCH) component seeks to expand child care options for low-income families by increasing the availability of home-based child care and providing training and technical assistance to providers to increase the quality of care in those homes. Special Needs Child Care focuses on meeting the needs of children who have specific physical, emotional, or behavioral problems that require special support in a child care setting.

Family Child Care Homes: The passage of Ohio's Work First program in 1997 increased the demand for child care slots, as more single mothers entered the labor force. In addition, the federal welfare reform legislation, passed in 1996, had changed the structure of federal child care assistance by combining funding for the existing subsidy programs into the Child Care and Development Fund (CCDF). States were required to contribute funding to draw down a proportion of their federal allotment. State expenditures for child care increased by 55% between 1996 and 1998. This increased demand coupled with the knowledge that many parents prefer child care located within their own neighborhood prompted the ECI to focus on creating more family child care slots. The ECI set as one of its goals to certify 1,025 new family child care homes through the Initiative and thereby increase the number of child care slots.

Starting Point, the County's child care resource and referral source, was selected as the lead agency for the ECI's child care components and was tasked with developing a regional child care system to meet this goal. Starting Point contracted with four regional agencies to provide the training and technical assistance necessary for family care providers to become certified and improve child care quality. The FCCH quality enhancement program, Care For Kids, promotes quality improvement through in-home technical assistance and consultation to family care providers, as well as through training sessions and workshops.

Special Needs Child Care: When demands for child care for all children increased with the passage of the welfare reform (PRWORA and OWF), early studies indicated that child care for children with special needs was particularly crucial for enabling mothers to find and sustain employment. Therefore, during the planning year for the ECI, a telephone needs assessment survey was initiated through Interlink to determine the extent of the need in Cuyahoga County. It established that 4,000 requests for special needs child care were received from July 1998 to February 1999. The ECI fostered coordination between Interlink/CCEIC and Starting Point to address this need. The ECI adopted a broader definition of special needs child care for Cuyahoga County than in most other jurisdictions with the goal of supporting stable child care for all children under 6 years of age with specific diagnoses of a disability. The definition also included children who, though undiagnosed, require special supports in order to remain in child care. A goal was set early on to serve at least 500 children with special needs yearly and this goal has been exceeded in the first 5 years.

Evaluation of the Initiative:

Another distinctive characteristic of the Early Childhood Initiative is that it provided for a rigorous external evaluation by a national team of researchers. From the beginning, the ECI Partnership planned to measure the impact of the Initiative in a variety of ways. The partners wanted to understand the extent to which services were being implemented as planned, were reaching children and families in need, and were having the desired impact on children, families and the community at large. Not only would the knowledge gained from ongoing evaluation inform the continuation of the Initiative and allow for mid-course adjustments, such research would ensure thorough documentation of what ECI set out to do and what it accomplished.

It was important to the ECI Partnership that the evaluation of the Initiative build local capacity for conducting early childhood research. With all ECI program components in operation beginning with infants born in 2000, the Partnership selected Cleveland's Center on Urban Poverty and Social Change at the Mandel School of Applied Social Sciences of Case Western Reserve University to direct the evaluation. In addition, the Partnership brought in national experts from the Chapin Hall Center for Children at the University of Chicago and the Frank Porter Graham Child Development Center at the University of North Carolina at Chapel Hill. The contractual period for the evaluation of the first 3 years of the ECI was designated as October 2000 to September 2002.

The research and evaluation of the Early Childhood Initiative was designed to capture the impact of the Initiative as a whole, as well as that of each of the programs. Evaluation research on large-scale community initiatives, such as ECI, is rare, especially when an initiative has been taken to scale in such a short time. The evaluation includes work on all of the major programs of the Initiative to examine the degree to which they reach eligible families, children and providers, to assess whether and how the target populations are benefiting as a result, and to determine the extent to which children and families are served by more than one ECI program. The evaluation also included exploring how the ECI affected the local context and systems for young children and their families. Specifically, the research and evaluation sought to document the role that the ECI played in changing the service delivery system, public policy, and community supports for young children and their families.

A principal investigator with expertise in the area under study leads each of six sub-studies: a population trends study; a systems change study; studies of the two home visitation programs, Welcome Home and Early Start; a family child care homes study; a special needs child care study; and a study of the health care insurance coverage expansion through Healthy Start and other Medicaid efforts. Each study addresses specific questions related to the program under evaluation. Even though the program components are being considered individually, all the evaluations share an overarching concern: *Is the program, strategy, or activity successful in helping to improve the lives of the children in Cuyahoga County?*

Because the ECI is complex, the evaluation effort brings together a multidisciplinary team of researchers from several institutions, with coordination provided by the Center on Urban Poverty and Social Change. Chapin Hall Center for Children has primary responsibility for the research and evaluation of the home visitation programs. The Center on Urban Poverty and Social Change is conducting studies of the family child care homes and the expansion of child

care for children with special needs in consultation with researchers from Frank Porter Graham Center at the University of North Carolina. The Center on Urban Poverty and Social Change is conducting the Healthy Start/Medicaid study (with assistance from the School of Medicine), the systems change study, and tracking indicators of well-being of the ECI target populations (children from birth to five years of age and their families) to determine whether the Initiative is having a discernible effect on these markers.

Multiple data sources and methods are being combined to provide a holistic view of how each component of the ECI is working and how all of the parts connect. Among the research tools that are being used are longitudinal studies of families in their homes; telephone surveys of parents and service providers; qualitative interviews with key informants; observation of service quality; linkage and analysis of computerized administrative records; case record reviews; and the calculation of population-based, County-level social indicators. The magnitude of the research and evaluation required the research team to develop efficient systems of coordination and integration, as well close working relationships with representatives of the various stakeholder groups in the ECI Partnership. Each research component team customized its evaluation approach based on data availability and programmatic and measurement characteristics specific to each line of inquiry. Thus, sample definitions and follow-up periods vary across and within chapters in order to maximize the amount of data available for analysis. (See Appendix 1.2 for an overview of the child samples used in this report.)

Operationally, the evaluation team continues to work closely with the Operations Management Committee in an ongoing way. A representative of the evaluation team attends the monthly Operations meetings and has regular interaction with the Initiative's evaluation manager. The Operation Committee provides direct feedback on all evaluation draft reports, presentations, and evaluation design changes. Further, research team members assigned to each evaluation component have regular contact with the program directors and their staff. These interactions relate to data collection and interpretation issues, program improvement activities, and new developments.

Status of the Initiative at the End of Phase II

By the conclusion of the 5th year of implementation (June 2004), the Initiative had clearly moved into a new phase of operation. The Initiative is viable, and its efforts have been solidified through the creation of the Office of Early Childhood. The Initiative continues to be responsive to the needs of the community and, through the strategic planning process, is evolving to address emerging challenges. The Cuyahoga Board of County Commissioners and the Partnership Committee members have committed their leadership and financial support to the Initiative. As in the first 5 years, the budget continues to utilize funding streams at the County, State and Federal levels.

The ultimate goal of the Initiative is to create a community committed to ensuring the well-being of its children. Through a re-examination and streamlining of marketing activities and approaches, the Initiative seeks to raise awareness of the ECI among families that could benefit from its services and to raise awareness among the general public about the important mission of the Initiative. These efforts, along with a continuing commitment to program improvement and

accountability, greatly increase the likely success of the Initiative and its overall impact within Cuyahoga County.

The Contents of this Report

The final report on the first 5-year phase of the Initiative includes chapters addressing specific aspects of the overall study. Chapter 2 presents the findings on the County-level indicators of child well-being, and Chapter 3 discusses the scope and reach of the programs of the Initiative within the child population in the County. The home visiting components of the Initiative (Welcome Home and Early Start) are examined in Chapter 4. The quality child care efforts of the ECI are discussed in Chapter 5 (Family Child Care Homes) and Chapter 6 (Special Needs Child Care). Chapter 7 presents data from the study of Healthy Start/Medicaid.

Appendix 1.1: Partnership Committee Membership

Board of County Commissioners
- Jane L. Campbell (1999-2001)
- Jimmy Dimora
- Timothy F. Hagan (2005)
- Peter Lawson Jones (2002)
- Tim McCormack (1999-2004)

State of Ohio
- Robert Taft, Governor

Foundations
- The Abington Foundation*
- The Eva L. and Joseph M. Bruening Foundation*
- The Cleveland Clearing House Association
- The Cleveland Foundation*
- The George W. Codrington Foundation
- Florence Crittenton Services Fund*
- Deaconess Community Foundation*
- Eaton Corporation*
- Hershey Foundation*
- Initiatives in Urban Education Foundation
- Mount Sinai Health Care Foundation*
- The Reinberger Foundation*
- Saint Ann Foundation*
- Saint Luke's Foundation*
- The Sherwick Fund*
- The Billie Howland Steffee Family Fund*
- The Treu-Mart Fund*
- The TRW Foundation
- United Way Services*
- Verizon Foundation
- The Raymond John Wean Foundation*
- The Thomas H. White Foundation*
- The Woodruff Foundation*

* Foundations that contributed funds to both phases are denoted by an asterisk.

Appendix 1.2 Overview of Child Samples and Follow-Up Periods Used in Report

Chapter	Sample Period	Follow-up Period	Measures
Ch 2 Childhood Indicators	Born 01/90-12/02	Point of birth	Birth outcomes Receipt of prenatal care
	Under age 6 01/92-12/03	Point of welfare receipt	Receipt of cash welfare
	Under age 6 01/92-12/02	Until 12/31/03	Maltreatment
	Under age 6 01/90-12/02	Point of death	Death rate
	Born 01/97-12/02	Until 06/30/04	Early Intervention receipt
Ch 3 Scope & Reach	Born 07/93-12/03	Until 12/31/03	ECI participation
	Under age 6 07/99-12/03	Until 12/31/03	ECI participation
	Born 07/99-12/02	6 months post birth	ECI participation
	Under age 6 served by ECI 07/99-06/02	6 months post ECI initial service	Use of non-ECI services
Ch 4 Home Visiting	Children served by Welcome Home 02/01-12/01 and consented for study	3 & 11 months post baseline	Satisfaction with service Service receipt
	Children served by Early Start 02/01-12/01 and affirmative parental consent on file	3 & 11 months post baseline	Enrollment in services Nature of helping relationship Service receipt, parenting knowledge, skills, and characteristics
	Children referred to Early Start 07/99-03/02	Until 06/30/02	Receipt of Early Start services
	Children referred to Early Start 07/99-03/02 and received at least one home visit	40 weeks post referral to Early Start	Program retention
	Children served by Early Start 02/01-12/01 and affirmative parental consent on file and reported for child maltreatment (vs. not reported)	Until 12/31/01	Service receipt, parenting knowledge, skills, and characteristics
Ch 5 Family Child Care	N/A - provider sample and population only - family child care providers certified 07/99-06/04 as well as providers certified prior to ECI; technical assistants; and parents of children attending family child care	N/A	N/A

Appendix 1.2 Overview of Child Samples and Follow-up Periods Used in Report (continued)

Chapter	Sample Period	Follow-up Period	Measures
Ch 6 Special Needs Child Care	Served through technical assistance to child care provider or placement assistance 01/00-06/04 and appears in administrative dataset and affirmative parental consent on file	Until 06/30/04	Receipt of S.N. services
	N/A - parent sample and supervisor sample	N/A	N/A
Ch 7 Healthy Start	Born 07/97-03/01and enrolled in Medicaid within 2 months of birth and with continuous enrollment months 3-15	3 months post birth	Receipt of initial well-baby visits
		15 months post birth	Receipt of recommended number of comprehensive preventive visits during 1st year (15 months) of life.
	Born 07/97-06/01 and enrolled in Medicaid within 12 months of birth	12 months post birth	Age at enrollment

Chapter 2
Early Childhood Social and Health Indicators in Cuyahoga County:

Claudia Coulton, Engel Polousky, Nina Lalich, Julia Withers, Maruza Andrade and Ini Shin

Chapter Summary

The Early Childhood Initiative (ECI) is concerned with the development of all children in Cuyahoga County, from birth through their fifth year of life. To shape this vision and measure progress, the ECI tracks key indicators of child health and well-being. Many of the child indicators have shown positive trends in the first 5 years of ECI. With respect to early care and education, families are availing themselves of the increased supply of regulated child care and using child care subsidies at a growing rate. Cuyahoga County's preschool enrollment rates, while not yet universal, far exceed national norms. Children's access to medical care has improved as the number of uninsured children in the County fell due to Healthy Start/Medicaid outreach and expansion. The access to prenatal care for pregnant women has also improved in recent years. Rates of child maltreatment, which rose during the first 4 years of ECI, showed a significant drop in 2003. On the less positive side, the persistence of high rates of low-birth - weight births, despite the decline in teen and non-marital births, supports the decision of the ECI to expand to include prenatal home visits. Also of concern is the increase in child poverty that has occurred since the recession in 2001. Specific trends highlighted include:

- Population and births: Births to teen and first-time mothers have been falling steadily. The percentage of women with adequate prenatal care has risen to approximately 80%. However, the low birth weight rate rose significantly to 9.9%.
- Family self-sufficiency: Poverty rates for young children fell slightly in the 1990s but have risen again to 23% since the recession began. At the same time, the percentage of children under six who were on cash welfare fell from almost 40% in 1992 to 8.8% in 2003.
- Child maltreatment: The percent of children under six with a substantiated/indicated abuse or neglect report dropped to 2.5% in 2003, a statistically significant change from the past. However, statistical models that control for other factors suggest that in the years prior to 2003, children had a greater chance of maltreatment in the post-ECI (after July 1999) as compared to the pre-ECI period (before July 1999) but a somewhat lower chance of a second incident within 1 year of the first incident.
- Health insurance: A large improvement occurred in health insurance coverage for young children between 1998 and 2001, with the estimated percent of uninsured children under age six falling markedly from 10.5% to 2.1%. By 2004, however, the percent uninsured rose slightly to 4.4%, but the change was not statistically significant.
- Child deaths: The death rate for children under six has not changed significantly since the start of ECI. The death rate for children under one has risen, but the change was not significant.
- Child care and pre-school enrollment: Enrollment of children under age three in regulated child care increased by about 30% since the inception of ECI. In 2004, 60% of three and four year-olds were enrolled in preschool, including Head Start, which compares favorably to a national preschool enrollment rate of 52%.
- Early identification of special needs: Since ECI, children with special needs are being identified and assessed at earlier ages. In 1997, 271 children were identified in their 1st year of life; this number more than tripled in 2002, when 902 children were identified.

Introduction

The Early Childhood Initiative (ECI) is concerned with the health and development of all children in their first years of life—birth until they reach their sixth birthday—in Cuyahoga County. This is a crucial period in human development, but because children have not yet entered school, public policy and programs have heretofore not systematically and universally addressed this stage. The ECI is promoting a sustained civic interest in this life stage and the establishment of services, supports, and opportunities that families need in their early years of childrearing. The ECI's investments in policy development, system improvements, and new programs are expected to reduce the inequities in child development within the County and assure that all children begin their lives on a solid foundation on which to build their future success. Achieving such ambitious aims for the entire population, though, requires programming at an unprecedented scale and a sustained focus on markers of progress.

This chapter provides a statistical portrait of the early childhood population in Cuyahoga County. The Initiative's leaders have called for ongoing tracking of social and health indicators to inform them and the community at large about the status of the young child population, both before ECI's inception and as it has moved to scale. Social and health indicators are population-based statistics that are gathered over a long period so that a trend can be observed. It is anticipated that selected indicators of early childhood well-being will begin to move in a more positive direction as a result of the many programs, services, and policy changes enabled by the ECI. Some additional indicators are being tracked because they provide information on the size and characteristics of the early childhood population that are pertinent to understanding the scope and context for the ECI.

Included in this chapter are early childhood indicators in the following broad areas:

- Early childhood population
- Birth information
- Economic status of families
- Child abuse and neglect reports
- Health insurance coverage
- Child deaths
- Participation in child care and preschool
- Early identification of children with disabilities

Social and health indicators have both strengths and limitations as tools for research and evaluation. Their major strength is that they are available historically, because they have been gathered either by administrative agencies or as part of repeated surveys. As such, indicators can be used to compare the status of a population before an initiative began with subsequent trends. Moreover, indicators lend themselves to statistical estimates that can be applied to an entire population, such as children under six in Cuyahoga County, the target group of the ECI. The limitations of statistical indicators for evaluating the effects of a single initiative are also significant. Demographic and economic forces beyond the control of the Initiative often have strong effects on trends, making it difficult to isolate the impact of specific policies or programs on the indicators. Moreover, some program objectives may not be well measured by indicators,

because the relevant data have not been collected by administrative agencies, or the time trend may not be long enough. Thus, although indicators can reveal important information about the social and health status of the early childhood population and the degree to which ECI has achieved some of its goals, these trends alone cannot support causal attribution. [Technical note: throughout the analysis section, figures reported in some tables may not sum to 100% due to rounding error.]

Methodology

Describing Trends:

This study of population indicators uses two methods of describing trends: *point-in-time estimates* and analysis of *birth cohorts*. Figure 2.1 illustrates these two perspectives. *Point-in-time estimates* are a common approach in which the indicators are calculated for each calendar year. In other words, statistical estimates are made by counting the number of children with an event that occurred in the year divided by the population under six at a point in time. As shown in Figure 2.1, all members of the early childhood population (i.e., under six) will not have been fully exposed to all ECI programs until the year 2005. Prior to 2005, point-in-time estimates include the experience of some children who were born before ECI was implemented. Especially for relatively rare events, rates are bound to vary somewhat from year to year. In order to detect significant changes between years, confidence intervals can be placed around a rate to determine whether the change is statistically significant.[1]

A *birth cohort* approach calculates indicators by grouping all children born in a particular time period.[2] One of the major features of the ECI is that it is universal and begins at birth or in the prenatal period, so it is children born after July 1999 who are first fully exposed to the universal newborn home visit of the Welcome Home Program and to all of the other components of ECI. Since infants born in the first half of 1999 were not eligible for all ECI programs, the 1999 birth cohort was labeled "partial ECI". Birth cohorts from 2000 forward are labeled "full ECI" to indicate that all children born in that year could have benefited from all ECI programs. Earlier birth cohorts could benefit at a later age from components of the ECI that were not restricted to newborns, such as health care and expanded child care and the systems and policy changes that occurred. Data organized by birth cohorts can be used to determine whether outcomes for infants born after the ECI was implemented are improved.

[1] In this report, when a rate is said to be significantly different, this means that its 95% confidence interval did not include the rate in the previous year or years. Confidence intervals were determined by (1000/n) (d± (1.96 * square root of d)) where d = number of events, n = denominator of the rate.

[2] Birth cohorts include a small proportion of children who were born outside the County and later migrated in, and this proportion rises as the cohort ages. Moreover, a small portion of children who are born in the County migrate out before age six. Thus, not all members of the birth cohort have the same exposure to the intervention. Unfortunately, the administrative records used in this study do not allow for the determination of migration status, but the net effects are presumed to be small.

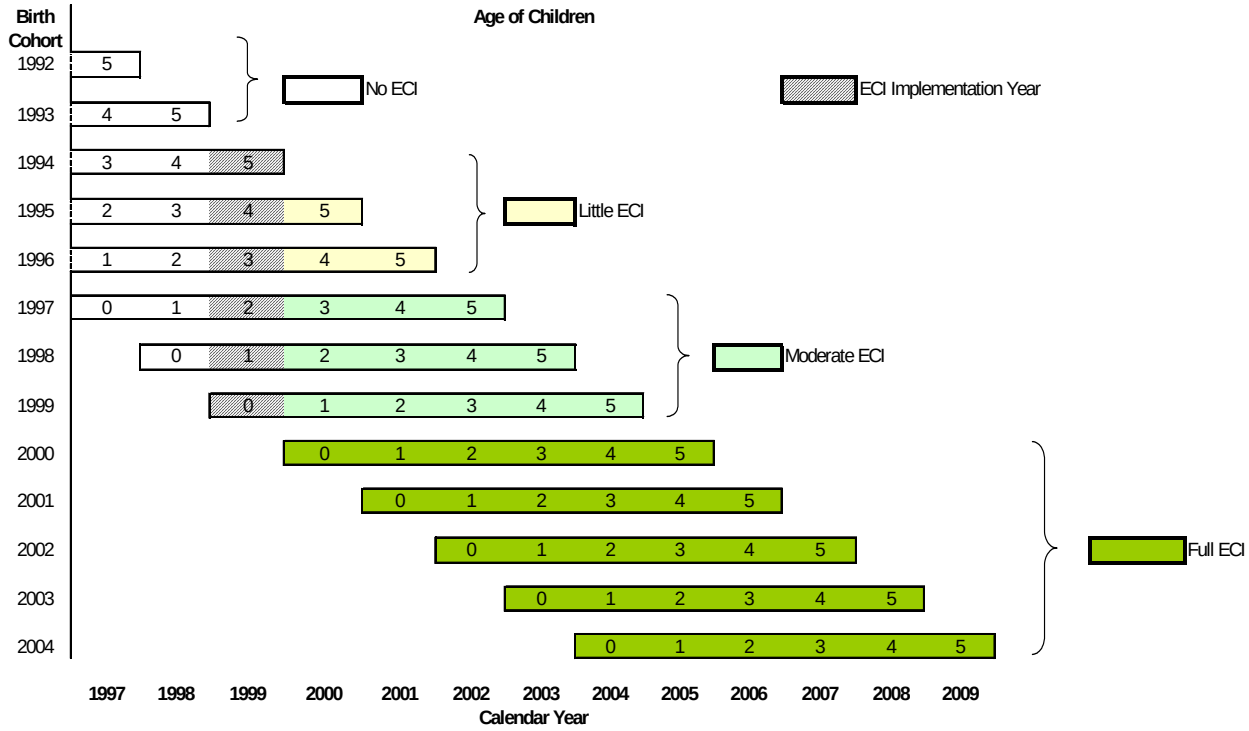


Figure 2.1 Birth Cohorts in ECI

Statistical Models and Comparisons:

While trends are useful for monitoring the progress of ECI, they are difficult to interpret. Trends are influenced by factors as varied as demographics, the economy, and public policy, and it is difficult to disentangle these causes. The ideal way to identify program impact net of other influences is through use of a control group, but this was not thought to be feasible in a program where universality and going to scale were key aims. Moreover, part of the theory of the Initiative was that there should be multiple entry points for all families and children into the programs and this would have made it difficult to establish control groups. Statistical modeling is an alternative method for attempting to describe the effects of a new program. By comparing children born before the ECI with those born after the ECI, and controlling to the degree possible for their individual and family characteristics, these models may provide an approximation of the influence of the program, albeit with much less certainty than a randomized controlled trial. In this chapter, several statistical models are presented for selected outcomes. At this point, comparisons between children born before and after ECI are only available for a few key outcomes, but in the future, efforts may be made to apply these approaches more fully.

Population Trends

The ECI focuses on all Cuyahoga County children in their earliest years from birth to age 6 (roughly, the age at which most of them have entered kindergarten). This phase of life is vitally

important in forming the basis for future development. Table 2.1 presents population estimates for this age group.

Table 2.1 Population Estimates of Children Under Six, Cuyahoga County, 1990-2003

Year	>1	1	2	3	4	5	Total Under 6
1990 [1]	21,647	20,525	19,857	19,365	19,319	19,094	119,807
1991	21,262	20,263	19,693	19,249	19,274	19,091	118,832
1992	20,877	20,001	19,529	19,132	19,230	19,087	117,856
1993	20,493	19,740	19,365	19,016	19,185	19,084	116,883
1994	20,108	19,478	19,201	18,900	19,140	19,080	115,907
1995	19,723	19,216	19,037	18,784	19,096	19,077	114,933
1996	19,338	18,954	18,872	18,667	19,051	19,074	113,956
1997	18,953	18,692	18,708	18,551	19,006	19,070	112,980
1998	18,569	18,431	18,544	18,435	18,961	19,067	112,007
1999	18,184	18,169	18,380	18,318	18,917	19,063	111,031
2000 [2]	17,799	17,907	18,216	18,202	18,872	19,060	110,056
2001 [3]	17,687	17,794	18,101	18,088	18,753	18,940	109,363
2002 [3]	17,567	17,674	17,979	17,965	18,627	18,812	108,624
2003 [3]	17,438	17,544	17,847	17,833	18,489	18,674	107,825

Note: Using linear extrapolation, an adjustment factor was calculated for and applied to each inter-census age group population to calculate adjusted inter-census populations.
Sources:
[1]Population Estimates Program, Population Division, U.S. Census Bureau
[2]Census 2000 Summary File (SF1) 100-Percent data, U.S. Census Bureau
[3]Calculated using age specific proportions from 2000 and yearly population estimates. Source: Ohio County Population Estimates: July 1, 2000 to July 1, 2003
Prepared by: Center on Urban Poverty and Social Change, Mandel School of Applied Social Sciences, Case Western Reserve University.

The number of children under six declined by approximately 10% over the decade. The decline mirrors the overall population decline in the County.

Birth Trends and Characteristics

Because many ECI services begin prenatally or at birth, the size of the annual birth cohorts and their characteristics are significant factors in shaping the ECI. Cuyahoga County birth trends appear in Table 2.2. There has been a gradual decline in the total number of births and a commensurate decrease in births to first-time and teen mothers who are eligible for the newborn Welcome Home visit. The teen birth rate has fallen steadily over the past several years, consistent with national trends. The percent of mothers with less than a high school education has fallen too.

Table 2.2 also presents information on prenatal care use and birth characteristics. The low-birth-weight rate in Cuyahoga County rose to 9.9% in 2002, a statistically significant increase. The low-birth-weight rate in the nation has also been rising, and was 7.6% in 2002.

Prenatal care, an essential part of a healthy start for children, is also tracked in Table 2.2. The trends show continuing improvement in the proportion of infants whose mothers received early and adequate prenatal care.

A commonly used index that combines information on birth outcomes and prenatal care is the Healthy Birth Index.[3] A healthy newborn is one that weighs more than 2500 grams, was born after 37 weeks gestation, and had an Apgar score of 9 or 10 five minutes after birth and whose mother started prenatal care in her first trimester of pregnancy. These factors are weighted equally in the index; however, weeks gestation and prenatal care beginning in the 1st trimester are the major contributing factors to newborns being excluded from the healthy birth category. Approximately 69.2% of newborns in 2002 are classified as healthy births using this index.

The rate of low-birth-weight births and the Healthy Birth Index are sensitive to racial and economic health disparities. Nationally, African-American births are almost twice as likely to be of low birth-weight and their mothers generally have less access to prenatal and other types of health care. Even when women get prenatal care, living in poor and deteriorated neighborhoods further increases the risk of unhealthy birth outcomes. While research has been unable to pinpoint the specific mechanisms through which these disadvantages lead to low birth-weight, the persistence of these problems in Cuyahoga County is further testament to the need for the kinds of services offered through the ECI and the decision of the ECI to expand prenatally so as to address the multitude of risk factors that may affect birth outcomes.

[3] Healthy Birth Index is defined as: 5 minute Apgar of 9 or 10, receipt of prenatal care in 1st trimester, gestational age >= 37 weeks and birth weight >= 2500 grams.

Table 2.2 Trends in Births and Birth Characteristics, Cuyahoga County, 1990-2002

Cuyahoga County	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Infant Births	22,560	22,913	22,087	21,491	20,274	19,876	19,495	19,040	18,998	18,392	18,895	18,189	17,374
Welcome Home Eligible [a]	9,809	9,751	9,196	8,988	8,496	8,525	8,258	8,093	8,143	7,785	7,838	7,768	7,306
Teen Birth Rate, 10-14 [b]	1.84	1.62	1.94	2.25	2.42	1.64	1.59	1.61	1.33	1.48	1.3	1.13	0.87
Teen Birth Rate, 15-19 [b]	66.8	67.08	64.23	62.77	57.39	57.1	55.94	53.83	56.77	51.79	51.12	48.01	42.88
Percent of Mothers Without High School	20.8%	22.3%	21.4%	21.4%	19.8%	19.0%	18.6%	18.9%	19.4%	18.9%	19.0%	17.3%	17.3%
Percent Low Birth Weight	9.0%	9.8%	9.7%	9.5%	9.2%	9.5%	9.3%	9.0%	9.1%	9.1%	9.0%	9.3%	9.9%
Percent with Adequate Prenatal Care [c]	67.0%	64.9%	65.9%	68.0%	66.3%	69.5%	71.1%	71.9%	73.5%	76.9%	76.3%	80.8%	79.7%
Percent with Care in 1st Trimester	79.9%	79.9%	79.5%	81.5%	80.6%	81.5%	83.4%	83.9%	84.7%	85.9%	85.9%	88.3%	86.1%
Percent Without Prenatal Care	3.5%	4.3%	4.4%	3.6%	2.4%	1.8%	1.3%	3.4%	4.5%	3.5%	1.7%	1.2%	1.1%
Percent Healthy Births [d]	66.6%	66.5%	66.7%	67.3%	66.8%	66.3%	66.5%	68.0%	67.5%	69.1%	68.3%	71.4%	69.2%

Source: Center on Urban Poverty and Social Change, Case Western Reserve University: generated using Cleveland Area Network for Data and Organizing (CAN DO) http://povertycenter.case.edu.cando.htm, Birth Statistics, 1990-2002.
Note: In 1997 and 1998, there was excessive missing data on prenatal visits from a few Cleveland hospitals. Errors may be responsible for the high rate of no prenatal care in these years. See The Right Start online at www.aecf.org.
[a]First time and teen mothers are eligible for the newborn Welcome Home visit.
[b]Teen Birth Rate = Total Teen Births / Population of Females ages 10 –14 (and 15-19)* 1000.
[c]Adequate prenatal care is determined using the Kessner Index, which defines adequate prenatal care as beginning in the 1st trimester and the total number of additional visits must meet or exceed that which would be expected for the child's gestational age.
[d]Healthy Birth is defined as: 5 minute Apgar of 9 or 10, receipt of prenatal care in 1st trimester, gestational age >= 37 weeks and birth weight >= 2500 grams. Source: National Center for Health Statistics (1999).

Economic Status of Families

Poverty is one of the strongest predictors of child well-being, and the devastating effects of poverty on early childhood development are well documented. Recognizing this fact, the ECI seeks to promote family economic self-sufficiency. For the purpose of this report, two indicators of self-sufficiency are presented: Children living in poverty and children on cash welfare assistance.[4]

Poverty status of children is determined by the income - to - needs ratio of the families in which they live. The Census Bureau reports the number and percent of children who live in *related* families with income below the poverty threshold. This threshold is adjusted for family size and inflation. The poverty threshold reflects a basic subsistence level. For a family of three, the current threshold is set at an annual income of approximately $14,500.[5]

Table 2.3 Percent of Children Under Five in Poverty, Cuyahoga County, Ohio and U.S.

Year	Source	Cuyahoga County % Poor	State of Ohio % Poor	United States % Poor
1990	Census	24.2	21.1	20.1
2000	Census	21.1	16.1	17.0
Average 2001-2003	ACS	23.3	20.6	19.7

Source: U.S. Bureau of the Census, SF3, 1990 and 2000 and American Community Survey 2003, Multi-Year Profile. Analysis of data by Center on Urban Poverty and Social Change.

Poverty rates for children under age five are presented in Table 2.3.[6] The poverty rate for young children in Cuyahoga County declined between the 1990 and 2000 census but has begun to rise again according to the recent estimates from the American Community Survey (ACS). This upward trend is mirrored by the nation as a whole and is, in part, due to the recession which has been particularly deep and prolonged in the Cleveland area.

Another indicator of self-sufficiency is the degree to which the families of young children rely on cash welfare payments. Given the level of welfare payments in Ohio, welfare-reliant families by definition live well below the poverty line. A recent study by the Center on Urban Poverty and Social Change documented that the majority of families that left welfare in

[4] Researchers debate the definition of self-sufficiency and these indicators are unlikely to capture all aspects.
[5] There is considerable debate about how the poverty threshold is set and general agreement that it reflects a very minimum, subsistence standard of living (National Research Council, 1995).
[6] Although the ECI focuses on children through their fifth year this table looks at poverty in children under five. This is because the data for 2001-2003 come from the American Community Survey. The Census Bureau only reports the under 5 category from this survey. Thus, for consistency this is the age grouping used for all years in this table.

Cuyahoga County had incomes that were somewhat higher than their welfare incomes had been (Coulton et al., 2004).[7] Table 2.4 shows that the number and percent of young children in Cuyahoga County on cash welfare has been declining steadily since 1992.[8] It also shows an accelerated decline since welfare reform was implemented in October 1997.

Table 2.4 Children Under Six Receiving Cash Welfare: Cuyahoga County, 1992-2003

Year	Monthly Average # of Children	% of Children Under Six	
1992	46,344	39.3%	
1993	45,748	39.1%	
1994	44,014	38.0%	
1995	40,178	35.0%	
1996	36,530	32.1%	
1997	32,053	28.4%	welfare reform
1998	26,182	23.4%	October 1997
1999	20,803	18.7%	
2000	16,306	14.8%	
2001	12,258	11.2%	
2002	10,570	9.7%	
2003	9,507	8.8%	

Source: CRIS-E Case/Individual Extract Files, Cuyahoga Employment and Family Services. Analysis of data by Center on Urban Poverty and Social Change.
Note: From August 1997 to present, actual data from the Case/Individual extract files was used. Prior to August 1997, data from the IMF extract files was used since Case/Individual extracts were not available prior to August 1997. Values were imputed based on the analysis of the data relationship between counts produced by the IMF data and counts produced by the Individual extracts.

The rising poverty rate accompanied by the steady decline in the welfare caseload suggests that more families with young children are strained economically in 2003 than was true at the peak of the economic boom of the later 1990s. Since they are not on welfare, they are predominantly the working poor who have the added burden of managing work and child care in a weak economy. Thus, a growing number of the families served by ECI face economic challenges but no longer have the economic cushion of a steady welfare check.

[7] This study also found that about 20% of families were worse off economically after leaving welfare. Studies of welfare leavers around the country are drawing similar conclusions.

[8] There is some discrepancy between the child poverty rate from the Census and the percent of the children on welfare, especially in the early 1990s. Since children on welfare almost always live below poverty, it is puzzling that the welfare participation rate in 1992 is almost twice the poverty rate. Several factors may contribute to this disparity. The child poverty rate computed in the Census is based on children who live in "related families." Thus, foster children are not counted in the poverty figures if they live with non-relatives. Also, the Census is known to undercount poor families and may in particular miss a large number of poor children. Finally, the Census counts children as poor if their families' income in the prior year was below the poverty threshold. Children can be on welfare if their family income is below the eligibility threshold for a given month. Moreover, households are defined differently in the Census versus the welfare system.

Child Maltreatment

Child maltreatment represents the most extreme risk for young children, and its reduction is a high priority for the ECI. Prevention of maltreatment can take two forms: (1) preventing young children from being maltreated at all (i.e., primary prevention), and (2) identifying or responding to incidents of maltreatment earlier or more effectively so that additional incidents do not occur (i.e., secondary prevention). Evidence that primary prevention is occurring requires a reduction in the proportion of young children who have experienced maltreatment. Evidence of secondary prevention might be seen in the reduction of subsequent occurrences of maltreatment. In this chapter, both first and second incidents of child maltreatment are examined for the entire population of children before and after the implementation of ECI to determine whether there was a decrease. This analysis differs in several ways markedly from the analysis of maltreatment in Chapter 4. In that chapter, the maltreatment events all post-dated ECI and the focus is on comparing Early Start and non-Early Start families. Moreover, that chapter uses all maltreatment reports as the outcome, whereas this chapter examines those reports that were found by the agency to be substantiated or indicated (this distinction is explained further below).

Measuring the level of child abuse and neglect in the young child population is fraught with difficulties. An important limitation is reliance upon child abuse and neglect reports that are received and investigated by the authorities. There are many factors along the way that affect whether an act or condition of abuse or neglect is actually observed, reported, and determined to be valid. Changes in surveillance, the process of investigation, or community expectations for parenting are factors that could explain changes in the rates of child abuse and neglect reports over time. Thus, it may be difficult to distinguish change in recognition and investigation from a true change in the amount or severity of maltreatment itself. Nevertheless, official child maltreatment reports are the only data source that can be used to track child maltreatment trends over time.

Child maltreatment indicators presented in this report are based on computerized records of child abuse and neglect reports to the Cuyahoga County Department of Children and Family Services. These reports come into the agency alleging child abuse or neglect and are accepted by the agency for investigation.[9] After investigation, each reported incident is classified as either:

- substantiated, which includes incidents where abuse and/or neglect are confirmed.
- indicated, which includes incidents where abuse and/or neglect is suspected but there is insufficient evidence to confirm it.
- unsubstantiated, which includes incidents that are reported but where no evidence of abuse or neglect is found.

The indicators of child maltreatment presented in this report include only those incidents that are classified as either substantiated or indicated. There is some debate in the field about the meaning of the indicated category, but it is generally agreed that the difference between

[9] Calls to the hotline that are screened out because they are thought not to be appropriate do not appear in the data base used here.

substantiated and indicated has to do with the certainty of the evidence that is available to the investigator rather than the seriousness of the situation. An additional complication in calculating maltreatment rates is that the agency may receive multiple reports about the same situation or occurrence. Most of the rates in this report are based on an unduplicated count of the children with one or more reports of maltreatment in a given period. This allows for the calculation of a rate that uses the child population or the birth cohort as the denominator.

Point-In-Time Estimates

Table 2.5 presents the counts of children who were maltreated and rates expressed as percentages of the age-specific population organized by calendar year from 1992 through 2003. This is a *point-in-time* rate because it counts the children who were maltreated each year.[10] The yearly rates of child maltreatment remained fairly level throughout the decade but showed a rather sudden drop in 2003. The 2003 maltreatment rate of 2.5 per 100 children is a 10-year low and is a statistically significant decrease from the average of the prior years. [11]

Table 2.5 Maltreatment of Children Under Six: Cuyahoga County, 1992-2003

Age at Time of Incident

	1992		1993		1994		1995		1996		1997	
Age	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
0	1,005	4.8%	984	4.8%	978	4.9%	897	4.5%	950	4.9%	995	5.2%
1	559	2.8%	497	2.5%	596	3.1%	488	2.5%	479	2.5%	505	2.7%
2	482	2.5%	494	2.6%	539	2.8%	564	3.0%	507	2.7%	505	2.7%
3	503	2.6%	514	2.7%	531	2.8%	487	2.6%	587	3.1%	592	3.2%
4	469	2.4%	479	2.5%	539	2.8%	536	2.8%	556	2.9%	629	3.3%
5	467	2.4%	486	2.5%	478	2.5%	523	2.7%	621	3.3%	639	3.4%
Total	3,485	3.0%	3,454	3.0%	3,661	3.2%	3,495	3.0%	3,700	3.2%	3,865	3.4%

	1998		1999		2000		2001		2002		2003	
Age	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate	Count	Rate
0	975	5.3%	899	4.9%	963	5.4%	987	5.6%	852	4.8%	747	4.3%
1	522	2.8%	467	2.6%	501	2.8%	570	3.2%	522	3.0%	414	2.4%
2	469	2.5%	463	2.5%	526	2.9%	550	3.0%	532	3.0%	380	2.1%
3	507	2.8%	449	2.5%	495	2.7%	524	2.9%	481	2.7%	405	2.3%
4	534	2.8%	470	2.5%	479	2.5%	539	2.9%	522	2.8%	380	2.1%
5	631	3.3%	506	2.7%	514	2.7%	528	2.8%	550	2.9%	389	2.1%
Total	3,638	3.2%	3,254	2.9%	3,478	3.2%	3,698	3.4%	3,459	3.2%	2,715	2.5%

[5]

Source: Child Maltreatment Data, Cuyahoga County Department of Children and Family Services. Analysis of data by Center on Urban Poverty and Social Change

[10] Using this method, if a child was abused or neglected twice in 1 year he or she is counted once, but if the events occur in 2 different years, he or she would be counted both times.

[11] In 2003, as compared to the prior years, there was an 8% increase in the percentage of maltreatment reports that were unsubstantiated. Changes in agency practice with respect to substantiation may have contributed to the decline in the maltreatment rate in 2003. In particular, the agency did make a change in practice with respect to the category of emotional maltreatment.

In the nation as a whole, the latest government report based on a compilation of state data gives the maltreatment rate for children from birth to age three as 1.6% and notes that there was an overall decline in incidents of maltreatment (U.S. Department of Health and Human Services, Administration on Children, Youth and Families, 2002).

Birth Cohort Estimates

Another way to look at child maltreatment that is pertinent to the ECI is to track birth cohorts to determine the probability that they will experience an incident of child abuse or neglect during their first 6 years of life. This way of looking at the data can show whether the chances of being maltreated (i.e. the hazard rate) have improved since ECI depending upon the age of the child. The hazard rates for successive birth cohorts are presented in Table 2.6.[12] The table is only partially complete because recent birth cohorts have not yet passed through their fifth year. For example, the entire 2002 birth cohort will not reach age six until December 31, 2008, so their total victimization rate cannot yet be calculated.

In Table 2.6, the rows represent the birth cohort years (1992 through 2002) and the columns represent the age at which the children experienced their first incident of substantiated or indicated maltreatment. The values contained in the table represent the estimated percent of children born in each year who have experienced a first incident of maltreatment at a specific age. For example, 4.28% of children in the 1992 birth cohort experienced a substantiated or indicated incident of maltreatment before reaching their first birthday. In this same 1992 birth cohort, 2.15% of children experienced their first maltreatment incident after they turned age 1 but before they turned age 2. Similarly, 1.82% experienced their first incident in their 5th year of life. Summing the age specific estimated percentages across the six age ranges results in the estimated victimization rate of 13.86% for the 1992 birth cohort. This rate reflects the estimated probability of the birth cohort experiencing an incident of maltreatment before their sixth birthday.

[12] To analyze the chances of maltreatment by birth cohorts we adopted methods used in survival analysis. Specifically, in this analysis we combined all the substantiated and indicated child abuse and neglect reports from 1992 through 2003. We then organized the reports by the birth year of the child and determined the age of the child at the time of his or her first report. For each birth cohort we counted the number of children with an initial incident at age 0, 1, 2, 3, 4 & 5. For each birth cohort we then calculated a hazard rate of being maltreated for the first time at each age between 0 and 5. The denominator for the hazard rate at each age is the number of infants in the birth cohort, minus those who have already been maltreated.

Table 2.6 Probability of Experiencing a Substantiated or Indicated Maltreatment Incident by Birth Cohort and Age at First Report (Hazard Rate)

	Age of victim at first maltreatment						
Cohort Year	**0**	**1**	**2**	**3**	**4**	**5**	**Victimization Rate by Age 6**
1992	4.28	2.15	1.94	1.78	1.89	1.82	13.86
1993	4.41	2.03	1.87	2.07	1.85	1.81	14.04
1994	4.38	1.91	1.95	1.87	1.57	1.53	13.21
1995	4.48	2.09	1.92	1.67	1.68	1.95	13.79
1996	4.73	2.25	1.78	1.79	1.88	1.69	14.12
1997	4.99	2.08	1.85	1.95	1.89	1.67	14.43
1998	4.72	2.20	2.40	2.00	1.64		
1999	4.75	2.60	2.18	1.73			
2000	5.35	2.79	2.05				
2001	4.96	2.28				Some ECI	
2002	4.39					Full ECI	

Source: Child Maltreatment Data, Cuyahoga County Department of Children and Family Services. Analysis of data by Center on Urban Poverty and Social Change
Note: Unable to calculate 2003 rate since birth cohort figure has not been released.

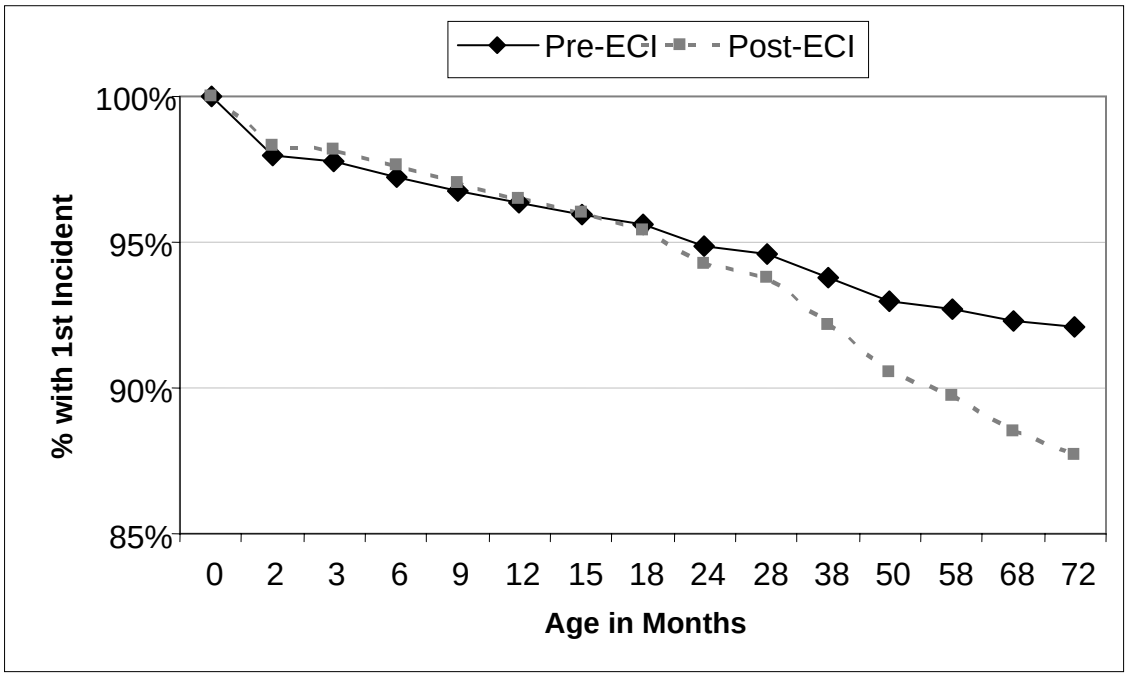
Table 2.6 shows that the risk of a first maltreatment incident is about two times greater during the first year of life than in subsequent years. This pattern holds true for all of the birth cohorts studied. It also appears that infants born in 2002 were less likely to have a substantiated or indicated child abuse or neglect incident in their first year of life than previous birth cohorts. The bottom line on the diagonal reflects the lower number of incidents of substantiated and indicated child maltreatment reports in 2003 for all age groups. In other words, all birth cohorts showed a lower hazard of experiencing a first incident of child maltreatment in 2003. Table 2.6 also provides a sense of the size of the impact of the child maltreatment on the Cuyahoga County early childhood population. The 1997 birth cohort had now reached age 6. By that age, 14.43% of the children had at least one substantiated or indicated incident of maltreatment.

The above comparison of birth cohorts does not test whether the differences are statistically significant nor does it adjust for the possibility that the birth cohorts may vary on demographic or other risk factors. To accomplish these aims, a statistical model was estimated in which information from birth certificates and welfare records was used for statistical control of risk factors in determining the probability of a child becoming a victim of maltreatment that was classified as substantiated or indicated. Sometimes known as survival analysis, the model also

accounted for the fact that the birth cohorts varied in the length of observation.[13] The analysis included all children born in Cuyahoga County between 1992 and 2002. The effect of ECI was modeled as a time-varying covariate beginning in July 1999. Details of the statistical model are presented in Appendix 2.A1.

The results of the analysis suggest that after controlling for relevant risk factors, there is a statistically significant change in the chances that a young child will become a victim of substantiated or indicated maltreatment after ECI went into effect. However, the degree of the difference between pre- and post-ECI depends on the age of the child. Following the introduction of the ECI, the risk of maltreatment was slightly lower than previously for very young children, but for older children the risk was higher after ECI. In Figure 2.2, this trend is depicted in the form of a survival curve. In this example, survival refers to children reaching an age without becoming a victim of maltreatment. In the figure at age 0, 100% of the newborns survive statistically because they have not been maltreated. The percent that have never experienced maltreatment falls as children age. It can be seen that since ECI went into effect fewer children reach their sixth birthday without a substantiated or indicated incident of maltreatment (93% survival pre-ECI and 87% post-ECI.) However, the survival curve for post-ECI is slightly above the pre-ECI until 4 months of age, becomes very similar through 24 months and then falls markedly.

[13] Life table estimates of the hazard and survival functions were obtained. Multivariate Cox proportional regression models were developed to investigate the factors associated with the risk of having a first incident of substantiated or indicated child maltreatment for the birth cohorts 1992 to 2002. Child's sex, having a prior live birth (now living), maternal age, marital status, education, and race were the factors obtained from the birth records and included in the model. Having Medicaid or being on Cash Welfare (OWF) at birth were additional covariates included in the analysis. The existence of ECI was treated as a time varying co-variate in order to determine whether ECI had a significant influence on the hazard of maltreatment controlling for all other factors. It should be noted that there may have been other occurences in addtion to ECI implementation that affected the hazards, but these were unobserved in these models. All statistical tests were two-tailed with alpha=.05.



Source: Child Maltreatment Data, Cuyahoga County Department of Children and Family Services. Analysis of data by Center on Urban Poverty and Social Change

Figure 2.2 Estimated Time from Birth to First Substantiated or Indicated Child Maltreatment Incident for Cuyahoga County Birth Cohorts, 1992-2002

The analysis also identified a number of factors that influence the chances of maltreatment. (See Appendix Table 2.A1 for the full statistical models). Controlling for all of these, the statistical model shows that the onset of the ECI increased the risk of maltreatment more for Ohio Works First (OWF) families than non-OWF families, and more for children with a teen mother than for children of older mothers.

It should be noted that the change in maltreatment risk associated with the onset of ECI does not necessarily mean that ECI caused these changes. Other conditions may have changed at or about the same time that ECI went into effect. Changes in the economy, welfare policy or agency practice could all have affected maltreatment rates. The fact that the inception of ECI seemed to have a bigger effect on children whose families received OWF and on somewhat older children could be do to the fact that, at the beginning of ECI, OWF families with children under three were all referred to Early Start. Or it is possible that ECI's efforts to reach families with services shortly after birth may have prevented child abuse and neglect reports in the very youngest children, holding down a trend that was otherwise increasing for various reasons not studied here. But these differences could also be due to other circumstances occurring around the same time as ECI, such as welfare reform, changes in child welfare policy or the practices of individuals who report suspected child abuse and neglect. Further research is needed to explore these possibilities.

Secondary Prevention

Secondary prevention of child abuse and neglect is another important objective for young children in the County. Secondary prevention is reflected in the degree to which children that have a first incident of child maltreatment avoid any additional incidents of maltreatment as a result of early detection and treatment. This possibility is examined in Table 2.7 that tracks children who have had a first incident of child maltreatment to determine their chances of having a second incident.[14] The data are organized by birth cohort and age of the child at the time of the first incident. This analysis focuses on second incidents within 1 year of the first incident, because data are available only through 2003. The table shows that there was a decline in second incidents of maltreatment in the birth cohorts born after the start of ECI. However, these declines are not seen in all age groups. For example, children who were born in 2002 and had a first incident of maltreatment in their first year of life were more likely to have a second incident than previous birth cohorts. Since the reported proportions in this table are based on fairly small numbers, there is considerable variation from year to year that may be due to chance. Therefore, in the next section results are reported of statistical modeling conducted to determine whether the decline in second incidents is statistically significant.

Table 2.7 Percent of Children Under Six Experiencing a Second Incident of Child Maltreatment Within One Year of the First Incident by Birth Cohort and Age at First Incident: Cuyahoga County, 1992-2002

Age of Victim at First Maltreatment

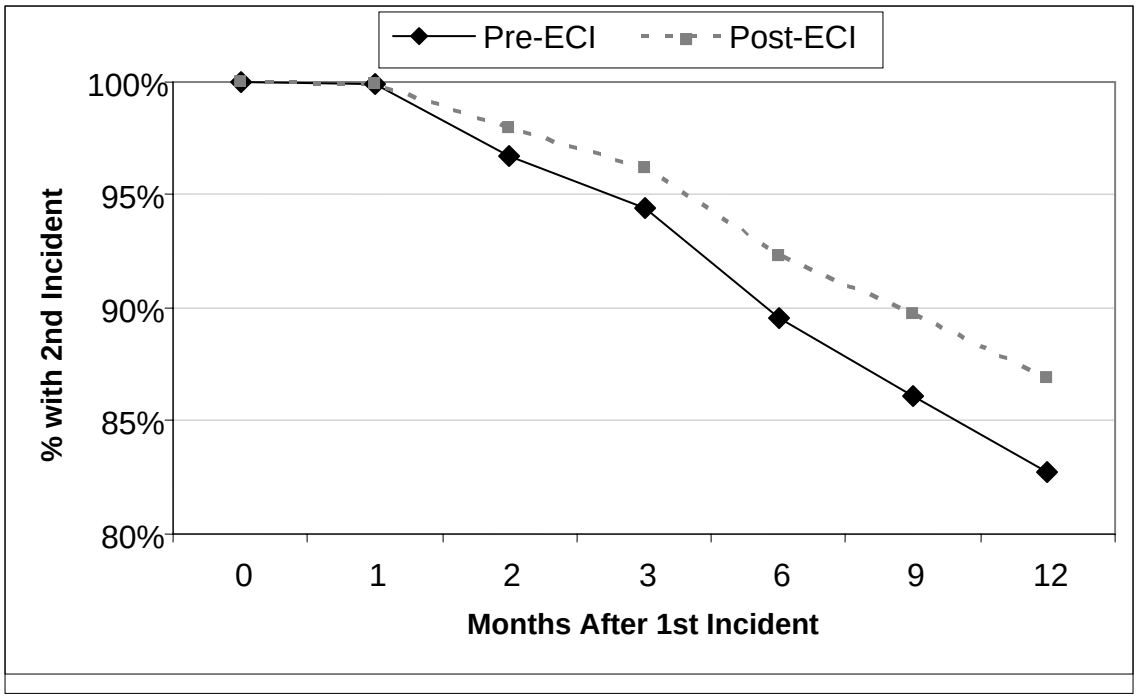
Cohort	0	1	2	3	4	5
1992	13.3%	13.4%	13.4%	12.2%	15.9%	14.9%
1993	15.3%	14.6%	12.8%	15.4%	18.2%	14.5%
1994	13.4%	12.1%	15.7%	16.0%	14.9%	14.2%
1995	14.9%	18.1%	18.3%	16.4%	13.0%	11.9%
1996	12.9%	17.2%	14.2%	8.5%	15.2%	8.9%
1997	14.3%	13.5%	14.1%	13.0%	13.3%	12.1%
1998	13.2%	13.3%	8.5%	9.3%	9.7%	
1999	10.8%	13.8%	16.7%	11.1%		
2000	9.1%	15.0%	10.4%			
2001	10.4%	12.4%			Some ECI	
2002	11.9%				Full ECI	

Source: Child Maltreatment Data, Cuyahoga County Department of Children and Family Services. Analysis of data by Center on Urban Poverty and Social Change.

To control for changes in the composition of the sample and to determine whether these changes were statistically significant, another survival analysis was performed. The survival curve appears in Figure 2.3. There was a statistically significant decrease of approximately 25%

[14] A second incident is defined as a report that occurs at least 30 days after the first incident. This definition is used to avoid counting multiple reports of the same incident as a second incident.

in second incidents of abuse or neglect after ECI went into effect (See Appendix Table 2.A2 for the statistical model and the hazard rates.)



Source: Child Maltreatment Data, Cuyahoga County Department of Children and Family Services. Analysis of data by Center on Urban Poverty and Social Change.

Figure 2.3 Estimated Time to 2nd Substantiated or Indicated Incident of Child Maltreatment Within 1 Year of the 1st Incident, Cuyahoga County Birth Cohorts, 1992-2002

Summary

The above analyses compare the chances that a child in the County will experience child maltreatment before and after July 1999, the point at which ECI went into effect. The results suggest that the chances of a first incident increased after ECI, but not for everyone; there was no increase for children under 4 months of age. Increases in maltreatment after July 1999 were greater for children on OWF than for those not on OWF and for children whose mothers were teens when they were born as compared to children of older mothers. The chances of a second incident of maltreatment within 1 year of the first incident declined after July 1999 for all maltreated children.

How should these findings be interpreted? The pattern of an increase in first incidents accompanied by a decrease in second incidents could suggest that there was a tendency post July 1999 to earlier recognition of maltreatment cases that were then more likely to be successfully resolved without a second incident. Whether ECI had a role to play in this is unclear, but it is possible that ECI helped to uncover some cases before the situations had become too difficult to resolve. Unfortunately, because this study did not include a contemporaneous control group not

exposed to ECI, it is not possible to rule out the possibility that other events that occurred simultaneously were responsible for the change.

Child Health Insurance

Access to health care is fundamental to the health of young children, and children without health insurance are often denied access to regular care. Therefore, the percent of children under age six without health insurance is an important statistical indicator of access to health care. A national polling firm conducted a telephone survey in 1998, 2001, and 2004 of a probability sample of Cuyahoga County households and asked parents about health insurance coverage of their children.[15] The results of this survey are presented in Figure 2.4 for children under six.

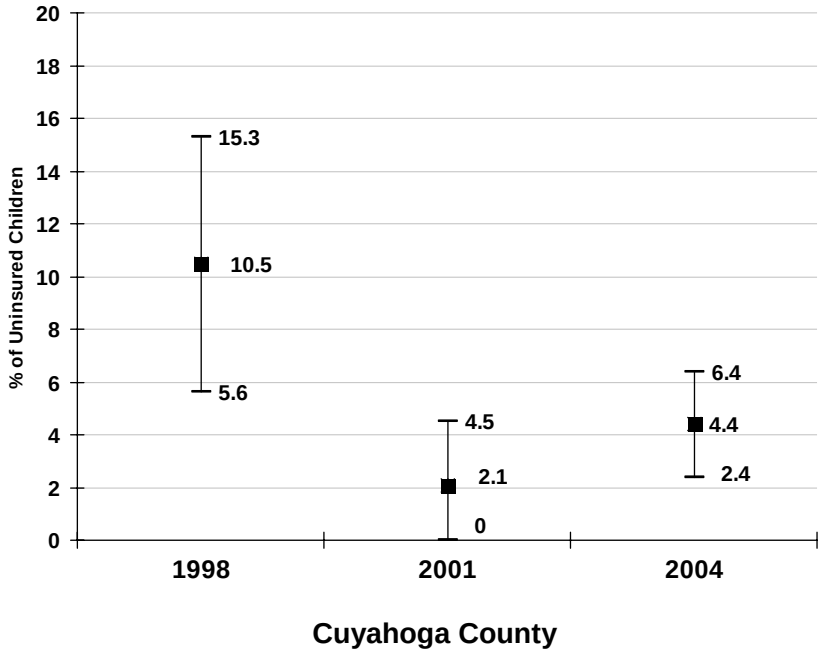


Figure 2.4 Children Under Age Six with No Health Insurance Coverage (with 90% Confidence Intervals), 1998, 2001 and 2004

Source: Ohio Family Health Survey, 1998, 2001 and 2004. Analysis of data by Center for Community Solutions.

The change in the proportion of children under six who were uninsured fell markedly between 1998 and 2001. The change was statistically significant ($p < .01$). This represents an unprecedented decline in uninsurance rates that can be attributed, in part, to the expansion of Healthy Start/Medicaid, and outreach, which was part of the ECI. Additionally, the percent of children leaving welfare who keep their Medicaid coverage has also risen to 88% (Coulton et al.

[15] The Center for Community Solutions designed and managed the survey in Cuyahoga County. The survey was weighted since various groups were over-sampled. Standard errors were computed using SUDAAN, which adjusts for the design effects of the weights.

2004). By 2004, there was a slight increase in the percent with no health insurance although the change was not statistically significant.

Child Deaths

Early childhood deaths are another indicator of child health. Table 2.8 displays the number of deaths and death rates of children under six from 1990 through 2002. There has been an overall decline in child death rates over the decade. The infant mortality rate is shown at the bottom of the table.[16] Although this rate has moved up and down over the years since ECI began, these changes from year to year are not statistically significant. Nevertheless, the infant mortality rate in Cuyahoga County exceeds the national average of 6.9 per 1000 live births.

Table 2.8 Deaths of Children Under Six and Death Rate per 1000, Cuyahoga County, 1990-2002

Age	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
>1	329	291	289	268	254	239	189	206	170	175	176	161	180
1	17	21	14	14	15	20	9	4	9	9	5	13	7
2	11	8	9	7	7	8	11	6	5	5	10	7	3
3	11	10	3	11	9	9	4	8	6	4	10	5	1
4	6	2	4	8	8	6	3	2	5	7	5	3	2
5	6	3	4	5	2	3	7	5	3	3	3	4	2
Total	**380**	**335**	**323**	**313**	**295**	**285**	**223**	**231**	**198**	**203**	**209**	**193**	**195**
Death Rate	**3.2**	**2.8**	**2.7**	**2.7**	**2.5**	**2.5**	**2.0**	**2.0**	**1.8**	**1.8**	**1.9**	**1.8**	**1.8**
Death Rate children <1	**14.6**	**12.7**	**13.1**	**12.5**	**12.5**	**12.0**	**9.7**	**10.8**	**8.9**	**9.5**	**9.3**	**8.9**	**10.4**

Source: Ohio Department of Health, Death records, 1990-2002. Analysis of data by Center on Urban Poverty and Social Change.

Early Care and Education

The ECI envisions a system of high quality care and early education for all young children in Cuyahoga County. This commitment derives from the scientific evidence that effective early childhood education can prevent academic failure and other negative outcomes in later years, especially for at-risk children (Karoly et al., 1998). Towards that end, the ECI endeavored to expand access to regulated child care providers and to link 3- and 4-year-olds to licensed child care and preschool programs.

[16] This rate is the number of deaths under age one per 1,000 live births.

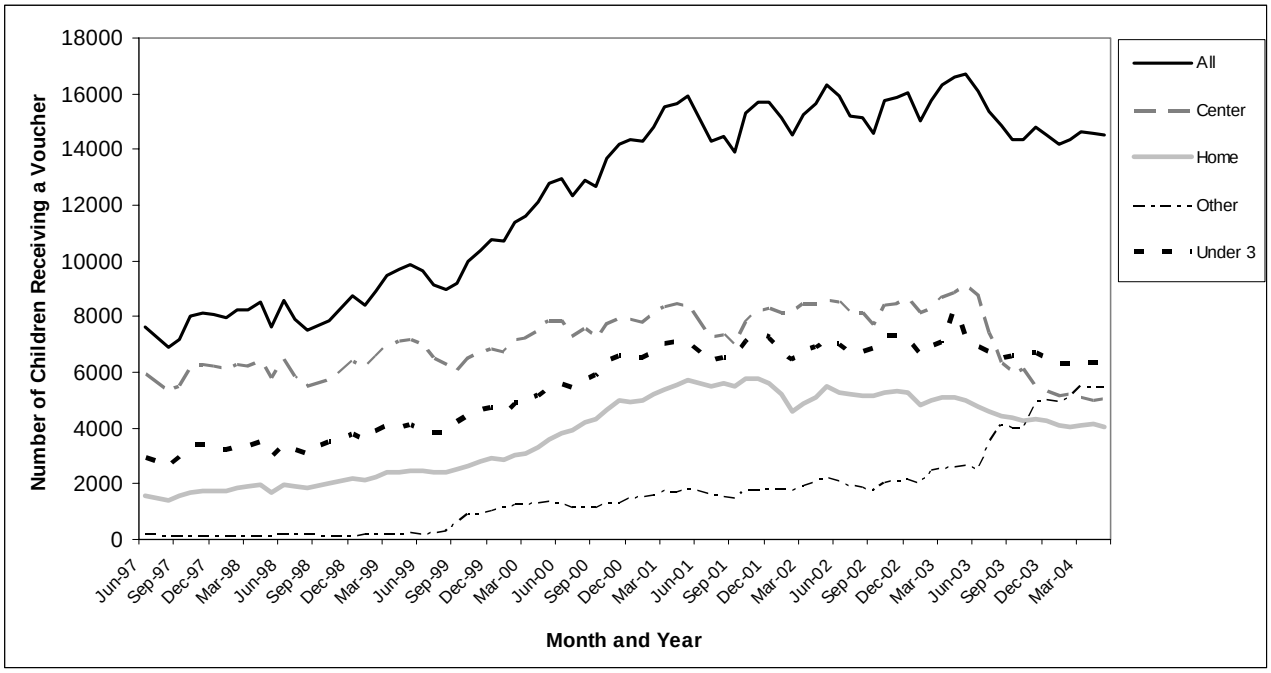
Table 2.9 Number of Children Enrolled in Regulated Child Care by Age Group and Setting, Cuyahoga County, 1996, 1998, 2000-2004

Year	Infant 0-17 mos.	Toddler 18-36 mos.	Preschool 37-60 mos.	Total	Percent of Population
1996	1,707	3,340	21,885	26,932	23.6%
1998	2,744	5,765	26,035	34,544	30.8%
2000	3,491	6,534	24,979	35,004	31.8%
2002	3,957	7,525	21,900	33,382	30.7%
2003	4,243	7,834	25,906	37,983	35.2%
2004[a]	3,982	7,542	27,270	38,794	

Source: Starting Point Child Care Resource and Referral System. Analysis of data by Center on Urban Poverty and Social Change.
[a]2004 population estimates not available.

With respect to child care enrollment, an indicator of progress is the number of children enrolled in regulated child care. Starting Point, the local child care Resource and Referral (R & R) agency, periodically conducts a survey of family and center-based child care providers. The survey obtains information on enrollment from each provider. Table 2.9 uses Starting Point's survey to estimate the number of children enrolled in regulated center-based child care. The number of children in regulated care has steadily increased, so that by 2004 there were 38,794 children enrolled. The rate of increase was greatest for children under age three, the group targeted by ECI.

An additional indicator of improved access to child care in recent years comes from data on the use of child care vouchers to pay for care. Families with incomes below 150% of poverty are eligible for help in paying for child care. As shown in Figure 2.5, the number of families redeeming child care vouchers increased until 2003, when there was a down turn. The growth has been most visible in family child care homes whose expansion and quality have been explicitly targeted by ECI programs. There was also a recent increase in the "other" category which was mainly children using child care vouchers in Head Start programs. Two factors external to the ECI may have influenced redemption of child care vouchers. The recession threw more individuals out of work, so the need for child care may have decreased. Second the eligibility threshold for child care subsidies varied during the study period. From 1997 to 2002, the threshold was 185% of poverty level, but in 2003 it was lowered to 150%.

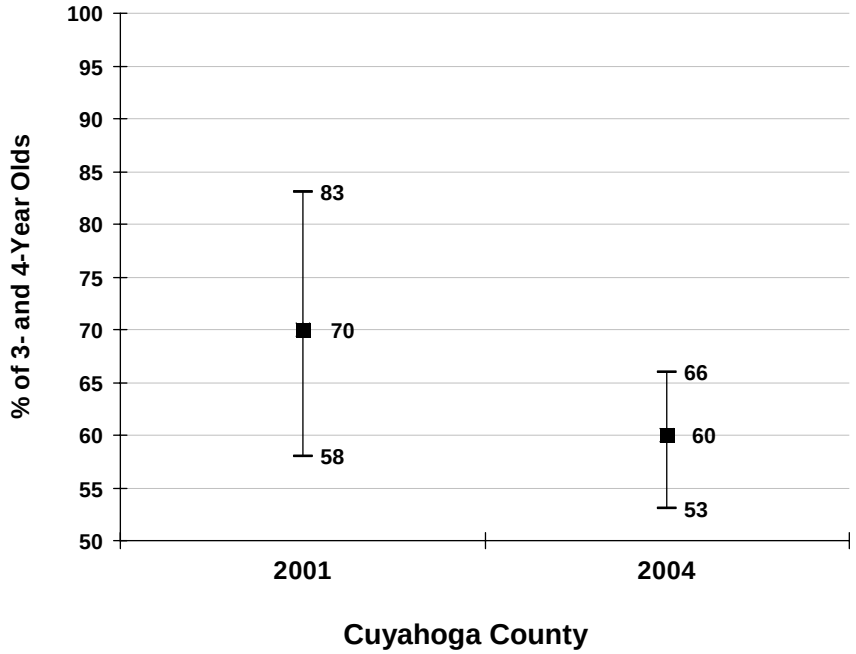


Source: Cuyahoga County Employment and Family Services, Day Care Voucher files, June 1997- May 2004. Analysis of data by Center on Urban Poverty and Social Change.

Figure 2.5 Monthly Use of Child Care Vouchers, Children Under Six, Cuyahoga County, June1997-May 2004

Preschool enrollment is difficult to track for the child population, because it is provided in many settings that are not part of an organized system of care, such as Head Start or public preschool. Many low-income children are enrolled in Head Start, but since more mothers are now working, a growing number of children may be participating in preschool programming within the context of child care centers. Public preschool for children with special needs is administered through numerous local boards of education. Myriad non-profit and neighborhood-based organizations operate preschool programs as well. Thus, valid and unduplicated counts of enrollment cannot be obtained at the present time.

The lack of data prompted the evaluation team to request that several questions about preschool enrollment be included in the 2001 and 2004 Ohio Family Health Survey for Cuyahoga County residents. Respondents were asked whether their children, ages three to four, were participating in preschool programs such as Head Start, a private preschool, a preschool program within a child care center, or a public preschool. The question was identical to the one asked on a national survey, so the results in Cuyahoga County can be compared to the nation.



Source: Ohio Family Health Survey, 2001 and 2004. Analysis of data by Center for Community Solutions and by Center on Urban Poverty and Social Change.

Figure 2.6 Enrollment of 3- and 4-Year Old Population in Preschool, Nursery School and/or Head Start (with 90% Confidence Intervals)

According to the survey data, the estimate of preschool enrollments for children ages three and four in Cuyahoga County was 70% in 2001 and 60% in 2004. Given the margin of error in the surveys (dictated by sample size), this difference is not statistically significant.[17] As illustrated in Figure 2.6, the 90% confidence intervals for these estimates overlap substantially. These participation rates compare favorably with a national enrollment rate of approximately 52% for the latest year reported, which is 2001 (U.S. Department of Education, National Center for Education Statistics, n.d.).

Early Identification of Children with Disabilities

Children with developmental delays and other disabilities should be identified as early as possible so that they can receive timely services. Through its network of services and public information, the ECI anticipated that children with special needs would be identified and involved with Early Intervention (EI) services earlier in life. The age at which children receive their first Individualized Family Service Plans (IFSP) is used as an indicator of early identification. Table 2.10 shows the number of children in EI by birth cohort and their age at their first visit. It can be seen that the number of children with their first visit before 6 months of

[17] In 2001 the survey sample had only 120 respondents with children ages 3-4 and 288 qualifying respondents in 2004. .

age has more than doubled since the inception of the ECI. EI also appears to be reaching a larger percentage of the birth cohort since ECI began. For example, even though they have only been tracked through 24 months of age, the 2002 birth cohort already has 6.39% of its children identified by EI.

Table 2.10 Number of Children in EI by Birth Cohort and Age of First EI Visit

Birth Year	0-6 mo	6-12 mo	12-16 mo	18-24 mo	24-30 mo	30-36 mo	≥36 mo	Percentage of Cohort
1997	197	74	69	98	124	104	76	3.48
1998	228	112	111	143	222	164	46	4.93
1999	502	188	146	174	227	171	47	7.39
2000	503	245	202	209	239	173	19	8.04
2001	608	210	157	222	198	55		7.79
2002	679	223	131	74				6.39

Source: KIDS database provided by Help Me Grow, 1997-2003. Analysis of data by Center on Urban Poverty and Social Change.
Note: Data incomplete for 2001 and 2002 birth cohorts.

Conclusion

The ECI, through its new and expanded programs, policy advocacy, and systems reform, aims to enhance the well-being of all young children in Cuyahoga County in their early years. This chapter shows the trends in selected child well-being indicators that ECI has targeted for improvement. For most of the indicators, there are now several data points available both before and after ECI implementation. However, from a birth cohort perspective, the 2000 birth cohort has only been tracked through 2003 or their third birthday. Thus, the full effects of ECI cannot yet be assessed. Nevertheless, several tentative conclusions can be drawn from the indicators.

In line with its goal of "Healthy Children," the ECI embraced the goal of reducing the number of uninsured children in Cuyahoga County. The significant drop in the percent of young children who are uninsured is evidence that the goal is being achieved. Lack of health insurance is a documented barrier to receiving timely and high quality health care and this barrier has been removed for almost all of Cuyahoga County's young children. Child deaths, an additional indicator of health, have been decreasing throughout the decade. Low birth weight rates and infant mortality have not declined, supporting the wisdom of ECI's expansion to the prenatal period.

Enabling young children to receive high quality child care and to have access to pre-kindergarten education is also an important aim of ECI. Enrollment in regulated child care and preschool were chosen as indicators of these goals. The indicators show that enrollment of children under 3 years of age in regulated child care, especially family child care homes, has increased in recent years. Although no baseline data were available on preschool enrollment, a recent survey shows that the percentage of 3- and 4- year olds attending preschool programs in Cuyahoga County is above the national average.

In line with its goal of promoting effective parents, ECI chose child abuse and neglect as an important outcome indicator. The rates of substantiated and indicated maltreatment had been persistently high for many years, including the first several years of ECI. For the first time, in 2003, there was a significant drop in child maltreatment rates. Yet statistical models that correct for changes in birth cohort characteristics show that when the entire period of ECI is considered, the risk of having a first incident of maltreatment rose after ECI for children beyond their first few months of age. It also showed that incidents were slightly less frequent post-ECI for the very youngest children, perhaps reflecting ECI's early contact with families. The fact that second incidents of child abuse and neglect fell following ECI suggests that secondary prevention may be occurring. This pattern may be indicative of improvements in services to children and families who have already been identified as maltreated.

An important indicator of the status of families with young children is their economic self-sufficiency. On this outcome there is a mixed picture. While there has been a rapid decrease in the percentage of Cuyahoga County's children who are in welfare-reliant families, poverty rates among children rose during the recent recession. Rising child poverty poses challenges for ECI since it increases the material needs and other stressors faced by many families. It supports the plans of ECI to engage the community more broadly in creating the social and economic context for families and children to succeed.

Finally, early identification of children with special needs is a sign that they will get timely access to services supporting parent effectiveness. Since ECI began, many more special needs children are being identified and served before they reach their first birthday.

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Appendix 2.1

In order to determine whether the rates of child maltreatment changed following the inception of the ECI, a statistical method, referred to as proportional hazard modeling, was used. This is a method of event history or survival analysis and is appropriate to examine an outcome where the time to the outcome needs to be taken into account and where some cases cannot be observed for the entire time. In this case, the event is a substantiated or indicated incident of child abuse or neglect, which we refer to as maltreatment. All children born in Cuyahoga County in 1992-2002 were tracked up to age six to determine if (and when) they had a first or second incident of maltreatment. This was accomplished by probabilistic matching of all birth certificates against the database of child maltreatment reports in the County. Because the latest year for which maltreatment reports were available was 2003, children were observed for varying lengths of time. This problem is known as censoring and proportional hazard modeling is able to provide estimates that take censoring into account.

Statistical modeling allows for a number of predictors to be examined simultaneously for their effect on an outcome. In this analysis, we were interested in determining whether the frequency of child maltreatment differed between the pre-ECI and post-ECI period, but at the same time it was important to control for a number of known risk factors. Moreover, we were also interested in determining whether the effect of ECI was different depending upon some of these risk factors. It should be remembered, though, that although statistical modeling can equate the pre- and post- ECI periods on the observed risk factors, it cannot hold constant conditions and events that are not observed. Thus, there may still be omitted factors that occurred coincidentally with the ECI that may be partly responsible for the differences attributed to ECI in these models.

The results of the analyses appear in Appendix Tables 2.A1 and 2.A2. The variables included in the models are listed in the first column and defined as follows:

- Sex: This is the sex of the child listed on the birth certificate, coded 0 if the child is female and 1 if male.
- Tobacco use: This is whether the mother used tobacco during pregnancy as reflected on the confidential portion of the birth certificate information provided by the hospital.
- Alcohol use: This is whether the mother used alcohol during pregnancy as reflected on the confidential portion of the birth certificate information provided by the hospital.
- High school graduate: This is whether the mother graduated from high school by the time of the child's birth as reflected on the confidential portion of the birth certificate information provided by the hospital.
- Received care in 1st trimester: This is whether the mother had received at least one prenatal care visit during the first 12 weeks of pregnancy as reflected on the confidential portion of the birth certificate information provided by the hospital.
- Child received OWF and Medicaid in the first 6 months of life: This is whether the child was a recipient on an OWF and Medicaid case within the first 6 months after birth as reflected in computerized records from the Client Registry Information System Enhanced (CRIS-E) provided by Cuyahoga Employment & Family Services.

Table 2.A1: Multivariate Analysis: Time to First Substantiated or Indicated Maltreatment Incident (N=213,819)

Variables	Parameter Estimates	Standard Error	Hazard Ratio
Sex			
0=Female	reference		
1=Male	-0.01526	0.01452	0.985
Tobacco Use			
0=No	reference		
1=Yes	0.64465	0.01738	1.905***
Alcohol Use			
0=No	reference		
1=Yes	0.63173	0.03175	1.881***
High School Graduate	reference		
0=No	-0.56519	0.01640	0.568***
1=Yes			
Received Care in 1st Trimester			
0=No	reference		
1=Yes	-0.28007	0.01595	0.756***
Child Received OWF and Medicaid in First 6 Months			
0=No	reference		
1=Yes	1.05471	0.02538	2.871***
Child Received Medicaid Only in First 6 Months			
0=No	reference		
1=Yes	0.66211	0.02629	1.939***
Mothers Age			
Under 20 years old	reference		
21-35 years old	-0.21905	0.02374	0.803***
Over 35 years old	-0.28001	0.04707	0.756***
Race			
White	reference		
Black	0.34204	0.01881	1.408***
Hispanic	-0.18018	0.03746	0.835***
Others	-0.05989	0.07714	0.942
Child Birth Order			
Third or more born child	reference		
First or second born child	-0.55321	0.01703	0.575***
Marital Status			
0=not married	reference		
1=married	-0.65725	0.02362	0.518***
ECI in Effect (After July 1999)			
0=No	reference		
1=Yes	-0.16439	0.04505	0.848***
Interaction Effect			
ECI * duration (over 4 months)	0.80996	0.03689	2.248***
ECI * OWF	0.21047	0.03129	1.234***
ECI * mother's age (21-35 years old)	-0.08688	0.03175	0.917**
ECI * mother's age (over 35 years old)	-0.03058	0.06709	0.970

***0.05 < p <=0.01 / **0.01< p <=0.001 / *** P<.0001**

- Child received Medicaid in the first 6 months of life: This is whether the child was a recipient on a Medicaid (but not OWF) case within the first 6 months after birth as reflected in computerized records from the CRIS-E provided by Cuyahoga Employment & Family Services.
- Mother's age: This is the mother's age at the time of birth as reflected on the birth certificate.
- Race: This is the race of the child as reflected on the birth certificate.
- Child birth order: This is whether the child is first or second born (coded 1) versus third or more in the birth order (coded 0).
- Marital status: This is the marital status of the mother at the time of birth reflected on the birth certificate.
- ECI in effect: This is a time varying covariate, coded as 0 if the event is before July 1999 and 1 if it is after July 1999.
- Interaction effects: These are the interactions between ECI and other variables that were statistically significant.

The remaining columns in the table are estimates from the statistical model and are indicative of the effect of the variables on the chances of a child born in Cuyahoga County becoming the victim of substantiated or indicated maltreatment. Most directly interpretable are the hazard ratios which represent the increased or decreased risk of maltreatment associated with a particular variable holding all other variables in the model constant. The asterisks mark those effects that are statistically significant. Thus, it can be seen that sex does not have a statistically significant effect on maltreatment, but that maternal smoking during pregnancy is associated with a child being at 1.9 times greater risk. Hazard ratios of less than 1 mean that the factor is associated with a lower risk. For example, having a high school education (as compared to not being a high school graduate) has a hazard ratio of .568. Taking 1 minus the hazard ratio (1-.568) suggests that a mother having a high school degree lowers the chances of maltreatment by a factor of .433 or about 43%. In these models, the hazard ratio is always with respect to the reference category. Thus, for example, African American children are 1.408 times more likely to be victims of maltreatment than the reference category which is white children.

The calculation of the hazard rate for the onset of the ECI is more complicated, because the ECI variable shows a statistically significant interaction with other variables. Statistical interaction implies that the effect of ECI on maltreatment depends on other variables. These effects are seen at the bottom of Appendix Table A2.1. Specifically, ECI raises the chances of maltreatment for children over 4 months old but not for those who are younger. ECI increases maltreatment more for children who are on OWF and Medicaid cases than for children who are not on OWF and Medicaid. The effect of ECI is less strong on children whose mothers are not teens. Taking all of these effects together, we can estimate the hazard rate for the ECI for children over 4 months, who were on OWF/Medicaid and whose mothers were teens. In this group, the hazard ration is 2.0930.[18] For children with these characteristics, the chances of

[18] To get the conditional hazard rate for this group we sum the coefficients (-0.16439 + 0.80996 + 0.21047 - 0.08688 - 0.03058)= 0.7386. To get the hazard ratio we take the exponent of 0.7386 ($e^{0.7386}$) = 2.0930.

substantiated or indicated maltreatment rose after ECI by a factor of 2.1930. But for children who were under 4 months of age, not on OWF/ Medicaid and whose mothers were over 35, the chances of maltreatment fell after ECI by approximately 15%.

As mentioned in the body of this chapter, the statistical relationship between ECI and increased risk of child maltreatment in some groups of children does not necessarily mean that ECI is solely responsible for these changes. In particular, the increased risk for children on OWF/Medicaid must be interpreted in light of the fact that welfare reform had forced tens of thousands of families off the welfare roles by July 1999 when ECI started. The families who were still on welfare in 1999 may have been disadvantaged compared to previous welfare recipients in ways that could not be controlled in this study. Moreover, welfare reform may have placed pressures on later (e.g. post July 1999) welfare families that previous welfare families did not experience.

Table 2.A2 examines the hazard of a second substantiated or indicated incident of child maltreatment within 1 year of the first incidents. Many of the variables have a similar effect on this outcome as they did in the previous table. However, there are several notable differences. As shown in the table, African American children have a lower hazard of a second incident than do white children by approximately 28% (i.e., 1-.718). A 1 year increase in age at the time of a first incident is associated with a 1.228 times greater hazard of a second incident. After ECI went into effect, the rates of second incidents of maltreatment within 1 year declined. The absence of any statistically significant interaction effects suggests that this decline occurred in all groups. The same caution should be exercised in interpreting this finding as was discussed above as there may have been other changes coinciding with ECI that could not be controlled in this analysis.

Table 2.A2: Multivariate Analysis: Time to 2nd Substantiated or Indicated Incident (Limited to 1 Year After 1st Incident, N=15,962)

Variables	Parameter Estimates	Standard Error	Odds Ratio
Sex			
0=Female	reference		
1=Male	-0.1025	0.0448	0.903*
Tobacco Use			
0=No	reference		
1=Yes	0.1705	0.0514	1.186***
Alcohol Use			
0=No	reference		
1=Yes	0.1426	0.0957	1.153
High School Graduate			
0=No	reference		
1=Yes	-0.1458	0.0488	0.864**
Received Care in 1st Trimester			
0=No	reference		
1=Yes	-0.1589	0.0475	0.853***
Child Received OWF and Medicaid in First 6 Months			
0=No	reference		
1=Yes	0.4255	0.0635	1.530***
Child Received Medicaid Only in First 6 Months			
0=No	reference		
1=Yes	0.1398	0.0829	1.150
Mothers Age			
Under 20 years old	reference		
21-35 years old	-0.1806	0.0592	0.835**
Over 35 years old	-0.3423	0.1201	0.710**
Race			
White	reference		
Black	-0.3307	0.0541	0.718***
Hispanic	-0.3417	0.1163	0.711**
Others	0.1181	0.2250	1.125
Child Birth Order			
Third or more born child	reference		
First or second born child	-0.3728	0.0527	0.689***
ECI Impact (After July 1999)			
0=No	reference		
1=Yes	-0.3123	0.0466	0.732***
Children's Age at the 1st Incident	0.2052	0.0128	1.228***
Marital Status			
0=not married	reference		
1=married	-0.1794	0.0666	0.836**

***0.05 < p <=0.01 / **0.01< p <=0.001 / *** P<.0001**

Chapter 3
The Scope and Reach of the ECI: Monitoring the Coverage and Connections of Initiative Programs

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Chapter Summary

This chapter examines the scope and reach of the Early Childhood Initiative (ECI) in regard to the services provided to the early childhood population (age birth to six years of age) in Cuyahoga County. The scale of ECI programs grew rapidly after the Initiative was launched in July 1999 and the services have achieved considerable scope over the following five years. Some programmatic element of ECI is now reaching the vast majority of newborns and their families in the county. As intended, the reach continues to be both broad and focused. Overall findings on the Initiative's scope and reach include:

- In its first 4.5 years, the ECI reached over 116,000 Cuyahoga County children prenatal to 6 years of age. The number of children served annually has grown from 45,000 to over 65,000 in the first five years.
- Approximately 76% of children born between July 1999 and December 2003 have received one or more ECI services. Among older children (born July 1993-June 1999) 40% have received one or more ECI services.
- Infants are being served earlier in life as the Initiative unfolds. For the most recent birth cohort on which complete data are available, 70% had contact with at least one ECI service before 3 months of age, up from 58% when the ECI began.
- There is greater evidence of ECI families engaging multiple ECI services. Approximately 20% of all children under six and 28% of infants under 1 year old who are touched by ECI rely upon services from more than one of the components, and the extent of cross-program usage within ECI has increased sharply over the first 5 years.
- ECI families also rely on a number of other public services. For example, 54% of the families who receive an ECI service also participated in the Food Stamps Program, 40% received cash assistance Ohio Works First (OWF), and 23% receive a child care voucher. Approximately, 12% have an open case with the Department of Children and Family Services. The overlap with other public systems is greatest for families using Early Start and Healthy Start/Medicaid.
- The programs of the ECI have reached considerable geographic spread throughout the County. Overall, 61% of the children reached by the ECI were residents of the City of Cleveland and 39% were residents of the County outside the City boundaries. Programs of the ECI targeted to at-risk families reflect this targeting in that more than two-thirds of the families they have served resided within the City of Cleveland. Other programs serve larger numbers of families outside the City (up to 60%), reflecting greater geographic dispersion in the families they target.

Over its first five years, the ECI has solidified a system that combines breadth and depth in its efforts to meet the needs of young children and their families in Cuyahoga County. The considerable scope of the Initiative naturally draws attention to those remaining children and families who may have needs but are not being reached. Moreover, the Initiative's ongoing attention to issues of program delivery and coordination promise to enhance the overall effectiveness of the services of the ECI as it moves beyond its formative stages.

Introduction

Efforts to impact community-wide social issues present an array of challenges for evaluators seeking to assess their impacts (Saunders & Heflinger, 2004). The magnitude of such community initiatives and their often diffuse nature result in data availability and access issues, as well as the analytic difficulties of linking targeted programs to community-level indicators (Gambone, 1998; Hollister & Hill, 1995). Despite these challenges, the evaluation of the Early Childhood Initiative (ECI) has included methods to assess program implementation and to explicitly monitor the extent to which the effort reaches its intended audiences.

Although the ECI comprises multiple agencies and programs, its vision continues to be singular—a system that fosters and supports effective parents, healthy children and high quality child care for all. The system, as envisioned, is more than just a set of services but includes the myriad connections among families and organizations. To achieve that vision, the scope of the ECI is broad and extends to all families who have a need for such supports. However, systems and populations in need are abstract concepts that are difficult to quantify in reality. This chapter, in a limited way, addresses the question of the scope and reach of the ECI system by tracking birth cohorts to determine the degree to which they become enrolled in the multiple ECI service components. It also examines the overlap of the ECI population with other public services and the geographic spread of ECI programs across the County. ECI services are defined as (a) home visiting through the Welcome Home or Early Start programs, (b) home-based child care at a home certified during ECI, (c) technical assistance and placement services delivered through the special needs child care program, (d) Early Intervention (EI) services, and (e) enrollment in the Healthy Start/Medicaid program. [*Technical note: Throughout the analysis section, figures reported in some tables may not sum to 100% due to rounding error.]*

Methodology

This chapter builds on previous evaluation methods and study of the implementation of the ECI (Coulton, Withers, Andrade, & Fischer, 2003). Computerized individual records from ECI programs and public agencies served as the principal data sources for these analyses. The challenges of working with large administrative data sets are well documented, and as such numerous strategies were employed to maximize their usability (English, Brandford, & Coghlan, 2000). The methodology involves tracking participation in ECI programs and other public services by the population of children in Cuyahoga County who were under 6 years of age at any time between July 1999 and December 2003. This window begins with the initiation of the ECI and extends to the end of 2003, the period for which full data were available. ECI defined as its target population all County residents from birth through age five. Much of the analysis organizes the data by 6-month birth cohorts. A birth cohort includes children who were born during each 6-month period.

Computerized individual records from ECI programs and public agencies served as the data sources for these analyses. All records were maintained on highly secure servers and could be accessed only by authorized personnel certified in guarding the privacy of records. The data processing and storage methods complied with the University's regulations on the protection of confidential data. The study population was identified from the following administrative records:

***Birth Certificates*:** Birth certificate records for Cuyahoga County residents were obtained from the Ohio Department of Health. Records of all live births were extracted for

calendar years 1993 through 2002, to include all children who would have had the opportunity to be reached by an ECI service before their sixth birthday.

Data on Use of ECI Services:

***Home Visiting and Early Intervention*:** Records of participation in the Help Me Grow programs--Welcome Home, Early Start and Early Intervention--were extracted from Help Me Grow's proprietary database (i.e., KIDS system). Children who were under 6 years old between July 1999 and December 2003 and had at least one visit by Welcome Home or Early Start, or completion of an Individualized Family Service Plan (IFSP) through Early Intervention recorded in the database were counted as participating in the program.

***Medicaid Enrollment*:** Monthly extracts of Medicaid eligibility records were obtained from the Ohio Department of Job and Family Services' (ODJFS) Client Registry Information System-Enhanced (CRIS-E) system. Children who were under six at the time and had at least 1 month of eligibility for Medicaid between July 1999 and December 2003 were counted as participating in that component of ECI.

Family Child Care: Children who received care in family child care homes that were part of the ECI were identified through their County child care vouchers. The family child care homes in ECI were listed and matched to the voucher file prepared by ODJFS. Children who received at least 1 month of care in these ECI family child care homes between July 1999 and December 2003 and were under 6 years of age were counted as participants. This method misses the estimated 20% of children in these family child care homes who were not using child care vouchers.[1]

Special Needs Child Care: A database from Starting Point was used to identify children whose child care providers were given technical assistance on their behalf or for which placement services were provided. However, children for whom there was no signed parental consent form were not included in the database (approximately two-thirds of the special needs children served). Given this, special needs child care services are not included in selected analyses.

Data on Use of Other Public Programs:

Welfare and Food Stamp Records: Children receiving cash welfare (Ohio Works First, OWF) and/or Food Stamps in Cuyahoga County were identified from monthly extracts from ODJFS's CRIS-E system.

Child Care Vouchers: Children who received child care (center-based or home-based) through the use of County child care vouchers were identified in the database maintained by ODJFS. Children who received at least one month of care subsidized through the use of a voucher between July 1999 and December 2003 and were under 6 years of age were counted as participants.

Child Welfare: Child welfare participation was determined using records from Cuyahoga County Department of Children and Family Services. Children who were under 6 years

[1] Based on sample data from the Family Child Care Homes portion of the ECI evaluation, 20% of the children present at the time of observation were not using a child care voucher; of these, half were the care provider's own children and the other half were private-pay clients.

old and had an open case with the agency at any time between July 1999 and December 2003 were counted as child welfare participants.

In order to determine which children received multiple ECI and public services, it was necessary to match the records extracted from the above data sources to create a single record per child. The data sources did not all contain common or unique identifiers so probabilistic matching was performed. The data entities were matched using the individual demographic information for each child according to the variables common to both databases. The variables included: child's date of birth, child's first name, child's last name, mother's date of birth, mother's first name, mother's last name, street name, street number, city, zip code, sex, social security number, and Soundex variables for names.[2]

Data sets for matching were prepared for each of the data entities. Two blocking strategies were employed in which a successful match required congruity between data sets on specific variables (child's date of birth and the Soundex value of the child's first name). The birth certificate data served as the base of the matching, and all other data entities were first matched to the birth certificate data. Records that could not be matched to the birth certificates were matched to the Early Childhood Initiative Register. The ECI Register is a cumulative data file of all children appearing in any data set, including children not born in Cuyahoga County, with the unique identifiers for each of the data entities matched to each other and to an ECI identifier that has been created for the purposes of the evaluation. All records were geocoded so that they could be analyzed spatially. Unless otherwise noted, the maps are based on the home address of the child on the date of receiving his or her first ECI service. In other words, a map of Medicaid participants would be based on the first address in the data file for that child after ECI began in July 1999. Maps that show the location of children who used multiple ECI services use the child's address at the time of the first service.

Evaluation of each matching process involved the following procedures: (a) analysis of the probabilistic weights, (b) assessment of the child's first and last names, (c) assessment of the child's date of birth (in the case of strategies that were not blocked by the date of birth), (d) analysis of ties (these included twins and siblings as well as duplicated assignment to entities' identification key variables), and (e) a 10% random sampling of all of the matching records were clerically reviewed.

Some of the analyses in this chapter required the calculation of a proportion of the birth cohort that received an ECI service. The birth certificates provide a fairly accurate estimate of the size of the birth cohort at the outset, but as the birth cohort ages, migration begins to have an effect. Since the counts of ECI program participants are cumulative, the denominator in most instances has been adjusted for in-migration. In other words, the size of the birth cohort is adjusted upward for an estimate of the number of individuals born in that time period who would have moved into Cuyahoga County. The in-migration adjustment for 1 year is fairly trivial (i.e., approximately 1%) but this will accumulate over time. The question remains as to when and how to adjust for out-migration rates. Children born in the County who later move out have a chance

[2] Two SAS macros were obtained from the Manitoba Centre for Health Policy [www.umanitoba.ca/centres/mchp/]. One macro was used for computerized probabilistic linkage, and the second macro was used to create Soundex variables based on names to compensate for some of the inconsistencies found in misspelled names.

to participate in ECI, even though their ECI exposure is cut short. Future research reports will use a statistical model that adjusts for the effect of in- and out-migration on the length of ECI exposure. Since this report only covers 4.5 years of participation, the bias due to out-migration should be minimal at this point.

Previous Findings

This chapter builds on ongoing data monitoring activities associated with the Early Childhood Initiative and its evaluation. Prior to this report the most recent data on scope and reach released were included in Coulton et al. (2003). At that time the findings included: (1) over its first 2.5 years, the ECI reached nearly 83,000 Cuyahoga County children prenatal to 6 years of age, and approximately 68% of children born since July 1999 had received one or more ECI services; (2) for the most recent birth cohort on which complete data are available, 63% had contact with at least one ECI service before 3 months of age; and (3) approximately 25% of all children under 6 and 34% of infants under 1 year old who were touched by ECI relied upon services from more than one of the components. In addition, ECI families also relied on a number of other public services. For example, nearly 60% of the families who received an ECI service also participated in the Food Stamps Program. Fourteen percent have an open case in the Department of Children and Family Services. The overlap with other public systems was greater for Early Start families than for those using other ECI services. Families in every part of the County were touched by ECI. Welcome Home has the widest geographic spread with more than 58% of its participants residing in the suburbs. Children that received multiple and intensive ECI services were concentrated in low-income neighborhoods within Cleveland where the need is great.

Population Coverage

If the ECI has been successful in creating a system of supports and services for the early childhood population, it should be touching large numbers of children early in life. Although the number of Cuyahoga County children and families in need of ECI services is not precisely known, the assumption of ECI was that it needed to achieve a large scale so that any and all with a need could be served. Therefore, this section addresses the question: What proportion of the early childhood population has received one or more ECI services and by what age are they first involved? If the ECI has moved to scale as planned, an ever greater proportion of young children will be enrolled at earlier ages, until some plateau is reached that exhausts the need.

In order to examine the reach of ECI, Table 3.1 presents unduplicated counts of the number of children in the County who have a record of being reached by one or more ECI services since its inception.[3] The counts are organized by birth cohort and by the age at which the child was first served by an ECI program. Between July 1999 and December 2003, the ECI reached over 116,000 children. An examination of the column labeled “percent of birth cohort” shows that the ECI has reached the vast majority of recent birth cohorts. In fact, 76% of all

[3] This analysis relies on computerized records on each individual served that were supplied by the agencies delivering the ECI services. Most of the records are believed to be fairly complete. However, with respect to special needs child care, there are significant gaps in records due to parental consent and other factors. Since these are unduplicated counts, though, if a child who is missing from the special needs child care records also received another ECI service, he or she is counted. Thus, the undercount is believed to be relatively small in this particular analysis.

children born since July 1, 1999 have been reached by one or more programs, and that coverage rate has been increasing over time. Notably, of older children who could only experience ECI for shorter periods (born July 1993 to June 1999), fully 40% have been reached by ECI.

Table 3.1 Number of Children Served by ECI, by Birth Cohort and Age at First Encounter for Children Born (July 1993 - December 2003)

Birth Cohort	prenatal	3 mo	6 mo	12 mo	18mo	24mo	30 mo	36 mo	48 mo	60 mo	72 mo	Total Served	% of Birth Cohort Served
Jul-Dec 93											2316	2316	19%
Jan-Jun 94											3265	3265	28%
Jul-Dec 94										2227	1258	3485	30%
Jan-Jun 95										3143	566	3709	32%
Jul-Dec 95									2274	1225	597	4096	36%
Jan-Jun 96									3192	581	504	4277	38%
Jul-Dec 96								2601	1190	614	446	4851	43%
Jan-Jun 97							2563	803	642	520	360	4888	47%
Jul-Dec 97						2761	872	327	630	482	299	5371	50%
Jan-Jun 98					2818	831	405	324	482	348	222	5430	52%
Jul-Dec 98				3158	817	314	349	273	370	284	79	5644	55%
Jan-Jun 99		1291	2128	748	262	283	264	257	299	196		5728	58%
Jul-Dec 99	73	5613	424	320	292	218	203	167	228	69		7607	77%
Jan-Jun 00	279	5393	451	351	279	182	191	173	210			7509	76%
Jul-Dec 00	384	5514	559	341	228	204	151	153	82			7616	77%
Jan-Jun 01	406	5591	451	352	239	184	175	85				7483	80%
Jul-Dec 01	548	5531	475	359	243	183	102					7441	80%
Jan-Jun 02	502	5398	480	335	207	114						7036	82%
Jul-Dec 02	478	5677	468	302	120							7045	80%
Jan-Jun 03	422	5256	387	180								6245	73%
Jul-Dec 03	496	4463	124									5083	58%
Total	3588	49727	5947	6446	5505	5274	5275	5163	9599	9689	9912	116125	

Pre-ECI Period

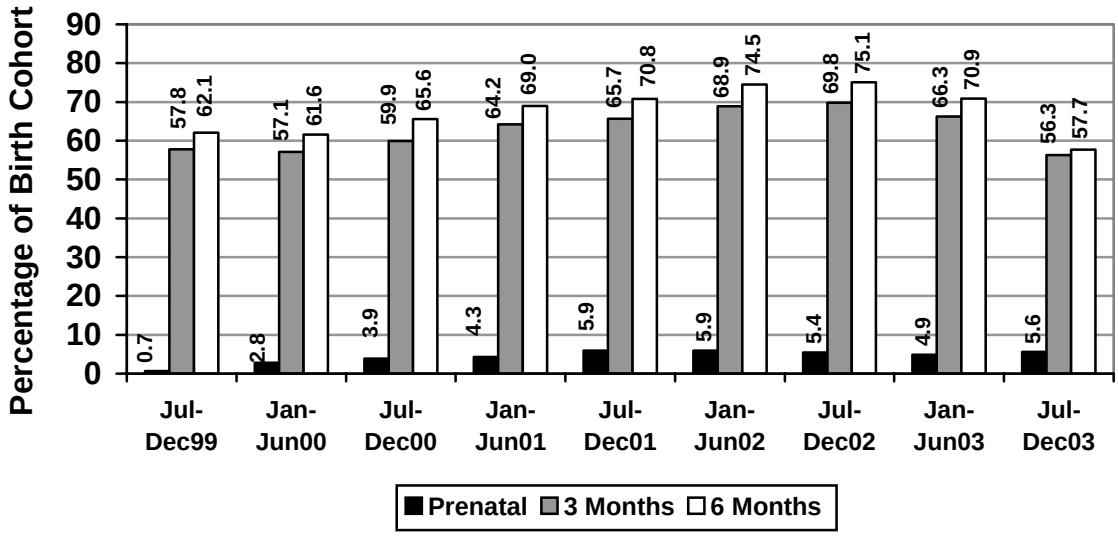
Complete Data Not Yet Available

Note: Percent of birth cohort figures were calculated by dividing the number of children served by the estimated birth cohort size adjusted for in-migration.

The timing of the launch of the ECI results in children having varying lengths of exposure to its programs depending on when they were born. For example, the second most recent birth cohort (Jan-June 2003) has only been followed through December 2003. By that time, the children born in January had almost reached their first birthday, but the children born in June had only attained 6 months of age. Not all children in the table have been observed for a full 6 years, so the percentage of the birth cohorts served is accurate only for the possible window of exposure to ECI. Indeed, as time goes by additional children in this birth cohort will come into contact with ECI services. Even though recent cohorts have had a briefer time in which to

experience ECI, it can be seen that ECI is reaching a growing percentage of subsequent birth cohorts. Thus, a longer period of follow-up with these recent birth cohorts is likely to show an even higher coverage rate as the infants mature.

Another important dimension of a successful early childhood program is that it reaches children as early in life as possible so that health care, parenting and child care needs can be met from the start. Figure 3.1 focuses on children born since the inception of ECI and examines their ECI contact prenatally and during the first 6 months of life. Indeed, as the figure shows, infants are being reached earlier in life. The percent of newborns with an ECI contact prior to 3 months of age increased from 57.8% (n=5,613) in July-December 1999 to 66.3% (n=5,256) by January-June 2003. Three and six month data are incomplete for the July-December 2003 cohort but, despite this, ECI had already reached over half the children by these age demarcations. In addition, the percent of children reached prior to birth has increased from under 1% (73 children) in July-December 1999 to 5-6% (500) in more recent cohorts. Thus, not only has total coverage risen with each birth cohort, but ECI programs are now reaching more children in those crucial early stages of life.



Note: For the Jul-Dec 2003 cohort, follow-up data are incomplete for children not yet reaching the 3 or 6 months of age by December 31, 2003.

Figure 3.1 ECI Contact with Young Children: Cumulative Percent of Recent Birth Cohorts Reached Prenatally and by 3 and 6 Months of Age

Cross Program Involvement

Although the ECI is universal in its offering of services that could be used by any family with young children, each of its component programs was intended to meet specific needs of the early childhood population. A relatively small group of families may need to use several of the services that ECI has to offer, while others may benefit from only one ECI component. If ECI is working effectively as a System, families served by one component will find it easy to access other services when and if they need them. At the same time, the most vulnerable families will be able to avail themselves of all that the ECI has to offer.

Figure 3.2 illustrates the fact that some ECI services are highly specialized while others are directed toward a large proportion of the early childhood population. The figure displays the use of ECI services by all children who were under 6 years of age between July 1999 and December 2003 (N=116,125). Children who received more than one service are counted multiple times. The figure shows the level of use during the first three years of the ECI and the numbers of children who newly used ECI in the subsequent two years (2002-2003). Medicaid, through its expanded eligibility and outreach, is the service used by the largest proportion of young children. Welcome Home, which targets first time and teen parents, is the second largest program in terms of children reached. Early Start, an intensive home visiting program, reaches a smaller group of families as intended. The Family Child Care Homes (FCCH) component of ECI has reached a large number of children through the numerous providers certified under ECI.[4] The Early Intervention (EI) services have reached a substantial number of children identified as having developmental delays and other conditions requiring specific assistance.

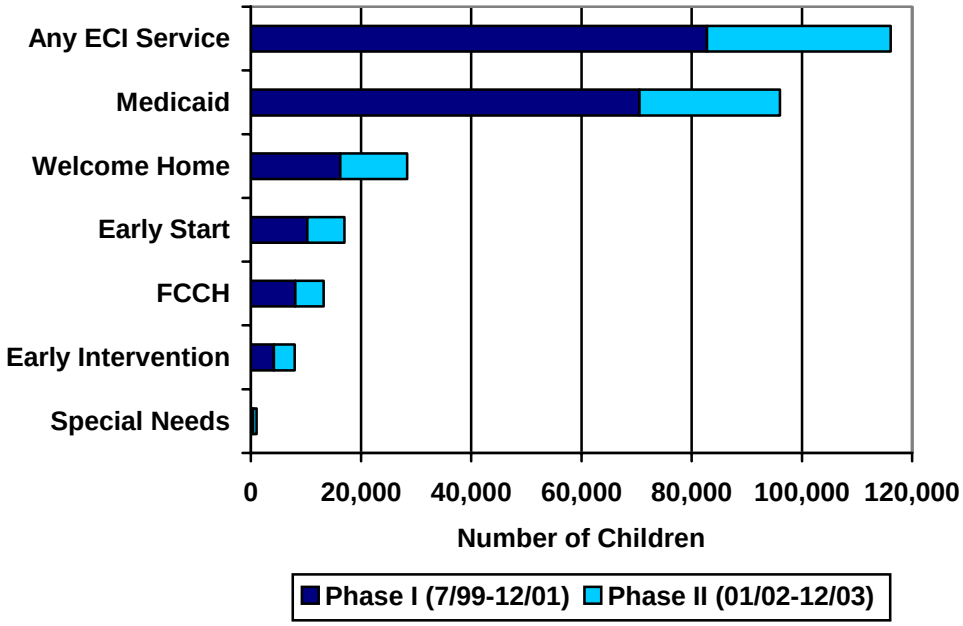
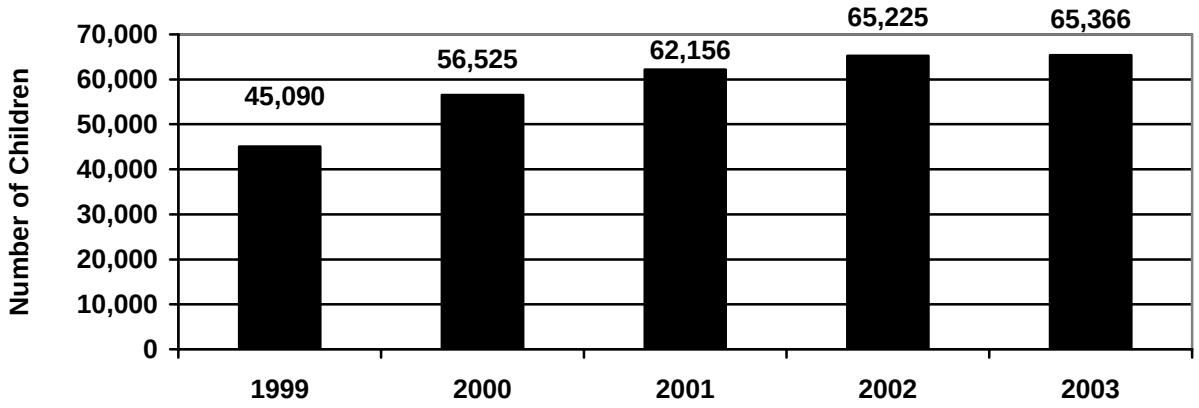


Figure 3.2 ECI Services Received: Cumulative Number of Children Under Age Six Served by ECI Programs (July 1999-December 2003)

In regard to the numbers of children reached by the Initiative on an annual basis, Figure 3.3 reports a count of children served by all ECI services. The figure shows growth over the implementation of the ECI with approximately 65,000 children being served in each of the last 2 years. Note that these figures include children in each year they were served, so it is inappropriate to sum counts across years.

[4] Children receiving special needs child care services through ECI are under-represented in Figure 3.2 because data from Phase I were incomplete. Across the first 5 years of the ECI, 1,619 children were identified as receiving services through the special needs child care component and, of these, individual-level data are available on 1,055 children (65.2%).



Note: Data for 1999 are for half-year (July to December) and other years are for full calendar year.

Figure 3.3 ECI Services Received: Number of Children Under Age Six Served, by Year of Service (July 1999-December 2003)

Another important aspect of the ECI is that it is not a single program but rather a set of programs designed to offer a variety of health and development services to parents and young children in the County. The services can be complementary to one another for those children with multiple needs but families whose needs are specific can also use them singly. The Initiative expected some degree of intersection among the ECI components and anticipated that families involved in one component might gain information that would enable them to access another component if necessary. Overall, for children under age six the proportion receiving more than one ECI service has increased from 7.4% in 1999 to 20.3% in 2003. For infants (under one) this proportion has increased from 14.6% in 1999 to 28% in 2003.

Figures 3.4 and 3.5 summarize data on ECI program use by all children under age six and children under age one. Both figures represent the annual proportion of children served by each program who also received one or more of ECI's other services.

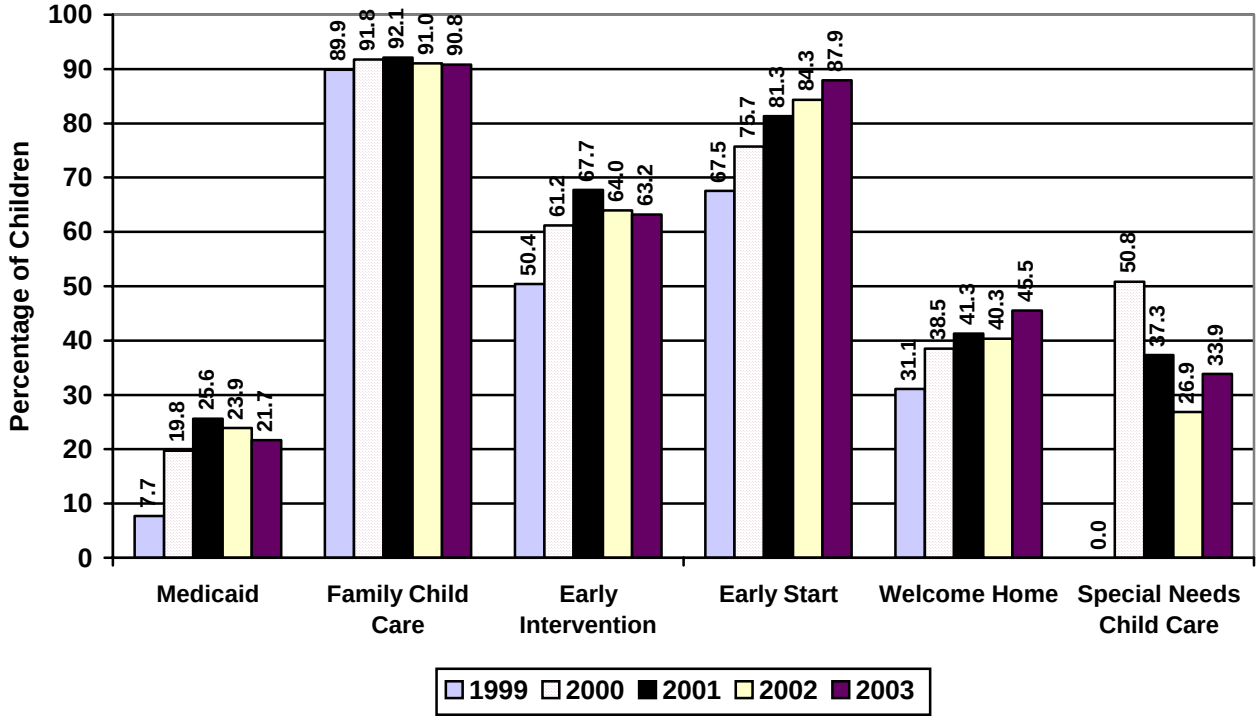
Children under age six:

As demonstrated in Figure 3.4, many children under age six receive more than one ECI service, and this multiple program usage varies substantially by ECI component. The populations differ both in terms of the absolute/average level of multiple program use during the period and in regard to the observable trends over time. For example, of all children enrolled in Healthy Start/Medicaid about 22% received some other ECI service, compared to approximately 91% of children in family child care.[5] Child recipients of the other programs show intermediate levels of multiple program usage (from least to most) - Welcome Home (46%), Early Intervention (63%), and Early Start (88%).

Beyond these average levels of multiple program use, most of the programs show patterns of increased multiple program usage among the children served over time. For example, among children on Medicaid the proportion using other ECI services increased from 7.7% in 1999 to 21.7% in 2003. Among children in Early Intervention the proportion increased from

[5] Note that the children using family child care are identified by the family's use of a child care voucher for the care and excludes any children whose parent pays for care privately.

50.4% in 1999 to 63.2% in 2003 (after peaking at 67.7% in 2001). Among children on Early Start the proportion increased from 67.5% in 1999 to 87.9% in 2003. Among children served through Welcome Home the proportion increased from 31.1% in 1999 to 45.5% in 2003. Among children served through family child care, the proportion of multiple program users remained high (90%) across the full period.



Note: The sample sizes upon which the proportions are calculated vary substantially. The average annual numbers of children served are as follows: Healthy Start/Medicaid (55,406), family child care (5,795), Early Intervention (2,469), Early Start (7,726), Welcome Home (6,282), and special needs child care (248).

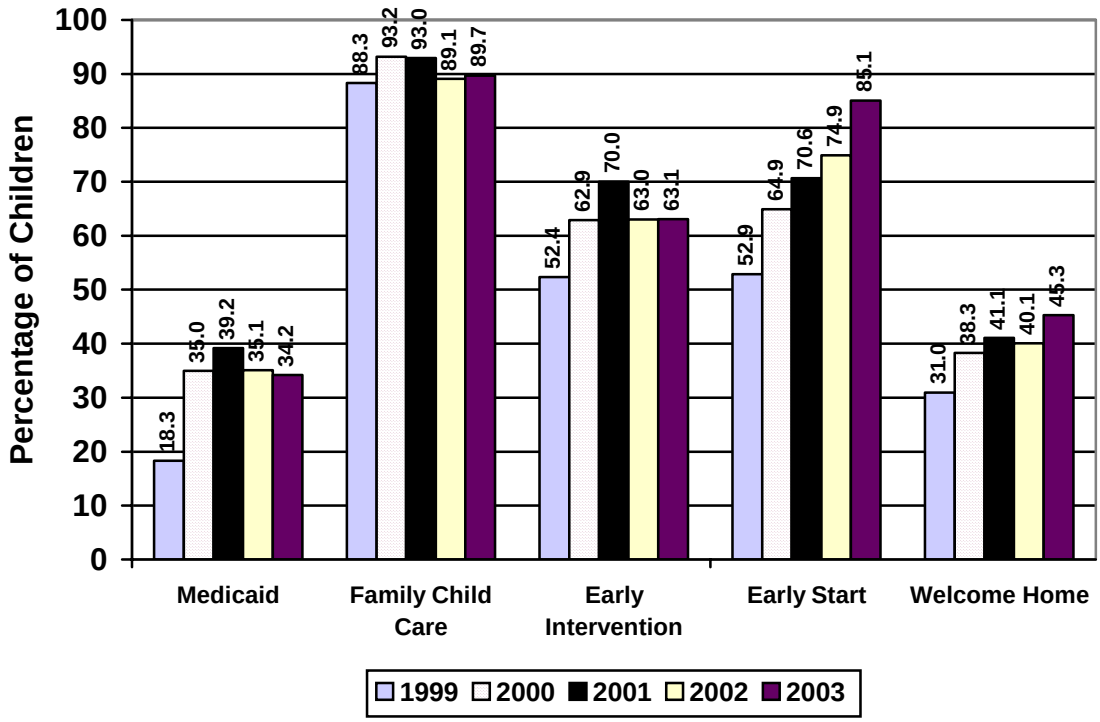
Figure 3.4 ECI Services Received: Percentage of Children Under Six Served by ECI Programs by Year Who Received More Than One ECI Service

Children under age one:

As demonstrated in Figure 3.5, children under age one exhibit a pattern of multiple program usage within ECI similar to the broader child population under age six. The proportions for special needs child care are suppressed due to very low sample size (20 per year). Many infants receive more than one ECI service, and this multiple program usage varies substantially by ECI component. In terms of the absolute/average level of multiple program use the patterns are comparable to the broader population. Child recipients of the programs show varying average levels of multiple program usage (from least to most) - Healthy Start/Medicaid (34%), Welcome Home (45%), Early Intervention (63%), Early Start (85%), and family child care (90%). One distinction here is that infants enrolled in Medicaid show much higher multiple program usage within ECI (34%), compared to the broader under six population (22%), perhaps reflecting the early emphasis of the ECI programs, especially Welcome Home.

Similarly, most of the programs show patterns of increased multiple program usage among the infants served over time. For example, among infants on Medicaid, the proportion

using other ECI services increased from 18.3% in 1999 to 34.2% in 2003. Among infants in Early Intervention, the proportion increased from 52.3% in 1999 to 63.1% in 2003 (after peaking at 70.0% in 2001). Among infants in Early Start, the proportion increased from 52.9% in 1999 to 85.1% in 2003. Among infants served through Welcome Home, the proportion increased from 31.0% in 1999 to 45.3% in 2003. Among infants served through family child care, the proportion of multiple program users remained high (90%) across the full period.



Note: The sample sizes upon which the proportions are calculated vary substantially. The average annual numbers of children served are as follows: Healthy Start/Medicaid (15,337), family child care (1,331), early intervention (1,069), Early Start (4,341), Welcome Home (6,271), and special needs child care (20).

Figure 3.5 ECI Services Received: Percentage of Children Under One Served by ECI Programs by Year Who Received More Than One ECI Service

Collectively, these data show marked levels of multiple program usage within the ECI and patterns reflected increased usage over time. These results likely reflect in part enhanced interaction and communication between the programs of the Initiative over its first 5 years of implementation. Given the expressed goal of the ECI to improve accessibility to services for all families, regardless of their entry point to the system, these trends are encouraging. However, it should be noted that these data are also influenced by the changing needs of the underlying population of children and families, along with changes in program policies and practices. The fact that multiple program usage declined slightly among children on Medicaid and children in Early Intervention over the 2002-2003 period provides evidence that these trends may be sensitive to a wide array of programmatic and contextual factors (e.g., changes in income eligibility standards for Medicaid and child care vouchers).

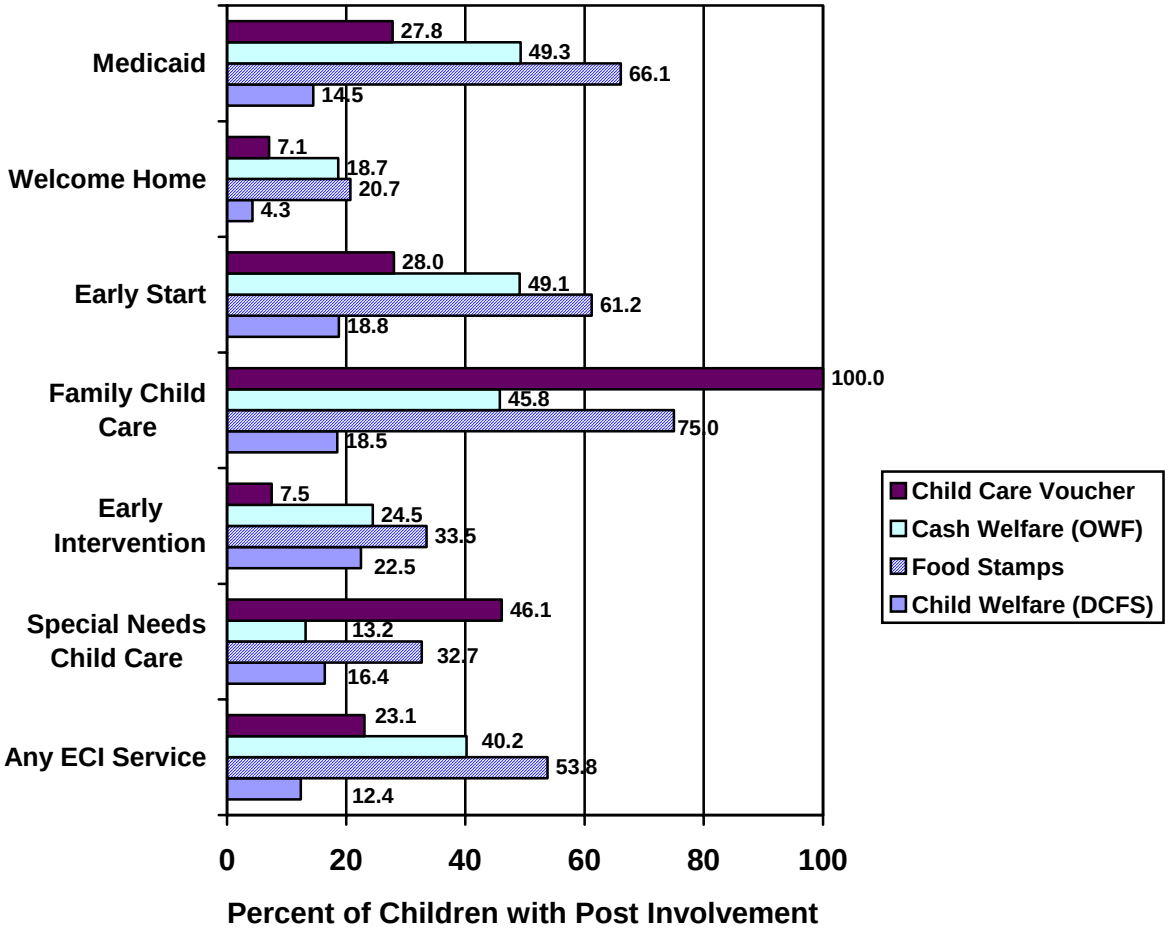
Other Public Systems and ECI

The services that have been incorporated into the ECI interface with a variety of other public programs that provide additional supports to families with young children. In specific, it is envisioned that for some families, ECI could help them to access and use these public services more effectively. The level of cross-system participation between ECI recipients and other public systems was determined by looking at the 6-month period after a child entered any ECI service to examine whether there was a record of service with one of four other public programs. The analysis was restricted to children born July 1, 1999 through December 2002 who could be followed for six months after their initial ECI event. The results appear in Figure 3.6. Note that three of the public programs, Ohio Works First, Food Stamps, and the Child Care Vouchers program (for centers and homes combined) are targeted to families with income below or near poverty.[6] For example, families with income below 150% of the federal poverty line could become eligible for child care vouchers and they could continue to receive the voucher until their income reached 165% of poverty.

Welcome Home, Early Intervention and Special Needs Child Care are the ECI programs that have the least cross-system participation with the means-tested public services, in part because they are offered to families regardless of income. Healthy Start/Medicaid, Early Start, and Family Child Care Homes have the greatest cross-system usage with the means-tested public programs.[7] Healthy Start targets low-income families. Early Start is targeted to families that need intensive support during the first 3 years of their infants' lives and low income is often a significant stressor for young families. Also, OWF families with children under three were referred to Early Start beginning in 2001.

[6] For reference, in 2003 (the latest period covered in these data) the federal poverty threshold for a family of four was $18,400.

[7] Part of the overlap between child care vouchers and FCCH is an artifact of the way FCCH children are identified for this analysis (through voucher data). If private pay children are served in any of the FCCH homes, they are not identified in a database and cannot be included in this analysis.



Note: Samples were restricted to children born July 1999 through December 2002 who could be followed for 6 months after their enrollment in the ECI service. Sample size for each service cohort is as follows: Medicaid (87,797), Welcome Home (22,735), Early Start (14,519), Family Child Care Homes (12,090), Early Intervention (6,793), and any ECI service (104,134).

Figure 3.6 Percent of Children Served by ECI Programs with Post Involvement in Outside Services (Within 6 Months of Initial ECI Service Date)

Cross-system participation with the County's Department of Children and Family Services (DCFS) is another important aspect of the interface between ECI and public systems. Overall, 12.4% of children served through ECI had an open case with DCFS in the 6 months after initiating service in ECI. Somewhat higher rates are evident among children served by Early Start (18.8%), Family Child Care (18.5%), and Special Needs Child Care (16.4%). The lowest rate is among the Welcome Home population at 4.3%. The highest rate is among children receiving Early Intervention services (22.5%), potentially due to the County's policy of screening all children in DCFS custody for developmental delays and other special needs. Thus, in some instances the open case in DCFS predated the ECI involvement, while in other cases it followed.

The Geography of the ECI

The ECI reaches families throughout the County with its varied services and programs. Welcome Home is the most geographically dispersed of the ECI programs. Across the Initiative during the first 4.5 years, 61% of the children served were residents of the City of Cleveland and 39% were County residents outside Cleveland. By comparison, of all children born in the County since 1999, 39.1% were born in the City and 60.9% were born outside the City. Further, in regard to the total child population under age six in the County, 41.5% were City of Cleveland residents and 58.5% lived outside the City in 2003. The City/County service proportions vary across the programs of the ECI. See Figure 3.7. Children served through Family Child Care, Early Start, and Medicaid are concentrated in the City of Cleveland, mirroring the concentration of poverty within the County and the targeting of these programs. Children served through special needs child care and early intervention services are more evenly split between the City and the suburban municipalities. Children served through Welcome Home showed the greatest geographic spread and were more often residents of the County (60%) outside the City of Cleveland, matching exactly the percentage of County births that occur outside the City.

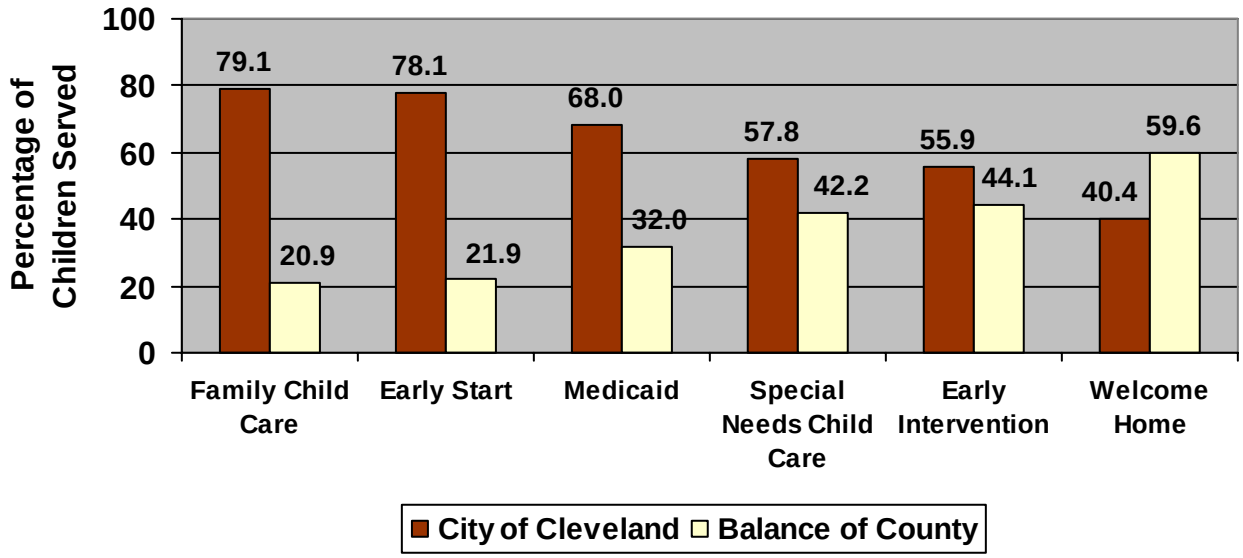


Figure 3.7 Percent of Children Served by ECI Programs by Residence (City of Cleveland versus Cuyahoga County outside Cleveland)

Although the ECI is universal, it is designed to offer more services and supports to families that are challenged or children who are vulnerable. Some of the County's families have participated in services across the three focus areas of the ECI (child health, home visiting, and child care). The map in Figure 3.8 overlays neighborhood child poverty rates with the locations of nearly five thousand children who were served in these three efforts through December 2003. The areas of the map that are not shaded are non-residential neighborhoods.

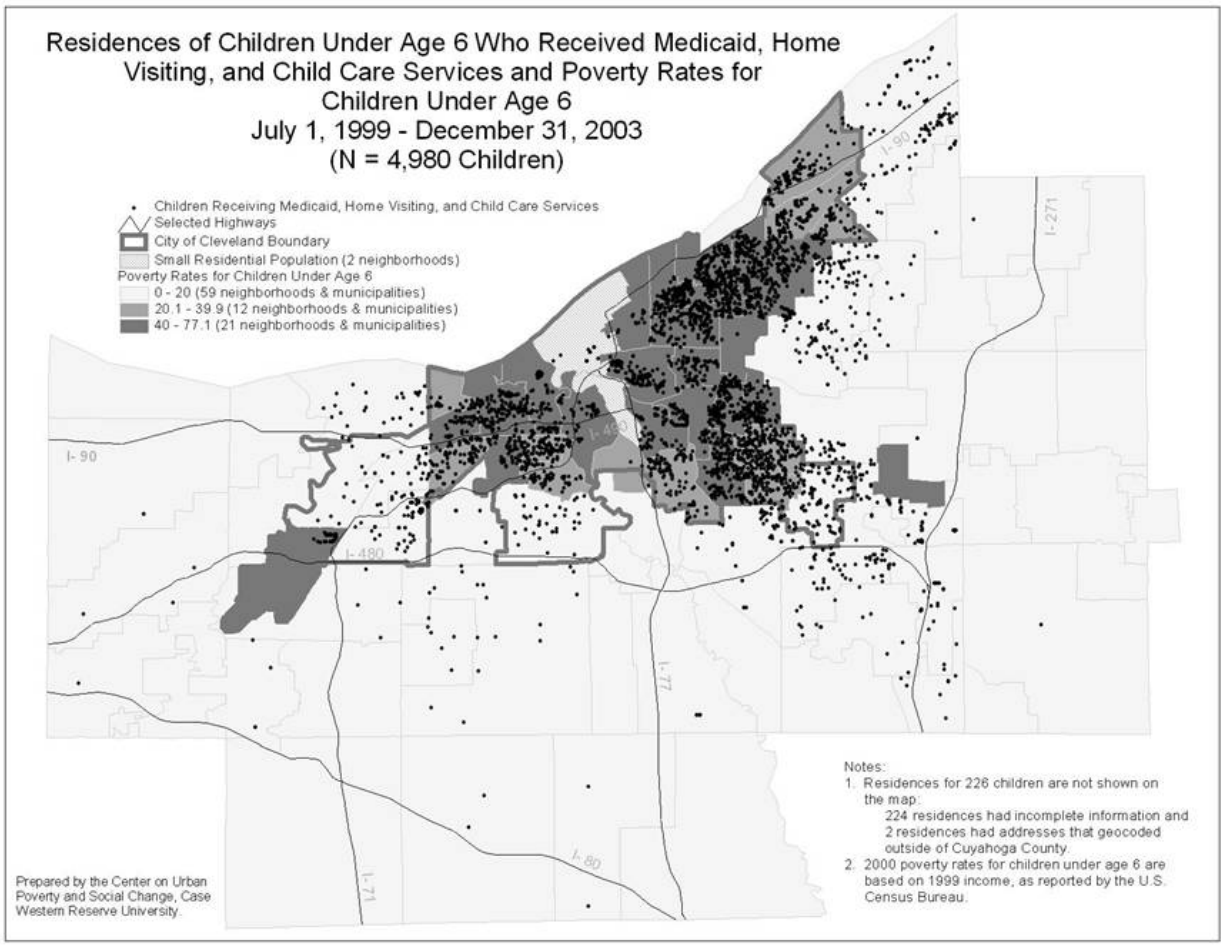


Figure 3.8 Map of Children Using All Three ECI Service Areas by Child Poverty Level of Neighborhood

Poverty is known to be one of the most serious risk factors for young children, and it can be seen that many of the multiply served families reside in poor neighborhoods, especially within the boundaries of the City of Cleveland. As such, it appears that ECI has an intense focus on neighborhoods where the early childhood population has the greatest need for assistance to support their development. However, the map also shows that there have been an appreciable number of children served in neighborhoods with moderate and low child poverty in Cleveland and the inner ring suburbs. This distribution reinforces the idea that high need families are no way restricted to areas of high poverty.

Another geographic representation shows a related characteristic of the ECI, that is, the degree to which children have been reached as close to birth as possible. Figure 3.9 shows the proportion of newborns reached by one or more ECI elements within 6 months of birth.

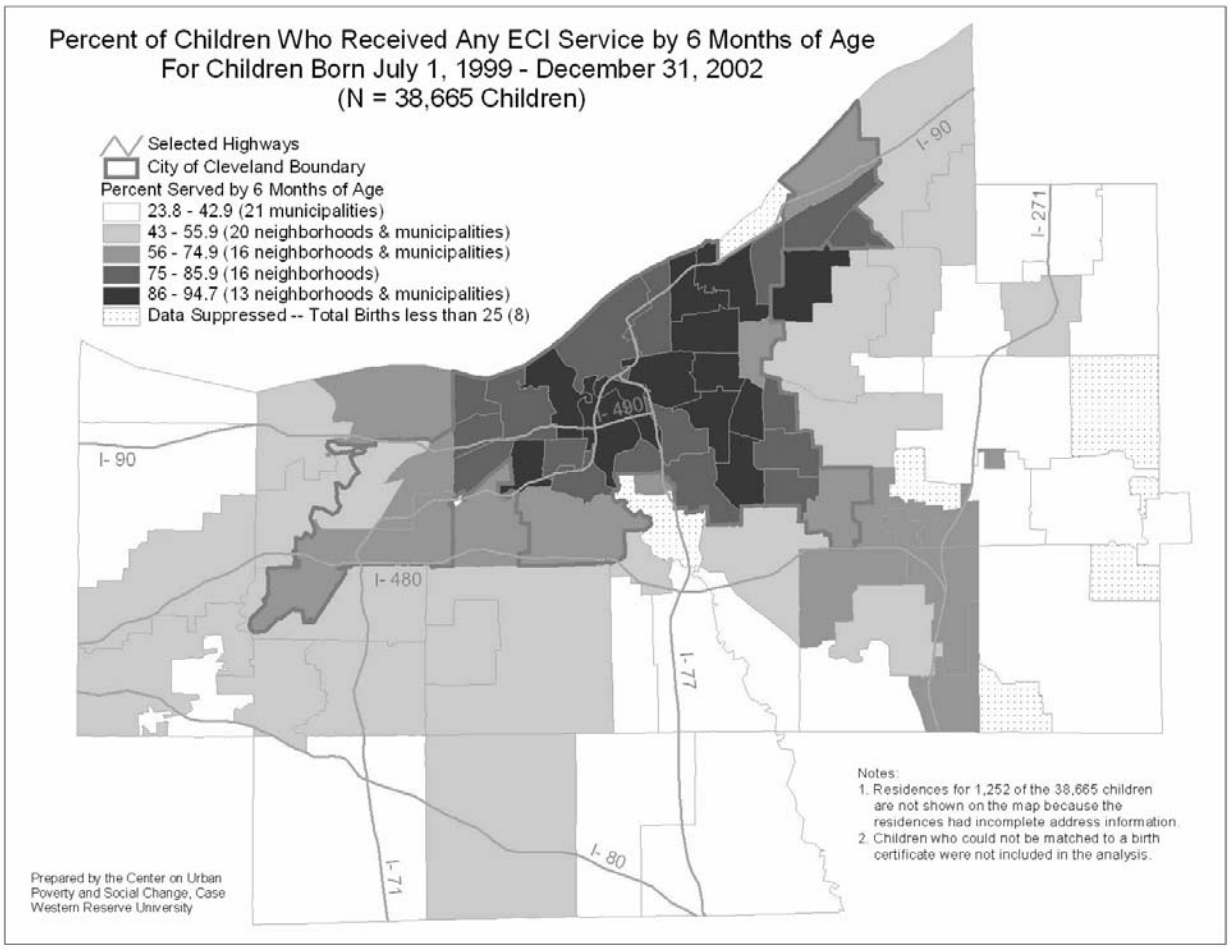


Figure 3.9 Map of Children Reached by ECI Programs Within 6 Months of Birth by Neighborhood

This map demonstrates that in many urban neighborhoods within the City of Cleveland the vast majority of newborns are reached by ECI programs very early. In some 29 neighborhoods, more than three-quarters of newborns have been reached by this age. However, in many inner ring suburbs a substantial proportion of newborns have been reached by 6 months of age (from one-half to three-fourths). This pattern also serves to reinforce a model that seeks to deliver services as early as possible to children who may benefit through a variety of complementary strategies.

Conclusions and Recommendations

During the period of 2002-2003 the ECI has continued to solidify its broad scale and extend its efforts to more effectively reach the County's youngest children. Over 116,000 children from birth through their fifth year of age have been served since its inception, including 76% of the children born in the County since July 1999. In this sense, the ECI is universal and continues the potential to represent a system of support for young children and their families.

Also, as anticipated, there is a group of families that are served by multiple components of ECI, and over time this subgroup has grown substantially. Many of these families possess multiple challenges and face the economic and personal hardships of poverty. They also tend to rely on the other public support systems in place in the County. In this sense, ECI targets high-risk children and families and has the potential to prevent negative developmental outcomes that are known to occur at high rates in the absence of intervention. Moreover, this pattern of

overlapping services going to at-risk families is indicative of a system that has become more accessible. However, it also points to the importance of these agencies and service providers building upon the work of one another to assure that families with complex needs can manage their multiple agency relationships and that duplication does not occur.

In most every definition of scope and reach (i.e., numbers served, trends over time, early initiation, geographic distribution, interconnection among programs), the data show that ECI has grown and improved over its first 5 years. These System-level data, however, speak only to the broadest conception of service delivery. Attention to issues of program delivery and quality has characterized the management of the ECI and its programs from early on, but documentation of the impact of these efforts remains a challenge. These data do not directly address the extent to which children and families that have been reached have tangibly benefited.

The ongoing task of refining the Early Childhood Initiative as a universal system for promoting healthy children, effective parents and quality child care continues. The evidence shows that the ECI has built and maintained a strong foundation to reach nearly the entire early childhood population and to provide intensive support to children and families with the greatest needs. This existing combination of breadth and depth provides the vehicle to effectively deliver the established set of ECI programs, as well as to extend and refine the Initiative's strategies to address newly identified needs and challenges facing young children and their families.

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Chapter 4
Welcome Home and Early Start: An Assessment of Program Quality and Outcomes

Deborah Daro, Eboni Howard, Jennifer Tobin, and Allen Harden

Chapter Summary

Chapin Hall Center for Children at the University of Chicago, in collaboration with Westat Associates, designed and implemented a comprehensive evaluation of ECI's two home visitation programs – Welcome Home, a universal home visitation program that provides a single home visit to all first-time and teen parents and Early Start, an secondary prevention program targeted to new parents facing significant challenges. Data collection methods included comprehensive surveys at baseline, 3 months and 11 months post enrollment with 289 Welcome Home participants; 325 Welcome Home-Early Start referrals; and 193 Ohio Works First (OWF)-Early Start referrals between February 2001 and January 30, 2002. In addition, in-depth qualitative interviews were completed with a stratified random sample of 87 of these participants 2 and a half years after enrollment (e.g., between August 2003 and March 2004). The evaluation also drew on the County's administrative data to assess overall program performance and the rate of subsequent reports for child abuse and neglect among those receiving these programs. Key findings with respect to participant outcomes include:

- Newborns and their parents are accessing supportive services sooner and are receiving 68 percent more home visits in their initial 3 months in Early Start than was true during the program's first operating year.
- Welcome Home is well received and is accomplishing the majority of its stated early and instrumental outcomes.
- The average Early Start participant receiving a minimum number of home visits (15) demonstrated significant improvement in her level of depression, perception of stress, and sense of competence and comfort in caring for her child.
- Although a substantial proportion of Early Start participants were reported for child abuse following referral to the program, these children tend to be reported at a younger age than those who are referred for services but do not engage.

Despite these encouraging trends, only one-third of those referred to Early Start received the service dosage our work indicates is necessary to achieve these outcomes. Further, the probability of an infant enrolled in Early Start being reported for child abuse is about two and a half times that of the general population of all 1 year-olds in the County. These patterns, coupled with the substantial number of unmet needs expressed by the Early Start referrals we interviewed 2 and a half years post-enrollment, suggest that new thinking may be needed in how the program is structured. As the County moves forward, we make the following recommendations:

- An increase in the initial reach and scope of Welcome Home services
- The development of an outreach team trained specifically to respond to those cases where enrollment in Early Start services is proving problematic
- More effective use of the Individualized Family Service Plan (IFSP) process to identify and address the full range of a family's needs including basic support
- Stronger linkages with income maintenance programs and child welfare services
- Increased training for direct service providers on relationship building and cultural competence

Introduction

A central feature of ECI has been the use of home visitation programs. Specifically, ECI uses universal home visitation (Welcome Home) to provide a common reference point and core set of information for all first time and teen parents. For those families facing minimal challenges, a single home visit by a nurse offers useful information regarding existing community services, provides parents an opportunity to ask questions regarding their infant's health needs, and identifies families or infants in need of greater assistance. Families requiring ongoing assistance due to a lack of parenting knowledge, self-management skills, or environmental challenges are offered Early Start, a more intensive intervention. Specifically, Early Start involved the provision of ongoing home visitation services by one of 27 community-based agencies located throughout the County.[1] Detailed descriptions of these models and their underlying logic are presented in Appendix 4.A.

Both ECI home visitation programs are part of the Ohio Department of Health's Help Me Grow Initiative. Help Me Grow (HMG) is a coordinated early childhood program of home visits for newborns and information and service coordination for parents and young children under 3 years of age. In addition to providing oversight for Welcome Home and Early Start, HMG also directs the County's Early Intervention program, a comprehensive assessment and service referral system designed to detect possible developmental delays or risk for developmental delays among infants and young children. Because of the central role Welcome Home and Early Start played in the original conception of ECI, Chapin Hall's evaluation of these components focused its efforts on only these two HMG programs.

Recent Changes in Program Structure:
Over the past several years, HMG has worked to improve the integration and consistency among all of its programs. Increasingly, Welcome Home, Early Start, and Early Intervention are functioning as a continuum of care rather than as individual programs. Because these changes occurred after the onset of the evaluation, the service experiences of new parents in the evaluation sample may differ from the experiences of current enrollees. It is possible that these service improvements have resulted in infants being channeled to more appropriate services sooner and that the emphasis on quality assurance has reduced the variability of the intervention across specific service providers. Thus, the pattern of findings observed in our sample may not fully represent current program accomplishments. Despite this limitation, however, we believe this study's participant sample is emblematic of the range of issues facing new parents in the County and highlights their attitudes toward voluntary family support services. Consequently, the findings offer useful information for ECI's future planning efforts.

Our Evaluation Approach

As part of the overall evaluation of ECI directed by the Center on Urban Poverty and Social Change at Case Western Reserve University, Chapin Hall Center for Children at the University of Chicago conducted a comprehensive assessment of both Welcome Home and Early Start. To achieve our evaluation goals, we employed a mixed-method approach, using a variety of data from administrative systems, program participants, home visitors, home visitors'

[1] At the beginning of the New Parent Study, there were 29 agencies providing Early Start services, but this number has been reduced over time.

supervisors, and program agency managers regarding service content and outcomes. The evaluation included the following study components:

- An initial assessment of participant satisfaction using questionnaires with a sample of both Welcome Home and Early Start program recipients
- An assessment of program impacts on participants interviewed at 3 months and 11 months post-referral for a sample of Welcome Home and Early Start program recipients
- An analysis of engagement and retention in Early Start services that examines the different characteristics of families who move through various stages of program connection using administrative as well as survey data
- An examination of possible longer-term impacts through the use of in-depth qualitative interviews with a sub-sample of both Welcome Home and Early Start program recipients about 29 months post-referral. These interviews allows us to better specify the individual and program characteristics associated with stronger outcomes and service utilization skills
- An assessment of subsequent reports for child abuse and neglect for a sample of Early Start program recipients based on a review of child protective services (CPS) administrative data
- An assessment of the quality and consistency of Early Start services delivered by different community-based agencies based on administrative data, interviews with a sample of agency mangers and staff, and reviews of sample case records at selected sites

This chapter summarizes the findings from all of these study components. More detailed discussions of these methods and their respective findings can be found in companion documents submitted to the County in 2003 (Howard, Tobin, Daro, & Harden, 2003; Daro, Howard, Tobin, & Harden, 2003). The present work builds on these earlier efforts by providing an extended post-enrollment observation period for our core evaluation sample and providing more descriptive data on the characteristics and staffing plans of a larger number of agencies delivering Early Start services.

Core Evaluation Questions:

The Welcome Home and Early Start evaluation study focused on seven initial questions:

- Do most first-time and young parents of newborns receive the information and help they need from a Welcome Home visit?
- How successful is Welcome Home in helping the highest-risk families obtain intensive services?
- To what degree is the target population of at-risk families becoming engaged with Early Start?
- Do families that receive Early Start improve more in outcomes after 11 months than a similar group of families that are not offered Early Start?

- Do newborns whose families receive Early Start have lower reported rates of child abuse and neglect than a group of similar newborns whose families are not offered Early Start?

- Are Early Start service providers able to deliver services in a consistent way, and do services reflect the program's guidelines?

- What needs are expressed by parents that are not met by Early Start or Welcome Home?

As we will report in this chapter, findings to these initial set of questions provided an initial overview of Welcome Home and Early Start service impacts and suggested some tentative explanations of how these services alter parental capacity and behaviors. However, to build on this foundation, additional evaluation questions were developed that focused on specifying the individual, provider, and program characteristics that account for stronger outcomes and document how outcomes vary over time:

- What participant, provider, and program factors are the most salient explanations for initial outcomes, and are these factors consistent across all outcome domains?

- What participant, provider, and program factors are the most salient explanations for families engaging in Early Start services for 1 or more years?

- Do families exposed to Early Start experience fewer child abuse reports during their child's first 2 years than a comparable group of families that are not offered Early Start?

- What are the additional unmet needs families face as their children mature?

- Do Early Start services result in more consistent access to prenatal care and improved maternal behavoirs for those participants who become pregnant after enrollment?

- How well do Early Start services facilitate a new parent's transition to work? Does including self-sufficiency objectives on the family's IFSP contribute to more positive outcomes?

- What is the interface between Early Start and child welfare services both at the front end (as a diversion option) as well as additional support for women who already have an older child in foster care or who have a long history of prior child welfare involvement?

- Does Early Start reduce the length of stay in foster care or avoid the need for foster care?

A central focus of these additional evaluation questions were documenting the extent to which Welcome Home and Early Start produced lasting and meaningful change for participants about 2 years after they were originally offered the programs.

Evaluation Overview: New Parent Sample Selection and Research Methodology

New Parent Sample Selection Methods:

Our assessment involved an examination of the full universe of Welcome Home and Early Start participants, as captured by the County's administrative data system, and the majority of Welcome Home and Early Start home visitors and supervisors, as captured through a self-assessment instrument staff completed during our initial training. Although these data provide a general summary of each program's service capacity and overall structure, they do not provide much detail about each program's participant population, service impacts, or program quality. To capture these dimensions, we identified a sample of new mothers drawn from the general population of Welcome Home recipients and from those Early Start participants referred for service through either Welcome Home or Ohio Works First. To compensate for the inability to randomly assign participants to treatment and control conditions, we selected a comparison or non-service group from among those Welcome Home recipients who were not referred on to Early Start but who exhibited a similar level of risk as measured by the Child Abuse Potential Inventory (CAP), a tool widely used in identifying a respondent's relative risk of being involved in physical child abuse and, to a lesser extent, physical neglect.[2]

The Welcome Home only participants recruited for the study had CAP scores ranging from 0 to 302, with a mean score of 42 (*SD* = 44). The final comparison sample was selected from the Welcome Home only pool in multiple waves, corresponding to the pace at which the nurses were enrolling Early Start referrals. To the extent possible, participants were matched on CAP scores. Our selection method for the Phase I sample was successful in obtaining at least a proportion of participants in the comparison group that presented risk levels comparable to those within the Early Start referral group as well as to those study participants enrolled through Ohio Works First (OWF). However, our assumption that the assessment process would fail to detect a notable number of mothers at risk for physical abuse was not supported. Although the Welcome Home nurses failed to detect all mothers with very elevated CAP scores, such omissions were rare. Consequently, we also examines change over time among various subgroups within the Early Start referral sample (e.g., those with different levels of socioeconomic and psychosocial risks) as well as comparing changes between Early Start participants and the Welcome Home only group.

New Parent Sample Enrollment and Retention:

Participants were recruited into the study from two sources – the Welcome Home nurse and the Early Start specialists working with families involved in Ohio Works First (OWF). Figure 4.1 summarizes the flow of participants into the sample from these two sources. A total of 2,506 eligible participants were offered the opportunity to participate in the study. The Welcome Home nurses recruited 2,311 first-time and/or teen-age mothers and the Early Start specialists recruited 195 mothers with children younger than 3 months old. Of these mothers, 1,499 enrolled in the study – 981 of the Welcome Home only group (53% acceptance rate); 325 of the

[2] The Child Abuse Potential Inventory's (CAP) ability to correctly classify physically abusive and comparison parents has been documented in numerous clinical and controlled settings (Milner, 1994). The 77-item abuse scale contains six descriptive factor scales: distress, rigidity, unhappiness, problems with child and self, problems with family, and problems with others. Generally, subjects are considered at risk for physical child abuse only when their scores exceed 166 and are considered to be at very high risk when scores are higher than 215 (Milner, 1994).

Early Start-Welcome Home referrals (69% acceptance rate); and 193 of the Early Start-OWF referrals (99% acceptance rate). Although every effort was made to fully document all cases in which a new mother was asked to participate in the study, actual acceptance rates might vary from these estimates because of variation in documenting study refusal among Welcome Home nurses and Early Start Specialists.[3]

As summarized in Figure 4.1, Westat field staff conducted initial interviews with over 90 percent of those who agreed to participate in the study. Of the initial sample, over 90 percent of the Welcome Home only and Welcome Home-Early Start referrals completed the 3-month assessment. Although a slightly lower proportion of the OWF-Early Start referrals completed the 3-month assessment, the completion rate for this group is well within the acceptable response rates for comparable studies (i.e., 84%). Completion rates for the 11-month interviews ranged from 74 to 88 percent.

For those study participants referred on to an Early Start agency, we also obtained regular reports on their service experiences from their home visitor. Initial quarterly reports were received on over 97 percent of all of these Early Start referrals. For those who remained enrolled it the program, additional quarterly reports were obtained at 6, 9, and 12 months post-referral.[4]

New Parent Sub-Sample:

A sub-sample of study participants was recruited in order to conduct in-depth qualitative interviews that could provide greater detail to describe and explain patterns in families as they relate to program use and potential programmatic outcomes discovered in earlier phases of the evaluation study. In order to achieve our sub-sample of respondents a mixed sampling plan was used, as follows:

Welcome Home-Only Eligible Sample

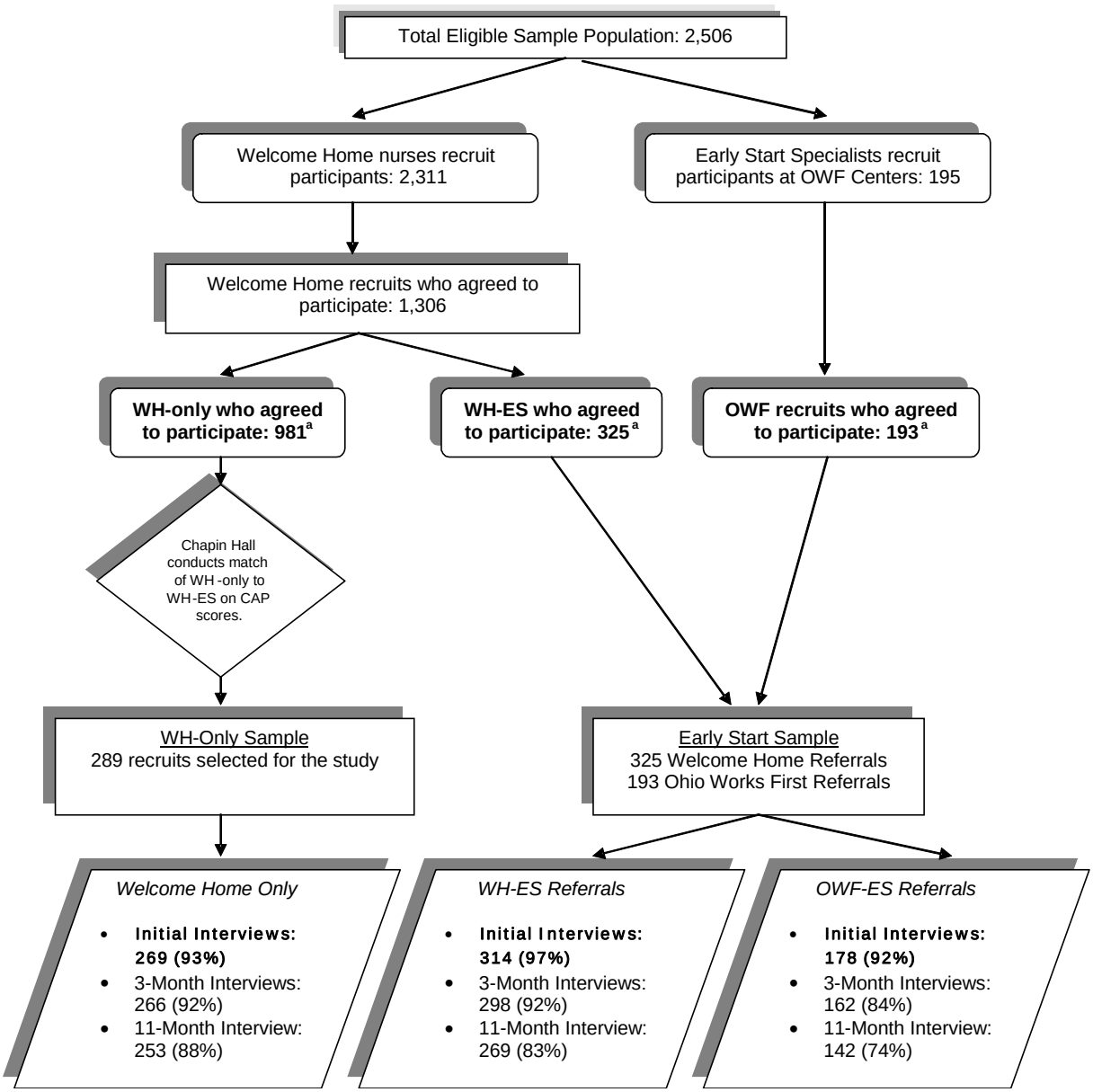
- Participants with CAP scores within one standard deviation of the group's mean
- Participants with CAP scores greater than one standard deviation of the group's mean

Early Start Referral Eligible Sample

- Participants who never received any home visits (Non-Users)
- Participants who were engaged in the program for 4 to 9 months and had fewer than 16 home visits (Low-Users)
- Participants who were still engaged in the program 12 months after referral and completed 11 or more home visits (High-Users)

[3] For example, it is often unclear in the refusal data whether participants accepted the Early Start referral, but refused study participation or whether they refused the Early Start referral and therefore were ineligible for the study and should not have been offered enrollment. Similarly, some of those offered enrollment did not meet the study's criteria and, therefore, should not have been included in the potential sample (e.g., were under the age of 16). For additional detail about initial study refusal rates, see Coulton and colleagues (2003) and Daro et al. (2003).

[4] Additional detail about the data and timing of the quarterly reports submitted by Early Start providers is available in Coulton and colleagues (2003) and Daro et al. (2003).



Note: [a]There are several issues that raise questions regarding the validity of the refusal data. See Coulton and colleagues (2003) or Daro et al. (2003) for additional detail.

Figure 4.1 Overview of the Sample Enrollment, Selection Process, and Survey Data

The Table 4.1 provides the mean, median, and range of the initial CAP scores and the number of home visits received for each eligible subgroup. Anticipating lower sample response rates than what was achieved on the final Phase I survey interviews (82%), we over-sampled 120 participants, randomly selected within each designated subgroup, to reach the target of 90 interviews. Chapin Hall field staff conducted initial interviews with over 87.9 percent of study participants who were located and contacted.[5] Appendix 4.B provides greater detail on the eligible sub-sample response rates.

Table 4.1 Eligible Sample for Phase II Selection

	WH		WH-ES and OWF-ES					
			Non-users		Low-users		High-users	
	CAP within 1 *SD*	CAP greater than 1 *SD*	WH-ES	OWF-ES	WH-ES	OWF-ES	WH-ES	OWF-ES
Sample size	188	30	68	41	36	15	37	13
Initial CAP scores								
Mean	63.5	203.8	87.5	107.9	94.7	156.5	93.9	119.4
(*SD*)	(31.7)	(40.2)	(56.7)	(84.5)	(75.6)	(103.5)	(64.8)	(77.0
Median	56	202	77	82	76	160	70	116
Range	21-148	149-302	0-286	19-366	13-270	12-344	9-238	27-282
Number of home visits								
Mean	--	--	--	--	7.1	6.9	16.9	18.5
(*SD*)					(4.7)	(5.2)	(3.7)	(4.7)
Median	--	--	--	--	6	5	17	18
Range	--	--	--	--	1-16	1-16	11-25	11-27

Notes. Numbers in parentheses are standard deviations.
Non-users: Participants who never received any Early Start home visits
Low-users: Participants who were involved in the program for 4 to 9 months and had 16 or less completed home visits
High-users: Participants who were involved in the program for 12 months and had 11 or more completed home visits

Data Sources:

The evaluation incorporated several data collection instruments and strategies, such as standardized surveys, in-depth interviews, observations, self-administered questionnaires, and analysis of County-level administrative data. Brief descriptions of these instruments are provided below.[6]

[5] Eighty-seven of the 99 respondents contacted, agreed to be in the interview. Of the respondents contacted 2 (2%) refused and 10 (10.1%) were closed because maximum contacts were reached. Maximum contacts cases had an average of 9 phone call attempts, 2 no shows visits, 2 letters sent, and 1 stop-by visit conducted before they were closed.

[6] Copies of all data collection instruments used in this study are available from Chapin Hall Center for Children.

Monitoring Participant Experiences

1. Participant Survey Interviews:

Participant survey protocols used with the full sample at the time of study enrollment included basic descriptive information on the mother and her family (e.g., age, race, income, educational status, employment status, and household composition) and questions regarding the mother's satisfaction with Welcome Home. The protocols used at the initial and 11-month follow-up interviews included a series of questions about the mother's expectations regarding Early Start and community programs as well as any concerns she had about becoming a new parent. In addition, the form included versions of various standardized measures.[7] These measures included:

- Knowledge of Infant Development (KIDI) (MacPhee, 1981) – a 17-item measure designed to assess knowledge of infant care, development, and behavior
- Social Support Behaviors Scale (SSB) (Vaux, Riedel & Steward, 1987) – a 44-item measure assessing the extent to which the respondent receives support in five domains (emotional, socializing, practical, financial, and advice or guidance)
- Social Support Index (SSI) (McCubbin, Patterson & Glynn, 1996) – a 16-item measure capturing the degree to which the respondent feels emotionally connected to and supported by family members and neighbors
- Parenting Sense of Competence Scale (PSOC) (Gibaud-Wallston & Wandersman, 1976, 1978) – a 17-item measure to assess attitudes about parenting and confidence in parenting ability
- Perceived Stress Scale (PSS) (Cohen & Williamson, 1988) – a 10-item measure to assess an individual's perceptions of the degree and source of current stress in her life
- Center for Epidemiologic Studies-Depressed Mood Scale (CES-D) (Radloff, 1977) – a 20-item measure of depressive symptomatology
- Readiness to Change, a revised version of the Stages of Change (URICA) Inventory (McConnaughy, Prochaska & Velicer, 1983) – a 16-item measure assessing the extent to which the respondent perceives a need to alter behavior to improve parental capacity and believes service enrollment can help achieve this objective
- At the 11-month interview, the second completion of the CAP inventory

In contrast to these more comprehensive interviews, the 3-month telephone interview obtained a summary of services the new parent utilized for herself or her infant since the first interview. Participants who received a Welcome Home visit were asked about their specific use of material provided during the Welcome Home visit and completed the Client Experiences Questionnaire, Subscale A, a standardized measure of service satisfaction (Greenley, Greenberg & Brown, 1997). If the respondent was enrolled in Early Start services, the interviewer explored her perception of services and administered the Helping Relationship Inventory, a standardized assessment of the quality of the participant-provider relationship (Poulin & Young, 1997; Young & Poulin, 1998). Chapin Hall research staff developed all data collection instruments and subcontracted with Westat Associates to hire, train, and supervise field staff who conducted these in-person and telephone interviews.

[7] Minor modifications to some of these measures were made to better reflect the context of this study.

2. Participant Qualitative Interviews:

The semi-structured, in-depth qualitative interview protocols implemented with our participant sub-sample about 2 and a half years after enrolling in the study focused on specific topics that the surveys and quarterly reports touched on, but did not explore in great detail. At the time of these interviews, the target child that initiated their use of Welcome Home or Early Start was 2.5 years old (*SD* = .33).[8] Participants were interviewed twice over a two week period.[9] Each participant interview lasted about 90 minutes, and was tape recorded with the participant's permission and transcribed. Participants were provided a $25 gift certificate for each interview.

There were two types of interview protocols used with this sample, an Ecocultural Family Interview (EFI) and a Programmatic Questionnaire. The EFI is a conversation with parents about how they organize their everyday routine -- how they plan, create, change, and sustain family activities (Ecocultural Scale Project, 1997; Weisner, 1997). Through the interview, mothers have an opportunity to talk about their family circumstances related to topics such as employment, their neighborhood, education, social support, childcare, social services, transportation, meals, housework, relationships, and all the other resources and constraints that make up their family's ecology. Mothers also describe goals for their children and for themselves, naturally revealing their values and moral convictions regarding the right way to live and raise children. The EFI focuses on determining what resources each participant believes they have available and what constraints they must work within using their own words, from their own life perspective. Specific definitions that were included under each dimension are detailed in Appendix 4.C.

The Programmatic Questionnaire was an open-ended protocol used to gather specific information about the Welcome Home and Early Start programs at the second interview. It was a structured open-ended interview created in order to ensure that all interviewers collect the same information about the Welcome Home and Early Start programs. Topics covered in the questionnaires included, among other issues, were the participant's view of program services and her relationship with her home visitor.

3. Staff Assessments of Participant Progress:

Additional information on the Early Start service experiences for mothers in our sample was obtained through quarterly survey reports completed by each participant's home visitor. These forms, completed every 3 months during a participant's enrollment, asked the Early Start worker to summarize the presence or absence of key problems or concerns for the participant and her family; progress on her Individual Family Service Plan (IFSP); her service profile (e.g., number of attempted and provided home visits, all telephone contact and other direct services, service referrals, etc); an assessment of the her overall progress and level of engagement; and completion of the staff version of the Helping Relationship Inventory. If the participant left services during that quarter, the home visitor was asked to document the date services ended and the reason the parent left the program.

[8] Range in target child's age at time of the qualitative interviews was between 1.7 and 3.0 years.

[9] The average number of days between the first interview and the second interview was 16 (SD = 14.3), excluding three outlier cases in which over 4 months passed (120, 153, and 183 days), before the second interview was completed.

4. Early Start Case Record Reviews:

In order to collect detailed information about a sub-sample participant's service receipt, Early Start case record reviews were attempted for all sub-sample participants who were in the low- or high-user sample groups. Two Early Start agencies were unable to locate one file, both from the low-user sample group. A total of 40 case records were reviewed from 16 different agencies, 21 High-Users and 19 Low-Users.[10] Reviewers used a standard record review protocol that collected information from the Individual Family Service Plan (IFSP) and case notes. Termination information, if available, was also gathered from the case records.

5. Child Welfare Administrative Data:

Although enhancing parental capacity is a central objective of the Welcome Home and Early Start intervention system, equally important is insuring child safety. To capture the extent to which these home visitation efforts achieve this objective, we examined data from the County's Department of Children and Family Services (DCFS) to determine if the children in our sample were reported for child maltreatment during the first months of life. Initially, we examined the pattern of maltreatment reports among our sample for the first 6 months following the birth of the target child (Daro, Howard, Tobin & Harden, 2003). In this report, our observation period is extended. Available data allows us to monitor both the number and distribution of child abuse reports observed during a child's first year of life for 99 percent of our sample, and for an 18-month observation period for two-thirds of our sample. In addition to examining child abuse trends for our sample children, we also examine reporting trends for the full cohort of Early Start participants referred to the program in 2001.

Program Characteristics and Quality

1. Staff Characteristics and Service Delivery Style:

At the onset of the study, we collected a self-administered assessment questionnaire from all Welcome Home and Early Start direct service personnel and supervisors. This assessment form included basic descriptive information (e.g., age, race, educational status, etc); employment history; in-service training opportunities; satisfaction with the overall structure and management of the program; and an assessment measure of their service delivery style developed by the research team. This 32-item experimental measure captures two dimensions of service delivery style: the structure of home visitation services (flexible versus structured) and the quality of the service delivery relationship (self-revealing versus distant). Eighty-six of the home visitors who completed the self-administered assessment at the onset of the study served families who participated in the evaluation study. Many of the findings from these data sources were reported in the ECI Evaluation and Research Project Interim Report, (Coulton, et. al., 2001) and, therefore, are not included in this report.

2. Overall Welcome Home and Early Start Program Performance:

We used the County's administrative data system (i.e., Help Me Grow) to track the service experiences of all families who had received Welcome Home or Early Start services

[10] Each case record review for High-User participants took about 86 minutes to complete, while each Low-User average about 51 minutes. The quantity and quality of case records varied greatly across agencies. Variations in clarity and consistency of records were discussed in detail in the ECI report on program Quality (Howard et al., 2003).

since the program began in July 1999. These data were used to monitor key changes over time in each program's ability to successfully reach its target population and to enroll children closer to the time of birth. In addition, these data provided a global assessment of Early Start program performance and document the extent to which families referred to Early Start received an initial home visit; the levels of service provided within the first 3 and 6 months of enrollment; and 6-month retention rates.

3. Qualitative Data on a Sample of Early Start Providers:

Qualitative data were collected from six Early Start provider agencies in the spring of 2002 to examine organizational structure, mission, and service delivery patterns. At each agency, the program manager or lead supervisor was interviewed; focus groups were conducted with all direct service staff regarding their perceptions of how Early Start services are delivered and managed within their agency; and program records for a random sample of open and closed cases were reviewed (Howard, et al., 2003). For this report we have interviewed an additional seven Early Start program managers to improve our ability to explore the relationship between key agency characteristics such as mission, staffing characteristics, and service capacity and performance levels with respect to participant enrollment and retention as documented in the program's administrative data.

Analytical Techniques:

As discussed earlier in this chapter, a combination of analytical methods that used both quantitative and qualitative techniques was used in this study.

Quantitative

A series of bivariate and multivariate analytic techniques were applied to both the survey and administrative data to describe the sample population and initial service satisfaction. To the extent possible, these data also identify the extent to which specific individual, provider, and program characteristics accounted for the initial variation in the number of months enrolled in the program and the number of home visits received. These techniques also were used to identify possible Early Start program effects at 11 months post enrollment, including the rate at which our sample families experienced a report of child abuse and neglect following enrollment in our study.

With respect to participant enrollment, we applied three multivariate techniques. First, we employed logistic regression to identify the set of factors that best explained differences between those who never receive a visit (or never engaged) versus those who receive at least one home visit. Second, we examined program retention using survival analysis, to more accurately specify the rate at which those receiving at least an initial visit left services. Finally, we used ordinary least square regression analysis (OLS) to identify relationships between various demographic, personal functioning, and service characteristics with the number of home visits provided to those who formally "enrolled" in Early Start (i.e., received at least one home visit). OLS analysis is able to model the direct relationship between service dosage, participant characteristics, and service variables while controlling for the influence of other variables.

To examine the potential impacts of Early Start services on participant behaviors, personal capacity, and parenting skills, multivariate analytic techniques were used to estimate the

extent to which any changes observed over time might be related to service duration or dosage. For these analyses, our outcome variables included changes in various standardized measures; changes in the number of parental concerns and challenges noted by respondents; and information from various administrative data systems regarding subsequent reports for child maltreatment and the outcome of these reports.

For those outcome areas in which we detected significant change, multiple regression techniques were applied to all Early Start referrals, regardless of referral source or actual receipt of a home visit. In selecting variables for these models, we employed cross tabulations and t-tests to assess the correlations between key variables in order to identify interaction terms and to explore the relationships among various "risk" or "protective" factors. In structuring the regressions, we first entered individual characteristics that might be associated with differential outcomes (i.e., SES risk markers), then entered "referral source" (i.e., Welcome Home versus OWF), and then entered service level.

Qualitative

Qualitative techniques were used with the in-depth interviews and the case record data. Data collected from interviews included a standardized EFI codebook, interviewer summary notes, and transcribed audiotapes. Thematic analysis was used with the EFI codebook, summary notes, transcripts, and case record reviews. Thematic analysis searches for patterns, exemplary events, key activities, practices, beliefs, goals, and processes through which programs such as Welcome Home and Early Start did or did not impact family life, based on the participant's family circumstances and perspective. We used software programs developed for qualitative data to facilitate the systematic analysis and coding of the interviews.

In addition to the method of thematic analysis, after an interview was completed the interviewer rated the family on 40 different dimensions of family circumstances using a standardized EFI codebook. For each item in the codebook, the interviewer determined whether the family demonstrated low, moderate, or high levels base on a family circumstance item and then fine-tuned the rating by assigning a number ranking to that choice. A brief statement regarding the information the participant stated in the interview that is used by the interviewer to arrive at each rating is written in the codebook next to each item. These statements or "cues" are an important product of the interview and helps to validate the interviewer's numeric ratings. Uncorrected interrater reliability for EFI codebook items was 88.21 percent, ranging from 70 to 100 percent. The corrected reliability was 92.9 percent.[11]

It is important to emphasize that the EFI ratings or scores are based on the *participant's point of view* about her current family circumstance. The interviewers' ratings are *not* based on their personal feelings or interpretation of what a participant says or what an interviewer believes the participant said or meant. It is based on the actual words, description, and perspective of the

[11] Inter-rater reliability assesses the extent of agreement, or consistency, among interviewers and raters. Raters read interview transcripts and/or listen to recordings, and independently completed an EFI codebook to check reliability. The percent agreement between scoring of items determines reliability. Sixty-two percent (n = 53) of the EFI interview codebooks were reviewed for reliability. Only 12 of the 53 interviews reviewed had an initial reliability of less than 81 percent agreement. These initial reliabilities ranged from 70 to 80 percent, and upon correction, these 12 interviews had a reliability ranging from 85 to 100 percent.

respondent herself. This style of scoring is contrasts with way social evaluation research is typically conducted, in which interviews usually focus on specific, narrowly pre-defined topics identified and driven solely by the interests of the researchers (Ecocultural Scale Project, 1997).

New Parent Sample Characteristics

Significant differences existed at enrollment and at the initial interview among the study's three parent samples. To identify the most salient differences, we compared the two Welcome Home samples and the two Early Start referral groups. In the first instance, we were interested in identifying any notable areas in which the Welcome Home referral system might miss new mothers facing significant elevated risk in any of our outcome domains. This analysis also provided a basis for determining the specific covariates we might use in comparing change over time between the two samples, using the Welcome Home only population as a comparison group to those referred on to Early Start.

The second set of comparisons examined the extent to which families referred to the program through two different referral sources represented populations with significantly different risk levels as determined by a specific set of functional measures.

Demographic Characteristics:

Full Participant Sample

Key descriptive enrollment characteristics for the study's three samples--Welcome Home only (WH), Welcome Home-Early Start referrals (WH-ES), and OWF-Early Start referrals (OWF-ES)--are summarized in Table 4.2. In contrast to the other two samples, the Welcome Home only group includes a higher proportion of participants who were white (70.2%), married (60.1%), and employed (73.8%). About one-third of the Welcome Home group had completed college and over half reported household incomes in excess of $40,000 a year. In contrast, the majority of WH-ES sample had at least one of the demographic markers commonly associated with an elevated risk for child maltreatment and poor parenting (Daro, 1988; Guterman, 2001; Olds, Henderson, Chamberlin & Tatelbaum, 1986). The mean age of the WH-ES women was 19.4 years and about one-quarter were teens, ages 16-17. This group was considerably younger than the WH group who reported a mean age of 26.1 years. Over 90 percent of this group reported never being married and over half had not yet graduated from high school. Reflecting their young age, the majority of the WH-ES group (57%) reported living with their parents. In contrast to the WH group, the majority of the WH-ES group had little experience in the work force, although a large proportion (44.2%) indicated they were actively seeking work. Half of the WH-ES group (51.3%) reported household annual incomes of less than $10,000.

Although the sample referred to Early Start through OWF shared many of the socio-economic risk factors observed in the WH-ES referral group, only one-third of the OWF-ES referrals were first-time parents. In contrast, 95 percent of the WH group and 87 percent of the WH-ES reported being first-time parents. Compared to the WH and WH-ES samples, the OWF-ES population had the largest proportion of African Americans (70.1%) and the largest proportion of respondents reporting household annual incomes of less than $5,000 (55.3%). Compared to the Early Start referrals from Welcome Home, the OWF-ES sample reported a slightly higher level of educational achievement (i.e., almost two-thirds of the OWF-ES referrals had at least a high school diploma or G.E.D.).

Table 4.2 Demographic Characteristics of Study Sample at Time of Study Enrollment

	WH	*Test statistics*	WH-ES	*Test statistics*	OWF-ES
Sample Size	269		314		178
Average Age (*SD*)	26.1 (5.7)	*t* = 18.1**	19.4 (3.0)	*t* = -11.8**	23.6 (4.8)
Teen Parents[a] (%)	3.3	X^2 = 43.4 **	22.0	X^2 = 30.4 **	3.4
Race/Ethnicity (%)		X^2 = 94.1 **		X^2 = 19.8 **	
African American, Black, not Hispanic	19.2		50.5		70.1
Hispanic	4.2		9.4		8.0
Asian or Pacific Islander	3.8		0.0		0.0
American Indian	0.4		1.0		0.0
White, not Hispanic	70.2		34.5		20.1
Other	2.3		4.6		1.7
Marital Status (%)		X^2 = 217.3 **		X^2 = 20.5 **	
Never Married	24.7		67.9		70.9
Never Married, living with boyfriend/partner	14.1		24.7		12.2
Married, living with spouse	60.1		3.9		8.7
Married, living apart	0.8		1.9		2.9
Legally Separated	0.0		0.3		1.2
Divorced	0.4		1.0		4.1
Widowed	0.0		0.3		0.0
Educational Level (%)		X^2 = 206.8 **		X^2 = 27.4 **	
Less than high school	0.8		11.7		4.0
Some high school	7.2		41.9		30.1
High school/GED	26.8		30.2		33.5
Some college	27.2		14.6		28.9
Associates degree	7.5		0.3		2.3
Bachelors degree	16.6		1.3		1.2
Graduate degree	14.0		0.0		0.0
Employment Status (%)		X^2 = 128.5 **		X^2 = 9.5 *	
Employed full-time	34.5		5.6		8.1
Employed part-time	4.5		5.0		11.0
Employed, on maternity leave	34.8		21.8		24.4
Unemployed, looking for work	11.4		44.2		38.4
Unemployed, not looking for work	14.8		23.4		18.0
Household Income (%)		X^2 = 157.3 **		X^2 = 31.4 **	
Under $5,000	10.8		34.2		55.3
$5,000 to $9,999	4.4		17.1		13.2
$10,000 to $19,999	8.8		20.6		20.8
$20,000 to $29,999	15.3		14.0		9.4
$30,000 to $39,999	8.0		8.2		0.0
$40,000 to $49,000	13.3		1.9		0.0
Over $50,000[b]	39.4		3.9		1.2

(table continues)

Table 4.2. (continued)

	WH		Test statistics	WH-ES		Test statistics	OWF-ES	
Average number of adults in household (*SD*)	2.2	(.71)	*t* = -1.6	2.3	(1.1)	*t* = 5.1 **	1.8	(.93)
Other Adults living in household (%)			X^2 = 220.5 **			X^2 = 87.1 **		
Spouse	57.7			3.3			7.0	
Boyfriend/Girlfriend	14.0			17.0			8.2	
Mother's Parents/Foster Parents	6.8			31.7			17.5	
Other relatives	2.3			4.9			9.4	
Friends/Others	.8			1.6			1.8	
More than one of the above categories	12.8			30.7			12.9	
No other adults/Live alone	5.7			10.8			43.3	
Maternal History								
Mother's first child (%)	94.8		X^2 = 7.2 **	87.3		X^2 = 137.9 **	38.2	
Average number of children (*SD*)	.1	(.44)	*t* = -2.4 *	.2	(.64)	*t* = -12.3 **	1.3	(1.4)

Note. A t-test or chi-square test was applied to differences between characteristics of WH and WH-ES and WH-ES and OWF-ES to determine whether apparent differences were statistically significant. For variables that are not independent of one another (e.g. race/ethnicity, marriage status, etc.) a chi-square test was used. The results of this test (the asterisk indicating *p*-value) are shown on the line with the name of the variable.
[a]Teen is defined as ages 16 and 17.
[b]OWF participants with household income over $50,000, were young and lived with several relatives.
Statistical significance levels are indicated as ***p* < 1 percent and **p* < 5 percent.

Sub-Sample

The demographic characteristics of the sub-sample have similar variation as the full sample, suggesting it is fairly representative of each program group. Details about the sub-sample's baseline demographics are in Appendix 4.D. These demographic differences among the three sample groups reflect the Phase I sample, in which different participant profiles fit with different target populations.

Demographic Characteristics Summary

These demographic differences among the three sample groups reflect the types of participant profiles expected among programs with different target populations. As the most universal of the programs, Welcome Home serves families that reflect the dominant demographic patterns observed among new parents throughout the County (e.g., generally married, wider income range, and diverse educational and employment experiences). In contrast, participants referred on to Early Start, either by Welcome Home nurses or OWF caseworkers, include a higher proportion of families that share demographic markers often indicating an elevated risk for child abuse and other poor adult and child outcomes (Chalk & King, 1998; Daro, 1988).

Personal Functioning:

Full Participant Sample

Given these demographic and socio economic differences, we expected to observe similar variation in the baseline scores reported for these groups on our array of standardized measures. As summarized in Table 4.3, statistically significant differences were observed between the two Welcome Home samples (e.g., those referred on to Early Start and those not referred on) and the two Early Start samples (e.g., those referred by Welcome Home nurses and those referred by

OWF workers) on a majority of these measures. However, in all but two instances, these differences were relatively small and did not suggest substantial differences across groups.

Table 4.3 Baseline Scores of Performance Measures

	Welcome Home Visit Only			Welcome Home- Early Start			Ohio Works First-Early Start	
Measures	*M*	*(SD)*	Difference	*M*	*(SD)*	Difference	*M*	*(SD)*
Sample Size	269			314			178	
Family Strengths	8.6	(.65)	.3	8.3	(.69)	-.4 **	8.7	(.96)
Readiness to Change	56.7	(6.3)	-1.6 **	58.3	(6.6)	-.2	58.5	(6.8)
Performance Measures								
Knowledge of Infant Development (KIDI)								
Correct	69.4	(.13)	7.2 **	62.2	(.12)	-3.6 **	65.8	(.11)
Baby Safety Checklist (BSC)								
Correct	88.1	(.05)	1.6 **	86.6	(.07)	-.8	87.3	(.06)
Parenting Sense of Competence (PSOC)	74.9	(9.1)	-.6	75.5	(8.7)	.7	74.6	(8.2)
PSOC-Skill/Knowledge*	33.4	(5.3)	-1.2 **	34.6	(4.7)	.4	34.2	(4.4)
PSOC-Valuing/Comfort	41.5	(5.7)	.6	40.1	(5.9)	.3	40.7	(5.8)
Social Support Behaviors (SSB)	42.8	(2.7)	.8 **	42.0	(3.3)	1.3 **	40.7	(6.8)
SSB Practical Help*	6.8	(.53)	.2 **	6.6	(.66)	.2	6.5	(1.1)
SSB Financial Assistance*	7.7	(.79)	.2 **	7.5	(1.05)	.4 **	7.1	(1.8)
SSB Advice Guidance*	11.8	(.76)	.2	11.6	(1.3)	.3 **	11.3	(2.0)
SSB Emotional*	9.7	(.78)	.2 **	9.5	(.90)	.3 **	9.2	(1.7)
SSB Socializing	6.7	(.67)	.0	6.7	(.55)	.2 *	6.6	(1.0)
Social Support Index (SSI)[a]	51.7	(7.9)	4.2 **	47.4	(7.9)	3.1 **	44.4	(8.6)
Perceived Stress Scale (PSS)	13.3	(5.9)	-1.1 *	14.4	(6.4)	-2.4 **	16.8	(7.0)
Depression Mood Scale (CES-D)*	8.4	(7.3)	-3.4 **	11.8	(8.6)	-2.3 **	14.1	(9.6)
Child Abuse Potential Inventory (CAP)	76.7	(58.9)	-13.6 **	90.3	(67.5)	-29.5 **	119.7	(83.6)

Note. Actual sample sizes for individual measures may vary as a result of missing data. A two-tailed t-test was used to assess the statistical significance of differences in characteristics between Welcome Home Only and Welcome Home-Early Start Referrals, and Welcome Home-Early Start referrals and OWF-Early Start Referrals.

[a]A systematic coding error resulted in higher SSI scores in the Cuyahoga County Early Childhood Initiative Evaluation: Phase I report (Coulton and colleagues, 2003). While this error impacted the final scores for all participants, it did not alter the general pattern of findings or our interpretation of the results.

Statistical significance levels are indicated as **p < 1 percent and *p < 5 percent.

Substantive differences were observed in the potential risk for physical abuse and clinical depression. With respect to our comparison of the two Welcome Home samples, the average CAP score of participants in the WH group (M = 76.7, SD = 58.9) was significantly lower (p < .01) than the average score for the WH-ES group (M = 90.3, SD = 67.5). The gap between the average CAP scores between these two groups is particularly striking given that our sample

selection process for the WH group focused on identifying the most at-risk families among the 981 Welcome Home participants initially recruited for the study. The full, recruited sample of Welcome Home recipients had an average CAP score of 42 (*SD* = 44). On balance, this pattern suggests that although the current screening process may indeed miss someat-risk families, the majority of families facing the greatest challenges are appropriately identified by the Welcome Home nurse and referred on to Early Start at the time the baby is born. The pattern also suggests that despite our attempts to "match" participants in both groups on their baseline CAP score, the WH group remained, on average, significantly less at risk, as measured by the CAP, than the WH-ES group.

In comparing the two Early Start referral groups, participants enrolled through OWF had significantly higher ($p < .01$) CAP scores ($M = 119.7$, $SD = 83.6$) than families referred to Early Start by the Welcome Home nurse ($M = 90.3$, $SD = 67.5$). However, even at this elevated level, the average OWF-ES CAP score suggests only a moderate risk for actual physical abuse (Milner, 1994). Although not presenting the highest level of risk, the average score for both Early Start samples are comparable to the CAP scores reported by other samples of new parents who have enrolled in various child abuse prevention programs (Chaffin, Bonner & Hill, 2001; Daro, 2000).

The Center for Epidemiological Studies – Depressed Mood Scale (CES-D) also showed notable differences between the two sample comparisons. A significant difference on this measure was observed between both the two Welcome Home service groups ($t = -3.4$, $p < .01$) and the two Early Start referral groups ($t = -23$, $p < .01$). The average CES-D scores for both WH-ES (11.8) and OWF-ES (14.1), while high, were lower than the threshold score typically used to suggest clinical depression (i.e., 16).[12] However, a sizable minority of participants in all three groups scored above this clinical benchmark for high risk. Overall, 16 percent of the WH sample, about one-quarter of the WH-ES group and over one-third of the OWF-ES group scored 16 or higher on this measure. This finding confirms that the potential for depression, while apparently highest among new parents with a number of socio-economic risk factors, exists across a broad range of new mothers.

Sub-Sample

Overall, variation within the sub-sample of participants mirrored the patterns observed in the full-sample, and scores on individual items are fairly close recognizing the difference in sample size across the two groups.[13] However, certain key differences exist between the sub-sample and their respective full populations due in part to the way in which the sub-groups were selected. Because the Welcome Home only sub-sample was selected based on elevated CAP scores, the mean CAP score and standard deviation of this sub-sample ($M = 127.7$, $SD = 78.7$) is notably higher than the full Welcome Home-only sample CAP score ($M = 76.7$, $SD = 58.9$). In

[12] The 16-point threshold is based on Radloff's (1977) original study on the general population, suggesting that symptoms at this level are likely to be of clinical significance. Although this cutoff score is widely used among those examining welfare and high-risk parent populations, the concurrent or predictive validity of this decision has not been tested extensively. Strong correlational evidence, however, suggests that those individuals with a CES-D score in this range are far more common among those being treated for clinical depression than among the general population.

[13] See Appendix 4.E. The ability to determine statistical significance may be comprised because of the small sample size.

addition, the mean depression score of the Welcome Home-only sub-group is also elevated compared to the full sample (e.g., M = 12.3, *SD* = 10.8 versus M = 8.4, *SD* = 7.3).

Similar differences in the CAP and depression scores were observed among the ES-OWF sub-sample. The avearage CAP and CES-D scores of the ES-OWF interview sample are distinctly higher than the full OWF sample. Although the method for selecting OWF participants within each of the three programmatic user subgroups was random, the selections of the user groups themselves were based on program utilization patterns. Among the OWF user groups, a larger proportion of participants who engaged in the program (got at least one visit), had higher CAP scores.[14] In addition, there were only 15 OWF low-users and 13 high-users eligible for the sub-sample, all but one of which were selected for the qualitative interviews. Although the baseline characteristics of the OWF sub-sample may not fully correspond to the full OWF sample on these dimentions, the sub-sample does appear to represent those more distressed mothers who are most likely to be in need of Early Start services.

Specific Parental Concerns and Attitudes Towards Formal Services:

At the time their babies were born, mothers in all three groups reported relatively few concerns about meeting their babies' basic needs or providing for their own health and emotional well-being. As summarized in Table 4.4, the average number of concerns across the three groups ranged from 3.4 for the WH group; to 3.7 for the WH-ES referrals; to 4.4 for the OWF-ES referrals.[15] The mean number of concerns listed by those in the OWF-ES referral group was significantly higher than the number reported by the WH-ES group. In addition, almost one-third of the participants in the OWF-ES referral sample had concerns with their self-sufficiency plan. When this issue is included in the list of potential concerns, the average number of concerns noted by OWF-ES participants increased to 4.6 (*SD* = 3.3).

The majority of respondents in all three groups who expressed concerns with child development and various infant care issues were fairly confident that Early Start or other community services could help them address these concerns. For example, over 90 percent of those referred to Early Start through Welcome Home or OWF were concerned about their infant's development and believed Early Start would address this need. In contrast, less agreement existed across the three groups about the efficacy of services in helping with issues such as the participant's mental or physical well-being and securing adequate childcare. Whereas over 80 percent of the WH participants with concerns about their own physical and mental health thought community services were available to help them in these areas, only 63 percent of the WH-ES referrals and 48 percent of the OWF-ES referrals believed Early Start would specifically address these concerns. For the small group of respondents who expressed concern with establishing friendships with others in the community or with community violence, respondents in the WH group were generally more optimistic about finding community resources to address these concerns than participants in either Early Start referral group were that Early Start would help them in these areas.

[14] Statistical analysis reviewed in next section on program utilization (originally presented in Coulton and colleagues, 2003 and Daro et al., 2003) found that participants with the highest CAP scores (i.e., over 166) were over twice as likely as those with the lowest CAP scores to receive at least an initial home visit, and those with moderate CAP scores were over one and a half times more likely to receive an initial home visit.

[15] Appendix G shows the initial concerns and beliefs that Early Start could help by User Group for the study sample.

Table 4.4 Initial Concerns and Belief that Early Start or a Community Service Could Help[a]

Measures	Welcome Home Visit Only	Difference	Welcome Home – Early Start Referrals	Difference	Ohio Works First – Early Start Referrals
Mean number of parents concerns (range between 0 - 13)	3.4 (2.9)	-0.31	3.7 (3.1)	-.95 *	4.4 (3.1)*
Mean number of concerns that Early Start/community programs will help	2.6 (2.5)	-.53 *	3.1 (2.6)	-.32	3.3 (2.6)
Type of Concerns					
Finding a different home or improving a current residence (%)	42.9		48.4		67.2
Believe Early Start/community will help (%)	51.3		58.2		61.9
Child development (%)	57.2		45.9		44.4
Believe Early Start/community will help (%)	82.4		90.3		91.1
Having adequate child care (%)	37.5		37.3		47.2
Believe Early Start/community will help (%)	66.3		82.6		78.0
Financial issues (%)	34.5		41.2		58.4
Believe Early Start/community will help (%)	47.8		60.9		54.4
Feeding your infant (%)	32.1		25.5		23.0
Believe Early Start/Community will help (%)	82.6		86.1		75.6
Health care for baby (%)	21.2		32.5		38.2
Believe Early Start/community will help (%)	82.5		85.1		80.6
Participant's mental and/or physical health (%)	20.9		20.2		27.5
Believe Early Start/community will help (%)	80.4		63.1		47.9
Relationship with significant others (e.g., husband, partner, boyfriend) (%)	19.3		21.0		24.4
Believe Early Start/community will help (%)	38.5		41.5		27.9
Relationships with extended family (%)	15.4		14.7		18.5
Believe Early Start/community will help (%)	51.2		43.5		33.3

(table continues)

Table 4.4 (continued)

Measures	Welcome Home Visit Only	Welcome Home – Early Start Referrals Difference	Ohio Works First – Early Start Referrals Difference
Establishing friendships with others in the community (%)	13.1	9.2	7.9
Believe Early Start/community will help (%)	82.9	46.7	42.9
Legal issues (%)	9.0	11.5	14.1
Believe Early Start/community will help (%)	62.5	58.8	47.8
Employment/job training (%)	16.5	37.6	45.8
Believe Early Start/community will help (%)	65.1	67.2	71.3
Community violence (%)	19.9	24.1	27.5
Believe Early Start/community will help (%)	49.1	36.5	30.4
Self-sufficiency			
Self-sufficiency plan requirements (%)[b]			30.5
Believe Early Start/community will help (%)			79.4

Note. Numbers in parentheses are standard deviations. A two-tailed t-test was used to assess the statistical significance of each difference in characteristics between Welcome Home Only and Welcome Home-Early Start Referrals, and Welcome Home-Early Start referrals and OWF-Early Start Referrals.

[a]Early Start Referrals were asked if they thought Early Start could help them with their concerns. Welcome Home only study participants were asked if *any community program* could help them with this concern.

[b]Applicable to OWF group only. This item is not included in the total score for the OWF sample. When this measure is included in the total number of parental concerns the mean is 4.6 with a standard deviation of 3.3. The mean number of concerns OWF believe Early Start/community programs will help with is 3.5 (2.7) when self-sufficiency concerns are added to the calculation.

Statistical significance levels are indicated as $**p < 1$ percent and $*p < 5$ percent.

Sub-Sample

Reflecting the high CAP and depression scores noted earlier, participants in the interview sample also reported a higher number of inital concerns compared to the overall evaluation sample. For example, mothers in the ES-OWF subsample had a mean number of concerns of 5.0 (*SD* = 3.4) compared to 4.4 for the full sample. For the WH sub-group, the mean number of concerns was 4.1 (*SD* = 3.2) compared to 3.4 (SD = 2.9) for the full sample. There was also variation in the type of concerns most frequently rasied by participants in the interview sample, particularly among the Welcome Home only sample. However, most of these differences are small and do not amount to significant variation when sample size differences are taken into account. (See Appendix 4.F).

As in the full sample, the majority of participants from all three sub-samples who expressed concerns about child development and various infant care issues were fairly confident that Early Start or other community services could help them address these concerns. The only exception to this pattern was among OWF-ES participants. In this case, 2 of the 8 mothers who expressed concerns about feeding their infant did not think Early Start could help them with this issue.

Personal Functioning and Parental Concerns Conclusions

Overall, patterns suggest that new mothers have diverse needs and different opinions regarding the likelihood that community services or formal supports can or should address these concerns. These differing opinions may reflect a variety of underlying concerns or preferences. With respect to the WH sample, these new mothers may be unaware of the full range of services available in the community and, therefore, believe that service resources are simply not available to help them. In other cases, mothers may be aware of various service options but feel either that the quality or capacity of these programs are inadequate or that such services are inappropriate for addressing personal or parenting concerns. As we noted in previous reports (Coulton and colleagues, 2003; Daro et al., 2003), the WH mothers were more likely at the time of our 3-month interview to rely on family members and friends to help them resolve basic parenting concerns or child care needs than to use formal, community services. Again, we do not know if these mothers first turned to their informal networks because this was their preference or because they were not fully familiar with local service options. However, these patterns do suggests that families use a variety of strategies to address their parenting needs and that the specific role formal support will play may depend on a constellation of factors include familiarity with local service options, personal attitudes toward using public services, and perceptions of service quality and utility.

Early Start Utilization Levels

This section reviews the service utilization patterns over time among all Early Start referrals and compares these patterns to the experiences of participants in our evaluation sample. In addition, descriptive data on Early Start agencies and sample participants were examined to determine if variations in either providers or participants impact levels of service enrollment or retention.

General Utilization of Early Start Services:

Table 4.5 summarizes the service experiences through June 2003 for eight cohorts of children initially referred to Early Start between July 1999 and March 2003.[16] For all children referred during each period, we report their service experiences, including estimated duration and dosage, and average time between critical service points (e.g., the average time between referral into Help Me Grow and referral out to an Early Start service provider and the average time between an agency receiving a referral and completing an initial home visit).[17] Because the primary focus of the evaluation is on the experiences of mothers with newborns, we separated out the service experiences of those children who were under 6 months of age at the time their families were initially referred to Early Start. In calculating the number of home visits provided during the initial 3 and 6 month post-enrollment periods, we report the number of visits provided each child rather than each family.[18]

A total of 19,975 infants, toddlers, and young preschool children, 72 percent of whom were under the age of 6 months, have been referred for Early Start services from program inception through June 2003. Of those referrals that occurred through March 2003 (19,049), 55 percent of all young children and 60 percent of all children reported before their 6-month birthday eventually received at least one home visit and completed an Individualized Family Service Plan (IFSP). On average, approximately one-third of all infants and about 14 percent of older children have been referred to Early Start by multiple sources. However, this proportion has declined steadily over the years, suggesting that greater efficiencies now exist in enrollment procedures.

Approximately 41% fewer children were referred to Early Start between January and June 2003 than had been referred to the program between June and December 1999. There are several reasons that might explain this decrease, such as declining birth rates, decrease in welfare caseloads, and the elimination of Prevention, Retention, and Contingency (PRC) Program funds. With no new populations being identified for service and older children having been theoretically enrolled in the program at the time of their birth, Early Start is increasingly operating as a very early intervention program (focusing on newborns) rather than needing to offer initial services to children from birth to age 5.

For the most recent reporting period, Help Me Grow referred cases on to a specific Early Start service provider in less than three days, a substantially shorter period of time than was true during the program's initial operating year where cases may have remained with Help Me Grow

[16] In order to maximize the post-referred observation period for all cohorts, we limited our sample selection for the most recent 6-month period to those who were referred during the first quarter of 2003, all of whom were observed for at least 3 months and half for at least 6 months. This approach provided more stable service estimates than if we had examined the experiences of all children referred to Early Start through June 2003.

[17] Because virtually every child who received a home visit completed at least one Individualized Family Service Plan (IFSP), we have not separated out that indicator in this analysis.

[18] This avoids a duplication problem inherent in the way home visits are documented by Early Start. For example, if a family has two children, a single Early Start visit will be attributed to each child in the family. If one were to compute the total number of visits to the family by adding the number of visits to each child, it would appear that the family received two visits rather than one. Presenting the service data by individual child avoids this problem and provides a more conservative estimate of service dosage.

Table 4.5 Service Experiences of Eight Cohorts of Children Referred to Early Start Between July 1999 and March 2003

	Early Start Referrals (*N*)	Received 1 or more Home Visit (%)	Received 1 or more Referral (%)	Time from referral in and out to provider (*M* in days)	Time from referral out to Home Visit (*M* in days)	Child age at first Visit (*M* in months)	Children with more than 1 Home Visit by 3 months (%)	Number of Visits to child by 3 mos. (*M*)	Children with more than 1 Home Visit by 6 months (%)	Number of Visits to child by 6 months (*M*)	Children exited by 6 months (%)
All children											
Jul - Dec 1999	3346	47	27	48.5	132.6	13.2	27	3.5	36	7.3	49
Jan - Jun 2000	3243	55	29	47.6	100.6	10.2	36	3.9	46	7.9	44
Jul - Dec 2000	2275	59	29	42.8	91.4	8.5	37	3.8	50	8.0	44
Jan - Jun 2001	2972	64	32	34.4	54.4	6.2	50	4.2	58	8.5	48
Jul - Dec 2001	2587	62	28	37.8	46.7	6.0	48	4.0	58	8.0	48
Jan - Jun 2002	1761	63	25	12.1	37.9	4.2	56	5.3	60	9.0	54
Jul - Dec 2002	1842	62	21	3.2	27.1	4.2	59	5.5	61	9.3	54
Jan - Mar 2003[a]	1023	62	20	1.8	18.1	2.9	62	5.9	62	7.0	39 [b]
Totals	19049	58	27	33.4	71.3	7.6	44	4.4	52	8.2	48
Children < 6 mos.											
Jul - Dec 1999	1892	50	34	48.6	126.9	5.3	30	3.5	40	7.3	44
Jan - Jun 2000	2143	58	36	49.5	105.0	4.1	37	3.8	48	7.8	40
Jul - Dec 2000	1662	60	36	44.0	94.4	3.7	37	3.7	50	7.9	43
Jan - Jun 2001	2239	66	37	35.1	54.1	1.8	52	4.1	60	8.4	46
Jul - Dec 2001	1965	63	33	37.9	48.7	1.6	49	3.9	59	7.9	45
Jan - Jun 2002	1445	64	28	12.3	38.4	0.7	57	5.3	61	9.0	53
Jul - Dec 2002	1483	63	24	3.1	26.5	0.2	59	5.4	62	9.3	53
Jan - Mar 2003[a]	844	62	23	1.7	18.5	-0.5	61	5.7	62	6.8	38 [b]
Totals	13673	61	33	32.6	68.6	2.4	46	4.4	54	8.1	45
Children > 6 mos.											
Jul - Dec 1999	1454	43	19	48.3	141.4	25.1	23	3.5	32	7.3	54
Jan - Jun 2000	1100	50	15	43.9	90.8	23.5	33	4.1	42	8.0	53
Jul - Dec 2000	613	56	12	39.3	83.0	22.0	37	4.1	49	8.4	45
Jan - Jun 2001	733	57	16	32.2	55.2	20.7	44	4.7	52	8.8	52
Jul - Dec 2001	622	58	13	37.6	40.2	20.1	47	4.2	55	8.2	58
Jan - Jun 2002	316	59	11	11.4	35.7	20.1	53	5.7	56	9.4	58
Jul - Dec 2002	359	58	6	3.6	29.3	21.0	56	5.8	57	9.7	56
Jan - Mar 2003[a]	179	63	8	2.2	16.5	17.9	63	6.6	63	7.8	43 [b]
Totals	5379	52	14	35.6	78.7	22.2	38	4.5	46	8.3	53

[a]Although this cohort focuses only on children initially referred for service in the first quarter of 2003, the service experiences of these children were observed through June 2003.

[b]The total number of children referred through June 2003 were 1,949. Of these children 1,605 were < six-months and 344 were > six-months.

for one month or longer. A similar decrease has occurred in the time between the Early Start agency receiving a referral and the completion of the first home visit. Children referred during the first quarter of 2003 received an initial home visit within three weeks of their initial referral, a process that took, on average, over a month in 2002. Infants referred to Early Start are now receiving an initial home visit within the first month of life, with a notable number of cases being enrolled during a woman's pregnancy. The County's explicit attention to this problem and the decline in the number of referrals to the program has most likely contributed to continued improvement in this area.

Under the Early Start model, children should receive weekly visits for the first 3 months of enrollment, dropping down to monthly and bi-monthly visits as progress is made on the IFSP. Data presented in Table 4.5 suggest that Early Start service levels, although improving, continue to fall below these expectations. The average number of home visits received by children enrolled in the program during the first quarter in 2003 increased 68 percent over the level of service provided at the time the program began (e.g., average number of home visited during this period increased from 3.5 to 5.9). Six month service levels also have increased, although not as dramatically. Despite these improvements, families are receiving only about half of the dosage recommended by the Early Start service model.[19] Similarly, only about half of those enrolling in Early Start remain enrolled for more than 6 months.

Variation Across Agencies and Service Providers

Table 4.6 summarizes aggregate service delivery patterns for the Early Start service agencies who have accepted at least 100 referrals from Help Me Grow since the program began through December 2002. As this table illustrates, there is wide variation in the time between receiving a referral from Help Me Grow and the provision of an initial home visit. Variation also exists in the average success of Early Start providers in completing an initial home visit for those referred to their program (e.g., 50 to 70 percent) and in successfully providing home visits (e.g, 5 to 10 visits over 6 months). Finally, wide variation exists in the ability of agencies to retain participants in the program for longer than 6 months. As summarized in Table 4.6, 7 of the agencies retained less than half of their participants for more than 6 months while five of the agencies retained over two-thirds of their participants beyond this period. This diversity, while expected in initiatives delivered by multiple providers, means that a family's experience with Early Start will differ rather dramatically depending upon the specific agency providing them services.

To better understand this variability, we focused on 13 of the larger Early Start service providers. We first examined the extent to which each of these agencies demonstrated consistent improvement in five core performance areas captured in the program's administrative data and highlighted in Table 4.6. Although all of the 13 agencies demonstrated significant improvement in reducing the time between receiving a referral and providing a home visit, wide variation in performance existed across the other four indicators over time. On balance, only five of the 13 agencies demonstrated consistent improvement over the life time of the program in all four of these areas. The remaining agencies either saw a decline in performance in one or more areas

[19] Expected level assumes weekly visits for the first 3 months, followed by bi-monthly visits for an additional 3 months or a total of eighteen visits over 6 months.

Table 4.6 Service Experiences of Children Referred to Early Start Between July 1999 and December 2002 by Early Start Service Agency[20]

	Early Start Referrals (*N*)	**Received 1 or more Home Visit** (%)	Received 1 or more Referral (%)	Time from referral in and out to provider (*M* in days)	**Time from referral out to Home Visit** (*M* in days)	Child age at first Visit (*M* in months)	Children with more than 1 Home Visit by 3 months (%)	**Number of Home Visits to child by 3 mos.** (*M*)	Children with more than 1 Home Visit by 6 months (%)	**Number of Home Visits to child by 6 months** (*M*)	**Children exited by 6 months** (%)
Achievement Centers for Children	158	75	23	32.0	7.8	3.9	72	5.3	74	9.4	54
Applewood Centers	942	55	32	36.5	75.9	8.5	40	3.7	47	6.9	58
Beechbrook	1643	47	31	33.6	135.1	10.2	30	3.9	37	8.1	65
Bellefaire	237	68	30	30.8	87.8	8.3	44	4.2	57	7.4	34
Bellflower Center	858	57	30	38.4	80.3	7.9	34	3.7	51	6.8	48
Berea Children's Home	2369	60	28	37.9	63.6	6.8	47	4.3	55	8.2	47
Cleveland Clinic Children's Hptl	255	67	31	25.0	34.6	5.1	58	5.1	64	9.8	41
Collinwood Community Serv. Ctr	115	59	32	38.5	97.2	8.5	40	2.9	50	5.2	60
Cuyahoga County Board Health	322	66	20	28.6	29.7	5.7	60	5.0	64	9.3	44
East Cleveland Neighborhood Ctr.	170	45	32	24.2	174.9	12.2	21	2.2	32	4.3	14
Family Life Education PAT	164	74	30	34.7	42.4	9.8	61	5.8	70	9.2	45
Friendly Inn	936	68	35	32.0	87.3	9.1	51	4.3	59	9.1	45
Garden Valley Neighborhood Ctr.	316	71	31	36.5	94.0	10.2	47	4.6	62	9.4	30
Garfield Heights Community Ctr.	666	64	25	31.1	70.5	8.2	50	4.1	57	8.1	32
Harvard Community Service Ctr.	757	66	26	33.7	89.0	9.6	48	4.9	56	10.1	32
Health Design Plus	148	73	30	28.3	40.7	4.6	57	5.3	67	8.9	36
Heights Youth Center	451	68	28	42.6	78.8	8.0	44	3.4	59	6.9	33
Lexington Bell Community Center	175	57	31	35.4	171.9	10.9	30	5.3	41	11.3	35
MCH Services	649	67	28	29.3	35.9	4.3	56	4.9	63	8.6	55
Merrick House	456	63	31	39.8	54.4	7.8	50	4.5	57	8.7	54
Murtis H. Taylor	120	58	33	38.8	87.4	6.5	38	2.7	49	5.1	48
Options for Families and Youth	872	66	30	39.2	39.9	6.3	56	5.3	61	10.3	49
Positive Education Program	1445	59	28	38.9	64.4	7.1	42	4.6	53	8.6	46
St. Martin de Porres Center	502	65	27	38.3	82.3	8.4	43	3.2	55	5.3	26
University Hospital Health Care	667	70	31	32.9	66.2	6.6	51	4.4	63	8.5	37
University Settlement	922	61	31	32.2	74.3	6.8	46	3.5	54	6.6	48

[20] The five variables highlighted in bold reflect possible performance measures embedded with the program's administration data.

over the observation period or experienced initial improvement followed by a decline in either enrollment levels or average service dosage during 2002.

Because the majority of the agencies experienced fluctuations in their performance in each of these areas, we calculated an agency's average performance in each area over the full observation period and examined these data for correlations among these five core performance indicators. Contrary to what we had speculated in our initial report, agencies that successfully provided an initial home visit to a larger proportion of their referrals also reported terminating fewer children within 6 months (r = -.71, p < .007). A even stronger correlation was observed between the average number of home visits an agency provides participants within the first 3 months of enrollment and the average number of home visits provided within 6 months of enrollment (r = .92, p < .000). These patterns suggest that differential performance among agencies is more consistent in terms of enrollment and retention than we had first anticipated. Those agencies that are successful in drawing in a larger proportion of their referrals appear to do a better job, on average, in retaining families, than those agencies failing to engage a greater number of referrals.

However, it is not clear that these skills translate into providing a greater number of home visits. Weak associations (r = .38) were observed between enrollment levels and number of home visits at both 3 and 6 months. Agencies that are successfully retaining a greater proportion of their participants are not necessarily doing so because they are, on average, providing a greater number of home visits. This pattern could suggest that certain Early Start agencies continue to provide outreach to families even if families are not accepting home visits. Agencies may be reluctant to terminate such families based on the belief that their persistent efforts will succeed. On the other hand, agencies not delivering significant service dosages to families also may be less vigilant in reviewing their caseload and terminating families with whom they are not successful.

In addition to this performance information, we also collected descriptive data from agency managers regarding each organization's service philosophy, staffing patterns, and core supervisory functions. We were interested in determining if mission and structural differences explained any of the variation we had observed in aggregate enrollment and retention rates and the ability to deliver a greater number of home visits. The number of home visits and retention patterns did not vary in terms of the experience or tenure of the agency manager or supervisors. However, when we examined the relationship between agencies that employed a majority of home visitors with less than an AA degree (e.g., paraprofessionals) versus those agencies that primarily employed degreed staff (e.g., those with AA, BA or MA degrees), some performance differences were observed. Greater retention rates were observed among agencies employing paraprofessionals (t = *-2.56*, p < .03). We also observed a strong correlation between the percentage of non-degreed home visitors in an agency and the agency's overall retention rate (r = -.53, p < .06). Agencies that employ a greater proportion of experienced home visitors experienced higher participant attrition at 6 months than agencies employing fewer such workers (r = .56, p < .04).

With respect to size, those agencies with annual budgets in excess of $10 million were significantly more likely than smaller agencies to have received a greater number of Early Start

referrals (t = 4.17, p < .002) but less likely to provide these referrals with an initial home visit (t = -3.60, p < .004). In addition, a higher proportion of children enrolled in these large programs were likely to terminate Early Start services within six months (t = 2.24, p < .05).

On balance, agency directors and supervisors that placed high emphasis on the importance of insuring the quality and consistency of their home visitors also were likely to place an emphasis on collaborating with other community agencies and coordinating services for their program participants. And the greater the emphasis agency directors placed on collaboration and service referrals, the lower the proportion of Early Start participants who left services within 6 months of enrollment (r = -.61, p < .05) and the greater the number of home visits at both 3 (r = .58, p < .04) and 6 months (r = .51, p < .08). Although these data are relational and not causal, the pattern might indicate that Early Start service providers who prioritize strong and active linkages with other service providers within their community may be able to address a wider range of new-parent needs and, therefore, are able to retain participants for longer periods of time.

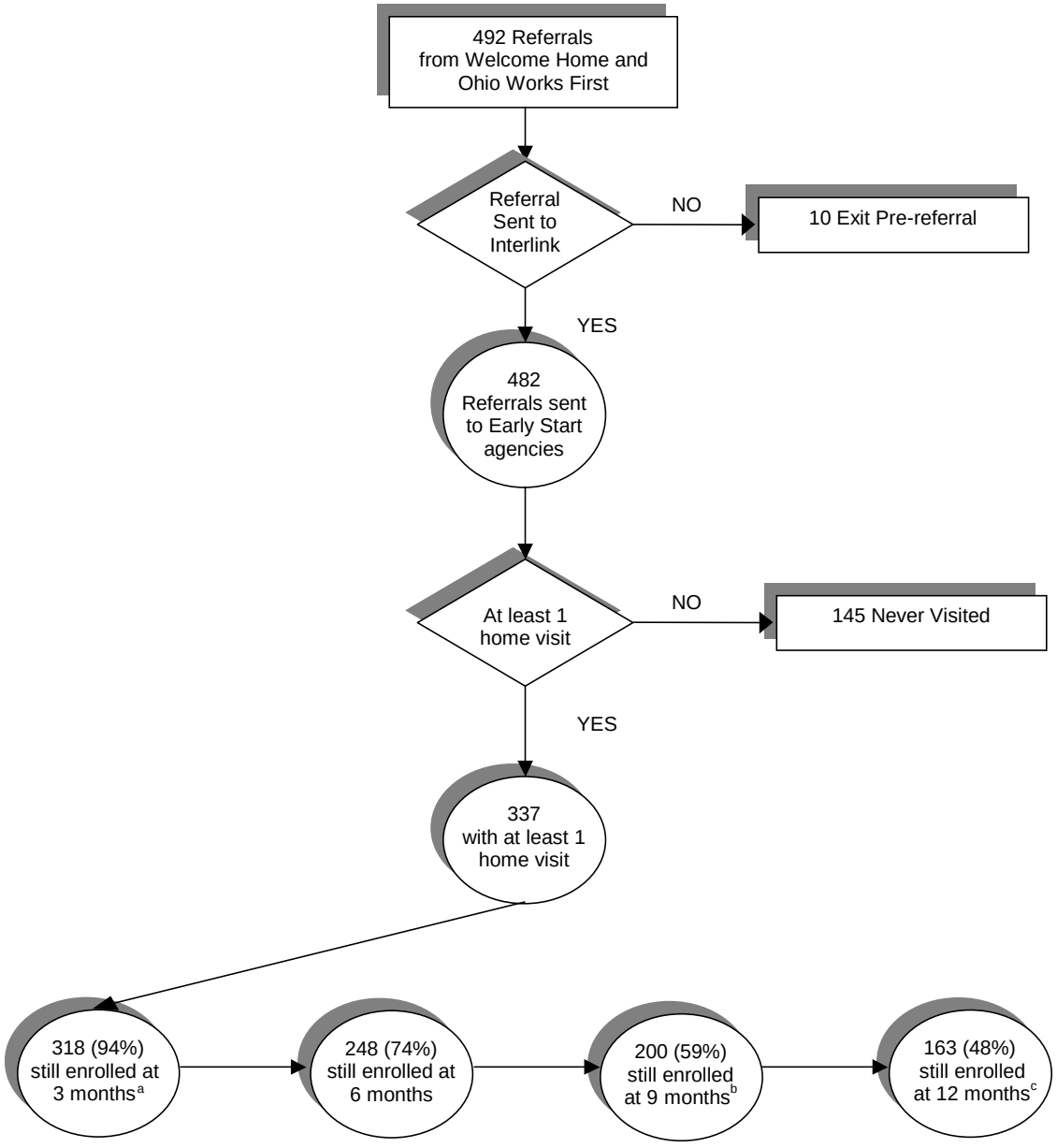
Service Experiences of the Participant Sample:

Figure 4.2 summarizes the general referral process and enrollment level for Early Start referrals in our evaluation sample. Of the 482 new parents referred to an Early Start agency, 337 (or 70%) received at least one home visit before leaving the program and, therefore, might be considered as having "enrolled" in the program. Among this "enrolled" population, 94 percent remained in the program for at least 3 months, 74 percent remained enrolled for at least 6 months, 59 percent remained enrolled at least 9 months, and 48 percent remained enrolled for at least 1 year. When compared to the program's administrative data, these enrollment figures suggested that those families enrolled in our sample were 9 percent more likely than the average Early Start referral with a young infant to receive at least one home visit and 37 percent more likely to remain in the program for longer than 6 months. It is possible that parents referred to Early Start either by the Welcome Home nurse or OWF caseworker may be more likely to engage and remain in services longer than a participant who self-refers to the program or is enrolled through the efforts of a community-based agency. On the other hand, Early Start service providers, recognizing that additional information would be collected on participants in the evaluation may have placed greater emphasis on enrolling and retaining these families.

Although initial enrollment and retention levels are higher in our sample in comparison to the total Early Start population, the total number of home visits provided to these participants is comparable to the total service dosage provided the average Early Start referral. As summarized in Table 4.7, participants in our sample who accepted an initial visit received an average of 13 visits (SD = 8.3) over the 12-month observation period, or about 54 percent of what might be expected over this period based upon the model's performance standards.[21] Although the ratio of completed to scheduled home visits was initially higher among those families referred to Early Start by the Welcome Home nurse (73 versus 68%), a higher proportion of scheduled home visits were successfully provided to the OWF-ES sample during the subsequent quarters, although this difference was not statistically significant. In addition workers reported a higher incidence of other contacts such as office visits or telephone contact with families referred through OWF than

[21] Expected level assumes weekly visits for the first 3 months, followed by bi-monthly visits for an additional 3 months, and then monthly visits thereafter, or a total of 24 visits over 12 months.

Welcome Home. (X^2 = 11.56, p < .001), a practice that may reflect the higher number of problems and greater degree of risk for abuse posed by this group of Early Start participants.



[a]Missing = 2
[b]Missing = 1
[c]Missing = 4

Figure 4.2 Referral Process and Enrollment Level for Early Start Referrals Who Received at Least One Home Visit

Table 4.7 Characteristics of Home Visits, IFSPs, and Family Concerns from Early Start Providers at Different Follow-up Periods for All Early Start Sample Participants

Measures	3 Months After Referral[a]	6 Months After Referral[b]	9 Months After Referral[c]	12 Months After Referral[d]	Total Averages for Study Period
Total Sample Size	335	321	248	200	
Welcome Home-Early Start	220	210	161	133	
Ohio Works First-Early Start	115	111	87	67	
Mean number of visits scheduled in the preceding 3 months	4.5 (2.7)	7.7 (4.0)	5.6 (4.0)	3.9 (3.1)	5.3 (2.4)
Mean number of scheduled visits completed	3.4 (2.2)	6.0 (3.5)	4.3 (3.5)	3.0 (2.3)	4.0 (1.9)
Average completion rate of home visits (%)	81.3 (29.9)	76.8 (24.0)	77.1 (25.1)	79.1 (27.1)	77.0 (22.9)
Cumulative mean number of visits scheduled over study period (12 months)					16.6 (9.7)
Cumulative mean number of visits completed over study period (12 months)					13.0 (8.3)
Total visit completion rate (%)					79.2 (28.1)
Frequency of Telephone Contact					
None, no regular telephone access (%)	4.0	4.5	6.8	8.7	6.0
None, no telephone attempt has been made (%)	.3	.3	.9	1.1	.7
Telephone less than once a week (%)	38.2	52.2	58.3	71.7	55.1
Telephone at least once a week (%)	54.4	38.5	31.1	16.3	34.1
Telephone more than once a week (%)	3.1	4.5	3.1	2.2	3.2
IFSP developed for engaged participants (%)	94.0	-	-	-	-
One or more IFSP goals accomplished (%)	-	67.7	67.7	66.1	67.2
IFSP revised over previous three-month period (%)	-	25.6	32.9	30.6	29.7
Mean number of concerns for the family[e]	4.0 (2.1)	3.8 (2.0)	3.6 (2.1)	3.6 (2.1)	3.9 (1.8)
Mean number of concerns included in the IFSP	3.1 (1.6)	3.0 (1.4)	3.1 (1.6)	3.3 (1.9)	3.1 (1.4)
Mean number of topics assessed for progress	-	5.2 (2.5)	5.1 (2.3)	4.9 (2.3)	5.0 (2.2)
Mean level of progress on core topics (range 1-40)	-	15.8 (8.2)	15.9 (8.6)	15.2 (8.2)	15.3 (7.4)

Note. The source of this data is from Early Start Providers' Intake Survey, Quarterly Form #1, Quarterly Form #2, and Quarterly Form #3 for Early Start referrals that had at least one home visit by the time the Intake survey was completed. Total sample size is indicated; however sample may vary as a result of missing data on individual items across instruments. Numbers in parentheses are standard deviations.

[a]This figure is based on the average number of months (M = 3.2, SD = 1.8) between study enrollment and home visitors' intake form.

[b]This figure is based on the average number of months (M = 5.9, SD = 1.8) between study enrollment and home visitors' first quarterly update.

[c]This figure is based on the average number of months (M = 9.1, SD = 1.8) between study enrollment home visitors' second quarterly update.

[d]This figure is based on the average number of months (M = 12.1, SD = 1.8) between study enrollment home visitors' third quarterly update.

[e]OWF families could also list concerns regarding self-sufficiency requirements. This item is not included in mean scores. When self-sufficiency is included the mean number of concerns for participants at 3 months is 4.0 (2.1) and the mean number of concerns included in the IFSP is 3.1 (1.6). At 6 months the means are 3.9 (2.0) and 3.1 (1.4), respectively. At 9 months the means are 3.7 (2.1) and 3.1 (1.6), respectively. At 12 months the means are 3.6 (2.2) and 3.4 (2.0), respectively.

Nature of the Service Relationship

The quality of the home visitor-parent relationship has been found to play a role in explaining both service outcomes (Coady, 1993) and participant retention (McCurdy & Daro, 2001). To investigate the quality of the provider-participant relationship within Early Start, both home visitors and study participants were asked to complete the Helping Relationship Inventory (HRI) 3 months following referral to Early Start. The HRI is designed to measure the strength of the helping relationship between a service provider and program recipient (Poulin & Young, 1997; Young & Poulin, 1998). Similar scores between the provider and participant suggest a more uniform or consistent view of the service relationship. In addition, the higher the absolute score for each respondent, the more positive the respondent's view of the relationship. We examined the nature of the service relationship among 226 participants and their home visitors (n = 145). These participants had at least one Early Start home visit, had corresponding HRI scores from their home visitor, and had the same home visitor during the entire study period.

Table 4.8 presents the initial Helping Relationship Inventory (HRI) scores for both mothers and home visitors to address the question of whether there were differences in how mothers and home visitors perceive the quality of their service relationship within the Early Start home visitation program. As this table indicates, no differences were observed between the home visitors and mothers in terms of their perceptions of the service relationship when it related to interpersonal feelings, comfort, appreciation, and a sense of mutual understanding. In contrast, significant differences were found in how mothers and home visitors viewed the structural component of their service relationship. Home visitors rated the structural relationship more positively than mothers did both at baseline and follow-up. On average, Early Start participants reported they felt less involvement in how problems were identified, goals articulated, plans developed, and progress evaluated than the home visitors rated them as having. No significant mean differences were observed in how participants and providers viewed the service relationship.

When we compared these initial perceptions for those participants who enrolled but left the program within 1 year and those who remained at least 1 year, we found that those mothers who continued their involvement in the program for at least 12 months had initially been more positive in their ratings. In contrast, final HRI scores by both mothers and home visitors did indicate significant differences between the enrolled and enrolled but left groups on the total HRI score and both sub-scales. Enrolled mothers and their home visitors consistently rated all aspects of their service relationship higher than mothers who did not stay enrolled in the program.

To examine how the service relationship changed between the enrolled and enrolled but left groups, differences between the initial and final HRI scores by participation level were examined. For mothers who remained enrolled in the program, their total HRI score increased from a mean of 73.3 to 76.4 (t = -2.2, p = .05). This change, however, primarily reflects differences in the mothers' perceptions of the structural, not personal, components of the relationship. In contrast, the home visitors serving these mothers reported significant increases in their total HRI mean scores and both subscales. In contrast, among the enrolled but left group both mothers and home visitors' ratings of the service relationship statistically decreased,

Table 4.8 Initial and Final Helping Relationship Inventory Mean Scores Between Mothers and Home Visitors

Helping Relationship Inventory (HRI)	Mothers		Home Visitors		Difference
Initial HRI for Score (*n* = 226)					
Helping Relationship Inventory (20-100)	72.1	(15.2)	73.6	(12.3)	-1.46
Structural Subscale	36.5	(7.7)	39.1	(62)	-2.60**
Personal Subscale	35.5	(8.9)	35.2	(6.6)	.36
Final HRI Score (*n* = 184)					
Helping Relationship Inventory (20-100)	73.4	(19.6)	75.7	(12.5)	-2.3
Structural Subscale	37.9	(9.4)	40.3	(6.4)	-2.5**
Personal Subscale	35.6	(11.1)	35.6	(6.9)	-.05

Note. Numbers in parentheses are standard deviations. A two-tailed t-test was used to assess the statistical significance of each difference between mothers and home visitors.
Statistical significance levels are indicated as **p < 1 percent, *p < 5 percent, and ^p < 10 percent.

specifically in their view of the personal component of the relationship. Perceptions of the structural component of the HRI did not significantly differ.

As one might expect, there is a vast difference in the service levels experienced by mothers who remained enrolled in the program compared to mothers who did not remain in the program. Mothers who remained enrolled in Early Start over the study period had an average of 19.3 visits while those who did not stay enrolled had 8.3 visits. To minimize the possible influence of service level selection effects, a group of enrolled and enrolled but left mothers who closely matched in terms of actual service levels were selected to look for differences in the service relationship. The patterns observed with the full sample also were found in this restricted sample suggesting that the level of service is not fully predictive of the strength of the participant-provider relationship.

In summary, the interpersonal component between mothers who left the program early and their home visitors declined over time, indicating that the two parties do not perceive the relationship in similar ways in regard to understanding each other, feeling comfortable with each other, or believing and trusting each other. These patterns suggest that the initial service relationship may not be the strongest factor that attracts a family to participate in a voluntary service opportunity, but the development of the service relationship over time may be a crucial factor influencing a parent's decision to remain enrolled in services and to receive a greater number of home visits.

Service Engagement Patterns:

Unlike mandated services, voluntary prevention programs have no legal authority for retaining families. Families are free to decide if they will accept program services or remain in the program. Theoretical frameworks that attempt to explain why families seek out and eventually use voluntary services find that this decision-making process is influenced by a variety of personal, programmatic, and contextual issues (McCurdy & Daro, 2001). We initially examined this question by exploring those factors particularly salient in differentiating the length of time participants remained enrolled in the program and the number of home visits they received. To address these issues, we applied three multivariate techniques as described in the Methodology section.

Logistic Regression on Program Enrollment

We constructed a logistic regression to examine the odds ratio of an Early Start referral with specific characteristics of being successfully provided at least one home visit. The independent variables in this model include participant race (Non-African American and African American), Early Start referral status (OWF versus Welcome Home), parenting experience (first-time parent and those with prior births), baseline CAP score (those scoring less than 100, those scoring between 100 and 166, and those scoring above the 166 cut-off for high risk), and score on the Readiness to Change measure (those scoring at or above the mean score of 58 and those scoring below the mean). In addition, the model includes an SES risk index based on a similar scale being used in the National Early Head Start Evaluation (Mathematica Policy Research, 2002).[22]

As summarized in Table 4.9, the logistic regression model, although approaching statistical significance (p = .057), identified only one significant predictor of service enrollment (i.e., baseline CAP score). Those participants with the highest CAP scores (i.e., over 166) were over twice as likely as those with the lowest CAP scores to receive at least an initial home visit, and those with moderate CAP scores were over one and a half times more likely to receive an initial home visit. Despite the fact that this finding suggests that Early Start is successful in reaching those at greatest risk for physical child abuse (as measured by the CAP), it is important to note that the SES risk index was not a significant predictor and the overall model did not explain much of the variance between these two groups.

Survival Analysis on Service Duration

Looking only at those Early Start referrals who received at least one home visit, we used the Kaplan-Meier method to plot the survival probabilities that participants would remain enrolled in Early Start at various points in time. Overall, the most rapid rate of decline in program involvement among those who receive at least one home visit occurs between 15 and 24 weeks following enrollment. This overall pattern was true for various subpopulations we examined in terms of referral source, race, and SES risk status as measured by our index. No significant differences were observed at any point in the rate of program termination between families referred to Early Start by Welcome Home versus OWF or among families presenting different levels of socio-economic risk. All points on these curves fell within the 95 percent confidence interval. In contrast, some differential attrition was observed by race early in enrollment, with non-African American participants showing a greater tendency to leave services within 8 weeks of the initial home visit. By 16 weeks following enrollment, however, this trend reverses, with African Americans experiencing a somewhat higher termination rate. By 20 weeks post enrollment, the difference in the termination rate among African American and non-African American participants intensifies and becomes significantly different at 38 weeks. These relationships are documented in Figure 4.3.

[22] This index was constructed by awarding participants one point for every one of the following characteristics: less than a high school education, income below $10,000, unemployed, less than 20 years of age, and never married.

Table 4.9 Logistic Regression Analysis of Demographic Characteristics, Parental Baseline Measures, and Early Start Referral Source on Ever Receiving an Early Start Home Visit

Independent Variables	Beta		Odds Ratio	95% Wald Chi-Square Confidence Limits Lower	Upper
Intercept	.18	(.29)			
Referral Source					
Ohio Works First-Early Start Referral [b]	—	—	1.00	—	—
Welcome Home-Early Start Referral	.35	(.25)	1.41	.86	2.32
SES Risk Index [a]					
0-3 Risk Markers	—	—	1.00	—	—
4-5 Risk Markers	-.22	(.22)	.80	.52	1.23
Race					
Non-African American [b]	—	—	1.00	—	—
African American	.16	(.21)	1.18	.79	1.77
Parenting Experiences					
Study Child not first birth [b]	—	—	1.00	—	—
Study Child first birth	.17	(.26)	1.19	.71	1.97
Readiness to Change					
Score < 58 [b]	—	—	1.00	—	—
Score > or = 58	.13	(.20)	1.14	.77	1.70
Baseline CAP Score					
CAP < 100 [b]	—	—	1.00	—	—
CAP 100 to 166	.52	(.25)	1.68*	1.02	2.77
CAP > 166	.76	(.30)	2.14**	1.19	3.83
n = 480					
Model X^2 = 13.77					
df = 7					
p = .0572					

Note. Beta coefficients are unstandardized estimates. Standard errors are in parenthesis.
[a]Risk markers were defined as a teen parent, income under $10,000, never married, education less than high school, and unemployed.
[b]Excluded category reference group.
Significance levels are indicated as **p < 1 percent and *p < 5 percent.

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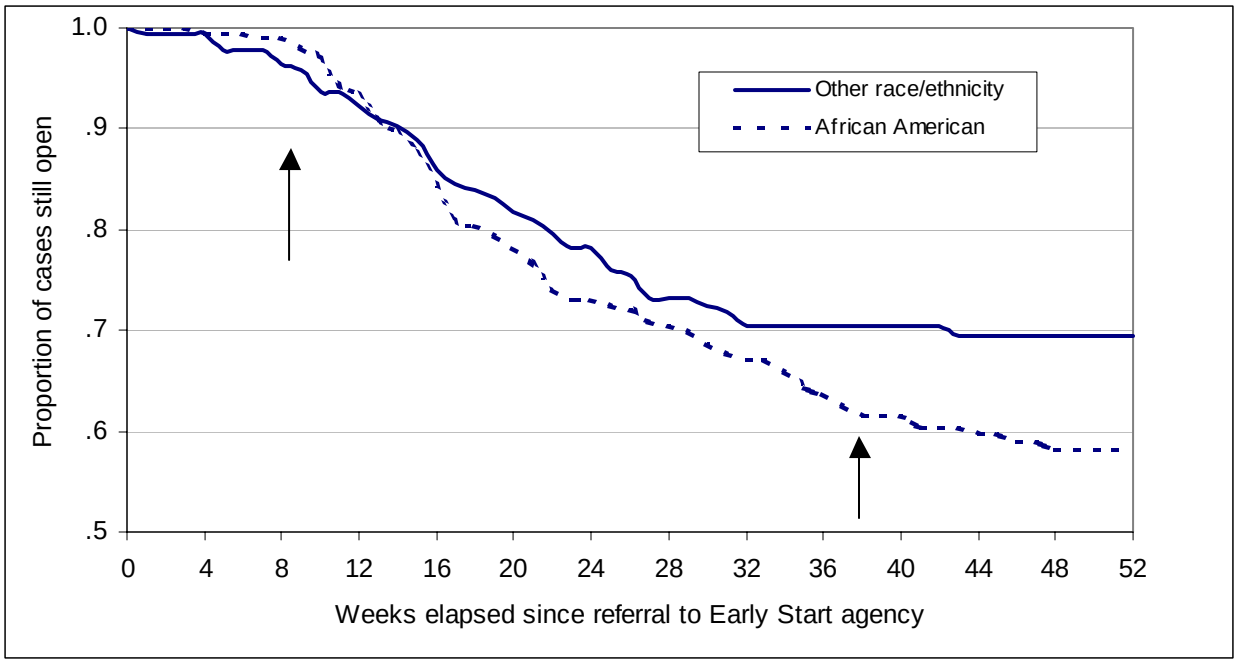


Note. Estimated by Kaplan-Meier techniques. Using 95 percent confidence intervals, statistically significant differences are observed at the points in time indicated with an arrow. The chi-square statistic for the generalized Log-Rank test is 3.08, which is almost significant at $p = .08$.

Figure 4.3 Survival Function of Length of Program Involvement for Early Start Referrals who Received At Least One Home Visit, by Race

Multiple Regression on Program Enrollment

To examine the extent to which participant demographic characteristics or initial personal functioning predicted the number of home visits a participant received, we conducted an ordinary least squares regression analysis. The dependent variable was the number of home visits, and the independent variables mirrored those used in the logistic regression with the exception of the way we manipulated the scores on the SES risk index, CAP, and Readiness to Change measure. In this analysis, all of these measures were entered as continuous variables. The results of this analysis are illustrated in Model 1 of Table 4.10.

Model 1, while statistically significant ($p = .005$), explained approximately 5 percent of the variance (adjusted $R^2 = 3.4\%$) in the number of home visits. The results were similar to the patterns observed in the logistic regression and, to a lesser extent, the survival analysis. Controlling for other variables, the CAP score is a statistically significant but weak predictor of the number of home visits ($B = .01$, $p < .05$). In contrast, the influence of race in predicting a participant's number of home visits is both significant and substantial. African Americans received significantly fewer home visits than non-African Americans, after controlling for key predictors of possible service need (e.g., level of risk and parenting history) and program interest (e.g., readiness to change).

In order to examine the possible influence of participant-provider relationships on service levels, we expanded multiple regression Model 1 to first include the participant's score on the Helping Relationship Inventory and then added in the provider's score on this measure. In both cases, we divided the sample into those who rated the quality of this service relationship at or

above the sample average and those who rated the relationship below this average. In the first instance, this analysis was limited to the 265 participants who completed the HRI at the time of the 3-month interview. In the second instance, the sample was limited to the 255 participants on whom we had also obtained a provider rating.

As summarized in Model 2 and Model 3 in Table 4.10, the introduction of these variables increased the proportion of explained variance but did not eliminate the significant role initial CAP scores and race played in predicting service levels. Those scoring at or above the average HRI score for the full sample were significantly more likely ($p < .001$) to receive a greater number of home visits than those who provided a less favorable rating of the relationship. When we added in the provider assessment of the relationship in Model 3, the proportion of explained variance increased to 12 percent (adjusted $R^2 = 9.5\%$) and the participant's view of the service relationship continued to play a significant but less robust role in predicting the total number of home visits. Indeed, the provider assessment of the service relationship proved the strongest predictor in the final model, suggesting the attitude of the home visitor has a notable influence on the number of visits a participant will receive.

Overall, these findings, like the findings from the Early Start administrative data, suggest that the program is not delivering the service dosage identified by the model's performance standards. However, the predictive abilities of the HRI also suggest that different service delivery methods and, potentially, worker characteristics and style can result in providing participants a greater number of home visits, particularly with those presenting an elevated risk for physical abuse. Unfortunately, further analysis of this concept did not identify any strong or consistent relationships between individual worker characteristics, such as work experience, educational level, race, or service delivery style, and participant service levels.

Program Implications:

The evaluation results present a mixed picture of Early Start's success in engaging new parents. On the one hand, the program is successfully engaging a wide range of families, including many that carry the demographic markers of high risk. Newborns and their parents are being provided home visitation services much earlier in the infant's life than had been true in 1999.

For those who are successfully provided at least an initial visit, the average Early Start recipient can expect to receive approximately 13 visits ($SD = 8.3$) during the first 12 months they are in the program, or about 50 percent of the service levels recommended by the model. This 50-percent service dosage is comparable to what most home visitation programs are able to achieve with their respective target populations and underscores the difficulty programs face in delivering voluntary, home visitation services to families that often have chaotic life styles and multiple risk factors.

Less encouraging is the fact that one out of every three referrals to Early Start will never have a single home visit. Like those successfully enrolling in the program, this group of unserved new parents also is diverse and includes roughly equal proportions of families with various demographic markers of risk, personal stress, and limited inter-personal functioning. Our

Table 4.10 Predictive Relationships of Total Number of Home Visits (HV) on Demographic Characteristics, Parental Baseline Measures, Early Start Referral Source, and Helping Relationship Inventory (HELP)

Independent Variables	Model 1 Beta		*t*-value	Model 2 Beta		*t*-value	Model 3 Beta		*t*-value
Intercept	12.7	(4.29)	2.97**	11.69	(4.56)	2.57*	9.56	(4.47)	2.14*
Referral Source									
OWF Referral [b]	—	—	—	—	—	—	—	—	—
Welcome Home Referral	-.46	(1.15)	-.40	.24	(1.2)	.19	.25	(1.2)	.20
SES Risk Index [a]	-.63	(.38)	-1.66	-.49	(.41)	-1.18	-.47	(.40)	-1.17
Race									
Non-African American [b]	—	—	—	—	—	—	—	—	—
African American	-2.59	(.93)	-2.79**	-2.43	(.99)	-2.45*	-2.12	(.98)	-2.16*
Parenting Experiences									
Study child not first birth [b]	—	—	—	—	—	—	—	—	—
Study child first birth	1.46	(1.17)	1.25	.85	(1.26)	.67	.78	(1.26)	.62
Baseline Readiness to Change	.02	(.07)	.38	.03	(.07)	.37	.04	(.07)	.53
Baseline CAP Score	.01	(.01)	1.97*	.01	(.01)	2.01*	.01	(.01)	2.24*
Parents' HELP Inventory									
Below average (70) [b]	—	—	—	—	—	—	—	—	—
At or above average (70)	—	—	—	2.83	(1.03)	2.75**	2.08	(1.04)	1.99*
Providers' HELP Inventory									
Below average (70) [b]	—	—	—	—	—	—	—	—	—
At or above average (70)	—	—	—	—	—	—	3.41	(.97)	3.53**
n =	327			265			255		
R^2 =	.051			.078			.123		
Adjusted R^2 =	.034			.053			.095		
F Value =	2.89		**	3.11		**	4.32		**

Note. Beta coefficients are unstandardized estimates. Standard errors are in parenthesis.
[a]Risk markers were defined as a teen parent, income under $10,000, never married, education less than high school, and unemployed.
[b]Excluded category reference group.
Significance levels are indicated as **p < 1 percent and *p < 5 percent.

analyses suggest that those families not receiving an initial home visit may not be the families at highest risk for maltreatment. Indeed, those new parents with the highest CAP scores (i.e., over 166) are twice as likely to be provided at least an initial home visit as those new parents with the lowest CAP scores. Somewhat surprisingly, those in the OWF-ES referral group were less likely to receive at least one visit once we controlled for SES risk status and initial CAP scores. Although not significant, this trend does suggest less variation in the service acceptance rates between these two referral groups than one might have expected given the specific emphasis placed on Early Start enrollment by OWF caseworkers. The failure to enroll a notable proportion of those at lower risk appears to be a function of differential agency performance, with some Early Start providers having very limited success in engaging these families in service.

Once a family is receiving services, the relationship between risk and service dosage is less clear. As indicated in our analyses, those receiving a greater number of home visits tended, on average, to have higher baseline CAP scores, but this relationship although statistically significant was of a small magnitude. Further, both the survival analyses and multiple regressions found no differences in retention or service utilization rates for those families with few or multiple SES risk markers. Consistent differences, however, were identified on both of these dimensions in term of the participants' race. African American participants were significantly more likely than non-African American participants to leave the program sooner and to receive fewer home visits. The difference in service dosage by race persisted even after we controlled for differences in a participant's CAP score, SES risk level, parenting experiences, readiness to change and relationship with the home visitor. Indeed, the home visitor's assessment of the service relationship and, to a lesser extent, the participant's perception of this relationship proved to be the strongest predictors of a parent's level of service. Although the initial relationship between a parent and home visitor does not always predict who will enroll in services, the participant-provider relationship can play a crucial role in determining if a family will remain enrolled and will accept a greater number of home visits. How these relationships are formed and nurtured over time and why they fail to take hold in many cases involving African American parents are issues we were unable to fully address in the context of these data.

Our initial analyses of the Early Start administrative data suggest that organizational context may play a role in determining a family's level of service and engagement in Early Start. Despite the County's efforts to improve consistency and quality within the Early Start service system, substantial variation continues to exist across Early Start providers in the proportion of referrals engaged in service, the number of home visits provided and ability to retain participants for more than 6 months. Although our ability to fully understand these differences is limited, our preliminary investigation suggests that no one factor or attribute is likely to guarantee a program's eventual success in all performance areas. A specific mission or staffing pattern may facilitate an agency's ability to enroll a high proportion of its referrals, but these factors may have little to do with insuring that once enrolled, a family will receive a high number of home visits. Achieving this later objective may hinge on the home visitor's ability to establish a strong personal relationship with the family and to provide access to a wide array of community services. In short, the successful Early Start program will be one that embraces a variety of skills in its service providers and pays specific attention to identifying and addressing those concerns most salient to program participants.

Initial and Intermediate Program Impacts

To document the experiences of new mothers during their infants' first year of life and to capture any potential changes as a result of Welcome Home and Early Start interventions, the evaluation design included in-person interviews with all study participants 11 months after the completion of their first interview. This section discusses the results from these interview data for mothers who received only Welcome Home as well as those who were referred on to Early Start either by the Welcome Home nurse or the OWF caseworker. We begin by discussing the general pattern of change we observed across these three groups of new parents. For those parents referred on to Early Start, we then examine the role Early Start services might have played in influencing these patterns.

Changes in Parental Capacity and Skills:

Our sample of new parents provided an excellent opportunity to empirically examine the extent to which three distinct groups of parents with varying skills and resources change during their child's first year of life. Table 4.11 summarizes the change we observed in each of our standard measures for the sample's three core populations – a representative sample of average new parents (the Welcome Home only population), a sample of relatively young new parents facing some level of economic stress and limited resources (the Welcome Home-Early Start population), and a sample of older new parents facing notable economic hardship and parenting challenges (the OWF-Early Start sample). Although key differences persisted across the three groups, they share a number of common improvements and declines, supporting the contention that all new parents, regardless of initial personal capacity and resources might benefit from ongoing services that offer opportunities for additional emotional connections and support.

With respect to the Welcome Home only population, this group of new mothers presented the most positive profile over time, recording the most positive scores at 11 months on every measure. This pattern confirms our baseline finding that the Welcome Home assessment process appropriately channels those parents facing the greatest number of problems into the Early Start service system. Indeed, relatively few of the Welcome Home participants not referred on to Early Start reported CAP and CES-D scores that would suggest a clinical risk for physical child abuse or depression. Over the 11-month observation period, the average Welcome Home only participant significantly increased her score on the study's two measures of child development knowledge, improved her sense of confidence as a parent, had fewer parenting concerns, and received increased social support in a number of areas. However, this group also reported significantly higher levels of stress and a diminished sense of emotional connection to family and friends. This drop in emotional support and a corresponding increase in stress were minor and are consistent with behaviors others have observed among new parents who struggle to care for a more mobile and potentially less predicable child (Daro, 2000; Guterman, 2001; McCurdy & Jones, 2000).

Table 4.11 Change over Time in Personal Functioning Among Welcome Home Only and Early Start Referral Groups

Outcomes	Welcome Home Only			Welcome Home-Early Start			Ohio Works First-Early Start		
	Initial *M*	Final *M*	Difference	Initial *M*	Final *M*	Difference	Initial *M*	Final *M*	Difference
Knowledge of Infant Development (KIDI) Correct	69.9	73.5	-3.64**	62.7	64.6	-1.88 *	66.1	67.1	-1.04
	(.13)	(.11)		(12.3)	(12.1)		(11.0)	(11.7)	
Baby Safety Checklist (BSC) Correct	88.3	89.3	-1.00**	86.7	88.0	-1.30 **	87.4	88.3	.95
	(.05)	(.05)		(6.5)	(5.5)		(6.1)	(5.2)	
Parent Concerns	3.4	2.9	.52**	3.7	3.1	.60**	4.7	3.7	1.00**
	(2.9)	(2.6)		(3.19)	(2.7)		(3.3)	(2.9)	
Parenting Sense of Competence (PSOC)	74.9	77.4	-2.48**	75.2	76.8	-1.58 **	75.1	76.1	-.99
	(9.1)	(8.6)		(8.8)	(8.3)		(8.2)	(9.4)	
Social Support Behaviors (SSB)	42.9	43.3	-.43**	42.0	42.6	-.59 *	40.6	41.3	-.72
	(2.7)	(2.6)		(3.5)	(3.4)		(7.0)	(6.3)	
Social Support Index (SSI)[a]	51.8	50.8	1.04**	47.7	45.8	1.88**	44.3	43.4	.92
	(7.7)	(7.7)		(7.8)	(7.5)		(9.1)	(7.9)	
Perceived Stress Scale (PSS)	13.3	14.2	-.85*	14.4	15.7	-1.35 **	16.7	16.0	.67
	(5.9)	(6.4)		(6.2)	(6.7)		(6.7)	(7.0)	
Depression Mood Scale (CES-D)	8.5	9.0	-.42	11.7	11.9	-.20	14.2	13.6	.61
	(7.4)	(8.9)		(8.6)	(9.1)		(9.6)	(10.7)	
Child Abuse Potential Inventory (CAP)	76.7	77.7	-.97	91.2	106.2	-15.05 **	121.5	132.8	-11.28
	(59.3)	(74.3)		(68.3)	(90.3)		(80.6)	(94.3)	

Note. Numbers in parentheses are standard deviations. The final sample size is 253 Welcome Home Only, 269 Welcome Home-Early Start referrals, and 142 Ohio Works First-Early Start referrals.
[a]A systematic coding error resulted in higher SSI scores in the *Cuyahoga County Early Childhood Initiative Evaluation: Phase I final report* (Coulton and colleagues, 2003). While this error impacted the final scores for all participants, it did not alter the general pattern of findings or our interpretation of the results.
Statistical significance levels are indicated as $^{**}p < 1$ percent, $^{*}p < 5$ percent, and $^{\wedge}p < 10$.

Like the Welcome Home only population, those in the two Early Start referral samples also reported a significant reduction in the number of parental concerns and those referred to Early Start by the Welcome Home nurse also reported significant increases in their knowledge of child development, parental competence, and levels of social support. In addition, both Early Start referral groups also had a significant decrease in emotional connection and sense of belonging to family members and friends and reported a significant increase in perceived stress. Perhaps reflecting this increase in perceived stress and reduction in emotional connection to others, average CAP scores within the Welcome Home referral group also demonstrated a significant increase over the 11-month observation period. The average scores for the OWF referral group were similar to the Welcome Home referral group, although most were not statistically significant.

Early Start Impacts on Parent Functioning

In assessing Early Start impacts, we began by comparing the change over time on each standardized functioning measures for those Welcome Home only and Welcome Home-Early Start participants that scored *within* one standard deviation of the average CAP score for the two groups combined.[23] This strategy allowed us to determine if the degree and direction of change in personal functioning within the two groups differed over time, independent of the actual level of service provided participants in the Early Start referral group. As the data in Table 4.12 indicates, 11 month CAP scores among the Early Start referrals were significantly higher than their initial CAP scores, and that this change was significantly different from the Welcome Home only group's experience. Other notable differences in the change in outcome measures over time between the Welcome Home only and the Early Start referral groups approaching statistical significance were in the knowledge of child development and feelings of emotional support and connection with family and friends measures. The Welcome Home only group had greater positive change in their knowledge of infant development (KIDI score) and a smaller negative change more change in their feelings of emotional support (SSI) than the Early Start referral group.

To further focus this comparison, we examined the relative change for participants in both groups who scored greater than one standard deviation *above* the group's CAP score mean, thereby limiting our comparison to the highest risk participants in both groups. These patterns are also summarized in Table 4.12. The only significant difference in this analysis is the change in the initial and final scores between these two small very high-risk groups on the depression measure (CES-D). The highest-risk participants in the Welcome Home only group experienced an increase in their depression score while the highest-risk participants in the Early Start referral group had a decrease in their depression score.

Although this strategy reduced the variation between the two groups in terms of their perceived risk for physical child abuse, substantial differences remained in terms of each group's demographic characteristics, parenting status, race and income levels. When we compared the patterns of change of these two groups controlling for these initial differences, we were unable to

[23] Gain score analysis examines differences between initial and final scores. The gain score approach (also called change or difference scores) involves subtracting the initial baseline scores from the final scores within each group. This creates just one variable for comparing differences between two groups, and interpretation of the beta coefficient in the change model is identical to interpretation in a simple level model (Gilner, Morgan, & Harmon, 2003).

Table 4.12 Gain Score Analysis Between Welcome Home-Early Start and Welcome Home-Only Groups Within One Standard Deviation of the CAP Mean and with CAP Scores Above One Standard Deviation of the CAP Mean for Both Groups

	Within One *SD* of CAP Mean					Above One *SD* of CAP Mean				
Outcomes	Welcome Home-Early Start		Welcome Home-Only		Difference	Welcome Home-Early Start		Welcome Home-Only		Difference
Sample Size	205		197			43		32		
Knowledge of Infant Development (KIDI) Correct	.01	(.13)	.03	(.11)	-.02^	.05	(.14)	.05	(.11)	.00
Baby Safety Checklist (BSC) Correct	.01	(.07)	.01	(.06)	.00	.02	(.08)	-.01	(.07)	.03
Parent Concerns	-.62	(3.39)	-.53	(2.80)	-.09	-1.05	(3.34)	-.87	(3.90)	-.18
Parenting Sense of Competence (PSOC)	1.41	(9.38)	2.18	(7.92)	-.77	1.51	(8.46)	2.59	(9.81)	-1.08
Social Support Behaviors (SSB)	.85	(3.41)	.46	(1.90)	.40	-.42	(6.90)	.23	(2.93)	-.66
Social Support Index (SSI)	-2.13	(7.45)	-.92	(6.07)	-1.21^	-1.12	(7.22)	-2.41	(5.89)	1.29
Perceived Stress Scale (PSS)	1.74	(6.61)	1.02	(6.34)	.72	.16	(7.25)	1.69	(7.01)	-1.52
Depression Mood Scale (CES-D)	.82	(9.31)	.37	(8.06)	.45	-2.65	(11.30)	2.09	(8.74)	-4.74*
Child Abuse Potential Inventory (CAP)	23.30	(70.62)	5.71	(57.97)	17.59**	-25.21	(103.65)	-30.16	(81.29)	4.95

Note. Numbers in parentheses are standard deviations.
Statistical significance levels are indicated as **p < 1 percent, *p < 5 percent, and ^p < 10 percent.

detect any effects on change in these measures as a result of a participant being referred on to Early Start. Any change in knowledge or personal function between the two groups is primarily accounted for by differences in such characteristics as participant age, race, marital status, and educational levels.

Examining outcomes for all referrals, while often used in randomized trials, can be problematic in cases where a substantial proportion of the population targeted for an intervention never receives service. As noted earlier, about one-third of those participants in our sample that accepted and were referred on to Early Start never received a home visit. To test the assumption that the lack of differences between the two groups reflected differences in actual service enrollment, we compared the changes observed among those Early Start referrals who received at least one home visit and those who received no services. As illustrated in Table 4.13, only two significant changes were observed between those who received at least one visit and those who did not receive any visits. On average, Early Start referrals that received at least one home visit had greater increases in their knowledge of child development and a greater increase in perceived stress than those referrals not accepting services. Because these two groups again reflect different socio economic profiles and initial levels of personal capacity and resources, we repeated the analysis, statistically controlling for these differences. As with the prior set of regressions, controlling for demographic differences eliminated all potential program effects.

Finally, we explored the possibility that participants may require some minimal level of service in order to achieve measurable and positive change over time despite demographic differences.[24] To test this assumption, we compared Early Start recipients who received more than the median number of home visits in total over the study period (in this case, at least 15 home visits) to those who received the median number of visits or less. OLS regressions were conducted on each outcome measure to allow us to control for the possible impacts of various demographic characteristics on service utilization levels. The results of these regressions are summarized in Table 4.14. As this table indicates, achieving this service threshold was a significant predictor of positive change on three of the nine outcome measures and approached significance in two additional measures. Within our sample, receiving at least 15 home visits was a significant predictor of decreases in depression, decreases in parental stress, and increases in parental competence. In addition, this service variable approached significance in predicting improvements in child development knowledge and reducing the number of parental concerns.

None of these models, however, explain a large proportion of the variance in the outcome measures, in part due to the very small level of change observed in this sample. A more robust examination of program effects would require larger samples and a more extended observation period. Despite these limitations, the areas of change predicted by higher service levels are promising from the point of view of preventing child abuse. Maternal depression has long been associated with an elevated risk and involvement in both physical and emotional neglect, while increased parental stress can contribute to a higher incidence of physical abuse, particularly with young children. In terms of protective factors, providing new parents with a stronger sense of competence and belief that their actions can influence their child's developmental trajectory hold promise in creating a context in which parents are more likely to seek out assistance in meeting their parenting and personal needs.

[24] This also explores the possibility of nonlinearity in the relationships between the number of visits and changes in outcome measures.

Table 4.13 Gain Score Analysis Between Early Start Referrals Who Received or Did Not Receive at Least One Home Visit

	Early Start Sample				
Outcomes	Received At Least One Home Visit		Received No Home Visits		Difference
Sample Size	297		114		
Knowledge of Infant Development (KIDI) Correct	.02	(.13)	.00	(.13)	.02
Baby Safety Checklist (BSC) Correct	.01	(.07)	.03	(.08)	-.02*
Parent Concerns	-.76	(3.15)	-.71	(3.34)	-.05
Parenting Sense of Competence (PSOC)	1.49	(8.66)	1.09	(9.10)	.40
Social Support Behaviors (SSB)	.62	(5.13)	.69	(5.17)	-.07
Social Support Index (SSI)	-1.57	(7.66)	-1.50	(7.08)	-.07
Perceived Stress Scale (PSS)	1.06	(6.76)	-.41	(6.23)	1.48*
Depression Mood Scale (CES-D)	-.24	(9.32)	.32	(9.81)	-.56
Child Abuse Potential Inventory (CAP)	12.52	(76.65)	16.96	(83.21)	-4.43

Note. Numbers in parentheses are standard deviations.
Statistical significance levels are indicated as **p < 1 percent, *p < 5 percent, ^p < 10 percent.

Table 4.14 Full OLS Regression Model of Changes in Early Start Participant Outcomes on the Level of Home Visits (Above or Below the Median) with Interaction and Control Terms

Independent Variables	KIDI	BSC	SSB	SSI	PSOC	CES-D	PSS	PC	CAP
Constant	-.04	-.02	3.89	-7.89	3.13	2.05	7.79	1.26	-67.38
	(.10)	(.05)	(3.93)	(6.04)	(6.34)	(7.16)	(5.33)	(2.55)	(60.96)
Above Median Home Visits	.09^	.03	.22	2.70	6.96*	-8.28*	-5.49*	-2.10^	7.34
(received 15 visits or more vs. not)	(.05)	(.02)	(1.86)	(2.86)	(3.00)	(3.39)	(2.52)	(1.21)	(28.80)
At or Above Median Home Visits × Total Number of Home Visits	-.00	-.00	.02	-.08	-.23^	.29^	.15	.09	-1.50
	(.00)	(.00)	(.09)	(.13)	(.14)	(.16)	(.12)	(.06)	(1.32)
Participant's Age at Enrollment	-.00	-.00	-.10	.14	-.02	-.08	-.12	-.07	.08
	(.00)	(.00)	(.10)	(.15)	(.15)	(.17)	(.13)	(.06)	(1.49)
White (vs. not white)	.04*	.01	-1.24	-.66	.70	-.66	-.40	1.01*	.67
	(.02)	(.01)	(.76)	(1.17)	(1.22)	(1.38)	(1.03)	(.49)	(11.84)
Not Married (vs. all others)	.02	-.01	.58	.22	-2.51	2.46	-1.15	.63	16.96
	(.03)	(.01)	(1.06)	(1.64)	(1.72)	(1.94)	(1.44)	(.69)	(16.75)
Has High School Diploma/GED (vs. not)	.01	.01	-1.62*	-.96	.52	.04	-.57	-.29	16.44
	(.02)	(.01)	(.73)	(1.13)	(1.19)	(1.34)	(1.00)	(.48)	(11.43)
Employed (vs. not employed)	-.02	.00	-.31	-.61	1.64	-.75	-.76	.44	.31
	(.02)	(.01)	(.69)	(1.06)	(1.11)	(1.26)	(.94)	(.45)	(10.71)
Low Income (vs. all others)	.00	.01	-.87	-.55	1.07	-.74	-.35	-.26	-5.68
	(.02)	(.01)	(.70)	(1.07)	(1.12)	(1.27)	(.95)	(.45)	(10.86)
Number of Adults in Household	-.01	.01^	.57^	.75	-.23	.38	.32	.20	-2.65
	(.01)	(.00)	(.32)	(.49)	(.52)	(.59)	(.44)	(.21)	(4.99)
First Time Parent (vs. not)	-.01	-.01	-1.14	-.98	2.65*	-1.20	1.17	-.07	14.65
	(.02)	(.01)	(.80)	(1.23)	(1.30)	(1.46)	(1.09)	(.52)	(12.51)
Initial Readiness to Change	.00	.00	-.01	.05	-.06	-.00	-.04	-.02	1.07
	(.00)	(.00)	(.05)	(.08)	(.08)	(.09)	(.07)	(.03)	(.77)
Unadjusted R^2	.06	.04	.07	.03	.08	.05	.07	.06	.06
Adjusted R^2	.01	-.01	.02	-.02	.03	.01	.02	.01	.01
F-statistic	1.30	.80	1.53	.58	1.77^	1.11	1.44	1.30	1.24

Note. Standard Errors are in parenthesis. Dependent variables included are Knowledge of Infant Development Inventory (KIDI), Baby Safety Checklist (BSC), Social Support Behaviors Scale (SSB), Social Support Index (SSI), Parenting Sense of Competence Scale (PSOC), Center for Epidemiological Studies-Depressed Mood Scale (CES-D), Perceived Stress Scale (PSS), Parent Concerns (PC), and Child Abuse Potential Inventory (CAP).

Significance levels are indicated as $^{**}p < 1$ percent, $^{*}p < 5$ percent, and $^{\wedge}p < 10$ percent.

ECI Impacts on Reports of Child Maltreatment:

Although enhancing parental capacity is a central objective of the Welcome Home and Early Start intervention system, insuring child safety is equally important. To capture the extent to which these home visitation efforts achieve this objective, we examined data from the County's Department of Children and Family Services (DCFS) to determine if the children referred to Early Start in 2001 as well as the children in our sample were reported for child maltreatment since enrollment into the program. These data included the number, characteristics, and distribution of all reports involving Early Start or Welcome Home recipients between the infant's birth through December, 2002. The data base provides at least a 12-month observation period for all children referred to Early Start during 2001, and for 99 percent of the 1,499 new parents recruited into the study. An 18-month observation window is available for at least 53 percent of the full Early Start 2001 cohort and about two-thirds of our study sample.

Child Maltreatment Reports Involving All Early Start Participants

The administrative data identified 5,529 children under the age of three as being referred to Early Start during 2001. In the 12-months following their initial referral to the program, 679 (12.3%) were reported for child abuse and neglect at least once and were named in a total of 899 reports. By the end of our observation period (December 2002), a total of 935 children (16.9%) had been reported, 28 percent of them multiple times. Over two-thirds of these reports involved suspected neglect, 15 percent suspected physical abuse, 17 percent suspected emotional maltreatment and 2 percent suspected sexual abuse.[25] Following an investigation, roughly 50 percent of all of these reports were indicated or substantiated. Contrary to national reporting trends, neglect allegations were more likely to be substantiated than allegations of physical abuse. Among the indicated pool of reports, 73 percent involved charges of child neglect (258 cases), 11 percent involved cases of physical abuse (40 cases) and 15 percent involved others forms of maltreatment including child sexual abuse (4 cases) and emotional maltreatment (50 cases). By the end of one year, 158 of these children (3% had spent some time in the state foster care system. By the end of 2002, this number had increased to 202 children or 4% of those referred to Early Start.)

Table 4.15 Proportion of Early Start 2001 Cohort Reported for Maltreatment by Enrollment Status

	Sample	Reported or Placed		Statistical Test and Significance
Enrollment Status	*N*	*N*	%	
Home visit with 12-months				
No	1,793	243	13.6	
Yes	3,736	501	13.4	$t = .15$
Home visit by 12/2002				
No	1,736	306	17.6	
Yes	3,793	693	18.3	$t = -.58$

Note. No statistically significant differences were found.

[25] These percentages total more than 100 because many of the reports alleged multiple forms of maltreatment.

Table 4.16 Average Number of Home Visits Provided Early Start 2001 Enrollment Cohort by Maltreatment Report Status

	N	Mean Number of Visits	Statistical Test and Significance
Reported within 1 year			
Not reported/ placed within 1 year	3,235	11.4	
At least one report/placement	501	11.6	t = -.53
Reported by 12/2002			
Not reported/ placed by 12/2002	3,100	12.7	
At least one report/placement	693	13.3	t = -1.48

Note. No statistically significant differences were found.

The probability of an infant referred to Early Start experiencing a report of child maltreatment is about two and a half times that of the general population of all 1 year-olds in the County (See Chapter 2). Given the targeted nature of Early Start services and the demographic and functioning challenges facing the parents of these children, it is not surprising to find higher rates of reports within the Early Start service population. Further, the enrollment of a family within a prevention program may increase the detection of possible abuse or neglect. To test these assumptions, we examined two groups of Early Start referrals – those who actually enrolled or received an initial home visit and those who did not enroll. As summarized in Table 4.15, we found no difference between the two groups in the proportion of those reported within either 12 months of enrollment or through December 2002. When we further limited the sample to those who enrolled in Early Start (i.e., received at least one home visit), we did not observe any meaningful differences in the average number of home visits provided participants who were reported or not reported at the end of 1 year or at the end of our observation period. No difference was observed in the proportion of cases reported when this sample was divided into those who received fewer than 15 visits during the initial year of enrollment (13.7% reported for maltreatment) and those who received 15 or more visits (13.0% reported for maltreatment). However, the average number of visits provided those cases involved in a report did vary in terms of the type of allegation filed in the report (see Table 4.17). Cases eventually reported for physical abuse received, on average, two more visits during their initial year of enrollment and three more visits at the end of the observation period than did cases involving others forms of maltreatment or no allegations.

The hypothesis that enrollment in Early Start might contribute to an earlier identification of abuse receives some support from these data. Children enrolled in Early Start and were subsequently reported for maltreatment were reported at a younger age than children referred but not enrolled in the program. On average, children in the Early Start service group reported for maltreatment within 12 months of enrollment were 9.2 months of age at the time of their initial report, while children who never received an Early Start visit were, on average, 12.3 months of age (t = 3.77, p < .001). At the end of our observation period, the differences between the two groups in the average age of first report become even more pronounced (11.8 months of age for the service group compared to 15.1 months of age for the non-enrolled group, t = 4.24, p < .001). Although this trend is promising, it is reflective of a broader trend observed in the full cohort of young children involved in child abuse reports, as noted in Chapter 2. Also, when we examined the source of these reports, very few differences were observed. Approximately one-third of the reports from both the groups (those receiving Early Start services and those not receiving Early

Table 4.17 Average Number of Visits by Type of Maltreatment Allegation for 2001 Early Start Cohort Reported Within 1 Year of Referral to Early Start and Between Early Start Referral and December, 2002

	All Referred Cases		Those receiving one or more visits	
	N	Mean Number of Visits	*N*	Mean Number of Visits
Reported within 1 year				
No allegation	4,846	7.7	3,267	11.4
Physical Abuse	102	10.2	78	13.4
Neglect	490	7.9	332	11.6
Other	91	6.8	59	10.4
Statistic	$F = 3.53$, $p < .014$		$F = 2.02$, $p < .11$	
By December, 2002				
No allegation	4,590	8.9	3,131	13.0
Physical Abuse	160	12.2	123	15.8
Neglect	664	9.5	463	13.6
Other	115	8.5	76	12.9
Statistic	$F = 6.09$, $p < .001$		$F = 3.76$, $p < .01$	

Start services) were reported by family members and friends, and one-third were the subject of an anonymous report. Among the remaining one-third, social service agencies (which might include Early Start service providers) accounted for 15 percent of the reports involving cases that received at least an initial home visit but only 11 percent of the reports involving the non-enrolled group.

As with other performance indicators, wide variation existed across Early Start service providers in terms of the proportion of cases reported for maltreatment. Among those agencies that received at least 100 referrals during 2001, the proportion of cases that were involved in a report of child abuse within 12 months of referral ranged from 5.4 to 18.7 percent. In an attempt to determine if this variation might be related to any measures of service quality or agency characteristics, we looked at the 13 Early Start agencies for which we had obtained additional descriptive data. Within this sample, no significant correlations were observed between the proportion of cases reported and the several measures of service quality included in the administrative data or in the proportion of cases reported based upon an agency's mission, size or staff characteristics. We did observe an increased likelihood among those agencies that placed lower priority on training home visitors to have a higher proportion of their cases reported for child abuse but this relationship only approached significance ($r = .48$, $p < .09$). However, those agencies that placed relatively low priority on modeling home visitor procedures and skills for their workers as a training strategy were more likely, at the trend level, to have a higher proportion of their cases reported for maltreatment ($r = -.52$, $p < .07$). In the absence of additional information as to the characteristics of the participant population and direct service staff at each agency, it is difficult to interpret these patterns, although it is reasonable to assume that some relationship does exist between an agency's initial and ongoing training of its direct service staff and reporting behavior.

Child Maltreatment Reports Involving Evaluation Sample

A total of 106 children enrolled in our study had at least one child abuse or neglect report between their birth and December 31, 2002. Of these cases, 82 (77%) had only a single report during the observation period, 13 cases (12%) had two reports, and 11 cases (10%) had three or

more reports. Overall, 1 percent of the full WH sample[26] (10 cases), 17 percent of the WH-ES referral group (57 cases), and 21 percent of the OWF-ES referral group (39 cases) were the subject of a child abuse report during our observation period. Over 75 percent of these reports involved potential child neglect, 27 percent involved emotional maltreatment, 21 percent involved physical abuse and 4 percent involved sexual abuse.[27] Of these cases, 59 (or 56%) were subsequently indicated or substantiated. Of the confirmed reports, 7 were from the WH group, 34 were from the WH-ES group, and 18 were from the OWF-ES group. Although fewer in number, reports involving the Welcome Home only participants were significantly more likely to be substantiated than reports involving children from the OWF referral group. Overall, 70 percent of the reports involving Welcome Home only participants were substantiated or indicated compared to 60 percent of the WH-ES referral group and 46 percent of the OWF-ES referral group. Twelve cases, 6 from the WH-ES group and 6 from the OWF group, involved the child being placed in foster care. By the end of the observation period, 10 of these children remained in care.

In examining differences in demographic characteristics and initial functioning, we focused on the 93 cases that involved participants in our interview sample who had been referred on to Early Start by either the Welcome Home nurse or their OWF case workers and for whom we had interview data.[28] Table 4.18 compares these demographic and baseline scores. In terms of demographic differences, participants in both referral groups who were reported for child abuse were more likely than those not reported to lack a high school education and to be unemployed. Participants in the OWF referral group also were more likely to be reported if they were teens and had low incomes (e.g., under $20,000). With respect to their personal functioning, the ES-WH participants reported for child abuse were more likely than those in this group not reported for child abuse to have higher depression scores and perceived stress. They also demonstrated a greater willingness to address parenting issues. In contrast, those reported in the OWF referral group differed from the non-reported participants in this group only in terms of their level of child development knowledge and their overall risk for child abuse, as measured by the CAP. As one might expect, those reported for child abuse in this group demonstrated significantly less knowledge with respect to child development and higher CAP scores The only service-related difference between the two groups involved the Welcome Home referrals. Participants in this group reported for child abuse remained enrolled in Early Start for a shorter period of time than those not reported for maltreatment.

In addition to examining the differences within the sample between those cases reported and not reported for maltreatment, we looked for key differences that distinguished cases that resulted in a substantiated or indicated charge of maltreatment. In drawing these comparisons, we focused on the differences between the 49 cases that involved substantiated maltreatment and those cases in which a family was either not reported or whose report was unfounded. These

[26] For purposes of this analysis, our sample of Welcome Home participants includes the 692 new parents recruited for the study but not selected as well as the 289 new parents on whom data were collected. Of the 10 cases referred to DCFS from this group, 8 cases (80%) were from those selected to be interviewed (i.e., those at higher risk).

[27] These percentages total more than 100 because many of the reports alleged multiple forms of maltreatment.

[28] Of those cases for which these more descriptive data are not available, two were in our Welcome Home recruitment pool, eight were in our Welcome Home only sample, two were in the WH-ES pool, and one was in the OWF-ES pool.

comparisons are summarized in Table 4.19. As this table indicates, the substantiated cases were more likely to involve mothers who had not completed high school and who were unemployed at the time of their initial interview. In terms of personal function, the reported cases were very comparable to those not reported or indicated for abuse in terms of their knowledge of child development, sense of parental competency, levels of social support and potential of child abuse (as measured by the CAP). However, those cases involving an indicated charge of child abuse were, on average, significantly more depressed and reported higher levels of perceived stress. Those cases that were substantiated also demonstrated a greater willingness to address their parenting issues than those cases not reported or substantiated for maltreatment.

No significant differences between these two groups were observed in terms of their Early Start service experience, although cases involving a substantiated report of maltreatment were, on average, enrolled in the program for a shorter period of time, had fewer home visits and were less likely to receive at least 15 visits. In terms of this last service indicator, however, over one-quarter of those cases with a substantiated charge of maltreatment had received this level of service. In order to further examine the potential influence of service enrollment on a family's likelihood to be reported for child maltreatment, we compared the demographic and initial functioning of reported and non-reported cases for those participants who enrolled in the program (e.g., received an initial home visit) and those that did not successfully enroll. Table 4.20 presents these data. As indicated in Table 4.20, demographic characteristics played a strong role in distinguishing cases that were reported from those that were not reported, independent of enrollment status. Among both groups, cases reported for child abuse were more likely to involve mothers who were not high school graduates and who were unemployed. Within the Early Start enrollment group, the only additional significant demographic variable that distinguished the reported and non-reported cases was race, with a much lower proportion of African American participants being identified in the reported group.

Among new parents enrolled in Early Start, child abuse reports were more common for those participants with annual incomes under $20,000. Although reported cases in the non-enrolled group had somewhat higher levels of perceived stress than those cases in this group who were not reported, no other significant functioning differences were identified. In contrast, reported cases in the sample that had received at least an initial home visit differed significantly from the non-reported participants in several functioning areas. As summarized in Table 4.20, reported cases that received at least one home visit had fewer social supports, higher perceived stress, greater depression and an overall higher likelihood for maltreatment. Without knowing the exact circumstances surrounding these reports, it is difficult to interpret this pattern. However, it may suggest that without enrollment in a service program, judgments about one's parental capacity may be more heavily influenced by demographic or descriptive characteristics than by any objective sense of personal functioning or parental capacity. Once a family becomes engaged in a prevention program they may have greater access to a wide range of professionals, all of whom have the opportunity to become more familiar with the family's specific strengths and weaknesses. As such, demographic characteristics have less relevance in determining whether or not a child should be reported for possible maltreatment.

Table 4.18 Comparison of Sample Participants Reported and Not Reported for Child Abuse, by Referral Source

Measures	Welcome Home - Early Start					OWF - Early Start				
	Reported		Not Reported		Statistical test and significance	Reported		Not Reported		Statistical test and significance
	M or %	*(SD)*	*M or %*	*(SD)*		*M or %*	*(SD)*	*M or %*	*(SD)*	
Sample Size	56		258			37		141		
Demographic Characteristics (%)										
Less than age 18	25.0		21.3		X^2= .36	8.1		2.1		X^2= 3.2^
Income < $20,000	58.1		50.0		X^2= .95	89.3		64.1		X^2= 6.8**
African American	38.2		53.2		X^2= 4.1*	63.9		71.7		X^2= .84
Not Married	96.4		91.7		X^2= 1.5	80.0		83.9		X^2= .31
Non high school graduate	69.6		50.0		X^2= 7.1**	68.6		25.4		X^2= 23.2**
Not working	85.2		63.9		X^2= 9.2**	79.4		50.7		X^2= 9.1**
Performance Measures at Intake (*M*)										
Family Strengths	8.3	(.8)	8.3	(.7)	*t* = .11	8.7	(.8)	8.7	(1.0)	*t* = -.25
Readiness to Change	59.8	(6.9)	57.9	(6.6)	*t* = 1.9^	57.6	(7.7)	58.7	(6.6)	*t* = -.77
KIDI (% Correct)	61.2	(12.6)	62.5	(12.4)	*t* = -.70	62.2	(11.3)	66.9	(10.9)	*t* = -2.2*
BSC (%Correct)	87.0	(5.4)	86.5	(6.9)	*t* = .63	86.7	(7.9)	87.5	(5.7)	*t* = -.55
Parenting Sense of Competence	75.3	(8.7)	75.6	(8.7)	*t* = -.24	74.1	(8.0)	75.1	(8.4)	*t* = -.63
Social Support Behaviors	42.2	(1.8)	42.0	(3.6)	*t* = .88	40.9	(5.0)	40.7	(7.2)	*t* = .22
Social Support Index	63.8	(8.1)	65.7	(7.9)	*t* = -1.6	62.0	(8.9)	62.4	(8.7)	*t* = -.27
Perceived Stress Scale	16.5	(5.8)	14.0	(6.5)	*t* = 2.9**	17.4	(6.2)	16.6	(7.2)	*t* = .63
Parental Concerns	3.6	(3.3)	3.7	(3.1)	*t* = -.11	4.5	(3.2)	4.4	(3.1)	*t* = .23
Depression Mood Scale	14.1	(8.5)	11.3	(8.6)	*t* = 2.2*	14.8	(9.2)	14.0	(9.7)	*t* = .52
Child Abuse Potential Inventory	91.3	(67.8)	90.1	(67.6)	*t* = .12	156.8	(106.2)	110.1	(74.0)	*t* = 3.1**
Early Start Service Levels (*M*)										
Months in Early Start	6.0	(4.2)	7.4	(4.6)	*t* = -2.2*	6.5	(4.4)	6.7	(4.1)	*t* = -.25
Number of Home Visits	7.8	(8.5)	9.3	(9.3)	*t* = -1.3	8.4	(9.8)	8.6	(8.9)	*t* = -.13

Note. Actual sample sizes for individual measures may vary as a result of missing data. A two-tailed test was used to assess the statistical significance of differences in the characteristics between those reported and those not reported for maltreatment within each referral sample.
Statistical significance levels are indicated as **p < 1 percent, *p < 5 percent, ^p < 10 percent.

Table 4.19 Comparison of Case Characteristics Between Substantiated/Indicated Child Abuse Reports and No Report/Unsubstantiated Cases Among Early Start Referral Samples

Measures	Substantiated/ Indicated Cases		Not Reported/ Unfounded Cases		Statistical Test and Significance	
Sample Size	49		443			
Demographic Characteristics (%)						
Less than age 18	18.4		14.9		X^2=	.41
Income < $20,000	64.9		57.3		X^2=	.80
African American	47.9		58.7		X^2=	2.0
Not Married	91.5		88.9		X^2=	.29
Non high school graduate	68.1		44.2		X^2=	9.7**
Not working	89.1		60.8		X^2=	14.3**
Early Start Experiences						
Engaged at Intake (%)	61.2		72.2		X^2=	3.0
Engaged at Quarter 1 (%)	44.9		52.4		X^2=	.99
Engaged at Quarter 2 (%)	34.7		41.3		X^2=	.94
Engaged at Quarter 3 (%)	28.6		33.6		X^2=	1.03
OWF Early Start referral (%)	34.7		36.3		X^2=	.05
Number of months in program *(M)*	6.1	(4.4)	7.1	(4.4)	*t* =	-1.4
Number of home visits *(M)*	7.8	(9.0)	9.0	(9.1)	*t* =	-.90
Total with 15 or more visits (%)	26.5		31.6		X^2=	.53
Performance Measures at Intake (%)						
Family Strengths	8.3	(.81)	8.4	(.82)	*t* =	-1.3
Readiness to Change	60.1	(7.3)	58.1	(6.6)	*t* =	1.8^
KIDI (% Correct)	61.4	(11.7)	63.8	(12.1)	*t* =	-1.3
BSC (% Correct)	86.8	(5.9)	86.9	(6.6)	*t* =	-.03
Parenting Sense of Competence	75.3	(8.2	75.3	(8.6)	*t* =	.03
Social Support Behaviors	41.4	(4.4)	41.5	(5.0)	*t* =	-.18
Social Support Index	62.5	(8.3)	64.5	(8.4)	*t* =	-1.5
Perceived Stress Scale	17.5	(5.9)	15.0	(6.8)	*t* =	2.7**
Parental Concerns	4.5	(3.1)	3.9	(3.2)	*t* =	1.3
Depression Mood Scale	14.8	(8.5)	12.4	(9.1)	*t* =	1.9^
Child Abuse Potential Inventory	113.9	(90.4)	99.6	(73.1)	*t* =	1.3

Note. Actual sample sizes for individual measures may vary as a result of missing data. A two-tailed test was used to assess the statistical significance of differences in the characteristics between those reported and those not reported for maltreatment within each referral sample.
Numbers in parenthesis are standard deviations.
Statistical significance levels are indicated as **p < 1 percent, *p < 5 percent, ^p < 10 percent.

Table 4.20 Comparison of Sample Participants Reported and Not Reported for Child Abuse, by Those Who Received at Least One Home Visits and Those Who Did Not

	Received At Least One Visit			Received Zero Visits		
Measures	Reported	Not Reported	Statistical Test & Significance	Reported	Not Reported	Statistical Test & Significance
Sample Size	58	279		35	120	
Demographic Characteristics (%)						
Less than age 18	17.2	15.1	X^2= .18	20.0	13.3	X^2= .95
Income < $20,000	76.7	55.0	X^2= 7.1**	60.7	56.3	X^2= .17
African American	55.2	58.8	X^2= .25	36.4	62.1	X^2= 6.9**
Not Married	89.5	88.6	X^2= .04	91.2	89.7	X^2= .06
Non high school graduate	63.2	41.8	X^2= 8.7**	79.4	40.2	X^2= 16.2**
Not working	81.8	61.1	X^2= 8.6**	84.8	54.7	X^2= 9.9**
Performance Measures at Intake)						
Family Strengths	8.3 (.84)	8.4 (.83)	*t* = -.87	8.6 (.73)	8.4 (.81)	*t* = 1.4
Readiness to Change	59.2 (6.6)	58.6 (6.4)	*t* = .61	58.6 (8.3)	57.3 (6.9)	*t* = .88
KIDI (% Correct)	61.3(12.3)	63.6 (12.4)	*t* = -1.3	62.1 (11.8)	65.0(11.2)	*t* = -1.3
BSC (% Correct)	87.6 (5.8)	87.1 (6.2)	*t* = .66	85.7 (7.4)	86.4 (7.2)	*t* = -.45
Parenting Sense of Competence	73.7 (8.8)	75.4 (8.5)	*t* = -1.3	76.6 (7.5)	75.5 (8.9)	*t* = .78
Social Support Behaviors	41.5 (3.5)	41.6 (5.1)	*t* = -.06	42.0 (3.5)	41.3 (5.4)	*t* = .85
Social Support Index	62.4 (8.3)	64.5 (8.1)	*t* = -1.8^	64.2 (8.7)	64.6 (8.9)	*t* = -.25
Perceived Stress Scale	16.7 (5.9)	15.0 (6.6)	*t* = 2.0*	17.0 (6.0)	14.8 (7.5)	*t* = 1.8^
Parental Concerns	4.4 (3.1)	3.9 (3.1)	*t* = .99	3.4 (3.4)	4.0 (3.2)	*t* = -.90
Depression Mood Scale	15.4 (8.7)	12.3 (9.0)	*t* = 2.5*	12.6 (8.6)	12.2 (9.2)	*t* = .27
Child Abuse Potential Inventory	128.0(92.3)	101.0 (74.0)	*t* = 2.4*	99.7 (86.1)	88.4(60.9)	*t* = .73

Note. Actual sample sizes for individual measures may vary as a result of missing data. A two-tailed test was used to assess the statistical significance of differences in the characteristics between those reported and those not reported for maltreatment within each referral sample.
Numbers in parenthesis are standard deviations.
Statistical significance levels are indicated as **p < 1 percent, *p < 5 percent, ^p < 10 percent.

Program Implications:

All new parents, regardless of socioeconomic status, can expect to face a variety of challenges and thus need a range of supports during their child's first year of life. Although most new parents will learn more about child development and feel more competent in their ability to care for their infant over time, many will experience increased stress, personal depression, and numerous moments of uncertainty. Even among our sample of new mothers with the greatest material and psychosocial resources, we observed a significant decrease in their sense of emotional connection and belonging to those in their informal support network and an increase in perceived stress during the first year following their child's birth. All of these patterns underscore the importance of casting a broad and inclusive net in providing support and outreach to all new parents.

Parenting challenges may be particularly salient for new parents with few economic and psychosocial resources. As such, Early Start service providers may need to pay greater attention to addressing the concrete and economic concerns most troubling to the families on their caseload such as childcare, housing, and employment. In addition to helping families address basic needs, a more concerted effort may be needed to help participants construct a meaningful

and positive network of informal support. The absence of strong informal supports within the Early Start population may reflect the isolation often observed in families with limited economic resources who are concentrated in communities with poor social services and the absence of collective efficacy. Although such limitations may make it more difficult for Early Start service agencies to improve social networks among its participant base, the development and nurturing of such personal relationships may be critical for achieving and sustaining meaningful program impacts.

Our analysis suggests that if a participant can be successfully enrolled in Early Start and receives a minimum of 15 visits, it is possible that significant change can be achieved in the areas of maternal depression, perceived stress, and parental competence. These findings, although encouraging, need to be kept in perspective. Unfortunately, the majority of Early Start referrals (69%) did not receive this level of service, a pattern particularly true for African American families. Further, the ability of service levels to predict a participant's personal functioning, although often statistically significant, was modest in magnitude and far from universal.

Even when services are provided at this higher level, Early Start does not have a significant impact on the likelihood of subsequent reports for maltreatment. Almost one in five children referred on to Early Start are being reported for possible abuse and neglect within 18 months following this referral, independent of the number of home visits they receive. About one-third of these reports occurred after referral to Early Start but prior to an initial home visit. However, two-thirds of these reports did occur after families had been enrolled in the program for an average of 6 months and had been provided an average of 8 home visits. Given that this service dosage is comparable to what the average Early Start participant will receive, it would appear that the intervention is not successful in reducing this specific indicator of child safety.

The concept of child safety encompasses a broader range of parental behaviors and environmental conditions than is represented within child abuse reporting statutes. Even if the system were able to correctly identify all victims of maltreatment, a substantial proportion of children would remain in situations that compromise their physical, social, and cognitive development. These conditions, although not always constituting reportable acts of maltreatment, can and do lead to many of the negative outcomes for children that child protection efforts seek to prevent (e.g., school failure, juvenile crime, mental health disorders, chronic poor physical health, etc.). We understand the importance of monitoring the capacity of Early Start to reduce child abuse reports. Indeed, the general decline observed in the overall rate of child abuse reports among children under 1 in the County is encouraging. However, our analysis suggest that this decline may not be the result of more intensive services directed to high-risk families through the Early Start service delivery system. Altering abuse rates among this group of families may be difficult to achieve without a broader system of available resources to address the full range of challenges facing these new parents.

The Family Circumstances of Welcome Home and Early Start Mothers

New parents offered Welcome Home and Early Start face a number of challenges, as described in our initial evaluation. To effectively serve this diverse population, it is important to understand the daily reality of these new parents both in terms of their objective needs as well as their ability and comfort level in accessing formal and informal support. A parent's daily routines and family circumstances can impact a child's developmental trajectories, the mother's personal well-being, and the use of social services program such as Early Start. Using the core elements of the EFI and drawing on data from the qualitative interviews, in this section we discuss the similarities and differences in family circumstances that existed among participants and the potential impacts these differences have on their parenting and interest in family support services.

Changes in Demographic Characteristics:

There were some changes in the descriptive characteristics of the sample at the time of our baseline interview compared to characteristics documented in the qualitative interviews.[29] There was little change in the proportion of women in each group who were married or employed. There was a small change in employment, where at the time of the qualitative interviews, fewer participants in the Welcome Home-Early Start referral group and a greater number of participants in the OWF-Early Start referral group were unemployed. Two and half years after giving birth, a notable percentage of women in all three groups are enrolled in school. Twenty-five percent of the Welcome Home-Early Start participants are in school (n=10), as are about 20 percent of the Welcome Home Only and OWF-Early Start participants. The most dramatic demographic change we observed in this sample was the number of additional children born since baseline; many women gave birth in the last couple of years, the greatest number of births occurring to women in the OWF-ES referral group. This group had a subsequent birthrate of 50 percent compared to 27 percent of the WH-only and 12 percent of the WH-ES groups.

Overall Family Circumstances:

Data collected from the Ecocultural Family Interview (EFI) allowed us to provide a specific score or rating to participants on a variety of dimensions related to family circumstances. Scores between 0 and 2 indicate that family characteristics rated "low" on that dimension, scores between 3 and 5 indicate a "moderate" rating, and scores from 6 to 8 indicate a "high" rating. The larger the number, the higher the family scored for a particular family circumstance. When we compared average scores for participants in each of our three referrals groups, no substantial or significant differences in family circumstances were found on items relating to the extent of health care coverage, cultural beliefs and influences, home-community environment, feelings of family connectedness, and the role of men, (e.g., fathers, husbands, boyfriends, and partners). However, we identified significant differences in average mean scores across the three groups for 12 of the 40 EFI family items. Table 4.21 summarizes these differences.[30] On balance, participants in the Welcome Home only sample were more likely than those referred on to Early Start to have slightly greater financial resources and to have greater agreement with other adults in the household regarding childcare and child-rearing tasks. These participants were less likely

[29] Appendix 4.H compares the descriptive characteristics of the sample at the time of our baseline interviews to their current status as documented in the qualitative interviews.

[30] Appendix 4.I details complete EFI comparisons by program referral group.

Table 4.21 EFI-Family Circumstances Items by Referral Groups

		Welcome Home			Early Start			Ohio Works First	
	EFI Item	*M*	*(SD)*	Diff	*M*	*(SD)*	Diff	*M*	*(SD)*
	Sample Size	22			40			24	
EFI Item #	**Domains and Items**								
	Family Subsistence and Work								
1.	Amount of income for basic items.	5.4	(1.9)	.96^	4.4	(1.7)	.40	4.0	(1.5)
2.	Amount of money for unexpected expenses.	4.7	(2.1)	.91^	3.8	(2.0)	.23	3.5	(1.4)
4.	Overall satisfaction with current availability of income/subsistence base.	4.3	(2.1)	.64	3.7	(1.7)	.77^	2.9	(1.6)
7.	Work and/or school have a positive impact on mother.	4.5	(1.8)	-.01	4.5	(1.8)	-.90*	5.4	(1.0)
	Health and Social Services								
9.	Level of household activity getting and using government income maintenance/in-kind services.	1.8	(2.5)	-1.66*	3.4	(2.2)	-.90	4.3	(2.3)
10.	Level of household activity getting and using social services and community agencies.	0.4	(0.9)	-.89*	1.3	(1.5)	-.79	2.0	(2.0)
	Information								
13.	Level of family activity focused on accessing and receiving information about government and social services from formal sources.	1.2	(2.1)	-1.13*	2.4	(2.0)	-.08	2.4	(2.2)
14.	Level of family activity focused on accessing and receiving information about government and social services from informal sources.	0.6	(1.0)	-1.35**	1.9	(1.5)	-.32	2.2	(1.8)
	Networks and Supports								
20.	Mother currently relies on instrumental support from informal networks such as family, kin, and friends, including siblings, grandparents, former in-laws, etc.	4.0	(2.4)	-1.44*	5.4	(1.5)	.64	4.8	(1.9)
	Domestic Workload and Childcare Tasks								
28.	Overall agreement and consistency between household adults regarding childcare and childrearing tasks.	5.5	(1.4)	.90^	4.6	(1.7)	-.44	5.1	(1.6)
31.	Time availability of mother for target child.	5.2	(1.8)	.20	5.0	(1.8)	-.85*	5.9	(1.2)
32.	How difficult is it to care for target child?	2.7	(1.5)	-.76^	3.5	(1.6)	.17	3.3	(1.6)

Note: Significance levels are indicated as $^{**}p < 1$ percent, $^{*}p < 5$ percent; and $^{\wedge}p < 10$ percent.

than those referred on to Early Start to use government programs or social service resources and were less likely to draw instrumental support from family members and friends. With regard to the two Early Start referral groups, those new parents referred by their OWF caseworkers were more likely than new parents referred by the Welcome Home nurse to believe work or school would have a positive impact on them and to be satisfied with the time they had available to spend with their children.

In addition to looking for differences between referral groups, we also examined family circumstances by Early Start usage group (i.e., non-users, low-users, and high-users). In this case, the three user groups showed significant differences on only 5 of the 40 EFI items addressing family circumstances.[31] Comparing only the high and low Early Start service users, the two groups differed on six EFI items. The only items that consistently distinguished those who engaged in the Early Start program (low- and high-users) from those who never received a home visit (non-users) were the availability of time mothers had in their daily routine to spend and care for their children. Non-users rated higher in the perceived amount of time they have available to spend with their child (M = 6.1, SD = 1.2), while low-users rated lower (low-users had mean of 4.8 and high-users mean was 5.1). None of the women in the low-user group scored low in the availability of time they had to spend with their child. Most mothers in this group had some availability, meaning they typically had every weekday evening and all weekend to spend with their child, and the majority had flexible enough schedules to be with their child every day of the week. In contrast, nearly two-thirds of the Early Start (27 of 42) users had moderate or little availability to spend with and care for their children. For example, a number of high Early Start users have busy daily routines that impinge on time they have with their child. Compared to the non-user program group, a larger proportion of high-users mothers work full-time positions (62 vs. 32%) including several mothers in the high-user groups who work double shifts and/or attend school.

In the following sections we discuss the similarities and differences that existed among participants by referral group in the following EFI domains: family subsistence and work, health and medical care, government and community services, informal supports, biological fathers, neighborhoods, child development information, and managing the demands of parenting.

Work and Family Subsistence:

As indicated by the means in Table 4.21, there we observed differences in satisfaction levels with their employment or educational situations between Welcome Home referrals and OWF referrals to Early Start. OWF referrals were notably more positive about their current employment opportunities and were less likely to express frustration at being unable to spend time with their children or balance the competing needs of earning money and caring for their children. On average, participants in the OWF sample indicated that work or school had a greater positive impact on their daily lives (M=5.4, SD=*1.0*), than participants in the Welcome Home-Early Start referral group (M=4.5, SD=*1.8*). On balance, the OWF participants found new employment and work opportunities a chance to meet new people and expand their skills, and it

[31] Statistical comparisons between Early Start users are in Appendix 4.I3 and Appendix 4.I4.

seemed to energize them for tackling other tasks at home. One OWF mother who worked full-time in a grocery store exemplified this pattern:

> It's like you don't feel out of place there, [at work]….You're meeting new people….I like to have [money] on hand when I need it… And it makes me feel good when I'm saying I worked for this or that's actually mine…it's like, I use my job…as a get away…I'm laugh'n, play'n, having a ball."

In contrast, the Welcome Home referrals generally viewed work or school as something that had a greater negative impact on their life, for they saw it as something that took them away from their children or reduced their energy to do other things. A married mother who works full-time as a teacher embodies this perspective:

> At one time [work] was my life, that's all I did….Now I have a child and….he needs me now and by the time he goes to bed, I'm so tired… Sometimes I hate working because it takes my time away from here [my home].

Considering the baseline demographic differences in income levels, employment opportunities, and educational status among participants in the three referral groups, it was not surprising to find differences in the extent to which participants in the three groups worried about income for basic items and unexpected expenses. For example, the Welcome Home only participants' mean score for the amount of income available for basic items was 5.4 (*SD*=1.9), one point higher ($p < .10$) than the Welcome Home-Early Start group (*M*=4.4, *SD*=1.7) and a 1.4 higher score ($p < .01$) than the OWF-Early Start referral group (*M*=4.0, *SD*=1.5). Twelve out of the 22 women in the Welcome Home only group scored high (above 5) for income for basic items, compared to only 4 of the women in the OWF-Early start referral group. Despite these differences in income for basic needs, very few mothers in our sample rated high in terms of their ability to easily meet all of their financial needs. Over two-thirds of the sample (59 out of 86) scored fewer than 5 points out 8 on the EFI in terms of having enough income to cover basic items like housing, food, clothing and utilities. About 50 percent of the sample ($n = 46$) scored fewer than 4 points on this indicator (i.e., a low or moderately low score). Many respondents, the majority of whom came from the Welcome Home-Early Start referral group, described situations such as having trouble paying rent, having their utilities shut off, living with relatives to pool resources, running out of food, having to chose between paying rent, paying a utility bill or buying clothes for their children, and frequently relying on family members to make ends meet. Nearly two-thirds of these mothers scored low or moderately low when it came to having money to pay for unexpected expenses, (e.g., a car repair). In such cases, respondents indicated that they would have to turn to family members or friends to help them out. Yet, even when faced with these types of financial shortages, relatively few of these respondents indicated that they focused a great deal of energy in securing government programs. The mean score for all three groups with respect to the identification and use of government programs was less than 3, although this behavior was significantly higher among the OWF referral group (*M*=2.0, *SD*=2.0) than the Welcome Home only group (*M*=0.4, *SD*=0.9).

Eighty-five percent of the sample (70 of 86) also rated low or moderate on satisfaction with current income, resources, and subsistence base. Over a third of the sample (*n*=31) expressed dissatisfaction with their current standard of living and were dissatisfied with their

current housing, income, and work hours. The financial situation and satisfaction with subsistence rated moderate among several women in the Welcome Home only referral group, as well as those in the Welcome Home-Early Start and OWF referral groups. Sarah is a Welcome Home-only recipient who has a 2-year old girl and lives with her husband.[32] She has worked full-time, two 8-hour shifts, for 4 years as a nursing assistant. She earns $11.00 an hour and generally has about $80 in her bi-weekly paycheck for non-essential expenses. Her husband is an apprentice electrician, but who has been laid off from work. Sarah explains that her family often has to shuffle bill paying, and live from paycheck to paycheck. They have no savings account and regularly secure food from a local food bank with the help of a friend. She states, "I did have savings…I had a nice savings. I had like about $300 saved up and …well my car… had broken down." Although she was interested in enrolling for food stamps, she was told that she earned too much money to qualify. Moderate incomes and dissatisfaction with subsistence are present even among mothers with professional positions, where they describe the difficulty in paying for housing, saving money, and having money left over for "luxury" items, such being able to fix the car, buy children clothes, go to an occasional movie or eat at a restaurant, and afford extracurricular activities for their children.

Although dealing with serious financial shortfalls, many of these respondents were reluctant users of public aid programs and the EFI mean level of household activity getting and using government in-kind services and community level social services was low among the Welcome home referral groups (Table 4.21). Seventy-five percent of the sample (64 of 86) rated low (n = 36) or moderate on use of government in-kind services, and 99% (85 of 86) of the sample rate low (n = 68) or moderate on using community services.[33]

Monique, a single mother from the Welcome Home-Early Start referral group, is typical of the low income women we interviewed who are frustrated with public aid programs. Monique has an 18-month-old son and works about 30 hours a week as a childcare provider for two different families, both of them medical doctors. Her son goes to a childcare center where she uses a County-provided childcare voucher. To augment her income, she does occasional house cleaning. Monique has 8 years of experience working as a nanny and has worked at discount department stores. She earns from $780 to $840 a month, without benefits. Unfortunately, her rent and utilities come to $800 a month, leaving her with insufficient resources to take care of herself and her son. In addition to her childcare voucher, she also receives food stamps, medical insurance, and a cash assistance payment of $90 a month from the County. Nevertheless, she often falls short of what she needs to meet her family's needs. Monique does not like using County services because they give her a "hard time" about her inability to document her employment, and explains that the process of applying for County services is "really complicated" because, as she says, she has to "fall into the right categories." She feels that getting and keeping government services is like "having another job." She regularly uses a local service agency to get 10 free diapers a month and credit cards to pay for additional basic items; her current credit debt is about $13,000. Moreover, Monique is distressed because she has to take her son to childcare centers while she works instead of caring for him herself. These and similar patterns related to work, income, and subsistence suggest that overall, the majority of the

[32] Pseudonyms were used for participants, their children, and their family members throughout this report.
[33] This topic is explored further in the next section.

mothers we interviewed struggle to some extent to make ends meet and do not feel highly satisfied or comfortable with their current financial income and subsistence base.

Use of Government and Community Services:

The use of formal social service and other government support programs was far from uniform among the group of parents we interviewed.[34] The OWF-Early Start families scored higher than families from the other two referral groups in their daily activities related to using and/or getting government income maintenance services and community-based social services. OWF-Early Start respondents scores were in the moderate range (M=4.3, SD=2.3), while the mean score of the Welcome Home-Early Start referrals was moderately low (M=3.4, SD = 2.2) and the Welcome Home only families were very low (M=1.8, SD=2.5, $p<.01$).

Only half of the 22 mothers in the Welcome Home Only referral group reported the use of a government program, most typically health insurance (n =7), WIC (n =4), and housing assistance like Section 8 (n =3). Even fewer respondents in this group reported the use of basic income support programs such as SSI, childcare vouchers, or food stamps. When asked why they did not use government programs, most of these respondents indicated that they did not need this type of help (n =11) or were unaware of such services (n =9). This lack of interest and knowledge on the part of the Welcome Home recipients mirror the responses we received in our general evaluation survey and, therefore, was not unexpected. However, the qualitative interviews also showed that many of these mothers maintain that they *should* be in a position to provide for their families and not depend on County or community services. For example, Gloria, the married mother from the Welcome Home only referral group who works in a supervisory position in a local college said:

> I don't know any [services] and I want to. I heard about them. But I don't hear enough about them… I [also] don't have the time to actually go there unless I request for a day off of work. Then if I request for a day off of work I'll have to make up that hour, use my vacation or sick time and I really don't want to use it until an emergency…But I really don't use any of them….Like the childcare vouchers. I don't know if I'm qualified for it…I don't know how to get them.

In her interview, Gloria also expressed this opinion about her non-use of social services:

> I feel that there are other people who may need it more than I do and there may be only limited…there's not much funding for it. So whoever really needs it more than I do should get it…Leave it for those that really needs it.

Although participants in the OWF-Early Start group were more likely to report the use of public services, as we noted in the preceding section all participants described low levels of getting and

[34] In reading mothers' perspectives about government and community services, it is important to note that none of the respondents differentiated "county government" services from Early Childhood Initiative (ECI) services. The services that were part of the ECI Initiative were not automatically distinguishable from other county-level or government services. The branding of ECI's Welcome Home and Early Start programs are discussed in a proceeding section of this chapter.

using social services, as well as accessing information about government and social services from both formal (e.g., community agencies, religious institutions, medical facilities) and informal sources (e.g., family, friends, neighbors). The majority of mothers explained that the reason they did not use government or social services was similar to Gloria's rational, because they did not believe they needed them, were eligible for them, or didn't know about them. As one mother articulated, "If you don't know about them how are you supposed to use them?" Many mothers said they did not know how to find the help they needed, did not find them services easily accessible or available, or if they located an agency, understood how to get the agency to respond to their needs. These quotes are representative of these beliefs about county and/or government services:

> I just think that the County should be more helpful to the people…It just seems like everyone that works in that whole department in the County in general has nasty attitudes toward people. And it's like you're supposed to be there to help people, that's what the field of social work is, but you have a nasty attitude toward me …. they want to give you a hard time or say you don't qualify for this and you don't qualify for that, so what else am I supposed to do? I'm kind of stuck and you're supposed to be there to help me…

> I don't feel like I have enough time to try to get all of my information together and go [to] this place and then they send you some place else. It's not that I don't want the help, if I could get the help and it was right there, and I only had to go two steps to get it, I wouldn't mind getting help. But if I got to do four or five different things just for this little bit of stuff, then it's no point in me doing it.

Several mothers, especially those in the two Early Start referral groups, who have sought out and used government or social services maintain that many needed services are not available, particularly to supports for single mothers, as well as basic supplies (clothes, diapers, furniture). As one mother simply said, "I would just tell the [County] board more housing for more people." Other mothers explained:

> What I would like to know is there anyway to find out if the community offers any kind of counseling services…unfortunately everything I've heard, if you don't have the money [you can't get the service]. Like my mom says poor people can't afford a mental breakdown. I know they have AA…Gamblers Anonymous…all these other support groups, is there anything for people who are in any other kinds of situations where they need that kind of support…?

<u>Health and Medical Care:</u>

In contrast to their frustration with public aid programs, the majority of participants in all three referral groups had adequate health care coverage and were generally satisfied with their health care and dental costs (EFI scores of 7 out of 8). Ninety-six percent (82 of 86) of the full sample rated high (EFI scores above 5) in the extent to which their child's health care costs were covered by health insurance. Only two mothers in the entire sub-sample, (one in the Welcome Home-Early Start referral group and the other in the OWF-Early Start referral group), did not have medical coverage for their child. However, both were in the process of applying for

Medicaid and other forms of public health insurance. One mother in the Welcome Home only group who was dissatisfied with her health care coverage indicated that her child's medical coverage is paid for by the father's job. She added, however, that because her treatment preferences are "so outside mainstream medical care" she receives little reimbursement for her out-of-pocket costs to cover the procedures she desires for her child, such as homeopathic and naturist treatments. The extent of health coverage for other family members in the household was slightly lower than it was for the target child, with 84 percent of mothers receiving high EFI scores. Even in this case, however, only a handful of mothers said that other family members in their household did not have medical insurance coverage.

Informal Social Supports:

Variation existed across the three referral groups in terms of their use of family members and friends to provide them instrumental support (e.g., money, childcare, transportation, clothes, and food). On average, participants in the Welcome Home only group were significantly less likely than those in the Welcome Home Early Start referral sample to report regular use of informal support to help them meet their parenting responsibilities. The average EFI score on this measure for the Welcome Home participants referred on to Early Start was 5.4 compared to a mean score of 4.0 for the Welcome Home only sample ($p<.05$). Overall, 76 percent of mothers in the Welcome Home Early Start referral group (22 of 39) rated the use of informal supports "high" (EFI scores above 5), while only 36 percent of Welcome Home only participants and 42 percent of the OWF Early Start referrals rated use of informal supports as high. A single mother from the Welcome Home-Early Start referral group embodies the feelings of many mothers whom heavily relied on their informal social networks for support:

> …my family is my backbone so they help me with her [my child]…'Cause they're there to help…when I need someone to talk to or if I need help financially or something like that, if I need help with her they're there to help me.… I really have to count on my family a lot…

The high level of reliance on informal support networks among mothers in the Welcome Home Early Start group may reflect the fact that a high proportion of these respondents were teenagers, many of whom still lived with their parents. Zero-order correlations indicated a significant relationship between reliance on social support and maternal age, with lower maternal age associated with a higher reliance on informal supports.[35] It also may relate to the fact that there is high are great financial and care giving needs among this group of women, yet a low use of social and community services. The most common types of informal supports Welcome Home-Early Start mothers used were childcare assistance and financial assistance, typically provided by the child's grandmother. Participants rarely described any negative tradeoffs or consequences of relying on informal supports (mean EFI scores about 2.0), except to say that sometimes their support sources lacked the financial resources to provide needed help. In other cases, the respondents expressed concern about feeling so dependent on other people, as articulated by this Welcome Home Early Start respondent:

[35] The zero-order correlations for the three groups are as follows: Welcome Home Only $r= -.37$, $p<.09$; Welcome Home Early Start r= $-.45$, $p<.004$; and OWF Early Start $r= -.52$, $p<.01$.

> It's nice [the help I get]. I mean I'm lucky, but I can't wait for the time when I don't have to ask them to do that. I'm 26 and I still feel like I'm a child because I still have to ask them for all this stuff….it's kind of embarrassing, because I feel like I'm older than the age of like the threshold of when you stop asking your parents for help…but then I got pregnant….

Another Welcome Home Early Start referral explained that it can be difficult to ask for help even when you need it because "there is so much help I need, I don't want to overwhelm and burden someone to the point where they feel like every time their phone is ringing, [it] is because I want something.…"

Biological Fathers:

In general, almost half of the mothers and their children had little or no daily involvement with the fathers of the target child (e.g., EFI scores were less than 4 on this dimension). There were no statistically significant differences in the role of men and fathers in the family circumstances of women and their children across the three referral groups. It was common for these fathers to be absence from their child's life or to see the child only on holidays or birthdays.[36] In some cases, the biological father may live in the household, but had little interaction with the child. As one mother explained:

> He has an excuse for everything and the excuse is work….He said he's not blowing her off, but to me he is….He hasn't seen her lately…I want him to *see* her too and spend time with her. And I don't think he [does, even] when he does pick her up…I think he go off with his friends or go do something [and] somebody come over [to watch her].

Neighborhood and Community:

Significant variation existed across participants in the three referral groups with respect to their perceptions of community safety, with the most pronounced differences existing between those in the Welcome Home Only and those in the OWF Early Start referral groups. The Welcome Home Only participants' mean rating of neighborhood safety on the EFI was 5.0 (*SD*=1.7) while the OWF-Early Start participants' mean level was 3.6 (*SD*=1.9, $p<.05$). Only 15 percent (3 of 20) Welcome Home only participants had EFI scores that indicated low neighborhood safety, compared to 45 percent (10 of 22) of the OWF Early Start referral group. The specific items that contributed to a mother rating her neighborhood as unsafe included the amount of crime and drugs, speeding cars, traffic, or a general lack of trust or fear among residents. A mother from the OWF Early Start referral sample details:

> As you can see there's a drug dealer right there on the corner…I don't think any kid should be brought up in this neighborhood, it's too much drama, a lot of drug dealing, a lot of robbing. I got robbed last summer, and at gunpoint. It's ridiculous! People shooting at other people. I wish [my children] they were in better surroundings...

[36] Forty-five percent of children in the Welcome Home Only referral group had little or no daily involvement with their biological fathers, 60 percent of the Welcome Home Early Start group had little or no contact; and 50 percent of the OWF Early Start group had little or no contact.

A mother from Welcome Home Early Start referral group describes her frustration with her neighborhood:

> I feel I cannot raise him here! I don't let him go outside. When we're in that hallway I don't want him to touch nothing! This is no place where a real parent should want to raise their kids because they can't...It's something that will bother me with my everyday routine.

These mothers account of their neighborhood safety for children is in sharp contrast to a mother from Welcome Home Only referral group:

> …It's rather nice. It's quiet…There's a lot'a kids, which is really nice...in the summertime [my child and neighbor's children] get together and they play…and there's a lot of activities that happen at the library and then there's a park right around the corner, which it's two minutes to walk to.…There's cars that speed down the street, [but otherwise]…no problem [I let him play outside unsupervised].

Accessing Child Development Information:

New parents in our sample spent only a moderate amount of time and energy securing information about their child's development. On average, families in all three referral groups scored low on this activity, with EFI scores ranging from 2.8 to 3.1 (moderate levels). As illustrated in Figure 4.4, the most common resource for obtaining this type of information was the child's pediatrician, followed by family members and friends. Overall, between 61 percent and 73 percent of participants, depending on the program referral group, indicated that they asked for and received child development information from their pediatrician.[37] Mothers stated that their child's doctor kept them informed of their child's developmental milestones and they relied on medical staff to assure them that their child was healthy and developing at the appropriate pace.

Among Welcome Home only mothers, a large proportion (59%) also turned to friends or family members and books and magazines (50%) to enhance their child development knowledge. A much smaller proportion of mothers in the Welcome Home Early Start and OWF Early Start referral groups stated that they sought out family members or friends (37% and 27% respectively), or referred to books and magazines (29% and 32% respectively) for child development information. Many mothers in these groups, however, did not refer to books or magazines because they did not consider them useful for understanding their particular child. For example, as one mother explained:

> A mother's intuition I guess and certain things happen naturally. Like right now I don't think there's any book to explain a 2-year-old child because they're so unpredictable, so you just got to know your child and know your relationship with your child and what types of things make him react this way.

[37] Among mothers in the three referral groups, 73 percent of WH, 60 percent of WH-ES and 59 percent of OWF-ES described receiving information on child development information from more than one source (*M= 2, Min*=1 *Max*=4).

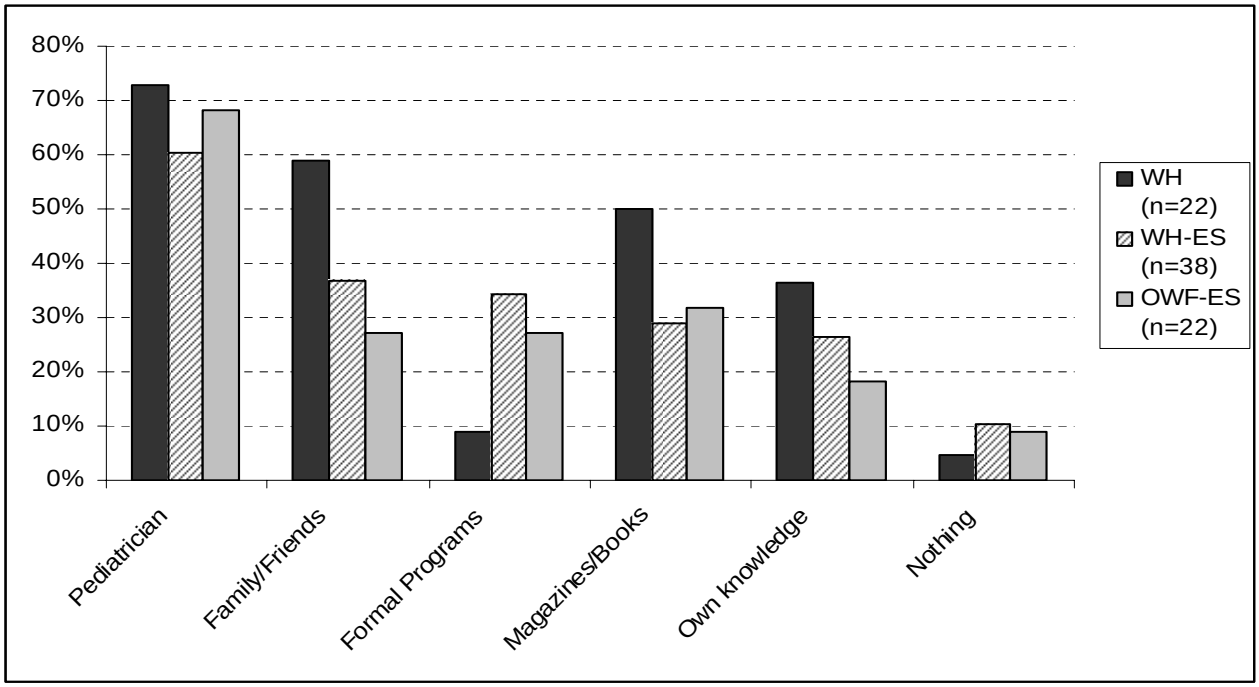


Figure 4.4 Sources Mothers Use for Child Development Information by Program Referral Group

Managing the Demands of Parenting and Daily Living:

Few differences were discovered among families by reference group or user group when it came to organizing the daily routine of children with domestic workload and child care tasks. The level of household activity focused on arranging childcare was similar, and at low levels for most families (e.g., mean EFI score of around 1.5). The degree of complexity the mother perceived in balancing domestic tasks, childcare needs, and work schedules were similar, with EFI mean scores of around 2.3. Circumstances that did show significant differences across the three referral groups related to the overall agreement and consistency between household adults regarding childcare and childrearing tasks. Welcome Home Early Start participants scored significantly lower ($p < .10$) on this dimension than the Welcome Home only group (M=4.6, SD=1.7 versus M=5.5, SD=1.4). Again, this may reflect the high proportion of teens in the Welcome Home Early Start sample, where young mothers living with their parents may face conflicts over primary responsible for the infant and for completing basic childrearing tasks.

Another significant difference ($p < .10$) involved the perceptions of participants as to how difficult it was to care for the target child. Mothers in the two Early Start referral groups scored higher in their perception of how difficult it was to care for their child. Mothers in these groups often described caring for their child as "exhausting" and frequently felt the child was a "handful" because they are "demanding," have "tantrums," do not "listen," "act up," are "stubborn," "mean", "bad, " or "evil." As one mother explained:

> She's very demanding…when she was talking to me and I was not paying attention she was pulling my face to her cause she knows what she wants. 'Look at me right now!'….It is frustrating sometimes….She acts up in public…she just tests you…It can be frustrating.

These differences may be related to the young age and unmarried status of many of these mothers, particularly those in the Welcome Home Early Start group. Many of these mothers are taking care of their children alone, relying on support from family members to provide them occasional respite care. They may get easily frustrated by their child's "typical" 2-year-old behavior. Many of these mothers also expressed feelings of being "all alone" in taking care of their child, and some, although they loved their child, wished they did not have them when they did. One 21-year-old mother expressed that she did not expect to be a mother at her young age, and although she loves being a mother she said, "Sometimes I just need a break. It's like I'm in a football game all by myself, [with] no teammates to pass the ball."

Even when tired and frustrated by their children's behavior a very predominant theme in the interviews was the love and admiration mothers expressed for their children, as demonstrated by this mother:

> My children are, like I said, they are just my whole world. I wouldn't know what to do without my kids. If anything happened I wouldn't be good…If somebody call six, nine kids [DCFS hotline] for whatever reason, they would never be able to come knock on my door and try to take my kids. It would be ugly. I would be on the news cause I would'a tried to kill'm or something. I'm so serious…I don't want *no* harm to come to them because they're so valuable. They're like just a *blessing*!…it's a struggle, but it's like a struggle that's *okay!*

As another mother put it, echoing the sentiments of most of the mothers in the sub-sample: "I just couldn't imagine life without him…He's my pride and joy."

Program Implications:

Our qualitative interviews underscore the challenges parents face in caring for young children. Balancing the demands of work and school with a strong desire to spend time with their children proved problematic for many of the women in this study, regardless of their marital status or financial resources. Indeed, very few of these parents felt satisfied with their current living situation or felt able to provide as much for their children as they would have preferred. On almost a daily basis, these women are making choices between meeting their core, financial obligations and meeting their children's physical, developmental, and emotional needs. Although formal service programs as well as family members and friends provide some assistance to reduce these burdens, in the end these mothers feel a unique responsible for insuring their children's safety and healthy development.

A clear finding from these interviews is that parenting demands do not diminish over time. Concerns over their child's developmental progress became even more salient for these mothers as their children become more mobile and began to explore their environment, both physically as well as through their expanding speech and cognitive capacities. In contrast to the challenges they faced in caring for an infant, raising a toddler requires that greater attention be paid to issues of safety within the home as well as within the family's community. At the same time, a high proportion of these mothers (over 50% of our OWF Early Start interview sample) are either pregnant or have had a second baby, further adding to their parenting responsibilities.

Others have returned to the work force or school. These and similar life changes place added burden on mothers to find adequate childcare options, insure that their housing does not include safety threats, and engage in activities that will nurture their child's natural curiosity and cognitive development. Although many of the parents we interviewed are working hard to maintain a stable and supportive home for their children, others find themselves in constant turmoil, dissatisfied with their economic situation and questioning their capacity as parents.

As we discuss in the following sections, Welcome Home and Early Start services address many of these tensions and, in many instances, provide mothers with a solid foundation to draw upon in addressing these subsequent developmental issues and personal challenges. In other cases, however, the type of parenting education and support offered by these programs is not sufficient to prepare these women for the plethora of demands that will be placed on them as their child matures. Assuming that this pool of participants is representative of the range of families being offered Welcome Home and Early Start, the situations many of these women find themselves in 2 and a half years later support the concept of offering Early Start services through the child's first 5 years of life. However, the limited interest among this group of parents in enrolling in formal support services suggests that new thinking may be needed in how this assistance is positioned within the County's broader array of supports and how it is presented to potential participants. As discussed in the following section, the primary desire for assistance within this population is less around issues of child development and safety and more around having the ability to provide a financially secure and stable home environment for their children.

The Experience of Welcome Home: Voices of the Families

To understand the program experiences of families in the Welcome Home program, the evaluation included in-depth qualitative interviews with a sub-sample of participants (n = 62) about 2 and a half-years after their Welcome Home visit when the mean age of the target child was 2.5 years. [38] This section summarizes data from these interviews, illustrating dominant views and perspectives of first-time mothers about the Welcome Home program. The section starts by revisiting general service satisfaction levels in the full sample of Welcome Home participants 3-months after they received the service. Then we will take a closer look at perspectives that can clarify the meaning of satisfaction among participants by looking at patterns in participants' service expectations, what they were fond of, and what program elements were disappointing. Finally, we examine patterns in which Welcome Home may have had lasting impacts on how new mothers care for their babies and use services.

Service Satisfaction and Use of Welcome Home:

As reported in the Phase I evaluation reports (Coulton and colleagues, 2003; Daro et al., 2003), at the time services were initially provided, over 90 percent of Welcome Home recipients expressed satisfaction with the program. When mothers were contacted 3 months after their Welcome Home visits, positive views of the program were still captured by the survey data. On a 20-point scale of perceived "helpfulness," the WH group gave the program an average rating of 16.0, while those in the WH-ES group gave the program an average rating of 15.7. On the Client Experiences Questionnaire, that ranges from 8-52, where a higher number indicates a higher level of satisfaction, those in the WH group rated 49.3 and WH-ES rated 49.1. The only two

[38] Mean standard deviation = .32, range between 1.7 years to 3.0 years of age.

areas that scored lower in terms of program "helpfulness" were connecting mothers to community resources and connecting mothers with other new mothers.[39]

These initial survey findings lead us to want to know more about what exactly mothers find "helpful" about the program, how Welcome Home fulfilled their needs, and why mothers were less satisfied with some elements of the program. We wanted to understand the meaning of satisfaction and needs from their own perspectives. In the qualitative interviews, we asked mothers about their reasons for acceptance, their expectations, what they liked most, what they liked least, their knowledge and use of other community services arising from the visit, and if they still use the information they received from the program.

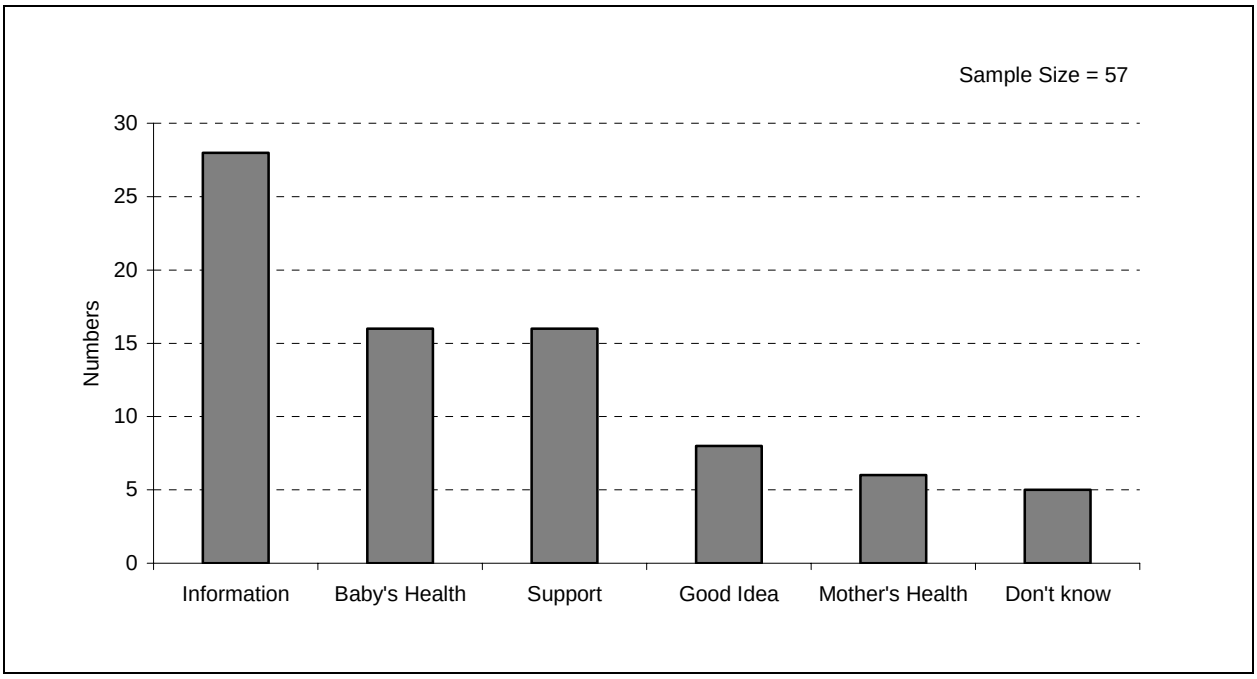
At the outset, it is important to point out that although 2 years have passed since most mothers' Welcome Home visit, all mothers in the sub-sample who received the service remembered the program. As the following sections will illustrate, Welcome Home elicited mostly positive responses from participants and was a program that mothers clearly remembered. The name of the program, "Welcome Home" was branded in the memories of these women. Very few women needed probing to help them remember what the Welcome Home visit was all about. The strong branding of Welcome Home in the minds of its participants is in stark contrast to the branding and recollection of the Early Start services discussed in the next section.

Mothers' Motives for Accepting Welcome Home:

Figure 4.5 illustrates the key reasons expressed about why they accepted the Welcome Home referral. About a third of the mothers (n = 20, 35%) expressed multiple reasons for accepting the Welcome Home referral. The most prevalent motive for accepting the Welcome program, given by almost half of the sample (n = 28), was to acquire information about being a parent, caring for an infant, and/or child development. Mothers wanted to have additional information about breastfeeding, bathing, dressing, and other tasks for which they might, as a new parent, fail to successfully complete or may not fully understand. As one mother explained, "I accepted it because I needed them to explain to me and give me some hints about taking care of Kristen…I was a first-time mom so I had no idea about things." Being a "first-time mom" and feeling like there was some knowledge missing from their repertoire was echoed by many women in justifying their acceptance of a Welcome Home visit. Mothers hoped the Welcome Home could educate them on caring for a newborn. Another participant detailed, "I thought it was a good opportunity. I was a first-time mother and any guidance and assistance I could get would help me so I took advantage of that."

After gathering information that could help them parent and take care of their newborn infants, other reasons mothers accepted the Welcome Home visit were concerns about their baby's health or the desire for emotional or instrumental support. Sixteen of the 57 respondents (28%) wanted the Welcome Home visit because they had general or specific concerns about the health of their baby. This theme was illustrated by one mother who said, "I wanted to make sure that everything was okay with him, and he had breathing problems when he was born.…I felt better having them come in and checking it out."

[39] Coulton and colleagues (2003), p. 4-49 to 4-30; Daro et al. (2003), p. 33 to 34.



Note: Contains duplicate responses (*n* =20). Missing = 5

Figure 4.5 Participant's Motives for Accepting Welcome Home

Sixteen mothers (28%) accepted the referral because they felt they could use some kind of support or assistance. The majority of mothers wanted emotional support and someone to talk to about being a mother and the feelings of doubt they had about taking care of a newborn infant. Many mothers recalled feeling scared, uncertain, and overwhelmed. They accepted the program because they wanted "help," "comfort," "attention," and have someone provide support that would "ease the anxieties" of taking care of a new baby. This theme was illustrated by one mother who said: "I was scared to come home, and it was nice to know that a nurse was going to come and check to make sure that he was okay. It helped to ease the anxieties of bringing him home."

A small number of participants (*n = 5)* said they accepted the visit because they were also looking for instrumental support or material goods, such as diapers, cribs, clothes, and other baby supplies. As one mother stated, "I thought if I got some free stuff out of it I'll accept it. I didn't really know what it was … well why say no? Somebody's gonna help me, why say no?"

Eight mothers also just generally stated that they accepted the program because it was a "good idea." As illustrative by one participant's comments who gave no other reasons for accepting Welcome Home other than to say; "Well I thought it was extra care for the baby…so I thought whatever's extra for the baby is a good idea to me." Mothers' concerns about her own health, most typically a c-section (*n* = 6), or not having a reason why they accepted the program (*n* = 5) were the least prevailing themes from the interviews. Of the small number of mothers who did not know why they accepted the program, four explained that they did not know they had a choice. As one mother explained, "I thought it was something they did for everybody."

Program Expectations:

Most of the participants who received a Welcome Home visit felt that their expectations were met by the program. These expectations generally matched their reasons for accepting the referral (e.g., to acquire information about parenting and caring for a child, to have the baby's health checked by a medical professional, to receive emotional or material support, or just because it seemed like a "good idea"). Forty-three of the 57 mothers (75%), who responded to questioning about whether Welcome Home met their expectations, said the program did meet their expectations. A small number of mothers felt they really didn't know what to expect from the program (n = 8, 14%). A few participants perceived that their expectations were not met (n = 6, 11%). One mother, who accepted the referral to get information to help her as a new mother felt that the program failed in this regard. She explained why the program did not meet her expectations:

> They really didn't help me when they came over....We talked, I took a couple of questionnaires, they gave me a couple of pamphlets of different programs that were available…She was only here for maybe 20 minutes….The only thing she did was come out here and she weighed her, she took her measurements, she asked me did I have any questions. I said no and that was it…truthfully there wasn't any reason for her to stay.

Even among those mothers who felt positively about the program and believed their expectations were met, some voiced a degree of discontent. Of the 43 women who felt the program met their expectations, about half of them (n = 22) also described aspects of the program they did not like. The following section summarizes the primary patterns we observed in terms of those aspects of the program participants viewed most favorably as well as those features that generated some dissatisfaction.

What Mothers Liked About Welcome Home

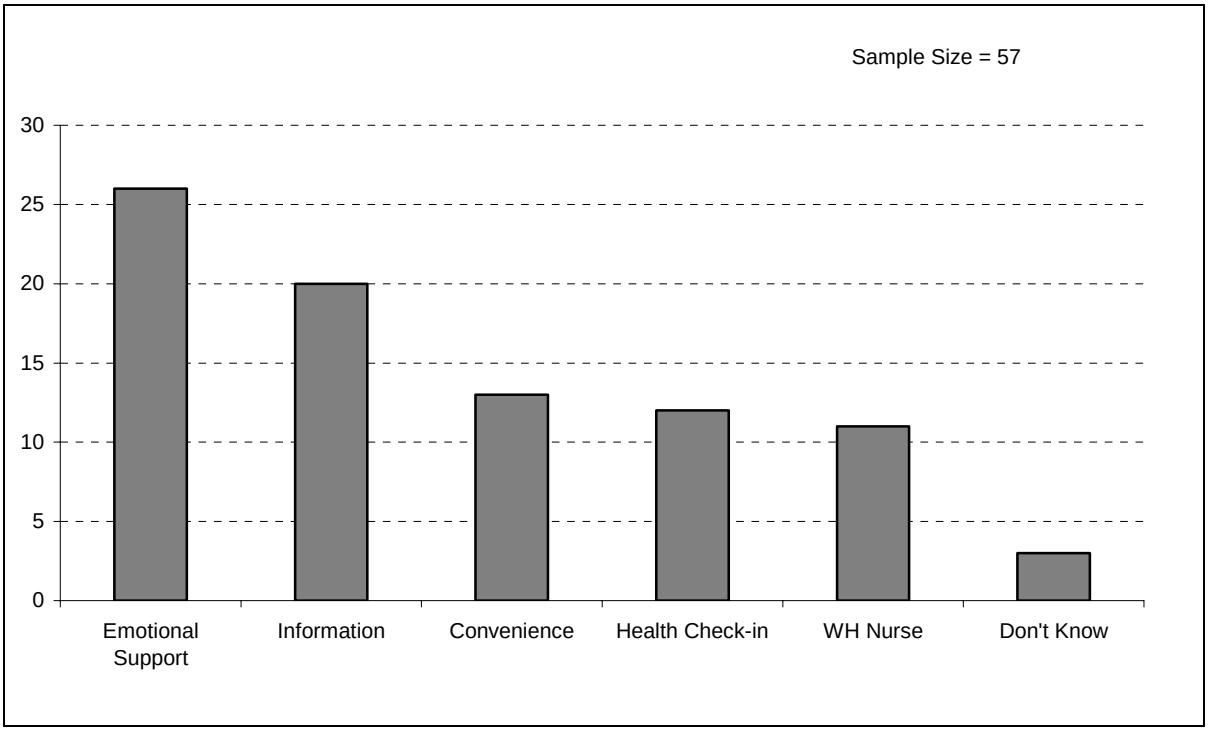
Figure 4.6 illustrates the major themes mothers expressed when asked what they liked most about the Welcome Home program and their experience with the program. Although the majority of Welcome Home mothers' accepted the program to receive information about being a new parent (n = 28), a small number of these mothers (n = 16) also stated that their initial motivation to enroll included a desire to obtain reassurance and emotional support. Indeed, the most prevailing theme arising among participants' explanation about what they liked most about the program was the receipt of emotional support and reassurance about being a new parent. As one mother said, "[I like] particularly [the] guidance…She used her own experience to kind of help me out…It was reassuring that I'm not the only one that's sitting here panicking." Twenty-six of the 57 respondents (46%) expressed great appreciation for the program providing them with someone to talk with, listen to their worries, help them feel okay about caring for a newborn, and provide encouragement and security. They also viewed the Welcome Home nurse as a safe and "comfortable" person to whom they could express general concerns about being a new parent. For example, one mother explained:

> She was somebody I could talk to. Like, that was the first time you come home from the hospital and you might be depressed. She was there for me to talk to. Like, if I needed anything to talk about right then and there, I would be able to

> talk to her and she could help me the best she could. I liked that because when you first come home from the hospital you need that emotional help so she was there for me the first time.

Many mothers (37%, *n* = 20) also appreciated the information they received from the Welcome Home nurse, exemplified by this mother's recollection:

> She took Maria's temperature and everything in front of me so she could show me how to do it. And how to check if the stools were not the correct color, or the right temperature of the water, or how to make the bottle…stuff that I was supposed to know. And how to check my c-section, or how to check her belly button and that was the stuff I did like...It was [also] someone I could talk to beside my mom about helping me raise a baby that was the thing I liked the most cause it's hard. And…talking to her about depression. That was a good thing.



Note: Contains duplicate responses (n =19). Missing = 5

Figure 4.6 Areas Mothers "Like Most" About Welcome Home

A number of mothers (*n* =13, 23%) articulated the ease, comfort and convenience of the visit occurring in their own home as well as the support and information they received. Many of the mothers articulated opinions similar to this mother:

> I liked the fact that someone came to *my* environment and she just answered everything for me…I had questions about everything...I was left alone with my sister who didn't have kids and neither of us knew what to do, at all. So I really

> appreciated that….I thought it was a great program….I think just making me more relaxed…Actually I got more from her than the nurses in the hospital.

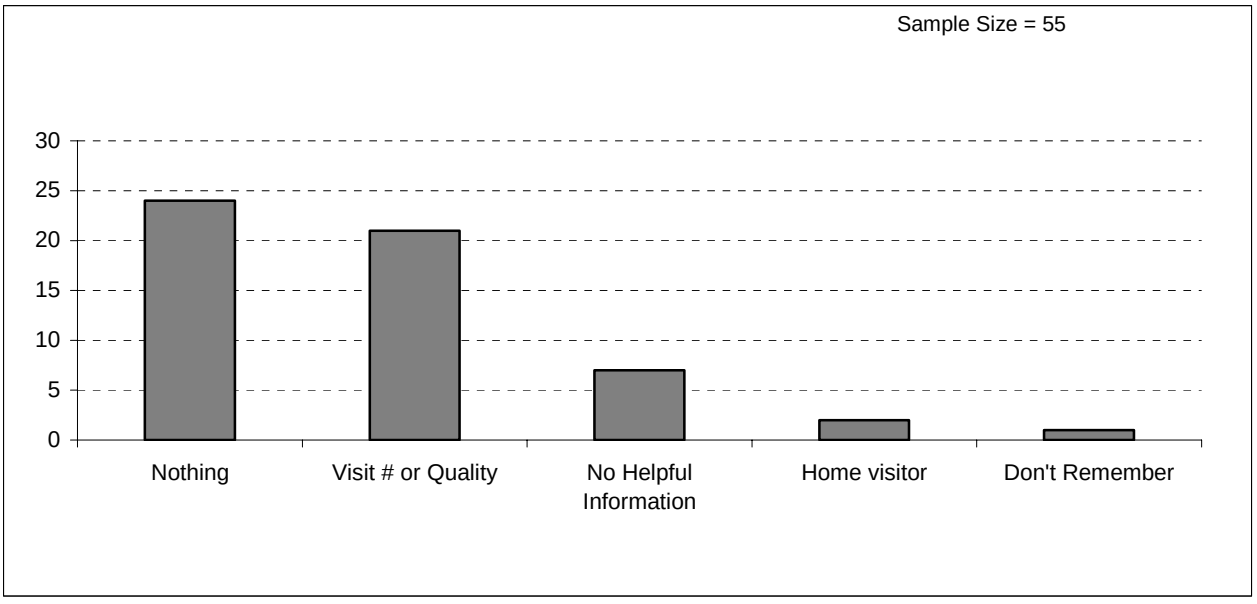
Mothers also expressed liking the demeanor of the Welcome Home nurse who provided the visit (21%, *n* =12), as well as having someone checking the health of their baby and/or themselves (19%, *n* =11). According to many, the Welcome Home program gave them a sense that a health professional "cared" about their well-being as a new parent and the health of their newborn child:

> I liked that she came to check on the baby. It made me feel more secure that there was a nurse coming and just to know things were going to be okay. It was a very secure feeling, because the first few weeks you're up and down emotionally…and that helps. I remember just thinking that [program] made me feel really good to know that someone was there and someone cared like that. I had a lot of people that cared, but a nurse? Somebody that knew what she was doing…

What Mothers Did Not Like

The major themes in the data about areas in which Welcome Home participants were not satisfied with the program experience are illustrated in Figure 4.7. Although the majority of participants felt positive about their Welcome Home experience and a large number had exclusively positive things to say about the program (*n* = 24, 44%), over half of the participants in the sample also felt some level of dissatisfaction (*n* = 31, 56%). Aspects of the program they did not like related to either the quantity or the quality of the visits. Six mothers were displeased with the length of the visit, stating that it was too short. For example, one mother explained:

> I wanted them to extend [the visit] it if that's possible…it was a 30-minute visit. It wasn't long…there were a lot of questions I wanted to ask her then, but I couldn't…



Note: Missing Data = 7

Figure 4.7 Areas Mothers Did Not Like about Welcome Home

A few participants felt the introduction of the program or the visit was at a time when they had so much on their mind, it was hard to comprehend:

> It should probably be brought up to a new Mom before she's in the hospital giving birth…because…my brain was on my baby and anything that I got at the hospital nurture-wise I didn't read…I would go to OB/GYN and ask them for a list of first-time mothers who are due in the next month, and then contact them before they go to the hospital, and explain the program… And then follow-up phone calls once the Mom is home or maybe a visit at the hospital to introduce themselves. 'I'm your Welcome Home support person.'…and then maybe a visit at the hospital to meet the person and then a couple visits after.

Sixteen mothers (29%) wanted additional Welcome Home visits with a nurse. Of these mothers, nine were mothers who were referred on to Early Start services (although four never received a home visit). The other seven mothers who wanted additional visits were in the Welcome Home only study group and were not referred on to Early Start services, five of them with relatively high CAP scores.[40] Most mothers explained that they did not want ongoing visits, but would have been amenable to one or two additional visits to provide the nurse an opportunity to follow up and "check in" with them to make sure everything was still going all right with them and their baby. For example:

> Maybe a follow-up visit from the nurse to see how you're doing. Like for myself, personally I went through a little depression stage. So I think it would be helpful if they did a follow-up visit with the nurse for the parents to voice their concerns or their thoughts on being a new mom, to see how everything is going from the parent's perspective.

Most pointedly, mothers' opinions in the sub-sample about what they did not like about the Welcome Home program underscore 3-month findings from the survey of the full Welcome Home sample about the need for new mothers to feel connected to someone:

> I guess I would have to say there should be more optional visits. You don't have to have them, but I'm sure there are women out there single or just new mothers who just don't have that support system. To be able to contact that person or the program itself and talk to somebody, to have a number to call anytime you really just need advice.

A few mothers (n = 7, 13%) also expressed some disappointment in the usefulness of the information they received during the visit. Some mothers felt the program did not provide them with some details about resources and connect them with community supports, and felt the information the program provided about parenting and child care was limited:

[40] CAP scores for these five participants were between 151 and 218.

> It wasn't that I disliked [the program], but it was things [that] I already knew. No, I didn't want to know how to massage a baby. I did [already] know how to feed a baby and change the baby's diaper. To me it was pointless…I guess it was okay for some people but not for me. It wasn't helpful or anything.

Just two mothers also mentioned feeling uncomfortable with the mannerisms or style of the nurse; overwhelmingly, mothers were quite pleased and at ease with the Welcome Home nurse.

In general, these qualitative patterns reinforce the findings observed in our 3- month interview with the full sample. Welcome Home participants, while feeling very positive about the program, would like to see the model place more explicit emphasis on fostering a network of support for new parents. The need for and interest in this type of support was particularly strong among those participants not being referred on to Early Start.

Use of Program Information:

As indicated by the survey with the full evaluation sample 3-months after their home visit, over three-quarters of Welcome Home recipients said they used the Welcome Home materials when they had concerns about their babies. About 90 percent of mothers in the full sample said they received the material from the nurse, and about two-thirds (66%) said they referred to the materials when they had concerns about their babies.[41] In interviews with the sub-sample, we asked recipients if they continued to make use of the advice and/or information they received from their Welcome Home nurse, and if so in what ways. Of the 54 mothers with a valid response to this question, 75 percent (n = 40) said they do not continued to use the advice and/or information they received from Welcome Home. Many mothers explained that the Welcome Home information was only useful when their child was a newborn infant, not as a toddler. Several mothers responded in similar ways to this mother when asked about her continue use of the materials, "No because we're kind of past that. It was all more for newborns and I don't even know where the stuff is anymore." Many mothers recalled the information they received during their Welcome Home visit was useful for tasks involving breastfeeding, giving an infant a bath, or taking their baby's temperature. However, after mothers mastered such newborn-related tasks, they perceived the program information was of limited value.

> I don't have to [use the material] now because she was a baby, I didn't ask her [the nurse] about anything growing up. I ask my mom for that….I did use all her advice until I couldn't use it anymore. Like dressing Holly in the winter and the summer…I just know it now. Like her temperature—I know how to take her temperature.

Fourteen mothers (26%) did note that they continued to use the advice the nurse gave them or referred to the materials they received during the visit. The reasons these women continued to use the information, however, varied. Five mothers said they have used the material in reference to other children, either another child they had or a friend's child. As one mother explains, "I have referred to it [the materials] with my second child, the folder packet of information. Before I had my second child, I read over the information as a kind of refreshing

[41] Daro et al. (2003), pg. 33-34.

type thing." Another five respondents stated they will occasionally refer back to the material if their child is sick, or still use the information they learned from the nurse like taking their child's temperature at various locations on the body. Four mothers also stated that they use the information to address child development issues, such as temper tantrums, baby activities, and activities to help nurture their child's successful development.

Many mothers found the Welcome Home materials very useful at the time they had their newborn. However, newborns grow quickly into babies and toddlers. Thus, many mothers found that the materials, although useful, were relevant for only a brief period of time. The materials were considered by most mothers outdated and no longer relevant in taking care of the developmental needs and concerns of their children.

Program Implications:

On balance, our interviews with Welcome Home participants confirm that the program is well received and that it is accomplishing the majority of its stated early and instrumental outcomes. This group of new mothers believes Welcome Home left them more confident in addressing their child's basic care needs and encouraged them to engage in a variety of daily activities designed to improve their child's cognitive and social-emotional development. The Welcome Home nurse and related materials appear to convey to new parents the importance of observing their child's health and safety and nurturing their child's development through reading. In addition to the nurse's impacts on the parent-child relationship, she plays a valued role as a source of emotional support for the mother. As observed in our 3-month interviews with the full sample, all new mothers, regardless of economic or personal resources, experience a sense of isolation and uncertainty about their ability to meet the needs of their newborn. The new parents in this sample clearly used the nurse as a resource in helping them validate these emotions as well as obtain reassurance that their sense of personal competence would return over time. These interviews confirm that Welcome Home participants place high value on the program and that this sense of personal satisfaction is sustained over time.

In a very real sense, the strong response to the program among recipients may be one reason participants identify certain shortcomings with the program. The participants in our survey clearly want more from the program in terms of immediate support. As noted by many of these respondents, they believe Welcome Home can be more effective in building networks among new parents in a given community. Although the emotional support provided by the nurse was useful, these new parents expressed a need for a system of ongoing support, one in which they would be able to connect with other women in similar situations. The expectation that the nurse would be skilled in this area may reflect the deep respect participants have for this set of service providers. The nurses are viewed as an objective, professional source of primary support, not as a mental health provider or someone who would work only with families at risk. The universal need for health care advice and support may play a central role in the willingness of most new parents in this sample to place a high value on the information provided by the nurse and to believe that, if given an opportunity, the nurse could be even more helpful.

Two possible structural changes for Welcome Home emerge from these interviews. First, several of the respondents expressed an interest in being introduced to the program and its basic child care information prior to giving birth. These women noted that the hours immediately

following the birth of a child are very emotional; making it difficult to focus on what exactly is being offered. Given that the current acceptance rate for Welcome Home is quite high (i.e., over 95%), it would appear that the current procedure for introducing the program following birth is not a major barrier to enrollment. The concept of introducing Welcome Home during prenatal visits has the potential benefit of better preparing new mothers for the birthing process and the impact the birthing experience may have on their emotional state. It is possible that the receptivity to the information provided in the post-birth visit would be enhanced if program participants had an opportunity to connect with the Welcome Home nurse prior to giving birth.

One pervasive finding emerging from these interviews is the interests participants expressed in having additional visits by the nurse at key milestones in their child's development beyond the infants' first few months of life. At present, the information does not address concerns parents have regarding the ongoing growth and development of their child, and issues of child management and home safety take on new meaning when a child becomes mobile and prone to exploring all aspects of his environment. Although several of the respondents who requested additional visits and services did not enroll in Early Start when it was offered, this may well reflect the different perceptions new parents have of the two programs. Welcome Home is viewed as a universal program that is open to all new parents, regardless of income or status, and new parents may view it as a resource that they will access periodically rather than as an intervention or service program that will require an extended commitment. Accepting one or two additional home visits from a Welcome Home nurse may be seen as far less burdensome for them than enrolling in a program with the expectation that one will be available for a service provider on a weekly basis for several months. Given the relatively limited success of Early Start in successfully engaging a sizable proportion of its target population in ongoing, intensive services, a modest expansion of Welcome Home might offer a reasonable alternative for some families.

The Experience of Early Start: Voices from the Families

In this section we explore the ways in which Early Start may have promoted more sustainable change in how mothers care for their babies, reach goals in their lives and use services. To understand these potential impacts, in-depth qualitative semi-structured interviews were carried out with a sub-sample of participants (n = 64) who were referred on to the program by their Welcome Home nurse or Ohio Works First (OWF) specialist. This sample is divided into those participants who were referred but never used the program (non-users); those who engaged for a minimum period of time; and those who engaged in the program for at least 12 months (high-users). This section begins by examining participants' reasons for accepting Early Start referrals and their initial expectations about the program. We then summarize the experience of participants in the program as reported in their Early Start case records, IFSP, and interview comments. Finally, we describe the nature of the service relationship from the participants' point of view and examine the reasons participants gave for ending the service relationship. The section ends with a summary of those areas in which Early Start appears most and least successful with participants and the core conditions influencing program performance.

<u>Initial Program Expectations and Motivation to Enroll:</u>

One of the initial and unexpected findings that emerged from our interviews was the significant confusion, perplexity, and bewilderment participants expressed when asked what

seemed to be a straightforward question: "Tell me about your experiences with Early Start." Twenty-one of the 64 Early Start referrals in the sub-sample did not instantly recognize Early Start by name. Nineteen of these 21 (90%) were in the non- or low-user service groups. It may be possible that participants in these two user groups did not get enough exposure to the program to remember its name. However, the average number of home visits for the low-user group was seven, not an inconsequential amount. The name "Early Start," unlike Welcome Home was not branded in the minds of many of our study participants, even among high-users of the program. For example, this high-user explained:

> No, I don't remember [the Early Start program]…I just remember him getting weighed; I remember her getting blood out of his foot to check his blood sugar. After that I remember my mother asking a whole bunch of questions and me just sitting there wondering what's going on.

Several women also confused Early Start with programs like Healthy Start and Head Start. In addition, a couple of mothers did not realize that Early Start was a program separate from Welcome Home one.

Given this initial lack of clarity about the program, our interviewers had to do significant probing with respondents, using additional questions and hints about core program activities, to jog the participants' memories. Once participants remembered the program, we found notable variation in the expectations and reasons for accepting the Early Start referral. As indicated in Figure 4.8, there were different motivations and expectations across the three user groups regarding the program. Mothers who were high users had expectations about Early Start more in line with the program's model, purpose, and best articulated strategies –providing child development and parenting information. For example, one of the high-users said she knew exactly what Early Start was about and wanted to give it a try because she "wanted to find ways

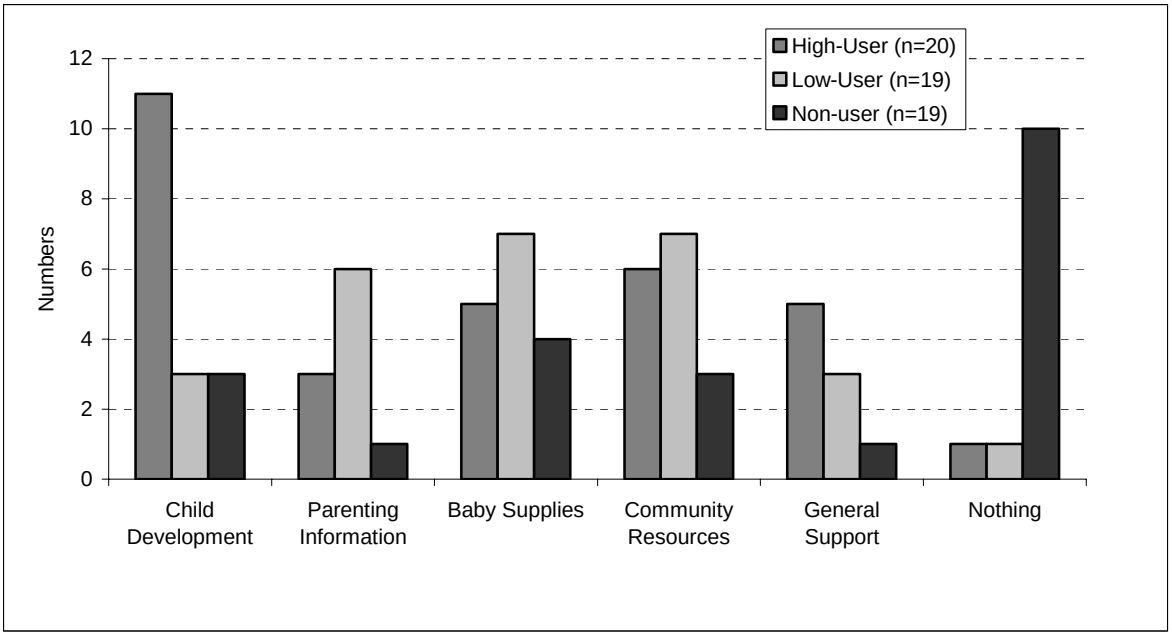


Figure 4.8 Participant's Motives for Accepting Early Start by Program User Groups

on how you handle stress, what to do when you feel overwhelmed" and expected information on "growth and development of my child too." In contrast, low-users frequently wanted and expected Early Start to provide tangible, concrete items for them or their child:

> I was looking for as much help as possible, because at the time I was broke. I didn't have any money. I didn't have any resources and so that's basically the reason…at the time I didn't have a crib. I didn't have any money. I didn't have any clothes for him. I didn't have any clothes for me...I didn't have anything…

Those mothers who did not use the program generally did not have any specific expectations about the program, or if they did, could not remember them. As stated earlier, many of these mothers were not exactly clear what the program was about and, therefore, had no opinions regarding potential benefits. As one mother explained; "Why would I [accept the program], I ain't really nothing to do with it? I don't even know what the service was like. Why would I have been referred? Because I was a new mom?"

In terms of Early Start being able to meet a participant's expectations, 14 of the 19 high-users (74%) with valid interview data were highly satisfied with the program. They believed that they received what they expected and wanted from Early Start, as illustrated by a high-user:

> Yes, [my expectations were met] because she got me a lot of information about her early stages of development and like what a baby's suppose to do…how to interact more with your child and make your child feel special and loved and all that other type stuff… showing me how to play games with your kids and spend that quality time with your kids. So that was real helpful…it kind of made me feel like I was really doing something. Like I was being the greatest mother in the world.

In contrast, only 7 of the 20 low-users (35%) felt their expectations and needs were met, and many participants in the low-user group expressed various levels of dissatisfaction related to not getting the kind of information or resources that wanted. As one mother said, the program was "like nothing spectacular that I did not already know." Another mother expressed her concerns that represented this view:

> I thought they would help a little bit more with parenting … and I thought that they would have more resources, but they didn't….[I needed] childcare, I was trying to move to find a bigger place…I wasn't working, so resources as far as someone helping with the utilities, things of that nature. And they didn't provide any resources….it was no luck, she didn't know anything. And I just left it alone and found resources on my own.

Information from both the full evaluation survey and the sub-sample interviews confirms that a larger proportion of mothers who engage in the program (both high- and low-user groups) than non-users expressed child development concerns. Sixty-two percent of participants who

engaged in the program had child development concerns, compared to 56 percent of the non-users. The largest proportion of mothers who expressed child-related concerns was in the high-user group. Also, a larger proportion of mothers who were engaged and were retained in the program for a year or more expected or *believed* that the home visitation program could help them with their concerns. Thus, interview and survey data indicates that mothers who had the greatest faith and belief that Early Start could help them, particularly about child-related concerns, were the ones that engaged and stayed in the program. Mothers who were more concerned about community resources related to housing, finances, employment, or childcare were often disappointed and felt their expectations of the program were not met.

The four primary goals outlined in the Early Start Help Me Grow Procedure Manual (2001) are: (1) supporting the health and development of children; (2) enhancing parent-child interactions and increasing parenting skills; (3) promoting use of health care for parent and child; and (4) linking families to formal and informal networks of support.[42] Participants whose expectations notably related to the program goals of child health, child development and parenting remained in the program for an extended period of time, and reported that the program met their expectations. However, participants were less satisfied with the program and tended to be low-users if their expectations and interests in participating in the program related to getting linkages to support networks.

Success in Accomplishing Core Program Objectives:

Participants' perspectives of the various services and activities of Early Start are examined in greater detail in this section, drawing on both the interview data and a review of each participant's Early Start case records. As noted in the program's logic model, the primary vehicle for organizing services for families is the development of an Individualized Family Service Plan (IFSP). This process is designed to assure that a family's core concerns are addressed in light of the program's intended purpose. After reviewing the experiences of the sub-sample of participants in developing their IFSP, the section examines the extent to which Early Start successfully secured necessary services in each of four core areas: child development activities, self-sufficiency (e.g., work, school), childcare, and linkages to other community and social services.

The Individualized Family Service Plan (IFSP) Process

At the beginning of the service relationship, the home visitor and the program participant jointly develop an Individualized Family Service Plan (IFSP). According to the original Program Logic Model and the Early Start Help Me Grow Manuals, the IFSP is a comprehensive plan for providing services to the child and family by assessing the family's concerns, priorities, and resources. [43] It is thought to help the family understand the services available through Early Start while also assisting the home visitor in understanding the family's needs.[44]

[42]A new curriculum was developed and implemented in February 2003, two years after the initiation of this study.
[43] Early Start Help Me Grow Procedure Manual (2001) and Early Start Home Visiting Curriculum Cuyahoga County, Ohio (2003).
[44] The IFSP is typically developed during the first visit. As detailed in earlier reports, we found that 94 percent of the full study sample who had at least 1 visit had an IFSP completed within 3 months of enrolling in the program (Coulton and colleagues, 2003; Daro et al., 2003). Analysis of randomly selected participant records (n = 260) from six different agencies found that an IFSP was completed on average, within 6 days of the first visit, with the mean number of home visits before the IFSP was developed being 0.43 (Howard et al, 2003).

Participants in the qualitative sub-sample were asked if they remembered working with their home visitor to determine what services they wanted and/or needed, and how the program could help them. Interviewers probed participants by asking if they remembered a process called "developing the Individual Family Service Plan (IFSP)" and/or a process in which they "went about setting the goals they wanted to achieve and their services needs with their home visitors." The majority of participants in the sub-sample who engaged in the program recalled the "IFSP process" and the focused discussion surrounding their specific goals and needs (22 of the 33 participants with valid responses recalled the process).[45] Nearly all of the participants who recalled the IFSP found it a useful tool. Explanations about why participants found the process useful varied depending upon their classification as a low or a high program user. The majority of high-users (9 of the 11 who remembered the process) felt that the IFSP process was useful in keeping them on track and focused on their needs and goals while providing them a sense of achievement. Illustrative of what many participants in the high-user group felt, one mother expressed this opinion:

> We designed plans for me and each time she would come back we would go over the plan…to see if I met my goal, and I did, and that felt good because I was able to set a plan and stick to it…It was like a personal achievement because I was able to continue moving forward despite my child and still able to go back to school and go back to work

In comparison to high program users, very few participants in the low-user group felt the process was valuable in terms of tracking their goals or achievements. Instead, low-user participants who remembered the process tended to find the IFSP was more valuable in terms of detailing the ability for the program to get them the resources they needed (4 of the 11 participants). Others suggested that the process had little or no utility to them, and was not a necessary service (5 of the 11 participants). Several of these mothers felt they already knew what their goals were and were motivated to achieve them without the extra guidance, as exemplified by this mother's recollection of the IFSP process:

> It didn't matter to me, because I already had it set in my head what I wanted to do. Before I got pregnant I was on my way to nursing school. I knew I was going to get there. I knew it just was going to take me a little bit longer.…even if she wouldn't have done it, I still was motivated…to get my life on a path to where I can be more financial stable...

As part of the IFSP process, the home visitor records a participant's concerns and interests about her situation and family on a "Conversation Page," which is included in the participant's case record. During our case record review, research staff documented the concerns recorded on this page for the study's 39 Early Start participants who completed an IFSP.[46]

[45] Eleven low-users and 11 high-users remembered the IFSP process. Recollections of the IFSP process specifically were missing from 9 respondents, 4 low-users and 5 high-users.

[46] Of the 41 Early Start program users, only 39 IFSP records were found to analyze. One participant did not have an IFSP in her service records and one file could not be located by the Early Start agency.

Analyses were conducted to compare the initial concerns expressed by Early Start participants to their home visitors with the initial goals articulated in their IFSP.[47]

Thirty-nine mothers who had a completed IFSP had an average of 3.8 goals outlined in their service plan. This average number of goals corresponds to the average observed for the full evaluation sample as documented in the provider quarterly reports. In the full sample, the mean number of concerns included on the initial IFSP was 3.1 (Coulton and colleagues, 2003; Daro et al., 2003). Overall, about one-third of the goals recorded for each participant in the IFSP reflected a specific concern raised by the participant. Participants' IFSP often included goals related to issues not viewed by participants as the reason for enrolling in Early Start or issues they wanted to address. It was very common for participants' initial concerns and self-defined goals not to be reflected in the IFSP. For example, home visitors documented child related concerns for 31 mothers, in which 27 actually had child development issues reflected in their IFSP plan. In contrast, only 5 of the 13 mothers who indicated a concern with their housing situation had this concern reflected in their IFSP. Only 2 of the 11 mothers who raised concerns related to finances and basic needs (the majority of whom were low-users) had this concern converted into an initial IFSP goal.[48]

This type of discrepancy between a participant's concerns and initial IFSP goals has implications for the focus of the home visits and service referrals offered participants through Early Start. If a participant's primary concerns are not articulated in her IFSP, these issues may not be addressed during the service process, and therefore will remain unresolved. And, as noted below, participants whose primary concerns are not addressed by the program are more likely to leave services early and to feel that the program has not met their expectations.

Child Development Goals: Health, Behavior and Special Needs

The most frequent concerns identified by participants in our sub-sample (31 of 39 mothers), related to issues involving their child's health and development. This was also the concern most likely to be transformed into an IFSP goal.[49] Specific health concerns, which may indicate children who have special needs, were documented in 10 participant records. These concerns include child behavior (e.g., child cries when mother leaves child), physical/health concerns (e.g., child born premature, child born with deformity, nutritional issues, asthma), and concerns about cognitive delays that were aroused using the Ages and Stages Questionnaire (ASQ). In the two cases in which cognitive delays were identified through the use of the ASQ, children received appropriate referrals. However, the response in those cases involving physical health issues or situations in which a child did not score in the "problem" range on the ASQ was less consistent.

Physical health issues were documented in eight participant records. None of these health-related concerns, however, resulted in specific service goals or topics that guided Early

[47] Only initial concerns and goals were used for analysis to allow for better comparison between Early Start user groups, in which high users had the majority of additional concerns and goals as a result of their longer engagement in the program.
[48] See Appendix 4.J for additional data on participants' documented IFSP initial concerns, goals, and achieved goals by Early Start usage group.
[49] Examples of initial child-related concerns, IFSP goals and achievement strategies are detailed in Appendix 4.K.

Start services. And among these eight participants, only one received a service or referral unique to the health issue of concern documented in the case file. In most cases, it appeared as if the health information or concern was noted primarily as background information. For example, although there were two children born prematurely and one child born with a leg deformity, there were no notes documenting the developmental progress of these children or service referrals in relation to their special circumstances. Notes indicate normal child development. In the case involving the child with a leg deformity, the mother (who is a high-user of the program) did not recall the IFSP process or any plan for services she wanted. Her initial motive for enrolling in the program was to get advice about parenting as a first-time mother, and "just day-to-day conversation" with someone. The mother recalled her home visitor telling her about therapy options for her child if it was needed. At a later time, the mother explained that she did get therapy for her child's motor skills and speech through another organization, but it was not the Early Start program.

In the case of one premature infant, the family received only seven visits over a 7-month time period, suggesting that regular monitoring and assessing of the child's development was limited. This mother explained in her interview that she was motivated to participate in Early Start because her child was born prematurely and she was worried about his development; she wanted information on community resources to help her find clothes and supplies for her baby. Yet, this mother felt the home visitor was not helpful with accessing community resources and ceased participation in the program. Another mother with an infant born prematurely received more visits, 24 home visits over a 12-month period. One visit note in this participant's record indicates that the child was on task developmentally and no referrals were made. Yet, 18 days after that case visit note, the home visitor made another note indicating that she had learned the child was referred to Early Intervention by another organization because of slow gross motor skills.

Even when participants enrolled in the program because of an explicit concern regarding their children's health, these concerns were not systematically addressed either in the IFSP or in the array of services provided. For example, one low-user participant in our interview sample indicated that when she began the program she expressed concerns about her two infants being lactose intolerant. During our interview with this mother, she also expressed enrolling in Early Start because she wanted to know if they could help her determine if she should be concerned about a potential learning disability or behavioral issues with her children. Case records did not indicate the specific nutritional issue, but did note that one of the infants had difficult with gross motor and problem solving skills at the time of the six-month ASQ. However the case record also noted that these skills "were not in the problem area, but should be watched closely." No service referrals were provided. In articulating this mother's initial concerns, her IFSP goal was to "… keep my children (twins) healthy and safe," and the strategies listed to achieve this goal were "keep regular doctor appointments, keep [children] fed and change often, take [children] out for new sights, sounds, smells, stretching exercises, [and] development screenings." This mother received only five visits over the 9 months she was in Early Start, and she felt her home visitor was not providing her with any resources that were helpful to her. During her time in Early Start, this participant found another early intervention program on her own that she felt focused more on child cognitive and motor skills, and what she can do as a parent to insure her children are literate.

Self-Sufficiency Goals: School and Employment

Explicit integration of a participant's parenting needs and self-sufficiency objectives is an explicit Early Start goal. Strategies for accomplishing this outcome often include such items as developing an IFSP goal that reflects a common understanding of the family's immediate needs; measurable progress in achieving self-sufficiency plans; and achieving economic self-sufficiency. As with the child development objective, the case record reviews and participant interviews identified an inconsistent response in how home visitors interpreted a participant's needs in this area and how effective the program was in moving participants toward self-sufficiency.

With respect to educational objectives, IFSPs for 10 of 39 women in the sub-sample included an explicit goal regarding their need for additional education. Of the 10 mothers with a documented concern related to school, only 6 had a corresponding school-related IFSP goal. However, an additional 10 participants (7 of whom were low-users) also had a school-related IFSP goal but no indication in the file that these women expressed concern with this issue. This dissimilarity between concerns and subsequent goals could suggest that home visitors may guide participants to focus on school as a way to improve their self-sufficiency prospects. Considering that most of the women with an educational IFSP goal, but not as an initial concern, were low program users, it is possible that the focus on a topic that was not an initial parental concern impacted the participant's ultimate engagement level.[50] Our comparison of these IFSP goals and the mothers' stated motives and expectations for the program identified a clear mismatch in focus. None of these mothers talked about school as a concern or as a motive for participating in Early Start. All but one of these mothers indicated that their most immediate concern was securing basic needs such as clothing, diapers, baby cribs, having a bed for themselves, or stable housing. One mother, who was a low-user, explained in her interview that she was frustrated with the program because it did not focus on what she needed:

> I know I needed help…so I was trying to get in any kind of program that helps you with your kids….When [my home visitor] came out, I just needed help to find a job so I could get myself on my feet. She didn't do that. She would come out and say, "well we're going to do it this today and that today"….They'll tell you they'll help you, this and that, but they really couldn't. I didn't want to continue; I could do bad by myself.

When describing her IFSP experience in relation to her needs, the mother explained:

> We just jotted down goals that I would set for myself, such as me getting a job, making it better for me and my baby…we talked about that almost every time she came…but it wasn't cool, because why you keep talking about it if you can't help me do something about it. So I find that kind of aggravating.

In addition to promoting continuing education, another Early Start strategy for achieving economic self-sufficiency is helping participants secure stable employment. Ten of the 39

[50] Appendix 4.L details participants who had educational as an IFSP goal, but school was not a concern or motive for accepting early Start.

mothers in our sub-sample with a completed IFSP expressed initial concern regarding their employment needs (3 OWF referrals and 7 teens referred to Early Start by Welcome Home). Of these 10 mothers, only half had an initial IFSP goal related to employment (all the OWF participants and 4 of the Welcome Home referrals). Only two participants, both from OWF, achieved their employment-related goals, although the specific role Early Start played in this outcome is unclear. In our interviews, one of these two mothers, the low-user who was quoted above as being "aggravated" with Early Start's assistance, did not credit Early Start in helping her find stable employment. Her IFSP plan indicates the goal was achieved because the mother had begun working for a temporary agency, although the record also notes that the mother was still looking for a permanent position. When the mother was asked in her interview if the Early Start program or her home visitor helped or assisted her in finding or getting jobs she said "no," stating that she only secured employment *after* she left the program. She explained Early Start's role in the process in the following way:

> He would ask, "what are some of your goals in life, where do you want to be?" And I would tell him I want a job so I can better myself and my son can have things. He would write everything down, and he would go buy a paper and we would look through the paper for a job.

Similarly, the other participant who achieved her employment-related goal felt that Early Start had not been directly responsible for this outcome even though she had received a significant number of home visits. She stated "I ended up finding a job on my own."

As with the education goal, a number of participants who had employment IFSP goals had not raised these issues in the initial IFSP process. Two of these five women achieved their employment goals, but did not credit Early Start with helping them achieve this objective. One of these mothers, a high-user, recalled talking to her home visitor about employment opportunities, but said that the conversations were not relevant to her situation because she was employed, but on extended medical leave. Another of these women, who was a low-user, said that Early Start was not helpful in terms of job strategies, specifically job training or interviews; she stated, "They didn't even mention it to me."

The lack of perceived help from Early Start with respect to employment objectives may reflect the types of strategies generally used by the program to address the work-related goals articulated in the IFSPs. These strategies included such general statements as "find employment", "look in paper", "check out internet resources", "fill out application", "update resume," "interview," "begin calling businesses," "brainstorm possibilities of jobs and write down ideas," "network with other people," "work on my skills and abilities," and "go thru job training program." Interview data with Early Start participants revealed that more mothers remembered discussing work issues with their home visitor than was reflected in their IFSP case record. Nevertheless, most of the mothers with work-related goals did not feel these common Early Start strategies assisted them in any meaningful way. In one interview, a high-user program participant stated that she expected that Early Start would have provided her with job referrals, and was disappointed that they did not do that. She felt that the employment-related information and strategies she talked about with her home visitor were tasks she was already doing on her own. Another program participant, a low-user, recalled discussing job related-topics

with her home visitors, but said that this information did not lead to any jobs. Only one mother in the sub-sample (a low-user) felt that the employment assistance she received from her Early Start home visitor helped. This particular mother was only one of three mothers in the sub-sample who expected that Early Start could help them with employment issues, and enrolled in the program to specifically receive assistance in this area. This mother described that her home visitor would print job listings off the internet for her, and would also offer a rides to places that were hiring. This mother ended up finding a job on her own, without her home visitor's assistance, although she stated that her home visitor "…tried real hard trying to help me."

Childcare

Although participants often linked their need for childcare to continuing their education or securing employment, participants also raised this issue independent of these contexts. Among our sub-sample, securing adequate childcare was raised as an initial concern by nine participants, (3 OWF referrals and 6 teenagers referred by Welcome Home). Of these nine cases, specific IFSP goals in this area were developed for only three participants. An additional participant who had not initially raised the issue also had a child care IFSP goal. The case records indicate that all four of these mothers achieved their childcare related goal.

As with the employment objective, the strategies identified by Early Start to address child care concerns involved a range of common search strategies including: "make appointments with different providers," "get voucher for childcare," "call Starting Point if potential babysitting doesn't work out," "starting Point to provide childcare provider list," "explore childcare options," "apply for daycare voucher," and "check references of daycare." Starting Point, the County's childcare resource and referral service, was a common resource documented by home visitors to assist participants in childcare, although it was not always the mechanism through which childcare was secured. In our interviews, 10 participants out of 39 with valid case record data recalled talking to their home visitor about topics related to childcare, although only 4 of these mothers' case records indicated this type of conversation. Opinions from participants about the success of childcare-related activities were generally positive. In about half of the cases in which childcare emerged as a specific need, participants secured this support through friends or family members, some of whom could accept child care vouchers as a home-based child care provider. Many mothers felt that the information they received from Early Start related to childcare was helpful, but it was information that only 5 of the 10 who recalled the topic used. Mothers who did not use the information related to childcare (all but one were in the low-user group), indicated the information was not useful because they were either not working, not planning on working, not planning on putting their infant in childcare, or were confident they could find a relative or friend to help with childcare when needed. In contrast to mothers (most of them in the low-user group) who did not use the childcare information, mothers who did use the information (most of them in the high-user group) found it very helpful.

Another mother, who was also a high-user, had an initial concern regarding obtaining "good childcare" and developed an IFSP goal of "getting child into good childcare." The case record review indicated that a childcare referral was made in this case. When we interviewed the mother, she recalled her conversation with her home visitor about this issue and viewed the information she received as helpful. She said, " [She] gave me a handout...of different places

that I could go for…That was helpful…[she also] helped me go over things on what to look for when choosing a daycare."

In general, mothers found Early Start assistance related to finding and securing childcare helpful, but not always necessary and consistently tied to their initial concerns or IFSP goals. Interestingly, participants in the low-user group tended not to use the childcare information because it was a resource they did not consider necessary for them at the time it was offered. Again, many of the mothers in the low-user group were motivated to enroll in Early Start out of a strong desire to get help with basic needs and supplies for themselves and their children, in addition to obtaining child development and parenting information. Childcare assistance was a strong motive to enroll in Early Start for only one participant in the subsample. Thus, concerns related to childcare were not a predominant factor attracting families to Early Start.

Linkages to Other Services

Case records were examined to identify the number and types of service referrals offered families in our sub-sample. In addition, participants were asked during the interview to identify any service referrals that had been provided by their home visitor and to indicate which if any of these referrals resulted in them obtaining additional assistance. Our case record review indicated that the Early Start home visitor documented service referrals for 26 of the 40 mothers whose records were available to review (15 high-users and 11 low-users). Collectively, high-users received far more referrals (42 referrals) than low-users (19 referrals), which is reasonable considering that high-users were in the program a longer period of time and received a greater number of home visits. The average number of service referrals per participant in each group was 2.8 for high-users and 1.7 for low users. Referrals for material goods (i.e. baby supplies, clothing, furniture) were the most likely to be documented (n = 18). PRC funds were often used to request basic items, most typically supplies specifically needed for the child; in this category, baby clothes were the most frequently requested item followed by cribs. After material goods, the most frequent referrals documented were related to housing needs (e.g., Section 8, CMHA, and housing lists; n = 11). The fewest number of referrals related to additional assistance in such areas as child development, child care, health care, mental health, and educational assistance. The case records indicated that 19 of the 26 mothers (73%) who were provided with specific service referrals contacted these resources for assistance.

Our interview data generally confirmed the patterns of service referrals documented in the case records. Thirty-three participants with valid interview data remembered Early Start providing them with a referral. The most frequent referrals participants recalled were those related to securing material goods and supplies (e.g., PRC voucher for clothes and furniture, community food banks, n = 22). However, in contrast to what documented records show, several participants recall discussing child-development-related referrals with their home visitor (e.g., reading program, swimming classes, tutoring program for older children, nutritionist) as well as childcare referrals. Many mothers did not recall housing referrals, or if they did stated they were not useful and did not represent new resources for them.[51]

[51] Examples of how these referrals matched IFSP goals related to housing, finances and basic needs are summarized in Appendix 4.M.

Summary: IFSP Progress, Concerns and Goals

Participants' primary concerns did not always translate into specific service goals, and those concerns that were outlined in the participant's IFSP were often not achieved. If achieved, participants often felt that Early Start services did not play a primary role in this accomplishment. These patterns may reflect different perceptions of "goal achievement" between participants and their home visitors or a biased interpretation of how events unfolded now that some time has passed since the parent participated in services. Respondents who were in more stable situations at the time of the interview may feel more personally responsible for their positive outcomes, while those in less positive situations may be inclined to blame the program for failing to provided necessary supportive services. However, the case record review data and our interviews identified a clear mismatch between Early Start service objectives as reflected in the ISFP and the participants' initial concerns. Mothers' expectations and motives were not always integrated into the documented service plan for the family. Consequently, some of the participants did not find what they expected or wanted from Early Start, leading to low levels of service satisfaction and, for some, early termination from the program. Many low-users did not have a particular goal they viewed as relevant to their immediate needs or found Early Start interventions to be simplistic and redundant with what they already had tried to accomplish on their own. Yet, for those mothers whose concerns, expectations, and goals matched with what was documented in the service plan and what Early Start was best able to deliver, such as child development and parenting information, Early Start proved to be a positive experience and one in which the participants saw measurable and sustained benefits.

<u>Nature of the Service Relationship:</u>

Our initial analysis of the full participant sample underscored the importance of the provider-participant relationship in determining service retention. In order to better understand the value participants place on their relationship with the home visitors, the qualitative interviews spent considerable time asking both low- and high-users to describe the characteristics of their home visitor and how these characteristics influenced their perceptions of the service program. This section reports these findings.[52]

Description of Home Visitors

Participants were initially asked to describe their home visitor using the first words that came to their mind. A wide variety of adjectives were used to describe Early Start home visitors, the vast majority of them positive. Almost all participants (37 of 39 respondents) said their home visitor was "nice" and felt their home visitor was a friendly person. Many mothers (18 of 39; 11 high-users and 7 low-users) also described feeling "comfortable" around their home visitor, adding that she or he was "easy to talk to," "listened to what I [they] had to say," and "was down to earth." As one mother said, "She was just a people person and some people doing social work don't come off as very warm, but she had a very warm personality, she was really a great girl." Several participants also felt their home visitors tried to be helpful or resourceful (19 of 39; 11 high-users and 8 low-users), as illustrated by one high-user in our sample: "My worker, the lady that would come by my house for Early Start, she was real resourceful. Anything I needed she would always look into it."

[52] Using data collected from record reviews and interview data, 7 of the 40 mothers had more than 1 home visitor (range 1 to 4) during their time in Early Start (2 of these mothers were low-users and 5 were high-users). Data from the full sample indicated that 12 percent had more than one home visitor during their first year in the program.

Other adjectives less frequently used by participants (i.e., fewer than 8 respondents) were: available/flexible (n = 8); caring (n = 7); "not a caseworker" (n = 6); "like a friend" (n = 5); respectful (n = 4); unhelpful (n = 4); uncomfortable or rude (n = 4); and inexperienced (n = 1). Although small variations existed in the descriptions provided by participants in the high-user versus low-user groups (with high-users being slightly more positive), very few participants provided any negative descriptions about their home visitor.

Types of Parent-Home Visitor Relationship

When participants were asked to describe the type of relationship they had with their home visitor, most said it was a "comfortable" and "open" relationship. About half of the respondents felt they could talk to their home visitor about anything, communicated easily them, and felt at ease about doing so (16 of 35 with valid data; 9 high-users and 7 low-users). As demonstrated by a low-user participant's description of her home visitor relationship;

> …I wouldn't say we were friends. We were comfortable with each other. I looked forward into her coming and I think she looked forward to talking to me cause we motivated each other…'cause she would share a little bit about what she's going through in her life and her struggles…And she did have a lot'a compassion… she was a professional and she [was] good at what she did.

About one-quarter of the participants (9 of 35) described their relationship with their home visitor as that of a close friendship or one with a treasured family member. One mother explained her relationship with her home visitor was like "sitting down talking to one of my relatives," while another mother said her home visitor was "number one" and that her relationship was "a great friendship" that including "great" communication that often didn't have anything to do directly with the Early start program. More high-users (6) than low-users (3) described their service relationship in this manner.

An equal proportion of the respondents, however, (10 of the 35) felt that although their home visitor was nice, the relationship was just "okay" or was one in which they felt uncomfortable. A few participants indicated that they did not feel they had a "real" relationship with their home visitor. One low-user mother explained there "was nothing there" in terms of a relationship with her home visitor. Another low-user of the program responded, "We didn't really have a relationship….She was just okay." Eight of the 10 mothers who described their home visitor-relationship in this manner were low-users of the program, with 5 of these low-program users stating that had no relationship or it was an uncomfortable relationship because they felt the home visitor was "in their business" and asking questions that were inappropriate.
One low-user articulated that the relationship with her home visitor definitely impacted the way she articulated her needs and concerns:

> I got a sense that he [my home visitor] didn't know how to draw people out…if people feel that you're uncomfortable with what you're doing or uncertain, they're going to be uncertain of you. And the formal official ice was never broken between him… it was a formality to have him over. I didn't get the sense

> that he was someone—like if something personal came up and I wanted to speak on it—I didn't get the sense that he was someone I would want to tell…

Successful Home Visitors' Traits

In response to the descriptions participants provided about their home visitor and the type of relationship they had with him or her, we asked mothers to list those traits they felt were most important for someone to be an effective Early Start home visitor. Responses to this question were very consistent across participants in both the high- and low-user groups. The most frequent trait participants identified for a successful home visitor was the capability to be respectful to the participant (identified by 16 of the 37 respondents). As one mother put it, "First off to be non-judgmental, open-minded and again resourceful." After respectful, other frequent responses were that the home visitors needed to be nice, have "people skills," and be caring towards mothers and their children (n = 13); be helpful and resourceful (n = 12); and make participants feel comfortable (n = 11). For example, one mother said "You have to be a good person, open minded and have patience and willing to work with all the different people so you won't offend anybody if you have different views." Another perspective that was illustrative of many mothers was a home visitor "should be friendly, honest and upfront." Additional descriptives participants used about home visitors included having experience with children (n = 10); be patient with both children and parents (n = 8); and not to be a caseworker (n = 3). As another mother explained:

> You have to be caring. I believe you should know any type of resource that your agency or that the program itself can offer. You have to be patient, you have to like being around children. You have to not mind if you come in the house and someone has 3 or 4 children and 2 of them are screaming at the same time. You can't mind that type of thing. ou can't say, 'oh we'll just do this another time.'

Congruent with overall survey findings, a larger proportion of mothers who remained in Early Start at least a year (high-users) tended to feel comfortable with their home visitor and felt that their home visitor was helpful and resourceful. A larger number of high-users also described having a comfortable relationship with their home visitor and a relationship that was more akin to a close friendship or a relationship with a family member. As might be expected, the majority respondents who indicated either a less positive relationship or no relationship with their home visitors were in the low-user group. These patterns underscore our earlier findings as to the importance of the participant-provider relationship in shaping a participant's overall view of services and, potentially, their willingness to remain enrolled in services.

Home Visitor Relationships and Program Termination Decisions

In order to determine the extent to which a participant's relationship with her home visitor impacted decisions to remain or leave the program, we examined termination decisions for both the high- and low-user groups. For the 40 Early Start program users in the sub-sample for whom we conducted case record reviews, 36 were identified as being terminated from services, 24 because of passive refusal (i.e., meaning the home visitor could not locate the mother and the mother did not respond to the home visitor's attempts to re-establish contact). Interestingly, four of these "terminated" participants (11%) still believed they were enrolled in Early Start at the time we conducted our qualitative interviews. Although small in number and

proportion, this finding again underscores the frequent mismatch between provider and participant perceptions of program expectations and experiences.

The reasons participants cited for ending Early Start Services are summarized in Figure 4.9. As this figure indicates, the most prevalent reasons for this decision involved changes or interactions with their home visitor, such as the changing home visitors, the home visitor did not contact them, or they felt uncomfortable with their home visitor. For example, one mother said she "resented" Early Start because of her home visitor's "coy"

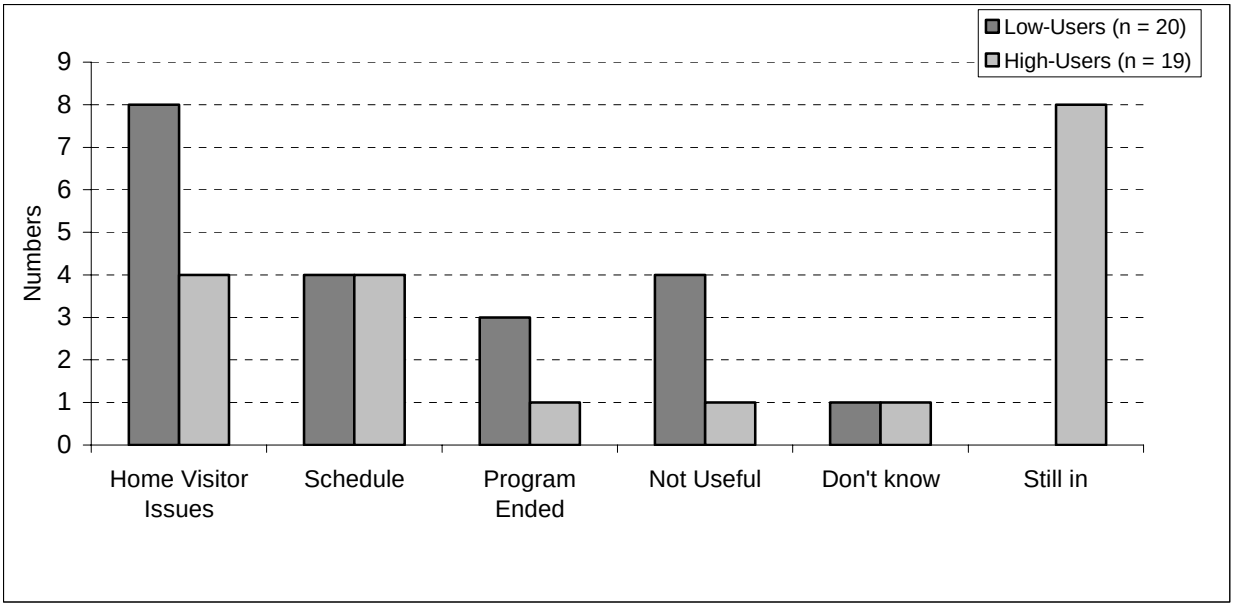


Figure 4.9 Reasons for Stopping Early Start Services

attitude. Another mother stopped services because she sensed that her home visitor did was not comfortable coming to her home and her neighborhood—a home with roaches and were someone was shot in her parking lot. The mother explained, "And once she came over, I could tell she was kind of nervous...and I would never want to make anyone nervous." These patterns would suggest that although a proportion of those leaving services early do so because their initial expectations are not met, some of these participants might be retained if they were able to establish and sustain a meaningful relationship with their home visitor.

Schedule was another reason participants stopped using Early Start services, among both low-users and high-users. Some felt they didn't have the time for the program, coupled with the fact that they were not sure they needed anything from the program. One mother explained it this way:

> I was just so busy—I was too tired. When I came home after school, I just kind of laid there and try to lay on the floor and do my homework and play with him—I didn't have time for somebody…and she didn't really do it on the weekends.

Several low-users also said that they didn't need the program, and it just was not helpful to them. As one mother who was a low-user other explained in her interview, "I had everything I needed for my daughter, I had a job. I didn't need their help anymore." Several low-users also thought the program just ended, because nobody tried to call them and they never received contact from their home visitor. As a mother explained, "I didn't stop. I didn't see the lady any more or I didn't talk to her any more, so I figured we were done. So that's what I thought. I don't know what happened after that."

General Program Satisfaction: Likes and Dislikes:

Figure 4.10 summarizes the areas participants in both user groups liked best about Early Start. As might be anticipated, the high-users identified, on average, a greater number of benefits from the program (M = 2.9) than participants in the low-user group (M = 1.8). Seventeen high-users described more than one area they liked about the program, while only nine low-users detailed more than one thing. The types of benefits cited also differed across the two groups. A greater number of high-users highlighted such features as the parenting information provided, the monitoring of their child's development, their relationship with their home visitor, and the goal-setting process as particularly beneficial. A greater number of high-users also said they like the baby supplies they received from the program, although for many high-users baby supplies was not an expectation they had from the program or their motive for accepting the referral. In contrast, Low-users frequently cited the community service referrals and general support they received from their home visitors as the program's most attractive features. Many low-users said they liked the community resources Early Start attempted to link them to, even if those resources were not able to meet their needs.

Participants who were low-users also liked the emotional support of just having someone to talk to. A participant expressed, "Like I said, talking to someone 'cause I don't really talk to any one about how it feels to be a parent…Doesn't nobody really ask me." Another mother also liked the emotional support, explaining it was an important benefit because "everybody needs some type of help" and every person "needs someone to say 'hey, I understand what you're going through."

Figure 4.11 summarizes those areas that participants in both groups disliked about Early Start. Although the total number of discouraging features was substantially less than the positive features identified, those in the low-user group who identified dislikes with the program listed slightly more of these characteristics (M = 1.5) than did the average participant in the high-user group (M = 1.2). Overall, mothers in the low-user

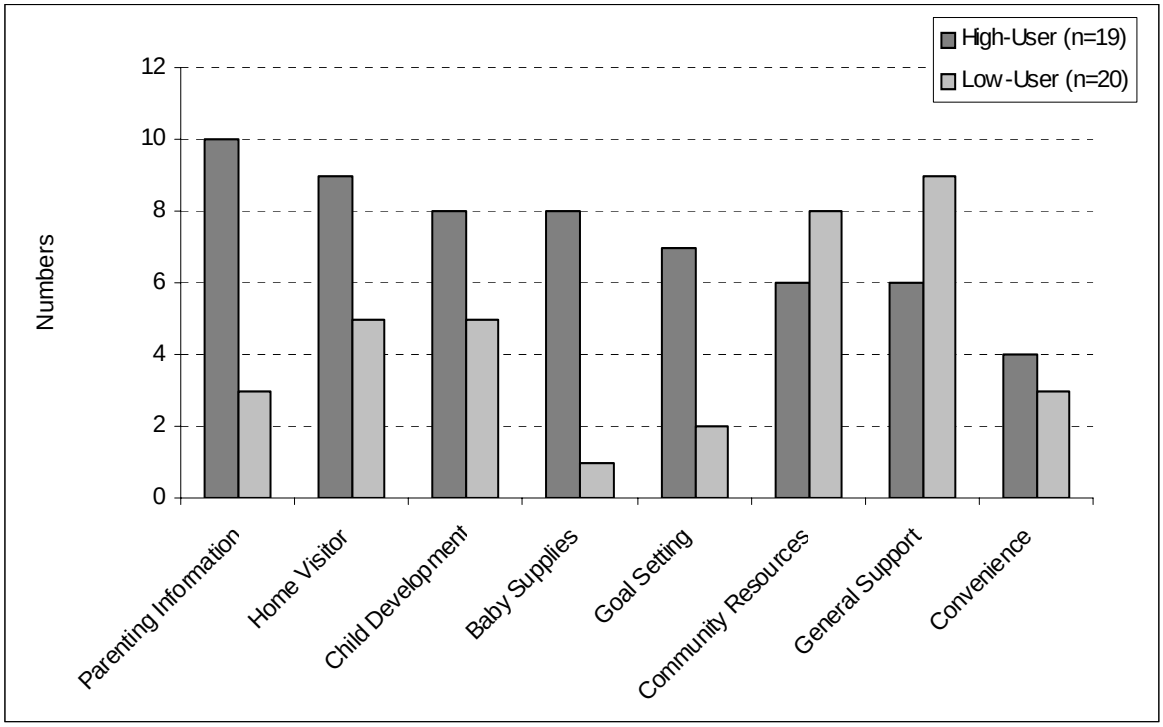


Figure 4.10 What Participant's Liked Best About Early Start by Program User Group

group expressed a greater number of dislikes about the program (7 of the 20 participants in this group expressed more than one dislike, ranging from 1 to 4) while only 4 of the 19 mothers in the high-user group identified more than one area of dissatisfaction. The most common areas of dissatisfaction involved insufficient linkages to community resources and difficulties contacting or communicating with Early Start providers. In terms of community resources, many mothers felt they were not provided with resources that met their needs or did not receive any of the resources they needed or expected the program could provide them:

> As far as providing outside resources, I suppose Early Start did as much as they could, but I don't really think there is too much of an awareness as far as outside resources and everything to help parents in general - outreach programs, job training or things like that - I think there should be more of an awareness as far as caseworkers and the government and everyone coming together to put the resources out there so that people will know where to go if they need help with something instead of having to rely on he say/she say, going through other people who have found resources. ...Only thing I think would probably need improvement is more resources.

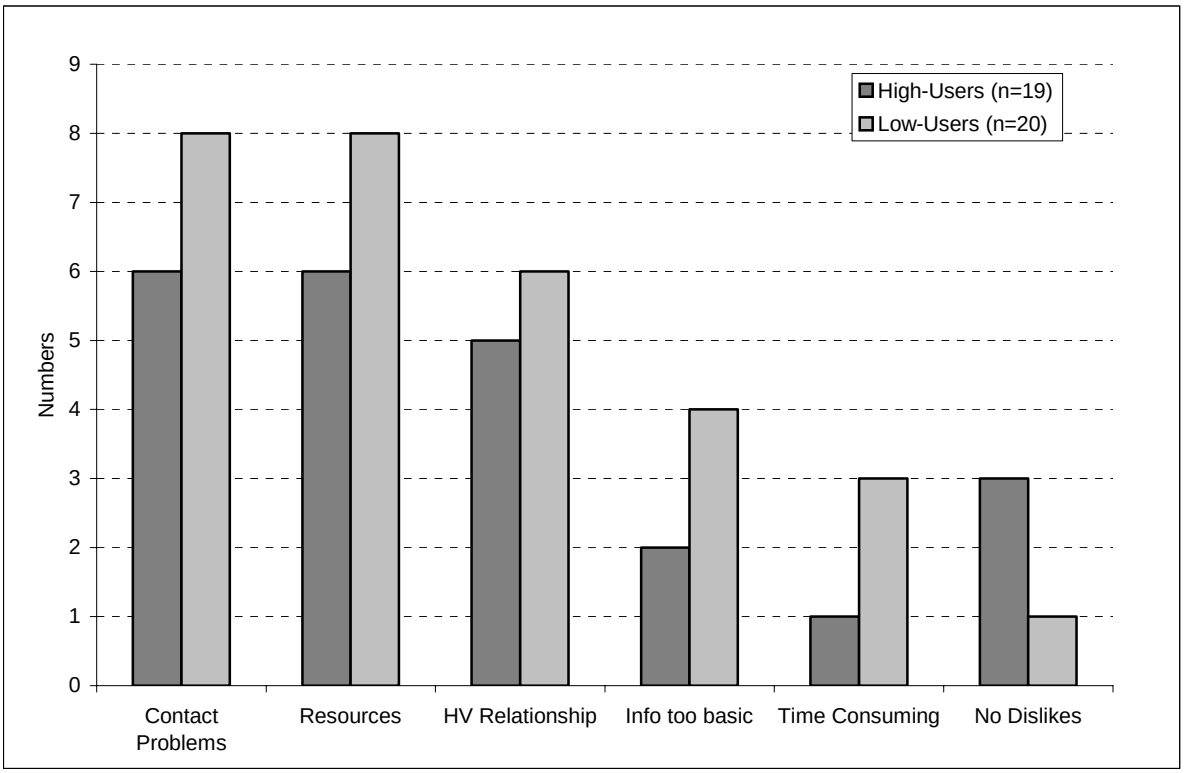


Figure 4.11 What Participants Disliked About Early Start by Program User Group

Approximately one-third of the participants in these samples described having difficulty reaching their home visitor, having home visits stop abruptly without warning, or being dissatisfied with the number of home visits they received. One mother said, "I didn't like the fact that they forgot about me" after the death of one of her babies and she still had another child survive. Several mothers said they wished their visits occurred more frequently:

> [I would have liked for] her to come out more. She just stopped coming out. I don't know what happened and I didn't hear anything else from her….I would [also] have requested a visit that the child is home to actually see how the parent and child interact together to see his behavior, just to see the child. We talk about him but you don't see my baby.

> I don't like that we don't get to meet more often. I almost wish it were something I could do [it] on a weekly basis…sometimes she is literally the only adult that I [would] see within the month.

On balance, Early Start participants had more positive than negative perceptions of the program. As noted in our previous discussion regarding goals and expectations, participants who enrolled in Early Start to obtain specific parenting and child development information placed the highest value on the assistance they received in these areas and felt very positive about their

relationship with their home visitor. These participants also appear to have benefited from the IFSP process and the discussions with their home visitors around goal setting. Although the low-users identified fewer positive elements and a greater number of negative features, these participants valued the personal support and service referrals they did receive from the program.

Lasting Program Influences

At the end of the programmatic interview, we asked participants who had engaged in the program if they felt their family was better off, the same, or worse as a result of their participation in the program. No participants felt their family was any worse off because of their involvement in Early Start, and the vast majority those in the high-user group (13 out of 16, or 80%) felt they were better off as a result of Early Start because they got information about child development, had someone to ask questions, and learned about resources. Among low-users, about one-third (5 out of 16) felt they were better off even though they had less involvement in the program. As one mother explained:

> I'll say better off because a lot of things that I wouldn't have had help with. I've gotten help because they told me about the programs.…Also because I had somebody that could help me besides her doctor asked her if she's developing correctly. So that's one good thing…I wouldn't have known anything about half of the programs that are out here if it weren't for them…I wouldn't have known that I could use those [programs]. I would think that you would have to be a certain income or also be receiving some type of county benefits in order to get stuff like that.

As might be expected, the remaining two-thirds of those in the low-user group (11 out of 16) felt Early Start had little influence, adding that their family situation, knowledge, resources and feelings of improved status went unchanged as a result of the program. Only 3 of the 16 in the high-user group expressed this viewpoint.[53] Comments from a couple of participants illustrate this perspective:

> [Nothing changed], not really, I mean everything stayed the same. There's nothing bad or good about it.…To me it [my life] didn't change.

Given the array of challenges facing many Early Start participants, the absence of sustained, positive impacts is not surprising. Within this context, the fact that over half of the participants responding to this question considered their family better off as a result of the intervention might be viewed as quite positive. Some of the interviews clearly reflect that participants gained new insights into how to monitor and encourage their child's healthy development and have greater confidence in challenging inappropriate advice or normative standards they might encounter in the future. In light of Early Start's stated service objectives to foster positive child development and strengthen self-sufficiency, however, these minimal gains suggest the need for a careful review of program expectations and linkages with other sources of concrete and emotional support for program participants.

[53] Data is missing for 10 cases (5 high-users and 5 low-users). Three cases had missing data because the programmatic interview was not completed. In four cases this question was not asked.

Program Implications:

The new parents we interviewed, although facing significant challenges, were eager and interested in obtaining additional support to help them care for their child. In some cases, these participants wanted information around basic infant care and child development. For others, the most immediate need involved basic supplies and resources for their children. In still other cases, parents sought greater financial security for themselves and were eager to identify viable educational and employment opportunities. And, in many cases, all of these needs were underscored by a general longing on the part of these new parents for someone to simply talk with about their concerns and to answer their questions. This diversity in core interests and needs present a significant dilemma for Early Start implementation. On the one hand, it is important for Early Start to operate within the context of its logic model and to hold all providers to a common set of service objectives and standards of best practice. Thus, Early Start providers might be expected to direct participants toward those activities the program is best suited to address, regardless of a participant's initial concerns. On the other hand, a strict adherence to a core set of objectives and strategies may produce a system unattractive and irrelevant to a substantial proportion of those being targeted for the intervention. To balance these competing interests, the program has relied on Individual Family Service Plan (ISFP) to provide a context in which the home visitor and participant can reach some common agreement on primary service objectives. Unfortunately, our interview data suggest that this process is neither achieving this type of consensus building nor insuring careful and consistent attention to several of the program's core outcomes. As a result, the types of long-term, sustainable outcomes implied by the Early Start logic model may prove difficult to achieve for a significant proportion of the service population.

Unlike Welcome Home, Early Start does not have a clear, coherent image among new parents regarding its purpose or what it can offer families. In some instances, this lack of clarity may reflect the broad range of individuals and agencies providing Early Start referrals. A Welcome Home nurse may present the program in a very different manner than an OWF case worker. In the interest of obtaining agreement from a potential participant to accept an Early Start service referral, these and other providers may present the program in a manner best suited to what they perceive the mother may want. Given Early Start's broad set of objectives, this type of "creative outreach" and selective emphasis is understandable. Although this ambiguity facilitates initial acceptance of the program, the lack of consistency in how the program is presented may contribute to the frequent mismatch we observed between participant expectations and IFSP goals. And, based on the comments of the participants in our sub-sample, an inability of Early Start to provide what a participant is seeking often leads to frustration and early termination from the program.

Although no program can be expected to address the needs of all those seeking assistance, our interview data suggest that a more deliberate IFSP process could be effective in minimize participant frustration and, perhaps, early termination. In setting IFSP goals, Early Start home visitors should pay greater attention to the interests of participants, even when those interests are not central to Early Start's most central objectives (e.g., child development and parenting information). Those participants with no immediate interest in parenting information or self-sufficiency, for example, might be better served by being offered a referral to another

community-based service provider rather than being retained in Early Start with a set of services goals in which they have no interest. Under this scenario, the IFSP process becomes one in which the Early Start service provider conducts a more detailed needs assessment with an eye toward identifying a broad range of family needs. Effectively responding to these diverse needs may require that Early Start providers work in closer partnership with an array of community resources to enhance the program's ability to address such concerns as housing, employment, job training, health care, and mental health services. Individual home visitors cannot provide an effective service response in all of these areas. Rather home visitors should receive the training and supervision necessary to insure that they are able to make the judgments necessary to successfully link families with a program that is in a better position to meet their needs.

For those participants who can identify an appropriate set of goals that reflect their interests and represent appropriate Early Start objectives, greater attention should be placed on identifying a list of strategies that provide useful benchmarks in measuring goal accomplishment and monitoring child health and safety. This type of careful monitoring is particularly important when an infant presents a significant health problem. The absence of consistent attention to those children in our sub-sample with compromised or questionable physical health conditions was particularly troubling. Although implementation of proposed reforms in the Early Start-Early Intervention intake process will provide a more comprehensive and consistent assessment of a child's cognitive and physical development, our data suggests that additional training in this area for all Early Start agency managers and home visitors is warranted.

Achieving this more nuanced understanding of the appropriate role of Early Start within the broad array of needs and concerns expressed by new parents at risk for maltreatment may require a planning context that moves beyond the current ECI service network. The new parents we interviewed were particularly discouraged by the information and referrals services they received from their Early Start home visitor, particularly with respect to basic needs such as concrete resources and housing, and employment services. For example, referrals to job search engines on the internet or reading the local paper do not represent strategies likely to produce employment opportunities for those who have been using these resources for some time. This and similar findings suggest that simple case management services that focus on an array of self-help strategies are unlikely to satisfy program participants or result in measurable goal accomplishments. At present, it is unclear if the ability of Early Start to effectively address these needs reflects poor case management or a serious shortage of appropriate service resources. In either case if Early Start is to achieve some of its instrumental and ultimate outcomes, a strategy to attend to the needs and concerns articulated by new parents must be devised.

Conclusions

The evaluation offers a broad overview of program operations and potential impacts. The purpose of this section is to summarize the study's major findings in three areas – program strengths, program limitations, and implications for future program development. Prior to this discussion, we address the key limitations of our data and analytic methods.

Study Limitations:

As with many evaluation studies, research design and sample restrictions can threaten statistical validity and reliability of subsequent findings in several ways. In this study, the

absence of random assignment leading to nonequivalent samples limited our ability to provide a full and robust analysis of program relationships and impacts void of threats to statistical and internal validity. In the absence of random assignment to treatment and control conditions, it is difficult to determine whether any changes in personal functioning or parental capacity observed among those enrolled in Early Start or Welcome Home services is solely the result of the intervention. Our initial design attempted to recruit a quasi-experimental sample from those not referred on to Early Start by the Welcome Home nurse using indicators of risk as a matching variable. However, a number of significant and potentially important differences emerged between these two samples despite our matching efforts. Although we have applied various statistical methods to control for these differences, these strategies reduce, but do not eliminate, all between group differences. Low statistical power because of small sample size further impacts our ability to discover important relationships, thereby increasing the likelihood of drawing a "non-difference" conclusion.

Our participant sample, though reflective of the full Welcome Home and Early Start populations on a number of key personal and service dimensions, is limited to those who met the study's criteria and agreed to participate in the study. Families agreeing to participate in a research project may differ from the general participant population in terms of parental competence or in their responsiveness to the intervention. In addition, differential recruitment rates among Welcome Home service providers may have resulted in our sample including a slightly lower-than-might-be-expected proportion of African Americans, very low-income families, and families living within one of the 11 core zip codes served by Early Start. As such, sample selection bias may be an issue that impacts the study's internal validity. For example, it is very possible that observed findings or lack of findings between participant outcomes and service measures are due to missing variables related to outcomes, (e.g., personality characteristics of the sample participants) or selection effects (e.g., differences in how participants were recruited into the study), that can under- or over-estimate statistical relationships. Selection bias also may impact the external validity of findings. The experiences of this sample may not fully reflect or be comparable to the program outcomes experienced by all those receiving Welcome Home or Early Start services. The attitudes, beliefs, and service experiences of those enrolled in the evaluation sample may differ from other Early Start recipients in ways not captured by our assessment tools.

Although our initial impact assessment was limited to the first year following program enrollment, qualitative interviews with a sub-sample of study participants provided an opportunity to assess program effects through 29 months post-enrollment. In addition, for the full sample, we were able to document the number, characteristics, and outcomes of child abuse reports for 12 to 18 months post-birth. This extended observation period has strengthened our ability to document the more lasting impacts of the interventions as well as to highlight those areas in which the program may not be offering greater protection for children or critical support for parents. That said, our extended observations are limited for the full sample to only a single outcome indicator (e.g., subsequent maltreatment reports) or to only a subgroup of all participants (e.g., those selected for the qualitative interviews). It is possible that the patterns we observed with these data may not be indicative of the full range of program effects. Despite high rates of reported maltreatment, it is possible that the initial gains we observed with respect to improved parental capacity are still in place but not sufficient for a family to avoid being

reported for possible maltreatment. Similarly, the attitudes expressed by some participants in the Early Start interview samples may not fully reflect the opinions of all program recipients or capture the types of outcomes of greatest value to the full range of families enrolling in the program. Although our measures are among the most reliable assessment tools used with these populations, they may not capture some of the more subtle changes families experience as a result of the intervention. Despite the fact that care has been taken to incorporate both participant and provider views of service impacts into our analysis, it is possible that the program has altered the lives of participants in ways we have not captured.

Finally, the study observed program implementation during a period of time in which the County was reassessing enrollment and quality assurance procedures. It is possible that as these systems became more standardized, the variability we observed, particularly among Early Start service providers, may no longer exist or may have been substantially reduced. Indeed, the dramatic decline in the time between initial referral to Help Me Grow and the subsequent referral to an Early Start provider and initiation of the first home visit suggest that program implementation is an evolving process and, therefore, difficult to capture within the context of a single evaluation.

Program Strengths:

Both Welcome Home and Early Start services are based on a theory of change that is well grounded in emerging research on early intervention and child abuse prevention. This is particularly reflected in the program's attention to educating parents with respect to child development, emphasizing the importance of early and consistent health care services for their infants, and highlighting the availability of various support services within the community. Although Early Start service duration and dosage rates are less than those recommended in the program's performance standards, they are typical of what is observed among other prevention and early intervention services. Thus, we do not view these rates as an indication of a unique ECI problem, but rather an issue symptomatic of a broader, more complex problem facing all those implementing voluntary prevention services.

A number of encouraging patterns were observed in our data with respect to both program implementation and program impacts.

With respect to program implementation:

- The Welcome Home screening system is effectively directing parents presenting the highest level of risk, as measured by the Child Abuse Potential Inventory and various socioeconomic indicators, into the Early Start Program. This pattern was confirmed by the Welcome Home only sample's more positive ratings on the study's baseline measures as compared to the scores of those referred on to Early Start and this sample's relatively low rate of reported maltreatment (i.e., less than 1%).

- Newborns and their parents are being provided ongoing home visitation services much earlier in the infant's life than had been true in 1999. In the most recent 6month reporting period for which we have data (January to June 2003), Help Me Grow cases are being forwarded to an Early Start service provider within 3 days of initial referral to the

program. Once receiving the referral, Early Start agencies are providing an initial home visit, on average, within 3 weeks. As a result, infants referred to Early Start are now receiving an initial home visit within the first month of life, with a notable number of cases being enrolled during a woman's pregnancy.

- For the cohort of children who enrolled in Early Start in 2003, the average number of home visits during the first 3 months following enrollment increased 68 percent over the level of service provided to those who enrolled in the program's initial year (5.9 visits versus 3.5 visits). Six-month service levels also have increased, but less dramatically.

- In our evaluation sample, Early Start referrals who presented the highest level of risk, as measured by the Child Abuse Potential Inventory, were twice as likely to receive an initial home visit and engage in the program as those with the lowest CAP scores. This pattern suggests that Early Start is successful in reaching and engaging at least a portion of its target population.

- Ninety-four percent of Early Start referrals in our sample who received an initial home visit remained enrolled at least 3 months; three-quarters remained in the program at least 6 months; and about half remained at least 1 year. On average, the group of program participants received 13 visits over the initial 1-year observation period and about one-third had weekly telephone contact with their home visitors while enrolled.

- The participants' and home visitors' views of the service relationship were key factor in predicting service dosage. Retention in Early Start, and consequently more home visits, is far more likely if the participant and home visitor are able to establish a strong relationship based on a mutual understanding of the purpose of Early Start and a mutual respect for what each can bring to the service relationship. Those participants who remained in the program for at least 12 months reported higher levels of understanding, collaboration, and clarity about their service relationship and were more likely to believe that they and their home visitor agreed on how to approach problems.

With respect to participant outcomes:

- Welcome Home is a very popular and well-received program. Our initial participant survey and subsequent qualitative interviews confirm that the program is well received and is accomplishing the majority of its stated early and instrumental outcomes. Parents are successfully being encouraged to observe their child's health and safety and to nurture their child's development through reading. In addition, the nurse plays a valued role as a source of emotional support for the mother.

- The average Early Start participant in our sample who received a minimum number of home visits (15) demonstrated significant improvement in her level of depression, perception of stress, and sense of competence and comfort in caring for her child. These gains continued to be significant even after we controlled for various socioeconomic characteristics such as race, maternal age, marital status, education, employment status, number of children, and initial willingness to change.

- None of the participants we interviewed 2 and a half years after enrollment felt their family was worse off as a result of Early Start services, and 80 percent of those who had remained in the program a year or more indicated their service experiences had left their families better off, as did one-third of the participants who had received only a minimal number of home visits. Those who stayed in the program the longest were most appreciative of the parenting and child development information they received as well as the general support provided by their home visitor. In contrast, those who engaged in the program for a shorter period of time most appreciated the general emotional support they received and information about community resources.

- Although a substantial proportion of Early Start participants were reported for child abuse following referral to the program, these children tend to be reported at a younger age than those who are referred for services but do not engage. This pattern may suggest that Early Start does serve the function of identifying children at risk sooner, perhaps before they experience serious injury.

Program Limitations:

The provision of intensive, voluntary, ongoing support programs is a difficult enterprise. Implementation and sustainability of such programs are particularly challenging when they are designed to capture a broad segment of the population that are considered "at risk" and deliver services through an equally broad system of community based providers. It should not be surprising that some elements of the Early Start service system are not meeting expectations. Again, our findings highlight some difficulties in both how programs are being implemented and the extent to which the interventions offer sustained impacts on child safety and parental capacity.

With respect to program implementation:

- One out of every three referrals to Early Start will leave the system without ever having received even one visit either because of insufficient outreach on the part of Early Start service providers or insufficient interest or motivation on the part of the parent. Further, only one-third of all Early Start referrals and 69 percent of those who received at least one home visit will experience the service dosage our work indicated as necessary for achieving positive change in a parent's level of depression, perception of stress, and parental competence.

- Wide variability exists in the degree to which Early Start service providers successfully enroll referrals, provide home visits, and retain participants in the program. Looking across those community-based agencies that have received at least 100 referrals since the program began, the proportion of referrals that receive an initial home visit ranges from 70 percent in some agencies to as low as 50 percent in others. Similarly, some agencies have been able to provide an average of 10 or more home visits over the first 6 months of enrollment while others deliver half this service level.

- Variability in implementation levels may reflect both agency-level differences (such as staffing patterns, size, and institutional mission) and variation in the extent to which direct service staff engage participants. Over time, sample participants who left the program and their home visitors reported lower levels of interpersonal connection than those who remained in the program. The qualitative interviews confirmed this pattern, with low-users of Early Start reporting that they did not have a close relationship with their home visitor, and often cite this fact as the reason they left the program. Overall, these findings indicate that when participants and their home visitors do not perceive the relationship in similar ways with regard to understanding each other, feeling comfortable with each other, or believing and trusting each other, service levels are compromised.

- New parents with the greatest number of socioeconomic risk markers (e.g., single parent status, young maternal age, low income, etc.) and African Americans were significantly more likely to leave the program sooner and to receive fewer home visits. The Early Start program, while successful in initially engaging parents that face certain psychological challenges in caring for their children, is not retaining parents facing the most stressful economic circumstances. This pattern is particularly true with respect to African American parents who received 15-20 percent fewer home visits than white participants.

- Survey and qualitative data indicates that mothers who had a greater number of initial concerns about such issues as housing, finances, employment, or childcare were more often disappointed by the program and more likely to leave the program after receiving only a few home visits.

- Our qualitative interviews with Early Start participants suggest that the program was not consistent in identifying children with developmental disabilities even when parents raised explicit concerns about their child's physical or cognitive development. Although physical health issues were clearly documented in the case records of eight participants in our sub-sample, none of these health-related concerns resulted in specific IFSP service goals and only one case received a service or referral to address the child's health concern. In other cases, difficulty on the part of staff in administering and interpreting the Ages and Stages Questionnaire may have contributed to a lack of sufficient attention to this domain.

- Our qualitative interviews revealed that participants often felt dissatisfied when their expectations of Early Start did not match with their actual program experiences, particularly around the need for concrete or therapeutic services. Such participants were among those most likely to leave services early.

- Discrepancies often existed between the initial concerns participants raised and her IFSP service goals. Overall, only one-third of the goals recorded in a participant's IFSPs reflected a specific concern she had articulated during her initial home visit. In part, this mismatch between perceived needs and actual service goals may account for the relatively low number of IFSP goals accomplished during Early Start enrollment.

- The common frustrations with Early Start expressed by those whom we interviewed involved difficulties in maintaining contact with their home visitors and Early Start providers and obtaining useful linkages to community resources.

With respect to participant outcomes:

- Almost one of every five children under the age of three (16.2%) referred to Early Start for services in 2001 was the subject of a child abuse report within 18 months of their initial program referral. Of these cases, 28 percent experienced two or more reports during this period. By the end of 2002, 4 percent of these Early Start referrals had spent some time in the state foster care system. Overall, the probability of an infant referred to Early Start experiencing a report of child abuse is about two and a half times that of the general population of all 1-year-olds in the county.

- Within our Early Start referral sample, 17 percent of the cases referred to Early Start by the Welcome Home nurse and 21 percent of the cases referred by OWF were reported for suspected maltreatment within 18 months of referral.

- Those participants who were the subject of a child abuse report in both the cohort and evaluation sample received, on average, an equal number of home visits as those who were not reported. Although it is possible that participants enrolled in Early Start may have come under greater scrutiny as a result of being engaged in an early intervention program, our analysis found that one-third of the reports in both the enrolled and non-enrolled groups were filed by family members or neighbors and one-third were the subject of an anonymous report. Overall, we did not have evidence to suggest that Early Start services reduced the likelihood a child would experience initial or subsequent maltreatment reports.

- Early Start services showed no impact on a new parent's level of social support, a troubling finding given the general decline in emotional connection to family and friends observed in all of our new parent subgroups.

- Fifty percent of the OWF referrals in the qualitative sample had another baby by the time of our 2-year interviews, increasing the odds that participants will find it even more difficult to achieve self-sufficiency objectives.

<u>Implications for Future Program Development:</u>

The high proportion of Early Start cases involved in an initial, and often multiple, reports of child abuse coupled with the substantial number of unmet needs expressed by the Early Start referrals we interviewed 2 and a half years post-enrollment serve as an important reminder as to how difficult it is to alter the life trajectory and parental capacities of those facing a significant array of personal and environmental challenges. Many of the changes already undertaken by Help Me Grow, such as establishing a common intake and assessment procedure between Early Start and Early Intervention, offer a specific way to address current performance problems in identifying and responding to children at risk of developmental delays. Similarly, offering prenatal services and supports in a more systematic way may result in new parents being better

prepared to assume responsibility for their newborn so that child abuse reports occurring within the first year of life might be reduced within the Early Start service population as they have been for the general population of 1-year-olds. Although we documented wide variability among Early Start service providers, it is possible that the existing quality assurance system will achieve greater consistency and improve quality across providers once it is fully implemented and operational for a longer period of time.

Other patterns, such as the high rate of subsequent pregnancies among the OWF service population, the wide variability in the Early Start service program across providers, and the continued resistance on the part of many new parents to engage in an extended home visitation program suggest that new thinking may be needed about how the program is structured and what types of staff are recruited to provide home visits. As the County moves forward with its strategic planning, we would suggest the following strategies be considered:

An increase in the initial reach and scope of Welcome Home services

The most pervasive structural improvement suggested by our qualitative interviews was a desire on the part of Welcome Home recipients to have additional visits by a nurse or health care professional at key milestones in their child's development. At present, much of the information provided by the nurse is time limited and focused on the infants' first few months of life so that the information does not address concerns parents have regarding the ongoing growth and development of their child. Also, issues of child management and home safety take on new meaning when a child becomes mobile and begins exploring all aspects of his environment. Parents in this sample repeatedly indicated that they felt it was as important to have an opportunity to discuss these and related issues with a healthcare provider when their child turned 6 months or 1 year as it was to have support in the first few weeks of their child's life. Although several of the respondents who requested this type of additional service did not voluntarily enroll in Early Start when it was offered, this may well reflect the different perceptions new parents have of the two programs. Welcome Home is viewed as a universal program that is open to all new parents, regardless of income or status, and such, new parents may view Welcome Home as a resource that they will access periodically rather than as an intervention or service program that will require an extended commitment. Accepting one or two additional home visits from a Welcome Home nurse may be seen as far less burdensome for them than enrolling in a program with the expectation that one will be available for a service provider on a weekly basis for several months. Given the relatively limited success of Early Start in successfully engaging a sizable proportion of its target population in ongoing intensive services, a modest expansion of Welcome Home might offer a reasonable alternative for some families.

The development of an outreach team trained specifically to respond to those cases where enrollment in Early Start services is proving problematic

Many new parents are neither engaging in Early Start nor receiving the service levels needed to realize positive outcomes. The uneven performance among Early Start agencies in terms of participant recruitment and retention suggest more directed training is needed to improve service consistency and quality. A wide range of factors determine if a given family will accept services, many of which are outside a program's control, such as serious substance abuse, domestic violence, or an unwillingness to accept voluntary services. However, our analysis suggests that Early Start agencies can achieve better performance levels by hiring a

diverse pool of home visitors and providing regular, reflective supervision that empowers staff to assume responsibility for achieving participant-level outcomes, not simply completing required paperwork. Further, engaging a higher proportion of referrals into the program may be a function of greater organizational resources or administrative emphasis on participant engagement, such as offering participants incentives (e.g., small gifts for the infant, access to other services provided by the agency) or worker incentives (e.g., compensating workers for going beyond the traditional work day or caseload levels to cover multiple attempts to contact a particularly resistant family). In other cases, varying success in engaging referrals may reflect some workers having a personality or service delivery style more attractive to a greater proportion of potential program participants. Although the evaluation was unable to statistically link such practices to consistent performance outcomes, our qualitative examination of Early Start service delivery suggests more careful examination of such organizational and worker behaviors may offer important insights into improving participant recruitment. Once identified, these and similar strategies need to be the focus of more intensive and ongoing training for all Early Start agency managers and staff.

Greater attention to community capacity building and general public education regarding the importance of the first few years of life

The first year of parenting is a time of high stress and poor social connections for many new parents. Although participants in both the Welcome Home and Early Start referral groups reported high levels of material support in terms of financial assistance and child care advice, many new parents, regardless of initial strengths, appear to lose the type of emotional support and reassurance that can serve as a buffer between the demands of daily living and adequate parenting. Given the importance of these emotional connections, it seems prudent for both Welcome Home and Early Start to place increased emphasis in this area. Also, with the majority of child abuse reports for the Early Start sample coming from family members and neighborhoods, a level of awareness and concern may already exist with the population, an interest that, if harnessed, might generate a resource that would provide the type of ongoing support parents view as important in assisting them in meeting their child's basic needs. Strategies might include augmenting home visitation services with center-based programs or parent support groups that draw together new parents within a community. Such groups can provide emotional connections for participants as well as a mechanism for validating the challenges of caring for a newborn. A key source of child abuse reports involving young children remain family and friends, not professionals. Enrollment in Early Start does not seem to alter this pattern.

More effective use of the IFSP process to identify and address the full range of a family's needs including basic support

Our interview data suggest that a more deliberate IFSP process could be effective in minimizing participant frustration and, perhaps, early termination. In setting IFSP goals, Early Start home visitors should pay greater attention to the interests of participants, even when those interests are not central to Early Start's most central objectives (e.g., child development and parenting information). Those participants with no immediate interest in parenting information or self-sufficiency, for example, might be better served by being offered a referral to another community-based service provider rather than being retained in Early Start with a set of services goals in which they have no interest. Under this scenario, the IFSP process becomes one in

which the Early Start service provider conducts a more detailed needs assessment with an eye toward identifying a broad range of family needs. Effectively responding to these diverse needs may require that Early Start providers work in closer partnership with an array of community resources to enhance the program's ability to address such concerns as housing, employment, job training, health care, and mental health services. Individual home visitors cannot provide an effective service response in all of these areas. Rather, home visitors should receive the training and supervision necessary to insure that they are able to make the judgments necessary to successfully link families with a program that is in a better position to meet their needs.

Stronger linkages with income maintenance programs and child welfare services

Successfully enrolling and effectively serving a greater proportion of high-risk parents will require solid reciprocal arrangements among public welfare agencies, child protective services, and local prevention efforts. Many of the families involved in Early Start have ongoing contact with other agencies, particularly public welfare and child protection. Efforts should be made to strengthen the existing reciprocal arrangements among ECI, child welfare, and public welfare to insure that families have access to the maximum range of supports. Collaboration is particularly critical in cases where the family is considered to present a high risk for child abuse or neglect. Consideration should be given to requiring formal case management or family team meetings involving both child welfare and ECI staff in all reported cases involving infants 6 months or younger. Although not all such cases will require formal child protective service interventions, it seems likely that most of these cases would benefit from the type of parenting education and supportive services available through ECI. Similarly, increased collaboration and shared commitment between OWF staff and Early Start home visitors may be necessary to improve the initial engagement rates of OWF referrals. As noted in our report, OWF families, many of whom were African American, were more likely than white families referred through Welcome Home to leave the program early and to receive a fewer number of home visits, suggesting that such families may present specific barriers to enrollment, which Early Start providers may have difficulty overcoming. Achieving higher engagement rates with these families, therefore, may require greater administrative collaboration between public welfare and the ECI service systems in order to provide these new parents the greatest array of service options and the highest levels of supervision and monitoring. Early Start home visitors need the capacity to better address the concrete and economic concerns most troubling to families referred for service either through the direct provision of aid or through referral to other agencies with ongoing access to the Prevention, Retention, and Contingency (PRC) funds.

Increased training for direct service providers with respect to the role personal experiences and cultural backgrounds play in defining the participant-worker relationship

It is common for professionals to deny awareness of, "or feigned blindness to client race in an attempt to treat minority clients 'just like any other' client," (Proctor and Davis, 1994, p. 316). In our qualitative study evaluating the quality and consistency of Early Start, evidence of "color-blind" practices were found (Howard, Tobin, Daro, & Harden, 2003). In that study, many managers and home visitors did not believe that an emphasis on racial and cultural competence or sensitivity was particularly important to the quality of their service provision. Overall, workers believed that cultural, racial, or ethnic differences between themselves and their Early Start families really did not matter that much in the services they provided. One home visitor expressed the majority belief of home visitors in that study -- I think it's not an issue … as long

as families get a certain level of respect they don't mind [what color we are]," (p. 45). However, the service experiences of African Americans in the evaluation sample may suggest otherwise. Our analysis found significant and persistent differences in program retention and dosage between African American and non-African American participants. Even when we controlled for other demographic differences, a participant's race remained a significant predictor of how long a family would remain in the program and how many home visits they would receive. Overall, African American parents received between 15 and 20 percent fewer home visits than white parents engaging in the program. Proctor and Davis (1994) suggest that disregarding race may be destructive because "that which is ignored, is readily apparent and cannot be easily ignored," (p. 316). In establishing a positive, trusting, and supportive relationship it is important to recognize that racially and/or culturally dissimilar workers and clients may approach each other with different perspectives and understandings of each other's realities. It is important that program officials critically examine the potential effect racial differences might have on the level of service and the service relationship, and take steps through worker training and experience to reduce negative consequences.

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Appendices Chapter 4:

Appendix 4.A
Program Logic Models and Strategies

Welcome Home Logic Model:

Welcome Home offers a single in-home visit by a registered nurse to first-time and teen parents. In addition, parents at "social risk" (e.g., those with prior multiple abortions or miscarriages, adoptive parents, or parents with prior loss of children to foster care) also are offered a Welcome Home visit. A hospital nurse on the post partum floor or a Welcome Home Specialist (i.e., a bachelor-prepared professional in nursing, social work, or other appropriate field) offers the service in the hospital to eligible mothers after they have delivered. In addition to introducing the service, staff will offer the family the option of receiving the "Growing Together" newsletter, a bi-monthly publication that covers developmental milestones and parenting concerns common during a baby's first years. The publication continues on a quarterly basis until the child's third birthday. If services are accepted, the mother's consent form and contact information are then forwarded to the Welcome Home nurse visitor who arranges for the visit to occur within the next 2 weeks. The program's logic model, as defined at the onset of our evaluation, is presented in Figure 4.A1.

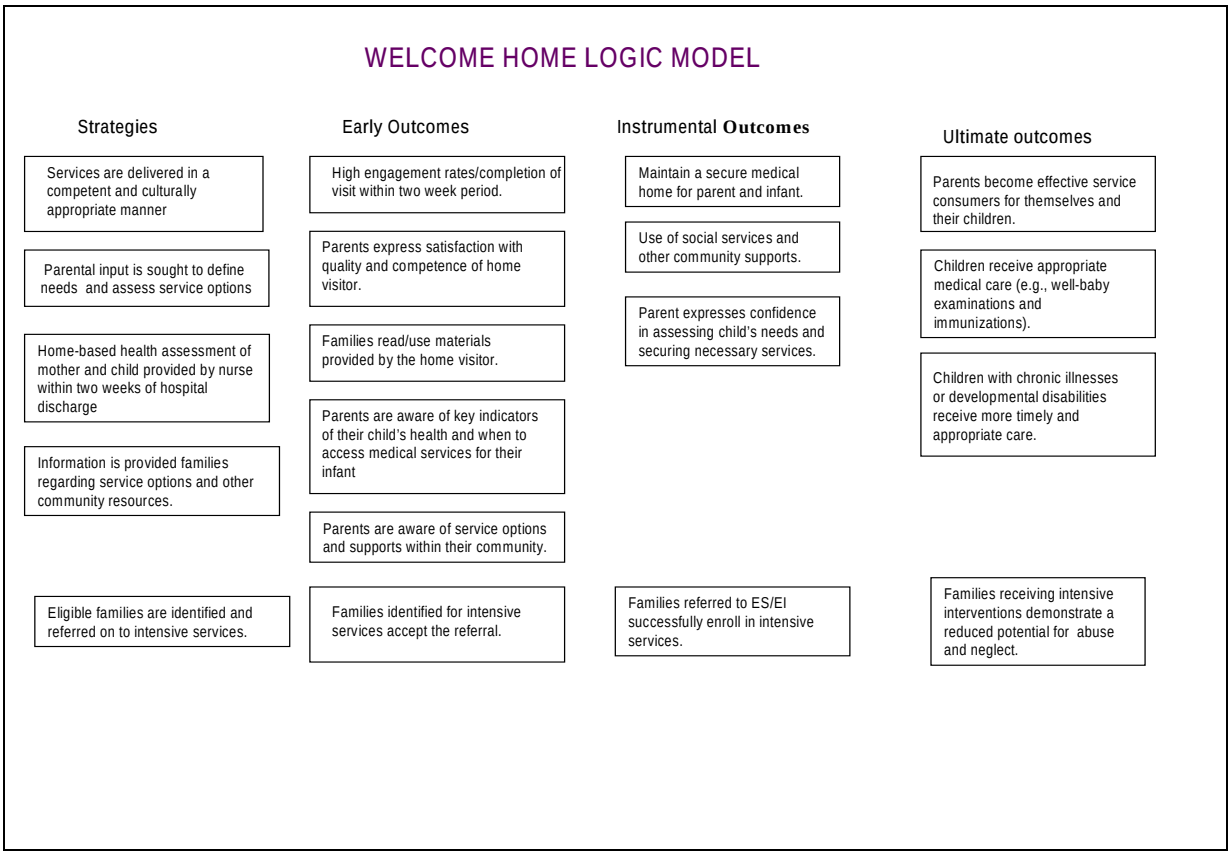

Figure 4.A1 Welcome Home Logic Model

Early Start Logic Model:

Early Start offers extended home visits to parents of infants and toddlers (birth to three) who face significant risk of child maltreatment or future developmental delays. Families are referred to this program through a variety of channels including Welcome Home, the Ohio Works First (welfare reform) Program, the Department of Children and Family Services, medical facilities, and other community-based agencies. In addition, Early Start accepts self-referrals as well as referrals from other family members or friends. All referrals are coordinated through a single intake unit (i.e., Help Me Grow) that refers the family on to 1 of 27 contracted community-based agencies. In making these referrals, the Help Me Grow staff strives to enroll families with Early Start agencies that either are located in the family's community or have the capacity to meet the family's unique service needs (e.g., such as substance abuse, domestic violence, mental illness, homelessness, etc). Early Start home visitors include both trained professionals (e.g., nurses, social workers, or child development specialists) and paraprofessionals. Services are offered weekly for at least the first 3 to 6 months following enrollment. Home visits are then offered on a bi-weekly, monthly, or bi-monthly basis until the child reaches 3 years of age, with the specific dosage depending upon the family's level of need. Primary activities conducted during the visits include initial and periodic assessment of the home environment and developmental and nutrition screening through the application of standardized assessment protocols. The focus of the intervention is guided by an Individualized Family Service Plan (IFSP) developed in partnership with the program participant. Core topics frequently included in this plan are parenting skills and information, child and maternal nutrition, health care, self-care and self-sufficiency. Figure 4.A2 summarizes the Early Start logic model that was in place at the time we began our evaluation.

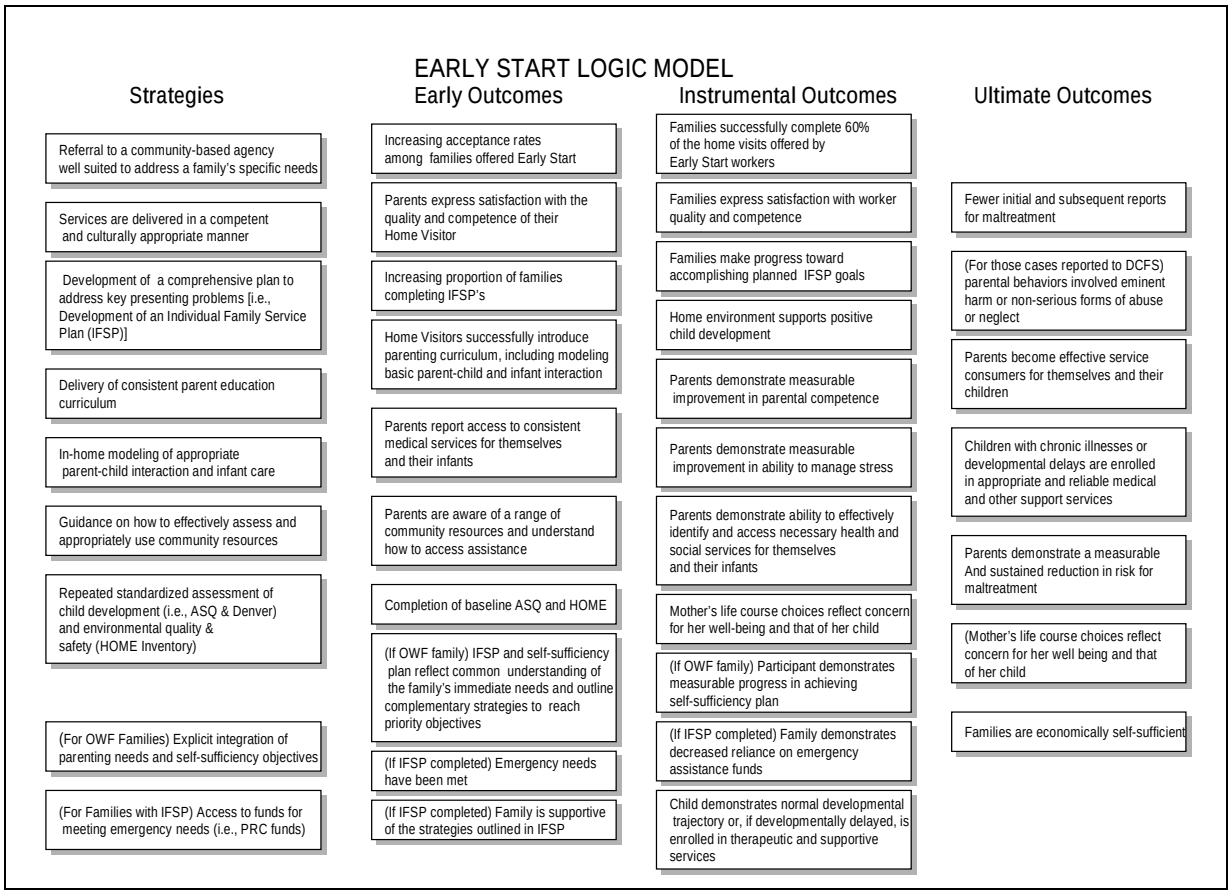

Figure 4.A2 Early Start Logic Model

Appendix 4.B Sub-Sample, Selection and Response Rates for Sub-Sample by Reference and Program User Groups

	WH		WH-ES and OWF-ES						
			Non-users		Low-users		High-users		
	CAP within 1 *SD*	CAP greater than 1 *SD*	WH-ES	OWF-ES	WH-ES	OWF-ES	WH-ES	OWF-ES	TOTAL
Eligible Sub-Sample	188	30	68	41	36	15	37	13	428
Randomly Selected for Interviews	15	12	14	13	22	14	17	13	120
Interviewed	12	11	12	10	14	7	14	7	87
Response Rate	80%	92%	86%	77%	64%	50%	83%	54%	73%

Appendix 4.C EFI Definitions

EFI Dimension	Description
Family Subsistence and Work	• Covers the family's available income and occupational status as well as the family's attitudes about her work. Includes themes such as security, stability, flexibility, insurance, wealth, equity back-ups, and reliance on multiple sources of support.
Health and Social Services	• Includes the number and kinds of social services used by the mother, infant and other family members. Services could include Early Start and Welcome Home, welfare, health services, and other community and government services.
Information	• Relates to the amount of information received from professionals about their child and the amount of time spent in seeking it.
Cultural Beliefs and Influences	• Consists of cultural beliefs and influences available in the family and community, such as beliefs about racism and discrimination, availability of employment and religion.
Home-Community Environment	• Includes the location of the home, and the safety and convenience of the neighborhood for children.
Networks and Supports	• Includes the mother's formal and informal social support networks, for sources of information, instrumental assistance, emotional support, and companionship.
Connectedness	• Relates to the mothers' connectedness to members of her extended family and their involvement with her children. It also considers the structure and quality of family relationships.
Domestic Workload and Childcare Tasks	• Involves the complexity of the family's domestic workloads (e.g., cooking, cleaning, shopping, running errands), as well as the level of assistance available inside and outside the family. This dimension also covers the complexity of the family's childcare situation. Who does childcare, how is it organized, and how is it balanced with other domestic demands?
The Role of Men	• Consists of the role fathers, male partners, and other men outside the family of the mother and her children play in their lives.

Appendix 4.D Baseline Demographic Characteristics of Sub-sample

	Welcome Home-Only		Welcome Home-Early Start		OWF-Early Start	
	N	%	*N*	%	*N*	%
Sample Size	22		40		24	
Average Age (*SD*)	24.5	(6.5)	20.4	(3.6)	23.2	(5.5)
Teen Parents[a] (%)	1	4.5	6	15.0	1	4.2
Race/Ethnicity (%)						
African American, Black, not Hispanic	4	19.0	25	62.5	17	73.9
Hispanic	1	4.8	3	7.5	1	4.3
White, not Hispanic	14	66.7	11	27.5	5	21.7
Other[b]	2	9.5	1	2.5	–	0.0
Marital Status (%)						
Never Married	10	47.6	35	87.5	20	86.9
Married	11	52.4	4	10.0	3	13.0
Legally Separated/Divorced	–	0.0	–	0.0	–	0.0
Widowed	–	0.0	1	2.5	–	0.0
Educational Level (%)						
Less than high school	–	0.0	3	7.5	–	0.0
Some high school	3	14.3	14	35.0	7	30.4
High school/GED	9	42.9	13	32.5	7	30.4
Some college	4	19.0	8	20.0	7	30.4
College/Graduate Degree	5	23.8	2	5.0	2	8.7
Employment Status (%)						
Employed	15	71.4	16	42.1	12	52.2
Unemployed	6	28.6	22	57.9	11	47.8
Household Income (%)						
Under $5,000	1	5.3	17	48.6	9	42.9
$5,000 to $19,999	4	21.1	9	25.7	10	47.6
$20,000 to $39,999	6	31.6	7	0.0	2	9.5
$40,000 or more	8	42.1	2	5.8	–	0.0
Average number of adults in household (*SD*)	2.4	(0.8)	2.1	(0.8)	1.7	(0.7)
Maternal History						
Mother's first child (%)	21	95.5	34	87.2	13	56.5

Note. Data on some variables may not add up to full sample size because of missing data.
[a]Teen is defined as ages 16 and 17.
[b]Among the Welcome Home-only group, two participants identified themselves as "Asians". In the Welcome Home-Early Start referral group one participant identified herself as "Other".

Appendix 4.E Baseline Scores of Phase I Performance Measures

Outcomes	Welcome Home Only Initial			Welcome Home-Early Start Initial			Ohio Works First-Early Start Initial	
	M	*(SD)*	Difference	*M*	*(SD)*	Difference	*M*	*(SD)*
Sample Size	22			40			24	
Family Strengths	8.6	(0.7)	.3*	8.2	(0.6)	-0.3	8.5	(1.0)
Readiness to Change	56.6	(6.7)	-1.2	57.8	(5.9)	0.1	57.7	(9.4)
Knowledge of Infant Development (KIDI) Correct	64.1	(.16)	-0.2	65.0	(.12)	0.6	64.0	(.14)
Baby Safety Checklist (BSC) Correct	88.4	(.06)	0.1	87.3	(.06)	0.2	87.1	(.05)
Parenting Sense of Competence (PSOC)	73.8	(11.5)	-1.4	75.2	(7.2)	0.8	74.3	(11.0)
Skill/Knowledge Subscale	33.4	(6.7)	-1.4	34.7	(3.6)	0.0	34.7	(4.6)
Valuing/Comfort Subscale	40.5	(6.2)	0.0	40.4	(5.1)	0.8	39.6	(7.7)
Social Support Behaviors (SSB)	41.3	(5.5)	-1.2	42.5	(1.5)	0.6	42.0	(2.9)
Practical Subscale	6.7	(0.6)	-0.1	6.8	(0.5)	0.2	6.6	(0.9)
Emotional Subscale	9.3	(1.7)	-0.4	9.7	(0.6)	0.2	9.5	(0.7)
Financial Asst. Subscale	7.5	(1.1)	-0.0	7.5	(0.9)	0.2	7.3	(1.4)
Advice/Guidance Subscale	11.3	(1.6)	-0.6*	11.9	(0.3)	0.0	11.9	(0.4)
Socializing Subscale	6.6	(1.0)	-0.2	6.7	(0.5)	-0.1	6.8	(0.5)
Social Support Index (SSI)[a]	67.9	(10.1)	2.5	65.4	(7.6)	3.7	61.7	(11.3)
Perceived Stress Scale (PSS)	14.7	(7.8)	-0.6	15.4	(4.6)	-3.4 *	18.8	(7.4)
Depression Mood Scale (CES-D)	12.3	(10.8)	1.4	10.9	(8.4)	-5.2 *	16.0	(11.7)
Child Abuse Potential Inventory (CAP)	127.7	(78.7)	33.9^	93.8	(66.6)	-46.8 *	140.6	(101.3)

Note: Statistical significance levels are indicated as **p < 1 percent, *p < 5 percent, and ^p < 10 percent.

Appendix 4.F Initial Concerns and Belief that Early Start or a Community Service Could Help[a] for Phase II Sample

Measures	Welcome Home Visit Only			Welcome Home – Early Start Referrals			Ohio Works First – Early Start Referrals	
	N	%	Difference	*N*	%	Difference	*N*	%
Sample	22			40			24	
Mean number of parents concerns (range between 0 - 13)	4.1	(3.2)	.6	3.4	(3.4)	-1.6	5.0	(3.4)
Mean number of concerns that Early Start/community programs will help	2.8	(3.5)	-.5	3.3	(2.9)	-.8	4.1	(2.8)
Type of Concerns								
Finding a different home or improving a current residence (%)	14	63.6		16	40.0		18	75.0
Believe Early Start/community will help (%)	6	40.0		11	64.7		12	66.7
Child development (%)	11	50.0		19	47.5		10	41.7
Believe Early Start/community will help (%)	10	90.9		16	84.2		8	80.0
Having adequate child care (%)	11	52.4		12	30.0		13	54.2
Believe Early Start/community will help (%)	8	72.7		9	75.0		10	76.9
Financial issues(%)	10	45.5		18	45.0		15	62.5
Believe Early Start/community will help (%)	6	60.0		11	57.9		8	53.3
Feeding your infant (%)	6	27.3		12	30.0		8	33.3
Believe Early Start/Community will help (%)	6	100.0		12	100.0		6	75.0
Health care for baby (%)	4	18.2		9	22.5		10	41.7
Believe Early Start/community will help (%)	4	100.0		9	100.0		10	100.0
Participant's mental and/or physical health (%)	8	36.4		9	23.1		10	41.7
Believe Early Start/community will help (%)	6	75.0		7	77.8		7	70.0
Relationship with significant others (e.g., husband, partner, boyfriend) (%)	5	22.7		12	30.0		10	41.7
Believe Early Start/community will help (%)	2	40.0		6	54.5		4	40.0
Relationships with extended family (%)	2	9.1		4	10.0		7	29.2
Believe Early Start/community will help (%)	2	100.0		3	75.0		3	42.9

(table continues)

Appendix 4.F (continued)

Measures	Welcome Home Visit Only N	%	Difference	Welcome Home – Early Start Referrals N	%	Difference	Ohio Works First – Early Start Referrals N	%
Establishing friendships with others in the community (%)	5	22.7		2	5.0		2	8.3
Believe Early Start/community will help (%)	4	80.0		0	0.0		1	50.0
Legal issues (%)	3	13.6		5	12.5		1	4.2
Believe Early Start/community will help (%)	3	100.0		1	25.0		1	100.0
Employment/job training(%)	4	18.2		13	32.5		9	37.5
Believe Early Start/community will help (%)	3	75.0		10	76.9		8	88.9
Community violence (%)	6	27.3		5	12.8		6	25.0
Believe Early Start/community will help (%)	2	33.3		2	40.0		0	0.0
Self-sufficiency								
Self-sufficiency plan requirements (%)[b]	–			–			5	41.7
Believe Early Start/community will help (%)	–			–			7	80.0

Note. Numbers in parentheses are standard deviations. A two-tailed t-test was used to assess the statistical significance of each difference in characteristics between Welcome Home Only and Welcome Home-Early Start Referrals, and Welcome Home-Early Start referrals and OWF-Early Start Referrals.
[a]Early Start Referrals were asked if they thought Early Start could help them with their concerns. Welcome Home only study participants were asked if *any community program* could help them with this concern.
[b]Applicable to OWF group only. This item is not included in the total score for the OWF sample. When this measure is included in the total number of parental concerns the mean is 5.2 with a standard deviation of 3.6. The mean number of concerns OWF-referrals believed Early Start/community programs will help with is 4.1 (2.8) when self-sufficiency concerns are added to the calculation.
Statistical significance levels are indicated as $^{**}p < 1$ percent and $^{*}p < 5$ percent.

Appendix 4.G Initial Concerns and Belief that Early Start Could Help for Full Study Sample by User Group

Measures	ES Non-Users			ES Low-Users			ES High-Users	
	N	%	Difference	*N*	%	Difference	*N*	%
Sample	155			65			51	
Mean number of parents concerns (range between 0 - 13)	3.8	(3.3)	-.21	4.0	(3.2)	-.24	4.3	(3.6)
Mean number of concerns that Early Start will help	3.2	(2.7)	.28	3.0	(2.5)	-.79	3.8	(3.0)
Type of Concerns								
Child Health/Development & Parenting (%)	86	55.5		39	60.0		33	64.7
Believe Early Start will help (%)	75	87.2		33	84.6		30	90.9
Housing (%)	85	54.8		40	61.5		25	49.0
Believe Early Start will help (%)	43	51.8		28	70.0	*	14	56.0
Financial issues (%)	71	45.8		30	46.2		22	43.1
Believe Early Start will help (%)	39	54.9	*	15	50.0		15	68.2
Employment/job training (%)	54	34.8		25	38.5		22	43.1
Believe Early Start will help (%)	28	51.9		17	68.0		16	72.7
Childcare (%)	63	40.6		27	41.5		21	41.2
Believe Early Start will help (%)	46	73.0		19	70.4	^	19	90.5
MOB's health (%)	34	21.9		19	29.7		17	33.3
Believe Early Start will help (%)	18	52.9		11	57.9		11	64.7
Relationship with FOB & extended family	44	28.4		18	27.7		20	39.2
Believe Early Start will help (%)	19	43.2		4	22.2		7	35.0

Note. Numbers in parentheses are standard deviations. A two-tailed t-test was used to assess the statistical significance of each difference in characteristics between ES non-users and ES low-users and between ES low-users and ES high-users.
Statistical significance levels are indicated as $^{**}p < 1$ percent, $^{*}p < 5$ percent, and $^{\wedge}p < 10$ percent.

Appendix 4.H Sub-sample Demographic Characteristics by Program Group at the Time of the Qualitative Interview

Sample Size	Welcome Home N=22		Welcome Home – Early Start N=40		Welcome Home – Ohio Works First N=24	
	Baseline	Yr. 2.5	Baseline	Yr. 2.5	Baseline	Yr. 2.5
Marital Status (*n*)						
Not Married	10	11	36	36	20	19
Married	11	11	4	4	3	5
Employment Status (*n*)						
Employed	15	16	16	27	12	8
Unemployed	6	6	22	13	11	16
Education Status (*n*)						
In school and working	–	2	–	6	–	0
In school only	–	2	–	4	–	5
Mean Number of Adults in Household (*SD*)	2.4 (.8)	1.8 (.7)	2.1 (.8)	2.1 (.9)	1.7 (.7)	1.8 (.6)
Mother had a subsequent child (*n*)	–	6	–	5	–	12

Appendix 4.I1 EFI Items by Reference Group

	EFI Item	Welcome Home M	(SD)	Difference	Early Start M	(SD)	Difference	Ohio Works First M	(SD)
	Sample Size	22			40			24	
	Family Subsistence and Work								
1.	Amount of income for basic items.	5.4	(1.9)	.96^	4.4	(1.7)	.40	4.0	(1.5)
2.	Amount of money for unexpected expenses.	4.7	(2.1)	.91^	3.8	(2.0)	.23	3.5	(1.4)
3.	Predictability of income.	5.6	(2.3)	.59	5.1	(1.9)	.38	4.7	(2.2)
4.	Overall satisfaction with current availability of income/subsistence base.	4.3	(2.1)	.64	3.7	(1.7)	.77^	2.9	(1.6)
5.	Flexibility of mother's current work or school schedule.	4.9	(1.8)	.44	4.5	(1.5)	-.12	4.6	(1.7)
6.	Effect of child on mother's work arrangements, school and career decisions.	3.4	(2.3)	-.56	4.0	(2.0)	.25	3.7	(1.7)
7.	Work and/or school has a positive impact on mother.	4.5	(1.8)	-.01	4.5	(1.8)	-.90*	5.4	(1.0)
8.	Work and/or school has a negative impact on mother.	3.8	(1.7)	.54	3.2	(1.9)	.07	3.2	(2.0)
	Health and Social Services								
9.	Level of household activity getting and using government income maintenance/in-kind services.	1.8	(2.5)	-1.66*	3.4	(2.2)	-.90	4.3	(2.3)
10.	Level of household activity getting and using social services and community agencies.	0.4	(0.9)	-.89*	1.3	(1.5)	-.79	2.0	(2.0)
11.	Extent to which target child's health care and dental costs are currently covered by health insurance.	6.9	(1.4)	-.55	7.5	(1.4)	.12	7.3	(1.7)
12.	Extent to which health care costs for other family members are currently covered by health insurance.	6.6	(1.5)	.25	6.4	(2.3)	-.61	7.0	(1.8)
	Information								
13.	Level of family activity focused on accessing and receiving information about government and social services from formal sources.	1.2	(2.1)	-1.13*	2.4	(2.0)	-.08	2.4	(2.2)
14.	Level of family activity focused on accessing and receiving information about government and social services from informal sources.	0.6	(1.0)	-1.35**	1.9	(1.5)	-.32	2.2	(1.8)
15.	Level of family activity currently focused on accessing sources of information on child development and/or child's level of functioning.	3.1	(1.4)	.13	2.9	(1.7)	.16	2.8	(2.0)

Appendix 4.I1 EFI Items by Reference Group (continued)

	EFI Item	Welcome Home *M*	*(SD)*	Difference	Early Start *M*	*(SD)*	Difference	Ohio Works First *M*	*(SD)*
	Cultural Beliefs and Influences								
16.	Mother has positive beliefs about employment opportunities.	4.3	(1.6)	.36	3.9	(1.6)	.27	3.7	(1.8)
17.	Mother has positive beliefs about racism and discrimination.	4.0	(1.4)	-.21	4.2	(1.2)	.34	3.8	(1.5)
	Home-Community Environment								
18.	Perceived safety of household's neighborhood for children.	5.0	(1.7)	.68	4.3	(2.0)	.72	3.6	(1.9)
19.	Level of household activity focused on participating in neighborhood.	2.4	(1.4)	-.24	2.7	(1.9)	.33	2.3	(1.5)
	Networks and Supports								
20.	Mother currently relies on instrumental support from informal networks such as family, kin, and friends, including siblings, grandparents, former in-laws, etc.	4.0	(2.4)	-1.44*	5.4	(1.5)	.64	4.8	(1.9)
21.	The instrumental and/or emotional support from family, kin and friends, has a negative impact on mother and/or child.	2.0	(2.0)	-.08	2.1	(1.7)	.08	2.0	(1.9)
22.	Mother currently provides instrumental and/or emotional help to family, kin and friends, including siblings, grandparents, former in-laws, etc.	2.1	(1.6)	-.63	2.8	(1.4)	.05	2.7	(1.3)
23.	Current family involvement in religion and worship.	3.1	(2.2)	.55	2.6	(2.0)	.51	2.0	(1.9)
24.	Religion/spirituality provides support.	3.1	(2.3)	.26	2.8	(1.8)	-.21	3.1	(2.2)
	Connectedness								
25.	Connected Family.	4.3	(1.7)	-.64	5.0	(1.9)	.68	4.3	(2.6)
	Domestic Workload and Childcare Tasks								
26.	Level of household activity currently focused on arranging childcare for target child.	1.5	(1.3)	-.19	1.7	(1.1)	.17	1.5	(1.0)
27.	Overall childcare tasks for the siblings of target child.	3.0	(0.9)	-.50	3.5	(1.5)	.57	2.9	(1.7)
28.	Overall agreement and consistency between household adults regarding childcare and childrearing tasks.	5.5	(1.4)	.90^	4.6	(1.7)	-.44	5.1	(1.6)
29.	Current degree of perceived complexity/elaborateness of mother's childcare workload and schedule.	2.3	(2.0)	-.01	2.3	(1.5)	-.05	2.4	(1.8)
30.	Current degree of complexity/elaborateness of mothers' domestic workload and schedule.	3.3	(1.0)	.39	2.9	(1.2)	-.34	3.3	(1.0)
31.	Time availability of mother for target child.	5.2	(1.5)	.20	5.0	(1.8)	-.85*	5.9	(1.2)
32.	How difficult is it to care for target child?	2.7	(1.5)	-.76^	3.5	(1.6)	.17	3.3	(1.6)
33.	How difficult is it to care for other child/children in family?	2.6	(1.5)	-.54	3.1	(1.5)	-.58	3.7	(2.0)

(table continues)

Appendix 4.I1 EFI Items by Reference Group (continued)

	EFI Item	Welcome Home *M*	*(SD)*	Difference	Early Start *M*	*(SD)*	Difference	Ohio Works First *M*	*(SD)*
	Role of Men								
34.	Flexibility of current man/significant other current work or school schedule.	4.2	(2.2)	-.02	4.3	(2.0)	-.67	4.9	(1.8)
35.	Current man/significant other participation in childcare and domestic tasks and activities.	4.1	(2.3)	-.72	4.8	(2.0)	-.10	4.9	(2.2)
36.	Involvement of biological father with target child.	4.4	(3.0)	1.13	3.3	(2.8)	-.98	4.3	(2.9)
37.	Role of current man/significant other (POSITIVE) in mother's life re: treatment of mother.	5.7	(2.0)	.05	5.6	(1.4)	.54	5.1	(2.3)
38.	Role of current man/significant other (NEGATIVE) in mother's life: treatment of mother.	1.4	(2.0)	.40	1.0	(1.3)	-.61	1.7	(2.1)
39.	Role of current man/significant other (POSITIVE) in mother's life: financial and resources contributions.	4.6	(3.3)	-.80	5.4	(1.4)	.09	5.3	(2.6)
40.	Role of current man/significant other (NEGATIVE) in mother's life: financial and resource contributions.	0.9	(1.4)	.34	0.5	(1.0)	-.34	0.9	(1.7)

Note: Statistical significance levels are indicated as **p < 1 percent, *p < 5 percent, and ^p < 10 percent.

Appendix 4.I2 EFI-Family Circumstances Items Comparing Welcome Home and Ohio Works First Referral Groups

		Welcome Home			Ohio Works First	
	EFI Item	*M*	*(SD)*	Difference	*M*	*(SD)*
	Sample Size	22			24	
EFI Item #	***Family Subsistence and Work***					
1.	Amount of income for basic items.	5.4	(1.9)	1.4*	4.0	(1.5)
2.	Amount of money for unexpected expenses.	4.7	(2.1)	1.1*	3.5	(1.4)
4.	Overall satisfaction with current availability of income/subsistence base.	4.3	(2.1)	1.4*	2.9	(1.6)
7.	Work and/or school have a positive impact on mother.	4.5	(1.8)	-0.9^	5.4	(1.0)
	Health and Social Services					
9.	Level of household activity getting and using government income maintenance/in-kind services.	1.8	(2.5)	-2.6**	4.3	(2.3)
10.	Level of household activity getting and using social services and community agencies.	0.4	(0.9)	-1.7**	2.0	(2.0)
	Information					
13	Level of family activity focused on accessing and receiving information about government and social services from formal sources.	1.2	(2.1)	-1.2^	2.4	(2.2)
14.	Level of family activity focused on accessing and receiving information about government and social services from informal sources.	0.6	(1.0)	-1.7**	2.2	(1.8)
	Home-Community Environment					
18.	Perceived safety of household's neighborhood for children.	5.0	(1.7)	1.4*	3.6	(1.9)
	Networks and Supports					
23.	Current family involvement in religion and worship.	3.1	(2.2)	1.1^	2.0	(1.9)

Note: Significance levels are indicated as **p < 1 percent, *p < 5 percent; and ^p < 10 percent.

Appendix 4.I3 Significant EFI Items by Early Start Usage Group

		Early Start Non-Users			Early Start Low-Users			Early Start High-Users	
	EFI Item	*M*	*(SD)*	Difference	*M*	*(SD)*	Difference	*M*	*(SD)*
	Sample Size	21			21			21	
	Domains and Items								
EFI Item #	***Health and Social Services***								
10.	Level of household activity getting and using social services and community agencies.	1.6	(1.5)	.6	1.0	(1.6)	-1.1^	2.1	(2.0)
	Information								
15.	Level of family activity currently focused on accessing sources of information on child development and/or child's level of functioning.	2.7	(1.6)	.2	2.5	(1.9)	-1.0^	3.5	(1.8)
	Networks and Supports								
20.	Mother currently relies on instrumental support from informal networks such as family, kin, and friends, including siblings, grandparents, former in-laws, etc.	5.0	(1.8)	-.8	5.8	(1.3)	.9^	4.9	(1.9)
23.	Current family involvement in religion and worship.	1.7	(1.6)	-1.2*	2.9	(2.0)	.3	2.6	(2.3)
	Domestic Workload and Childcare Tasks								
31.	Time availability of mother for target child.	6.1	(1.2)	1.3*	4.8	(1.8)	-.2	5.1	(1.5)

Note: Significance levels are indicated as **p < 1 percent, *p < 5 percent; and ^p < 10 percent.

Appendix 4.I4 EFI Items Comparing Non-User and High-User Groups

EFI Item	Early Start Non Users *M*	*(SD)*	Difference	Early Start High Users *M*	*(SD)*
Sample Size	22			21	
Family Subsistence and Work					
7. Work and/or school have a positive impact on mother.	5.4	(1.4)	1.1^	4.4	(1.7)
Cultural Beliefs and Influences					
16. Mother has positive beliefs about employment opportunities	3.6	(1.6)	-.8^	4.4	(1.3)
Networks and Supports					
24. Religion/spirituality provides support.	2.3	(1.6)	-1.2^	3.5	(2.2)
Connectedness					
25. Connected Family.	3.9	(2.4)	-1.3^	5.2	(2.0)
Domestic Workload and Childcare Tasks					
30. Current degree of complexity/elaborateness of mothers' domestic workload and schedule.	2.7	(0.8)	-.6^	3.3	(1.2)
31. Time availability of mother for target child.	6.1	(1.2)	1.1*	5.1	(1.5)

Note: Significance levels are indicated as **p < 1 percent, *p < 5 percent; and ^p < 10 percent.

Appendix 4.J Early Start Participants' Documented IFSP Initial Concerns, Goals, and Achieved Goals by Early Start Usage Group

Topics	Initial Concerns						Initial Goals						Achieved Goal [b]					
	Low-User		High-User		Total		Low-User		High-User		Total		Low-User		High-User		Total	
	N	(%)	*N*	(%)	*N*	(%)	*N*	(%)	*N*	(%)	*N*	(%)	*N*	(%)	*N*	(%)	*N*	(%)
Sample Size	18		21		39		18		21		39		*Based on number in initial goals topic*					
Child Health/Development & Parenting [a]	14	(78)	17	(81)	31	(80)	13	(72)	14	(67)	27	(69)	0	—	5	(36)	5	(19)
Housing	7	(39)	6	(29)	13	(33)	8	(44)	5	(24)	13	(33)	3	(38)	2	(40)	5	(39)
Finances & Basic Needs	7	(39)	4	(19)	11	(28)	4	(22)	2	(10)	6	(15)	1	(25)	1	(50)	2	(33)
School	4	(22)	6	(29)	10	(26)	10	(56)	6	(29)	16	(41)	0	—	2	(33)	2	(13)
Work	6	(33)	4	(19)	10	(26)	5	(28)	5	(24)	10	(26)	2	(40)	2	(40)	4	(40)
Childcare	5	(28)	4	(19)	9	(23)	1	(6)	3	(14)	4	(10)	1	(100)	3	(100)	4	(100)
General Well-Being	2	(11)	3	(14)	5	(13)	0	—	0	—	—	—	0	—	0	—	—	—
Mother's Health	2	(11)	3	(14)	5	(13)	0	—	3	(14)	3	(8)	0	—	3	(100)	3	(100)
Father of Baby & Family	0	—	4	(19)	4	(10)	0	—	1	(5)	1	(3)	0	—	0	—	—	—
Transportation	1	(6)	1	(5)	2	(5)	1	(6)	2	(10)	3	(8)	0	—	1	(100)	1	(50)

Note: Data collected gathered from sub-sample record reviews. Participants could have more than one concern and more than one goal. The average number of concerns was 2.8 for the low-user group and 3.2 for the high-user group. The average length of involvement in the Early Start program for high-users was 20.9 months (*SD* = 8.6), three high-users were still enrolled in Early Start at the time record reviews were conducted. The average length of involvement in the Early Start program for low-users was 6.2 months (*SD* = 1.3).

[a] This category includes an unduplicated count of participants who expressed more than one concern and goal related to child health, child development and parenting. The duplicate count in which there were. Documented child/parenting concerns ranged from 1 to 3, averaging 1.7 concerns per person.

[b] Six low-users achieved 7 goals and twelve high-users achieved 19 goals.

Appendix 4.K Examples of IFSP Initial Child-Related Concerns, Goals, and Achievement Strategies for Achievement

Initial Concerns	Goals	Strategies
•Growth and development (High-User)	• Promote positive growth and development	•Doctor appointments; parents' activities; ASQs; provide age appropriate toys; books; libraries (via libraries, bookstores, community centers, parks)
• Child Grow healthy (Low- User)	• Want child to grow up right and be healthy	• Regular doctor visits/immunization; participation in ES curriculum; proper nutrition for mom and baby; provide stimulting environment
• Normal growth & development (Low-User)	• Grow and develop normally	• Keep all doctor appts, get all immunizations as scheduled, continue to meet with HV and obtain info on normal growth and development
• Maintaining good health, educational advancement for children (High-User)	• I want to help my child advance to walking	• Help child gain control over head and shoulders; help child learn to sit up alone; do leg strengthening exercises and massages; when ready; place child in walker
• Reading to child and playing with him (High-User)	• Read to child	• Choose a time during day or evening when he is alert and not fussy and read to him; read to him daily if possible; choose books or articles that are interesting to mom at this point because child only hears voice
• Knowing what to expect for my child's development (High-User)	• Help mom learn about baby's development	• Provide articles related to development; do ASQ on baby
• Toilet training (Low- User)	• Child to have a positive growing environment	• Keep baby clean; keep home clean; change diapers regularly; proper dental care for child; create special place for child; child-proof the home
• Child's health (High-User)	• Keep child healthy to overcome his asthma	• Take medication daily; keep child calm; not playing too hard; regular check-ups
• Nutrition (High-User)	• Promote proper nutrition	• Teaching aids regarding nutrition; get breastfeeding information
• Having a healthy baby & sleep through the night (High-User)	• Child eating correctly	• Feed by spoon; switch bottle, then spoon; try airplane game; read up on feeding correctly

Appendix 4.L Participants with an IFSP Education Goal, but School was not an IFSP Concern or Motive for Accepting Early Start

Program User Level	Motives for Accepting Early Start:	Mother's IFSP Initial Concerns	Mother's IFSP Goals	Did mother get what she wanted from Early Start?
Low-User	• Baby supplies: crib, diapers, milk • A bed	• Child is healthy • Child's development • Obtaining furniture	• Child's good health and development • Mother to re-enroll in college • To obtain a driver's license	Yes *They got me a crib, diapers, milk and different stuff like that…She helped me a lot. She did way more than I thought.*
Low-User	• Baby supplies: crib, diapers, clothes • Housing • Parenting Information	• Baby necessities • Housing • Find a job	• Keep child healthy and safe • Return to school • Find a job	No: *He wasn't helping so I knew no one else was going to help me… [they] didn't help me none so I didn't really care for that program.*
Low-User	• Baby supplies: crib, diapers, clothes • Housing • Parenting Information	• Baby clothes, crib • Housing • A support system	• Find assistance for a baby bed and clothes • Housing • Register for college full-time	No: *It would've been more helpful probably if I didn't work… they couldn't actually offer the help that I needed"*
Low-User	• Child development information • Parenting Information	• Child development • Being a good parent • Child activities	• Keep children healthy and safe • Further my education • Find a different place to raise my children	No: *…Early Start worker I had, he wasn't really resourcing me to anything… I would ask him what is it you can help me with and he would say; 'what do you need?'*
Low-User	• Baby supplies: crib, diapers • A bed • Finances	• Having enough funds to get through each month • Child staying healthy	• Keep child healthy and safe • Go back to school	No *They were to supply me help [my baby] with clothes and stuff like that…I received the bed, but I didn't receive anything else.*
Low-User	• Baby supplies (clothes, toys) Child development	• Child's development, health and education • Housing	• Keep child healthy and safe • Finding an apartment • Go back to school	No: *They didn't really give me too much for him…I think I just got the hand-outs… on what they should be doing at what age.*

Note: One participant did not complete the programmatic questionnaire portion of the interviews

Appendix 4.M Examples of IFSP Initial Financial and Basic Needs-Related Concerns, Goals, and Achievement Strategies for Achievement

Concerns	Goals	Strategies
• Budgeting & Utility Payment Assistance (Low-User)	• Set budget for family	• Gather materials (folders, envelopes, markers), divide expenses into categories, expect the unexpected, pay by due dates - set dates, work on budget form on weekly basis
• Getting baby furniture and some things for the house (High-User)	• We need a home, with the appropriate furniture and appliances to meet the baby's needs	• Get list of resources for furniture and applicances, Check future housing arrangements to get move in date, Mom will call resources, Mom to finalize moving deal with realtors
• Employment status, on leave without pay. Getting pambers and a crib (High-User)	• I have financial issues - getting organized	• Sign up for welfare benefits, WIC assistance, Food card, need to access last paycheck
• Getting housing, finding a job, my baby's health (Low-User)	• I would like to have a new job & I want stable housing for me and my child	• Look in the paper, fill out applications, interviewing • Look in the paper for housing, apply for CMHA, look at places
• Housing, getting a car (Low-User)	• I would like my own place	• Figure out how much rent is affordable, look into housing options that fit the budget, visit the options, choose the best, sign lease, pay deposit and first month's rent, move

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Chapter 5
Increasing Capacity and Enhancing Quality in Cuyahoga County's Family Child Care System

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Chapter Summary

The Family Child Care Homes component of the Early Childhood Initiative was intended to increase the number of certified family child care homes in Cuyahoga County by 1,025 and improve the quality of care in those homes[1]. Starting Point, the County's Child Care Resource and Referral Agency, and its regional partners recruited, trained, and delivered technical assistance to family child care providers. The evaluation sought to determine if the component met its capacity building goal and whether the quality of child care had improved over time as a result of home-based technical support. Additionally, the evaluation examined the nature of the work of technical assistance providers, the technical assistance provided to a small sample of providers, and the decisions made by parents when choosing family child care.

Between July 1, 1999 and June 30, 2004, a total of 1,528 family child care homes were certified to provide care, a number that exceeded the component's goal. As a result of attrition, a total of 939 ECI providers remained certified by July 2004. More than 25,000 technical assistance visits were delivered to the ECI-Certified providers with almost 11,000 of the visits dedicated to improving the quality of care. About 82% of ECI-Certified providers received at least one post-certification technical assistance visit of any kind while 70% of ECI providers received at least one post-certification quality enhancement visit over the 5 year period. ECI providers who received quality technical assistance visits received an average of 10 quality visits between July 1, 1999 and June 30, 2004.

Capacity building efforts included a focus on assisting providers in becoming viable small businesses. Average income per provider from child care subsidies increased over the 5 years. In March 2000, the mean monthly income for providers certified after July 1, 1999 was $1,524. By March 2004, ECI-Certified providers were earning an average of $2,497 per month. Increases in income are a result of increases in the average amount paid per child as well as increases in the average number of children in care.

Observations of a random sample of 95 family child care homes revealed that the overall quality of care remained poor even after receipt of technical assistance aimed at improving quality. Analysis showed that quality of care was significantly related to provider level of education, number of children in care, and number of quality visits received. Although the number of quality visits was significantly and positively related to quality, the effect was small.

After 5 years of the ECI, the two primary goals of the FCCH component have met with mixed success. The effort to build child care capacity was overall a success despite provider attrition. The goal of increasing quality of caregiving through home-based technical assistance proved difficult and suggests that other program models for enhancing the quality of caregiving may need to be considered.

[1] Family child care is regulated child care provided to six or fewer children under the age of six, in the home of the provider. In this report, such care may be called home based, Type B, or family child care.

Introduction

Cuyahoga County's Early Childhood Initiative includes an effort to expand and improve the provision of family-based child care as a strategy for meeting the child care needs of County families, particularly those entering and remaining in the workforce as a result of the 1996 welfare reform legislation (Personal Responsibility and Work Opportunity Reconciliation Act – PRWORA [*Pub. L. 104-193*]). Subsidies to states and local jurisdictions have been available through the federal Child Care Development Fund. Additionally, states have been able to use a portion of their Temporary Assistance for Needy Families (TANF – the program created by PRWORA) funding to increase the accessibility of subsidies. TANF work participation demands meant that many families who had used relative or other private forms of child care would want to use the child care subsidy system, that local child care systems would have to expand, and that parents would have to be able to trust the reliability and safety of the new child care settings they used (Adams, Snyder, & Sandfort, 2002; Blank, 1997; Blau & Tekin, 2001; Cabrera, Hutchins, & Peters, 2002; Coley, Chase-Lansdale, & Li-Grining, 2001; Fuller & Kagan, 2000; Michel, 1999).

While many policy analysts have been focused on accessibility and reliability of child care services, other researchers and advocates have been concerned about the quality of care available to low-income and other families (Brayfield, Deich, & Hofferth, 1993; Casper, 1995; Fuller & Kagan, 2000; Galinsky, Howes, Kontos, & Shinn, 1994; GAO, 1994; Gilbert, Berrick, & Meyers 1992; Hofferth, 1995; Kisker & Ross, 1997; Kontos, Howes, Shinn, & Galinsky, 1995; Larner, 1994; Meyers, 1995; Michel, 1999; Mitchell, Cooperstein & Larner, 1992; Phillips, 1995; Vandell & Wolfe, 2000). Studies of care available to low-income families show that the quality of provider-child interaction is often poor, creative play and activities may be discouraged by providers, physical facilities lack resources for children and may be unsafe, and discipline techniques are limited.

A "high quality early child care setting is one that supports optimal learning and development" (Marshall, 2004, p. 166). Professionals have developed a variety of tools and strategies to measure child care quality. Structural indicators examine characteristics that can be regulated, such as child-to-provider ratio, the overall number of children in the setting, and education or training of staff. Process indicators examine the features of care in a setting, such as the interactions between the caregiver and the child, the approach and emotional tone of caregiving, appropriateness of activities, and overall learning activities available to children. Most research confirms that relationships exist between structural characteristics, process indicators, and optimal child development (Blau, 1997, 2000; Love et al., 2003; Marshall, 2004; National Research Council and Institute of Medicine, 2003).

No matter the measure used, many recent national studies show that most child care quality is fair at best. A report on more than 600 child care settings (NICHD Early Child Care Research Network, 2000) found that over 60% of settings visited were fair or poor in quality. Kontos et al. (1995) reported that 91% of the family child care providers in their sample provided poor or fair quality care based on observational scores from the *Family Day Care Rating Scale* (*FDCRS*) (Harms & Clifford, 1989). Of the family child care homes visited as part of the North Carolina Smart Start Evaluation (Peisner-Feinberg, Bernier, Bryant, & Maxwell, 2000), 92% had *FDCRS* scores in the poor or fair range of quality. In general, research shows

that family child care homes tend to score lower on measures of child care quality than do child care centers (Fuller & Kagan, 2000; Vandell & Wolfe, 2000).

Specific questions have been raised about the dimensions of child care quality, about the connection of quality to child development, and about the intricacies of the relationships among parents, providers and children (see Besharov & Samari, 2000 and Vandell & Wolfe, 2000 for extensive discussion of some of these questions). Parents' definitions of quality are often at odds with definitions put forth by child care professionals and advocates (Kontos et al., 1995). Parents often desire a provider who is warm and loving (Kontos, Howes, Shinn, & Galinsky, 1997). They want a provider who will communicate with them and is flexible and understanding of their needs (Cabrera et al., 2002; Fuller, Kagan, & Loeb, 2002). Mensing, French, Fuller, and Kagan (2000) found that parents desired a provider who is trustworthy and whose child care setting feels safe. Only when these criteria are satisfied do parents talk about the importance of a developmentally appropriate learning environment, convenience, and structure of the setting – although these are the aspects of child care quality assessed in most professional measures of child care quality.

Vandell and Wolfe (2000) present a case for significant investment of public funds to improve the quality of child care. They identify many strategies that are available to the public sector. One strategy calls upon the public sector to "increase the pool of well-qualified individuals who enter and remain in the field of early childhood education through the kinds of tuition subsidies and incentives traditionally used in nursing, physician, and teacher training when shortages appear" (p.6). Taylor and Bryant (2002) report that several factors are related to improving the quality of child care. These include strong leadership in the quality improvement program and in collaborating organizations; strategic planning for a system of quality improvement programs; organizational support for the training and development of child care staff; a system of financial rewards for providers who obtain higher education and improve the quality of care; technical assistance, conducted on-site and customized to the child care program's needs; and strong, effective collaborations with community organizations and programs.

The Family Child Care Homes component of ECI was influenced by several factors: implementation of TANF and the attendant local program (Ohio Works First), which required recipients in the former welfare system to obtain employment and participate in work activities; lack of space in existing child care settings to meet the needs of those individuals returning to work and training; and a recognition that many young families prefer family child care for their young children. The County recognized that it needed to expand availability of care, and that it could use a public-private partnership strategy to develop child care resources.

The ECI's goal of increasing capacity and improving quality of the family child care home system in the County in a short amount of time was admittedly ambitious. The County established standards for child care providers that were higher than those in other counties and these standards easily could have resulted in attracting fewer providers than in other areas of the state. These standards included additional hours of training and voluntary technical support visits, which were implemented to improve quality of care. The County was successful initially in achieving the capacity goal and moderately successful in retaining providers. In fall 2001,

after initial capacity goals had been achieved, the County obtained a waiver from the Ohio Department of Job and Family Services, allowing it to slow the rate at which it responded to certification requests. Currently there is a waiting list of prospective providers seeking certification.

Figure 5.1 shows the intervention strategies and intended outcomes of the FCCH component. As indicated, the component was expected to expand the number of slots so that capacity was enhanced and there were sufficient homes to meet the demand for family child care settings. Starting Point hoped to reduce the amount of time required for provider certification as one strategy for increasing the number of providers. The organization also expected that the Regional System it developed (described below) would help providers to attain a more professional orientation to the work and to use other training and supportive services. The efforts of staff (technical assistance providers and training staff) in the Regional System were expected to result in increases in the provision of developmentally appropriate care over time. The evaluation focused on examining the early and intermediate outcomes of the provider-oriented strategies. In the first years, the evaluation reported on capacity-building and quality enhancement. For the current evaluation period, the researchers have focused on understanding the quality enhancement intervention.

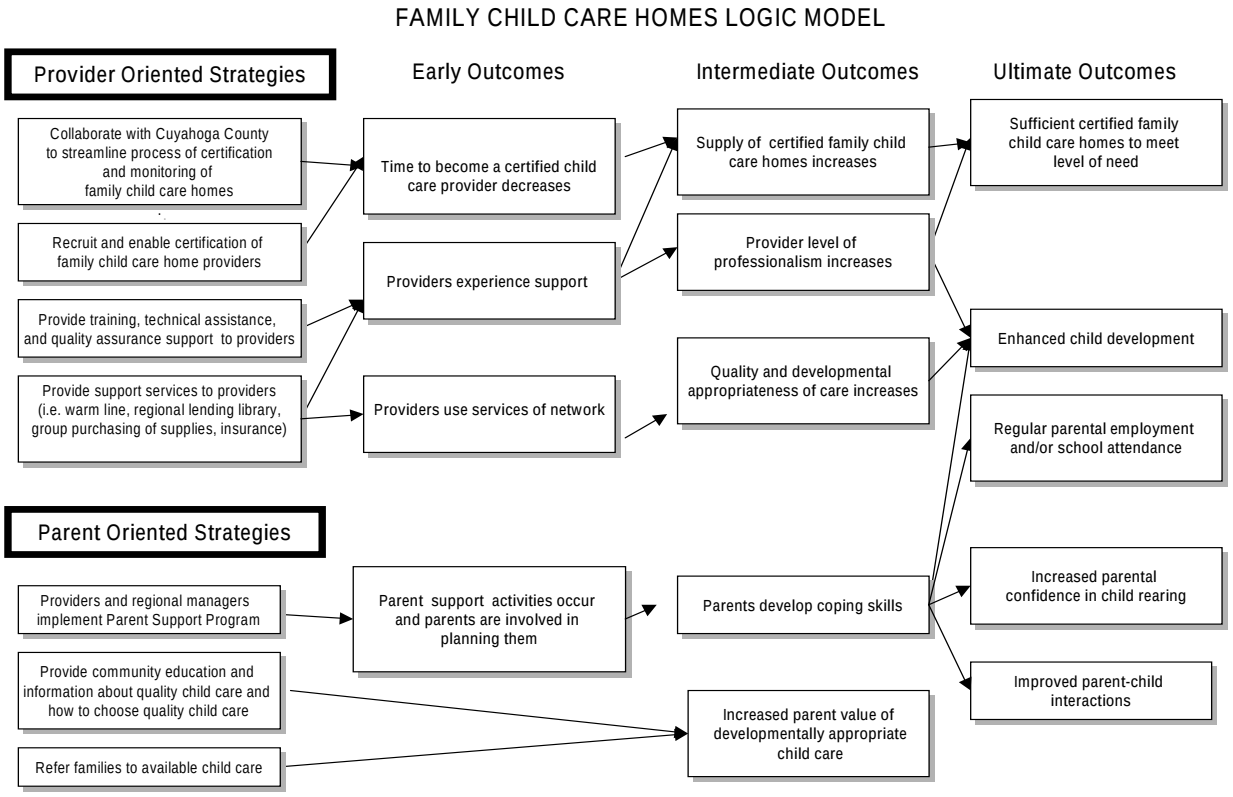


Figure 5.1 Family Child Care Homes Logic Model

The Regional System – Its Plan for Building Capacity and Improving Quality

As part of the ECI, Starting Point, the County's Child Care Resource and Referral Agency, was charged with coordinating the system of family child care provider recruitment, training, and support. Starting Point seeks to provide information, enhance quality, increase resources, and stimulate the growth of child care services in Northeast Ohio (Starting Point, 1999). Starting Point contracted with four regional organizations in its work for ECI: (1) Applewood Centers, Inc., (2) the Children's Hunger Alliance (formerly the Ohio Hunger Task Force), (3) Early Childhood Options, and (4) Neighborhood Child Care, Inc. In March 2004, following a merger and shift in its priorities of work, Applewood Centers left the Regional System and its child care homes were divided between Children's Hunger Alliance and Neighborhood Child Care, Inc. The Regional System provides training and technical supports intended to increase the capacity and enhance the quality of family child care in the County. As manager of the Family Child Care Homes (FCCH) Regional System in Cuyahoga County, Starting Point focused its efforts in several areas to develop and implement the capacity building and quality enhancement service of the Regional System:

- Expansion of the number of child care homes to achieve 1,025 providers.
- Creation of neighborhood-based services.
- Implementation of services for typically developing children as well as those with special needs.
- Implementation of training, monitoring, and other supports that were intended to improve the quality of child care services.
- Inclusion of family child care homes certified prior to the start of the ECI in July 1999.
- Improvement of child care quality and maintenance of services to providers.

The following discussion highlights the key elements and objectives of the FCCH component through June 2004.

Creation of New Certified Family Child Care Homes:

The goal for the Regional System was to secure certification for 1,025 homes during the first year of the Initiative. The goal was reached during the Initiative's second year with 1,528 homes eventually being certified. Regional organizations were to assure care availability for typically developing children and for children with special needs (children who would need assistance and support to be retained in a specific child care setting). For the most part, efforts were concentrated on typically developing children, although additional supports and assistance were given to providers who cared for children with special needs if requested.

Technical Support and Quality Assurance/Care for Kids:

Initially, Regional staff members were to deliver a minimum of 15 pre- and post-certification technical support visits to each new provider to assist her in offering developmentally appropriate care and in operating a small business. In these visits, staff

members were to provide a curriculum of varied activities and experiences to encourage the provider in her work with the children in her care. During subsequent years, the number of visits was reduced and included four USDA Child and Adult Care Food Program visits. At least one assessment visit using the *Family Day Care Rating Scale* (*FDCRS,* or what is referred to by the technical assistance staff as the "Thelma Harms" – a co-author of the scale, who had provided training to the technical assistance staff) (Harms & Clifford, 1989) also was required for each new family child care home provider, once certification was completed. In November 2000, Starting Point launched the quality enhancement program known as "Care for Kids." Starting Point implemented Care for Kids within the Regional System, making the visits available to Pre-ECI-Certified providers in July 2001. During years 4 and 5 of the ECI, technical assistance staff members were required to conduct a total of eight visits. These included three food program visits, two assessment visits, and three quality enhancement visits. Table 5.1 reviews the required visits and activities of the component. It is important to note that enrollment and participation in the quality enhancement services, Care for Kids, by either the ECI-Certified or Pre-ECI-Certified providers has been purely voluntary.

Table 5.1 Required Technical Assistance Visits and Other Contractual Requirements for the Regional System

ECI Project Year All years = 7/1 – 6/30	Visits Required	Other Requirements
1999 – 2000	15 pre- and post-certification visits	Build capacity to 1,025
2000 – 2001	11 visits including 4 food program visits	Official Care for Kids voluntary technical assistance visits begin; assessment visits using the FDCRS begin
2001 – 2002	11 visits including 4 food program visits	Pre-ECI-Certified providers receive TA visits; financial incentive implemented for providers scoring 5 or higher on FDCRS
2002 – 2003	8 visits – 3 food, 2 assessment, and 3 quality enhancement	
2003 – 2004	8 visits – 3 food, 2 assessment, and 3 quality enhancement	State regulations: 6 hours of in-service training annually beginning in 4/03

Source: Starting Point.

Several strategies were identified for use within the Regional System to extend the quality enhancement services. The project sought mentors and master teachers to assess quality and model appropriate practice. In-service training and an annual training conference offered additional opportunities to promote quality. The Regional offices had lending libraries of educational toys and materials that were used as long as supplies lasted. A reimbursement incentive was implemented to increase payments to some providers who demonstrated a specific level of quality as determined by a *FDCRS* assessment (completed by a Starting Point consultant with significant child care experience). Curricular guides were provided to technical assistance

staff, and in June 2003, staff was trained in and began implementing *Supporting Care Providers through Personal Visits* (2002), a curriculum developed by the Parents as Teachers National Center.

Parent Education and Support:

The Regional System was to provide information and referral services for parents, including support activities and information regarding developmentally appropriate parenting and care for children, children's health insurance, and other services (i.e., Early Start and Early Intervention, Special Needs Child Care Initiative, Starting Point's Child Care Training program, Women, Infants and Children (WIC) program, and family planning). Family child care providers would also learn about strategies for encouraging parent-determined education and support activities. Child care provider training and technical assistance would assure that providers had this information to share with parents.

Administration:

The System established a management information system (MIS) and each of the regional organizations was expected to provide required information in a timely fashion. The MIS would collect, update, and report data on each region's operations, activities, and outcomes. Each organization was expected to submit required program and financial reports.

The Evaluation Plan

The study of the ECI Family Child Care component evaluates the dual objectives of increasing the number of family child care homes in the system and enhancing the quality of care in those homes. Several sub-studies comprised the mixed-methods design that used administrative and primary data sources to inform the evaluation findings. In the following section, the methods used in the study are described. The methods section is followed by results of the analyses. Finally, a discussion of the evaluation results completes the chapter.

Methods Used in the Study of Family Child Care

Several types of data and analyses have been used to determine if the FCCH component achieved its capacity building and quality improvement objectives. Data sources, methods, and sample groups are described in the following sections.

Data Sources and Collection:

Administrative Data

Starting Point provided evaluators with administrative data sets with information about family child care providers certified in Cuyahoga County during the first 5-year period of the ECI. Data included demographic information such as provider name, address, date of birth, education, gender, and date of certification as well as regional location. Additionally, information was available about provider participation in the voluntary quality enhancement services, Care for Kids, as well as in training activities. These data sets have been updated quarterly during the period of the evaluation. Data provided descriptive information for discussion of the population of FCCH providers, for mapping providers' locations, and for enumerating pre- and post-certification technical support visits. The data sets were also used to select a random sample of providers for evaluation of the quality of caregiving. During this phase

of the study, we have used the data sets to provide some comparative information regarding providers certified before the ECI was implemented.

Cuyahoga County's child care voucher data set provided a second administrative data source. The data set contains information about payments made to child care providers and numbers of children for whom payments are made. These data were used to analyze payments to family child care providers during the ECI.

Provider Data for Quality Study

Observations of the quality of caregiving were collected from a stratified, randomly selected sample of 95 family child care providers certified during the ECI. The sample was identified to assess changes in the quality of caregiving as a result of the intervention, Care for Kids.

The sample of 95 providers was a group of ECI-Certified providers who were observed at baseline (Time 1) and then again 12-months later (Time 2) after they received technical assistance aimed at improving the quality of their caregiving. Data on 68 providers were presented in the Phase I report in December 2002. However, because data on the quality of caregiving were collected through March 2003, this report includes the summary findings from the final sample of 95 providers. The 27 additional providers were observed by the same raters as the initial 68 providers. Inter-rater agreement was assessed for both measures of child care quality for the sample of 95 providers. While a consensus score was the value entered into the data file for analysis, inter-rater reliability as measured by Cohen's kappa was .55, or fair. Detailed information about the sample selection and the process of data collection can be obtained in the Phase I Family Child Care Homes Final Report (Pearlmutter, Grayson, & Withers, 2002).

During each of the two observations of providers, data collectors completed two assessment measures, the *Family Day Care Rating Scale* (*FDCRS*) (Harms & Clifford, 1989) and the *Caregiver Interaction Scale* (*CIS*) (Arnett, 1989), which are widely used measures of the process quality of child care (i.e., the quality of the interactions between children and peers and caregivers and the nature of the learning experiences available to children). The *FDCRS* assesses the characteristics of the physical environment as well as the learning experiences of the children in care. There are six subscales with a total of 32 items. Subscales include space and furnishings for care and learning, basic care, language and reasoning, learning activities, social development, and adult needs. Scores on the *FDCRS* range from 1 (*inadequate*) to 7 (*excellent*) with scores from 1 to less than 3 considered "inadequate" or "poor", scores from 3 to less than 5 considered "minimal" or "fair", and scores from 5 to 7 considered "good".

The *CIS* specifically rates the quality of a provider's interaction with children on a scale from 1 (behavior is "not at all" evident) to 4 (behavior is "very much" evident). The *CIS* includes 26 items relating to four subscales: sensitivity (the provider is warm, attentive, engaged), harshness (the provider is critical, punitive), detachment (the provider is minimally interactive, minimally interested in the children), and permissiveness (the provider ignores misbehavior or minimally supervises the children in her care). Higher ratings on the *CIS* are associated with

providers whose interactions with children are very sensitive, not very harsh, not very detached, and not very permissive.

Technical Assistance Data

A primary emphasis of the Phase II evaluation of the FCCH component was on the nature of the technical assistance being delivered by the Regional Family Child Care Home Regional System. Observations of a convenience sample of 22 family child care providers and their technical assistance providers occurred between February 2004 and September 2004.

Visits to observe technical assistance provision were arranged with the technical assistants from each of the three participating regional groups and the participating child care providers. Visits generally lasted 90 minutes. Two observations of the same Technical Assistant/Child Care Provider dyad were completed for 21 of 22 dyads. A third visit to assess quality of caregiving was also completed with 20 of the 22 providers. Because the sample was both small and unrepresentative of the population of family child care providers, data from the quality assessment present limited insight into the quality of caregiving in the population of providers. Rather, the data provide insight into a unique sample of providers who were recruited and willingly agreed to participate.

A Technical Assistance Evaluation Form (Appendix 5.1) was developed based on evaluation forms used to assess student teacher and clinician competency. Areas of assessment include session planning, session execution, session conclusion, TA teaching methods, TA feedback to child care providers, TA relationship with child care provider, TA relationship with children, and TA professionalism. A total of 50 items are included with each item rated on a 3-point scale where 1 indicates the behavior was never present, 2 indicates the behavior was sometimes or somewhat present, and 3 indicates the behavior was consistently present. Quality of caregiving, assessed during a third visit without the technical assistant, was measured using the *FDCRS*. Child care providers received $100 in gift cards to a local grocery store for participating in the study. TA providers were not compensated for their participation.

Focus Group Data

A focus group protocol was developed to be used with a sample of technical assistance providers who visited homes of the child care providers in the Phase II sample. Staff members were asked to talk about their work and to indicate what had changed over time in their work as technical assistance providers. We asked about their implementation of the new curriculum (Supporting Care Providers through Personal Visits) and its value for work in visits. We discussed challenges in the work and solicited their ideas for making technical assistance more effective.

A facilitator and co-facilitator were present during the group session which was held in a meeting room in one of the Regional offices. The facilitator introduced the research and obtained consent. She asked the questions, probed for responses, reviewed the content of the discussion, and thanked the participants. The co-facilitator managed the recording equipment, and used her knowledge of the technical support provision to ask probing questions that added richness and specificity to the discussion. The group lasted approximately 2 hours.

The session began with introductions and a discussion of informed consent. After consent forms were signed, the group's purpose was reviewed and the questions were asked. Approximately 20 minutes was allowed for discussion of individual questions. About 15 minutes prior to the group's ending time, the discussion was concluded, the contents were reviewed with participants, and they were asked for additional input. At the end of the discussion, participants were thanked and provided with passes to the Rock and Roll Hall of Fame and Museum. The session was then concluded. Gift certificates in the amount of $20 were later mailed to the participants.

Parent Interview Data

A phone questionnaire was developed and used with a sample of parents recruited by child care providers and parents using family child care. Data were collected in response to eight questions. Parents were asked, for example, to identify factors they looked for when choosing child care, factors that influenced their decision to use family child care, characteristics that define quality child care, and factors related to their current child care situation that help them meet work and family obligations. A research assistant contacted parents who had agreed to participate. She obtained consent, reviewed each question, and then concluded the interview. The interviews lasted 20 to 30 minutes. At the end of the interview, parents were mailed two $20 gift cards to a local grocery store to compensate them for their time.

Data Analyses:

Population and Visit Data Analyses

Starting Point's administrative data set and the County's child care voucher data set were examined to provide information about Regional expansion of family child care slots, pre- and post-certification visits, and payments to child care providers. Descriptive statistics were used to explain capacity building efforts and to describe the TA visits. In addition, for this report we examined data for providers certified prior to the ECI and show comparisons between these and ECI-Certified providers.

Quality of Provider Caregiving Data Analyses

Observation and interview data were analyzed using descriptive statistics, correlation measures, and regression analyses. These analyses allowed description of the quality of the child care homes and understanding of the factors that best predicted quality of care in the sample.

Technical Assistance Data Analysis

Data collected during the observations of technical assistance were analyzed using descriptive statistics. The analyses describe the frequency of occurrence of different types of behaviors relevant to the delivery of technical assistance.

TA Focus Group Data Analysis

The group discussion was audio-recorded and transcribed. The transcription was reviewed to identify specific responses to questions, cross-cutting themes, and underlying issues that emerged from the discussion. The facilitator and co-facilitator reviewed what they had heard and reached consensus on responses to questions. In addition, they discussed themes and developed agreement about underlying issues.

Parent Interview Data Analysis

Parent responses to interview questions were reviewed to identify content as well as themes. Particular emphasis was placed on the ways in which parent definitions of child care quality related to those of professionals in the field of early care and education.

Sample Descriptions:

ECI-Certified FCCH Provider Population and Provider Sample of 95

The provider data set from Starting Point contains demographic information for all of the family child care homes in Cuyahoga County. For purposes of the sample of 95 providers whose quality of caregiving was assessed, the population of providers represents only those providers certified during ECI, since it was from that population that the sample was randomly selected. Data for a total of 1,528 ECI-Certified providers are included. Two providers whose residences are physically located outside Cuyahoga County are included because they provide care to children from Cuyahoga County. Table 5.2 shows the characteristics of the population of providers certified during ECI and the sample of 95 providers who participated in the study of child care quality.

Education Levels: Data on the highest level of education as reported by the providers were available for 1,495 providers. Based on these data, it was found that 12% of the providers reported having attended some high school or less, 56% reported having a high school diploma or GED, about 29% reported attending some college, and about 3% graduated from college or had post-graduate education. For the providers in the quality study (n = 95), 20% reported having attended some high school or less, 33% reported having a high school diploma or a GED, 42% attended some college or post high school training, and 5% obtained a college degree or more.

Age and Gender: Age at time of certification was available for 1,508 providers in the population of family child care providers certified during ECI. Ages in the administrative data set ranged from 18 years to 77 years, with an average age of 37 years. Ages ranged from 22 years to 68 years for providers in the observed group, with an average of 39 years. With regard to gender, 98% of 1,512 providers are female. In the sample of 95, 100% are female.

Race and Ethnicity: Data regarding race and ethnicity were available for 1,373 of the ECI-Certified providers. In the provider population, 83% were African American, 11% were Latino, and 5% were White. Less than 1% considered themselves to be Asian or another category. In the observed sample, 80% were African American, 9.5% were Latina, and 10.5% were White. None of the providers in the sample of 95 providers was Asian or another category.

Enrollment in Care for Kids and Receipt of Visits: Eighty-nine of the 95 sample providers (94%) were enrolled in the Care for Kids quality enhancement program at least once between July 1999 and March 2003. These data can be compared with visit data through March 2003 for the population of providers where 1,012 of 1,501 providers (67%) were enrolled in Care For Kids at least once through March 2003.

Table 5.2 Characteristics of the Population of Family Child Care Providers Certified During ECI, the Quality Sample of 95, and the Technical Assistance Sample of 22

	Population	Quality Sample	TA Study Sample
	(*N* = 1,528)	(*n* = 95)	(*n* = 22)
Education Level[a]			
Some HS or less	12%	21%	4%
HS diploma or GED	56%	31%	45%
Some college	29%	43%	41%
BA/BS or higher	3%	5%	10%
Gender[b]	98% female	100% female	100% female
Age[c]	37 years	39 years	39 years
Race and Ethnicity[d]			
African American	83%	80%	91%
Latino	11%	10%	4.5%
White	5%	10%	4.5%
Asian or Other	1%	0%	0%

[a] *n* = 1,495 [b] *n* = 1,512 [c] *n* = 1,508 [d] *n* = 1,373

Source: Starting Point Data. Analysis of data by Center on Urban Poverty and Social Change.

Data about provider receipt of the intervention, i.e., quality visits and training, were examined. Providers in the sample who received quality visits *(n* = 89) received an average of 17 quality visits while the population of ECI-Certified providers that received visits (*n* = 1,054) received an average of 11 quality enhancement visits between the beginning of the Initiative, July 1999, and the study's conclusion, March 2003. Table 5.3 presents data on types of quality visits received by the provider sample.

Table 5.3 Visits by *FDCRS* Subscales for the Sample of 95 Providers

Quality Visit Type	Number of Providers	Mean Number of Visits	*SD*	Minimum	Maximum
Quality Visits Between T1 and T2	83	7.17	3.18	1	15
Quality Visits Since Certification	89	17.25	7.62	3	42
Assessment	85	3.74	1.54	1	7
Space & Furnishings	71	2.04	1.24	1	7
Basic Care	79	3.57	2.25	1	12
Language & Reasoning	50	2.08	1.18	1	6
Learning Activities	82	3.82	2.32	1	11
Social Development	60	2.55	1.93	1	9
Adult Needs	55	1.85	1.19	1	6
Provisions for Exceptional Children	25	1.4	0.82	1	4

Source: Starting Point Data. Analysis of data by Center on Urban Poverty and Social Change.

Types and number of hours of training attended by providers in the sample and the population of providers were also calculated. The number of hours rather than number of trainings were chosen because of the variation in the total amount of time devoted to different trainings. Some training sessions lasted 1 hour others an entire day. Results as shown in Table 5.4 reveal that the sample providers, on average, attended more training than did the population. Additional analysis revealed that the most popular topics based on attendance, however, were the same for both groups. The most popular training topics included "Taxes and Fiscal Management for FCCH", "Nutrition, USDA/CACFP", and "Orientation".

Table 5.4 Number of Training Hours Attended by FCCH Providers

	Population	Quality Sample
	(*n* = 830)	(*n* = 78)
Mean Training Hours	13.53	15.00
Median Training Hours	9.0	11.25
Mode	2.0	4.0
SD	17.09	13.25
Range	1 to 206	1 to 60

Source: Starting Point Data. Analysis of data by Center on Urban Poverty and Social Change.

Finally, because providing child care was a work option offered to individuals moving from cash assistance to work, the percentage of providers in the population and in the sample who received cash assistance during the 12 months prior to certification was examined. Records indicate that 32% of the population and 24% of the sample received cash assistance during the year before becoming certified as a family child care provider.

Overall, these data on education, age, gender, race and ethnicity, and quality visits for the ECI-Certified providers suggest that the sample of 95 providers is broadly similar in terms of demographics as the population of providers, but received, on average, more quality visits aimed at increasing quality of caregiving and attended more hours of training.

Pre-ECI-Certified FCCH Provider Population

The provider data set from Starting Point also provided demographic information for Cuyahoga County family child care homes certified prior to the ECI. Data for a total of 948 providers are included. Table 5.5 shows the characteristics of the population of providers certified prior to the ECI.

Education Levels: A total of 865 providers provided information about educational attainment. Fifteen percent of the providers reported having attended some high school or less, 57% reported having a high school diploma or GED, about 24% reported attending some college, and about 4% had graduated from college or had post-graduate education.

Gender and Age: Almost all, or 99%, of the Pre-ECI-Certified providers were female. Age was reported at the time of certification and current ages for these providers could not be determined.

Table 5.5 Demographics of Pre-ECI Providers (*N* = 948)

	All Pre-ECI-Certified FCCH Providers
Education Level	(*n* = 865)
Some HS or less	15%
HS diploma or GED	57%
Some college or post HS training	24%
BA/BS or higher	4%
Gender	99% Female
Race	(*n* = 741)
African American	92%
Latino	4%
White	3%
Asian or Other	1%
Care for Kids Participation	50% participated at least once

Source: Starting Point Data. Analysis of data by Center on Urban Poverty and Social Change.

Race and Ethnicity: Data regarding race and ethnicity were available for 741 providers. Ninety-two percent were African American, 4% were Latino, and 3% were White. One percent was Asian or Other category.

Enrollment in Care for Kids: Half of the Pre-ECI-Certified providers had participated in Care for Kids, the quality enhancement program, at some time during the ECI.

Overall, ECI-Certified providers were similar in education but were less likely to be African American than providers certified prior to the start of ECI.

Providers certified prior to the ECI reported having appreciable experience providing child care (Table 5.6). Eighty percent of providers had been certified for 4 years or longer. Provider certification ranged from less than 1 year (*n* = 85, 9%) to 14 years or more (*n* = 3, 1%).

Table 5.6 Years Certified as Family Child Care Provider – Pre-ECI Providers (*N* = 948)

Number of Years Certified	Number of Providers	Percent of Providers
One or less	85	9
Two	41	4
Three	36	4
Four	34	3
Five	199	21
Six	162	17
Seven	74	8
Eight	83	9
Nine	68	7
Ten	26	3
Eleven	109	11
Twelve	13	1
Thirteen	15	2
Fourteen or more	3	1

Source: Starting Point Data. Analysis of data by Center on Urban Poverty and Social Change.

Participants in the Study of Technical Assistance

The study of technical assistance had two groups of participants. One group was the technical assistants providing the intervention and the other was the child care provider sample. A total of 10 Technical Assistants (TAs) and 22 family child care providers participated in the study of technical assistance. The technical assistants were African Americans with high school degrees. All of the technical assistants reported participating in college level coursework and/or training offered by Starting Point aimed at improving their understanding of early care and education. Finally, more than half the group had provided technical assistance as part of the ECI for at least 3 years. All three regional groups providing technical assistance were represented in the study.

The second group of participants, the provider sample, was initially comprised of 13 providers from the sample of 95 providers who participated in the study of child care quality and 9 providers who were recruited specifically for the study by their technical assistant. The final sample size, however, was reduced to 20 because 2 providers dropped out of the study. One provider dropped out after the first observation while the second provider dropped out after the second observation. Table 5.2 (p. 5-12) provides demographic information about the family child care providers who participated in the technical assistance study. Other information collected about the sample revealed that all of the sample providers participated in the quality enhancement program, Care for Kids, and that 5 of the 22 providers were certified prior to ECI. Additional descriptive information about this sample of providers includes quality ratings completed during an additional visit to the child care providers. The quality of caregiving in this small sample of 20 family child care homes was found to be higher overall (than the overall quality of caregiving observed in the sample of 95), but also much more variable across the group. More specifically, the average *FDCRS* score for the sample of 20 providers was 3.64 (*SD* = 1.18). Scores ranged from 1.94 to 6.06. Seven of the providers received scores in the poor range (1 - 3.0), 10 providers received scores in the medium range (3.1 - 5.0), and 3 providers received scores in the good-to-excellent range (5.1 - 7.0). Additionally, while the population of pre- and post-ECI-Certified providers received an average of almost nine quality enhancement and assessment visits over the 5 years of the Initiative, the sample of 20 providers received an

average of 27 quality enhancement and assessment visits over the same 5 year time period. Finally, TAs rated their providers on several factors related to intentionality. Sixty-two percent of the providers were rated as providers who "put a lot of effort into implementing the ideas presented during TA sessions."

In summary, this descriptive information suggests that the sample of providers that participated in the study of technical assistance, while similar to the population in terms of race and ethnicity, age, and gender, was better educated. They also received more quality technical assistance visits than the population of pre- and post-ECI-Certified providers. Given that education has been found to be positively correlated with the quality of care and that the sample size was small and not randomly selected, the provider sample for the study of technical assistance was considered a sample of convenience only and not representative of the population of certified Type B family child care providers in Cuyahoga County. The providers in this sample likely represent a group of highly intentional providers, i.e., providers who are motivated to do the work it takes to improve the quality of their child care. As such, efforts with these providers are likely indicative of what technical assistance can accomplish in a "best case" scenario.

Focus Group Sample

Seven (of a possible 10) technical assistance staff attended the focus group. One of the technical assistance providers had a college degree. The others had taken some college courses. All were women and all were African American. Half of the participants had been child care providers prior to becoming technical assistants. They reported annual salaries of between $15,000 and $20,000 for full-time employment as technical assistants.

Parent Sample

Data from 50 parent interviews were included in the analyses. All parents used family child care for at least one of their children under the age of 6 years. Of the 50 parents, 20 pay privately for child care they receive in a family child care home. Twenty-seven parents use vouchers. Two parents use relative care and have no payments. One parent declined to provide information about how she pays for care.

Findings

The following sections describe the findings from the five sub-studies of the FCCH component of ECI. First, the efforts of Starting Point and the Regional organizations to increase family child care capacity are presented. Second, complete results from the Phase I study of quality are reported. Third, results from the study of technical assistance are described. Then, findings from the focus group discussion with TA providers are provided. Last, results of the parent interviews are presented.

<u>Building Capacity – Implementing the Regional System and Its Outcomes:</u>

Increase Number of Certified Family Child Care Homes

Clearly, implementation of the FCCH component increased the rate of new certifications for family child care homes. Table 5.7 shows the number of homes certified during each year of the Early Childhood Initiative. A total of 948 family child care providers were certified prior to the start of the ECI.

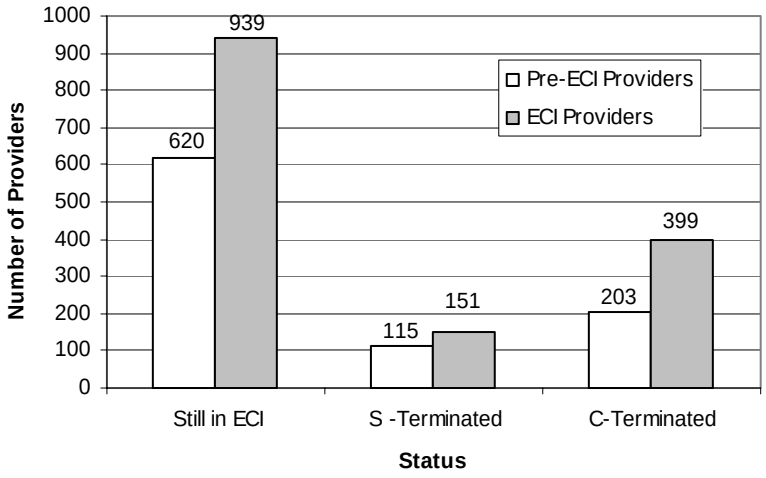
Table 5.7 Family Child Care Home Providers Certified by ECI Year

Year	Number of Providers	Cumulative Number
7/1/99 – 6/30/00	692	692
7/1/00 – 6/30/01	734	1,426
7/1/01 – 6/30/02	82	1,508
7/1/02 – 6/30/03	1	1,509
7/1/03 – 6/30/04	19	1,528
Total	**1,528**	

Source: Starting Point Data. Analysis of data by Center on Urban Poverty and Social Change.

Providers No Longer in the System: By June 30, 2004, 589 of the total 1,528 ECI-Certified providers no longer had contracts with the County to provide family child care. Most of the contracts (*n* = 399 or 68%) were terminated by the County. Primary reasons the County terminated contracts included an inability to inspect the child care home, inability to locate the provider, and health and safety issues such as missing or incomplete health records, failure to have parents sign daily attendance sheets, and lack of operable spoke detectors. Some providers failed to fulfill requirements necessary to maintain certification, e.g., 6 hour annual in-service training. About 25 percent (*n* = 151) of the group of terminated ECI-Certified providers either requested that their contracts be terminated or they moved out of the area. An additional 39 providers (almost 7%) left the certified provider rolls without a termination reason being listed.

Among providers certified prior to the ECI, 328 providers (almost 35% of the group of 948 providers) were no longer caring for children by the end of June 2005. Sixty-two percent of the providers (*n* = 203) were terminated at the County's request while 35% (*n* = 115) were terminated at the request of the provider. An additional 10 providers had no listed reason for termination. Figure 5.2 shows the status of these providers as of June 30, 2004. A total of 939 ECI providers and 620 pre-ECI providers remained certified as family child care providers, a net increase of 611 providers since the start of ECI and a potential of 7332 child care slots (611 providers x 6 children x 2 shifts of care).



Note: S-terminated are self-terminated providers; C-terminated are County-terminated providers. Forty-nine additional providers were terminated as family child care providers without a listed reason.
Source: Starting Point data. Analysis by Center on Urban Poverty and Social Change

Figure 5.2 ECI and Pre-ECI Providers' Status as of June 30, 2004

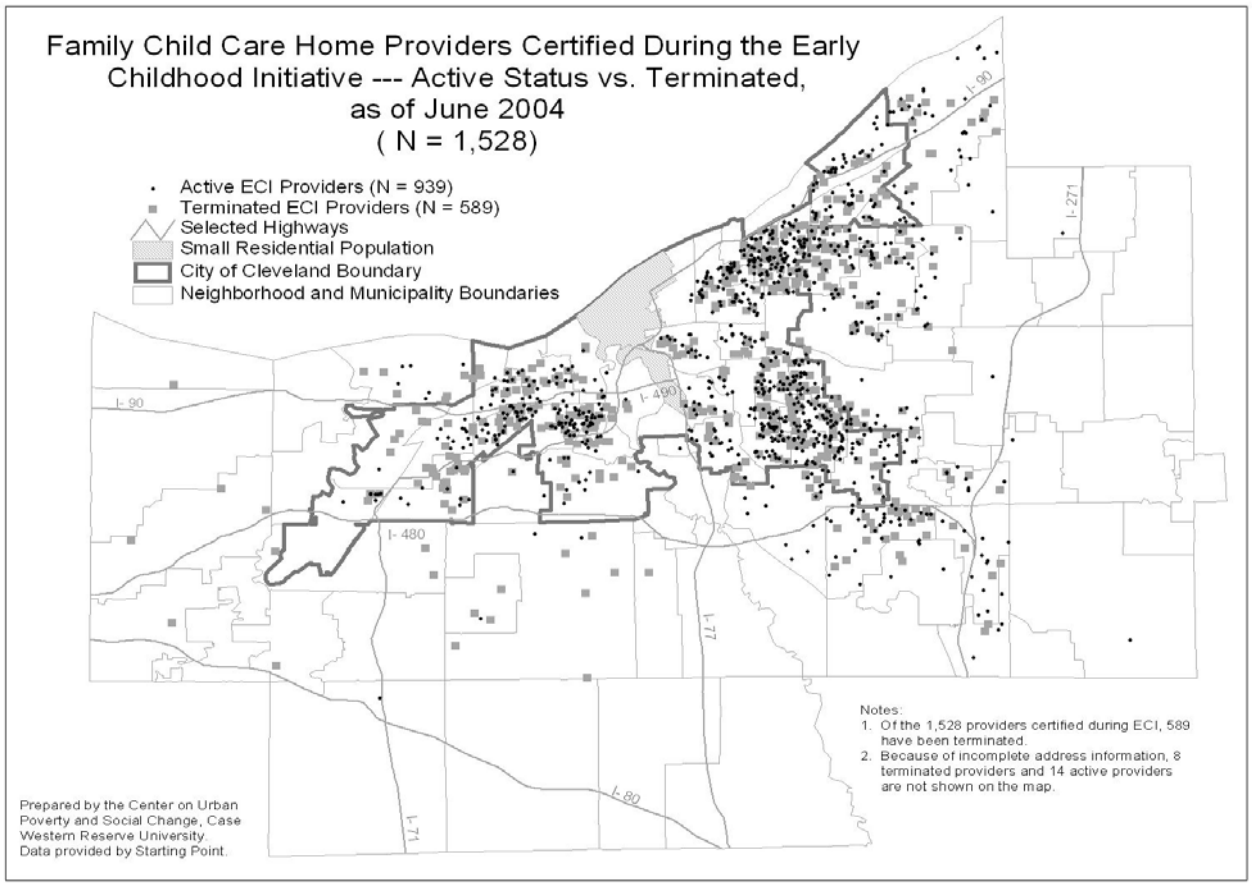
Table 5.8 shows changes in ECI-Certified family child care provider numbers over the 5 years of the ECI. It indicates the number of providers in the Family Child Care System at the beginning of each year as well as the number of providers who entered and left the System. Attrition rates or losses of ECI-Certified providers from the system have increased over time, except during year 4 of the Initiative. In the first 2 years, the rate of loss was under 10%, while during the year ending June 30, 2004, the rate of attrition was almost 15%.

Table 5.8 ECI-Certified Family Child Care Home Providers - Rates of Attrition

ECI Year	Beginning Number of Providers	Number of Providers Added	Number of Providers Terminated	End of Year Number of Active Providers	Attrition Rate
7/99-6/00	0	692	7	685	1.01%
7/00-6/01	685	734	128	1,291	9.02%
7/01-6/02	1,291	82	164	1,209	11.94%
7/02-6/03	1,209	1	125	1,085	10.33%
7/03-6/04	1,085	19	165	939	14.95%

Source: Starting Point data. Analysis by Center on Urban Poverty and Social Change.

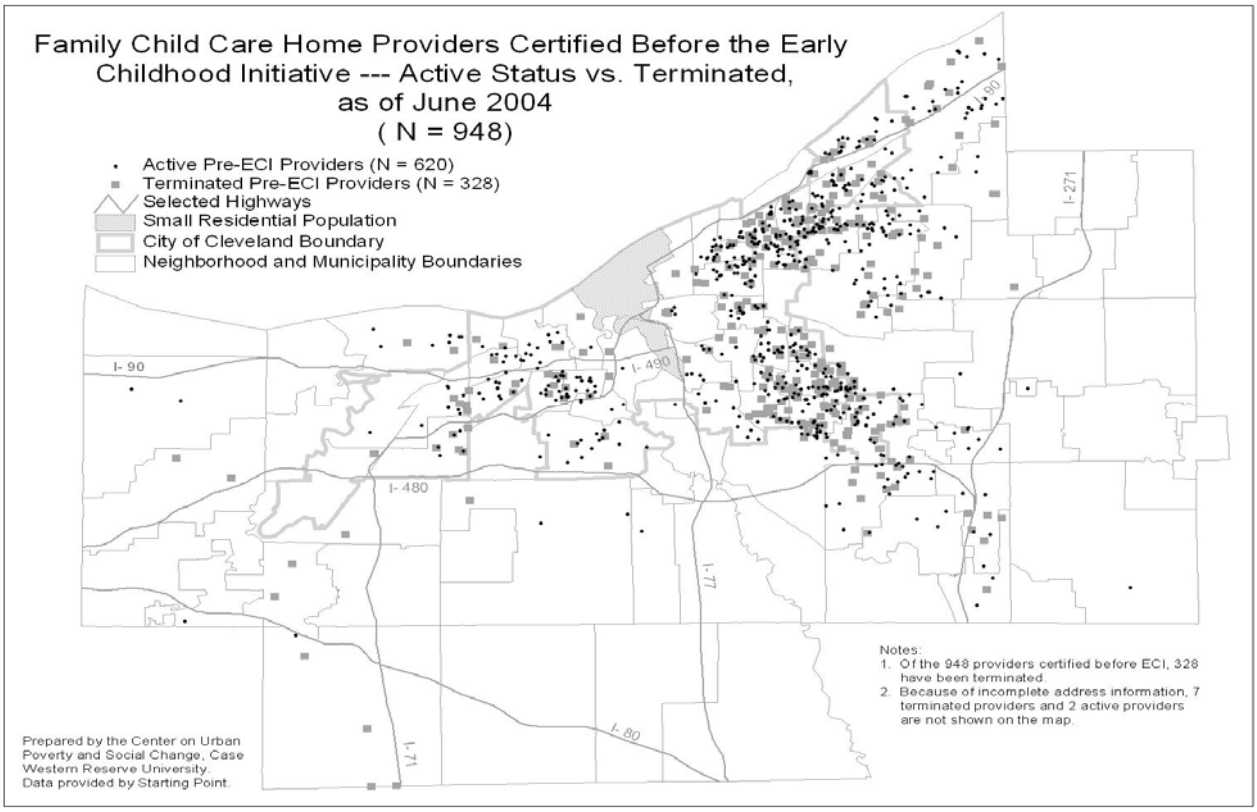
The Phase I report indicated that provider attrition rate was low compared to rates from other studies of family child care homes. Although the rate has increased and resulted in an overall loss of nearly 40% of those providers certified as part of the ECI, the component has shown an overall gain in the number of certified providers since 1999.



Source: Starting Point. Analysis of data by Center on Urban Poverty and Social Change.

Figure 5.3 Geographic Distribution of Active and Terminated ECI-Certified Providers

Distribution of Child Care Homes: Figure 5.3 shows a map of the distribution of active and terminated ECI-Certified family child care providers throughout Cuyahoga County. Most homes are clustered in the east and southeast sections of the County or in small sections of the west side. These clusters clearly target neighborhoods in which families transitioning from cash assistance to employment live. Terminated providers cluster in the same areas and there are appreciable losses of provider capacity within the City of Cleveland and in the western suburbs of the County.



Source: Starting Point. Analysis of data by Center on Urban Poverty and Social Change.

Figure 5.4 Geographic Distribution of Active and Terminated Pre-ECI-Certified Family Child Care Providers

Figure 5.4 shows a map of the distribution of active and terminated Pre-ECI-Certified providers. Similar patterns are clear in this map. Homes are distributed in the same way and terminations affect the same neighborhoods.

Voucher Payments to Providers

An examination of county child care voucher payment data indicated that more than 1,500 different home-based providers received a voucher between March 2000 and March 2004. See Table 5.9. In March 2004, 1,319 providers, both Pre-ECI-Certified and ECI-Certified, received a payment. Voucher payments have increased over time and in March 2004, averaged $2605 to pre-ECI-Certified providers and $2,497 to ECI-Certified providers. Increases are a result of increases in the average amount paid per child as well as increases in the average number of children in care. For example, the average amount paid per child increased over time from $380 in March 2000 to $452 in March 2004 for the ECI-Certified providers. Additionally for the ECI-Certified providers, the average number of children increased between March 2000 and March 2004 from four to six.

Table 5.9 Voucher Income for ECI-Certified Family Child Care Providers (*n* = 770)

	Average Monthly Income per Provider		Average Received per Child	
	March 2000	**March 2004**	**March 2000**	**March 2004**
Mean	$1,524	$2,497	$380	$452
Median	$1,171	$2,312	$390	$462
Minimum	$119	$110	$119	$110
Maximum	$6,788	$7,124	$453	$475

Source: Cuyahoga County, Department of Work and Training. Analysis of data by Center on Urban Poverty and Social Change.

Providers certified before the establishment of ECI had higher earnings per child and higher earnings overall than did their ECI-Certified peers. They also had an average of six children throughout the life of the project, compared to a shift for ECI-Certified providers. See Table 5.10.

Table 5.10 Voucher Income for Pre-ECI-Certified Family Child Care Providers (*n* = 532)

	Average Monthly Income per Provider		Average Received per Child	
	March 2000	**March 2004**	**March 2000**	**March 2004**
Mean	$2,330	$2,605	$404	$456
Median	$1,978	$2,415	$396	$483
Minimum	$60	$360	$60	$360
Maximum	$8,104	$7,737	$427	$516

Source: Cuyahoga County, Department of Work and Training. Analysis of data by Center on Urban Poverty and Social Change.

Increase Quality of Family Child Care Homes Through Technical Support

Technical Support Visits to ECI-Certified Providers: A total of 25,417 visits were made to ECI providers during the ECI's 5 years. Of these visits, 2,840 (11%) were made to providers prior to their becoming certified and 22,577 visits were made following certification. Seven percent of the visits (*n* = 1,838) were focused on space and furnishings and were considered to be pre-certification visits. Twenty-three percent of all visits (*n* = 5,821) were dedicated to meals and snacks, visits required by the USDA Child and Adult Care Food Program. Assessments using the *FDCRS* were conducted during 13% of the visits (*n* = 3,267). An additional 13% of the visits (*n* = 3,183) were focused on opportunities for provider professional growth and development. Two percent of the visits (*n* = 582, and shown as "other" pre-certification visits) were not categorized. The remaining visits were associated with quality enhancement. The 10,726 visits constituted 42% of all the visits and were received by 1,070 ECI providers (70% of the population of ECI-Certified providers) for an average of 10 quality visits per provider over the five year period.

Table 5.11 Pre- and Post-Certification Visits by Year for ECI-Certified Providers (*n* = 1,393)

Type of Visit	Year 1 '99-00	Year 2 '00-01	Year 3 '01-02	Year 4 '02-03	Year 5 '03-04	Total Visits
Pre-Certification Visits						
Space and Furnishings	1,158	680	0	0	0	1,838
Meals and Snacks	149	130	45	24	18	366
Opportunities for Professional Growth	10	42	2	0	0	54
Other Pre-Certification visits	394	174	14	0	0	582
Total Pre-Certification and Other Visits	**1,711**	**1,026**	**61**	**24**	**18**	**2,840**
Post-Certification Visits						
Assessment Visits	71	712	881	882	721	3,267
Meals and Snacks	279	1,380	1,474	1,125	1,197	5,455
Opportunities for Professional Growth	23	1,205	1,245	363	293	3,129
All Other Quality Enhancement Visits	215	2,920	4,020	1,948	1,623	10,726
Total Post-Certification, Quality Enhancement and Other Visits	**588**	**6,217**	**7,620**	**4,318**	**3,834**	**22,577**
Total Visits	**2,299**	**7,243**	**7,681**	**4,342**	**3,852**	**25,417**

Source: Starting Point. Analysis of data by Center on Urban Poverty and Social Change.

During years 1 and 2 of the Initiative, Technical Assistance (TA) staff conducted primarily pre-certification visits. After that, assessment and quality enhancement visits became a clear focus. The number of food visits remained fairly stable during years 2 through 5 of the ECI. The overall number of visits reached its highest point during year 3 of the ECI (a total of 7,620 visits) and has dropped in each of the succeeding years. The requirements for visits were highest in years 2 and 3 when up to 15 total visits were expected. The number of required visits decreased to eight during years 4 and 5 (three food visits, two assessment visits, and three quality enhancement visits). Table 5.11 shows visit data for providers certified during the ECI.

Pre-ECI-Certified providers received visits throughout the 5 year period. They received fewer visits overall and almost 40% focused on food and nutrition. Quality enhancement visits constituted more than 37% of the visits. Total visits to these providers were highest during year 3 and have declined during the last 2 years of ECI. See Table 5.12.

Table 5.12 Visits by Year for Pre-ECI-Certified Providers (*n* = 809)

Type of Visit	Year 1 '99-00	Year 2 '00-01	Year 3 '01-02	Year 4 '02-03	Year 5 '03-04	Total Visits
Post-Certification Visits						
Assessment Visits	4	223	380	359	319	1,285
Meals and Snacks	1,049	855	601	623	747	3,875
Opportunities for Professional Growth	1	214	435	132	185	967
All Other Quality Enhancement Visits	127	651	1,430	766	707	3,681
Total Visits	**1,181**	**1,943**	**2,846**	**1,880**	**1,958**	**9,808**

Source: Starting Point. Analysis of data by Center on Urban Poverty and Social Change.

In addition to visits made to providers, TA staff attempted an additional 1,120 visits to ECI providers and 358 visits to pre-ECI providers, in which the child care provider was not at home or not available. These attempts have been carefully tracked over the past 3 years. It is likely that this number is a conservative count of the number of times TA staff tried to access providers without success.

Appendices 5.2 and 5.3 present the total number of visits for ECI and Pre-ECI-Certified providers. Overall, ECI providers received 25,417, or 73%, of the visits during the 5 years ended June 30, 2004, while providers certified prior to ECI received 9,808 visits, or 27%, of the total visits delivered.

Quality Enhancement Visits: Quality enhancement visits were made every year during the 5 years of the ECI. Their number was greatest in Year 3. During years 4 and 5, members of the Regional System were expected to deliver three quality enhancement visits to each provider. As can be seen in Table 5.13, the average number of quality visits received by providers who received visits during years 4 and 5 was three. The total number of providers receiving visits decreased from year 4 to year 5, at least in part because there were fewer providers in the System.

Table 5.13 Quality Enhancement Visits for Each Year of the ECI for ECI- and Pre-ECI-Certified Providers

	Number of Providers	Total Number of Visits	Average Number of Visits	Maximum Number of Visits
Year 1				
Pre-ECI-Certified Providers	46	127	2.8	6
ECI-Certified Providers	102	215	2.1	7
All Providers	148	342	2.3	7
Year 2				
Pre-ECI-Certified Providers	205	651	3.2	20
ECI-Certified Providers	731	2,920	4	16
All Providers	936	3,571	3.8	20
Year 3				
Pre-ECI-Certified Providers	310	1,430	4.6	15
ECI-Certified Providers	771	4,020	5.2	21
All Providers	1,081	5,450	5	21
Year 4				
Pre-ECI-Certified Providers	264	766	2.9	9
ECI-Certified Providers	557	1,948	3.5	12
All Providers	821	2,714	3.3	12
Year 5				
Pre-ECI-Certified Providers	263	707	2.7	9
ECI-Certified Providers	518	1,623	3.1	10
All Providers	781	2,330	3	10

Note: Quality enhancement visits exclude all assessment, food, adult-oriented, and provider-not-at home or not-available visits
Source: Starting Point data. Analysis by Center on Urban Poverty and Social Change

Provider Visits During Year 4 of the ECI: During year 4, 33% of ECI providers received 8 or more post-certification technical assistance visits. Forty-four percent of ECI-Certified providers received 3 or more quality enhancement visits, 30% received 3 or more food visits, and 36% received 2 or more assessment visits. Table 5.14 shows the number and percent of quality enhancement visits for ECI- and Pre-ECI-Certified providers during the 4th year of the ECI.

Table 5.14 Number of Post-Certification TA Quality Enhancement visits 7/1/2002 - 6/30/2003

Number of Post-Certification Quality Visits Received	Number of ECI Providers	Number of Pre-ECI Providers	Percent of ECI Providers	Percent of Pre-ECI Providers
0	197	165	26	38
1	137	88	18	21
2	87	47	12	11
3	83	41	11	10
4	76	33	10	8
5	67	22	9	5
6	48	17	6	4
7	31	13	4	3
8	17	1	2	<1
>8	11	2	1	<1
Total	754	429		

Note: All visits are shown excluding 25 attempted, but not completed visits.
Source: Starting Point data. Analysis by Center on Urban Poverty and Social Change.

Provider Visits During Year 5 of the ECI: During year 5, 27% of ECI providers received 8 or more post-certification technical assistance visits. Thirty-nine percent of ECI-Certified providers received 3 or more quality enhancement visits, 32% received 3 or more food visits, and 29% received 2 or more assessment visits. Table 5.15 shows the number and percent of quality enhancement visits for ECI- and Pre-ECI-Certified providers during the fifth year of the ECI.

Table 5.15 Number of Post-Certification TA Quality Enhancement Visits 7/1/2003 - 6/30/2004

Number of Post-Certification Quality Visits Received	Number of ECI Providers	Number of Pre-ECI Providers	Percent of ECI Providers	Percent of Pre-ECI Providers
0	236	202	31	43
1	146	90	19	19
2	84	50	11	11
3	91	49	12	11
4	72	32	10	7
5	47	20	6	4
6	53	16	7	3
7	15	4	2	1
8	4	0	<1	0
>8	6	2	<1	0
Total	754	465		

Note: All visits are shown, excluding 25 visits that were attempted, but not completed.
Source: Starting Point data. Analysis by Center on Urban Poverty and Social Change.

Summary of Population Data Analyses

Increase and Sustain the Number of Providers: During the ECI's 5 year operation, the number of family child care home providers was increased beyond the goal established for the component. A total of 1,528 providers were certified to provide care for children. Terminations resulted in a loss of about 39% of those providers over the 5 year period. Yearly rates of attrition ranged from 1% in year 1 to 15% in year 5. By June 30, 2004, 939 providers certified as a part of ECI remained. Changes in the funding environment and thus in the number of families eligible to receive a subsidy may have contributed to some of the provider loss. During the same time period, the rate of terminations among the 948 providers certified prior to ECI was about 35%.

Increase the Quality of Care through Technical Assistance Visits: During the 5 years of ECI efforts, more than 25,000 technical assistance visits were delivered to ECI-Certified providers. Almost 11,000 of the visits were dedicated to improving the quality of care. During years 4 and 5 of the Initiative, 44% and 39% of ECI-Certified providers, respectively, received three or more quality enhancement visits, which had been the goal.

Quality of Care in a Sample of Family Child Care Homes:

The following section describes results from the study of the quality of caregiving in a sample of ECI-Certified family child care homes. Data were collected for the Phase I study of the quality of caregiving in a sample of family child care homes. Quality data on 68 family child care homes were described in the Final Phase I report released in February 2003. Data, however, were collected though March 2003. The quality of caregiving for the complete sample of 95 family child care homes will be described.

Quality of Caregiving in the Sample of 95

The primary intent of this part of the evaluation was to determine whether the intervention - technical assistance and training - affected the quality of caregiving. More specifically, what was the effect of the intervention on the quality of care in a sample of family child care homes?

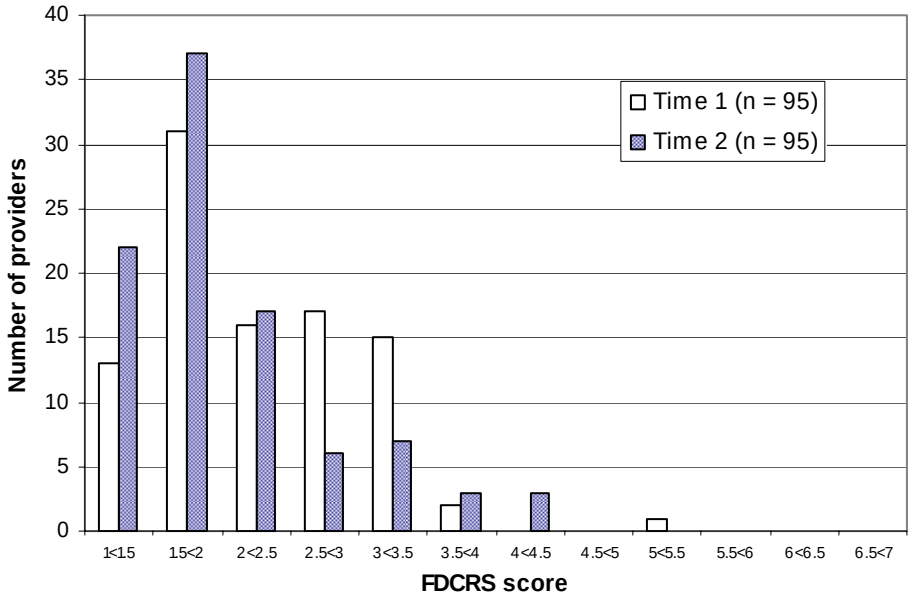
Data from the *FDCRS* and the *CIS* were examined in order to provide a picture of the global quality of child care in a group of family child care homes in Cuyahoga County. All providers were certified during ECI and were considered to be newly certified providers although some providers had cared for children privately before certification. In the following section, data collected pre-and post- technical assistance are reported.

Family Day Care Rating Scale (*FDCRS*): The *FDCRS*, a widely used measure of process quality in family child care homes, includes 32 items covering six categories. Each item can receive a score from 1, inadequate or poor, to 7, excellent. A score between 5 and 7, for example, suggests that the care being provided in the family child care home is meeting the developmental needs of the children in care.

Using the *FDCRS* data collected at Time 1 and Time 2, the quality of child care in the sample of 95 family child care homes can be described. Based on observations, the overall quality of care at Time 1 was in the poor range with an average rating of 2.28 (*SD* = .73) The

FDCRS scores at Time 1 ranged from 1.23 - 5.1, suggesting that providers at the upper levels of the range were providing at least fair or medium care (i.e., mean score over 3).

The *FDCRS* Score at Time 2 was 2.05 (*SD* = .73) indicating the overall quality of care provided by the sample remained in the poor range. Time 2 scores ranged from 1.00 - 4.43. A paired samples *t* test was conducted to evaluate whether *FDCRS* scores at Time 2 were significantly lower than Time 1 scores. Results revealed that the quality of care at Time 2 was significantly lower than the quality of care at Time 1 (t (94) = 3.67, p = .000). The standardized effect size index, *d*, was .377, a small value. The mean difference was .229 points between the two sets of *FDCRS* scores with a slight overlap in distributions of the two sets of scores. Using an interval estimation strategy, the 95% confidence interval for the *FDCRS* scores for Time 2 was between 1.90 and 2.19 while the 95% confidence interval for the Time 1 scores was 2.13 and 2.42. Figure 5.5 shows the distribution of *FDCRS* scores for the 95 family child care providers at Time 1 and Time 2.



Source: Observer data. Analysis of data by Center on Urban Poverty and Social Change.

Figure 5.5 Results of *FDCRS* Quality Scores at Time 1 and Time 2

Scores for specific subscales of the *FDCRS* are shown in Table 5.16. Review of the subscales that pertain to the direct provision of child care (i.e., all subscales except Adult Needs), reveals that the subscale with the highest scores at Time 1 and Time 2 is Social Development. Three items comprise this subscale: Tone, Discipline, and Cultural Awareness. Scores from both observations suggest that while this area is one of strength, the overall quality of the social environment for children is poor. The subscale with the lowest scores at Time 1 and Time 2 is Basic Care. Items in the Basic Care subscale focus on the provider's attention to children's diapering, safety, meals and snacks, naps and resting, and health.

Overall, the scores for the sample of 95 providers confirm the findings reported in the Phase I report on 68 providers that showed that the quality of care remained poor despite home-

based intervention aimed at increasing the quality of care. Additionally, the subscale Basic Care remained the area of lowest quality.

Table 5.16 Subscale Scores from the *FDCRS* at Time 1 and Time 2

	Time 1 Mean (*SD*) (*n* = 95)	Time 2 Mean (*SD*) (*n* = 95)
FDCRS Subscales		
Space & Furnishings	2.25 (0.70)	2.05 (0.69)
Basic Care	1.84 (0.78)	1.50 (0.66)
Language & Reasoning	2.50 (0.96)	2.42 (1.12)
Learning Activities	2.31 (0.91)	2.03 (0.82)
Social Development	2.78 (1.10)	2.57 (1.19)
Adult Needs	3.31 (1.25)	3.14 (1.19)

Source: Observer data. Analysis of data by Center on Urban Poverty and Social Change.

Caregiver Interaction Scale (*CIS*): A primary criterion for many parents looking for "good child care" is that the caregiver be warm and caring (Kontos et al., 1995). Caregivers who are neither harsh nor detached but are instead sensitive to the needs of the children meet this criterion. It is these interaction qualities between providers and children that the *CIS* assesses. Observers rated aspects of provider sensitivity, harshness, detachment, and permissiveness on a 4-point scale where 1 corresponds to "not at all (true)", 2 corresponds to "somewhat (true)", 3 corresponds to "quite a bit (true)", and 4 corresponds to "very much (true)". [2]

Table 5.17 presents the *CIS* ratings from the two observations. At Time 1, results from the *CIS* reveal that providers as a group were "somewhat" sensitive in their interactions with children (*M* = 2.85, *SD* = .46). Subscale scores suggest that providers were somewhat low in sensitivity; fairly low in harshness, i.e., not overly harsh; moderately low in detachment; and moderately low in permissiveness.

Table 5.17 Quality of Provider Interactions with Children Based on the *Caregiver Interaction Scale*

	Time 1 Mean (*SD*) (*n* = 95)	Time 2 Mean (*SD*) (*n* = 95)
***CIS* Total Score (Range 1.0-4.0)**	2.85 (.46)	2.68 (.52)
***CIS* Subscales**		
Sensitivity	2.32 (.62)	2.07 (.65)
Harshness	1.68 (.52)	1.72 (.64)
Detachment	1.99 (.74)	1.96 (.71)
Permissiveness	1.96 (.56)	1.93 (.68)

Source: Observer data. Analysis of data by Center on Urban Poverty and Social Change.

The *CIS* Score at Time 2, 2.68 (*SD* = .54), suggests that providers' interactions with children remained "somewhat" sensitive. Provider levels of harshness, detachment, and permissiveness were similar to those observed at Time 1. A paired samples *t* test was conducted to evaluate whether CIS scores were significantly lower at Time 2. Results revealed that the *CIS* score at Time 2 was significantly lower than the score at Time 1 (t (94) = 3.115, p = .002). The

[2] Higher scores on the sensitivity subscale and low scores on the harshness, detachment, and permissiveness subscales indicate better quality interactions. For the *CIS* total score, scores on the latter three subscales are reversed so that higher total scores represent better interactions.

standardized effect size index, *d*, was .32, a small value. The mean difference was .167 points between the two sets of *CIS* scores with minimal overlap in distributions for the sets of scores. Using an interval estimation strategy, the 95% confidence interval for the *CIS* scores for Time 2 was between 2.58 and 2.79 while the 95% confidence interval for the Time 1 scores was 2.76 and 2.95. Changes in *CIS* Scores mirrored those of the *FDCRS* scores. In both cases, Time 2 scores were significantly lower than Time 1 scores.

Additional Analyses of Quality Outcomes

Results from the descriptive analyses of the *FDCRS* and *CIS* scores revealed that despite intervention aimed at improving quality of care, overall quality of caregiving remained poor from baseline to Time 2. The goal of this section of the report is to examine how the intervention - technical assistance and training - explains the quality of care as measured by the *FDCRS* score at Time 2. The *FDCRS* was chosen as the outcome measure for quality in this analysis because the intervention was aimed at improving *FDCRS* scores rather than *CIS* scores. In addition, the nature of interactions between adults and children as measured by the *CIS* could be biased by cultural and socioeconomic differences between the observers and the care providers (Heath, 1983; Hart & Risley, 1995.)

Prior to computing the multiple regression analysis, preliminary descriptive analyses were completed. Descriptive information on variables used in the analysis is presented in Table 5.18 with correlations among variables available in Table 5.19. Additional information about the relationships between provider characteristics and receipt of quality visits was investigated as a part of the preliminary analysis. This kind of information would tell us something about providers who may be more likely to improve as a result of technical assistance. For example, providers with more education might be more willing to accept visits. Analyses revealed, however, no significant interactions between provider education or provider experience and number of quality technical assistance visits received. More specifically, regardless of their years of education or experience, all providers received, on average, the same number of quality enhancement visits, approximately 12.

Table 5.18 Descriptive Statistics of Variables Used in the Regression Model

Variable	Mean	*SD*	*n*
FDCRS T2 (1 - 7)	2.05	.73	95
FDCRS T1 (1 - 7)	2.28	.73	95
# Quality Visits	12.36	6.60	95
# Training Hours	12.17	13.30	95
Education in years	12.32	1.53	95
Experience (yes or no)	.14	.346	95
# Children Present T2	3.49	1.76	95

Source: Observer Data. Analysis of data by Center on Urban Poverty and Social Change.

Table 5.19 Correlations Between Selected Variables for the Multiple Regression (*n* = 95)

	FDCRS T2	*FDCRS* T1	# Quality Visits T2	# Trainings	Education	Experience	Children T2
***FDCRS* T2**	1						
***FDCRS* T1**	.649*	1					
# Quality Visits T2	.252*	--	1				
# Trainings	.318*	--	.394*	1			
Education	.225*	.245*	-.139	.148	1		
Experience	-.004	.205*	.011	-.061	.139	1	
Children T2	-.251*	--	.008	-.040	.246*	.045	1

Significance levels are indicated as **p<.01 and *p<.05.
Source: Observer Data. Analysis of data by Center on Urban Poverty and Social Change.

Using ordinary least squares regression, an analytic framework was constructed based on a goal of the FCCH component, i.e., how does the intervention affect quality of caregiving. Factors of primary interest included the number of quality visits providers received and the number of training hours they attended, the primary components of the intervention. Control factors including the *FDCRS* score at T1, provider number of years of education, provider prior child care experience, and the number of children present at the time of the second observation were added to the model.

Table 5.20 Regression Examining the Influence of Quality Visits and Training on Child Care Quality at Time 2 for the Sample of 95 Providers

	Unstandardized Coefficients		
	B	*SE B*	p-value
(Constant)	-.306	.475	.522
FDCRS T1	.599**	.083	.000
Quality Visits	.022*	.009	.011
Training Hours	-.001	.005	.831
Education	.094*	.038	.017
Experience	-.305°	.159	.059
Children Present T2	-.112**	.031	.001
F	17.485 **		
R^2	.544		
Adjusted R^2	.513		

Significance levels are indicated as **p<.01, *p<.05, °p<.10.
Source: Observer Data. Analysis of data by Center on Urban Poverty and Social Change.

Table 5.20 presents results of the main effects regression model, a model that accounts for 51% of the variation in provider *FDCRS* scores at Time 2. The number of quality technical assistance sessions a provider received, provider years of education, and the number of children present at the Time 2 observation contributed significantly to the model. A provider's prior child care experience approached significance at .059. The number of hours of training a provider attended, however, did not contribute significantly to the model.

Closer inspection of the regression analysis reveals that some predictors affect a provider's *FDCRS* score positively and others negatively. Based on the findings, holding other factors constant, every additional visit a provider received increased her *FDCRS* score .022 of a point and every additional year of education raised a provider's score .094. On the other hand,

findings indicate that providers with fewer children in care had higher scores. That is, for every additional child a provider cared for, her *FDCRS* score decreased by .112.

Overall, the analysis suggests that after controlling for provider characteristics, the *FDCRS* Time 1 score, and the number of children in care, quality technical assistance visits add significantly to the model explaining the *FDCRS* score at Time 2, but training hours do not. Although the number of quality technical assistance visits is significantly and positively related to the *FDCRS* score, the coefficient is small, suggesting a relatively weak effect.

Study of Technical Assistance:

The study of technical assistance provision was motivated by a desire to better understand how technical assistance was being delivered and received by family child care providers. Results from the Phase I study of quality-building efforts indicated that the program was not achieving the quality improvement desired. Instead of increases in quality as a result of the quality enhancement program, Care for Kids, scores on both the *FDCRS* and the *CIS* for the sample of family child care providers declined. While data suggested that some of the decline in scores might be due to increases in the number of children in care from baseline to the Time 2 observation and that providers with child care experience prior to certification were more likely to have lower scores at the Time 2 observation, questions were also raised about the variation in information being introduced to providers during the technical assistance visits. Anecdotal evidence from both child care providers and technical assistants suggested that there were differences in the ways in which technical assistance was delivered.

With the goals of improving child care and better supporting technical assistants in their job of mentoring and educating family child care providers in Cuyahoga County, Starting Point identified a new curriculum to be implemented in a standard way to all care providers. In June 2003, TAs in the regional system attended a two-day training on the Parents As Teachers (PAT) curriculum, *Supporting Care Providers Through Personal Visits* (*SCPTPV*) (Parents as Teachers National Center, 2002), a curriculum designed specifically for home visits to family child care providers. The training was run by two of the principal authors of the curriculum and emphasized that home-based visitation must involve more than social support. The trainers' primary message was that information is necessary to guide change. The *SCPTPV* curriculum includes detailed visit plans with hand-outs for child care providers and parents. The goals of the program include establishing partnerships, increasing child care providers' knowledge of child development and developmentally appropriate practice, increasing care providers' observation skills, and providing opportunities for care providers to apply knowledge learned. While the *SCPTPV* curriculum has numerous strengths, its effectiveness with a provider population similar to Cuyahoga County's providers has not been rigorously evaluated (K. Guskin, personal communication, November 24, 2004).

The technical assistants began implementing the PAT program after the training dates in June 2003. Starting in February 2004, the evaluation team's observations of technical assistance visits began. Two observations were made to each TA-child care provider dyad that agreed to participate in the study. One dyad was observed on only one occasion. Data from a total of 43 sessions are reported here. Table 5.21 lists the topics of the TA sessions that were observed.

Table 5.21 Topics of TA Sessions

	Frequency	Percent
Cultural Awareness	7	16.2
Literacy	7	16.2
Sensory	5	11.6
Health and Safety Checklist	3	6.9
Alone Space and Time	2	4.7
Art	2	4.7
Block Play	2	4.7
Child-Related Display	2	4.7
Dramatic Play	2	4.7
Safety	2	4.7
Use of TV	2	4.7
Eye-Hand Coordination	1	2.3
Handwashing	1	2.3
Music and Movement	1	2.3
Physical Play	1	2.3
Unknown	3	6.9

Source: Observer data. Analysis of data by Center on Urban Poverty and Social Change.

Appendix 5.4 lists the areas covered in the observation of technical assistance and the number of instances that behaviors were observed "never" (1), "sometimes or somewhat" (2), or "always" (3). Review of the ratings reveals both strengths and weaknesses in the delivery of technical assistance to family child care providers. First, both from the data and anecdotal notes, it was evident that technical assistants have built positive relationships with providers. TAs appeared comfortable interacting with providers and have fostered an environment of trust. When talking to providers, TAs used a sensitive, supportive tone and treated the provider's responses with respect. TAs were mindful of the need to preserve providers' self-esteem. Given the 11th grade reading requirements of the PAT materials, TAs recognized that information must be presented at a level appropriate to the provider's understanding. TAs strived to maintain a positive environment and were prepared to provide resources to support caregivers. Finally, TAs typically stated the objectives of each session and often provided a rationale for the objective (e.g., we're working on sand and water play because you are not currently providing that and children learn from playing with sand and water.)

Weaknesses in the delivery of technical assistance focus on two main areas: incomplete knowledge about child development and hesitancy in requesting providers to behave in ways that might be new. Review of the observation form reveals that the TAs' relationships with the children in care were areas of emerging growth. TAs demonstrated difficulty recognizing the developmental abilities and needs of the children in care and as a result, had difficulty modeling appropriate behavior for the provider. We noted that in some instances TAs failed to know the names or the ages of the children in care suggesting that using developmentally appropriate activities was not a typical past behavior during sessions. Based on questions to providers about differences in past and present sessions we learned that the session organization we observed was new to some (not all) providers. We learned that past visits were less formal and more social. This may be the reason that some TAs showed difficulty in requesting that providers restate the

main ideas of the just completed session or in assigning "homework" to the provider. In some cases, the technical assistance "frame" was new for both the TA and the child care providers. These teaching "frames" represent a tightening of the informational content and greater structure in the visits, both of which are viewed as positive additions to the home-based technical assistance program.

During the observations, two or three characteristics that facilitated and/or hindered the effectiveness of the technical assistance were recorded. This set of anecdotal evidence provides additional information about the strengths and weaknesses of the 43 technical assistance sessions that were observed. Review of notes revealed that characteristics affecting the quality of technical assistance fell into four broad categories with interactions occurring across categories. The four categories include provider-, technical assistant-, child-, and materials and facility-related characteristics. To begin, it seemed necessary as a base for a quality session that a respectful, if not positive, rapport exist between the provider and the technical assistant. Once rapport was established, other factors could affect a session's success to varying degrees. For example, it was noted that a provider's intentionality, communication skills, flexibility with change, assertiveness, and mental or physical health were influential during sessions. Similar characteristics affected the technical assistant's ability to provide information although additional factors such as knowledge of the materials, preparation of activities, use of teachable moments, and knowledge of developmentally appropriate practice (aspects discussed in previous paragraphs) proved noteworthy. The rapport between the technical assistant and the children and the ability of the TA or provider to manage children's behavior became critical in some instances. The number of children and ages of the children affected some sessions. When four or more children were present and when the age range of the children was broad or there was a child with special needs, technical assistants were challenged to provide activities that met the needs of all the children in care. Finally, materials and facility-related characteristics affected sessions in yet other ways. Issues related to the amount of space available for activities, use of the television for an activity or just having the television on during the session, the difficulty of the information to be taught, and the appropriateness and quality of the materials used in activities, all posed as additional factors influencing the overall quality of technical assistance sessions.

In summary, this first glimpse of the organization of technical assistance visits was informative for training purposes as well as for future assessments of technical assistance. Strengths and weaknesses in the delivery of technical assistance were noted, however, the use of a more structured intervention appeared helpful to both the technical assistants and the child care providers who participated. Results are preliminary and not meant to be the last word on what appears to be a promising curriculum for delivering technical assistance aimed at improving quality in family child care homes.

Focus Group with Technical Assistance Providers:

A focus group with TA staff that participated in the study of technical assistance was held in June 2004 at one of the regional offices. Questions prepared for the group were intended to provide insight into the work of the TA staff and gain their perspectives about their efforts, to obtain feedback regarding the use of the *Supporting Care Providers Through Personal Visits* curriculum developed by Parents as Teachers (PAT), and to determine if and how their work had

changed during the course of the ECI. Findings from the discussion are presented beginning with the general themes and then responses to the specific questions that were asked.

Themes from the Discussion

Staff found the new curriculum helpful in working with child care providers: The PAT curriculum provided clear guidelines for TA staff. Several TAs talked about its usefulness and their comfort with it. Although they liked the previous curriculum (the Creative Curriculum), they believed the PAT materials provided more guidance and permitted them to better plan for activities with providers.

A trusting relationship with child care providers remains important: TA staff was able to articulate that developing a relationship of mutual trust and respect was of great value to them in accomplishing the work. They stated clearly that these are not friendship relationships but are about the business of providing technical assistance.

TA staff is challenged by providers who initially agree to visits and then deny staff entry or are not at home: This continues to be the most challenging part of the work for staff, as they plan for visits that do not happen. They reported that they have little trouble engaging providers when they get in the door, but that getting into a home is very difficult.

Encouraging change in provider behavior requires persistence and patience: Child care providers often are not ready to change the way they work with children in their care. They may believe they are already doing what is required or they have little motivation to change. TA staff are both discouraged and challenged when they encounter these provider attitudes. They want to offer more and varied learning activities to capture the attention of these providers.

Staff described the need for a career ladder for themselves and for child care providers**:**

Staff indicated that technical assistance providers and child care providers who had been part of Care for Kids for 4 years need new challenges, new ideas for activities, and new strategies for encouraging professional development. The TA providers believe that this assistance will be ongoing in some way, even if it involves only those visits directed at food program providers. The question seems to be "How do we encourage people to keep growing in some way?"

Responses to Research Questions

Discussion of changes experienced by the TA staff during the previous year: TA staff was asked to describe the ways in which their work had changed in the previous year. One participant talked about the impact of the PAT curriculum.

> I think things have changed, as far as when we had visits before, but I think as far as the PAT, I think that curriculum has really helped providers because it's given them activities and things, and even . . . (encourages them to) call the parents, that's one thing I stress, call the parents ahead of time. I think it shows the parents that they are teaching their children. And showing them activities.

Then others joined in.

> It tells you what to do and then tells you to use information. It goes directly to the Harms (*FDCRS*) County assessment, 'cause that's what we have to base our business on anyway. And the PAT corresponds with that, so that has really been a big help. So the provider needs to work on things a lot, and it gives you all the information you can bring. Activities you can follow, information on how she can implement it and make an assessment for the children and even make it as a learning activity, and mathematical, so I really like the PAT for that. Because we need instructions, and then plus, for the parents, there's handouts. And the providers should be specific that these are her handouts, and then the parents' handouts.
>
> I was right along with the PAT and didn't realize that I was. So, I think that it's an excellent tool for us to use. Sometimes, I think that some of the material is, uh, a bit wordy. So I highlight things for the providers that will be, uh, something that they can use and to assimilate the information. For the parents, I highlight things that they can ask as the provider, they can say well, "This, this and this is what I think you should read to your child." Or "put your child in your lap and let them look at the picture books and so forth." So I highlight those things and when they're saying that to their parents when they're handing out that parent handout, they will know exactly what to do. I think it's an excellent tool, uh, I'm hoping that what we do can be implemented after we leave, but I'm thinking that we will have to go back and reinforce those things.
>
> . . . we use the Parents as Teachers curriculum. I like it. It's pretty informative. Uh, it explains brain development and uh, each learning activity or whatever. It explains why it is important for children to have exposure to that particular subject. So yes, I do like it, and we do use it. I mean we have no choice but to use it, we should be using it. But um, yes, I do use it.

Some compared the PAT curriculum to the *Creative Curriculum* (Dodge & Coker, 1998) that was used previously in the project. They indicated that the PAT curriculum focused more fully on developmentally appropriate practice and that it gave them the tools they needed. The Creative Curriculum had demanded more of them, required them to organize activities and handouts, while PAT had those tools available to them immediately.

Value of the child care provider-TA staff relationship: TA staff was very clear about the importance of developing and nurturing this relationship. They also made clear that the type of relationship was not one of friendship, but rather a business relationship characterized by mutual respect.

> . . . it's not a buddy-buddy girlfriend relationship, but it's a good working relationship that, when I come in, it's not that we're going to sit down and talk about a bunch of personal stuff, but they know that I'm going to take care of business first. And then if a party has an issue, we move over to that issue.

> The PAT has just enhanced the relationship. Because I guess where I am, I've been working with my providers a little while, so the relationship is already there. It did give me more information that I can give on to, that would be more on a professional level.
>
> So, it has gone beyond PAT with me in this particular, uh, provider. But it is not a buddy-buddy, good 'ol girl kind of relationship. It is one of mutual respect.

The challenges of the TA work: As indicated in our previous discussions with TA providers, the concept of behavioral change provided a great challenge to the work. They indicated there was no predictability and many of the providers were not invested in change.

> I think with me, the challenge is just getting the provider to make change is hard. Not that they don't want to make change, but it has to be sort of eased into, they have to feel like they are still in control. They don't want you to come over and just take over their home.

Other challenges were articulated, as well. Some TA staff members were most concerned about getting in the door. They recounted stories of appearing at a home, only to discover the provider was not there, or had no children with whom to work.

> I think one of the challenges that I have experienced, is trying to get in. I mean, I have scheduled people and re-scheduled and re-scheduled and re-scheduled. And, it is not my fault, and it is not the fault of anybody, because you cannot be intrusive and push yourself into someone's home. You have to be invited into their homes. . .
>
> And scheduling and re-scheduling and re-scheduling ….And, it has not been that we haven't had the resources or the tools or the activities or anything to go in, it's just trying to get in. And I guess it's because I'm new, like these ladies have already established there, you have established clients, where I'm establishing new relationships.
>
> And it's still like that for you later, 'cause you have a hard time having them to keep their appointment.

Another challenge related to keeping experienced providers engaged in the project. Providers who have been participants in the Care for Kids project may believe that they have learned enough and that support visits are no longer necessary. Some TA staff discussed this issue from the perspective of the provider, while others discussed it as an issue they face. For example, some wondered how they could retain their excitement for the work after several years.

> After a provider has been on Care for Kids for so long, it's like, "What do you do with them time after time?" "what are you going to tell me?". That's what's going on in my head. "What is it that you're going to present to me that hasn't been presented before that's going to help me after I have let you in my house for 4 years?"
>
> I'm saying on my end. – I already got a 6. I have the pride, I have the children coming; I have everything else. I took into consideration everything that you have told me. And I think it has to do with personality too. . . Why would I really want you coming into my

> home, after 4 years? You know, what is it? Has the PAT curriculum changed, or would it be something always new?
>
> I'm asking on both ends, because I'm a provider myself and I've applied at Care for Kids. And I'm just being honest, I have been down to the CDA (Child Development Associate) program, and I mean with a person like me, I want to get out of my house, I want to do something. I've already been to the library, I already took courses. So it's not that I don't have pride. What I'm saying is "is there a way that can be implemented that will bring me to a place where it can make me want to stay?" That's what I'm saying – after I have branched out. If I'm going to go outside….why do I have to let you come in the house?

Personal change resulting from their TA work: Some TA staff believed they had gained knowledge about developmentally appropriate practice that they had not recognized. They were willing to try more creative activities, more and different textural play, and other types of experiences they would not have considered prior to working as a TA provider. Some had or were currently providing child care services as well, and they talked about the effects for their child caregiving.

> I'm a provider also. So I still do kids in the evening. So, just the set up and the labeling and….we re-did my dramatic play area. Yeah, I think it's done a lot for me as a provider. I mean, it's a learning thing, you know.

The rewards of watching someone change: TA staff discussed their pleasure in seeing people change. They also indicated that they would use strengths of one provider to support change and strength-building in another provider. This process, they believed, would increase the resolve of both providers to change.

> . . . if I came and say you scored low on sand and water. And the next, and all year long, you still haven't made a change, and next year, we go back to the sand and water thing, but we may go back in a different form of doing sand and water. And then, it took you 2 years to get it, but I still kept coming back with the same thing, you know. So, a lot of times, you just have to keep doing it over before there is any change.
>
> . . . the providers, some of the providers are very creative.
>
> And I'll take that strong point and give it to the provider's weak . . . (points). So I usually will take the stronger ones, and use what they have. Some of them, I mean, can really do some creative stuff. And some of them already did stuff in the past that they can bring to the table as a provider. Some of them have been in daycare centers. Some have done a lot of things that they can bring as providers, so I usually I take those things and use them in my curriculum.
>
> . . . if they know they're doing a good job, they enjoy showing other people if they're doing a good job. So, to be able to couple them up with another provider who is not doing so good, but maybe wants that assistance. Um, we can set up that type of relationship and that always seems to work pretty good also.

Summary of Responses

TA providers were asked to respond to five questions: to describe ways in which their work had changed during their TA staff experience, to address the nature of their relationships with child care providers, to indicate challenges and rewards of their work, and to discuss personal change occurring as a result of their work. Participants reported that the work had changed during the previous year as a result of introduction and training in the use of the PAT curriculum. TA staff viewed the PAT curriculum as very helpful to their efforts with child care providers. They found it more tailored to their needs and child care providers' needs. It is specific, full of activity ideas, and has suggestions for providers and for parents as well.

Relationships are still valued but more clearly defined by these TA staff. They indicated that relationships are about business – accomplishing tasks together. It is built on mutual respect and trust. This conceptualization is very different from the view of the relationship described in the previous focus group discussions. In these, the relationship was very much about the provision of social and emotional support.

Staff mentioned several challenges to their work. These included gaining access to child care providers, encouraging providers to change their behavior, and assuring that they and child care providers would remain involved as providers. They asked that some type of career ladder be developed to assure depth and breadth in the technical assistance over time.

TA providers indicated that they had changed as a result of their work. They had gained a real understanding of developmentally appropriate practice and were more willing to try new learning and teaching activities, both in their own child care settings and in their work with other child care providers.

Last, TA staff noted that watching others change was a rewarding aspect of their work. They recognized the creativity of some child care providers. They talked about using child care providers who had changed and developed some practice strengths as models and mentors for providers who had not yet effected change.

Underlying/Other Issues

In our previous focus group discussion report, we noted that participants seemed unclear about an agreed-upon process for delivering technical assistance. In this discussion, it was absolutely clear that participants understood a process and were using it. They were not in agreement about the mandate for using the PAT curriculum, but all stated that they used it and it was helpful to them. The curriculum constituted a foundation of support, a mechanism through which they delivered technical assistance.

Also, in our previous report, we noted that education and preparation of TA staff needed to be examined. We suggested that technical assistance providers could benefit from having a CDA credential or an associate's degree (or even bachelor's degree) in early childhood education. The tone and focus of our conversation in the focus group discussed here clarifies and strengthens this comment. TA staff commented that experience and education made a difference. Education increased knowledge of child development and encouraged a focus on optimal

development as well as the strategies for promoting it with providers. Education supported the importance and value of caregiver-child interaction, not just for specific activities, but for building an overall understanding of developmentally appropriate practice.

Interviews with Parents:

One of the outcomes of the FCCH component is that parents can define and recognize high quality child care. High quality child care offers children from low income families the best chance of achieving school readiness. Given that the FCCH component was developed in response to the work requirements of welfare reform, it is assumed that many of the children receiving care in the family child care homes could benefit from high quality child care. Getting parents to recognize high quality child care is a first step toward their securing at least higher quality care for their children. The goal of this section is to understand how parents choose child care, what parents view as quality child care, how satisfied parents are with their choice of child care, and finally how child care helps parents meet their work obligations.

Themes from the Interviews

Parents recognize that child care needs to be more than babysitting although they may not know explicitly what a child care provider should offer beyond basic care: Parents believe that children should be cared for in an environment that is safe and clean, where diapers are changed and meals are served, where the provider is reliable and responsible, and where there are learning activities.

Parents indicated that they had several choices of child care available when they looked for child care but chose family child care because there were fewer children in care: Parents reported that the number of children in care was a primary reason for choosing family child care over center-based care. Parents believe that with fewer children in care, the provider can have more one-on-one time with their children.

Parents often choose their child care provider based on referrals from friends and family: Once families decide on using family child care, and despite knowing that child care should be more than babysitting, parents often choose a provider based on referrals from friends and family rather than on the activities offered by the provider.

Parents express satisfaction with their current child care situations: Parents reported the flexibility of the provider to be the most helpful part of their current child care arrangement. Parents indicated that providers offer transportation, accommodate changes in work schedules, agree to care for children over weekends, and most importantly, provide sick child care.

Parents' definitions of child care quality are similar to professional definitions but remain incomplete: Comfortable surroundings, clean home, nutritious meals, learning activities, appropriate disciplining, attentive provider, and good communication were described by parents as being highly desirable in child care. Details about what learning activities should be included were missing.

Responses to Research Questions

Factors parents considered when looking for (any kind of) child care: Parents offered a list of factors they considered when looking for child care. Most parents listed several factors they deemed important. Factors identified included cleanliness of the home, group size, personality of the provider, flexibility of hours, willingness to take children when sick, location, and safety.

Types of child care available when looking for care: All parents reported access to family child care and almost all indicated access to center-based care when looking for child care. More than half of the parents noted access to relative and friend care also. Some parents expressed that they would have liked to use friend or family care but felt using a friend or relative was not an option. While many of the parents interviewed use certified family child care, some use uncertified care.

Why choose family child care? and Why did you choose your current family child care home? Parents responded similarly to these two questions. Parents cited three main reasons for choosing family child care over center-based care. The first and primary reason for choosing family child care related to the number of children in care. Accessibility and flexibility in terms of hours and location, and referral to a provider by a friend or relative were the two other reasons parents chose family child care.

Almost all parents reported that the decision to use their current family child care home was based on a referral or because the caregiver was a relative or friend. A few parents noted the importance of the provider's location. A couple of parents indicated that the kinds of materials and educational activities the provider offers were important factors in choosing the current child care placement; however, these educational activities were almost never the primary reason listed for choosing their current provider.

How do you pay for child care and what would you do if you lost your voucher?: Our goal was to interview parents using vouchers; however, many parents who called to participate in the study pay privately for child care. In the current sample of 50 parents, 20 pay privately, 27 use vouchers, 2 use relative care (and pay nothing), and 1 declined to provide information about her payment method.

Parents using child care vouchers identified several plans of action if faced with the loss of their vouchers. The most common plan included trying to get a friend or relative to care for their children. Several parents also indicated they might quit working. Included in this group is one parent who stated that she would "stay home and provide daycare again." One parent expressed uncertainty about what she would do in the situation.

Child care and work obligations: We asked parents to tell us what it is about their current child care arrangement that has been helpful in meeting work or education obligations and family obligations. The overwhelming response of all parents was the flexibility that the provider offered as part of the caregiving. Parents cited provider flexibility in providing transportation, in accommodating changes in shifts and hours, and in caring for sick children. The provider was willing to accommodate the parents' work schedule.

What is working? What isn't working in your current arrangement?: Almost all the parents expressed satisfaction with their current child care arrangement. One parent described her situation as "perfect". A few parents, a definite minority of the group of parents interviewed, expressed frustration, however, about their situations. They reported frustration about various issues including inflexible closing times ("sometimes I have to work late and the provider closes at 5:30"), lack of weekend hours, the location of the child care home ("the provider lives kind of far away"), and difficulty validating vouchers.

Defining quality child care: Parents defined some elements of child care quality in ways that do not vary significantly from those of professionals. While no parent defined child care quality in as complete a way as a professional might or as defined using the *FDCRS* and *CIS*, most parents recognized that child care is more than basic care. While parents acknowledged that children need to have their basic needs meet, they also recognize that children do best when they are in comfortable, safe surroundings where they have room to play outside as well as inside. Parents desire a provider who structures a learning environment that includes a pleasant social atmosphere. Parents know that child care does not have to be about babysitting and that activities that encourage children's learning should occur. Finally, parents believe that communication between parents and care provider is an important part of quality child care.

Summary of Findings:

- During ECI's 5 year operation, a total of 1,528 providers were certified to provide care for children. Terminations resulted in a loss of 39% of the providers over the period. Yearly rates of attrition ranged from 1% in year 1 to 15% in year 5. By June 30, 2004, 939 providers certified as a part of ECI remained. Changes in the funding environment, and thus in the number of families eligible to receive a subsidy, may have contributed to some of the provider loss. During the same time period, terminations among the 948 providers certified before ECI was about 35%.

- More than 25,000 technical assistance visits were delivered during the first 5 years of the ECI. Almost 11,000 of the visits were dedicated to improving the quality of care. During year 4, 44% of ECI-Certified providers received three or more quality enhancement visits while during year 5, 39% received three or more quality visits, which was the goal each year.

- Observations of a random sample of 95 family child care homes revealed that despite intervention aimed at improving quality of care, the overall quality of caregiving remained poor. Scores from the Time 2 observation for both the *FDCRS* and the *CIS* were significantly worse than the baseline quality observed 12 months earlier.

- Regression analyses revealed that the number of quality technical assistance visits a sample provider received between certification and her Time 2 observation added significantly to the model explaining the *FDCRS* score at Time 2; the number of training hours a provider attended did not contribute significantly to the model. Although number of quality visits was significantly and positively related to the *FDCRS* score, the coefficient was small suggesting a weak effect. Provider level of education and number of children in care also significantly added to the model explaining quality.

- The use of the PAT curriculum, *Supporting Care Providers through Personal Visits*, seems to be a promising program that supports both technical assistants in their work and child care providers. It offers standardized visit plans that can allow more uniformity of information giving across regions, visits, and providers.

- Technical assistants reported supportive working relationships with child care providers. They expressed satisfaction with the use of the new curriculum, *SCPTPV*, and appreciate the resources it offers. They expressed frustration in gaining access to some providers and believe that many providers are not open to changing their behavior.

- Parents seem to understand in a broad sense what factors characterize quality child care as defined by professionals. Parents indicated that quality care meets the educational needs as well as the basic care needs of their children. When it comes to choosing a provider, however, parents make their choice based on referrals from friends and families. Most parents expressed satisfaction with their current care situation and cited the provider's flexibility in providing care as key to their ability to maintain employment.

Discussion and Implications

This study evaluated the dual goals of increasing child care capacity and enhancing quality of caregiving in newly certified family child care homes in Cuyahoga County. At the broadest level, the goals have met with mixed success. The goal of building child care capacity was initially reached and exceeded, but recent losses in the number of providers have kept the project from sustaining its achievements. Quality building efforts were less successful. Based on a randomly selected group of ECI-Certified providers, quality of caregiving remained poor despite both technical assistance and training. Although results did not provide the positive picture that was desired, they inform the Initiative's future work aimed at improving the lives of Cuyahoga County's youngest citizens by building the early care and education system.

Increasing the Supply of Family Child Care Providers:

Starting Point and the Regional Child Care System succeeded in expanding the number of family child care homes in Cuyahoga County. The goal of increasing the number of providers by more than 1,000 was reached during the ECI's second year of operation. At first, losses in the number of providers were small. Over time, however, the provider group has experienced greater levels of attrition. Among ECI-Certified providers, almost 40% are no longer caring for children. Among providers certified prior to ECI, 35% are no longer providing child care. Reasons for terminated contracts vary. Some providers failed to meet continuing certification requirements, particularly as training requirements became more stringent. Others failed basic health and safety checks during routine inspections. Still others likely left because funding for child care subsidies decreased both at the county and state levels and children who were eligible for vouchers at the start of ECI no longer are eligible.

Income increased over time among ECI providers. Incomes averaged $1,000 more per month in 2004 than they had in 2000. In addition, average monthly income per child increased by more than $70 during that time. Providers were paid an incentive for participating in the

quality enhancement program, "Care for Kids", and for demonstrating at least "good" quality care as measured by child care consultants working with the Regional Network.

Technical assistance visits grew over time as well, reaching a total of more than 25,000 by the end of the project's 5th year. By all accounts, technical assistance providers made significant efforts to complete visits. Both ECI- and pre-ECI-certified providers received quality enhancement visits. However, in each year, the desired and contracted number of visits was not achieved. In the final year, when three quality enhancement visits were required, only 39% of providers received three or more visits. Many providers were at first willing receivers of these visits; over time, fewer providers accepted technical assistance. During the last 2 years, technical assistance providers reported that more than 1,000 attempts at visits were not completed because child care providers were not at home or not available when they had agreed to meet with a technical assistance provider.

Technical assistance providers like the structure and information provided in the new curriculum, *Supporting Care Providers through Personal Visits*. A primary challenge now is to engage and motivate more child care providers to change their care provision. This challenge and technical assistance providers' inability to complete required visits indicate that, on an ongoing basis, technical assistance visits and training activities may not encourage sufficient change to influence the quality of care among these providers.

Increasing Quality of Family Child Care:

There is little doubt that the goal of increasing the quality of child care was an undertaking of mammoth proportion. From the beginning stages of the Initiative several hurdles proved difficult for the component to overcome despite the strengths of the Family Child Care Regional System, and affected the System's ability to achieve its goal of increasing quality of care. Acknowledging major limitations of the project and the ways in which they affected the goal of enhancing quality are important to the System's future work.

Primary strengths of the regional child care system included the enthusiasm and experience that regional groups brought to the task of increasing quality. Meetings with regional partners during the early stages of the Initiative revealed that the regional partners were committed to building capacity and improving child care quality. Additionally, all of the partners came with experience providing training and USDA Child and Adult Care Food Program visits. The regional groups wanted to be successful. Training opportunities for technical assistants offered by Starting Point were another positive aspect of the Regional System. In fact, though, obstacles outside the Regional System's control were larger than anticipated. Two factors that may have affected the quality-building outcomes of the component include the low salaries of technical assistants and the recruitment of women receiving cash assistance to become child care providers (S. Foster, personal communication, September 14, 2002). Together, these factors may have affected the component's ability to increase the quality of caregiving in a positive way. In the former case, low salaries kept the regional partners from hiring technical assistants with at least Child Development Associate credentials. Research shows that higher education, specifically a college degree in early childhood education or child development, is linked to higher levels of quality early care and education. While a college degree may be an unrealistic expectation for home-based child care providers, college degrees in early childhood education

are desirable for technical assistants. Results from several national studies point to the significant and positive effects of having individuals with college degrees in early childhood education providing early care and education (Fischer & Eheart, 1991; Grayson & Pearlmutter, 2004; Weaver, 2002).

Encouraging women leaving cash assistance to become child care providers may not have been a sound policy decision. Other states considered such a policy but decided otherwise (C. Drugge, personal communication, May 14, 2004). Certainly, a positive aspect of the policy was that it offered jobs to women who needed work. Research shows, however, that providers who choose to provide child care do a better job of caregiving. They are intentional in their desire to care for children in the best way and seek opportunities to improve their skills. A lack of intentionality in the population of ECI-Certified providers may be implicated in the attrition among providers in the System and the lack of change in quality. Review of the demographic data from the providers in the study of technical assistance, reveals that the providers with the highest *FDCRS* scores were certified prior to ECI. Their technical assistants judged them to be "very intentional" in their desire to provide quality child care. These providers reported numerous ways they sought to improve their caregiving. They also attended significantly more trainings and received significantly more technical assistance sessions over the first 5 years of the ECI.

In examining the impact of the intervention on quality of caregiving, findings showed that the home-based technical assistance visits significantly and positively affected caregiving. While the size of the effect is small, the positive results suggest that visits should be continued but that the role of the technical assistance visits might need to be reconsidered, i.e., a change in the program model might be worth considering. During the first 5 years of the ECI, the goal of the technical assistance visit was to deliver essentially new information to providers, information that would increase the quality of caregiving. Providers also had the opportunity to learn new information about improving the quality of their care by attending group training sessions. There were no formal links between the home-based technical assistance and the training activities.

Home-based technical assistance and group training each have strengths and weaknesses associated with them. For example, on the positive side, intervening in the home allows a technical assistant to work with a provider in the actual caregiving environment. On the negative side, however, the environment may be too distracting for substantive first time learning to take place. Additional difficulties include the voluntary nature of home visiting and the variability in the quality of the visit. Group training can be a superior learning environment if the size of the group is relatively small, i.e., 16 or fewer participants to allow for discussion, the group facilitator is knowledgeable about adult learning styles as well as the subject matter, and the group sessions occur on a regular basis to allow for group cohesion to develop (Weitzman & Greenberg, 2002). On the negative side, group training will likely fail when the presentation is a lecture that does not meet the various learning styles of group members. Very few individuals benefit from two hours of lecture.

Perhaps readjusting the roles of the home-based technical assistance and the training needs to be considered. While certainly more technical assistance visits may improve quality, given the current budgetary constraints, the likelihood of increasing technical assistance visits is

unlikely. Instead, it may be more useful to present information to small groups of willing providers where discussion and active participation in activities allow providers to better understand the material. In such a scenario, presentations meet the different learning styles of participants. Group sessions are followed up with home-based review of new material. During the home visit, providers are videotaped using strategies discussed in the group. The videotape is reviewed during the session to study how the strategies are working or not working. Several intervention programs, e.g., Hanen Centre Programmes for Parents and Caregivers, already work with participants in this manner.

Quality of child care is an issue in every state. In general, standard regulations such as certification, which is the standard in Ohio, represent the lowest level of caregiving quality, the most basic level of care. However, more than three-quarters of the states have developed some quality standards and some have implemented tiered reimbursement systems tied to achievement of quality standards. A few counties in Ohio are experimenting with one or both parts of this strategy for improving center-based child care. Quality standards for home providers could include achieving the CDA credential or meeting standards set by the National Association for Family Child Care (NAFCC). Tiered reimbursement would require that the state make funds available to increase funding for family child caregivers who meet quality standards.

Policymakers might question moving to a tiered system of care upon learning that parents are satisfied with the care their children receive. Our findings about parental choice mirror the literature that indicates parents make their choices by seeking referrals from family and friends for safe and flexible care. Parents can state many of the characteristics of quality, but typically make other choices. Blau (2001) suggests that even educated parents with the funds to pay the cost of higher quality care often choose the lowest cost option, an option that may not meet the child's needs as much as the parents' needs.

The family child care system in Cuyahoga County must find a way to identify providers who are most likely to remain in the System and provide high quality child care if the goal of improving the developmental and educational outcomes of our children is to be achieved. We know that providers who are intentional in their desire to provide child care and who have higher levels of education demonstrate higher quality care. We know also that technical assistance visits affected quality in a positive and significant way, but that many more visits than could be realistically delivered are required to increase scores to the desired levels of caregiving.

Recommendations

The attention paid to family child care through ECI during the past 5 years has shown the importance and value of this service to families. It also has shown the difficulty of changing patterns of provider behavior so that children will receive developmentally appropriate care. Traditional training mechanisms and in-home services alone have not demonstrated success. Some creative strategies should be considered. Starting Point already has become involved with Teacher Education and Compensation Helps (TEACH), the program that encourages providers to seek formal education in early childhood development. The County and Starting Point should examine additional strategies that, when taken together, would become a comprehensive plan for shaping and changing the provision of family care. Formal education and on-going training should be a requirement for participation as a family child care provider and to work as a

technical assistant. Hamm and Jones-DeWeever (2004) report that family providers want training in small groups, through home study courses, and resource centers. Other models include provider networks that encourage training and supply assistance so that providers can access training. For more formal requirements, the County should consider the establishment of quality standards and tiered reimbursement rates. North Carolina and Oklahoma provide excellent models of public entities committed to building quality child care.

Additionally, reconsidering the role of the technical assistance visits may prove worthwhile. It is unlikely that every provider would be willing or able to participate in a group format, but a model that stresses small group learning with home-based follow-up might improve caregiving in a way that has not been seen thus far and that also may appeal to providers looking for external support from other providers working in the same system of caregiving.

If a home visiting model is to be continued, the County and Starting Point should examine the abilities and expectations set for home visitors – the technical assistance staff. These individuals perform their jobs with commitment and energy. However, they still are limited because many of them lack the formal education and training in child development and early education that would allow them to be experts in provider professional development. Many have hands-on expertise. Assisting them to obtain formal education would increase their capacity and ability to train and support others. The PAT curriculum is a very helpful tool. Formal education could assure its optimum use.

Finally, educating parents about their responsibility for choosing quality of care also seems essential. Parents already understand some aspects of quality. An ongoing campaign to influence decision making about child care could introduce and emphasize other, more subtle aspects. Parents could be informed about early brain development and the importance of reading, as well as other interactive experiences for their very young children. For instance, parents might be expected to watch a video about quality child care when renewing their child care subsidy eligibility. They would be expected to take a pre- and post-"test" about quality child care. Efforts to educate parents about the role of child care beyond basic safety and trust issues need to occur in many venues, using multiple methods to assure that the messages reach parents in all of our communities.

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Appendices Chapter 5:

Appendix 5.1

Technical Assistance Evaluation Form
Family Child Care Homes
Early Childhood Initiative Phase 2

Provider ID: _____

TA Initials: _____

Date: _____ Visit #: _____1 or 2____

Number of Children Present: _____

Ages of Children Present in Months (list birthdates if possible):

_____

How long in months has the provider worked with this TA?

_____

How many TAs has the provider worked with including current TA?

_____

Observer Initials: _____

DIRECTIONS: Rate the overall performance of the session by circling the number that best represents your overall sense of the behaviors observed. Please provide specific examples of behaviors in the "comments" section.

1 = No or not at all present
2 = Somewhat or sometimes present
3 = Yes or consistently present
NA = Not applicable

Notes (include information about the specific session and how closely it resembled the content of the Supporting Care Providers through Personal Visits).

TECHNICAL ASSISTANCE EVALUATION FORM				
The TA . . .	**No or never**	**Sometimes or Somewhat**	**Yes or always present**	
1. Instructional Processes	**1**	**2**	**3**	**NA**
A. Session Planning				
1A1. Identifies objectives appropriate to provider's needs based on previous assessments				
1A2. Develops activities within the objectives that are appropriate to children's developmental levels				
1A3. Prepares organized session				
B. Session Execution	**1**	**2**	**3**	**NA**
1B1. States clearly the goals of session				
1B2. Involves provider in activity or activities				
1B3. Explains main ideas of session in several ways				
1B4. Poses appropriate questions to the provider to assess provider's understanding of the content				
1B5. Demonstrates knowledge of session content				
1B6. Encourages provider participation in session activities				
1B7. Presents information at a level appropriate to provider's level of understanding				
1B8. Demonstrates flexibility/adaptability to changing situations				
1B9. Uses session time in a productive and purposeful way				
1B10. Uses materials appropriately				
C. Session Conclusion	**1**	**2**	**3**	**NA**
1C1. Summarizes main points of session				
1C2. Encourages provider to restate main ideas learned				
1C3. Evaluates provider understanding and clarifies any misunderstandings the provider expresses				
1C4. Provides "assignment" to provider to encourage practice of new information				
1C5. Reviews assignment and its goals				
D. Teaching Methods	**1**	**2**	**3**	**NA**
1D1. Demonstrates knowledge of DAP				
1D2. Uses materials/tools with a sense of competence				
1D3. Uses activities that are appropriate				

to the children in care (DAP)				
1D4. Explains goals, activities, etc in a concrete way				
1D5. Uses "teachable moments"				
1D6. Maintains a positive environment				
1D7. Knows and provides resources (e.g., referrals to other agencies) as appropriate to the provider's needs				
E. Feedback to Provider	**1**	**2**	**3**	**NA**
1E1. Uses specific positive statements about provider behavior when providing feedback				
1E2. Uses sensitive, supportive tone with provider				
1E3. Treats provider's responses with respect				
1E4. Encourages self-appraisal by provider				
1E5. Preserves provider's self-esteem				
2. Interpersonal Relationships	**1**	**2**	**3**	**NA**
A. Relationship with Provider				
2A1. Listens actively to provider's concerns, questions, ideas				
2A2. Attends to and shows interest in provider				
2A3. Appears comfortable interacting with provider				
2A4. Establishes rapport				
2A5. Builds an environment of trust				
2A6. Establishes a working alliance with provider that promotes change				
B. Relationship with Children	**1**	**2**	**3**	**NA**
2B1. Recognizes the developmental abilities and needs of the children				
2B2. Models interactions appropriate to the children's developmental levels				
2B3. Gets eye-to-eye with children				
2B4. Clearly communicates behavior expectations to children				
2B5. Establishes rapport easily with the children				
2B6. Effectively manages situations				
2B7. Uses sensitive, supportive tone with the children				
3. Professionalism				
A. Professional Responsibilities of TA				
3A1. Arrives punctually for appointment				
3A1a. If late, calls to let provider				

know				
3A2. Uses time effectively				
3A3. Communicates effectively				
3A4. Dresses appropriately for the job				
3A5. Demonstrates a professional attitude				
3A6. Reflects on what is learned during session				

Identify 2 or 3 characteristics that <u>facilitate</u> the effectiveness of the technical assistance.

Identify 2 or 3 characteristics that <u>hinder</u> the effectiveness of the technical assistance.

Appendix 5.2 Total Technical Assistance Visits – ECI-Certified Providers[1]

Type of Visit	Year 1	Year 2	Year 3	Year 4	Year 5	Total Visits
Pre-certification, Meals/Snacks, Opportunities for Professional Growth	2,013	3,611	2,780	1,512	1,508	11,424
Assessment	71	712	881	882	721	3,267
Space and Furnishings for Care and Learning	16	106	39	56	20	237
Furnishings for routine care and learning	0	39	58	34	24	155
Furnishings for relaxation and comfort	0	17	31	19	19	86
Child-related display	0	27	130	113	207	477
Indoor space arrangement	0	42	86	47	25	200
Active physical play	0	64	87	30	16	197
Space to be alone	0	12	27	13	8	60
Space to be alone – Infants & Toddlers	0	12	13	9	1	35
Space to be alone – 2 years & older	0	1	5	7	8	21
Basic Care	117	339	92	46	6	600
Arriving/leaving greetings	0	29	133	28	31	221
Nap/rest	0	12	80	20	21	133
Diapering/toileting	0	65	306	69	52	492
Personal grooming	0	81	491	152	34	758
Health	0	29	19	5	3	56
Safety	0	10	36	8	5	59
Language and Reasoning	0	27	56	48	19	150
Informal use of language	1	31	23	13	15	83
Informal use of language – Infants & Toddlers	0	8	20	4	2	34
Informal use of language – 2 years & older	0	3	8	10	7	28
Helping children understand language	0	68	103	63	27	261
Helping children understand language – Infants & Toddlers	0	6	14	17	17	54
Helping children understand language – 2 years & older	0	1	22	5	14	42
Helping children use language	0	25	38	19	32	114
Helping children reason	0	23	71	30	24	148
Learning activities	10	146	88	93	17	354
Eye-hand coordination	0	81	126	33	36	276
Art	0	208	290	54	56	608
Music and movement	0	80	114	34	48	276
Sand and water play	0	27	135	80	208	450
Dramatic play	0	19	105	40	87	251
Blocks	0	32	40	25	56	153
Use of TV	0	28	109	43	32	212
Schedule of daily activities	0	66	230	79	81	456
Supervision of play indoors and outdoors	0	20	74	23	5	122
Social development	61	561	59	28	1	710
Tone	0	1	30	1	20	52
Discipline	1	62	89	16	11	179

Type of Visit	Year 1	Year 2	Year 3	Year 4	Year 5	Total Visits
Cultural awareness	0	73	79	70	108	330
Adult Needs	3	79	62	189	21	354
Relationships with parents	2	120	150	41	8	321
Balancing personal and caregiving responsibilities	1	62	148	44	18	273
Provisions for Exceptional Children	0	17	5	0	0	22
Adaptations for basic care (physically handicapped)	0	2	1	0	0	3
Adaptations for activities (physically handicapped)	0	4	1	2	0	7
Adaptations for other special needs	0	13	2	6	2	23
Communication (exceptional)	0	2	2	12	2	18
Language/reasoning (exceptional)	0	1	2	2	20	25
Learning and play activities (exceptional)	0	3	4	3	24	34
Social development	0	2	1	1	24	28
Caregiver preparation	3	133	82	36	0	254
Gross motor	0	1	0	0	0	1
Fine motor	0	0	1	0	0	1
Vision impaired	0	0	0	1	0	1
Referral Visits	0	0	3	127	101	231
Total Visits Completed	2,299	7,243	7,681	4,342	3,852	25,417
Visits Attempted - Not Completed (Provider not home or not available)	1	18	265	371	465	1,120

[1]134 visits were made to ECI-Certified providers with no subject/topic noted. Those visits are not included here.

Source: Starting Point data. Analysis by Center on Urban Poverty and Social Change.

Appendix 5.3 Total Technical Assistance Visits – Pre-ECI-Certified Providers[1]

Type of Visit	Year 1	Year 2	Year 3	Year 4	Year 5	Total Visits
Pre-certification, Meals/Snacks, Opportunities for Professional Growth[2]	1,050	1,069	1,036	755	932	4,842
Assessment	4	223	380	359	319	1,285
Space and Furnishings for Care and Learning	1	20	18	21	8	68
Furnishings for routine care and learning	0	5	26	8	7	46
Furnishings for relaxation and comfort	0	6	3	3	5	17
Child-related display	0	5	47	45	103	200
Indoor space arrangement	0	1	17	20	13	51
Active physical play	0	17	23	10	8	58
Space to be alone	0	3	4	3	3	13
Space to be alone – Infants & Toddlers	0	0	6	3	2	11
Space to be alone – 2 years & older	0	1	1	2	2	6
Basic Care	123	136	40	19	8	326
Arriving/leaving greetings	0	8	40	13	18	79
Nap/rest	0	2	38	8	9	57
Diapering/toileting	0	4	133	36	17	190
Personal grooming	0	15	128	42	10	195
Health	0	4	8	3	2	17
Safety	0	2	16	6	4	28
Language and Reasoning	0	7	29	29	8	73
Informal use of language	0	9	6	3	5	23
Informal use of language – Infants & Toddlers	0	2	6	1	1	10
Informal use of language – 2 years & older	0	0	3	0	1	4
Helping children understand language	0	5	26	14	23	68
Helping children understand language – Infants & Toddlers	0	1	6	4	5	16
Helping children understand language – 2 years & older	0	0	2	0	3	5
Helping children use language	0	1	14	4	7	26
Helping children reason	0	7	27	5	17	56
Learning activities	0	57	38	44	7	146
Eye-hand coordination	0	17	54	13	18	102
Art	2	53	88	19	20	182
Music and movement	0	13	44	2	19	78
Sand and water play	1	6	49	35	83	174
Dramatic play	0	5	45	13	27	90
Blocks	0	6	12	3	19	40
Use of TV	0	8	33	6	12	59
Schedule of daily activities	0	19	85	29	42	175

Type of Visit	Year 1	Year 2	Year 3	Year 4	Year 5	Total Visits
Supervision of play indoors and outdoors	0	5	27	14	2	48
Social development	0	100	20	28	1	149
Tone	0	0	8	1	8	17
Discipline	0	6	35	5	2	48
Cultural awareness	0	21	39	27	45	132
Adult Needs	0	8	24	95	11	138
Relationships with parents	0	20	62	11	0	93
Balancing personal and caregiving responsibilities	0	7	49	17	15	88
Provisions for Exceptional Children	0	3	0	0	0	3
Adaptations for basic care (physically handicapped)	0	0	2	0	0	2
Adaptations for activities (physically handicapped)	0	0	4	0	0	4
Adaptations for other special needs	0	0	2	4	0	6
Communication (exceptional)	0	0	1	1	0	2
Language/reasoning (exceptional)	0	0	0	0	5	5
Learning and play activities (exceptional)	0	0	0	1	6	7
Social development	0	0	1	1	6	8
Caregiver preparation	0	35	39	10	1	85
Gross motor	0	1	1	0	0	2
Fine motor	0	0	0	0	0	0
Vision impaired	0	0	0	0	0	0
Referral Visits	0	0	1	85	69	155
Total Visits Completed	1,181	1,943	2,846	1,880	1958	9,808
Visits Attempted - Not Completed (Provider not home or not available)	0	8	47	139	164	358

[1] 58 visits made to Pre-ECI-Certified providers listed no subject and are not included here.
[2] For providers certified before July 1, 1999, there is no record of pre-certification visits. The visits listed in these cells are post-certification food and adult development visits.

Source: Starting Point Data. Analysis by Center on Urban Poverty and Social Change.

Appendix 5.4 Ratings of the Technical Assistance Visits

Technical Assistance Observation Form	No or never present 1	Sometimes or somewhat present 2	Yes or always present 3	Not Applicable 4
1. Instructional Processes				
A. Session Planning				
1. Identifies objectives appropriate to the provider's needs based on previous assessments	2	10	31	
2. Develops activities within the objectives that are appropriate to children's developmental levels	6	22	15	
3. Prepares organized session	4	18	21	
B. Session Execution				
1. States clearly the goals of the session	5	21	17	
2. Involves provider in activity or activities	16	16	11	
3. Explains main ideas of session in several ways	9	24	10	
4. Poses appropriate questions to the provider to assess provider's understanding of the content	13	25	5	
5. Demonstrates knowledge of session content	3	19	21	
6. Encourages provider participation in session activities	16	18	9	
7. Presents information at a level appropriate to provider's level of understanding	2	13	28	
8. Demonstrates flexibility/adaptability to changing situations	8	20	15	
9. Uses session time in a productive and purposeful way	4	25	14	
10. Uses materials appropriately	5	21	17	
C. Session Conclusion				
1. Summarizes main points of session	14	16	13	
2. Encourages provider to restate main ideas learned during the session	30	13	0	
3. Evaluates provider understanding and clarifies any minsunderstandings the provider expresses	19	19	5	
4. Gives assignment to provider to encourage practice of new information	23	12	8	
5. Reviews assignment and its goals	28	9	6	
D. Teaching Methods				
1. Demonstrates knowledge of developmentally appropriate practice (DAP)	4	30	9	
2. Uses materials/tools with a sense of competence	3	21	19	
3. Uses activities that are appropriate to the developmental levels of the children in care	6	25	12	
4. Explains goals, activities, etc. in a concrete way	9	18	16	
5. Uses "teachable moments"	11	28	4	
6. Maintains a positive environment	1	8	34	

7. Knows and provides resources (e.g., referrals to other agencies) as appropriate to the provider's needs	4	7	28	4
E. Feedback to Provider				
1. Uses specific positive statements about provider behavior when giving feedback	5	23	15	
2. Uses sensitive, supportive tone with provider	0	8	35	
3. Treats provider's responses with respect	0	6	37	
4. Encourages self-appraisal by provider	18	14	11	
5. Preserves provider's self-esteem	0	4	39	
2. Interpersonal Relationships				
A. Relationship with Provider				
1. Listens actively to provider's concerns, questions, ideas	4	12	27	
2. Attends to and shows interest in provider	1	8	34	
3. Appears comfortable interacting with provider	2	3	38	
4. Establishes rapport	0	5	38	
5. Builds an environment of trust	0	5	38	
6. Establishes a working alliance with provider that promotes change	4	15	24	
B. Relationship with Children				
1. Recognizes the developmental abilities and needs of the children	6	29	8	
2. Models interactions appropriate to the children's developmental levels	8	27	8	
3. Gets eye-to-eye with children	3	13	27	
4. Clearly communicates behavior expectations to children	9	19	15	
5. Establishes rapport easily with the children	3	19	21	
6. Effectively manages difficult situations	7	21	15	
7. Uses sensitive, supportive tone with the children	1	11	31	
3. Professionalism				
A. Professional Responsibilities of TA				
1. Arrives punctually for appointment	12	0	31	
2. If late, calls to let provider know	6	0	6	31
3. Uses time effectively	3	19	21	
4. Communicates effectively	3	24	16	
5. Dresses appropriately for the job	0	4	39	
6. Demonstrates a professional attitude	0	3	40	

Source: Observer data. Analysis of data by Center on Urban Poverty and Social Change.

Chapter 6
Improving Special Needs Child Care by Supporting Providers and Families

Gerald Mahoney, Kathleen Quinn-Leering, and Meg Fernando

Chapter Summary

The Special Needs Child Care (SNCC) component of the Early Childhood Initiative (ECI) was created to improve special needs child care in Cuyahoga County. Recognizing a range of needs, program planners designed a multi-dimensional approach to help children who require additional support in child care settings. Child care providers received training and technical assistance (TA) and families received assistance in their search for suitable child care placements. Six community agencies provided these services over the first 5 years of the ECI.

Earlier work concluded that this component targeted an area of great need in the County (Mahoney, Quinn-Leering, Jones, & Withers, 2003). The services were used by many child care providers and families and were associated with (a) a greater willingness to provide special needs child care, (b) stable child care placements, and (c) high parent satisfaction. The present evaluation sought to gain deeper insight into the use of the SNCC services to determine if (a) these services help child care providers more effectively care for children with special needs and (b) the supply of special needs child care in the County is sufficient to meet the need.

This evaluation included analyses of an administrative data set, a parent survey, and a child care provider survey. Noteworthy findings include:

- Over 1,000 children with special needs received services during the first 5 years of the ECI project. Throughout this same period, more than 2,800 child care providers received a technical assistance visit and/or attended a training. Overall, center-based providers used the services more than family child care home providers.
- In general, parents reported high satisfaction with the Early Intervention (EI) services for children with special needs provided by Cuyahoga County.
- Parents most often used center-based programs for their child with special needs. Most parents reported receiving some type of help in finding child care and most found it relatively easy to locate child care during their most recent search. Parents value help with the high cost of child care and with identifying providers able to care for children with special needs. In general, parents expressed high satisfaction with their current child care provider.
- Approximately one-third of the parents who were not using child care indicated that their child's special needs influenced their decision "a fair amount" or "a lot."
- Child care providers received TA visits primarily because (a) children had difficulties adjusting to the expectations of child care settings, (b) child care staff wanted to learn more about a child's special needs, and (c) help was needed caring for a child with behavioral problems.
- Overall, providers were very satisfied with the technical assistance they received. Consultants providing highly rated visits were knowledgeable, established positive rapport with providers, and were committed to helping the child and family.

The evidence indicates that the SNCC services are helpful to those who receive them. As the program moves forward, it may be useful to consider ways to expand access to the services, especially for families whose children have more severe needs.

Introduction

The need for quality child care services for young children is expanding nationally. It is not easy for families to find appropriate, quality child care, and it is especially problematic for families who have children with special needs (Freedman, Litchfield, & Warfield, 1995; Herman & Thompson, 1995; Krajicek & Moore, 1993; Palfrey, Walker, Butler, & Singer, 1989). Historically, people of all ages with disabilities have faced problems gaining access to services available to those without disabilities, including child care programs. Passage of the Early Intervention Amendments to the Education for All Handicapped Children Act (PL99-457 in 1986), the Americans with Disabilities Act (ADA) (PL101-336 in 1990) and Individuals with Disabilities Education Act (PL 101-476 in 1990) laid the groundwork for access to equal rights, privileges, and services for adults and children with special needs. In the area of child care services, children with identified disabilities are legally entitled to equal access to community-based child care.

Research has highlighted a number of issues linked to child care for this population of children. Evidence suggests that having a child with special needs influences the choices mothers make about working, such as when to return to work, how many hours to work, and the type of child care chosen (Booth & Kelly, 1998; Landis, 1992). Parents of children with special needs report that they often encounter child care programs that are expensive, low quality, inconveniently located, and unable to meet the needs of their children (Warfield & Hauser-Cram, 1996). Freedman et al. (1995) point out that "what distinguishes families of children with disabilities from other working families is the intensity and complexity of the arrangements required to balance work and home requirements successfully" (p. 512). Identifying an appropriate child care setting appears to be especially challenging for parents of children with more severe needs such as multiple disabilities, low cognitive functioning, and significant behavior problems.

Behavior problems, in particular, are often a significant barrier to successful and stable child care placements. Children exhibiting problem behaviors may be asked to leave their child care setting because child care providers do not know how to handle or change the children's disruptive behavior (Keenan & Wakschlag, 2000). The incidence of behavior problems in early childhood settings can be of some magnitude. For example, studies have found that between 16%-30% of children enrolled in Head Start programs have externalizing behavior problems (Qi & Kaiser, 2003).

Child care providers are often reluctant to provide special needs child care because of negative attitudes, lack of training, lack of specialized equipment, and the perception of additional expenses (Berk & Berk, 1982; Chang & Teramoto, 1987; Clarke & Nomanbhoy, 1998; Krajicek & Moore, 1993). Consultation and training are viewed as key strategies to address these issues by helping child care providers accept and better care for children with special needs (Klein & Sheehan, 1987; Palsha & Wesley, 1998; Wesley & Buysee, 1996). With support, child care providers can learn how to make the necessary modifications in practices, routines, and activities that will enable each child to participate in meaningful ways. The Early Childhood Initiative (ECI) recognized the significance of this issue for many families and child care providers in Cuyahoga County and thus determined that one objective of the ECI would be to support efforts to improve child care for children with special needs.

Program Description

The Special Needs Child Care (SNCC) component of the ECI was created to improve child care for children with a wide range of special needs throughout Cuyahoga County. The County implemented a multi-dimensional approach to addressing the needs of families and child care providers in the community and adopted a broad definition for special needs child care: child care for children who require additional support in a child care setting. This definition includes, but is not limited to, children with diagnosed medical conditions, developmental delays, biological risk factors, environmental risk factors, and socio-emotional problems.[1] Children with special needs could be identified either before they are placed in child care or while in a child care setting.

The program logic of the Special Needs Child Care component appears in Figure 6.1. The Special Needs Child Care component has two goals:

(1) The first goal is to build capacity of special needs child care in the County. This is intended to ease the burden parents face when searching for appropriate child care and better equip providers to cope with some of the challenges that can arise when caring for

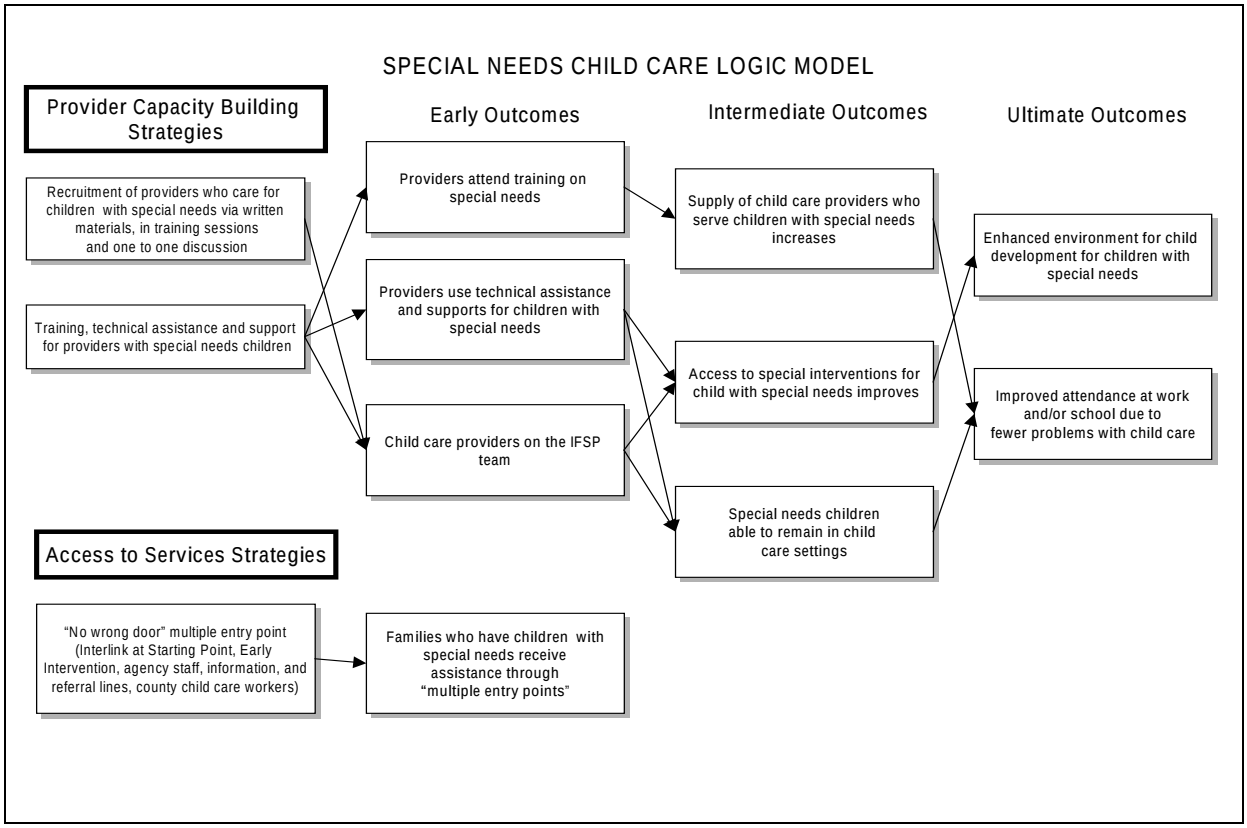


Figure 6.1 Special Needs Child Care Logic Model

[1] The following are examples of each type of special need: (a) diagnosed medical conditions--autism, cerebral palsy; (b) developmental delays--cognitive delays, motor delays; (c) biological risk factors--prematurity, health concerns; (d) environmental risk factors--child abuse or neglect; and (e) behavior problems--aggression, noncompliance.

children with special needs. The component has addressed this issue through providing child caregivers with special needs child care training and technical assistance (TA).

(2) The second goal is to improve families' access to appropriate services for children with special needs through helping parents locate suitable child care and other necessary services (e.g., Early Intervention, Early Start). Based upon a "no wrong door" philosophy, this assistance is designed to decrease the time and effort it takes families to obtain appropriate services.

The SNCC component was coordinated by Starting Point, Cuyahoga County's child care resource and referral agency. Starting Point, in turn, contracted with six community agencies over the first 5 years of the Initiative—each with its own specialized capabilities (see Table 6.1). For example, one agency is dedicated to supporting child care providers caring for children with medical or physical needs, while other agencies focus on helping providers learn better ways of managing children who exhibit challenging behaviors. Appendix 6.1 describes Starting Point, the six contracted special needs child care agencies, as well as three sources of support to the agencies.

Table 6.1 Contracted Service Levels of Children with Special Needs by Community-Based Agencies by Contract Periods

Agency	Period 1 (01/15/00 – 09/30/00)	Period 2 (10/01/00 – 09/30/01)	Period 3 (10/01/01 – 6/30/02)	Period 4[a] (7/1/02-6/30/03)	Period 5[a] (7/1/03-6/30/04)
The Achievement Center for Children	200	200	150	200	200
Applewood Centers	35	35	35	50	50
Beech Brook	--	--	30	30	30
Cuyahoga County Board of Health	30	61	91	75	75
Hanna Perkins Center	35	35	--	--	--
Positive Education Program	200	200	200	250	250
Total	**500**	**531**	**506**	**605**	**605**

Note: Hanna Perkins Center ceased participation at the end of Period 2 and Beech Brook joined ECI as Period 3 began.

[a]Due to a number of children on the waiting list to be served, funds were allocated to serve an additional 18 children in Period 4 and 13 children in Period 5.

Source: Starting Point.

Findings from the Previous Evaluation

A previous evaluation provided evidence that the Special Needs Child Care component has led to improvements in child care services for children with special needs in Cuyahoga County (Mahoney, Quinn-Leering, Jones, & Withers, 2003). The evaluation focused on the use of TA, training, and child care placement assistance by child care providers and parents, the relationship of TA and child care placement stability, and the impact of the SNCC services on the County's capacity to serve children with special needs. The data sources included an

administrative data set[2] documenting the use of the Special Needs Child Care component services, a telephone survey completed by 59 parents whose children's child care providers had received technical assistance, and a mail survey completed by 113 supervisors of child care centers that had utilized the services.

Technical assistance and training were the foundation of the SNCC services. Fully 3,174 technical assistance visits on behalf of 399 children with special needs were documented over the first two and a half years of the ECI. Of these children, about two-thirds were male, the average age was approximately 4 years, and most common were medical (37%), developmental (33%) and behavioral (30%) needs. Most of the 760 child care providers who received TA worked at child care centers (89%) rather than family child care homes. Overall, 903 providers attended at least one of the 256 special needs child care trainings. Parents of children with special needs also received SNCC services. Approximately 270 families received child care placement assistance. TA visits were held with 246 parents as part of TA consultants' efforts to work together with providers and families.

Results from the parent telephone survey indicated that while finding and maintaining special needs child care can be challenging, technical assistance was helpful and had a positive impact on children's child care experiences. Most parents reported receiving some type of support in their search for child care--most often general information about child care, names of programs, and assistance with children's transitions to new programs. This support proved sufficient for many parents. However, several parents indicated they would have liked help identifying providers qualified to care for their child. Parents gave TA high marks, with many commenting that the TA consultants worked hard to make their child care arrangements successful. In addition, TA was associated with child care stability, with 80% of the children remaining in their program for at least 6 months.

Findings from the survey of child care center supervisors indicated that most centers serve only a small number of children with special needs. Supervisors expressed a desire to be more inclusive, but most thought it was difficult to provide quality special needs child care. They reported that their caregivers were "somewhat" capable of providing special needs child care, and that they were more comfortable caring for children with less complex and severe needs. TA and training were associated with a greater willingness of providers to care for children with special needs, especially TA and training related to children with physical, developmental, or medical needs. Centers were more willing to care for this population of children when they had better paid and better educated child care providers.

The earlier evaluation revealed positive trends; nonetheless, there remained additional questions about the program. The issues deemed important to explore included (a) the effect of the services on the quality of children's experiences, (b) how well early intervention services are

[2] The available administrative data was incomplete for several reasons: (a) database construction took place during the first 18 months of the project and much of the data were entered retrospectively, (b) one agency did not provide data on the services it provided, and (c) data were available only for those children whose parents had signed a consent form. As of January 2002, at least 80% of the children who received services are included in the administrative data set.

being integrated into children's child care experiences, and (c) the relationship between child care provider qualities (e.g., educational background) and the effectiveness of the services.

Evaluation Design

Evaluation Questions:

The previous evaluation focused primarily on describing activities taking place in the Special Needs Child Care component to expand and improve the supply and quality of child care for children with special needs. The present evaluation continued to monitor these activities and also sought to determine the extent to which these activities are enhancing the quality of child care and contributing to the well-being of children and their parents. The evaluation questions are as follows:

- To what extent do Cuyahoga County child care providers participate in training and technical assistance related to children with special needs, and does this help them to care more effectively for these children?
- Is the supply of child care for children with special needs sufficient to meet the need in Cuyahoga County?
- Are child care providers involved in planning with families and other professionals to meet the on-going developmental needs of children with special needs?

Method:

Three sources of data were used to answer the evaluation questions: (a) an administrative data set, (b) a survey of parents of children with special needs, and (c) survey of child care providers receiving technical assistance.

Administrative Data set

The agencies involved in the SNCC programs collected the following information on the services they provided to child care providers and families: (a) demographic characteristics of the individuals involved, (b) descriptive information about the TA visits, (c) basic information about trainings, (d) child care placement information, and (e) child care stability tracking information. This information was compiled by Starting Point into a centralized database. The administrative data set used for this report includes data from January 1, 2000 through June 30, 2004. Data gathered during 2002-2004 are more reliable than those collected pre-2002 (for an explanation see Footnote 2 in the section above that describes the previous evaluation).

Parent Survey

A mail survey for parents of children with special needs was constructed to address four issues: (a) describe the child care arrangements families are using, (b) assess parents' satisfaction with these arrangements, (c) examine the degree to which child care providers are involved in children's early intervention services, (d) determine whether there continue to be barriers to identifying and obtaining child care for children with special needs. After review by the SNCC Evaluation Committee members and pilot-testing with parents of children with special needs, the survey was finalized. A copy of this survey is available from the authors.

Five-hundred families were randomly selected from the Help Me Grow database. This database documents the children with special needs in Cuyahoga County who receive services

before their third birthday. Once children turn 3, the information remains in the database but is no longer updated. Each of the selected families had a child under the age of 6, had received an Individualized Family Service Plan (IFSP), and had received more than one IFSP visit. Families' use of child care was *not* a criterion of selection. Families received a letter from the Director of Help Me Grow that described the study and requested their participation. Parents who completed the survey were given a gift card to a local store.

From the original sample, 110 parents could not be located and 10 parents declined to participate. In the end, 164 parents completed a survey, representing a 42% response rate (of the 390 families that were located). Almost all of the responding parents were mothers (98%) and 72% were married. Twenty percent of the participants were African American, 74% were White and 5% were of another race. Twenty-two percent had a high school education or less, 34% had an Associate's Degree or some college, and 45% had at least a Bachelor's Degree. A range of household incomes was reported with 13% having incomes of less than $10,000 a year, 22% reported incomes of $10,000 to $29,999, and 65% with incomes over $30,000. The average age of the children was 3.7 years old. One-half of the children had special needs that could be classified as mild, 37% as moderate, and 13% as severe. Respondents were also asked the type(s) of special needs their child had (they could indicate more than one). Most common were developmental delays (76%), followed by chronic health conditions (36%), physical problems (36%), and behavior problems (9%). Most of the children (94%) were covered by some type of health care.

Table 6.2 compares the original sample of 500 families to the 164 families in the respondent sample. Statistical analyses were performed to determine whether the respondent sample was representative of the original sample. No significant differences were found for child age or gender (at the $p<.01$ level). However, there were statistically significant differences for child race and parent marital status. Respondents were more likely to be married and their children were more likely to be white than in the original sample. Post-stratification weights were used to make the survey sample similar to the original sample in terms of child race and parent marital status. One respondent was missing marital status data resulting in a study sample size of 163. *All analyses reported from this point on are based on the weighted sample data.*

Table 6.2 Comparison of the Original Sample and the Study Sample

Characteristic		Original Sample (n=500)	Study Sample (n=164)
Child Age (in years)	Mean (SD)	3.79 (1.13)	3.67 (1.16)
Child Gender	Male	59%	63%
	Female	41%	37%
Child Race	African American	46%	24%
	White	49%	72%
	Other	5%	4%
Mother Marital Status	Married	53%	80%
	Not Married	48%	20%

Child Care Provider Survey

Child care providers who received a technical assistance visit were asked to complete two surveys. Providers were given the first survey by their TA consultant directly after a TA visit. This survey took less than 10 minutes to complete and was returned by mail to the evaluators. The second survey was a brief follow-up telephone survey that was administered at least 3 weeks after the TA visit. The surveys were designed to obtain information regarding: (a) the characteristics of TA visits (e.g., length of time), (b) the reasons for TA visits, (c) the services provided by TA consultants, and (d) provider satisfaction with TA visits. After review by the SNCC Evaluation Committee members and pilot-testing, the survey was finalized. Copies of the survey are available from the authors.

One hundred and seven child care providers completed the initial survey. Of this group of providers, 72 also completed the follow-up survey. The surveys were completed over a 4-month period from May through September 2004. The response rate cannot be calculated with absolute accuracy because information on the number of surveys handed out is incomplete. However, reliable documentation was available for 135 providers and of these, 73% chose to participate in the study. It should be noted that although the study design called for child care providers to complete one survey each, five providers completed more than one survey (about separate TA visits). The additional surveys were included in the data set so as not to lose the information provided.

Ninety seven percent of the respondents were center-based child care workers and the remainder were family child care home (FCCH) providers. Almost all of the providers worked full-time (94%). Most of the respondents were female (97%), had an average age of 36.5 years old (SD=10.8), and 24% were African American, 70% were white, and 6% were of another race. Providers reported working an average of 9.7 years in the field of early childhood (SD=7.7) and 2.9 years (SD=3.4) in their present position. The providers' educational background in early childhood education was divided roughly into thirds: one-third had at least an Associate's Degree in early childhood education, one-third had their Child Development Associate (CDA) or were working on it, and one-third had no formal training in early childhood education.

Findings

Results indicate that child care providers and families from throughout the County are using special needs child care services. Recipients of these services are generally satisfied and there is evidence that the services have had a positive effect on child care for this population of children. The data also suggest that special needs child care still poses some challenges and thus requires continued attention.

Who is Receiving the SNCC Services?

The administrative database documents the special needs child care services that were used by children, parents, and child care providers in the County. This descriptive data reports on who received services, where they received them, and for what reasons.

Over 1,000 children received services through the project. Table 6.3 presents the demographic characteristics of the children. Two-thirds of the children were male. Medical, developmental, and behavioral issues were the most common special needs among these

children. Figure 6.2 identifies the location of the residences of children who received special needs child care services (i.e., placement assistance and/or TA). The children receiving these services resided throughout the County with about half of them living within the City of Cleveland.

Table 6.3 Characteristics of Children Who Received SNCC Services (01/01/00-6/30/04) (N=1,044)

Characteristic		
Gender	Male	67%
	Female	33%
Age (in years)	Mean (SD)	3.75 (2.56)
	Range	0-15
Race	African American	38%
	White	33%
	Other	7%
	Missing	22%
Special Need[a]	Biological	10%
	Environmental	1%
	Medical	40%
	Developmental	35%
	Behavioral	24%
	Other	17%

Note: This table represents unduplicated counts of children (i.e., children served by more than one agency are counted only once).

[a]Duplicated counts of special needs (i.e., children may have more than one special need).

Source: Starting Point. Analysis of data by Center on Urban Poverty and Social Change.

Special needs child care services were utilized by child care providers throughout the County. Table 6.4 presents the characteristics of the providers who received technical assistance and/or training. Most of the providers were female and worked in child care centers. As shown in Figure 6.3, 646 child care programs had at least one provider who received a technical assistance visit and/or training. About 60% of the programs that received services were located in the City of Cleveland. The map indicates that just under 200 child care programs received services throughout the first 5 years of the ECI; however, 276 programs received services for the first time after June 2002, many of which were located in northeastern Cuyahoga County.

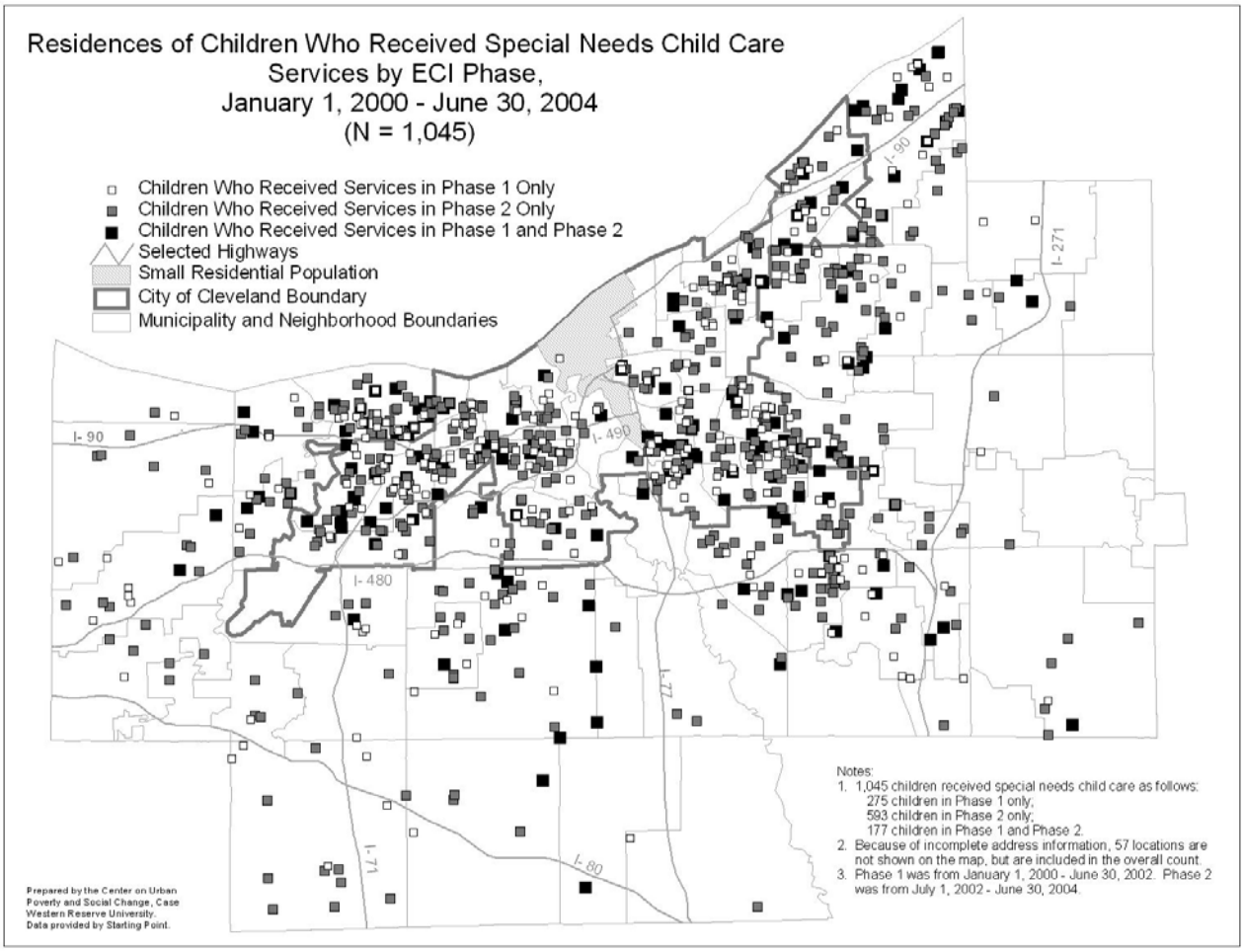


Figure 6.2 Map of Residences of Children Served

Table 6.4 Characteristics of Providers Who Received SNCC Services (Training and/or TA) (01/01/00-6/30/04) (N=2,836)

Characteristic		Providers
Gender	Male	6%
	Female	94%
Age (in years)	Mean (SD)	35.97 (12.43)
Race	African American	22%
	White	31%
	Other	3%
	Missing	43%
Type of Provider	Center	87%
	Family Child Care Home	13%

Source: Starting Point. Analysis of data by Center on Urban Poverty and Social Change.

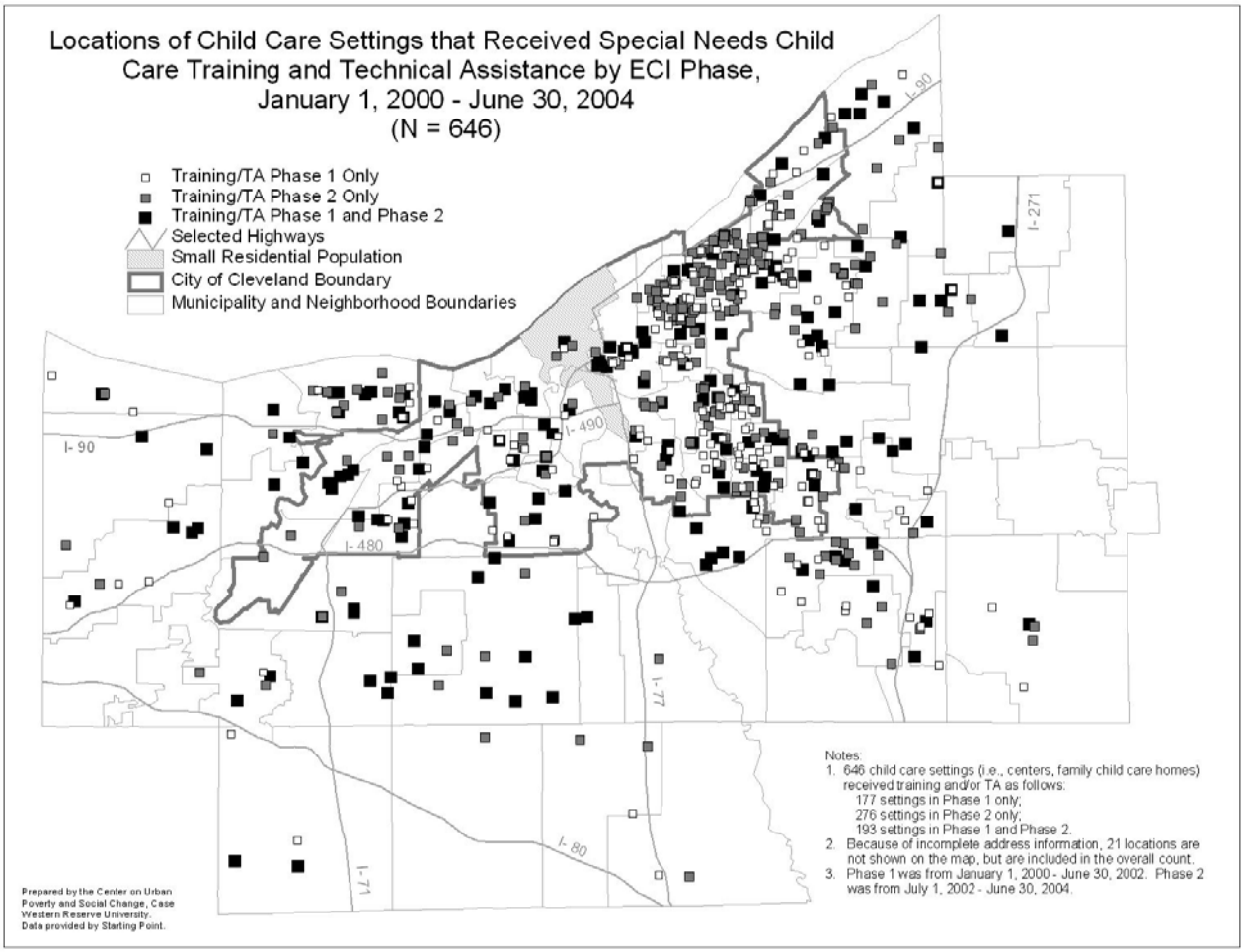


Figure 6.3 Map of Child Care Settings Served

Technical Assistance

Each SNCC agency offered individualized technical assistance. The content of the technical assistance differed by agency to reflect their area of specialization, their approach to TA, and the needs of the child.[3] Table 6.5 presents the characteristics of the technical assistance visits for each agency and overall. There were 8,378 TA visits on behalf of children with special needs during ECI. Eight percent of the children had multiple special needs that required TA from more than one SNCC agency. Approximately two-thirds of the children were male, and the children ranged in age from infancy to 15 years old. Technical Assistance was primarily provided on behalf of children with medical, developmental, and/or behavioral special needs. Center-based providers used TA to a greater degree than did FCCH providers.

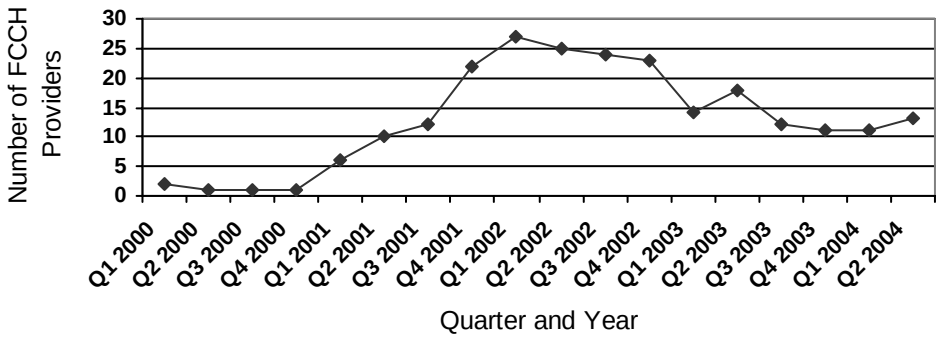
TA was provided to 122 FCCH providers over the course of the ECI. Figure 6.4 indicates that the use of the SNCC services peaked during 2002, and since then, at least 10 FCCH providers have received TA visits each quarter. Overall, consultants made 454 TA visits to FCCH providers.

[3] Applewood and Positive Education Program (PEP) also provide TA to child care providers that is more general in nature, but this type of TA is not reliably documented.

Table 6.5 Characteristics of TA Delivered by Agency and Overall (1/1/00-6/30/04)

Characteristic	ACC	Applewood	Beech Brook	CCBH	PEP	Summary
Number of Children Served	448	156	69	176	334	1039
Total Number of TA Visits	1975	2396	768	386	2853	8378
Age of Child (in years)						
Mean (SD)	3.4 (2.9)	5.7 (2.5)	4.4 (1.7)	2.8 (2.7)	3.4 (1.3)	3.8 (2.6)
Range	0-13	1-12	2-11	0-14	0-15	0-15
Median	3	5	4	2	3	3
Number of Visits per Child						
Mean (SD)	4 (5)	15 (17)	11 (11)	2 (2)	9 (10)	8 (11)
Range	1-32	1-83	1-59	1-8	1-75	1-83
Median	2	8	7	2	6	4
Number of Months between First and Last Visit						
Mean (SD)	5 (8)	7 (8)	6 (5)	4 (8)	6 (8)	6 (9)
Range	0-43	0-44	0-20	0-49	0-45	0-49
Median	1	5	4	.5	4	3
Special Need[a]						
Biological	22%	1%	4%	23%	1%	14%
Environmental	1%	3%	0%	1%	0%	1%
Medical	68%	6%	12%	96%	2%	50%
Developmental	54%	63%	14%	18%	11%	39%
Behavioral	4%	34%	88%	1%	41%	26%
Other	3%	1%	1%	3%	49%	18%
Recipient of TA[b]						
Center Provider	55%	84%	86%	41%	80%	74%
FCCH Provider	15%	0%	4%	12%	1%	5%
Other (Often Parent)	30%	16%	10%	47%	19%	21%

Note: The columns for each agency represent duplicated counts of children (i.e., children may be served by more than one agency). "Summary" column represents unduplicated counts of children (i.e., children served by more than one agency are counted once).
[a]Duplicated counts of special needs (i.e., children may have more than one special need).
[b]Children may be linked with more than one provider (e.g., teacher, director) receiving TA on their behalf.
Source: Starting Point. Analysis of data by Center on Urban Poverty and Social Change.



Note: Providers are counted once per quarter, but may be counted in more than one quarter.
Source: Starting Point. Analysis of data by Center on Urban Poverty and Social Change.

Figure 6.4 Number of FCCH Providers Receiving TA by Quarter (N=122 Unduplicated FCCH Providers)

Training

Each of the special needs child care agencies conducted trainings on topics related to its area of expertise. The trainings ranged from small gatherings with one or two individuals to large workshops with over 50 attendees. The median number of attendees was six. The primary attendees were child care providers but parents and family child care home technical assistant consultants also attended. Table 6.6 indicates that almost 500 trainings on special needs child care have been conducted. Center-based providers made up 92% of the child care workers who received training. Home-based providers attended 53 of the SNCC trainings.

Table 6.6 Special Needs Child Care Trainings (1/1/00-6/30/04)

	(1/1/00-6/30/02)	(7/1/02-6/30/04)	Overall
Number of Training Sessions	243	250	493
Number of Providers [a]	1835	2277	4112

[a]Duplicated Count (i.e., providers attending more than one training were counted more than once).
Source: Starting Point. Analysis by Center on Urban Poverty and Social Change.

Table 6.7 lists the most frequent special needs child care trainings topics. Most common were topics that addressed children's development and managing children's behavior.

Table 6.7 Most Frequent Special Needs Child Care Trainings (1/1/00-6/30/04)

Training Topic	Number of Trainings Given
Directors' Network[a]	38
Redirecting Children's Behavior	34
Managing Children's Behavior	23
Arranging the Environment	21
Child Development	19
Diagnosed Medical Condition	18
Using Positive Guidance	18
Behavioral	17
Stress	15
Toddler Development	12

[a]Directors' Network is a monthly meeting for center directors participating in PEP's Day Care Plus Intensive Program. Topics include a variety of issues related to child care.
Source: Starting Point. Analysis of data by Center on Urban Poverty and Social Change.

Child Care Placement Services

The Achievement Center for Children, Starting Point, and the Help Me Grow Collaborative all helped parents find child care placements for children with special needs. Information on the characteristics of children in need of child care was available from the Achievement Center for Children and Starting Point. Children's medical or development needs were the main reasons assistance was provided by the Achievement Center for Children. Starting Point assisted families whose children had a range of special needs; asthma was the most common need (27%), followed by ADD/ADHD (17%). Table 6.8 summarizes the characteristics of the children who received child care placement assistance. Requests were made more often for boys than girls. The Achievement Center for Children served a somewhat younger group of children with 61% of the children being age three or younger, as compared to 40% of the children served by Starting Point. African American children utilized these services to a greater degree than did children of other races.

Table 6.8 Characteristics of Children in Need of Child Care Placement Assistance[a]

Characteristic		Achievement Center for Children (N=307)[b]	Starting Point (N=1,011)[b]
Gender	Male	59%	69%
	Female	41%	31%
Age	Less than 2 years old	24%	17%
	2 or 3 years old	37%	23%
	4 or 5 years old	21%	21%
	Six years old or older	19%	38%
Race	African American	49%	62%
	White	28%	31%
	Other	5%	7%
	Unknown	18%	0%

[a]Achievement Center for Children data is from 1/1/00-6/30/04; Starting Point data is from 4/1/02-6/30/04.

[b]Duplicated Count (i.e., children with more than one placement request are counted more than once). The unduplicated count for the Achievement Center for Children is 232 children.

Source: Starting Point. Analysis of data by Center on Urban Poverty and Social Change.

SNCC Services and Child Care Placement Stability

Placement stability was examined by identifying a group of children in the administrative database whose child care provider received technical assistance on their behalf during a 1 month period (N=94). For the purposes of this evaluation, stable child care was defined as a child care placement lasting 6 months or longer. Telephone calls were made to the child care program 7 months later to determine the status of the child's placement. Placement information was reliably gathered on 58 of the children (62%). The sample of children with placement information was similar to the remainder of the sample with the exception that the children with information were older on average (4.2 years vs. 3.3 years).

There were stable child care placements for 89% of the children in the sample. Thus, almost all of the children who received TA in the given month remained in that child care program for at least a 6 month period. Given that only 6 children had placements lasting less than 6 months, the child and service characteristics associated with more or less stable placements could not be determined.

Parent Perspectives and Experiences:

Early Intervention Services

The parent survey asked a number of questions about experiences with Early Intervention (EI) services in order to gain a better understanding of the available services for children with special needs, in general. EI services are available for families that have children with special needs under the age of three. Families are entitled to developmental evaluation, service coordination, and an IFSP. A wide range of services are available, such as hearing and vision services; family counseling; and occupational, physical, and speech therapy. All of the families participating in this study had experience with EI services. Overall, parents responding to the survey gave the EI system high marks.

The survey listed a number of formal and informal ways that parents could learn about EI services. Parents were asked to identify how they first discovered these services were available. Figure 6.5 presents the five ways parents most often first learned about EI services. Medical professionals were the most common sources of information. Welcome Home, an ECI program that arranges for nurses to visit first-time and teen parents, was a primary source of information for 25% of the respondents.

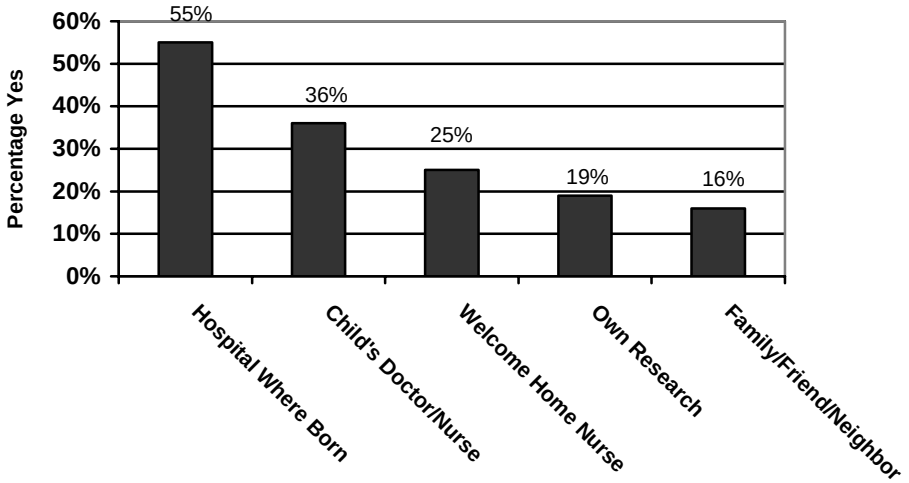


Figure 6.5 How Parents First Learned About Services Available to Child (N=163)

Parents were generally satisfied with their early intervention programs. Figure 6.6 shows that parents were most positive about the ease of obtaining early intervention services, with over 90% saying that it was "definitely" or "somewhat" true that services were easy to get. The severity of children's special needs was related to parents' responses. Parents whose children had

less severe needs were *happier* with the choices they had been given (t = 4.55, df=159, p<.001) and felt that professionals were *more knowledgeable* about other available programs (t = 2.29, df=158, p<.05).

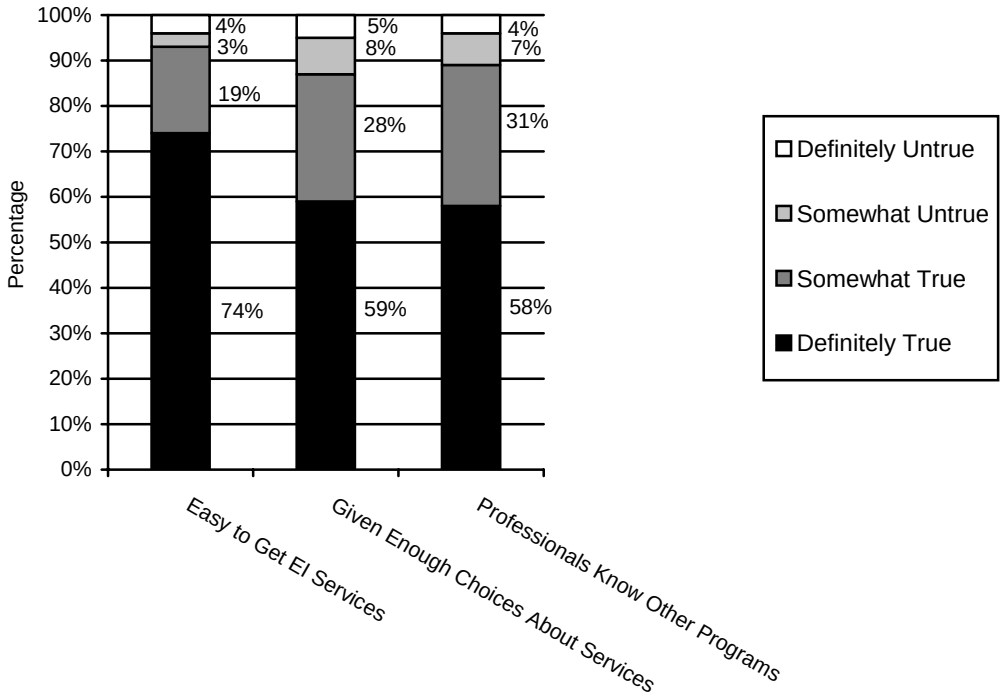


Figure 6.6 Parent Satisfaction with Early Intervention Services (N=163)

An open-ended question at the end of the survey served as an opportunity for many parents to praise the early intervention (EI) system. One parent commented "early intervention has been wonderful during an extremely difficult time." Another parent stated "my son owes his life to the early intervention specialists from the Help Me Grow Collaborative." Parents frequently credited the EI services with having a positive impact on their child's development. One parent wrote "EI services were wonderful. The training I received and the therapy my daughter received were critical to her progress. Thank you!" A few parents were less pleased, however, suggesting that it was difficult to obtain EI services initially or when a child had a particular type of special need (e.g., less severe needs, medical needs).

One of the emphases of the SNCC project was on increasing child care providers' involvement in early intervention services, such as participating in IFSP meetings, helping set goals for children, and working closely with children's EI specialists. Only 12 parents who completed the parent survey had both a child in child care and a current IFSP (7%). Eight of these parents (66%) reported that their child care provider was either "somewhat" or "very" involved in their family's IFSP. Ten of the children currently received early intervention services. Child care providers were "somewhat" or "very" involved in the services received by five of these children (50%). Child care vouchers were used by two of the 12 families and in

both cases, the family's child care provider was involved in the IFSP and EI services. These results are encouraging, but given the small sample size, more research on this issue is needed.

Parents Using Child Care

Seventy-two parents (45%) were using child care services when they participated in the study.[4] As indicated in Figure 6.7, most children received their care from child care centers, but family child care homes were used by a number of families as well. On average, children entered child care at about 18 months of age (range of 2 months to 48 months). Approximately two-thirds of the children were in child care full-time (i.e., more than 25 hours per week). Child care vouchers were used by 29% of the families to help pay for services. Approximately three-fourths of the families had used their present child care arrangement for at least 6 months and almost 80% intended to use the same arrangement for the next 6 months. Data analyses indicated that African American parents were significantly more likely than parents of other races to have a child with special needs in child care [$\chi^2(2, N=162)=7.07, p<.05$]. Parents who were not married were also more likely than married parents to use child care [$\chi^2(1, N=162)=18.66, p<.001$].

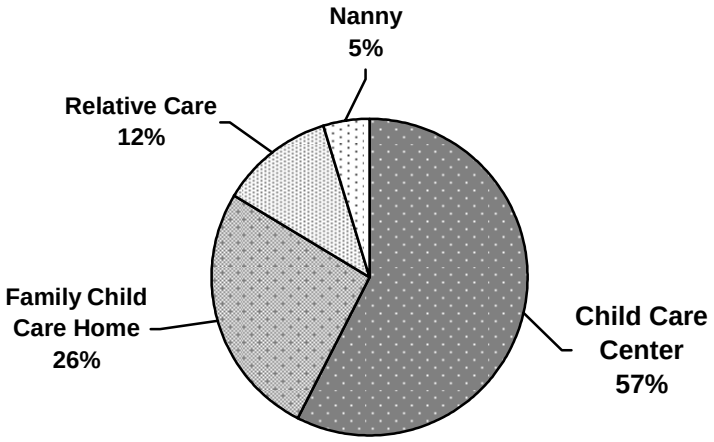


Figure 6.7 Families' Use of Child Care for Their Child with Special Needs (N=72)

Parents were asked about the assistance they received (at any point in time and from any source) in their search for special needs child care. As Table 6.9 shows, at least half of the parents reported receiving information and/or a list of child care programs. Parents also responded to an open-ended question asking them what kind of help is most valuable. Two themes dominated parents' responses. The first was related to the high cost of child care. Parents felt vouchers or other types of financial assistance would be helpful. The second theme was parents' desire for assistance finding willing and qualified child care providers—whether center-based, family child care homes, or nannies. One parent summed it up as "solid referrals from reliable sources."

[4] Due to missing data, one family's current use of child care could not be determined.

Table 6.9 Types of Child Care Placement Assistance Parents with a Child in Child Care Have Received (N=72)

Type of Placement Assistance	Percent Who Received Assistance
Information	56%
List of child care programs	50%
Referrals to specific programs	37%
Professionals developed child care plan for provider	32%
Professionals went with parent to look at programs	18%

Most parents reported that they encountered few difficulties during their most recent search for child care. Sixty percent of parents found their search either "somewhat" or "very" easy. Nonetheless, a portion of parents experienced barriers locating quality special needs child care. Figure 6.8 illustrates that the cost of child care is the most significant problem encountered by families. A little more than half of parents said that cost was "somewhat" or "very much" of a problem. Almost one-fifth of parents reported that it was "very much" of a problem finding a child care arrangement where the provider was *willing* to care for a child with special needs. The same percentage indicated that this was true of identifying a child care provider *capable* of caring for a child with special needs. Parents' responses to an open-ended question highlighted some of these issues. One parent wrote "child care for a special needs child is difficult to find—especially when your child can perish if a caregiver is not knowledgeable or reliable/responsible." Another parent commented "There needs to be more centers that provide help with special needs children. I'm still on a waiting list that I was put on five years ago. . . . That puts the parent in a bad position."

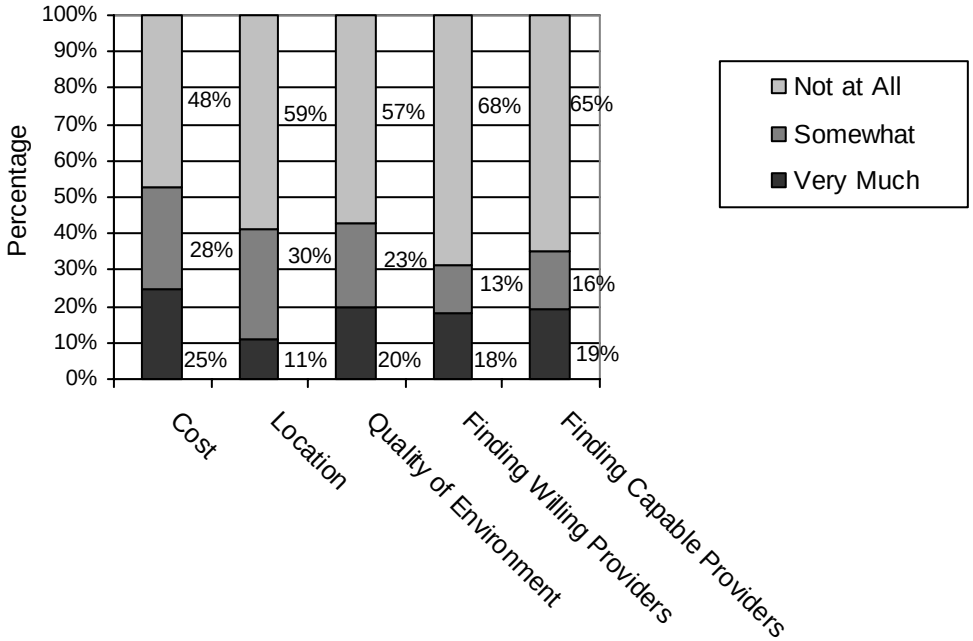


Figure 6.8 The Degree to Which Parents Using Child Care Thought that this Issue Was a Problem During Most Recent Search for Special Needs Child Care (N=72)

Thus, the available child care and related placement support services appear to meet the needs of most parents who have children with special needs. Even so, it seems that some parents continue to have difficulty finding a high quality child care setting for their child. Parents' overall rating of problems was examined by adding the responses of each individual problem. As Table 6.10 shows, experiencing *more difficulties* during the last search for child care was associated with having a child with *more* types of special needs and being *less satisfied* with the current child care arrangement.

Table 6.10 Correlations Between Parents' "Overall Rating of Problems Searching for Child Care" and Select Family Characteristics[a] (N=72)

	Level of Child's Special Needs	Number of Types of Special Needs	Child Age	Parent Total Satisfaction with Current Child Care
Overall Rating of Problems Searching for Child Care (during most recent search for child care)	.04	.29*	.04	-.29*

[a]All tests used Kendall's tau-b.
*p<.01. All tests were two-tailed.

Generally, parents had positive perceptions of their child care providers. Figure 6.9 presents parents' ratings of their current child care provider. On average, parents viewed their providers as having a good relationship with both them and their child, and as capable of meeting

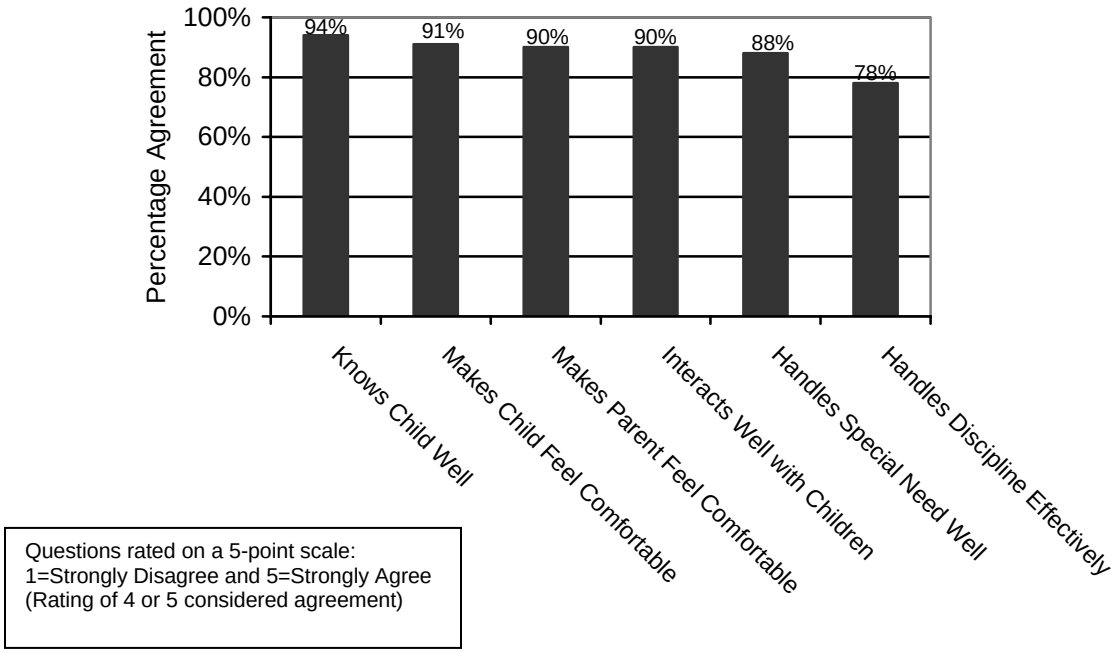


Figure 6.9 Percentage of Parents Who Agree with Statements About Current Child Care Provider(s) (i.e., rating of 4 or 5) (N=72)

their child's special needs. Parents' total level of satisfaction with their current child care arrangement was calculated by adding the rank given to each individual item. *Parents' total satisfaction* had a *positive* relationship with the *ease* with which the child care was found (τ = .249, N=83, p<.01, two-tailed) but *negative* associations with (a) *child age* (τ = -.205, N=83, p<.05, two-tailed), and (b) *respondent age* (τ = -.180, N=83, p<.05, two-tailed). Thus, those who had an easier time finding child care, younger parents, and parents with younger children were more satisfied with their current child care arrangement.

Parents were also asked about their experiences with child care *since their child was born*. Table 6.11 shows that parents' overall satisfaction was high. Parents were moderately satisfied when it came to the assistance they received in finding child care and for the child care choices they have had. Table 6.12 presents correlations between parents' satisfaction and select family characteristics. Higher parent satisfaction regarding the *assistance received when looking for child care* was linked with *fewer types of special needs*, *younger children*, and *younger parents*. Satisfaction with *child care choices* was negatively associated with the *number of types of special needs*. Finally, higher parent satisfaction with *child's child care* was related to *less severe special needs*, *fewer types of special needs*, *younger children*, and *younger parents*. In general, parents were more satisfied if their child had less severe, less complex needs, and if both the parent and the child were younger.

Table 6.11 Parents Overall Satisfaction with Child Care Experiences (N=72)

Overall satisfaction with. . .[a]	Mean (SD)
Assistance received in finding child care	6.5 (3.2)
Child care choices	6.4 (3.2)
Child care child has received	8.1 (2.3)

[a]Rated on a 10-point scale: 1=Very Unsatisfied; 10=Very Satisfied

Table 6.12 Correlations Between Parents' Satisfaction with Child Care Experiences (Since Child's Birth) and Select Family Characteristics[a] (N=72)

Satisfaction with. . .	Level of Child's Special Needs	Number of Types of Special Needs	Child Age	Parent Age
Assistance Received in Finding Child Care	-.08	-.23*	-.19*	-.23**
Child Care Choices	-.15	-.34**	-.10	-.14
Child Care Child has Received	-.27**	-.31**	-.23**	-.33**

[a]All tests used Kendall's tau-b.
*p<.05. **p<.01. All tests were two-tailed.

Parents Not Using Child Care

Ninety respondents (55%) reported that they were not currently using child care. Most of the families (61%) reported that one parent had stayed home with the child since the child's birth. A small portion (6%) of the families had two working parents, but arranged for compatible work schedules. Twelve percent of the families used child care in the past, but were not currently using it. Most parents (80%) not currently using child care had not searched for care in the past year. One in five parents had looked but could not find a suitable placement.

Parent responses suggested that children's special needs influenced child care decisions only for some parents (see Figure 6.10). Almost two-thirds of the parents said that their child's special needs had little or no influence on their decision to not use child care. The remaining parents indicated that their child's special needs did play a role in their child care decisions with over a quarter saying that the influence was "a lot." Parents with children with *more types of special needs* were more likely to say that their child's special needs influenced their *decision to not use child care* (τ = .320, N=120, p<.001, two-tailed).

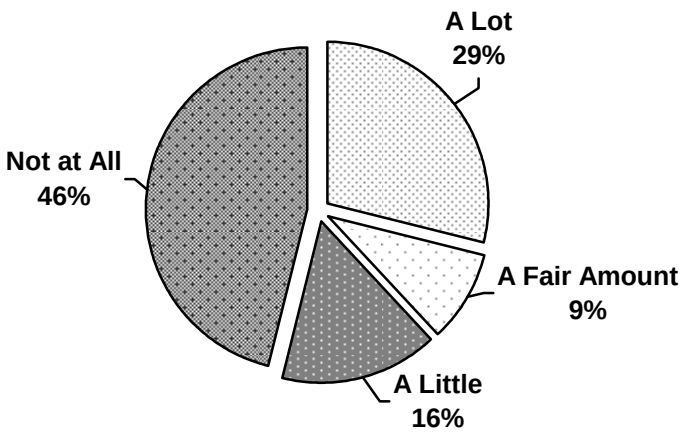


Figure 6.10 Percentage Agreement that Child's Special Needs Influenced Choice Not to Use Child Care at This Time (N=163)

Child Care Provider Perspectives and Experiences:

The child care provider survey asked providers a number of questions about the TA visits they received (see Table 6.13). The providers reported that they had requested TA in more than 25% of the cases and the remainder were initiated by someone else. A little more than two-thirds of the children receiving TA were 4 years old or older. Older children may have received more TA than is typical because school-age summer programs were in session during the data collection. The number of TA visits associated with the child varied. Approximately one-fifth of the providers received only one TA visit, half received between two and six visits, and one-quarter received at least seven visits related to this child. Most TA visits lasted less than 90 minutes.

Table 6.13 Characteristics of the TA Visits Received by Survey Respondents (N=107)

Characteristic		Percentage
Agency		
	Achievement Center for Children	22%
	Applewood Centers	21%
	Beech Brook	10%
	Cuyahoga County Board of Health	18%
	PEP's Day Care Plus	30%
Individual who first requested TA		
	Someone else at program	33%
	Provider (completing survey)	28%
	Parent	17%
	Other/Not certain	22%
Child's age		
	One year old or younger	4%
	Two or three years old	26%
	Four or five years old	46%
	Over six years old	24%
Level of child's special need (when TA began)		
	Mild	13%
	Moderate	41%
	Severe	46%
Number of TA visits provider has had for this child		
	One	22%
	Two or Three	22%
	Four to Six	31%
	Seven or more	26%
Length of TA visit		
	0-30 minutes	23%
	31-60 minutes	35%
	61-90 minutes	28%
	More than 90 minutes	14%

Child care providers were given 21 reasons why TA may have been requested for the child and were asked to check all that applied. Figure 6.11 presents the 10 most common reasons. In general, providers' responses suggest that many of the children had difficulties adjusting to the behavioral expectations of a child care setting. Children had trouble with routines, transitions, and getting along with peers. In addition, TA offered child care providers an opportunity to learn how to better care for a child with special needs, such as how to make the necessary modifications in the classroom. Assistance for children exhibiting behavioral problems was also a significant reason for TA.

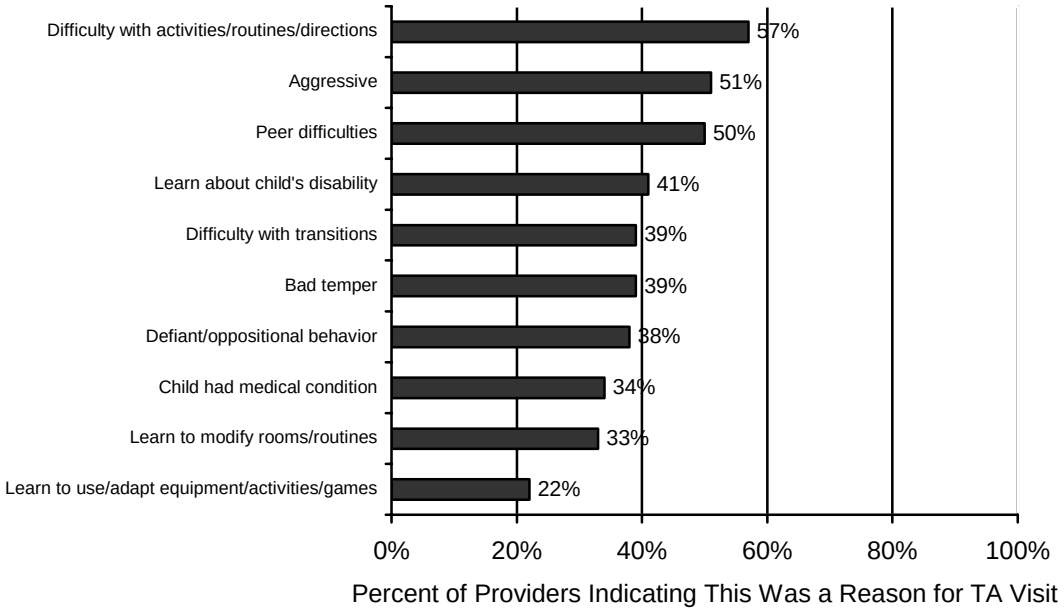


Figure 6.11 Most Common Reasons for TA Visits (N=107)

Child care providers were asked to rank the top three reasons TA was provided (see Table 6.14). The rankings provide an opportunity to compare the most *common* reasons with the most *critical* reasons. The most common reasons for TA were usually the most important ones. One exception was that although only 34% of providers reported that TA was needed because child had a medical condition, this was a common "most important" reason for TA.

Table 6.14 Child Care Providers Rankings of the "Most Important" Reasons for their TA Visit: The Top Six Reasons (N=107)

Top Reasons for TA	Number of Providers
Difficulty with activities/routines/directions	35
Aggressive	31
Learn about child's disability	28
Child has medical condition	27
Bad temper	27
Defiant/oppositional behavior	23

Figure 6.12 summarizes the types of services that the TA consultants provided during their visits. Providers could check all the services that applied to their visit and most TA

consultants provided various types of assistance during their visits. Most common were specific suggestions related to caring for the child and observations of the child. Providers also indicated that the consultant often gave suggestions about caring for children in general. One provider observed that many of the activities the TA consultant brought in had been really helpful not only to the child, but to the whole class.

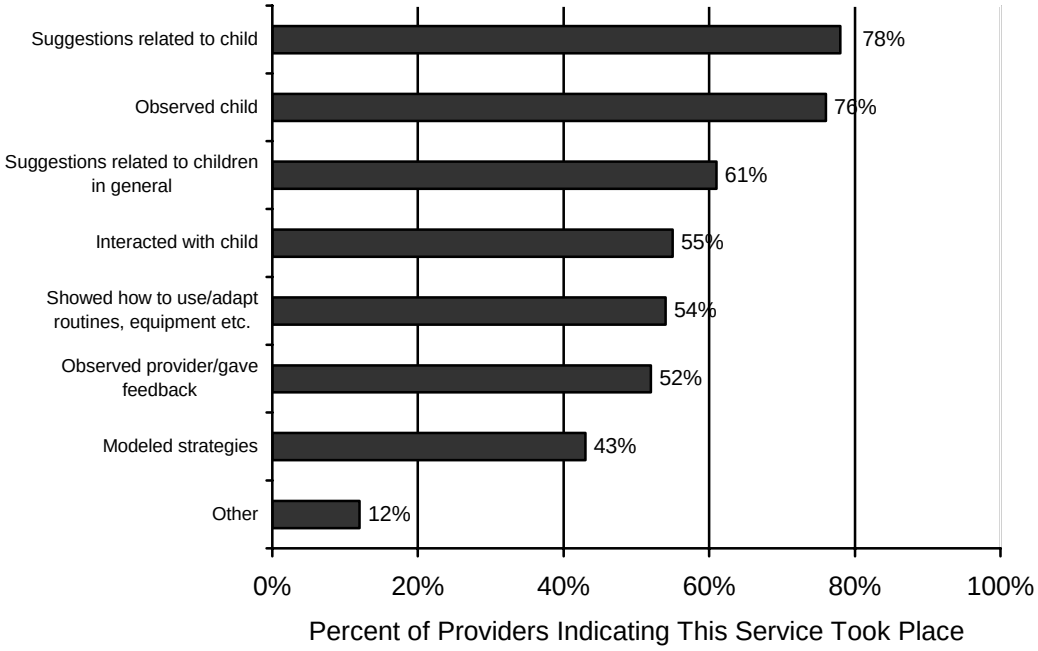


Figure 6.12 TA Consultant Services During this TA Visit (N=107)

Study participants were given two opportunities to rate their satisfaction with their TA visit. Figure 6.13 presents child care providers' survey responses immediately after their visit. Overall, providers were very satisfied with TA. They felt that the consultants were knowledgeable, took time to address their questions, and would recommend TA to others. Typical of the providers' responses is the following: "although the child is still quite a challenge, (the TA consultant) gave us a lot of insight to his behavior. She was also helpful in getting the parent to acknowledge there was a problem." Another provider wrote "(the TA consultant) was very helpful to me—introduced me to new games and tools to use with children." A third provider commented "(the TA consultant) has been wonderful! Our staff is comfortable asking her about anything and they are very appreciative! Thank you!!!!"

One area where there was somewhat less satisfaction was whether the TA visit made it easier to work with the child. Thirty percent of the providers suggested that this was only "somewhat" or "not at all" true. TA visits may not have the desired effect for a number of reasons. The unwillingness of parents to work with the provider appeared to be an impediment to success. There were also a few cases when providers did not feel they received adequate support

from the TA consultant. One provider wrote "I'm not sure what (the TA consultant) thinks. . . . Communication would improve services."

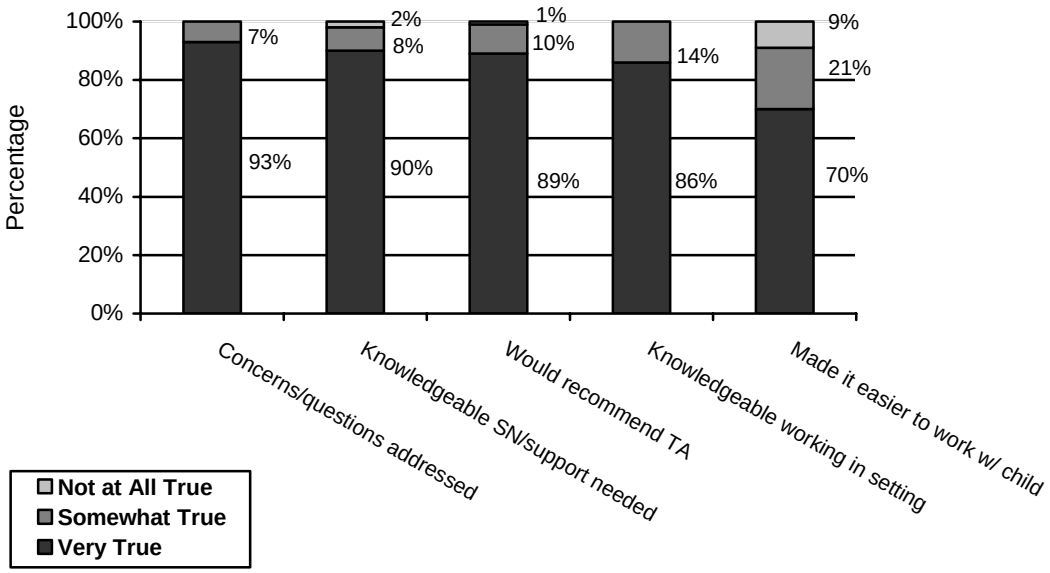


Figure 6.13 TA Provider Satisfaction with TA Visit—Directly after Visit (N=107)

Most of the characteristics of the TA visit itself (e.g., number of visits) and of the child care provider (e.g., educational background) were *not* related to provider satisfaction immediately after the TA visit. However, the length of time child care providers had *worked in early education* was positively related with their satisfaction with (a) consultants' "*knowledge of working in the setting*" (τ = .193, N=93, p<.05, two-tailed) and (b) the degree to which "*concerns or questions were addressed*" (τ = .179, N=93, p<.05, two-tailed). In addition, Table 6.15 shows that higher *overall satisfaction* (i.e., sum of all five satisfaction questions) was associated with *less provider education* and *higher provider income*.

Table 6.15 Mean Provider Overall Satisfaction Directly After TA Visit (N=107)

	Provider Overall Satisfaction[a]
Education[b]	
High School or Less	14.78
At Least Some College	14.20
Income[c]	
Less than $20,000/year	13.96
$20,000/year or more	14.76

[a]Rated on a 3- to 15-point scale: higher number represents higher satisfaction.
[b]t = 2.32, df=92, p<.05.
[c]t = -2.90, df=63.65, p<.01.

The follow-up survey took place at least 3 weeks after the TA visit. This survey yields information about providers' satisfaction after they tried to implement what they learned from the TA session. Figure 6.14 shows that child care providers remained satisfied with the TA. Providers reported that in only half of the cases did families make a strong commitment to working with providers to help their children. Comments to the open-ended question shed light on some of the difficulties inherent in translating ideas into practice. One provider noted that while she had found the TA visit "extremely helpful," other staff members with less of a background in early education were less able to benefit from the service. At times it seemed difficult for providers to implement all they had learned. Providers cited reasons such as lack of parental support, the child moving into another classroom, lack of management support, or restrictions of the child care environment (e.g., too few staff).

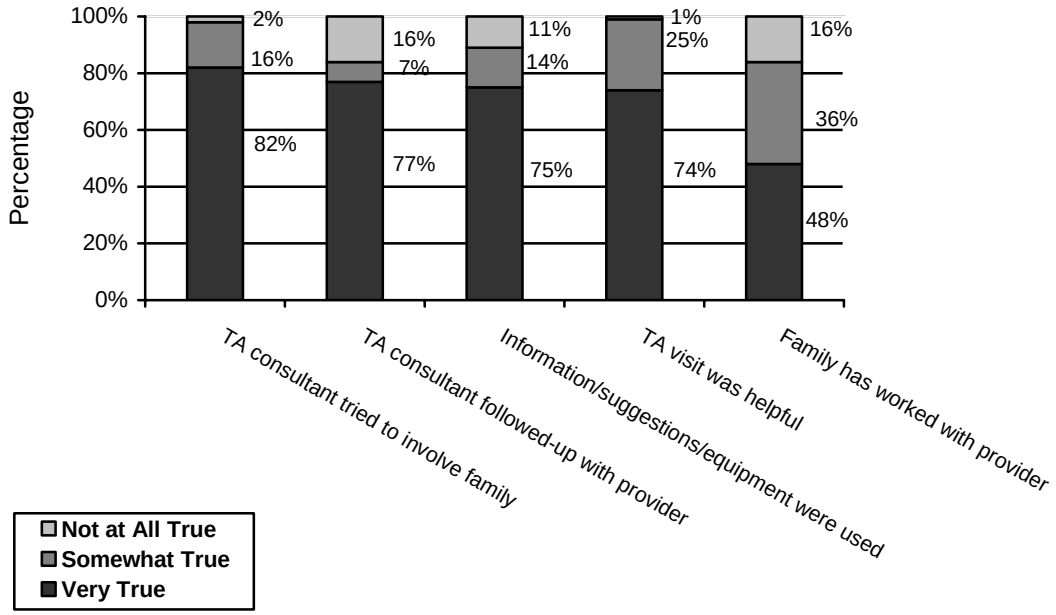


Figure 6.14 TA Provider Satisfaction on Follow-up Survey with TA Visit (N=72)

In general, however, providers' responses to the open-ended question were positive. Providers frequently mentioned specific ideas, strategies, or equipment they were given. A provider stated that the consultant was a great help and she had used "all her tips." Another provider suggested that the storyboards she was given made it much easier for the child to understand things. A third provider noted that the TA consultant "didn't just drop by and make some token suggestions"; rather she made a plan, gave the providers a chance to implement it, and then followed-up with them. Many providers felt that the child's experience had been much improved by the TA visit. One provider shared that the TA consultant was a "miracle worker" and that the child had become a completely different child and was now a "joy to be with." This

provider mentioned that she had been working with children for 15 years, but this was her first success like this. She added "it's a wonderful feeling and (the child) feels it too." Table 6.16 summarizes the qualities of the TA consultant that proved most helpful to providers.

Table 6.16 Summary of Provider Responses: Positive Qualities of TA

Consultant Is Knowledgeable
- about area of special needs
- about child care settings
- about other available services
- about additional sources of information (e.g., web sites, books)
- about *specific* ideas, techniques, strategies, and equipment
- about information that can be useful for other children in care

Consultant Establishes a Positive Relationship with Provider
- acts professionally
- takes the time to build positive rapport
- follows-up with provider and visits often enough to provide support
- available by telephone and willing to be contacted if needed

Consultant Is Committed to Helping Child and Family
- takes adequate time initially to learn about the child, providers, classroom, and family
- models behaviors or strategies for provider
- observes provider and gives feedback
- tries to involve parent
- supports providers' interactions with parents

Analyses identified a positive relationship between finding the visit *helpful* and (a) the *length* of the visit (τ = .232, N=71, p<.05, two-tailed) as well as (b) *provider age* (τ = .217, N=66, p<.05, two-tailed). There was also a positive association between provider *income* and ratings of how much providers *used* what was learned during the TA session (τ = .313, N=59, p<.01, two-tailed). Positive associations between provider and TA visit characteristics and providers' overall satisfaction on the second survey (i.e., sum of the four satisfaction questions--does not include level of family involvement question) were identified. Table 6.17 shows that *overall satisfaction* on the follow-up survey was related to the *number* of TA visits the provider had received for the child and the *length of time* the provider had been working in early childhood education. Providers with higher *incomes* were also *more* satisfied with their second TA visit (i.e., more than or equal to $20,000/year vs. less than $20,000/year) ($t$ = -2.02, df=51.46, p<.05).

Analyses were conducted to determine if provider or TA visit characteristics were associated with provider total satisfaction from both surveys (i.e., the sum of survey one satisfaction and survey two satisfaction). Provider income was the only characteristic that was related to satisfaction with TA. Providers with incomes of $20,000 or more per year were significantly more satisfied with their TA visit than those with incomes of less than $20,000 ($t$ = -2.70, df=33.59, p<.05).

Table 6.17 Correlations Between Parents' Overall Satisfaction on Follow-Up Survey with Select TA and Provider Characteristics[a] (N=72)

	Number of TA Visits Provider Had for Child	Length of TA Visit	Provider Education	Provider: Time Worked in Early Education
Overall Satisfaction on Follow-up Survey	.22*	.21	.-.04	-.29*

[a]All tests used Kendall's tau-b.
*p<.05. All tests were two-tailed.

Finally, provider survey responses were linked with the service information documented in the SNCC administrative data set. By linking these two data sources, the relationship between provider satisfaction (as measured by the provider survey) and use of the SNCC services (as measured in the administrative data set) could be explored. Ninety-two children, 87 providers, and 84 centers participating in the child care provider survey were successfully linked with service information in the SNCC administrative data set. There was a negative relationship between providers' *initial satisfaction* and the *overall number of TA visits* the child received (τ = -.236, N=78, p<.05, two-tailed). The negative association remained after controlling for the severity of a child's needs (τ = -.270, n=70, p<.05, two-tailed). The link between higher satisfaction and fewer TA visits was unexpected and difficult to interpret. It may be that children who receive more TA visits represent more challenging cases (regardless of the severity of needs), and this might lead to lower provider satisfaction. A second possible explanation is that consultants who visit less often use their time more effectively which leads to higher provider satisfaction. Future research may want to more closely examine this relationship.

Discussion

The special needs child care evaluation attempted to document the effectiveness of this project at (a) increasing the availability of child care for children with special needs and (b) enhancing the ability of child care providers to address the unique challenges and concerns associated with this population of children. Reflecting the fact that the Special Needs Child Care component used a variety of different strategies implemented by multiple agencies to address these goals, the evaluation for this project also employed a variety of methods to assess the effectiveness of this program.

The administrative data were used to describe the range and quantity of services that this project provided to child care providers, parents, and children. Four additional survey studies were conducted to determine the impact that this component was having on its various constituencies. There were two surveys of parents, one of which targeted parents of children who had received special needs child care services and the other of which assessed the general population of parents of young children with special needs who were currently residing in Cuyahoga County. The first parent survey was conducted to describe parents' experiences with child care for their child with special needs, and to determine whether parents felt that the services they received from the SNCC component had a positive impact on these experiences. The second parent survey was designed to (a) document the various types of child care

arrangements that parents throughout Cuyahoga County were using for their children with special needs, (b) determine whether parents were continuing to encounter challenges in obtaining appropriate child care and general early intervention support, and (c) determine whether parents' decisions not to place their children in child care was related to difficulties that they encountered in finding suitable placements. A survey of child care supervisors whose staff had been the recipients of either training or technical assistance was conducted. This survey was designed to determine whether child care supervisors believed that the training and technical assistance offered by this project enhanced the willingness and capabilities of their child care providers to adequately deal with the challenges associated with children who have special needs. Finally child care providers were surveyed immediately after they received technical assistance from one of the five agencies involved in the SNCC project. This survey attempted to (a) determine the types of problems for which technical assistance was being requested, (b) describe how TA consultants interacted with child care providers, and (c) determine whether child care providers felt that the TA actually improved their ability to address the problems or concerns that were the bases for the TA visit.

The administrative data confirmed that the agencies that were contracted to provide SNCC services carried out the key activities. Indeed, the amount of activities that were collectively carried out by these agencies was substantial. Throughout the course of this project nearly 650 child care programs received training or technical assistance. Training and technical assistance helped the child care providers working in these programs to have (a) a better understanding of the nature of children's special needs, (b) the kinds of activities, procedures or equipment that they could use to accommodate these needs, and (c) the types of interactive strategies and classroom routines they could use to manage children's behavior problems. More than 1,000 children were the specific targets for this training and technical assistance. In many cases, however, training and technical assistance helped child care providers deal with general problems and concerns for all the children in their care.

The parent surveys provided several other important pieces of information relevant to this project. Many parents believed that identifying suitable child care for their child with special needs was not problematic. These parents reported that there are child care programs that are willing to care for children with special needs, and the providers at these programs have the knowledge and ability needed to do this.

However, this picture changes somewhat when children have more severe or complex special needs and as children get older. Not surprisingly, the more severe children's disabilities are, and the greater the numbers of special needs children have, the more likely parents were to be dissatisfied with their child care options. Yet, the parents of children who actually received technical assistance through the SNCC project reported that the services were helpful in improving the quality of their children's experiences.

Both the surveys of the child care center supervisors and the child care providers also speak to the quality of services provided through this component. The supervisor survey indicated that the training and technical assistance increased both the willingness and capacity of their providers to address the challenges associated with children's medical, physical, and

developmental needs. It also suggested that child care staff wages and educational background were important factors related to a willingness to serve children with special needs.

The child care provider survey provides a similar picture of technical assistance. The main reasons that child care providers received technical assistance was to help them address challenging behaviors and to learn more about a child's special need(s). The providers valued the way that TA consultants worked with them and the types of information and strategies they were given. Not surprisingly, however, providers felt that although this information was practical and useful, it did not fully solve the difficulties of caring for children with special needs. Providers did not attribute this to inadequacies of the TA. Rather they identified issues such as a lack of parent cooperation or insufficient personnel to help implement recommendations. The findings also suggest that providers with higher wages and greater experience in early education may benefit more from the TA services.

Although this report provides insight into two of the questions posed by the evaluation, it less adequately addresses the third question, that is, the degree to which child care providers are involved in the early intervention services received by the family. The encouraging results from the parent survey are only suggestive due to the small number of respondents with a current IFSP and a child in child care. A second limitation of the evaluation is that it does not include *direct* evidence of the impact of SNCC services (e.g., observations of TA visits, pre- and post-intervention measures of child development). There remain a number of important issues to explore.

Conclusion

The results from the evaluation of the Special Needs Child Care component are supportive of the quality and effectiveness of this program. Results from this evaluation indicate that this project has been effective in reaching out to child care programs and workers in helping them address the challenges and concerns of numerous children with special needs. The services provided through the SNCC component are valued by the parents, child care providers, and program supervisors who have received them. Generally, these constituencies report that this program is effective both in enhancing the capacity of child care programs to care for children with special needs and in giving providers the information and skills that they need to deal with the daily challenges presented by these children. The results suggest that the SNCC program provides an important service to the community and that these efforts to reach out to, inform, and assist child care providers and families in Cuyahoga County should continue. Building on these successes, the SNCC component may want to consider doing more to promote the consultant practices rated highly by providers (as outlined in Table 6.16). In addition, the component may want to increase attention to addressing the barriers that appear to reduce the effectiveness of the services (e.g., lack of parental involvement, child care staff with limited background in early childhood education).

There is evidence that caring for children who have more severe disabilities and behavior problems continues to be challenging. Our findings raise the question of how the needs of children with more severe problems can be handled. The current activities that are being conducted in terms of the Special Needs Child Care component seem to be effective when a child has mild to moderate needs and providers and families are knowledgeable about the

available services. However, findings from this evaluation suggest that there may be a need to reconsider how the County can address the needs of children with more severe or multiple needs. Some parents would like more comprehensive assistance in identifying child care providers that are specifically trained for dealing with more severely challenged children. In addition, perhaps there might be a way that the SNCC program can work more intensively with programs and providers who are more willing and capable of dealing with these children. What ever way this issue is addressed, our findings underscore the importance of assuring that the SNCC services be available throughout the entire County for all children with special needs, including those children with mild disabilities, children with behavior problems, as well as more severely challenged children.

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Appendix 6.1 Special Needs Child Care Component Agencies and Resources

The SNCC component was coordinated by Starting Point, Cuyahoga County's child care resource and referral agency. Starting Point, in turn, contracted with six community agencies over the first 5 years of the ECI. This appendix provides descriptions of Starting Point, the six contracted special needs child care agencies, as well as additional sources of support to the component.

Coordinating Agency:

Starting Point

Starting Point is the County's child care resource and referral agency. Starting Point services support child care providers, families, and the community-at-large. In terms of the ECI, the agency is responsible for developing, administering, and managing the Special Needs Child Care component. Starting Point oversees and coordinates the work of the community agencies providing direct service to parents and providers. In addition, Starting Point collects the administrative data from each of the contracted agencies and provides this information to the evaluators.

Six Contracted Community-Based Agencies:

The Achievement Center for Children (ACC): Technical Assistance Program or TAP

Since 1980 the Technical Assistance Program (TAP) of the Achievement Centers for Children has helped families of children with special needs find child care for children birth through age twelve. TAP's philosophy is that children are more alike than different and that with preparation and support children with special needs can be successfully included in child care centers, family child care homes, and school-age child care programs throughout Cuyahoga County.

TAP has helped families not only to find child care but also helped them to learn to advocate for their children and to access appropriate services. A parent is able to feel comfortable knowing that their child care provider has support and training regarding their child's special needs.

TAP has helped teachers and child care providers receive the training, on-site consultation, and follow up assistance they need to be able to include children with disabilities into their programs. Providers are able to have access to adaptive toys and equipment and to learn words to use and ways to help other children in the classroom to understand disabilities.

TAP Resource Teachers provide community-wide workshops and training programs about the inclusion of children with special needs into child care settings. The Resource Teachers are educated and trained in all aspects of child development, child care programming, inclusion, and have extensive training in working with young children with disabilities.

The TAP program is currently funded by the Early Childhood Initiative of Cuyahoga County.

Applewood Centers

Applewood provides TA and training to several child care centers in the County, primarily YMCA programs. Most of the centers Applewood serves include school-aged children as well as children under 6 years of age. Applewood consultants have regularly scheduled TA visits to centers and provide two types of services. They work with providers on general issues (e.g., classroom management) in order to improve the care for all the children at the center. They also work with providers to address behavior problems and mental health issues of individual children. Applewood conducts several workshops for YMCA staff, most of which address issues related to children with behavior problems and working with parents.

Beech Brook

Beech Brook provided special needs child care services during years 3, 4 and 5 of the ECI. Beech Brook's TA is available to any child care center or family child care home in the County that has a child exhibiting a behavior problem or who has autism. TA takes place with the child care provider and also with the child's parents/caregivers if they need services. The duration of TA depends on the needs of the child, provider, and parents, and TA is provided for as long as is necessary to help maintain the child in his/her child care setting. Beech Brook conducted three trainings per year aimed at helping child care providers improve their ability to care for children with behavior problems and children with autism.

Cuyahoga County Board of Health (CCBH)

CCBH assists child care providers who care for children with medical needs. TA begins with a Registered Nurse meeting with the parent of a child who will be entering child care. The nurse collects information needed to develop a Nursing Care Plan (NCP) for the child. Once the child is placed in child care, the nurse makes a TA visit to the child care program (center-based or FCCH) to review the NCP with the providers. Follow-up TA visits take place as needed. CCBH conducts workshops on subjects related to children with medical conditions.

Hannah Perkins Center (HPC)

HPC provided special needs child care services during years 1 and 2 of the ECI. HPC serves children with special needs who are enrolled in pre-selected center-based child care programs. TA consists of providing on-going, long-term assistance to providers and families. Children served are typically those who have experienced some type of trauma in their lives (e.g., parental divorce).

Positive Education Program's Day Care Plus (PEP)

Day Care Plus was established in 1997 to address the problems of children whose behavior problems placed them at risk for removal from child care centers. Positive Education Program's Day Care Plus program provides consultation services and technical assistance to child care providers, and support for families with children experiencing difficulties in the child care setting. Working with staff, parents and all agencies involved, Day Care Plus Consultants develop a seamless and effective program for children experiencing social, emotional and behavioral difficulties.

Day Care Plus has three primary goals: to improve the social, behavioral and emotional functioning of at-risk children in child care; to increase the competencies of parents and

caregivers of at-risk children in child care; and, to increase the competencies of child care staff. However, the program's ultimate goal is to maintain children successfully in their child care placements.

Day Care Plus can provide these services to child care centers and identified children:

- Observe at-risk children, develop individual behavior plans, offer one-on-one help and services such as collaborative arts programming, speech and language screening;
- Train providers to manage children with difficult behaviors;
- Refer children and collaborate with other agencies as needed; and
- Work with parents on a consistent approach to care.

Additional Sources of Support for the SNCC Component:

Help Me Grow of Cuyahoga County

Help Me Grow assists Cuyahoga County families with young children in a number of ways. The agency conducts developmental screenings of young children, provides information and referrals to services and programs such as Early Intervention and Early Start, determines eligibility for services, facilitates the development of the IFSP (Individualized Family Service Plan), and assists parents of young children with special needs in their search for child care. Help Me Grow also conducts workshops on issues related to young children with special needs.

Resource Libraries

Two types of libraries were established to supplement the agencies' efforts to support child care providers and families. Each agency has a Resource Lending Library that is available to agency staff, child care providers, and parents. The libraries include books, manuals, videos, and pamphlets on a variety of topics related to children with special needs.

In addition, there is a Technical Equipment Lending Library. This library is currently managed by Beech Brook, but the equipment is available for use by all of the agencies. The library has a variety of equipment such as adaptive toys for use by children with limited movement and touch screens for computers that can be used in place of keyboards. There is also a contract with a medical supply equipment company so child care providers can obtain the equipment they need for children with medical needs.

Chapter 7
Medicaid Enrollment and Utilization in Cuyahoga County: Evaluating the Early Childhood Initiative Amid Other Health Systems Changes

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Chapter Summary

The Early Childhood Initiative (ECI) of Cuyahoga County, through the Healthy Start/ Medicaid component, seeks to promote and facilitate early and continuous coverage of eligible children under age six by public health insurance. Enrollment in Medicaid is expected to result in timely and regular use of health care services by children, and therefore to promote healthy development and reduce the use of inappropriate and/or unnecessary care. Areas examined in this chapter include:

- ECI outreach activities (specific to Cuyahoga County only): referral sources, points of application, and rates of approval for applications submitted to the Cuyahoga Department of Employment & Family Services;
- Patterns of enrollment and disenrollment of children in and out of the Medicaid program: age at initial enrollment in Medicaid and duration of initial spell; and
- Trends in utilization of health services among children born before and after the implementation of the ECI program, including age at first comprehensive preventive visit (CPV) and number of CPVs in the first year of life.

Data were compiled from the 1998-2004 Cuyahoga Employment & Family Services administrative records; and 1998-2002 Medicaid fee-for-service claims and managed care encounter data obtained from the Ohio Department of Job and Family Services (dates reflect state fiscal year). Medicaid enrollment and utilization data for Cuyahoga County were compared to data from six other urban counties in Ohio for the same period. Findings include:

- *Outreach Activities*: The Hotline remained the largest source of Healthy Start applications through June 2004. Hospital intake sites had the highest proportion of approved applications.
- *Patterns of enrollment and disenrollment*: Enrollment in the first month of life was high both in Cuyahoga County and the control counties (> 80% in all birth cohorts) throughout the study period, with no meaningful difference in this key outcome measure. The proportion of children dropping out of Medicaid within 13 months of enrollment decreased over the period observed for all counties, and children from more recent birth cohorts were significantly less likely than those from earlier cohorts to have disenrolled from Medicaid within the first 13 months. Of note is that substantial differences in this statistic were observed in earlier cohorts between Cuyahoga County and other counties, with Cuyahoga County faring better than its counterparts. Such inter-county differences were nearly inexistent in more recent cohorts.
- *Trends in utilization of health services*: Compared to children from other counties, those from Cuyahoga County fared significantly better relative to early receipt of comprehensive preventive visits (CPVs). Specifically, infants in Cuyahoga County were significantly more likely to receive a CPV in their 1st month of life than infants in other cities (50% vs. 41%); less likely to have had no CPV in the first 3 months of life (24% vs. 28%), and more likely to have had more than six CPVs in their 1st year of life (30% vs. 26%).

Introduction

The Early Childhood Initiative (ECI) is a comprehensive, community-wide approach to support Cuyahoga County's young children and their families, including expanding access to health insurance and health care for all children in poor and low-income working families. Cuyahoga Employment & Family Services (EFS) is the principal agent in this effort.[1] Through a variety of outreach and information dissemination activities, EFS enrolls eligible children in Medicaid programs for which they are eligible. Medicaid covers well-child care, as well as acute and chronic health services through participating Medicaid managed care programs.

The ECI aims at (1) increasing participation of young children in the Medicaid program; (2) decreasing discontinuity in their enrollment in Medicaid; and, (3) ensuring early and sustained contact of children with the health care system.

Health insurance coverage, by reducing financial barriers, is believed to lead to increased access to health care services. In children of low-income families, Medicaid has been shown to improve access to care and use of services through a usual source of care (Newacheck, Pearl, Hughes, & Halfon, 1998). At least in certain subgroups of the population, continuous enrollment in Medicaid has been shown to be associated with greater continuity of care, more physician visits, and fewer deferrals of care, which is key to the reduction of inappropriate and/or unnecessary care (Halfon, Wood, Valdez, Pereyra, & Duan, 1997). We further hypothesize that early enrollment in Medicaid is likely to result in early initiation of preventive care use – an essential element in healthy development.

The detrimental effects of gaps in health insurance on having a regular source of care (i.e., medical home) have been well documented, and continuous Medicaid coverage has been proposed as a quality measure in evaluating Medicaid managed care programs (Cooper & Kuhlthau, 2001). Children experiencing gaps in health insurance coverage for longer than 6 months are at least 50% more likely than others to have more than one site for medical care (Kogan, Alexander, Teitelbaum, Kotelchuck, & Pappas, 1995). In addition, lower continuity of care is associated with increased use of emergency department services and hospitalization (Christakis, Mell, Koepsell, Zimmerman, & Connell, 2001). Also, continuity with a clinician is more important than continuity with a health care site in reducing the likelihood of future hospitalization (Mainous, & Gill, 1998). It has been shown, however, that the probability of remaining covered by Medicaid for 28 months among new enrollees 16 years of age or younger is only 20%, indicating that a minority of individuals remain continuously enrolled in Medicaid for over 2 years. Furthermore, for those losing Medicaid coverage, 61% had health insurance 4 months after disenrolling (Carrasquillo, Himmelstein, Woolhandler, & Bor, 1998), which suggests that nearly 40% of individuals become uninsured soon after leaving Medicaid.

The Medicaid program has expanded significantly since 1997, with the implementation of the State Child Health Insurance (SCHIP) program, to provide coverage to children up to 200% of the Federal Poverty Level. Findings from the evaluation of this program in the state of New York have shown increased access to and utilization of primary care, improved continuity of care, and improved health status among participating children, although utilization of emergency and specialty care were unchanged (Holl, Szilagyi, Rodewald, Shone, et al., 2000). These improvements were associated with only a modest increase in expenditures (Zwanziger, Mukamel, Szilagyi, Trafton, et al., 2000). However, critics have argued that merely providing

[1] Cuyahoga Health & Nutrition merged with Cuyahoga Work and Training in 2002 to form Cuyahoga Employment & Family Services (EFS). Throughout this report the agency is referred to as EFS.

insurance coverage (public or private) is not sufficient to ensure access to care (Rosenbach, Irvin, & Coulam, 1999). Additional factors are likely to account for the availability of a medical home, and for the effects of gaps in insurance coverage.

Expanded availability of primary care physicians, coupled with various approaches in case management, has been shown to be associated with decreased use of Emergency Department (ED) visits and pediatric hospitalizations -- although such favorable outcomes have not been consistent across studies (Piehl, Clemens, & Joines, 2000; Gadomski, Jenkins, & Nichols, 1998; Schuster, Wood, Duan, Mazel, et al., 1998). In 1990, a lack of primary care provider was cited as a reason for more than 40% of non-urgent visits to the ED, nationwide (US GAO, 1993). Interventions in pediatric EDs consisting of educating parents on the importance of a primary care provider and assisting them in making an appointment to the provider of their choice have resulted in a decrease of subsequent ED use, with potentially modest savings to the Medicaid program (Grossman, Rich, & Johnson, 1998). While these are utilization and process measures, they have often been used as proxies for outcomes, because such encounters could have been prevented through adequate receipt of ambulatory care (Palmer & Miller, 2001).

In Phase I of the evaluation of ECI, we reported favorable trends in key outcomes of interest over time, for children residing in Cuyahoga County. In Phase II of the evaluation, we compare key outcome measures across Ohio counties that experienced similar changes in outreach programs and health care financing/delivery during the study period. As noted above, effects relative to Cuyahoga County, above and beyond that observed in other counties, would be attributed at least in part to ECI. The planned research and evaluation of the ECI and Healthy Start/Medicaid expansion has three components:

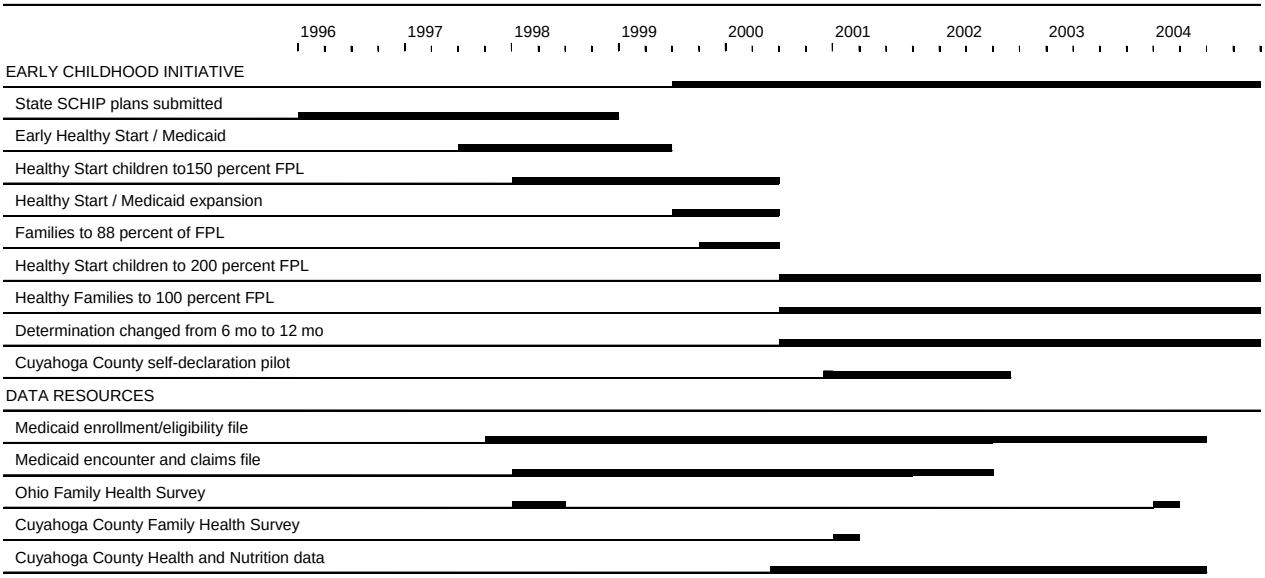
1) A brief description of Healthy Start/Medicaid outreach activities in Cuyahoga County;
2) A comparison of Medicaid enrollment trends and patterns for children under age six in Cuyahoga County and six Ohio comparison counties;
3) A comparison of service utilization focusing on well-child care in Cuyahoga County and 6 Ohio comparison counties.

Program Description and Implementation

Several State, Federal, and County-level policies and initiatives have affected Medicaid enrollment for children and their families. See the Chronology for program implementation depicted in Figure 7.1 for relevant policy changes impacting this component of the ECI. For additional information on relevant policy changes please refer to Chapter 1 of this report.

The Balanced Budget Act (BBA) of 1997 amended the Social Security Act, to include Title XXI, the State Children's Health Insurance Program (SCHIP), a program designed to provide increased access to health coverage for children in families with income too high to qualify for Medicaid (Title XIX) but too low to afford private coverage. Under SCHIP, states may 1) expand Medicaid to include children in families with incomes higher than those served by their Medicaid program; 2) create a separate State program; or 3) create a program that combines the two. In January 1998, under the SCHIP, known as Healthy Start in Ohio, children up to age 19 and living in families with incomes below 150% of the federal poverty level (FPL) became eligible for comprehensive health care. Again, in July 2000, the state expanded eligibility for children, this time increasing families' income limits to 200% of the FPL. Parents in households with children were also covered up to 100% of the FPL. Also, during this period, the Medicaid redetermination cycle (i.e., the point at which families must provide evidence of

their continued eligibility for services) increased from 6 months to 1 year in an effort to maintain continuity of coverage. These events, along with data availability, are depicted in the timeline Figure 7.1.



Source: Prepared by Center on Urban Poverty and Social Change, Case Western Reserve University

Figure 7.1 Chronology of Programs Affecting Health Care Access for Children and Data Resources

Results from the 1998 Ohio Family Health Survey (OFHS) showed that many uninsured adults and children in Cuyahoga County were eligible for Healthy Start or one of the other Medicaid programs. Since then, a number of concurrent activities and events have influenced enrollment trends and substantially reduced the number of uninsured children in Cuyahoga County. Cuyahoga Employment & Family Services launched major marketing and outreach efforts to enroll eligible residents and retain those already enrolled. In addition, the County's ECI program, which began in July 1999, may have also increased enrollment in existing insurance programs by providing early contact with young families to explain the importance of regular health care for children and the availability of insurance programs. The formerly robust economy, which helped workers secure jobs with better benefits, including health insurance, may also have accounted for some of the improvement.

Evaluation Design, Methods and Data Sources

Program and Its Logic:

The Healthy Start/Medicaid program implemented through Cuyahoga Employment & Family Services is designed to reduce the number of uninsured low-income children and assure that children have access to medical care. Through a variety of outreach and information dissemination activities, the Healthy Start/Medicaid program enrolls low-income families, pregnant women, and children who meet eligibility criteria in one of several Medicaid programs.

Those who qualify can receive well-child, acute, and chronic health services through participating Medicaid managed care organizations (MCOs).

The program logic of Healthy Start/Medicaid appears in Figure 7.2. The success of the program rests upon informing parents of eligible children of their eligibility and making it possible for them to enroll and stay in the program. Once children are enrolled, their parents select an MCO, from which they then select primary care providers. This enables families to acquire appropriate and adequate well-child care, immunizations, sick care, and other services necessary and standard for their child's age.

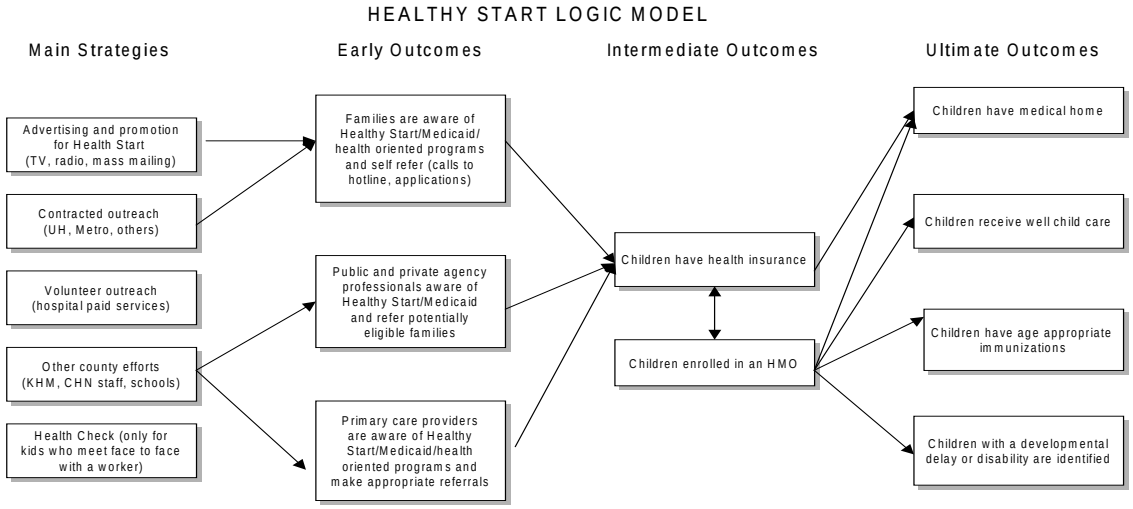


Figure 7.2 Healthy Star/Medicaidt Logic Model

Data Sources:

The ECI program emerged amid new outreach programs in Cuyahoga County and other Ohio counties aimed at expanding children's access to health services (e.g., the State Child Health Insurance Program, and the Welcome Home program[2]), and important changes in the health care financing and delivery system, such as managed care. Given the confluence of these activities, during the study period, and our specific aim to assess the performance of ECI independently from that of co-existing programs and initiatives with goals similar to that of ECI, key outcomes of interest were compared across Ohio counties that experienced similar changes in the past several years. Any incremental effects observed in Cuyahoga County relative to the outcomes of interest – above and beyond that observed in other counties – were attributed in part to the ECI. The analysis encompassed the large urban counties in Ohio. The six counties that served as controls for Cuyahoga County were: Butler, Franklin, Hamilton, Lucas, Montgomery, and Summit. The selected counties differed from Cuyahoga County in many aspects – including,

[2] Welcome Home provides a visit by a nurse to all first time and teen mothers in Cuyahoga County and to mothers in other cities in Ohio. See chapter 4 for more detailed descriptions of this program and its effect in Cuyahoga County.

but not limited to the sociodemographic makeup of the population; population density; the proportion of individuals with incomes at or below the FPL; and the economic climate. Nevertheless, they were the only counties in Ohio that could be characterized as "urban" – a key criterion to select a county as a "control." Also, like Cuyahoga County, the health care delivery system in these counties underwent similar changes relative to the implementation and expansion of Medicaid managed care programs in the late 1990s. These factors constituted the rationale for including these counties in the analyses.

Data for this evaluation component come from several sources:

- Cuyahoga Employment & Family Services (EFS) administrative records
- The Medicaid Recipient Master File (RMF) from the Ohio Department of Job and Family Services (ODJFS)
- Medicaid fee-for-service claims and encounter records from Medicaid managed care programs, also from ODJFS.

Information on outreach strategies and activities were obtained from staff at EFS. Agency records were used to describe the interactions and activities of EFS with potential Medicaid recipients. Applications received by EFS were tracked according to the source that provided, referred or helped the applicant complete the application. Therefore, the source of the applications and the proportion approved by source provide insight into the breadth of outreach activities. To further understand the influence of outreach efforts, the individuals inquiring about Medicaid through the hotline (a major source of applications) were asked how they had heard about the hotline and Medicaid. These two data sources provide insights into the complex process of enrolling in Medicaid.

The study of enrollment trends and patterns utilizes data on Healthy Start/Medicaid enrollees under age six from the RMF, maintained by ODJFS. This file, updated annually, serves as a source for summary information on the children's enrollment history. Each record in the RMF includes demographic data, as well as monthly indicators on enrollment and eligibility. Pertinent information is extracted from these records, including age at first enrollment in Medicaid, length of initial enrollment, and disenrollments.

It is important to note that the Phase I Report on the ECI relied on data from the Client Registry Information System-Enhanced (CRIS-E), obtained from Cuyahoga Department of Employment & Family Services. The two sources of data, RMF and CRIS-E, differ in important ways: CRIS-E files capture enrollment information in a "real-time" fashion and record enrollment information on a month-per-month basis, whereas the RMF consolidates enrollment history to reflect retroactive eligibility information. As a result, some of the differences in the counties' outreach efforts and outcomes relative to measures of *early* enrollment across the seven counties may not be accurately reflected through these statistics. Similarly, it will not be possible to compare the Cuyahoga County-specific findings from the RMF with those of previous reports that were based on the CRIS-E, as there may be sizable differences between the two statistics. For example, the proportion of children in the 1/01-6/01 birth cohort enrolled as of the first month of life is reported to be 63.8% through CRIS-E files, but 84.4% through the RMF files. It is to be noted, however, that in aggregate, the two sources tend to report a similar number of children enrolled through a year's time.

Data on utilization of health services by children enrolled in the Healthy Start/Medicaid program were obtained from claims and encounter files provided by ODJFS. Claim records are billing records generated in the fee-for-service (FFS) system for services paid by the Ohio Medicaid program directly to the provider. Encounter data are pseudo or shadow claims generated by Medicaid managed care organizations (MCOs) to account for services rendered to a beneficiary while s/he was enrolled in their system. While variations in the content and quality of encounter data may occur, it is generally believed that encounter data mirror claim records in format, content, completeness, and quality. In order to obtain a complete claims history and to account for possible lapses in MCO enrollment that may have occurred during the study period, claim records and encounter data were combined in the process of summarizing children's utilization experiences.

The claim and encounter records carry diagnosis and procedure codes that make it possible to identify, respectively, the condition(s) that prompted a given health encounter, as well as the type(s) of service received. These codes were used to summarize children's health care utilization at the individual level to derive measures of receipt of comprehensive preventive visits (also referred to as well-child care); and visits to the Emergency Department (ED). Diagnosis and procedure codes used to identify these services are listed in the Appendix Table 7.A1.

Results from the 1998 Ohio Family Health Survey and the 2001 Cuyahoga Family Health Survey had indicated that the proportion of uninsured children in Cuyahoga County had decreased from 10.5% to 2.1% (Weiner & Coulton, 2001)[3]. Results from the 2004 Ohio Family Health Survey indicate a nonsignificant increase in the number of uninsured children to 4.4% (Center for Community Solutions, 2004). Data on health insurance coverage are reported in more detail in Chapter 2 of this report.

Analysis:

This report presents initial data summarizing the enrollment history and utilization experience of children under age six, residing in Cuyahoga County. The experience of children residing in Cuyahoga County is further compared with that of children residing in the six control counties. As detailed in Figure 7.3, the results are presented for birth cohorts. For this analysis, birth cohorts are identified in 6-month intervals, starting July 1997, and comparisons are made in the experiences of children enrolled in Medicaid from the pre-ECI period (July 1997 through June 1999) to the ECI periods (July 1999 through June 2002). For measures requiring the use of at least 15 months of follow-up, the analyses were limited to children born from July 1997 through March 2001. [Technical note: throughout the analysis section, figures reported in some tables may not sum to 100% due to rounding error.]

[3] The 90% confidence intervals for the two point estimates were 5.6-15.3% for 1998, 0-4.5% for 2001 and 2.4-6.4% for 2004.

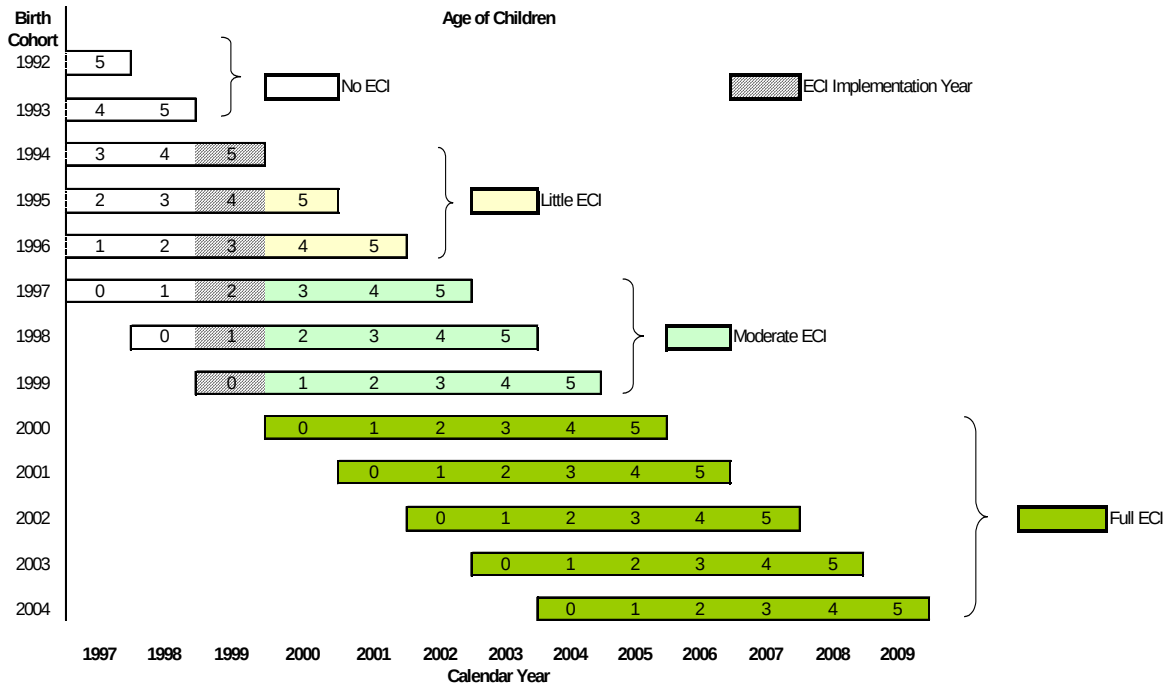


Figure 7.3 ECI Birth Cohorts

The research design is based on the premise that cumulative exposure to ECI activities and programs should positively affect health care-seeking behavior and appropriate utilization. Early birth cohorts will have minimal or no exposure to the ECI influence, but each successive birth cohort will have more exposure, until children born in 2000 and after will have full program exposure. Data for the first 6 years of life for the 1998 birth cohort will not be available until 2006 (accounting for claim lag), so our analyses must rely on less than the full 6 years of data. Nonetheless, analysis of several years should provide valuable insights into the health care utilization by young Medicaid patients and inferences about the effects of ECI. It is of note here that children included in these analyses are all Medicaid beneficiaries, i.e., those enrolled in Medicaid anytime during the study period and in any of the eligibility categories of Ohio Works First (OWF, formerly known as the Aid for Families with Dependent Children or AFDC), Healthy Start (HST), or State Child Health Insurance Program (SCHIP).[4]

The following are specific research questions addressed in this report:

- What are the most frequently used referral sources and points of intake for application to Medicaid?
- What are the rates of approval for applications submitted to the County?
- Compared to children from other counties in the study:
  - Are children from Cuyahoga County enrolling in Medicaid at an earlier age?
  - Are children from Cuyahoga County receiving their comprehensive preventive visits at an earlier age?

[4] Because of the small number of enrollees in the SCHIP program during the study period (approximately 2% of the total), we opted to group the Healthy Start and SCHIP children under one eligibility category of HST.

- What proportion of enrolled children from Cuyahoga County adheres to the American Academy of Pediatrics-recommended schedule of comprehensive preventive visits?

Methodological Considerations

The nature of the Medicaid program, the dynamic aspect of the study cohorts, and the availability of data produced constraints on the analysis that could be conducted and the conclusions that could be drawn. These considerations are detailed below:

- The Medicaid program is known for its dynamic nature, with individuals enrolling in and disenrolling out of the program. The analysis of such data required the use of statistical techniques that could properly account for timing of events (such as age at enrollment in Medicaid), and duration of enrollment (length of enrollment spells).
- The study population in the analyses presented in this chapter included only children enrolled in the Medicaid program, and the number of children enrolled in Medicaid served as denominators to derive various measures. Therefore, children who may have been eligible for Medicaid but not enrolled in the program were not accounted for in these analyses.

Research Findings

The evaluation of the ECI incorporated measures of process and outcomes. Process measures were specific to Cuyahoga County, while outcome measures were compared across the 7 counties included in the study.

1) Process Measures (Specific to Cuyahoga County):

Applications Received and Approval Status by Source of Application

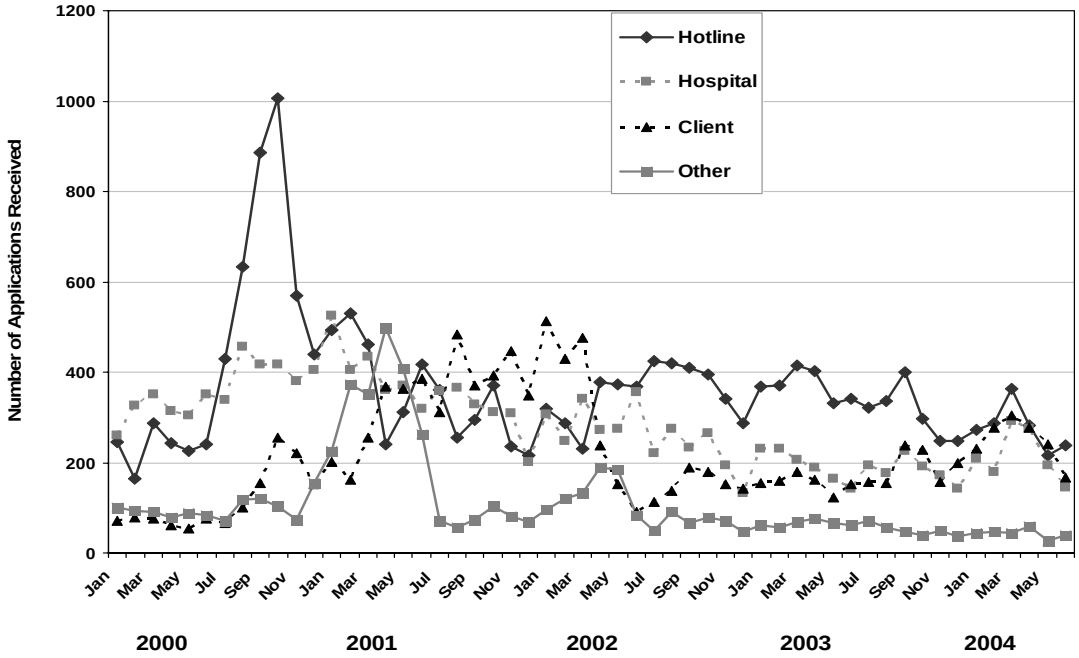
The following section summarizes marketing and outreach activities / enrollment practices that were adopted by Cuyahoga Employment & Family Services over the first 5 years of the ECI:

- Adopting and promoting "Healthy Start" brand name
  - Developing descriptive brochure, table top promotional display, bus placards, give-aways (e.g., lanyards, water bottles, magnets), and a fact sheet, all displaying the Healthy Start logo and contact information
  - Using EFS Kids Healthmobile to target school, neighborhood, and community functions, such as health fairs and neighborhood festivals
- School-Based Outreach
  - Dedicating an employee to target preschool-aged children through Child Care Centers, Head Start Programs, and Starting Point often with mailings to parents
  - Working with school systems, often to develop collaborative and interactive relationships
- Mailings and Cross-selling
  - Encouraging applicants to any public benefit program to apply for "Healthy Start"
  - Mailings to people receiving other types of child services/supports or public benefits such as, Women, Infant and Children (WIC), Child Support, Unemployment, etc

  - Advertising campaign with paid radio and television advertising
- Contracted with various organizations to promote Healthy Start and submit completed applications (discontinued in June 2002 due to loss of State funding) , such as:
  - Metro Health Medical Center
  - University Hospitals
  - Cleveland Municipal School District
- ECI public awareness campaign
  - ECI marketing and communications strategies included information on Healthy Start and the Hotline
  - Distribution of material through in-home visits in the Welcome Home and Early Start programs
  - Use of paid television advertising (discontinued in June 2003)
- Enrollment and application Hotline
  - Developing the capacity to take applications and provide application assistance over the phone
  - Hotline operated seven days per week, twelve hours per day

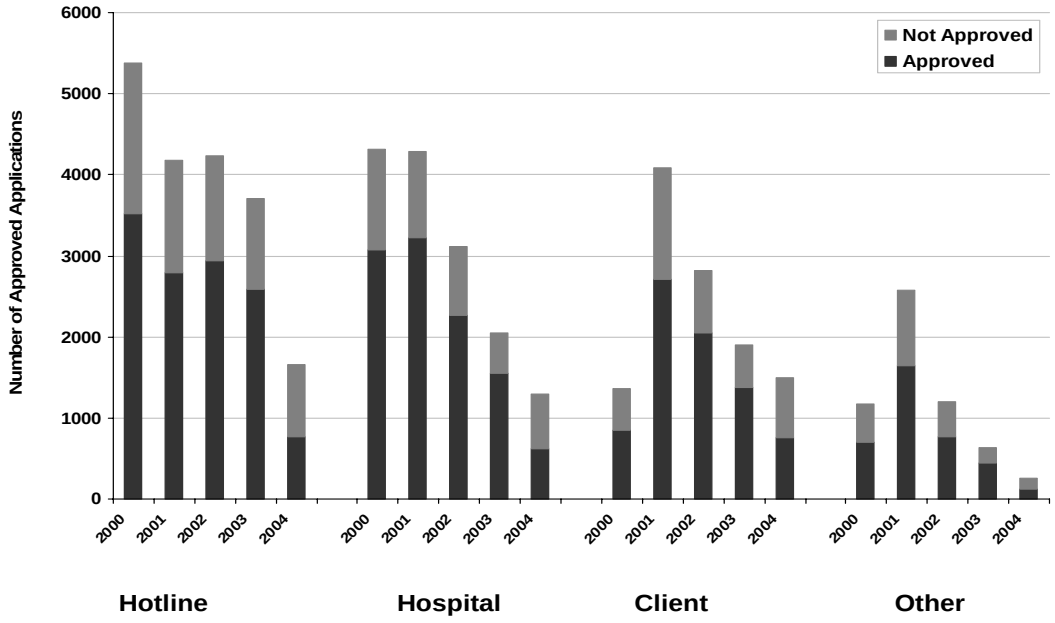
The expanded and enhanced Healthy Start/Medicaid outreach activities undertaken as part of the ECI distinguishes Cuyahoga County from most of the other counties in Ohio. While there is limited systematic evidence to characterize the differences between counties in regard to their outreach activities, one identified data source is the spending on outreach activities funded through the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA). In Ohio these funds were available for use by counties beginning October 1, 1996 and ending June 30, 2003. Data for state fiscal year 2003 show that gross spending on outreach activities in Cuyahoga County substantially outpaced spending in the six other urban counties. Overall, Cuyahoga County spent $484,753 on outreach activities, compared to an average of $337,536 in the other six counties (44% more). Of all the funds expended by the urban counties on several key outreach activities, the majority was expended by Cuyahoga County: 79% of all the funds spent on telephone hotlines, 49% of the funds spent on brochures, flyers, and promotional items, and 40% of the funds spent on paid television spots. These data indicate that for the period covered, Cuyahoga County was directing substantial resources into outreach activities. However, in terms of the amount spent per Medicaid beneficiary, Cuyahoga County spent less than the comparison urban counties. On average, outreach spending per capita during the period was $1.86 per Medicaid enrollee in Cuyahoga County compared to $2.25 per enrollee in the other urban counties. Though comparable data for prior periods are not available, the general pattern likely holds for the period in which the funds were available.

Figure 7.4 presents the volume of Healthy Start applications by source and month, January 2000 through June 2004. The volume fluctuated somewhat during the study period, with a sharp increase during October 2000, possibly coinciding with an increased number of families reaching the Temporary Assistance for Needy Families (TANF) time limits. The Hotline appeared to be the largest source of Healthy Start Applications, with an average of 37% of the applications originating through this venue.



Source: Healthy Start Applications Data, Cuyahoga County Employment & Family Services, Analysis of data by Center on Urban Poverty and Social Change.

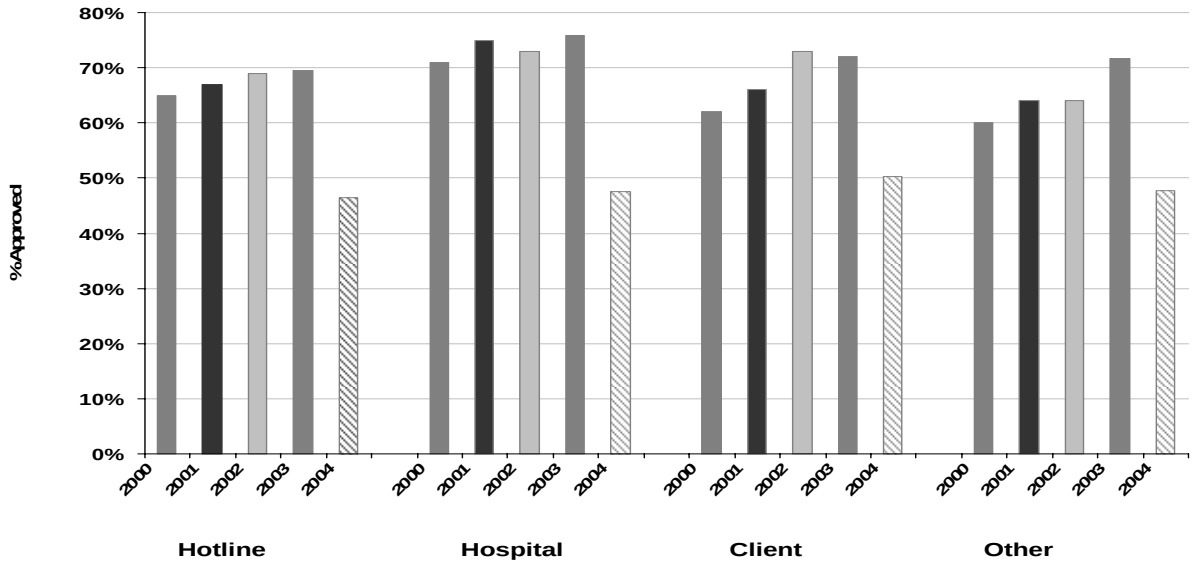
Figure 7.4 Healthy Start Applications Received by Source and Month, January 2000 through June 2004



Source: Healthy Start Applications Data, Cuyahoga County Employment & Family Services, Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.5 Number of Applications by Approval Status and Source, 2000-2003 and January-June 2004

Figure 7.5 shows that aggregate numbers of applications have declined across all sources through 2003, although applications from hospitals or the clients themselves have increased in the first 6 months of 2004. Despite this decrease in the volume of applications, the number of children enrolled in Medicaid has been rising steadily since the start of the ECI, although not at the same pace as that observed in the first 2 years following the start of the ECI.



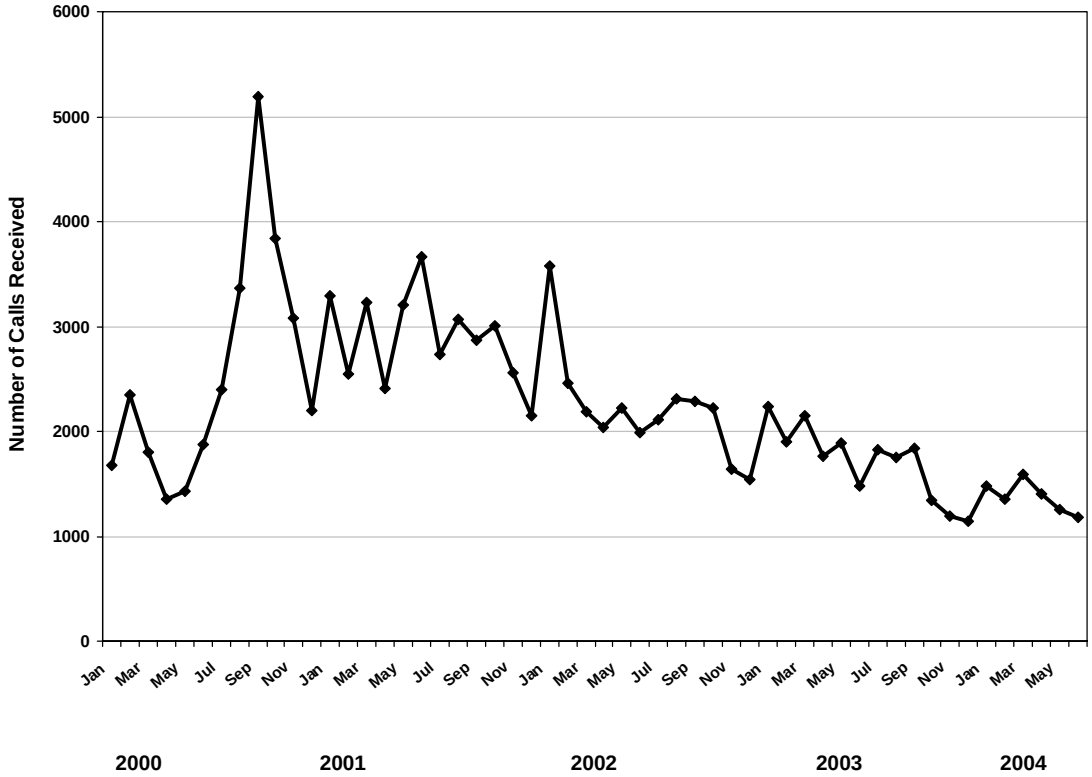
Source: Healthy Start Applications Data, Cuyahoga County Employment & Family Services, Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.6 Percent of Applications Approved by Source, 2000-2003 and January-June 2004

Figure 7.6 shows that rates of application approvals have increased over time regardless of source (through 2003), achieving or exceeding approval rates of approximately 70%[5]. Increasing approval rates could suggest that efforts to streamline application procedures have been having the intended effects.

Figure 7.7 presents the volume of calls received by the Hotline for each month from January 2000 to June 2004. The hotline received 116,264 calls during that time period and mailed out over 37,521 applications from May 2000 to June 2004. Many of these applications were begun over the phone with the help of Hotline staff, so that all that was needed was the applicants' signatures to complete the application. After a dramatic increase in Hotline calls in mid-2000, call volume hovered around 3,000 per month in 2001, and declined to approximately 2,000 per month in 2002, 1,500 per month in 2003 and into 2004. Declining call volume to the Hotline is likely related to two factors: (1) low levels of uninsured in Cuyahoga County [4.4% in 2004] leading to fewer new applications, and (2) declining disenrollments leading to fewer re-applications.

[5] Approval data are incomplete for 2004.

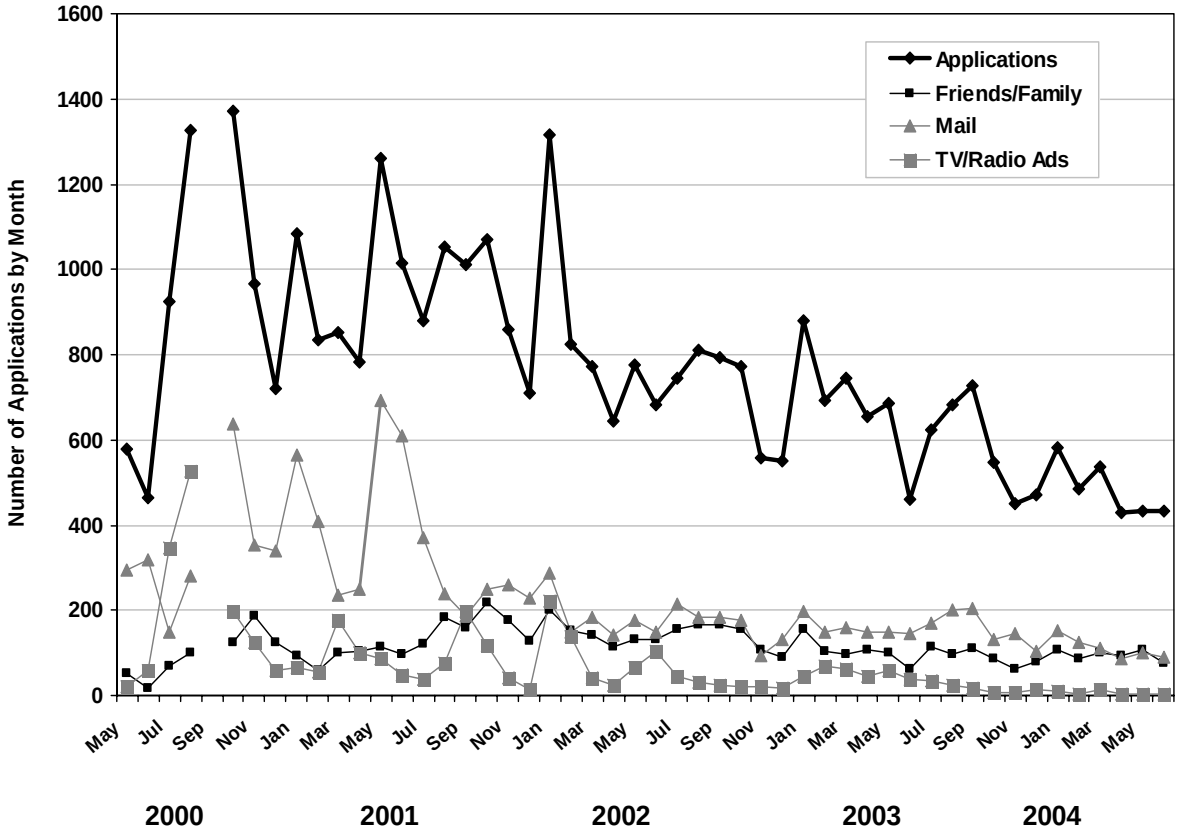


Source: Healthy Start Hotline Data, Cuyahoga County Employment & Family Services, Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.7 Healthy Start Hotline Calls Received by Month, January 2000 through June 2004

Figure 7.8 presents the number of applications mailed out to potential clients and how the callers heard about the hotline. Callers to the hotline were most likely to have heard about the hotline through a mailing, followed by friends or family and paid advertising (primarily an advertisement on television). Referrals linked to mailings and paid advertising fluctuated during the period.

It is important to note that applicants may have been exposed to more than one outreach effort. Further, given a change in the coding of outreach source in the applications in July 2001, the categories of outreach source may not be consistent over the study period.

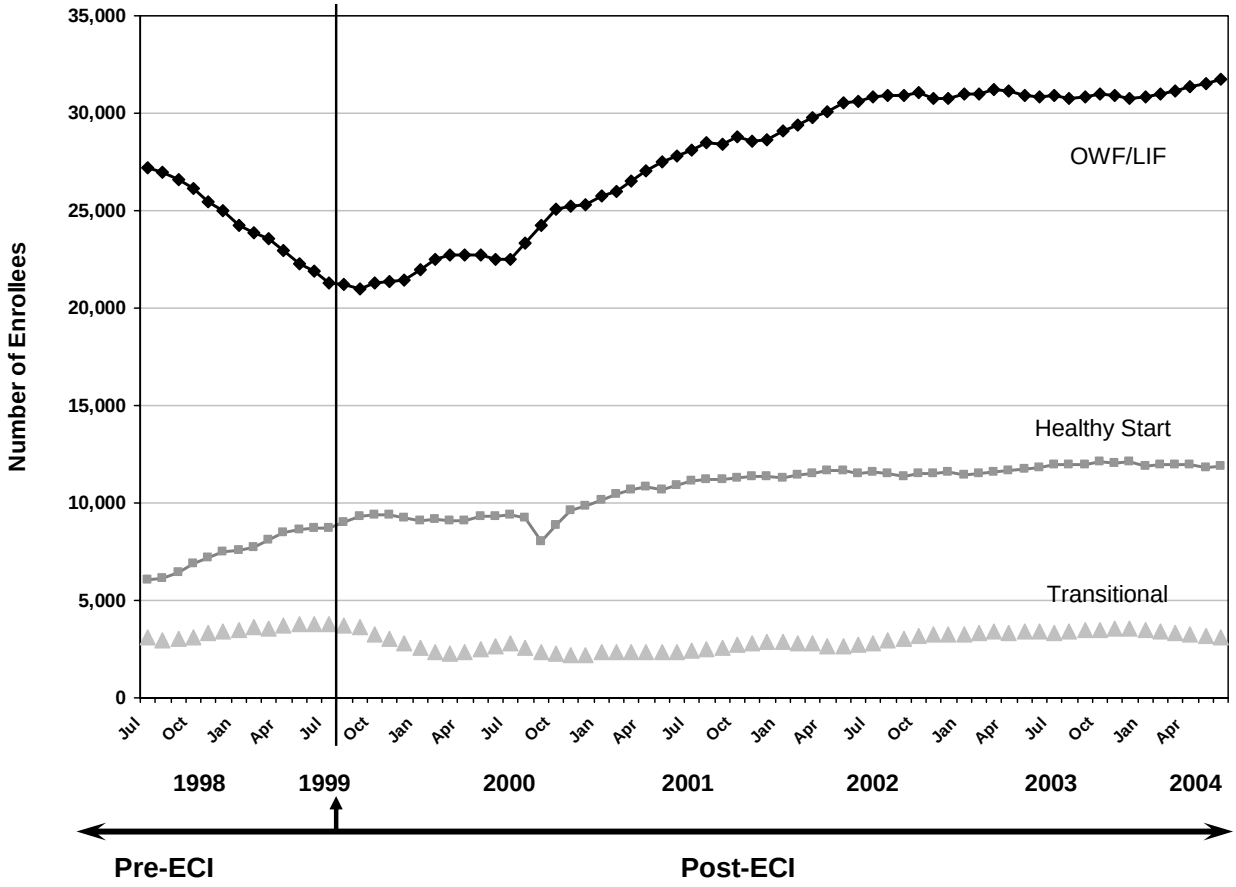


Source: Healthy Start Applications Data, Cuyahoga County Employment & Family Services, Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.8 Healthy Start Applications Mailed from Hotline by Source, May 2000 to June 2004

Enrollment of Children in the Medicaid Program

Figure 7.9 shows the number of enrollees in each of the eligibility categories of Ohio Works First/Low Income Families (OWF/LIF), Transitional Medicaid, and Healthy Start. Children enrolled in Medicaid through the OWF/LIF program receive Medicaid benefits, and OWF children also receive cash assistance. Incomes of families receiving OWF benefits are usually below 70% of the federal poverty level (FPL), and that of families in the LIF program range between 70% and 90% of the FPL. Transitional Medicaid provides families previously enrolled in the OWF/LIF program Medicaid benefits, without cash assistance, for up to 12 months. These are families that no longer qualify for the OWF/LIF program, due to an increase in their income. The Healthy Start program provides health care coverage to pregnant women and children up to age 19 with incomes up to 200% of the FPL. The data for the period July 1998-June 2004 cover a 12-month interval of pre-ECI, and five12-month intervals following the implementation of ECI. With regard to the OWF/LIF program, enrollment decreased slightly in the pre-ECI period, but increased steadily beginning with the second interval in the post-ECI period. Enrollment in the Healthy Start program increased steadily through the study period. No changes in enrollment in Transitional Medicaid were observed during that period.



Source: CRIS-E Monthly Individual Extract Files, Cuyahoga County Employment & Family Services, Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.9 Cuyahoga County Monthly Medicaid Enrollment, Pre- and Post- ECI (June 1998 – June 2004)

2) Outcome Measures with Inter-County Comparisons:

Population Profile

The study population included 54,534 children residing in Cuyahoga County and 137,520 children from the six other counties enrolled in Medicaid and born between July 1997 and June 2002. Since June 2002 represented the last month for which Medicaid enrollment and utilization data were available, the last birth cohort included in the utilization analysis were children born in March 2001 to allow a minimum follow-up period of 15 months. Eligibility category reflects the family's income level. By definition, enrollees of the Healthy Start program have higher incomes than those of the OWF/LIF program. Although enrollees could potentially qualify for more than one eligibility category, an algorithm was developed to select a primary category.

As shown in Table 7.1, the proportions of African American children and those enrolled in the OWF/LIF program were greatest among enrollees of Cuyahoga County (59.4% and 69.9% respectively). Less than one third of Cuyahoga County enrollees were in the Healthy Start program, the lowest proportion among the study counties – a statistic attesting to greater levels of

economic hardship, and therefore a greater representation of the most vulnerable among enrollees in that county, relative to the other six counties. Across all seven counties in our study, over 80% of children enrolled in Medicaid at birth.

Table 7.1 Study Population Profile – Distribution of Children by Race and Eligibility Category

County	# Enrolled[1]	% Enrolled in Medicaid at Birth[2]	% African-American	% White	% Other	%OWF/ LIF	%Healthy Start
Butler	9,762	82.4	13.8	80.1	6.1	51.6	48.4
Cuyahoga	54,534	85.4	59.4	30.7	10.0	69.9	30.1
Franklin	42,730	80.8	47.0	44.6	8.5	57.8	42.2
Hamilton	29,718	86.8	58.0	37.9	4.1	59.9	40.1
Lucas	18,797	87.4	38.1	51.8	10.1	68.0	32.0
Montgomery	19,392	85.7	46.2	50.4	3.4	63.4	36.6
Summit	17,121	86.4	37.1	59.4	3.5	67.6	32.5

[1]Number enrolled represents the number of children born between July 1997 and June 2002 and enrolled at some point during SFY98 to SFY02.

[2]Reflects the percent of children born between July 1997 and June 2001 who were enrolled by 12 months of age.

All other proportions reported in the table reflect the entire population, as shown under column heading # enrolled, and not the sample meeting the enrollment criteria above.

Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Medicaid Enrollment Spells

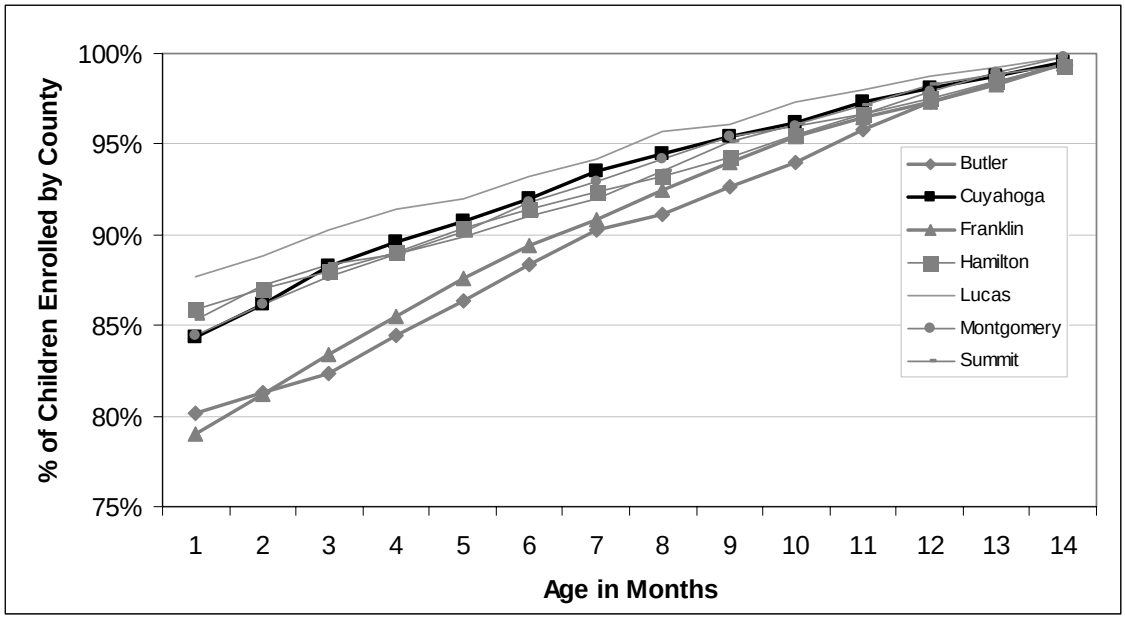
Gaps in insurance coverage hinder access to care, and children who are continuously insured are more likely to have a medical home and receive appropriate and timely care. The objective of the ECI is to promote and facilitate early and sustained contact with the health care system, and hence the interest in monitoring patterns of enrollment into and disenrollment out of the Medicaid program. Several measures were developed to analyze early and continued enrollment in Medicaid:

- Early enrollment in Medicaid was evaluated by analyzing age at initial enrollment in Medicaid. We used survival analysis to analyze changes in the age at enrollment in Medicaid across birth cohorts. In addition, we calculated the proportion of infants enrolling in Medicaid before 1 month of age, among enrollees 1 year of age or younger, so that cohorts are comparable.
- Continued enrollment in Medicaid was assessed by analyzing the length of the initial enrollment spell. In this case, survival analysis with censoring was used to compare spell duration across birth cohorts. We also calculated the proportion of children disenrolling from Medicaid within the 13 months following initial enrollment. The choice of 13 months, rather than 12 months, was to account for eligibility re-determination at 12 months. In this study, Medicaid spell length is defined as the number of consecutive months of enrollment. In order to account for possible difficulties in logistics, a gap of only 1 month in enrollment history is not counted as disenrollment. The duration of initial spell is calculated using survival analysis, with right censoring; a statistical technique used to account for the enrollment spells being initiated throughout the study period, and for spells that may remain open as of June 2002, the last month for the examined study period.

As noted above, the statistics presented in this chapter may not be directly comparable to the ones presented in the ECI Phase I Report, which used the Client Registry Information System - Enhanced (CRIS-E) data obtained from the Cuyahoga Department of Employment & Family Services. In order to compare these statistics across the seven counties, however, the present study used the Recipient Master File (RMF) obtained from the Ohio Department of Job and Family Services (ODJFS).

Early Enrollment:

One of the desired effects of ECI is enrollment of eligible children in Medicaid at an early age. As shown in Figure 7.10, between 80% and 90% of children were enrolled in Medicaid as of the first month of life, and this statistic did not differ markedly across the seven counties. Although differences persisted at statistically significant levels in favor of Cuyahoga County ($p<.0001$) for the most part, and the proportion of children enrolled as of the 3rd month of life remained the second highest amongst the counties in the study. Given the small magnitude of many of the inter-county differences presented in this chapter, caution should be taken in making any inferences relative to policy implications.[6] Of note here is that these proportions reflect retroactive eligibility, and that data from the CRIS-E system, providing real-time enrollment statistics, would have served as a better basis for these comparisons. This would have been of particular interest in evaluating Cuyahoga County's Early Start program, given the substantial investment in that component of the Initiative.

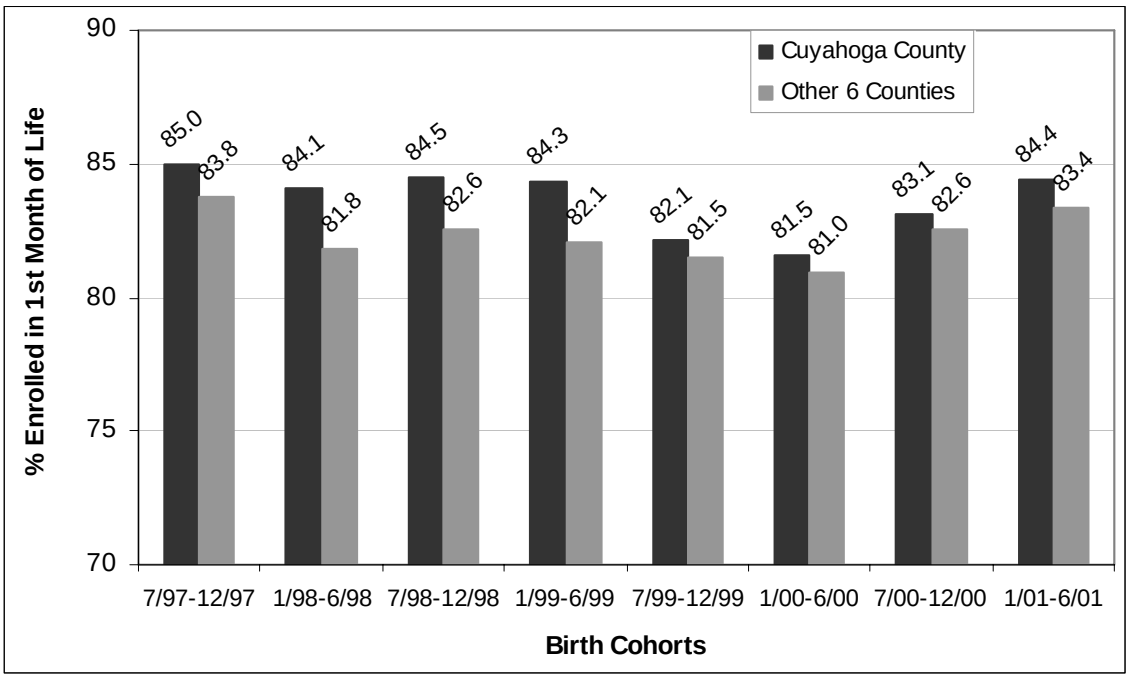


Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.10: Survival Curves Depicting Age at Enrollment in Medicaid: Analysis by County

[6] To provide a frame of reference, we note, for example that the total number of children residing in Cuyahoga County and enrolled in Medicaid is between 4,300 and 5,300 in any given birth cohort. Therefore, a difference of 1% would reflect the experience of 43 to 53 children per birth cohort, and approximately 500 children for the entire study period.

Similarly, as shown in Figure 7.11, the proportion of Cuyahoga County children enrolled in Medicaid as of the first month of life was only slightly higher than that in the other comparison counties. Although this difference was statistically significant (p<.0001), it is not necessarily meaningful from a policy perspective.



Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

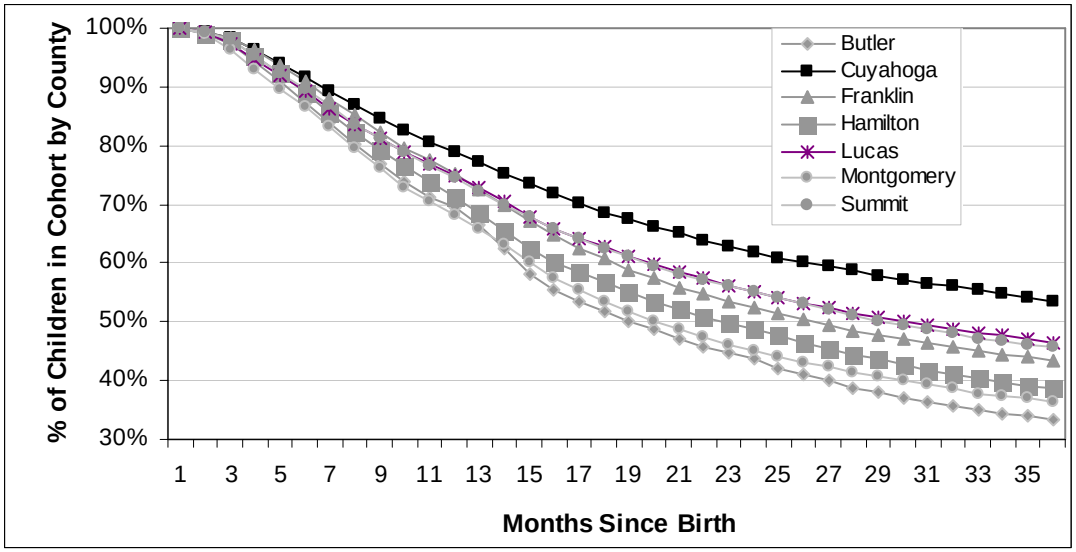
Figure 7.11 Proportion of Infants Enrolled in Medicaid at <1 Month of Age, by Birth Cohort (analysis limited to infants <12 months of age)

Among residents of Cuyahoga County, a greater proportion of children in the OWF/LIF program than those in the Healthy Start program enrolled prior to 1 month of age (86.0% and 80.5% respectively in the most recent cohort, p<.0001) – possibly because of a greater rate of enrollment of low-income pregnant women in the OWF/LIF program. This gap appears to have persisted across the study cohorts (Appendix Table 7.A2). However, the magnitude and the directionality in the difference were not consistent across all seven counties: In some counties, such as Butler and Summit, a greater proportion of children in the Healthy Start program than in OWF/LIF enrolled in Medicaid prior to 1 month of age.

Continued Enrollment in Medicaid:

As shown in Figure 7.12, relative to children in other counties, those residing in Cuyahoga County had longer spell lengths once they were enrolled in Medicaid. This difference persisted after adjusting for birth cohort effect, eligibility category, and race (p<.0001).

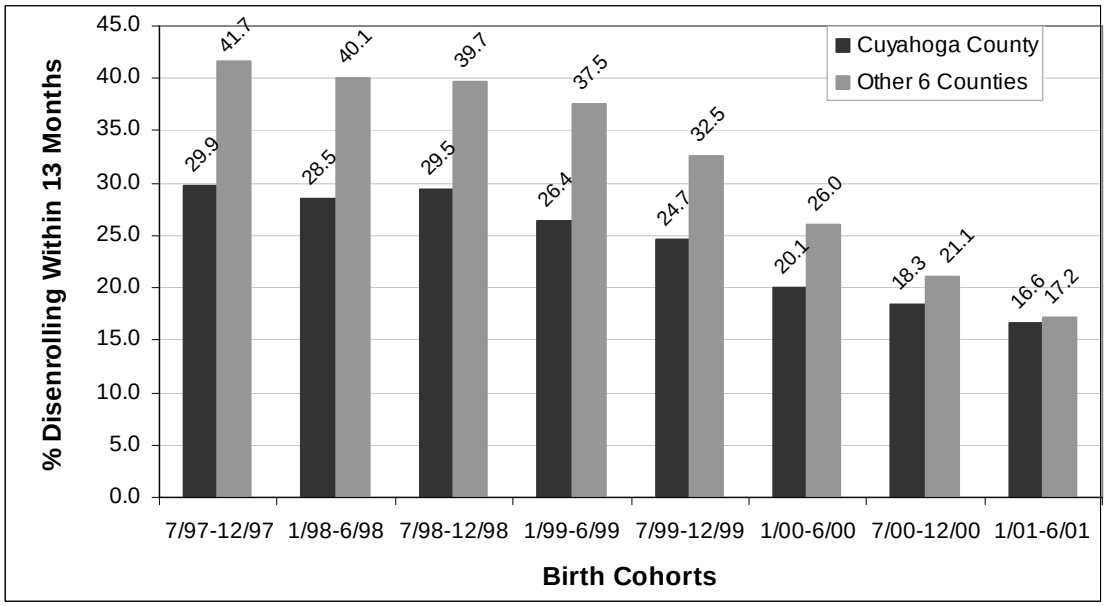
Table 7.A3 in the Appendix shows the proportion of children remaining enrolled in Medicaid for a specified duration after their initial enrollment for each of the seven counties.



Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.12: Survival Curves for Length of Enrollment Spells (in Months): Analysis by County

Summary findings from the analysis of spell lengths are presented in Figure 7.13. All counties experienced a substantial drop in the proportion of children disenrolling from Medicaid within 13 months from initial enrollment. In earlier cohorts, this proportion was lowest in Cuyahoga County (approximately 30%). In the most recent cohort, however, disenrollment in Cuyahoga County was at 16.6%, and comparable to that of the other counties (17.2%).



Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.13 Proportion of Children Disenrolled Within 13 Months from Initial Enrollment in Medicaid by Birth Cohort

The proportion of children in the most recent cohort disenrolling from Medicaid within 13 months from initial enrollment did not differ markedly by eligibility category, although it is of note that a sharper drop in disenrollment was observed over time among Healthy Start children than among their OWF/LIF counterparts (See Table 7.A4 in the Appendix), despite the fact that Healthy Start children may be more susceptible to changes in eligibility due to fluctuations in income. The steeper decline in disenrollment among Healthy Start children may have caused the difference in disenrollment between the two groups of children to narrow significantly. That the Medicaid program has been successful in retaining Healthy Start children in the system is a positive finding indeed. These numbers should be further monitored, and the factors contributing to this favorable trend identified.

Utilization Measures

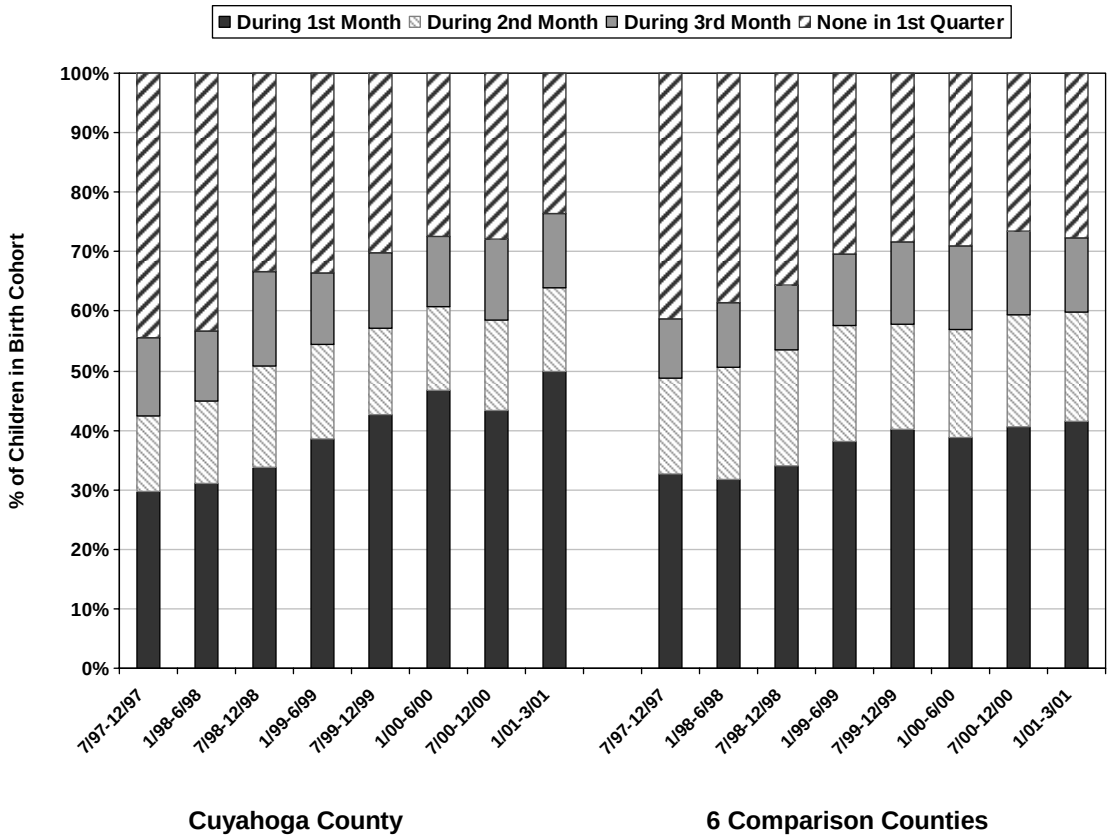
Through early and continued enrollment in Medicaid, the ECI hopes to promote early initiation and sustained contact with the health care system. Therefore, it is expected that these efforts will result in – among other measures -- a greater likelihood in adequate use of comprehensive preventive visits (CPVs). This report focuses on CPVs as a key measure of preventive care which can be compared across all seven counties for this population.

The American Academy of Pediatrics (AAP) recommends at least one CPV by 4 weeks of age, two CPVs by 3 months of age, and six CPVs by 12 months of age (AAP, 2000). This study examined (1) early initiation of care, as measured by the proportion of children receiving at least one CPV by 1 month (excluding the 1st week of life), 2 months, and 3 months of age, as well as those receiving no CPV in that timeframe; and (2) the proportion of children receiving the recommended number of CPVs in the 1st year of life, or at least six visits in the first 15 months of life.

Early Initiation of CPVs:

As shown in Figure 7.14**,** we note a substantial increase in the proportion of Cuyahoga County infants receiving a CPV in the first month of life -- from 29.8% in the earliest cohort to 50.0% in the most recent cohort. Similarly, the proportion of children not receiving any CPV by 3 months of age decreased from 44.5% to 23.5% during the study period.

Children residing in Cuyahoga County were at a significantly greater advantage relative to receiving their CPV in the first month of life (50.0% vs. 41.4% in all other counties in the most recent birth cohort). In contrast, fewer Cuyahoga County children received no CPV in the first 3 months of life (23.5% vs. 27.7% in control counties). In summary, we note 1) the positive trends in Cuyahoga County over time; and 2) the consistently more favorable performance of Cuyahoga County relative to these measures in the comparison counties. All of these trends and comparisons were statistically significant at $p < 0.001$. Relevant county- and birth cohort-specific statistics are available in the Appendix (Table 7.A5**)**

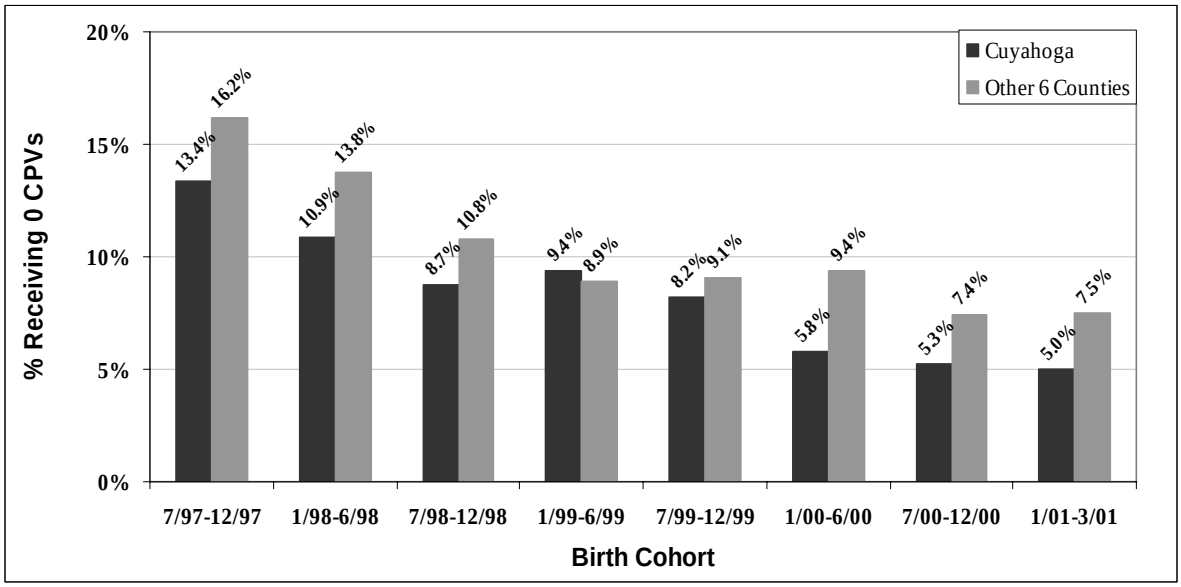


Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.14 Receipt of Initial Comprehensive Preventive Visits in the First 3 Months of Life, by Birth Cohort

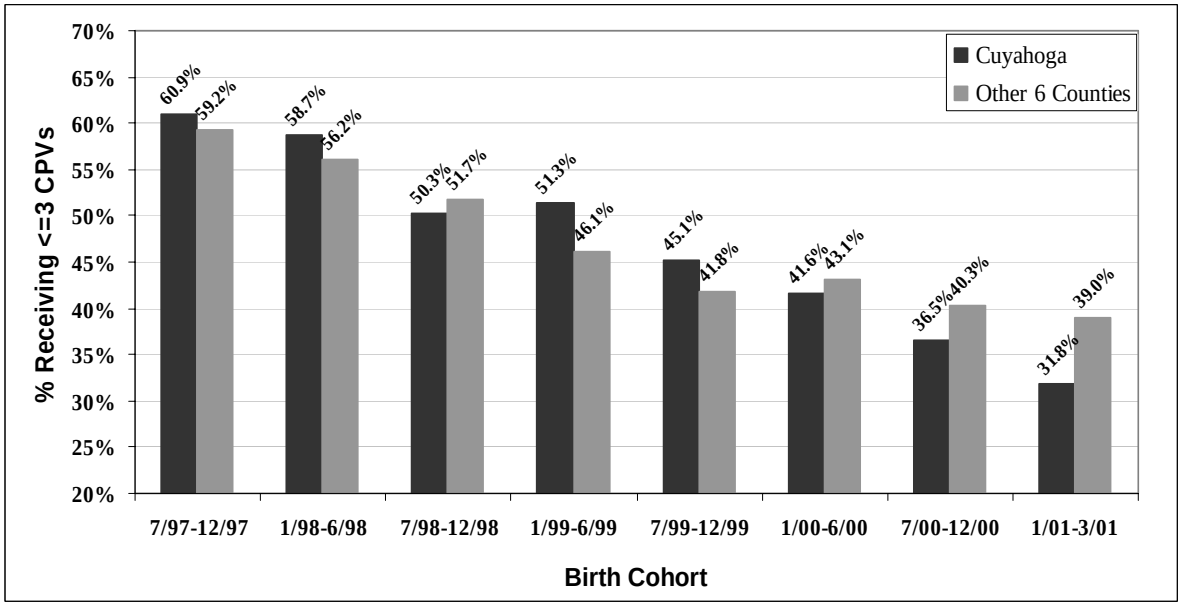
Receipt of the Recommended Number of CPVs by 1 Year of Age:

As noted above, the AAP recommends receipt of at least six CPVs in the first year of life. The proportion of children receiving no visits, three visits or less, and six or more CPVs in their first year of life is depicted in Figures 7.15, 7.16 and 7.17. The study population for this analysis included children enrolled in Medicaid upon birth who also remained continuously enrolled in Medicaid through the first year of life. The methods employed in this report are somewhat different from those of the Phase I report, in that we have included in these analyses children who were enrolled in Medicaid anytime in the first 3 months of life, but have stayed continuously enrolled until 15 months of age. These changes in methodology preclude us from comparing the statistics directly between the previous and present reports.



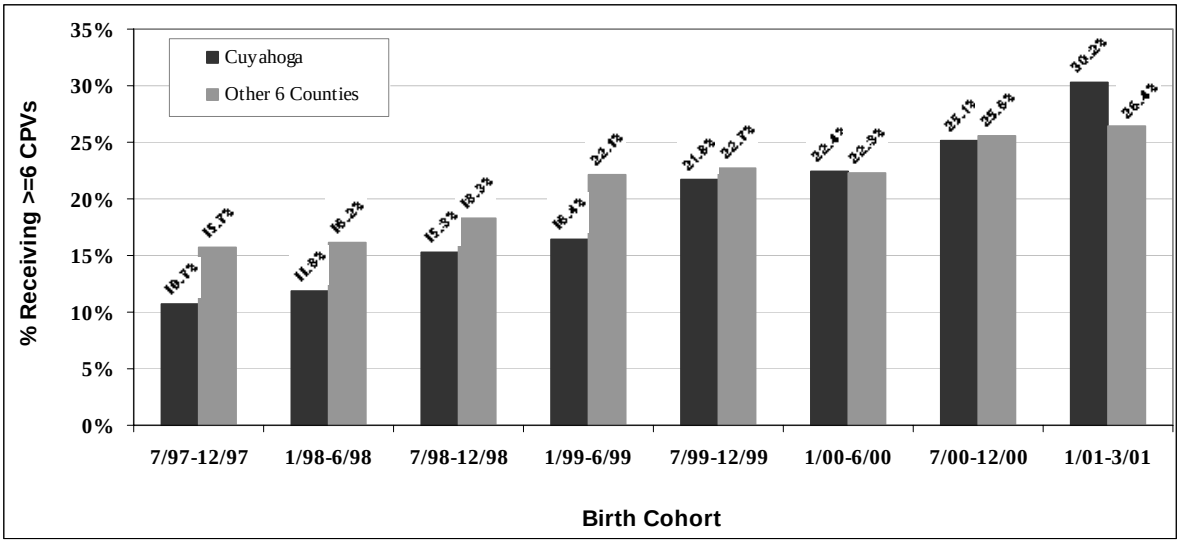
Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.15 Received 0 Comprehensive Preventative Visits During First Year of Life



Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.16 Received <=3 Comprehensive Preventative Visits During First Year of Life



Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Figure 7.17 Received >=6 Comprehensive Preventative Visits During First Year of Life

As depicted in the figures above, Cuyahoga County children were significantly less likely than their counterparts residing in the control counties to have had 0 visits by their first birthday (5.0% and 7.5% respectively), or three visits or less (31.8% and 39.0% respectively). In contrast, they were significantly more likely to have received at least six visits in their first 15 months of life (30.2% and 26.4% respectively). We further note that these performance measures have been improving over time, more so for Cuyahoga County than for the control counties. All comparisons were significant at $p < 0.001$. (More detailed statistics for each of the study counties are available in the Appendix Table 7.A6).

Discussion:

As noted previously, in order to assess the effects of ECI on enrollment and utilization measures independently of Medicaid managed care in Cuyahoga County, the study attempted to identify a set of comparison counties for which data were available. The analyses in the present report encompassed other counties in Ohio that also experienced significant expansion in Medicaid managed care programs during the study period.

In summarizing the findings, we note the apparent improvement in trends pertaining to early and sustained enrollment in the Medicaid program, as well as early initiation and receipt of comprehensive preventive visits among infants according to the recommended schedule of such visits, not only in Cuyahoga County, but in comparison counties as well. Additional analyses are warranted to identify programmatic aspects across counties that may have contributed to -- or hindered -- progress towards achieving program goals.

An important finding in this report is the reduced difference in several key outcome measures between Cuyahoga County and the comparison counties over time. There may be several factors contributing to these trends:

1) Despite the similarity in the level of urbanization among the counties included in the study, Cuyahoga County may be distinguished as the most "urban" of all the counties, with possibly the greatest representation of economically disadvantaged subgroups of the population. This is evidenced by the greater proportion of OWF and minority children among Medicaid beneficiaries in Cuyahoga County, as compared to the other counties. In turn, greater poverty may have prompted the community to invest in programs such as the ECI, even before the SCHIP. We further posit that economically vulnerable people may be more amenable to respond to such outreach efforts, hence the more favorable outcomes in Cuyahoga County early on in the study period.

2) That other urban counties have shown progress in these measures over time that was comparable to that of Cuyahoga County may be related to programs such as SCHIP and/or other, ECI-like programs that may have been initiated at local levels. Such programs can play the role of a catalyst in attracting into the Medicaid program not only children of poor families with higher incomes, but also those with lower incomes who may have been eligible but not enrolled in Medicaid.

In addition to examining more closely the community and economic attributes in the control counties in comparison to that of Cuyahoga County, future studies should document the timing in the emergence of programs with similar objectives to ECI (if any) in each of these counties relative to changes in the outcome measures. The detailed analysis of these factors across the counties will be key in further assessing the effectiveness of the ECI.

Limitations:

The proper interpretation of the findings presented in this report requires a consideration of the study limitations, which are mostly a function of data used in these analyses:

- We were unable to measure receipt of immunization by children according to the recommended schedule – a key component of preventive care. Immunization rates constitute a very important quality indicator. However, serious under-reporting of immunization data in FFS claims has been noted in the past, mainly because Maternal and Child Health Clinics have been providing immunizations free of charge. Under-reporting of immunizations is likely to also exist in MCO encounter data. Services with no documented billing transactions cannot be accounted for in the analysis, and administrative data cannot be considered a reliable source of data to assess the adequacy of receipt of childhood vaccines in the study population. It is noteworthy, however, that findings from the Ohio Department of Health Retrospective Surveys showed a steady increase in the rates of immunization, both for the City of Cleveland, as well as for the suburbs, although a significant gap between the two populations persists. The rates for the 4:3:1 immunization series, which is to be completed by the child's second birthday, increased from 36% in 1992 to 53% in 2000 for residents of the City of Cleveland, and from 54% to 81% for residents of the suburbs. More recent data from the 2003 National Immunization Survey put the 4:3:1 immunization rate for Cuyahoga County at 76.2% (+/- 7.7%) but data were not available for the City of Cleveland (Barker, Santoli, & McCauley, 2004).
- As noted above, the enrollment data used to compare statistics on children's timing of enrollment across counties does not reflect "real-time" enrollment experience in the study

counties. Instead, the data incorporate retroactive eligibility – a fact that precludes us from making a fair and accurate assessment of a key measure of ECI.

- We note that the analyses on CPVs presented in this report use only claims data. While billing data eliminate errors due to recall bias – an important strength of our data materials -- they can present important quality issues, particularly as they relate to the completeness and accuracy of the codes documented by providers.

Future Directions

This report presents results from the analysis of Medicaid enrollment and claims/encounter files. The present report focuses on comparing key ECI outcome measures across Ohio counties that experienced significant expansions during the study period in their outreach efforts to enroll economically disadvantaged children into the Medicaid program, as well as in the health care financing/delivery system. Additional analyses that might be undertaken in the future include:

- Enrollment/Disenrollment/Re-enrollment: A more thorough analysis of enrollment and disenrollment in Medicaid is warranted. The present study examined the age at initial enrollment in Medicaid, and the duration of the initial spell. Several questions remain unanswered, however. In particular, it would be of interest to learn how many, who, and when these children re-enroll in Medicaid. It would also be of interest to learn about children's patterns of enrollment in Medicaid in relation to that of the mother's (during pregnancy) and other household members' enrollment.
- Analyses of enrollment/disenrollment in Medicaid and utilization measures should aim at exploring the effects of exposure to specific components of the Early Childhood Initiative (ECI), such as the Welcome Home program, specifically targeted to facilitate early initiation of child health care. Furthermore, despite the logistical difficulties in obtaining county-specific data on real-time enrollment in Medicaid through CRIS-E, future analyses should attempt at evaluating early enrollment. Also, to better evaluate/improve process measures relative to the performance of ECI in Cuyahoga County, it will be important to identify the most effective means of outreach to the eligible population (i.e., flyers versus television advertisement).
- Examine key outcome measures in this report in relation to county-level contextual factors, as well as county-specific initiatives in outreach efforts. Such contextual factors might include more detailed measures of the economic conditions at the county level, and their changes over time (e.g., education, percent unemployed, percent uninsured), as well as variables reflecting the availability of Medicaid providers who are willing to serve low-income children. Furthermore, these contextual variables should encompass indicators/measures of the availability and intensity of ECI-like programs that may have developed over time in counties other than Cuyahoga County.
- Examine key outcome measures relative to smaller geographical units than the county. As evidenced in preliminary analyses presented in the previous report, variations of these measures do exist at the neighborhood level, and it would be highly desirable to identify factors contributing to these variations, including but not limited to means of public transportation in that community, and availability of Medicaid providers in the surrounding area.

- Locus of care: Analyze temporal trends in the locus of care (ED versus primary care/office settings) to address common pediatric conditions. A study of inpatient services for Ambulatory Care Sensitive conditions is not likely to be fruitful, given findings from preliminary analyses that indicate a very small number of hospitalizations in this population actually fall into this category.
- Also relative to locus of care and medical home, it will be important to develop measures of continuity of care among Medicaid enrollees, both relative to the individual provider(s) or group(s) of providers rendering care, and to managed care organization (MCOs). Many of the study counties, including Cuyahoga County, experienced a substantial change in the availability and/or mix of MCOs in a given area over time. The extent to which the entry and exit of MCOs into an area influenced locus of care and medical home is not known. Further analyses to explore this question would be most informative.
- Future analyses should explore the development of composite measures to account for simultaneous changes in several aspects of health care utilization. As depicted in Figure 7.18, these studies could aim at determining the distribution of one utilization measure in relation to another.

	Adequacy of Utilization of Comprehensive Preventive Exams (O/E)	Non-Injury Related Emergency Room Visits	Injury Related Emergency Room Visits	Office Visits
→	Lowest Q1			
→	Q2			
→	Q3			
→	Highest Q4			

Figure 7.18 Matrix Summarizing Utilization of Health Services by Children Enrolled in the Medicaid Program

Conclusion

In this study, we compared children's Medicaid enrollment and preventive care utilization data across Cuyahoga County and six comparison counties, all of which experienced Medicaid managed care expansion during the study period.

The findings indicated that Cuyahoga County performed somewhat better than its counterparts in several key outcome measures, especially in the beginning of the study period. These measures improved for Cuyahoga County, as well as for the comparison counties over time. As a result, the differences in these measures between Cuyahoga County and the other

counties had narrowed by the end of the study period, although Cuyahoga County continued to fare somewhat better than the other counties.

By using multivariable models, we adjusted for inter-county differences in enrolled children's demographic profile, and the distribution by eligibility category. More refined analyses are warranted to also account for differences in the economic conditions across the counties. However, given the widely recognized fact that residents of Cuyahoga County may be most likely to experience economic hardship, its performance in key outcome measures, which can be characterized at least as equal to that of others, may be considered a great achievement. Future studies will be able to evaluate the extent to which this success can be attributed to efforts of the ECI.

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Appendix 7.1

Table 7.A1: Diagnosis and Procedure Codes Used in Identifying Comprehensive Preventive Visits, Emergency Department Visits, and Office Visits

Category	ICD-9-CM Codes	CPT Procedure Codes
Comprehensive Preventive Exams	V20.2 Routine infant or child health check	99381 Initial preventive medicine - New patient (age group infant)
	V70.3 Other medical examination for administrative purposes	99382 Initial preventive medicine - New patient (age groups 1-4 year old)
	V70.5 Health examination of defined subpopulation	99391 Periodic preventive medicine - Established patient (age group infant)
	V70.6 Health examination in population survey	99392 Periodic preventive medicine - Established patient (age group 1-4 year old)
	V70.8 Other specified general medical examination	99432 Other than hospitals or birthing rooms (age group newborn)
	V70.9 Unspecified general medical examination	

Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A2 Proportion of Infants Enrolled in Medicaid at <1 Month of Age, by Birth Cohort and Eligibility Category (Analysis Limited to Infants <12 Months of Age)

	Birth Cohort							
	7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01
Butler	83.1	82.7	80.6	78.5	79.7	76.4	79.1	80.2
Cuyahoga	85.0	84.1	84.5	84.3	82.1	81.5	83.1	84.4
Franklin	79.9	73.8	77.3	76.1	77.2	77.5	78.9	79.2
Hamilton	84.7	86.2	84.9	85.5	82.6	84.1	85.4	86.0
Lucas	85.6	85.5	85.1	86.0	85.5	85.2	85.5	87.8
Montgomery	85.4	83.4	84.6	82.8	84.0	80.4	84.0	84.6
Summit	86.4	84.8	85.7	85.9	83.6	82.4	83.9	85.3

By eligibility category

OWF/LIF

	Birth Cohort							
	7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01
Butler	83.5	83.8	77.8	74.7	74.2	69.5	74.2	77.4
Cuyahoga	86.0	86.2	85.9	85.7	83.5	82.9	85.0	86.0
Franklin	81.8	78.1	80.8	76.8	77.0	75.7	78.1	79.1
Hamilton	86.5	88.4	88.7	87.3	81.9	83.0	85.4	85.8
Lucas	86.1	86.7	85.7	86.7	84.5	84.4	85.4	88.6
Montgomery	84.7	84.6	85.8	82.6	82.8	78.1	83.4	84.2
Summit	86.5	86.1	86.7	87.5	85.2	81.8	83.9	86.2

Healthy Start

	Birth Cohort							
	7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01
Butler	82.8	81.8	83.0	81.3	84.1	82.5	84.6	83.8
Cuyahoga	81.4	78.0	81.3	81.4	79.6	78.9	78.7	80.5
Franklin	76.0	67.1	72.9	75.2	77.3	79.5	80.0	79.4
Hamilton	81.2	83.0	79.7	83.3	83.4	85.5	85.4	86.2
Lucas	84.2	82.9	83.9	84.6	87.1	86.6	85.6	85.7
Montgomery	86.5	81.7	82.6	83.2	85.8	83.8	85.0	85.3
Summit	86.1	82.1	83.9	82.9	81.1	83.3	84.1	82.9

Table 7.A3 Proportion of Children by Birth Cohort and Length of Spell at Initial Enrollment

Cuyahoga

Spell Length	Birth Cohort 7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01	7/01-12/01	1/02-6/02
3	98.1%	98.3%	98.6%	98.2%	98.3%	97.9%	98.5%	98.5%	98.7%	98.9%
6	90.2%	90.3%	90.9%	90.1%	90.8%	92.2%	93.4%	93.2%	94.3%	
9	81.0%	81.6%	82.2%	82.0%	83.4%	86.0%	87.9%	88.6%	90.3%	
12	73.5%	74.7%	74.6%	76.0%	77.4%	82.0%	83.7%	84.6%		
15	67.4%	68.2%	67.3%	70.9%	72.9%	77.3%	79.2%	81.2%		
18	62.6%	62.2%	62.3%	65.8%	69.1%	73.1%	75.4%			
24	54.4%	54.5%	55.6%	59.7%	62.6%	67.9%	70.0%			
30	49.5%	50.2%	51.4%	55.2%	59.0%	64.1%				
36	45.4%	46.6%	48.0%	52.1%	55.8%					

Butler

Spell Length	Birth Cohort 7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01	7/01-12/01	1/02-6/02
3	96.5%	96.2%	96.1%	96.6%	97.5%	97.8%	98.1%	98.3%	98.6%	98.8%
6	83.7%	80.4%	80.7%	82.3%	88.2%	90.6%	93.8%	92.2%	93.2%	
9	66.9%	66.2%	65.2%	70.9%	80.2%	82.6%	87.4%	86.0%	87.2%	
12	55.9%	56.0%	57.7%	65.1%	71.2%	76.7%	81.1%	81.4%		
15	46.1%	45.9%	49.8%	53.0%	60.4%	65.1%	68.0%	69.4%		
18	39.6%	39.9%	44.0%	47.0%	54.0%	57.3%	62.4%			
24	32.2%	31.3%	37.0%	40.3%	47.1%	49.1%	54.5%			
30	25.4%	25.5%	31.8%	34.0%	41.7%	42.7%				
36	22.6%	23.1%	28.1%	30.0%	38.6%					

Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A3 Proportion of Children by Birth Cohort and Length of Spell at Initial Enrollment (con't)

Franklin

Spell Length	Birth Cohort 7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01	7/01-12/01	1/02-6/02
3	97.3%	97.0%	98.2%	98.0%	98.6%	98.6%	98.9%	98.7%	98.6%	98.6%
6	86.2%	86.0%	88.8%	88.7%	89.8%	92.6%	93.9%	94.8%	95.1%	
9	73.8%	74.5%	77.2%	78.9%	80.2%	85.9%	88.2%	91.0%	91.9%	
12	63.2%	65.4%	66.9%	70.3%	73.1%	80.1%	84.2%	87.4%		
15	54.8%	57.8%	58.9%	61.9%	64.9%	71.9%	77.5%	81.0%		
18	48.2%	50.9%	52.6%	55.7%	59.2%	66.3%	71.6%			
24	38.9%	42.0%	43.9%	47.4%	52.1%	59.1%	67.5%			
30	34.2%	35.7%	38.9%	43.1%	48.0%	55.9%				
36	30.5%	33.0%	35.7%	40.5%	45.6%					

Hamilton

Spell Length	Birth Cohort 7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01	7/01-12/01	1/02-6/02
3	98.1%	97.1%	98.0%	97.3%	97.6%	97.9%	98.0%	98.9%	98.6%	98.7%
6	86.2%	85.3%	85.9%	84.3%	87.8%	91.0%	92.3%	93.6%	94.3%	
9	71.7%	72.3%	72.6%	72.1%	77.3%	82.4%	86.5%	88.5%	90.5%	
12	61.2%	62.5%	61.6%	63.0%	70.2%	76.2%	81.3%	84.0%		
15	52.6%	53.4%	52.6%	56.3%	62.2%	67.0%	71.3%	75.6%		
18	47.3%	47.6%	47.0%	50.3%	57.8%	61.9%	64.6%			
24	39.3%	38.3%	39.9%	44.9%	50.5%	54.5%	57.3%			
30	32.8%	32.7%	35.9%	40.5%	44.5%	49.0%				
36	28.5%	29.5%	32.5%	36.7%	41.8%					

Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A3 Proportion of Children by Birth Cohort and Length of Spell at Initial Enrollment (con't)

Lucas

Spell Length	Birth Cohort 7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01	7/01-12/01	1/02-6/02
3	96.9%	96.6%	97.4%	95.3%	96.7%	98.3%	97.9%	98.9%	98.6%	98.9%
6	85.5%	84.9%	87.1%	84.9%	87.1%	92.3%	92.5%	93.8%	94.3%	
9	74.0%	73.9%	75.4%	75.3%	78.4%	86.4%	87.6%	89.3%	91.9%	
12	64.9%	66.0%	66.1%	68.5%	72.2%	82.2%	84.5%	86.9%		
15	57.1%	60.0%	58.8%	60.1%	64.1%	74.6%	78.8%	83.6%		
18	51.3%	54.0%	54.5%	55.0%	60.0%	69.0%	74.9%			
24	42.4%	45.5%	46.3%	47.7%	55.6%	63.2%	69.2%			
30	37.1%	39.8%	41.6%	43.5%	51.8%	59.8%				
36	33.3%	36.6%	39.2%	41.5%	49.6%					

Montgomery

Spell Length	Birth Cohort 7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01	7/01-12/01	1/02-6/02
3	94.4%	95.9%	94.7%	95.4%	95.7%	95.7%	97.7%	98.6%	98.3%	0.9833
6	83.0%	82.6%	82.7%	81.0%	83.6%	85.1%	90.8%	93.3%	94.0%	
9	69.6%	68.5%	68.3%	67.0%	72.4%	76.4%	84.5%	88.4%	91.1%	
12	60.0%	58.4%	58.1%	58.4%	63.7%	69.7%	80.0%	84.0%		
15	52.1%	51.2%	49.9%	49.8%	56.9%	62.3%	70.1%	76.3%		
18	45.5%	44.2%	43.2%	42.3%	52.5%	56.7%	64.0%			
24	36.7%	34.4%	35.1%	36.3%	47.0%	48.5%	57.8%			
30	30.2%	29.3%	31.5%	33.4%	43.1%	45.2%				
36	26.3%	26.1%	29.2%	30.6%	40.9%					

Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A3 Proportion of Children by Birth Cohort and Length of Spell at Initial Enrollment (con't)

Summit

Spell Length	Birth Cohort 7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01	7/01-12/01	1/02-6/02
3	97.3%	97.7%	97.6%	97.4%	97.2%	98.2%	98.1%	98.4%	99.0%	98.7%
6	86.3%	86.6%	86.7%	86.4%	89.3%	90.8%	92.7%	93.4%	93.8%	
9	75.3%	75.3%	76.0%	76.6%	79.8%	84.1%	87.4%	89.0%	90.0%	
12	66.5%	68.3%	68.0%	68.5%	73.1%	79.0%	81.0%	84.5%		
15	59.8%	60.3%	60.7%	62.3%	67.6%	73.1%	75.1%	77.5%		
18	54.1%	53.9%	55.9%	57.4%	63.3%	68.5%	69.8%			
24	47.0%	46.2%	47.8%	52.2%	57.6%	60.6%	64.1%			
30	39.7%	40.1%	43.2%	47.3%	53.2%	56.7%				
36	35.7%	36.9%	39.5%	44.6%	50.4%					

Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A4 Proportion of Children Disenrolling Within 13 Months from Initial Enrollment in Medicaid, by Birth Cohort and Eligibility Category

	Birth Cohort							
	7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01
Butler	48.7	47.5	44.7	40.4	33.3	28.6	24.2	22.2
Cuyahoga	29.9	28.5	29.5	26.4	24.7	20.1	18.3	16.6
Franklin	40.9	38.0	36.3	33.2	30.3	23.4	18.4	14.8
Hamilton	43.3	42.2	42.7	39.9	33.7	28.2	24.0	19.4
Lucas	39.3	36.8	37.5	36.1	31.5	21.4	17.9	14.4
Montgomery	44.2	44.8	45.8	45.7	38.8	33.1	23.7	18.0
Summit	36.9	36.5	35.9	34.7	29.4	24.1	21.3	18.6

By Eligibility Category

OWF/LIF

	Birth Cohort							
	7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01
Butler	42.0	42.1	41.1	35.3	30.4	31.0	24.0	20.4
Cuyahoga	26.4	24.6	25.6	22.4	21.4	18.9	17.1	15.7
Franklin	36.5	35.2	32.8	30.2	28.2	23.8	19.5	14.0
Hamilton	38.9	36.1	35.9	33.8	28.8	23.7	23.1	18.2
Lucas	34.9	30.7	32.9	31.0	28.0	20.6	17.2	14.2
Montgomery	38.1	39.1	40.5	40.7	33.5	31.6	23.4	17.7
Summit	32.1	30.5	30.2	29.8	23.6	21.6	21.3	16.8

Healthy Start

	Birth Cohort							
	7/97-12/97	1/98-6/98	7/98-12/98	1/99-6/99	7/99-12/99	1/00-6/00	7/00-12/00	1/01-6/01
Butler	55.8	53.0	48.3	44.7	35.9	26.2	24.5	24.6
Cuyahoga	40.1	38.5	37.8	34.7	30.8	22.2	21.2	18.9
Franklin	48.0	42.0	40.6	36.7	32.7	22.8	17.1	15.9
Hamilton	50.9	50.8	52.0	47.6	40.1	34.3	25.5	21.4
Lucas	49.9	50.1	46.9	45.9	37.1	23.2	19.4	14.8
Montgomery	53.8	53.1	54.4	52.9	47.5	35.3	24.1	18.6
Summit	46.7	48.1	46.5	43.2	39.0	28.0	21.3	23.6

Source: Recipient Master File, SFY 98-SFY03, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A5 Initial Comprehensive Preventive Visit - Children Continuously Enrolled Months 3 - 15

Cuyahoga

Birth Cohort

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
During 1st Month	873	29.7%	871	31.1%	935	33.8%	1029	38.5%	1249	42.7%	1503	46.7%	1538	43.3%	871	50.0%
During 2nd Month	376	12.8%	387	13.8%	469	17.0%	429	16.0%	422	14.4%	450	14.0%	537	15.1%	244	14.0%
During 3rd Month	381	13.0%	327	11.7%	438	15.8%	318	11.9%	373	12.7%	378	11.8%	488	13.8%	219	12.6%
None in 1st Quarter	1305	44.5%	1214	43.4%	924	33.4%	898	33.6%	883	30.2%	886	27.5%	986	27.8%	409	23.5%
	2935		2799		2766		2674		2927		3217		3549		1743	
Visit in 1st Quarter	1630	55.5%	1585	56.6%	1842	66.6%	1776	66.4%	2044	69.8%	2331	72.5%	2563	72.2%	1334	76.5%

Butler

Birth Cohort

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
During 1st Month	78	29.1%	67	27.0%	77	27.9%	112	37.2%	145	34.7%	143	30.0%	164	33.3%	92	34.5%
During 2nd Month	80	29.9%	68	27.4%	95	34.4%	95	31.6%	116	27.8%	121	25.4%	160	32.5%	76	28.5%
During 3rd Month	36	13.4%	41	16.5%	37	13.4%	35	11.6%	53	12.7%	92	19.3%	59	12.0%	41	15.4%
None in 1st Quarter	74	27.6%	72	29.0%	67	24.3%	59	19.6%	104	24.9%	121	25.4%	110	22.3%	58	21.7%
	268		248		276		301		418		477		493		267	
Visit in 1st Quarter	194	72.4%	176	71.0%	209	75.7%	242	80.4%	314	75.1%	356	74.6%	383	77.7%	209	78.3%

Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A5 Initial Comprehensive Preventive Visit - Children Continuously Enrolled Months 3 – 15 (con't)

Franklin

Birth Cohort

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
During 1st Month	354	27.5%	349	27.0%	452	32.5%	559	38.1%	681	40.1%	759	35.5%	1017	39.1%	563	40.8%
During 2nd Month	151	11.7%	264	20.4%	274	19.7%	265	18.1%	256	15.1%	373	17.4%	438	16.8%	234	16.9%
During 3rd Month	106	8.2%	119	9.2%	140	10.1%	164	11.2%	219	12.9%	303	14.2%	373	14.3%	168	12.2%
None in 1st Quarter	678	52.6%	560	43.3%	523	37.7%	478	32.6%	543	32.0%	705	32.9%	773	29.7%	416	30.1%
	1289		1292		1389		1466		1699		2140		2601		1381	
Visit in 1st Quarter	611	47.4%	732	56.7%	866	62.3%	988	67.4%	1156	68.0%	1435	67.1%	1828	70.3%	965	69.9%

Hamilton

Birth Cohort

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
During 1st Month	374	31.7%	354	30.3%	362	30.4%	419	35.5%	505	39.8%	676	42.8%	716	39.2%	418	44.6%
During 2nd Month	134	11.4%	159	13.6%	165	13.9%	178	15.1%	204	16.1%	248	15.7%	318	17.4%	167	17.8%
During 3rd Month	130	11.0%	117	10.0%	137	11.5%	185	15.7%	200	15.8%	253	16.0%	311	17.0%	131	14.0%
None in 1st Quarter	542	45.9%	539	46.1%	527	44.2%	399	33.8%	359	28.3%	401	25.4%	482	26.4%	221	23.6%
	1180		1169		1191		1181		1268		1578		1827		937	
Visit in 1st Quarter	638	54.1%	630	53.9%	664	55.8%	782	66.2%	909	71.7%	1177	74.6%	1345	73.6%	716	76.4%

Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A5 Initial Comprehensive Preventive Visit - Children Continuously Enrolled Months 3 – 15 (con't)

Lucas

Birth Cohort

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
During 1st Month	391	41.8%	338	38.6%	352	42.5%	352	40.8%	362	40.4%	424	37.6%	498	41.4%	259	42.0%
During 2nd Month	226	24.2%	195	22.3%	160	19.3%	177	20.5%	180	20.1%	204	18.1%	257	21.4%	142	23.1%
During 3rd Month	88	9.4%	102	11.6%	84	10.1%	91	10.5%	105	11.7%	127	11.2%	118	9.8%	53	8.6%
None in 1st Quarter	230	24.6%	241	27.5%	232	28.0%	243	28.2%	250	27.9%	374	33.1%	330	27.4%	162	26.3%
	935		876		828		863		897		1129		1203		616	
Visit in 1st Quarter	705	75.4%	635	72.5%	596	72.0%	620	71.8%	647	72.1%	755	66.9%	873	72.6%	454	73.7%

Montgomery

Birth Cohort

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
During 1st Month	239	32.3%	215	31.2%	230	32.5%	239	38.9%	353	44.3%	386	42.7%	554	49.4%	251	42.9%
During 2nd Month	116	15.7%	106	15.4%	110	15.5%	121	19.7%	132	16.6%	171	18.9%	168	15.0%	84	14.4%
During 3rd Month	62	8.4%	78	11.3%	90	12.7%	74	12.0%	107	13.4%	110	12.2%	145	12.9%	77	13.2%
None in 1st Quarter	323	43.6%	291	42.2%	278	39.3%	181	29.4%	205	25.7%	236	26.1%	254	22.7%	173	29.6%
	740		690		708		615		797		903		1121		585	
Visit in 1st Quarter	417	56.4%	399	57.8%	430	60.7%	434	70.6%	592	74.3%	667	73.9%	867	77.3%	412	70.4%

Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A5 Initial Comprehensive Preventive Visit - Children Continuously Enrolled Months 3 – 15 (con't)

Summit

Birth Cohort

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
During 1st Month	277	32.9%	278	35.9%	306	37.0%	300	39.3%	335	39.0%	396	41.2%	416	40.0%	198	38.7%
During 2nd Month	145	17.2%	159	20.5%	208	25.2%	168	22.0%	168	19.6%	195	20.3%	211	20.3%	89	17.4%
During 3rd Month	99	11.8%	90	11.6%	84	10.2%	77	10.1%	133	15.5%	116	12.1%	173	16.6%	63	12.3%
None in 1st Quarter	321	38.1%	248	32.0%	228	27.6%	219	28.7%	223	26.0%	255	26.5%	241	23.2%	161	31.5%
	842		775		826		764		859		962		1041		511	
Visit in 1st Quarter	521	61.9%	527	68.0%	598	72.4%	545	71.3%	636	74.0%	707	73.5%	800	76.8%	350	68.5%

Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A6 Comprehensive Preventive Visits During 1st Year (15 Months) of Life.
Children Continuously Enrolled Months 3-15

Cuyahoga

Birth Cohort

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
0 Visits	392	13.4%	304	10.9%	241	8.7%	251	9.4%	241	8.2%	186	5.8%	187	5.3%	87	5.0%
1 visit	456	15.5%	405	14.5%	292	10.6%	278	10.4%	257	8.8%	272	8.5%	240	6.8%	112	6.4%
2 Visits	475	16.2%	445	15.9%	354	12.8%	393	14.7%	383	13.1%	401	12.5%	336	9.5%	136	7.8%
3 Visits	465	15.8%	488	17.4%	505	18.3%	451	16.9%	439	15.0%	480	14.9%	534	15.0%	220	12.6%
4 Visits	440	15.0%	469	16.8%	500	18.1%	445	16.6%	481	16.4%	612	19.0%	676	19.0%	296	17.0%
5 Visits	393	13.4%	358	12.8%	450	16.3%	417	15.6%	489	16.7%	546	17.0%	684	19.3%	365	20.9%
>=6 Visits	314	10.7%	330	11.8%	424	15.3%	439	16.4%	637	21.8%	720	22.4%	892	25.1%	527	30.2%
	2935		2799		2766		2674		2927		3217		3549		1743	
<=3 Visits	1788	60.9%	1642	58.7%	1392	50.3%	1373	51.3%	1320	45.1%	1339	41.6%	1297	36.5%	555	31.8%

Butler

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
0 Visits	30	11.2%	24	9.7%	24	8.7%	18	6.0%	39	9.3%	35	7.3%	33	6.7%	18	6.7%
1 visit	23	8.6%	29	11.7%	16	5.8%	33	11.0%	28	6.7%	40	8.4%	57	11.6%	19	7.1%
2 Visits	34	12.7%	25	10.1%	29	10.5%	25	8.3%	45	10.8%	56	11.7%	49	9.9%	36	13.5%
3 Visits	49	18.3%	25	10.1%	33	12.0%	34	11.3%	59	14.1%	69	14.5%	61	12.4%	30	11.2%
4 Visits	34	12.7%	49	19.8%	41	14.9%	44	14.6%	74	17.7%	82	17.2%	66	13.4%	43	16.1%
5 Visits	42	15.7%	42	16.9%	50	18.1%	47	15.6%	64	15.3%	82	17.2%	102	20.7%	46	17.2%
>=6 Visits	56	20.9%	54	21.8%	83	30.1%	100	33.2%	109	26.1%	113	23.7%	125	25.4%	75	28.1%
	268		248		276		301		418		477		493		267	
<=3 Visits	136	50.7%	103	41.5%	102	37.0%	110	36.5%	171	40.9%	200	41.9%	200	40.6%	103	38.6%

Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A6 Comprehensive Preventive Visits During 1st Year (15 Months) of Life. (con't)

Franklin

Birth Cohort

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
0 Visits	232	18.0%	178	13.8%	164	11.8%	131	8.9%	168	9.9%	202	9.4%	228	8.8%	125	9.1%
1 visit	260	20.2%	162	12.5%	181	13.0%	156	10.6%	141	8.3%	165	7.7%	187	7.2%	105	7.6%
2 Visits	238	18.5%	204	15.8%	195	14.0%	177	12.1%	199	11.7%	246	11.5%	294	11.3%	139	10.1%
3 Visits	161	12.5%	215	16.6%	196	14.1%	256	17.5%	211	12.4%	324	15.1%	343	13.2%	186	13.5%
4 Visits	154	11.9%	194	15.0%	209	15.0%	233	15.9%	318	18.7%	377	17.6%	449	17.3%	246	17.8%
5 Visits	99	7.7%	183	14.2%	197	14.2%	215	14.7%	293	17.2%	384	17.9%	471	18.1%	261	18.9%
>=6 Visits	145	11.2%	156	12.1%	247	17.8%	298	20.3%	369	21.7%	442	20.7%	629	24.2%	319	23.1%
	1289		1292		1389		1466		1699		2140		2601		1381	
<=3 Visits	891	69.1%	759	58.7%	736	53.0%	720	49.1%	719	42.3%	937		1052	40.4%	555	40.2%

Hamilton

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
0 Visits	254	21.5%	204	17.5%	152	12.8%	101	8.6%	90	7.1%	124	7.9%	133	7.3%	68	7.3%
1 visit	179	15.2%	222	19.0%	148	12.4%	108	9.1%	119	9.4%	125	7.9%	159	8.7%	74	7.9%
2 Visits	176	14.9%	178	15.2%	186	15.6%	166	14.1%	164	12.9%	174	11.0%	203	11.1%	92	9.8%
3 Visits	168	14.2%	157	13.4%	212	17.8%	191	16.2%	201	15.9%	225	14.3%	274	15.0%	134	14.3%
4 Visits	140	11.9%	148	12.7%	160	13.4%	198	16.8%	248	19.6%	277	17.6%	303	16.6%	150	16.0%
5 Visits	102	8.6%	115	9.8%	170	14.3%	186	15.7%	217	17.1%	299	18.9%	326	17.8%	160	17.1%
>=6 Visits	161	13.6%	145	12.4%	163	13.7%	231	19.6%	229	18.1%	354	22.4%	429	23.5%	259	27.6%
	1180		1169		1191		1181		1268		1578		1827		937	
<=3 Visits	777	65.8%	761	65.1%	698	58.6%	566	47.9%	574	45.3%	648	41.1%	769	42.1%	368	39.3%

Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A6 Comprehensive Preventive Visits During 1st Year (15 Months) of Life. (con't)

Lucas

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%			#	%	#	%	#	%
0 visits	102	10.9%	100	11.4%	70	8.5%	81	9.4%	130	14.5%	169	15.0%	72	6.0%	29	4.7%
1 visit	87	9.3%	84	9.6%	77	9.3%	94	10.9%	61	6.8%	95	8.4%	100	8.3%	40	6.5%
2 visits	101	10.8%	99	11.3%	101	12.2%	91	10.5%	62	6.9%	103	9.1%	141	11.7%	41	6.7%
3 visits	124	13.3%	102	11.6%	123	14.9%	109	12.6%	89	9.9%	147	13.0%	149	12.4%	88	14.3%
4 visits	162	17.3%	128	14.6%	121	14.6%	133	15.4%	130	14.5%	146	12.9%	166	13.8%	96	15.6%
5 visits	137	14.7%	132	15.1%	127	15.3%	133	15.4%	140	15.6%	171	15.1%	178	14.8%	117	19.0%
>=6 visits	222	23.7%	231	26.4%	209	25.2%	222	25.7%	285	31.8%	298	26.4%	397	33.0%	205	33.3%
	935		876		828		863		897		1129		1203		616	
<=3 visits	414	44.3%	385	43.9%	371	44.8%	375	43.5%	342	38.1%	514	45.5%	462	38.4%	198	32.1%

Montgomery

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%			#	%	#	%	#	%
0 visits	135	18.2%	125	18.1%	93	13.1%	72	11.7%	58	7.3%	61	6.8%	73	6.5%	37	6.3%
1 visit	129	17.4%	113	16.4%	98	13.8%	52	8.5%	63	7.9%	80	8.9%	72	6.4%	45	7.7%
2 visits	96	13.0%	107	15.5%	102	14.4%	60	9.8%	75	9.4%	101	11.2%	114	10.2%	68	11.6%
3 visits	95	12.8%	99	14.3%	111	15.7%	84	13.7%	122	15.3%	127	14.1%	154	13.7%	77	13.2%
4 visits	98	13.2%	111	16.1%	109	15.4%	92	15.0%	157	19.7%	172	19.0%	202	18.0%	105	17.9%
5 visits	89	12.0%	73	10.6%	102	14.4%	119	19.3%	147	18.4%	152	16.8%	208	18.6%	106	18.1%
>=6 visits	98	13.2%	62	9.0%	93	13.1%	136	22.1%	175	22.0%	210	23.3%	298	26.6%	147	25.1%
	740		690		708		615		797		903		1121		585	
<=3 visits	455	61.5%	444	64.3%	404	57.1%	268	43.6%	318	39.9%	369	40.9%	413	36.8%	227	38.8%

Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Change.

Table 7.A6 Comprehensive Preventive Visits During 1st Year (15 Months) of Life. (con't)

Summit

Birth Cohort

	7/97-12/97		1/98-6/98		7/98-12/98		1/99-6/99		7/99-12/99		1/00-6/00		7/00-12/00		1/01-3/01	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
0 Visits	98	11.6%	65	8.4%	61	7.4%	59	7.7%	54	6.3%	83	8.6%	78	7.5%	46	9.0%
1 visit	103	12.2%	94	12.1%	83	10.0%	85	11.1%	76	8.8%	78	8.1%	94	9.0%	49	9.6%
2 Visits	125	14.8%	93	12.0%	109	13.2%	96	12.6%	110	12.8%	115	12.0%	130	12.5%	61	11.9%
3 Visits	113	13.4%	132	17.0%	133	16.1%	113	14.8%	119	13.9%	158	16.4%	142	13.6%	68	13.3%
4 Visits	136	16.2%	111	14.3%	157	19.0%	129	16.9%	159	18.5%	164	17.0%	169	16.2%	76	14.9%
5 Visits	124	14.7%	112	14.5%	122	14.8%	122	16.0%	158	18.4%	181	18.8%	188	18.1%	81	15.9%
>=6 Visits	143	17.0%	168	21.7%	161	19.5%	160	20.9%	183	21.3%	183	19.0%	240	23.1%	130	25.4%
	842		775		826		764		859		962		1041		511	
<=3 Visits	439	52.1%	384	49.5%	386	46.7%	353	46.2%	359	41.8%	434	45.1%	444	42.7%	224	43.8%

Source: Fee-for-Service Claims and Medicaid Encounter Data, SFY 98-SFY02, ODJFS. Analysis of data by Center on Urban Poverty and Social Chang

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The Report and Executive Summary are available in
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