A Review of the Literature on Home-Based Child Care: Implications for Future Directions

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I. INTRODUCTION

Home-based child care—regulated family child care and family, friend, and neighbor care—is a common arrangement for many young children in the United States, especially those from low-income families and families of color. Research suggests that home-based care may be the predominant form of nonparental care for infants and toddlers (Brandon, 2005). It also represents a significant proportion of the child care for children whose families receive child care subsidies (Child Care Bureau, 2006). Parents use these arrangements for a variety of reasons, including convenience, flexibility, trust, shared language and culture, and individual attention from the caregiver. Parents may also turn to home-based child care if they have very young children—infants or toddlers—because there are few spaces in child care centers.

Regulated family child care has been an issue for research and policy since the 1980s, when states actively began to invest in efforts to expand the supply of child care options and improve its quality. In contrast, family, friend, and neighbor child care did not emerge as a focus of research and policy until the mid-1990s, after the enactment of welfare reform when data began to emerge about significant proportions of child care subsidy dollars expended on this type of care (Porter & Kearns, 2005a). In the past decade, growing recognition of the role that these unregulated settings play in the child care supply has prompted a growing number of studies (for example, Anderson, Ramsburg, & Scott, 2005; Brandon, 2005; Capizzano, Adams & Sonenstein, 2000; Porter, 1998) and an increasing number of initiatives that aim to support these caregivers.

Although there are more studies that examine quality in family child care than studies that examine this question in family, friend, and neighbor care, information about the quality of home-based care is fairly sparse and presents a mixed picture. Some research suggests that home-based child care environments are relatively safe and that caregivers are affectionate and responsive (Layzer & Goodson, 2006; Paulsell et al., 2006; Tout & Zaslow, 2006). These studies also found that little time is spent on learning activities, such as reading or higher-level talk and engagement with children (Layzer & Goodson, 2006; Paulsell et al., 2006; Tout & Zaslow, 2006).

Child care serves a dual purpose of supporting children's development and their parents' ability to work. Most measures of child care quality, however, focus solely on structural features of child care settings and interactions between caregivers and children that are associated with supporting children's developmental outcomes. This literature review—particularly Chapters VI and VII—points to ways in which initiatives to support home-based caregivers may be able to support both children's development and parent outcomes. For example, home-based caregivers may be able to support parents in fulfilling their family and work responsibilities by offering flexible scheduling, information about parenting and other resources, and other supports.

Many state and local agencies and foundations, as well as the Administration for Children and Families (ACF) in the U.S. Department of Health and Human Services (DHHS), have explored ways to improve quality in home-based child care settings (see Porter & Kearns, 2005a for examples of state initiatives funded with Child Care Development Fund quality set-aside dollars and O'Donnell et al., 2006 for examples of those that are supported by private philanthropy). These efforts have potential for promoting positive child outcomes and school readiness among children who spend a significant amount of time in home-based child care. Relatively little is known about the effectiveness of these initiatives, however, making it difficult for states to make informed policy and program decisions about how best to support home-based caregivers. To begin a process for filling

this knowledge gap, the Office of Planning, Research and Evaluation (OPRE) within ACF contracted with Mathematica Policy Research, along with its subcontractor, Bank Street College of Education, to carry out the project Supporting Quality in Home-Based Care.

Project Overview

The purpose of this two-year project was to review the literature and gather information about strategies that have the greatest potential for improving the quality of care provided by home-based child care providers—including regulated family child care providers and family, friend, and neighbor caregivers—who serve children from low-income families, and then refine or develop one or more specific initiatives that can be implemented and rigorously evaluated. The final products of the project will be:

- A comprehensive and up-to-date review of the literature on quality in home-based child care settings
- A compendium of the most promising strategies, regardless of the funding source, for improving quality in home-based care
- Design options for developing initiatives that use a variety of strategies to improve quality in home-based care

Project Logic Model

Identifying and evaluating strategies to support quality in home-based care is important because of the potential to positively influence outcomes for children who spend a significant amount of time in these settings. High-quality child care can support children's healthy development and help foster the skills needed for successful transition to kindergarten and elementary school (Clarke-Stewart, Vandell, Burchinal, O'Brien, & MacCartney, 2002). This is especially true for home-based care settings that serve children from low-income families and others who may be at risk of entering kindergarten at a disadvantage compared to their better-prepared peers (Fuller, Kagan, Loeb, & Chang, 2004). However, little theoretical work has been done to understand the pathways for increasing the quality of home-based child care. Many initiatives to support home-based care have not been developed based on theories of change or logic models that hypothesize how specific inputs and services will affect quality or child outcomes. Moreover, as stated earlier in the chapter, evidence about the effectiveness of initiatives to support quality in home-based care is sparse. In sum, there is little empirical evidence or theory for making program design decisions about which strategies have the best potential to improve targeted outcomes.

In collaboration with OPRE, the project team developed a preliminary logic model to identify the pathways through which home-based child care may influence child outcomes. The logic model can serve as a framework to guide the literature review and other aspects of the project.

Home-Based Care: Pathways to Influencing Child Outcomes. At this early stage, we have focused on two primary pathways to child outcomes: the home-based child care environment, interactions, and practices; and parents (Figure I.1). The home-based child care environment includes features of the physical environment, such as safety and furnishings, toys and materials, group size, and activities (Table I.1). Interactions refer to the caregivers' engagement with the children in care (for example, talking with them or doing activities with them). Practices refer to caregiver behaviors while caring for children, such as health and safety procedures, routines at

mealtimes, and the caregiver's approach to behavior management. The extent to which these dimensions of the environment support healthy development and promote learning will influence the outcomes of children in care.

The home-based child care environment is influenced, in turn, by three factors: (1) characteristics of caregivers, (2) characteristics of children in care and patterns of use, and (3) parent-caregiver communication. Caregiver characteristics include a broad range of demographic, health, and economic indicators; motivation for providing care; education, training, and skills; and access to support (Table I.2). Characteristics of children in care and patterns of use include, for example, the ages of children in care, their home language, the schedule for care, the intensity and duration of the care arrangements, and the purpose of care (Table I.3). Parent-caregiver communication includes information about the child and the family, as well as guidance and preferences about the child's care that may influence the care environment and interactions. For example, information about the child's health or religious or ethnic background may influence such aspects of the care environment as meals, activities, language spoken in the child care home, or interactions. Information about the parent's work schedules and family needs may influence such patterns of use as the schedule or number of hours a child is in care.

Figure I.1. Home-Based Child Care: Pathways for Influencing Child Outcomes

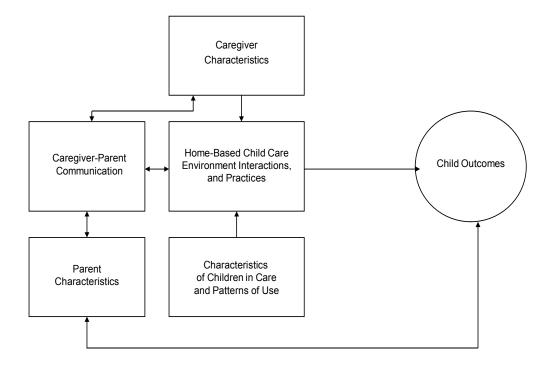


Table I.1. Home-Based Care Environment, Interactions, and Practices: Logic Model for Supporting Quality in Home-Based Care

Features of the Home-Based Care Environment, Interactions, and Practices

Health and Safety of the Home
Space and Furnishings
Personal Care Routines
Listening and Talking
Toys and Materials
Activities
TV Viewing
Adult-Child Interaction
Child-Child Interaction
Caregiving Practices
Emotional Climate in the Home
Language and Culture in the Care Environment
Nutrition and Physical Activity
Group Size

Table I.2. Caregiver Characteristics: Logic Model for Supporting Quality in Home-Based Care

Characteristics Of Home-Based Caregivers

Access to Social Support

Demographics Health Status Psychological Well-Being **Employment Outside the Home** Household Income and Proportion from Caregiving Access to Health Insurance Social Service Needs Relationship with Parents Knowledge of Child Development Caregiving Skills Training and Credentials Licensing/Regulation Status Motivation for Providing Care Interest in Professionalizing Relationship with Children in Care Satisfaction with Role as Caregiver Knowledge of Community Resources and Government Supports

Table I.3. Characteristics of Children in Care and Patterns of Use: Logic Model for Supporting Quality in Home-Based Care

Characteristics of Children in Care

Ages of Children: Infants and Toddlers, Preschoolers, School Age, Mixed Age Special Needs, Such as Developmental Delays or Chronic Health Conditions Home Language(s) of Children in Care Whether Children Are Siblings or Otherwise Related to One Another

Patterns of Use

Schedule: Standard Daytime, Weekend, Rotating Shift, Overnight

Intensity: Part-time, Full-time, More Than Full-time

Primary Purpose of Care: Primary Arrangement While Parents Work; Supplemental/Wraparound Care for Elementary School, Head Start, or Other Center-Based Care; Back-up, Emergency, or

Respite Care

Parents are their children's first teachers and play the most critical role in promoting their development. Home-based care may influence parent characteristics and support parents in carrying out their central role in several ways (Table I.4). For example, communication between caregiver and parent may improve the parent's knowledge of child development. When parent-caregiver communication leads to child care that is responsive to the needs of the child and family, parents' satisfaction, and thus the stability and duration of the arrangement, might increase.

Initiatives to Support Home-Based Care. We expect that implementing an initiative to support quality in home-based child care may produce outcomes for caregivers, parents, and children (Figure I.2). Characteristics of such an initiative that need to be considered as part of an initiative design include the target population of caregivers, service delivery strategies, intensity and duration of services, staff qualifications, and staff supervision and training (Table I.5). Expected outcomes of a quality support initiative would vary, depending on these features. For example, an initiative targeted to caregivers who provide after-school care for elementary age children would be expected to produce different child outcomes than an initiative for caregivers of infants. Similarly, initiatives to provide and install safety equipment in caregivers' homes and provide training on basic health and safety would aim to produce different caregiver outcomes than one that provides weekly coaching visits and training on a specific child development curriculum. Table I.6 provides a menu of caregiver, parent, and child outcomes that could be the target of a quality support initiative for home-based care.

Targeting Services According to Characteristics of Care Arrangements. Research and policy analysis on home-based child care typically divide the care into two primary categories: (1) regulated family child care; and (2) family, friend, and neighbor care. These arrangements are often viewed through two main lenses: the regulatory status of the setting and the caregiver's relationship to the child. Family child care homes are subject to regulation—care must comply with requirements about the number and ages of children in care, adult-child ratios, qualifications of caregivers, health and safety features of the home, and (sometimes) other criteria. Family, friend, and neighbor care is exempt from these requirements under certain conditions: the number of children in care, the number of families using the care, and the number of hours children are in care.

Table I.4. Characteristics of Parents Who Use Home-Based Care: Logic Model for Supporting Quality in Home-Based Care

Characteristics of Parents

Demographics
Health Status
Psychological Well-being
Home Language and Culture
Education
Employment
Household Income
Access to Health Insurance
Knowledge of Child Development
Satisfaction with Child Care Arrangements
Relationship with Caregiver
Ability to Balance Work and Family Commitments

Figure I.2. Initiatives to Support Quality in Home-Based Care: Pathways for Influencing Caregiver, Parent, and Child Outcomes

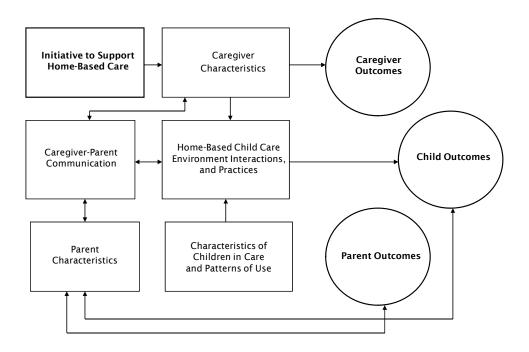


Table I.5. Characteristics of Initiatives to Support Quality in Home-Based Care: Logic Model for Supporting Quality in Home-Based Care

Characteristics of Initiatives

Target Population of Caregivers

Service Delivery Strategies

Home visits

Group training

Professional development activities

Consultation

Coaching

Peer support network

Curricula

Family interaction

Provision of materials and equipment

Home safety check

Warm line

Caregiver recruitment activities

Intensity and Duration of Services

Staff Qualifications

Staff Training and Supervision

Table I.6. Menu of Target Caregiver, Parent, and Child Outcomes for Initiatives to Support Quality in Home-Based Care: Logic Model for Supporting Quality in Home-Based Care

Caregiver Outcomes	Parent Outcomes	Child Outcomes
Improved relationships with parents	Improved knowledge of child development	Improved social-emotional development (social skills, self-regulation)
Increased knowledge of child development	Increased satisfaction with child care arrangements	Reduced behavior problems
Improved caregiving skills	Improved relationship with caregiver	Improved language and literacy development
Improved health and safety of the home	Greater ability to balance work and family	Improved cognitive development
Increased training and credentials	Reduced stress	Improved health status
Increased professionalization	Reduced work absenteeism	Reduced injuries and accidents in child care
Improved satisfaction with role as caregiver	Improved psychological well- being	Positive racial/ethnic socialization and identity
Improved access to community resources and government supports		
Improved access to social support		
Reduced isolation		
Improved psychological well- being		
Increased income		
Increased access to health insurance		
Reduced social service needs		

In addition to regulation, arrangements can be categorized by the relationship of the caregiver to the child. In all 50 states, family members who provide care only to children who are related to them are legally exempt from regulation (Porter and Kearns, 2005a). Nonrelatives who care for children not related to them are exempt as well if they comply with regulatory thresholds for the maximum number of children who can receive home-based care without regulation.

While such distinctions are often used to define different types of home-based care, they can be confusing and are of limited use as a framework for developing initiatives to support caregivers that can be broadly implemented. First, because there is such wide variation in regulatory standards across states, caregivers exempt from regulation in one state may be subject to it in another. Since regulatory status is not consistently defined across geographic areas, the distinction between regulated family child care and family, friend, and neighbor care can blur. Second, within these two primary groupings, there is tremendous diversity among caregivers. Caregivers differ in their motivation for providing care, schedules of care, education and training in early care and education, interest in professionalization, the number and ages of children in care, participation in the subsidy system, and the receipt of other government supports (for example, the Child and Adult Care Food Program). Moreover, many home-based caregivers provide care for children who are related to them and those who are not.

Because there is such wide diversity among home-based caregivers, no single set of services can meet all their needs. The problem lies in attempting to include all home-based caregivers in a single category. As an alternative, we propose a categorization based on identifying key characteristics of care, such as the purpose of care (for example, primary arrangement, wraparound, respite), the schedule and intensity of care (such as standard daytime, part-time, overnight), characteristics of children in care (such as their ages, group size, languages, special needs), and caregiver characteristics (for example, relationship to children, motivation, training, regulation, and needs; Figure I.3). Doing so will make it easier to identify needs and to provide more targeted services. Understanding specific features of the care arrangements may influence the intensity of services, content and focus on child outcomes, service delivery strategies, and extent of focus on specific caregiver outcomes.

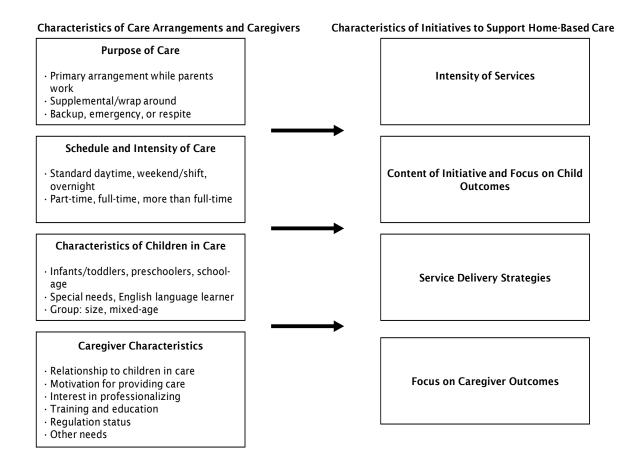
In the rest of this report, we use the logic model as an organizing framework for reviewing the literature—to highlight what is known about the characteristics of care arrangements, the match between these features of care and quality support initiatives, gaps in our knowledge base, and emerging areas for intervention. Most prior research on home-based child care categorizes caregivers as family child care or family, friend, and neighbor and limits our ability to move beyond those categorizations. However, we attempt to highlight other features of care, as described in Figure I.3, when information to do so is available.

The Literature Review

The purpose of the literature review is to provide a comprehensive summary of research findings on the characteristics of home-based child care, to describe the definitions and constructs used within and across studies to define quality in home-based settings, to identify promising strategies for supporting quality in home-based child care, and to examine relevant gaps in the research literature. The review summarizes the research literature on six broad topics:

- 1. The patterns of use and the characteristics of families who use home-based child care
- 2. The characteristics of home-based caregivers, their motivations for providing child care, and their interests in information and ways of obtaining it

Figure I.3. Using Characteristics of Care Arrangements and Caregivers to Identify Appropriate Services and Target Outcomes from a Menu



- 3. Observed quality in home-based care and perceptions of quality from the perspective of parents and others
- 4. Initiatives that aim to improve the quality of home-based child care, lessons learned from implementation of these initiatives, and evidence of their effectiveness
- 5. Related literature on family support and home visitation, including evaluations of implementation and outcomes
- 6. Findings from selected research on the family context, including parenting, work-family issues, and aspects of child development that may inform the development of initiatives

Methodology

This section describes the methodology we used to search for and select relevant literature to include in the review.

Conducting the Literature Search. Our search for relevant literature for this review focused on three areas: (1) primary literature on home-based child care (Chapters II-V); (2) related literature on family support and home visiting strategies (Chapter V); and potentially-related literature on parent well-being, work-family issues, and selected areas of children's development (Chapter VI). We limited our review of the related literature to existing literature reviews and meta-analyses. Our review of potentially-related literature focused on selected articles recommended by federal staff and the members of our Technical Working Group (TWG).

To identify primary literature on home-based child care, we searched three databases—Child Care and Early Education Research Connections (CCEERC), ¹ Education Resources Information Center (ERIC), ² and the Annotated Bibliography of Head Start Research ³—using relevant search terms related to home-based child care. These terms included *family child care; kith and kin care; relative care; license-exempt care;* and *family, friend, and neighbor care.* We also used terms related to anticipated outcomes, such as *quality in infant and toddler care, parental employment and stress,* and *provider outcomes.* In addition, we reviewed four existing literature reviews of family child care (Morrissey, 2007) and family, friend, and neighbor child care (Brown-Lyons, Robertson, & Layzer, 2001; Porter & Kearns, 2005b; Susman-Stillman & Banghart, 2008), and two papers on assessing quality in family, friend, and neighbor care (Maher, 2007a; Porter, 2007).

For related literature on family support and home visitation, we reviewed existing literature reviews and meta-analyses. These included a meta-analysis of family support (Layzer, Goodson, Bernstein, & Price, 2001) as well as a literature review of home visitation (Gomby, 2005) and a meta-analysis of studies on this topic (Sweet & Appelbaum, 2004).

We also looked at literature that might potentially be related to home-based child care at the suggestion of OPRE and members of our TWG. In response to OPRE, we extended our search to several other databases, including PsychInfo and Medline and looked for articles published in the

¹Found at http://www.childcareresearch.org/discover/index.jsp.

²Found at http://www.eric.ed.gov.

³Found at http://www.acf.hhs.gov/programs/hsb2/biblio/index.jsp.

Journal of Marriage and Family and Developmental Psychology. The purpose of this aspect of our research was to identify selected articles on parenting and family issues that might be relevant for home-based child care, because these kinds of arrangements often share characteristics of care within the family.

In addition, members of the project's TWG suggested that we pursue literature related to possible outcomes for parents and children that might be appropriate for initiatives for home-based care. They included research on work-family balance issues, as well as specific aspects of child development, such as racial/ethnic identity and self-regulation.

Selecting the Articles for the Literature Review. We reviewed more than 135 articles. Because we wanted to include the most current findings, we limited our search to literature produced within the past approximately 20 years (1987-2008). To ensure that the literature review was as inclusive as possible, we selected articles from peer-reviewed journals; published reports from academic institutions, research institutes, and federal or state agencies; presentations at professional conferences; and unpublished manuscripts. Because we sought a comprehensive range of sources, we included several types of studies. In addition to the literature reviews and meta-analyses mentioned earlier, we reviewed studies involving original data collection that used different approaches, including surveys (national, multistate, statewide, small-scale, and local); intervention studies (including process and outcome evaluations); direct observations of child care settings (including single-site, multisite, and longitudinal observational studies); child assessments; and qualitative data collection approaches that rely on in-person interviews, telephone interviews, or focus group discussions. Individual studies may have encompassed more than one of these approaches (such as longitudinal observational studies with assessments of child outcomes).

Organization of the Literature Review

The literature review is organized according to the six topics that we identified earlier. The second chapter, The Use of Home-Based Child Care and the Characteristics of the Families Who Use It, presents findings on the use of home-based child care arrangements, including information about the characteristics of families who rely on these types of arrangements while they work. Chapter III, The Characteristics of the Caregivers Who Provide Home-Based Child Care, describes research on the demographic characteristics of the caregivers, as well as their motivations for providing care and their interests in information and support. Chapter IV, Observed and Perceived Quality of Home-Based Child Care, discusses research findings on quality in these settings as well as parents' perspectives on quality. Chapter V, Initiatives That Aim to Support Home-Based Care, presents findings about the characteristics of initiatives designed to support quality in home-based child care settings, including information from evaluations of implementation and outcomes. Chapter VI, Findings from Related Literature on Family Support, Home Visiting, and the Family Context, discusses research on efforts to support parents (such as home visiting or family support) that may be useful for developing an initiative for home-based caregivers, as well as research on several aspects of the family context that may be useful for understanding the types of outcomes that could be anticipated for parents and children. The final chapter, New Directions for Home-Based Child Care, discusses gaps in the existing research literature and emerging areas for consideration in the development of quality-support initiatives.

II. THE USE OF HOME-BASED CHILD CARE AND THE CHARACTERISTICS OF THE FAMILIES WHO USE IT

In this chapter, we discuss five factors that characterize home-based care: (1) the different categories of home-based child care that families use in terms of the caregiver's relationship to the child (family member or unrelated), the location of the care (in the provider's home or the parent's home), and the regulatory status of the care (regulated or license-exempt); (2) the amount of time children spend in these arrangements; (3) the schedules of home-based child care arrangements; (4) the ages of children in these arrangements; and (5) the characteristics of families who use homebased care. All these factors are important to understand in developing design options for initiatives to support quality in home-based child care, because they could influence important aspects of the design. For example, variations in the schedule and the dosage of care may affect the intensity and content of the services offered. Caregivers who provide child care to infants and toddlers on a fulltime basis may be interested in, and need, different kinds of information and services than those who provide part-time care to a group of school-age children. The purpose of the care—whether parents are using it as a primary arrangement while they work or as a supplemental arrangement will also affect the nature of the services that an initiative might offer. The intensity and types of services offered will, in turn, influence the types of caregiver and child outcomes that can be achieved.

In our review of the literature, we identified eight studies on the use of home-based child care that relied on national data. Each study defined its sample somewhat differently in terms of the ages of children included and whether care was provided while the mother worked or for other reasons. In addition, the studies vary in how they categorize types of home-based care. We also reviewed several studies that used nonrepresentative or smaller samples. Because understanding these differences is important in interpreting the findings we report, Table II.1 presents a summary of the studies used, data sources, samples, and categories of home-based care.

The Proportion of Children in Different Types of Home-Based Child Care

More than 60 percent of all children under age 5 are in some type of non-parental child care arrangement each week (Johnson, 2005). The majority are cared for by a home-based caregiver, such as grandparents, other relatives, or nonrelatives, including family child care providers (Johnson, 2005). In addition to serving as a primary source of care for young children, studies show that up to a quarter of all children ages 6 to 12 spend some time in home-based care, often during after-school hours (Snyder & Adelman, 2004).

In this section, we report on the proportion of children in three main types of home-based care: (1) *relative care*: care provided by a nonparental relative in the child's home or the caregiver's home; (2) *family child care*: care provided by a nonrelative in the caregiver's home; and (3) *other non-relative care*: care provided in the child's home by babysitters, neighbors, friends, and other nonrelatives.

¹Twenty percent of children under age 5 with an employed mother are in center-based care (Johnson, 2005).

Table II.1. Descriptive Information About the Studies Referenced in Chapter II

Citation	Primary Data Sources	Sample	Definitions of Home-Based Care
	Nationa	l Studies	
Boushey and Wright, 2004	SIPP 1996 and 2001 panels	Employed mothers with children under age 6	Parental care: Care by a parent Relative care: Care a by non- parental relative age 18 or older Family day care: Care by a non- relative in the provider's home Nanny or sitter care: Care by a non-relative in the child's home Care by a minor sibling: Care by a relative under age 18
Brandon, 2005	NHES 1999; NSAF; HSPC survey of five diverse states	Sample not clearly defined	Family, friend, and neighbor care: Any nonparental care provided on a regular basis that is not provided in a licensed or registered center or family child care setting
Capizzano, Adams, and Sonenstein, 2000	NSAF 1997	Employed mothers with children under age 5 (in households with incomes below 200 percent of the federal poverty level)	Family child care: Care by a nonrelative in the provider's home Babysitter or nanny care: Care by a nonrelative in the child's home Relative care: Care by a nonparental relative in the child's or provider's home Parental care: Care for children whose mother did not report a nonparental child care arrangement while she worked
Johnson, 2005	SIPP 2001 Panel, Wave 4	Adults who are parents of children under 5 years old, including arrangements used by employed and nonemployed mothers	Relative Care: Mothers, fathers, grandparents, and siblings Other relatives: Aunts, uncles, and cousins Nonrelatives: In-home babysitters, neighbors, friends, and other nonrelatives

Table II.1 (continued)

Citation	Primary Data Sources	Sample	Definitions of Home-Based Care
Lawrence and Kreader, 2006	ASPA-NHES 2001; ASPA-NHES 2005; NSAF 1999	The sample varies by data source: (1) ASPE-NHES 2001, a nationally representative sample of 9,583 children from kindergarten through 8th grade participating in before- and after-school activities; (2) ASPE-NHES 2005, a nationally representative sample of 11,684 students in kindergarten through 8th grade in after-school activities; (3) NSAF 1999, data on a nationally representative sample of children ages 6 through 13 with employed primary caretakers.	Parental care: Care by parents Relative care: Care by grandparents, siblings, aunts, uncles, or anyone related to the child Nonrelative care: Care by someone not related to the child, such as a neighbor, babysitter, or family child care provider and may be provided in the child's home or at another home Sports and other activities: Activities such as organized sports, music lessons, or scouts that children may attend for enrichment purposes or to cover hours that parents are unable to provide supervision Self-care: When the child is responsible for himself or herself without adult supervision.
Maher and Joesch, 2005	NSAF 1999; NHES 1999; WSFFNCC	The sample varies by data source.	
Snyder and Adelman, 2004	NSAF 1999	Preschool children ages 5 and under and school age children (ages 6 to 12) whose mothers are employed	Family child care: Care by a nonrelative in the provider's home Babysitter or nanny care: Care by a nonrelative in the child's home Relative care: Care by a nonparental relative in the child's or provider's home Parental care: Care for children whose mother did not report a nonparental child care arrangement while she worked

Table II.1 (continued)

Citation	Primary Data Sources	Sample	Definitions of Home-Based Care	
Tout, Zaslow, Papillo, and Vandivere, 2001	NSAF 1997	Children age 5 and under not yet in school, regardless of mother's employment status	Family child care: Care by a nonrelative in the provider's home Babysitter or nanny: Care by a nonrelative in the child's home Relative care: Care by a nonparental relative in child's or provider's home Parental care: Care for children whose mother did not report a nonparental child care arrangement while she worked	
State and Local Studies				
Brandon, Maher, Joesch, Battelle, and Doyle, 2002	WSFFNCC	1,185 households with children under age 12, and 278 family, friend, and neighbor caregivers in Washington State	Family, friend, and neighbor care: Any regular, nonparental care arrangement other than a licensed center, program, or family child care home; this care thus includes relatives, friends, neighbors, and other adults. Family child care: Regulated homes or minicenters	
Maxwell and Kraus, 2005	Three-year longitudinal study	190 legal unlicensed care providers in the subsidy system	NA	
New Jersey Child Care Resource and Referral Agency, 2006	Survey of all registered family child care providers in the state of New Jersey [3,800 were mailed and 1,040 (27%) were completed and returned]	1,040 family child care providers registered with the state Child Care Resource and Referral Agency	Registered family child care providers: Care provided by a registered provider in the provider's home	
Susman-Stillman and Banghart, 2008	NA	NA	NA	

Note:

ASPA-NHES 2001 = Before- and After-School Programs and Activities Survey of the National Household Education Survey 2001; ASPA-NHES 2005 = After-School Programs and Activities Survey of the National Household Education Survey 2005; NHES = National Household Education Survey; NSAF = National Survey of America's Families; SIPP = Survey of Income and Program Participation; and WSFFNCC = Washington State Study of Family, Friend, and Neighbor Child Care; NA=Not applicable.

Proportion of Children in Relative Care

Although the proportion of children in relative care varies by study, all studies show that the rates of children in this type of care are higher than in any other type of home-based care. The Census Bureau reported that, in 2002, approximately 40 percent of all children under age 5 were cared for by relatives; children whose mothers were employed were more likely to be in these care settings than children with nonemployed mothers (Johnson, 2005). Boushey and Wright (2004) found that, in 2001, one-third of working mothers with children under age 6 who used child care used relative care. Capizzano, Adams, and Sonenstein (2000) reported the lowest rates, with one in five children under age 5 with working mothers in relative care.

Proportion of Children in Family Child Care

The proportion of young children in family child care (care provided by a nonrelative in the caregiver's home) ranges from 6 to 16 percent, depending on the sample used. The Census Bureau reports that 6 percent of all children under age 5 are in family child care; that proportion is slightly higher for children with employed mothers (10 percent; Johnson, 2005). Tout, Zaslow, Papillo, and Vandivere (2001) report that 11 percent of all children age 5 and under are in family child care. Another study found that 16 percent of children under age 5 whose parents are employed are in family child care (Capizzano et al., 2000).

Proportion of Children in Other Nonrelative Care

Care by a nonrelative in the child's home was the least common type of care. Boushey and Wright (2004) report that 3 percent of working mothers with children under age 6 used these caregivers. Capizzano et al. (2000) report that 6 percent of children under age 5 whose mothers were employed used this type of care. Tout et al. (2001) reported similar findings.

Proportion of Children in Multiple Concurrent Child Care Settings

In addition to looking at the primary child care arrangement used by children, some studies describe the range of child care arrangements that families use. Findings on the proportion of children in more than one arrangement vary by the employment status of the mother, the type of care setting, and the age of the child. The Census Bureau examined the percentage of children under age 5 with employed mothers in multiple care arrangements by the type of care (Johnson, 2005).³ Overall, 22 percent of these children are in more than one regular arrangement each week. Children cared for by grandparents or in nursery/preschools were most likely to be in more than one care arrangement (46 and 54 percent, respectively; Johnson, 2005). In their analysis of the 1997 National Survey of America's Families, Tout, Zaslow, Papillo, and Vandivere (2001) examined the percentage of all children age 5 and under in more than one child care arrangement by the child's age. They found that older preschoolers were more likely than infants to be in more than one care arrangement (26 percent of infants were in more than one arrangement, compared to 49 percent of children at age 5; Tout et al., 2001).

³The Survey of Income and Program Participation (SIPP) includes questions about the child care arrangements used on a regular basis, which is defined as those used at least once a week. Respondents report on all arrangements used on a regular basis, and many report using more than one care arrangement.

The Time Children Spend in Home-Based Child Care

Depending on the study, children age 5 and under spend an average of between 28 and 36 hours per week in child care, including center care (Tout et al., 2001; Johnson, 2005). Of children age 5 and under with employed mothers, children in family child care spend more time in care—31 hours per week than those who are cared for by grandparents, who spend an average of 21 hours per week in care (Johnson, 2005).

The amount of time children spend in any nonparental care tends to increase by the age of the child. Studies suggest that children may spend less time in home-based care (specifically relative care) as they age. For example, Snyder and Adelman (2004) found that 37 percent of infants and toddlers spent 35 or more hours per week in relative care, but only 31 percent of preschoolers spent a similar amount of time. There are some significant differences in the amount of time and the ages of children in center care compared to home-based child care. Census data indicate that children under age 5 with working mothers spend more time in centers (31 hours per week) than in home-based child care (Johnson, 2005; Tout et al., 2001). In addition, older children—preschoolers—spend more time in center care than infants and toddlers (Johnson, 2005; Tout et al., 2001)

The Schedules of Home-Based Child Care Arrangements

Some studies indicate that home-based care arrangements tend to offer more flexible schedules than center-based care, with many providing care during nontraditional hours such as evenings, weekends, and overnight. However, these studies tend to be small and do not include representative samples. In a longitudinal study of 190 home-based caregivers who were exempt from licensing and participating in the subsidy system, Maxwell and Kraus (2005) found that 61 percent of the caregivers provided overnight care, and 63 percent provided second-shift care. Similarly, in a study of 278 family, friend, and neighbor caregivers in Washington State, Brandon, Maher, Joesch, Battelle, and Doyle (2002) found that almost half of children under age 12 received some care on evenings and weekends.

Other studies, however, have found that home-based child care is most often provided during traditional hours. Results from a survey of 1,040 family child care providers registered with the New Jersey Child Care Resource and Referral Agency (2006) indicate that, on average, care was provided during traditional hours (7 a.m. to 5:45 p.m.), although some providers offered drop-in or overnight care. Similarly, Snyder and Adelman (2004) found no differences in the use of relative care by whether the child's parent worked traditional or nontraditional hours. Specifically, children age 12 and under with parents working nontraditional hours and children with parents working traditional hours are equally likely to spend any time in relative care.

The Ages of Children in Home-Based Child Care

As described previously, home-based child care serves children from birth through age 12. However, differences exist by age in the use of this type of care. Of all children age 5 and under, home-based care is more common among children ages birth to 2 (72 percent of all children in nonparental care) than children ages 3 to 5 (41 percent; Brandon, 2005), although there are frequently mixed age groups in care. This decline as children age reflects an increase in the use of center-based care for older preschoolers (Brandon, 2005). Other studies have found similar trends (Tout et al., 2001; Maher & Joesch, 2005).

The use of home-based care is also common with school-age children from 6 to 12 years. Approximately one-quarter of 6- to 12-year-olds, regardless of parents' employment status, spend some time in relative care (Snyder and Adelman, 2004). Data from NSAF reveals that 48 to 59 percent of children ages 6 to 12 with employed mothers spend some time each week in family, friend, and neighbor care, and 21 to 37 percent use this care as a primary arrangement (Maher & Joesch, 2005). Typically, younger school-age children—those between kindergarten and 5th grade—are more likely to be in relative care than older children—those 6th through 8th grade (Lawrence & Kreader, 2006).

The Characteristics of Families Who Use Home-Based Child Care

Research indicates that families who use home-based child care share some common characteristics. Specifically, children with socioeconomic risk factors, such as children from low-income families, children whose parents have a high school degree or less education, children from single-parent households, and children from racial and ethnic minorities, are more likely to be in home-based care than their counterparts.

Families with low incomes tend to rely on these arrangements more often than families with higher incomes (Boushey & Wright, 2004; Capizzano et al., 2000; Johnson, 2005). The Census Bureau reports that children under age 5 of employed mothers with incomes below the federal poverty level are more likely to be cared for by a grandparent than children living at or above the poverty level; higher-income children are more likely to be in center-based child care (Johnson, 2005).

The education levels of the parents may also be related to the use of home-based child care. Snyder and Adelman (2004) found that parents with a high school diploma as their highest level of educational attainment are more likely to use relative care than parents with a college degree. Boushey & Wright (2004) found similar trends: working mothers with more education were more likely to use regulated care than mothers with less education.

Single mothers use these arrangements more than two-parent families (Boushey & Wright, 2004; Snyder & Adelman, 2004). Snyder and Adelman (2004) found that children with single parents are more likely to spend any time in relative care, and are more likely to have relative care as their only child care arrangement. Boushey and Wright (2004) found that nearly half (47 percent) of single mothers living with family members have a relative as the primary care arrangement for their child.

Studies have also found differences in the use of home-based care by race and ethnicity (Boushey & Wright, 2004; Snyder & Adelman, 2004). Hispanic and African American families use home-based care more often than white families, although differences exist by the age of the children (Snyder & Adelman, 2004). Forty-three percent of children under age 3 with an African American or Hispanic parent spend some time in relative care, compared to 32 percent of children under age 3 with a white parent. However, relative care use is similar for whites and African Americans for 3- and 4-year-olds and for whites and Hispanics for 10- to 12-year-olds.

Research also indicates that families use home-based child care for a variety of reasons. Findings from several studies of family, friend and neighbor child care point to trust as a major factor in parents' use of family, friend and neighbor care, especially when children are very young (Anderson, Ramsburg, & Rothbaum, 2003; Brandon, Maher, Joesch, Battelle, & Doyle, 2002; Drake,

Unti, Greenspoon, & Fawcett, 2004; Porter, 1991; Reschke & Walker, 2005; Stahl, Sazer O'Donnell, Sprague, & López, 2003; Zinsser, 1991). Familiarity with the caregiver (such as the child's grandparent or aunt) is often cited by parents as another factor; the parents are comfortable with the child care arrangement because they believe that the caregiver will "love" their child (Drake et al., 2004; Porter, 1991; Zinsser, 1991). Research also shows that some families, particularly those who are newcomers to the United States, want to use family members for care because they share the same culture, home language, values, and childrearing practices (Fuller, Holloway, & Liang, 1996; Shivers, 2005).

Summary Points

- Home-based child care is widely used among families with young children. Although the proportion of children in this type of care varies by study, it is estimated that over 40 percent of all children under age 5 are in home-based care.
- Children under age 5 spend less time per week on average in home-based care settings than in center-based care; children under age 3 with employed mothers spend more time on average in home-based care than older preschoolers.
- Home-based care may be a more flexible care option for families. Some studies show that this type of care is more likely to be available during nontraditional work hours. More data are needed to better understand the patterns of use of home-based care.
- Home-based child care serves children from birth through age 12. However, differences exist by age in the use of this type of care. Of all children age 5 and under, home-based care is more common among children ages birth to 2 than children ages 3 to 5. Schoolaged children (6 to 12 years) also frequently spend some time in home-based care. In addition, there are often mixed age groups in home-based child care.
- Children with socioeconomic risk factors—such as low family income, low level of
 maternal education, and living in a single parent household—are more likely than their
 peers to be in home-based child care.
- Hispanic and African American families use home-based care more often than white families, although differences exist by the age of the children.

III. THE CHARACTERISTICS OF THE CAREGIVERS WHO PROVIDE HOME-BASED CHILD CARE

Many types of caregivers provide home-based child care, including regulated family child care providers and family, friend, and neighbor caregivers; relatives and nonrelatives; caregivers who are paid and those who are not; caregivers who receive child care subsidies and those who do not; and caregivers with a variety of motivations for providing care. The characteristics of these caregivers are important factors in designing initiatives for home-based care, because they can inform the content that the initiatives will offer, the service delivery strategies used, and the outcomes that can be achieved.

The content should reflect the needs and interests of the caregivers, including their motivations for providing child care. For example, if the caregivers are not interested in providing child care as a business, the initiative may not need to include topics about business practices. The education levels of the caregivers may influence how the content is offered. If caregivers do not have much experience in higher education, the material may need to be presented in a different way than it would be for caregivers who have some college experience, or provided through on-site mentoring rather than in a classroom setting. Prior training in child care may also have a relationship to content. If caregivers have already participated in some training, the topics of the initiative may need to build or extend on what they have already learned. Even more important, the service delivery strategies and the content of the initiative must be related to the anticipated outcomes for caregivers. For example, if the goal is to reduce isolation and to enhance access to social support, the initiative design may include opportunities for caregivers to meet together, in addition to home visiting; topics may include information on activities that caregivers can do with the children in the community.

This chapter discusses the findings from our review of the literature on three areas related to the caregivers who provide home-based child care. First, it presents information about the size of the home-based child care workforce and findings about caregivers' demographic characteristics—age, ethnicity, education, specialized training in early childhood, and income. Second, it describes research on caregivers' motivations for providing child care. Third, it discusses research on caregivers' interests in information and support and how they would like to receive these services. In addition to findings from reviews of the literature, the research presented here is drawn from state-level studies, some with representative samples and some with nonrepresentative samples, as well as from small qualitative studies with nonrepresentative samples of caregivers.

The studies in this chapter suggest some similarities between regulated family child care providers and family, friend, and neighbor caregivers. They also highlight some of their differences. These findings point to both the importance—and the challenge—of designing an initiative for home-based care that goes beyond the distinctions between regulated care and family, friend, and neighbor care.

⁴ These caregivers, however, may need training on filing taxes if they are paid for providing child care.

The Characteristics of Home-Based Caregivers

No single data source is available to count the number of home-based caregivers who care for children in the United States. However, estimates derived from parent reports of their children's care arrangements on the 1999 National Household Education Survey (NHES), conducted by the National Center for Education Statistics, suggest that home-based caregivers make up more than 70 percent of the paid child care workforce, and more than 80 percent of the total population of caregivers in the United States (Center for the Child Care Workforce and Human Services Policy Center, 2002). These estimates indicate a total workforce of 2.3 million paid caregivers in the United States across both center- and home-based child care. Approximately 1.7 million of them are homebased caregivers. Paid relative caregivers, approximately 804,000, account for 35 percent of the total paid workforce, followed by the 650,000 family child care providers who account for 28 percent. Another 13 percent (298,000 caregivers) are paid nonrelatives (such as nannies or babysitters) who provide care in the child's home (Center for the Child Care Workforce and Human Services Policy Center, 2002). Center staff make up the remaining 24 percent of the total (550,000 caregivers). In addition to paid caregivers, there are an estimated 2.4 million unpaid caregivers, including 2,232,000 relatives and 121,000 unpaid nonrelatives who provide care either in their own home or the child's home or volunteer in child care centers (Center for the Child Care Workforce and Human Services Policy Center, 2002).

Overall, home-based caregivers are a diverse group. Some of this diversity is due to the type of care being provided—for relatives or nonrelatives, as a source of income or not, and whether care is regulated or unregulated. At the same time, there is evidence of wide variation in caregiver characteristics across and within these categories. Reviews of the literature indicate that family child care providers and family, friends, and neighbors have a wide range of ages (Porter & Kearns, 2005b; Susman-Stillman & Banghart, 2008). One study of low-income caregivers found that both groups tended to be older than low-income center-based child care providers (Fuller & Kagan, 2000). On average, studies find that caregivers are in their mid- to late 40s, but some are in their teens and others are in their 70s and even 80s (Porter & Kearns, 2005b). As noted in Chapter II, home-based child care is a common form of care for families of color. Family, friend, and neighbor caregivers tend to share the same ethnicity as the parents of children in care (Porter & Kearns, 2005b; Susman-Stillman & Banghart, 2008). Grandmothers are the most common relative caregivers (Brown-Lyons et al. 2001; Susman-Stillman & Banghart, 2008).

Some variation exists in education levels between regulated and unregulated caregivers. Reviews of the research have found and that family child care providers are more likely to have a high school or higher degree than family, friend, and neighbor caregivers (Brown-Lyons et al., 2001; Susman-Stillman, 2008).² A study of child care used by families receiving welfare in three cities found that a higher proportion of regulated caregivers than unregulated ones had gone beyond high school (Coley, Chase-Landsdale, & Li-Grining, 2001), but another study of the child care supply in two Washington State communities found that more than half of the family child care providers did not have a high school degree or a general equivalency diploma (Paulsell, Boller, Aikens, Kovac, & Del Grosso, 2008). By contrast, another study estimates that one-third of home-based caregivers

² Home-based caregivers are also likely to have lower education levels than center teachers (Brown-Lyons et al., 2001; Susman-Stillman & Banghart, 2008).

have some formal education and that 15 percent have a bachelor's degree (Conners-Tadros & Ramsburg, 2008).

Research also indicates that there is wide variation in specialized training in early childhood among home-based caregivers (Brown-Lyons et al., 2001; Morrissey, 2007; Susman-Stillman & Banghart, 2008). Some studies show that family, friend and neighbor caregivers report varying amounts of training (Porter & Kearns, 2005b). A study in Washington State found that more than 60 percent of family, friend, and neighbor caregivers reported that they had no specialized training in early childhood (Brandon et al., 2002), while another indicates that nonrelatives are more likely than relatives to report having any training (Layzer & Goodson, 2006).

Several studies—for example, a survey of home-based caregivers in New Jersey and a study of family, friend, and neighbor caregivers in the Early Head Start Enhanced Home Visiting Pilot—indicate that family, friend, and neighbor caregivers and family child care providers have low incomes, with most reporting under \$30,000 per year (New Jersey Association of Child Care Resource and Referral Agencies, 2006; Paulsell et al., 2006). The study of Washington State family, friend, and neighbor caregivers found that 27 percent had incomes below the federal poverty level (Brandon et al., 2002), while another study of 303 family, friend, and neighbor caregivers in the Illinois subsidy system found that 57 percent had incomes below \$20,000 (Anderson et al., 2005). Among family, friend and neighbor caregivers, relatives often have lower incomes than nonrelatives, and nonrelatives are more likely to receive payment from families for providing care (Brown-Lyons et al., 2001; Folk, 1994). Nearly one-third of relative caregivers in the Illinois study report living with the family for whom they provide care (Anderson et al., 2005). Home-based caregivers (regulated family child providers and family, friend, and neighbor caregivers combined) account for approximately 40 percent of all subsidized child care arrangements (Child Care Bureau, 2006).

Caregivers' Motivations for Providing Care

Research shows that caregivers are motivated to provide child care in their homes for several reasons. Studies have typically examined this issue through the perspective of regulated family child care (providers who offer child care as a business) and family, friend, and neighbor care (those who provide care to support their families, friends, and neighbors). Reviews of the literature indicate that some caregivers, primarily regulated providers, report that they do this work because they want to stay at home with their own children and earn some income, and they like to work with children (Brown-Lyons et al., 2001; Morrissey, 2007).

Research from state-level studies (Anderson et al., 2005), focus groups (Porter, 1998), and interviews (Bromer, 2005) as well as literature reviews (Brown-Lyons et al., 2001; Porter & Kearns, 2005b; Susman-Stillman & Banghart, 2008) indicates that some caregivers say that they provide child care because they want to help out their families and they want children to have care within the family rather than in other settings. For this group of caregivers—many of whom are relatives of the children for whom they provide care—money is not often a primary motivating factor. The Illinois study found that only one-fifth of the caregivers, two-thirds of whom were relatives, did this work for income (Anderson et al., 2005). Another study of 400 license-exempt caregivers in Minnesota, in which relatives made up nearly 80 percent of the sample, found that a significantly lower proportion of relatives than nonrelatives—2 percent compared to 9 percent—provided child care to earn money (Chase, Schauben, & Shardlow, 2005). Other findings based on interviews or focus groups with small, nonrepresentative samples show that some caregivers, especially those with low incomes,

provide care out of a sense of obligation to help family members become self-sufficient (Bromer; 2005; Bromer & Henley, 2004; Porter, Rice, & Mabon, 2003).

The Kinds of Support That Home-Based Caregivers Want

Many studies have examined home-based caregivers' reports of the kinds of services they would like to have. They include questions about caregivers' motivations for providing child care, the problems they face in doing this kind of work, and their expressed needs. These factors can influence the environment in which they provide care, as well as their interactions with children and their practices, which can affect the outcomes for children in care. These characteristics are also important factors for the design of an initiative for home-based care, because they relate to the kinds of services that caregivers may want, the intensity of the services that are provided, and the outcomes that can be anticipated for caregivers.

Challenges That Caregivers Face

Regardless of the differences in motivation for providing care among home-based caregivers, research shows that they share some similar challenges in caring for other people's children. In this section, we discuss four key challenges home-based caregivers face: (1) conflicts with parents, (2) isolation, (3) work-related stress, and (4) balancing child care responsibilities with other work outside the home. We also describe some challenges unique to those who provide child care to earn income and to those who provide care to help family and friends.

Caregivers who provide care to earn money, as well as those who do it to help out their families, report that conflicts with parents represent a major issue (Anderson et al., 2005; Atkinson, 1988; Brown-Lyons et al., 2001; Bromer, 2005; Drake, Unti, Greenspoon, & Fawcett, 2004; Morrissey, 2007; Paulsell et al., 2006; Porter, Rice, & Mabon, 2003). Some studies suggest that the nature of the conflict seems to vary depending on the caregiver's motivation for providing care and relationship to the parents of the children for whom care is provided. When income is a motivating factor for the caregiver, caregivers report that parents sometimes demonstrate a lack of respect for the professional status of their child care work (Atkinson, 1998; Porter, 1991). When care is provided within the family or with close friends, caregivers report that differences in child-rearing styles are problems (Anderson et al., 2005; Brown-Lyons et al., 2001; Bromer, 2005; Paulsell et al., 2006; Porter, 1998).

Home-based care providers who receive payment for providing care, especially family child care providers, reported challenges with scheduling and payment (Morrissey, 2007). "Being taken advantage of" (often related to "late" pickups) is a common concern (Bromer, 2005; Porter et al., 2003). Inconsistent payment or amounts that are less than agreed upon are issues as well (Brandon et al, 2002; Porter, 1998).

Another common concern is the isolation related to the nature of caring for children at home. Studies of regulated family child care have pointed to this issue more directly than those of family, friend, and neighbor care (Hamm, Gault, & Jones-DeWeever, 2005; Nelson, 1991), in which isolation is inferred through caregivers' interest in get-togethers with other caregivers (Brandon et al. 2002; Brown-Lyons et al., 2001; Drake et al., 2004; Porter, 1998). For family, friend, and neighbor caregivers, evidence of caregivers' specific reports of this problem is limited and the reports are mixed. One review of the literature on family, friend, and neighbor care indicated that relatives had less contact than nonrelatives with other caregivers (Brown-Lyons et al., 2001), while another study

of 249 participants, including 56 relative caregivers, in a family interaction initiative in Hawai'i showed that relatives have opportunities for social contact through their frequent visits with the children to other family members or friends (Porter & Vuong, 2008).

A third shared concern is work-related stress. For caregivers operating a business, this may take the form of long hours with little pay (Hamm et al., 2005; Morrissey, 2007; Nelson, 1991), the challenge of caring for other children along with their own (Atkinson, 1998; Morrissey, 2007; Todd & Deery-Schmitt, 1996), as well as the problems cited earlier (that is, disagreements with parents, and isolation). Family, friend, and neighbor caregivers are more likely to report physical exhaustion from long hours of caring for children and resistance from spouses about their work (Brandon et al., 2002; Brown-Lyons et al., 2001; Bromer, 2005; Porter, 1998; Porter et al., 2003).

The fatigue related to caring for children may be compounded for some family, friend and neighbor caregivers because they have a second job outside the home (Bromer, 2005). One study of family, friend, and neighbor caregivers in the subsidy system in Georgia indicated that one in five had another job (Todd, Robinson, & McGraw, 2005). Approximately 60 percent of the caregivers in the Minnesota survey reported that they were employed in addition to providing child care, but nearly half of all the caregivers in the survey also reported providing care for 10 hours or less a week (Chase et al., 2005).

Research also points to some differences in the issues that home-based caregivers face. In general, these differences seem to be related to the reasons for doing this work. The family child care providers in the New Jersey study reported that one of their primary challenges was finding children for their new businesses (New Jersey Association of Child Care Resource and Referral Agencies, 2006). This is an important issue, because low enrollment decreases the income from a child care business. If providers do not earn the expected amount, they may experience less satisfaction with their work and may reconsider child care as an option for making money. Lack of professional support has also been reported as a major problem for family child care providers, who may feel they do not have enough opportunities for training and professional development compared to those available to center-based teachers (Hamm et al., 2005). Some studies have suggested that the combination of low income from a child care business and high job stress may contribute to turnover in the field (Morrissey, 2007).

Family, friend, and neighbor caregivers, many of whom do not provide care to earn income, most often cite issues with children as problems. Caregivers consistently report that managing children's behavior is a challenge and that they are not certain how to manage very active children (Anderson et al., 2005; Brandon et al., 2002; Drake et al., 2004; Porter, 1998). Discipline—setting limits—is also often reported as a problem for caregivers, as are other behavioral issues, such as toileting, sleeping, and feeding (Porter, 1998).

Interest in Services

Most of the current research on the kinds of support that home-based caregivers are interested in receiving focuses on family, friend, and neighbor care, because little was known about this population of caregivers and the support that caregivers *wanted* (Anderson et al., 2005; Brandon et al., 2002; Chase et al., 2005; Porter, 1998; Todd et al., 2005). The research on family child care, in contrast, focuses on the kinds of support that caregivers *need* to improve the quality of care (Kontos, Howes, & Galinsky, 1996; Larner, 1994; Morrissey, 2007).

Types of Information and Materials. The studies that examine family, friend and neighbor caregivers' interests in supports include several state-level surveys, as well as focus groups with caregivers.⁵ In general, they examine three issues: (1) the kinds of materials and equipment that caregivers would like to receive, (2) the type of information that caregivers want, and (3) the format in which they would like information to be provided. Studies consistently find that caregivers would like to obtain safety equipment such as first aid kits and fire extinguishers, as well as books and toys (puzzles, arts and crafts materials) for children (Brandon et al., 2002; Chase et al., 2005; Drake et al., 2004; Porter, 1998). They are interested in a wide variety of topics (Brandon et al., 2002; Chase et al., 2005; Drake et al., 2004; Porter, 1998; Todd et al., 2005). Some topics, such as behavior management and communication with parents, seem to reflect specific challenges caregivers reported. Others, such as child development including preparing children for school, information about caring for school-age children, activities to do with children, health and safety (including CPR and first aid), and nutrition seem to reflect a general concern about caring for children. Some evidence exists that caregivers are also interested in learning about licensing, community resources, and government supports (Anderson et al., 2005; Chase et al., 2005; Drake et al., 2004; Porter, 1998, Shivers & Wills, 2001).

Formats for Obtaining Information. Findings point to a wide range of formats in which caregivers want information (Brandon et al., 2002; Chase et al., 2005; Drake et al., 2004; Porter, 1998; Todd et al., 2005). Some research has found that home-based caregivers would like to obtain newsletters, tip sheets, and videos (Brandon et al., 2002; Drake et al., 2004). Caregivers are interested in a variety of training formats including workshops, support groups and meetings, home visits, computer-based programs, and radio and television programs (Brandon et al., 2002; Chase et al., 2005; Drake et al., 2004; Porter, 1998; Todd et al., 2005). One study found that caregivers who provided child care to school-age children were primarily interested in training related to their own personal and professional needs. In addition, they stated a preference for advanced training with more convenient hours and longer workshops (Todd et al., 2005). There were also some indications that caregivers wanted a connection to early childhood organizations for information through warm lines or other mechanisms (Chase et al., 2005).

With three exceptions, none of the studies attempted to distinguish between the interests of relative caregivers and those who cared for children who were not related to them, or attempted to make distinctions among caregivers who saw their roles in different ways. One exception was the Minnesota survey, cited earlier, which assessed caregivers' interest in receiving support (Chase et al., 2005). It concluded that 48 percent of nonrelatives who were paid and provided care for an average of 24 hours a week were "eager" for support and that 19 percent of relatives who were not paid and offered care for less than 12 hours a week were "independent" and were less interested in support. Approximately 38 percent of a middle group—a mix of relatives and nonrelatives who provided care for 17 hours a week on average—were rated as "open" to supports.

⁵As we noted earlier, some of the samples in these studies are limited to subsidized caregivers, while others include those who do not receive subsidies. State-level surveys include the Illinois study (Anderson et al., 2005); the Minnesota study (Chase et al., 2005); the Georgia study (Todd et al., 2005); and the Washington study (Brandon et al., 2002). Focus groups were used in the California study (Drake et al., 2004), the Washington study, and Porter's study (Porter, 1998); the Georgia study also included interviews and focus groups. The Illinois and Georgia study samples were family, friend, and neighbor caregivers in the subsidy system.

Another exception was the Georgia study of caregivers who provided care to subsidized schoolage children (Todd et al., 2005). Based on interviews and focus groups with caregivers, it characterized caregivers who were interested in training in three subgroups: (1) "budding professionals," those who were almost ready to become professional providers and who might want to pursue advanced degrees or credentials; (2) "community caregivers," those who may not want to become professionals but were interested in advanced training because they want to help children and families; and (3) "family pillars," caregivers who want in-depth training because they are very committed to the families and children for whom they provide care (Todd et al., 2005).

The third is the Illinois study of caregivers in the subsidy system (Anderson et al., 2005). It compared the number of children in care with relatives and non-relatives in the child's home as well as in the provider's home and the duration of the care. The findings indicated that slightly higher proportions of relatives who provided care in their own homes were caring for one or two children than all license-exempt providers, and that the duration of the care provided by relatives was longer on average—21 months—than that for non-relatives who provided care in the child's home (17.7 months) or all license-exempt providers (19.7 months).

Summary Points

- The total workforce of home-based caregivers is quite large—approximately 3.9 million caregivers—more than 70 percent of the total paid child care workforce and more than 80 percent of the total caregiving population in the United States.
- Ages of home-based caregivers vary widely from teens and early 20s to 70s and 80s. On average, caregivers are in the mid-40s.
- Home-based caregivers care for children from diverse racial and ethnic backgrounds.
 Family, friend, and neighbor caregivers tend to share the same ethnicity as the parents of children in care.
- Both regulated family child care providers and family, friend, and neighbor caregivers report low incomes.
- Regulated family child care providers tend to have higher education levels than family, friend, and neighbor caregivers, but both types of providers report a wide range of specialized training in early childhood.
- Caregivers report different kinds of motivations for providing child care: some want to stay at home with their children and earn income; others want to help out their families and to keep child care within the family.
- Home-based caregivers face some common challenges: conflicts with parents; isolation; work-related stress; difficulty balancing child care with work outside the home; and managing difficult behavior. Some caregivers who provide care to earn income report that low enrollment and lack of professional support are problems.
- Home-based caregivers are interested in a variety of training topics: child development; activities to do with children; health and safety; child behavior management; communication with parents; licensing; and community resources. Their interest in this information may vary, depending on their motivation for providing care.

IV. OBSERVED AND PERCEIVED QUALITY IN HOME-BASED CHILD CARE

Child care quality is important because it is associated with positive outcomes for young children. Research has shown that children in high-quality care perform better on cognitive and language assessments, as well as on some social-emotional measures (Clarke-Stewart et al., 2002; Elicker, Clawson, Hong, Kim, Evangelou, & Kontos, 2005; Loeb, Fuller, Kagan, & Carrol, 2004). Less research has been done on quality in regulated family child care than on quality in center-based care. Even less has been done on quality in family, friend, and neighbor child care. Nor have there been many studies that examine the relationship between child care quality and some child outcomes that researchers are beginning to recognize might be relevant for school readiness such as those that relate to self-regulation, social skills, or racial and ethnic identification (Zaslow & Tout, 2008). We begin this chapter by describing the studies we reviewed and the measures of quality used in them. We then summarize the research findings on quality in home-based care.

In our review of the literature, we found 14 articles that relate to quality in home-based child care (Table IV.1). Some of them compare quality in regulated family child care and family, friend, and neighbor care to center care (Coley et al., 2001; Elicker et al., 2005; Fuller & Kagan, 2000; Kontos, Howes, Shinn, & Galinsky, 1995; Loeb et al., 2004; NICHD ECCRN, 2000). Others examine one type of home-based care exclusively—regulated family child care or family, friend, and neighbor care (Administration for Children and Families, 2004; Maxwell & Kraus, 2005; Peisner-Feinberg, Bernier, Bryant, & Maxwell, 2000; Paulsell et al., 2006; Paulsell et al., 2008; Shivers, 2006; Tout & Zaslow, 2006). One compares quality in regulated family child care and family, friend, and neighbor care (Layzer & Goodson, 2006).

Significant variation exists in the samples and caregiver characteristics in these studies. The sample sizes range widely, from 41 (Tout & Zaslow, 2006) to 612 (NICHD ECCRN, 2000). Caregivers include those used by mothers on welfare (Coley et al., 2001; Fuller & Kagan, 2000); those participating in the child care subsidy system (Maxwell & Kraus, 2005; Layzer & Goodson, 2006); those who provide care to primarily low-income families (Elicker et al., 2005; Paulsell et al., 2006; Paulsell et al., 2008; Shivers, 2006); and those who provide care to families in a wide spectrum of economic groups (Kontos et al., 1995; NICHD ECCRN, 2000; Peisner-Feinberg et al., 2000; Tout & Zaslow, 2006). In addition, the samples in multisite studies were drawn from different states in which regulations and subsidy requirements for home-based care vary (Porter, Rice, & Rivera, 2006). This factor may influence findings about structural quality, because different regulations (such as thresholds for the maximum number of children in care, adult-child ratios, caregiver training, and health and safety of the home) may apply to regulated family child care and family, friend, and neighbor care differently across states.

The studies also used different observational measures to assess quality; some used more than one measure. Most (8 of the 14) used the Family Day Care Rating Scale (FDCRS; Harms & Clifford, 1989) or its updated version, the Family Child Care Environment Rating Scale (FCCERS-R; Harms, Cryer, & Clifford, 2007). Five used the Arnett Caregiver Interaction Scale (Arnett CIS; Arnett, 1989); and two used the Quality of Early Childhood Care Settings: Caregiver Rating Scale (QUEST; Goodson, Layzer & Layzer, 2005). Two used the Child-Caregiver Observation System (C-COS; Boller & et al., 1998); and one each used the Observational Record of the Caregiving Environment (ORCE; NICHD ECCRN, 1996) and the Child Care Assessment Tool for Relatives (CCAT-R;

Table IV.1. Summary of Research Findings on the Quality of Home-Based Child Care

Study Citation	Location	Provider Sample	Key Findings		
Studies Using the FDCRS or FCCERS-R					
Administration for Children and Families, 2004	17 Early Head Start research sites nationwide	67 family child care homes when children were 14 months old; 82 homes at 24 months; 55 homes at 36 months.	Average scores and ranges: 3.4 (1.4-5.9) at 14 months, 3.9 (1.3-6.6) at 24 months, and 3.9 (1.2-6.6) at 36 months.		
Coley et al., 2001	Boston, Massachusetts; Chicago, Illinois; San Antonio, Texas	10% of children in regulated family child care homes and 46% in unregulated homes used by low-income families	Regulated family child care homes: average score 4.5; 8% inadequate; 57% minimal; 35% good Unregulated homes: average score 3.2; 44% inadequate; 44% minimal; 12% good		
Elicker et al., 2005	Four urban counties in Indiana: South Bend, Marion, Lake, and Allen	307 children from low-income, working families; 74 in regulated family child care homes, 25 in unregulated family child care homes, 25 in relative care, 117 in Head Start centers, 28 in Child Care Ministries (which is exempt from regulation), and 48 in child care centers	Regulated family child care homes: average score 2.9; unlicensed homes: average score 2.8; relative caregivers: average score 2.4; centers, average score 4.6; Head Start, average score 5.3; ministries, average score 3.1		
Fuller & Kagan, 2000	Connecticut, Florida, and California	108 family child care homes and 85 unregulated homes used by families with mothers in welfare-to-work programs	Across the sites, range from 2.5 to 3.0 for both family child care and family, friend and neighbor care; Home-based 71% inadequate or minimal; 13% good or excellent		
Loeb et al., 2004	Connecticut, Florida, and California	69 family child care homes and 118 family, friend, and neighbor caregivers used by mothers in welfare-to-work programs	Family child care homes: average scores by city from 2.8 to 3.8; family friend and neighbor care: average scores by city from 2.5 to 2.8.		
Kontos et al., 1995	North Carolina, Texas, and California	112 regulated family child care homes, 54 unregulated homes and 60 relative caregivers	Percent with scores 3 or below: 35% percent with scores between 3 and 4: 56%; percent with scores 5 and above: 9%		

Study Citation	Location	Provider Sample	Key Findings
Maxwell & Kraus, 2005	North Carolina	190 license-exempt caregivers	Percentage of scores under 2, range from Year 1 to Year 3: 25 to 32; percentage of scores between 2 and 3: 52 to 65; percentage of scores between 3 and 4: 13 to 20; percentage of scores between 4 and 5: 0 to 3
Paulsell et al., 2008	White Center and Yakima, Washington	45 family child care homes	Average score was 3.4; percentage below 3: 29; percentage 3 to 5: 64; percentage above 5: 7.
Peisner et al., 2000	North Carolina	151 family child care homes	Average score: 3.61; percentage below 3: 25.6; percentage 3 to 4: 41.6; percentage 4 to 5: 24.8; percentage 5 and above 5: 8.1
Shivers, 2006	Los Angeles, California	35 unregulated caregivers	Average score was 3.8
	Studies Using	the Arnett CIS	
Administration for Children and Families, 2004	17 Early Head Start research sites nationwide	67 family child care homes when children were 14 months old; 82 homes at 24 months; 55 homes at 36 months.	Average scores and ranges: 3.2 (2.2-4.0) at 14 months; 3.3 (2.0-4.0) at 24 months; 3.3 (2.1-4.0) at 36 months
Coley et al., 2001	Boston, Massachusetts; Chicago, Illinois; San Antonio, Texas	10% of children in regulated family child care homes and 46% in unregulated homes used by low-income families	Scores for regulated family child care homes: 3.25; for unregulated homes: 3.2
Fuller & Kagan, 2000	Connecticut, Florida, and California	108 family child care homes and 85 unregulated homes used by families with mothers in welfare-to-work programs	Range of scores across centers and home-based care: 2.6 to 3.0
Paulsell et al., 2006	12 Early Head Start programs nationwide	70 home-based caregivers	Average score and range: 3.1 (2.1-3.6)

Table IV.1 (continued)

Study Citation	Location	Provider Sample	Key Findings		
Studies Using QUEST					
Layzer & Goodson, 2006	5 of 25 counties in the Study of Child Care for Low-Income families: Los Angeles County, California; Hamilton County, Ohio; Harris County, Texas; King County, Washington; Franklin County, Massachusetts	533 home-based providers of whom 389 (73%) were regulated	Range of scores on warmth, guidance and supervision: 2.6 to 2.9; supporting children's cognitive development: 2.2 of 3 average score of 2.7 of 3 for safety; Average score on 10 items for comfort and space: 2. 6 of 3		
Tout & Zaslow, 2006	Minnesota	41 family, friend and neighbor caregivers	Scores on the Provider Rating subscales ranged from 1.2 to 2.8; the percentage of caregiver environments where materials and practices were observed range from 0 to 100		
	Studies Usin	ng the C-COS			
Administration for Children and Families, 2004	17 Early Head Start research sites nationwide	67 family child care homes when children were 14 months old; 82 homes at 24 months; 55 homes at 36 months.	Of 60 snapshots, average number of incidents of any caregiver talk to the child: 30.4 at 24 months, 31.3 at 36 months; average number of incidents of caregiver responding to the child: 8.1 at 24 months, 7.4 at 36 months; average number of incidents of caregiver initiating talk with the child: 22.6 at 24 months, 24.2 at 36 months; average number of incidents of child negative behavior: 5.4 at 24 months, 3.3 at 36 months.		

Study Citation

Provider Sample

Key Findings

Location

Table IV.1 (continued)

Study Citation	Location	Provider Sample	Key Findings
Paulsell et al., 2006 (CCAT-R)	12 Early Head Start programs nationwide	74 home-based caregivers	Observation periods with any caregiver talk: 69%, observation periods with any child talk or vocalization: 65%, observation periods when predominant caregiver tone is engaged: 85%, observation periods when caregiver does activity with child or group: 76%, observation periods when caregiver does not attend to child: 18%, observation periods with any nurturing behavior: 51%, observation periods with any harsh behavior: 5%

Note: FDCRS and FCCERS-R scores: inadequate = 1.0-2.9; minimal = 3.0-4.9; good = 5.0-6.0; excellent = 7.

Porter et al. 2006). These observational measures use different approaches for assessing quality and capture different aspects of it; we briefly describe each one in Figure IV.1.⁶

Moreover, a growing interest in the quality of family, friend, and neighbor care, along with concerns about whether existing observational measures adequately capture a range of features that can influence child outcomes, has raised questions about conceptualization and measurement of quality in home-based child care (Maher, 2007a; Porter et al., 2006; Zaslow & Tout, 2008). Instruments that may be appropriate for one setting, such as center-based care or regulated family child care, may not adequately represent the features of another (Maher, 2007a). Without common ways of measuring quality, comparisons across settings and studies are difficult to make.

We also review literature on structural features of quality in home-based care. These features include child-adult ratio, group size, caregiver education and training, caregiver experience, licensing and regulation, caregiver beliefs, and cost of care. We end the chapter with a review of research findings on parents' perceptions of quality.

Findings on Quality in Home-Based Care Using Observational Measures

The articles we reviewed point to a mixed picture of quality in home-based child care. In this section, we discuss the results of studies with the FDCRS, the Arnett CIS, and the other observational measures listed in Figure IV.1.

Quality as Measured by the FDCRS or FCCERS-R. Research based on observations conducted using the FDCRS or FCCERS-R points to varying conclusions about quality in home-based child care (Table IV.1). Some studies indicate the average quality rating of home-based care between minimal and good—scores between 3 and 5 (Paulsell et al., 2008; Shivers, 2006). Others suggest that, on average, quality is inadequate—scores between 1 and 3 (Elicker et al., 2005; Fuller et al., 2004). Several studies indicate that the quality of care is inadequate as measured by the FDCRS in 25 to 35 percent of home-based care settings (Coley et al., 2001; Kontos et al., 1995; Peisner-Feinberg et al., 2000). Other work, however, suggests these estimates of the percentage of homes with inadequate quality as measured by the FDCRS may be low. For example, two other studies estimated that a large majority of home-based care settings—more than 70 percent in one study—were inadequate (Fuller & Kagan, 2000; Maxwell & Kraus, 2005).

Despite different samples across studies, the research consistently shows that the quality of regulated family child care tends to be higher than that of family, friend, and neighbor care (Coley et al., 2001; Elicker et al., 2005; Fuller et al., 2004). Similarly, average quality of care in centers—as measured by the Early Childhood Environment Rating Scale-Revised Edition (ECERS-R; Harms, Clifford, & Cryer, 1998), an environment rating scale for center-based preschool classrooms—is consistently found to be higher than that of regulated family child care (Coley et al., 2001; Elicker et al., 2005; Fuller & Kagan, 2000; Fuller et al., 2004).

Quality as Measured by the Arnett CIS. In studies with the Arnett CIS, home-based caregivers tend to show a fairly high level of engagement with the child and few instances of harsh

⁶More detailed descriptions can be found in *Quality in Early Childhood Settings: A Compendium of Early Childhood Measures* (Halle & Vick, 2007).

Figure IV.1. Observational Measures of Quality in Home-Based Child Care

Family Day Care Rating Scale (FDCRS; Harms and Clifford, 1989). The FDCRS was designed to measure global quality of child care in regulated family child care settings. It includes seven scales to assess characteristics of the child care environment: (1) opportunities to develop language and reasoning skills, (2) learning activities, (3) social interactions, (4) space and furnishings, (5) care routines, (6) program structure, and (7) adult needs. Items are coded on a seven-point scale from inadequate (1) and minimal (3) to good (5) and excellent (7). A global quality score can be calculated by averaging across all items and can range from 1 to 7.

Arnett Caregiver Interaction Scale (Arnett CIS; Arnett, 1989). The Arnett was originally designed for use in centers, but it has been widely used in home-based care. It measures the quality of the caregiver's interactions with the children in care. Items measure the extent to which the caregiver spoke warmly, seemed distant or detached, exercised rigid control, or spoke with irritation or hostility. The 26 items are coded on a 4-point scale from "not at all" characteristic of the caregiver (1) to "very much" characteristic of the caregiver (4). The measure contains four subscales: (1) sensitivity, (2) harshness, (3) detachment, and (4) permissiveness.

Quality of Early Childhood Care Settings: Caregiver Rating Scale (QUEST; Goodson, Layzer & Layzer, 2005). The QUEST is a new measure specifically designed to assess quality in home-based care. Unlike the FDCRS and the Arnett CIS, it assesses quality based on the interactions between a caregiver and a single focal child. In addition, it uses time sampling, measuring the frequency of children's interactions with other children in 20-second intervals for 30 minutes. Scores are based on the percentage of the time that interactions occur. The provider rating, which assesses interactions between the caregiver and the focal child rates behaviors on a scale from 1 (not true) to 3 (always true). The QUEST also assesses the quality of the environment through an Environmental Checklist that is based on the National Association of Family Child Care's accreditation standards for health, safety, and the quantity of materials. Scores are based on a scale of 1 (not true) to 3 (always true).

The Child-Caregiver Interaction Scale (C-COS; Boller, Sprachman, and the Early Head Start Research Consortium, 1998). Like QUEST, the C-COS assesses the quality of the interactions between a caregiver and a focal child with time sampling. The C-COS was developed to measure the types of caregiver interaction and child activities specifically pertaining to the focal child based on six 5-minute observations. During each 5-minute observation, observers watch the focus child for 20 seconds and then indicate whether a specific set of child and caregiver behaviors occurred. Over the 2-hour observation, 60 20-second child-caregiver observations are made. The observed interactions include talk between the child and the caregiver; the focal child's interactions with materials and other children; the focal child's television viewing; and the focal child's wandering or unoccupied behavior. Scores are based on the percentage of the time that each interaction is observed.

Observational Record of the Caregiving Environment (ORCE; NICHD ECCRN, 1996). The ORCE was developed for the NICHD study to assess quality across a variety of settings, including care provided by relatives, such as fathers and grandparents, and family child care providers, as well as centers. It uses time sampling to assess the frequency of specific kinds of positive caregiver-child interactions—the caregiver's affect, physical contact with the child, talk to the child, and stimulation of cognitive and physical development—on a scale from 1 to 4. In addition, the ORCE uses scores from 1 to 4 to rate caregivers on qualitative ratings on

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⁷A revised version of this measure, the Family Child Care Environment Rating Scale-Revised Edition (FCCERS-R; Harms, Cryer, & Clifford, 2007) is now available. Most of the studies included in this review were conducted before the revised version was available.

behaviors such as sensitivity to distress, stimulation of development, and positive regard. Both quantitative and qualitative ratings are reported on scales of 1 to 4.

Child Care Assessment Tool for Relatives (CCAT-R; Porter, Rice, & Rivera, 2006). The CCAT-R was developed specifically to assess quality of care provided by relatives, but it has been used to measure quality of care provided by friends and neighbors as well. Like QUEST, the C-COS, and the ORCE, it measures the frequency of interactions between the caregiver and the focal child with time sampling. These interactions include talk within the caregiver-child dyad, as well as among the child, the caregiver, and other children and adults; the caregiver's engagement with the child; and the child's engagement with materials and other children or adults in the setting. In addition, the CCAT-R includes items related to affect of the caregiver and the child; the types of caregiver and child activities that occur; and disciplinary practices. Caregivers are rated on four factors—nurturing, engagement, and two factors that relate to language—that are based on the percentage of time that the related interactions occur. Ratings include poor, acceptable, and good and are based on the percentage of time that the related interactions occur. There is a range of percentages for each rating. One study, the Early Head Start Enhanced Home Visiting Evaluation (Paulsell et al., 2006), reported scores solely on the basis of the percentage of the time interactions were observed. The CCAT-R also includes checklists for health and safety and materials, although these are not calculated in the score. The scores for the checklist are based on the percentage of items that were observed.

or ignoring behavior (Coley et al., 2001; Fuller & Kagan, 2000; Paulsell et al., 2006; Peisner-Feinberg et al., 2000). For example, the average total Arnett CIS score was 3.1 out of 4 for the Early Head Start Enhanced Home Visiting Evaluation, 3.3 for the Early Head Start national evaluation, and 2.9 for the Growing Up in Poverty Study (Paulsell et al., 2006; Administration for Children and Families, 2004; Fuller & Kagan, 2000). Unlike the FDCRS, the CIS routinely shows few differences between centers and home-based care or between regulated family child care and family, friend, and neighbor care (Coley et al., 2001; Fuller et al., 2004; Loeb et al., 2004). In part, the similarity in the findings may be a function of the instrument, which has a 4-point scale that may not capture the nuances in caregiver sensitivity and detachment.

Quality as Measured by Other Instruments. In contrast to studies that used the FDCRS to measure quality, research with other instruments points to some positive aspects of quality in home-based care. The two studies that used QUEST (Layzer & Goodson, 2006; Tout & Zaslow, 2006) found that most of the homes were safe and healthy and that many contained adequate age-specific materials for children. Providers were affectionate and responsive, and they were involved with the children most of the time. The study that used the CCAT-R also found that nurturing behavior, such as kissing or patting the child, was common, and that harsh or ignoring behavior was infrequent (Paulsell et al., 2006).

Relative care was also rated high on the ORCE, which was used in the NICHD study. Grandparents were rated as "3" out of "4" on aspects that related to positive behaviors, and had higher ratings on these characteristics than regulated family child care providers or center teachers with children of certain ages (NICHD ECCRN, 2004). One study of home-based care settings with the C-COS also found that home-based caregivers were responsive to children, especially in terms of talking to them, but there were differences among the types of providers (Fuller & Kagan, 2000). Family, friend, and neighbor caregivers were more responsive to children's talk than regulated family child care providers or center teachers.

Some of the research conducted with these instruments, however, has also found weaknesses in home-based care. Studies with QUEST and the CCAT-R suggest that a significant proportion of the children's activities involved routines, and that not a great deal of time was spent on learning activities, such as reading, science, or math; nor did the caregivers engage in much higher-level talk with children (Layzer & Goodson, 2006; Paulsell et al., 2006; Tout & Zaslow, 2006). Television use was common in many homes. The study with the C-COS found similar results—it indicated that there was less reading in family, friend, and neighbor care than in other settings, and that there was more television (Fuller & Kagan, 2000). On the other hand, there were lower proportions of children who were unoccupied or wandering.

Structural Features of Quality in Home-Based Child Care

Another strand of research on quality in home-based care seeks to link structural dimensions of the child care setting that can be related to quality (for example, Clarke-Stewart et al., 2002; Elicker et al., 2005; Burchinal et al., 2002; Raikes et al., 2005). These studies examine dimensions of home-based child care typically associated with quality, such as the provider's characteristics or features of the home caregiving environment, but these associations are not sufficient to establish causality. We cannot determine, for example, if a provider's level of training increases quality, or if more motivated providers are more likely to seek out training and also provide better-quality care. An additional complication is the greater focus on regulated family child care than on family, friend, and

neighbor care (Morrisey, 2007; Porter et al., 2006). Consequently, these results may be less applicable to family, friend, and neighbor settings.

Child-Adult Ratios and Group Size. Because most home-based caregivers care for a small number of children, the child-adult ratio in home-based care is often smaller than that in center-based care (Coley et al., 2001). While instances of large group size in home-based care settings are sometimes reported, research suggests that group size in home-based care is typically within thresholds set by state regulations and standards (Fuller & Kagan, 2000). One study found that the number of children in a home was not related to quality, but compliance with group size regulations was related to more positive caregiving (Clarke-Stewart et al., 2002).

Education and Training. A caregiver's education and training have been shown to be related to higher-quality care. Research indicates that many facets of education and training, such as educational attainment, specialized education in child development or early education, a Child Development Associate (CDA) credential, and a college degree in early childhood education, are related to quality (Elicker et al., 2005; Norris, 2001; Peisner-Feinberg et al. 2000; Raikes et al., 2005; Weaver, 2002). One study concluded that provider training was a better predictor of observed child care quality in family child care than group size or child-adult ratios (Burchinal et al., 2002), although a research brief on the infant-toddler literature suggests that adult-child ratios may be one of the strongest predictors (Kreader, 2005). Research has also found that better-educated caregivers tend to provide more sensitive caregiving and richer learning environments (Clarke-Stewart et al., 2002; Raikes et al., 2005). Education and training are also correlated; more educated providers are more likely to participate in professional training (Bryant, 2007; Norris, 2001).

Experience. Provider experience—years of providing child care—has not been linked with quality. One study found the association inconsistent (Burchinal et al., 2002) and another concluded that experience and quality were not related (Clarke-Stewart et al., 2002). It seems likely that other factors, such as the provider's education or state regulation, are more important to child care quality.

Licensing and Regulation. Although licensing and regulation have not been as well studied as education and training, they have been found to be positively associated with the quality of home-based child care (Kontos et al., 1995; Kreader, 2005; Raikes et al., 2005). This is consistent with findings that indicate that regulated family child care tends to be of higher quality than unregulated family, friend, and neighbor care (Coley et al., 2001; Elicker et al., 2005; Fuller et al., 2004).

Caregiver Beliefs About Childrearing and Intentionality. Provider beliefs is a broad category that includes many different constructs, but research on beliefs about childrearing indicates some association with quality. Child-centered beliefs—those that focus on children's needs rather than on those of adults—were linked to higher-quality care and more stimulating environments in home-based care (Clarke-Stewart et al., 2002). Other work has found that intentionality—caregivers' thoughtful planning about activities for children in their care and interest in obtaining information to improve child care quality—predicted higher-quality care and sensitivity (Kontos et al., 1995). Nonauthoritarian beliefs have also been identified as strong predictors of quality (Bryant, 2007; Kreader, 2005).

Cost. The scant work that has examined cost as a predictor of quality has found a modest but positive association (Helburn & Howes, 1996). Similarly, other work suggests that higher fees predict higher quality and caregiver sensitivity (Kontos et al., 1995). A provider's assets and

resources also predicted child care quality (Weaver, 2002). Provider income, along with other factors such as education, and training, was correlated with higher quality care.

How Parents View Quality in Home-Based Child Care

Some studies have examined parents' perceptions of child care quality, including home-based care. Research aims vary. They include efforts to understand the fit between professional views and those of parents, as well as to understand the factors that may influence parents' use of different kinds of child care settings.

One study in Minnesota sought to identify how five groups of stakeholders—parents, providers, Child Care Resource and Referral (CCR&R) staff, program administrators, and licensors—defined child care quality, regardless of setting (Ceglowski, 2004). The study gathered data through focus groups and interviews, and grouped the findings into three categories: (1) characteristics of quality providers, (2) characteristics of quality programs, and (3) child outcomes related to quality care. All the stakeholders agreed on child outcomes—"happy" children who were ready for school—but there was less consensus about the characteristics of programs and providers. Program administrators alone pointed to group size and adult-child ratios as an important aspect of programs, while the other stakeholders identified a structured environment that focused on learning and provided culturally responsive care. There was even less agreement among the stakeholders about the characteristics of quality providers. Parents identified communicating well with families as an important aspect of quality providers. Administrators and CCR&R staff pointed to professionalism and training, and licensors identified stability and caring.

Positive communication as an aspect of quality has emerged in other studies as well. Research on parents and family, friend, and neighbor caregivers in the subsidy system in Illinois found that parents rated positive provider relationships second after safety in their ranking of factors they saw as contributing to quality in these settings (Anderson et al., 2005). In another study, mothers in the welfare system in three cities (Boston, Chicago, and San Antonio) indicated that they had better communication with license-exempt providers than center-based teachers or regulated family child care providers (Coley et al., 2001).

Good relationships seem to be related to satisfaction: the mothers in the welfare study also reported higher satisfaction with family, friend, and neighbor caregivers than other providers, and a national study of 533 family child care providers and family, friend, and neighbor caregivers in the subsidy system found that parents reported close relationships with providers and few disagreements as an aspect of their satisfaction with care (Layzer & Goodson, 2006).⁸

In further studies, parents have identified other aspects of home-based care as positive. Whether these are definitions of quality or reasons parents provide for using particular types of care depends on the questions in the research. Trust and safety rank high in parents' views of home-based care (Anderson et al., 2005; Coley et al., 2001) as does flexibility of the schedule (Coley et al., 2001; Layzer & Goodson, 2006; Morrissey, 2007; Porter & Kearns, 2005b; Susman-Stillman & Banghart, 2008). In addition, convenience (especially location) is a factor. A study of 57 racially

⁸This research suggests that parents do not report conflicts with caregivers as a problem, although the perspective of caregivers seems to differ, pointing to conflicts with parents as a major issue.

diverse mothers who had entry-level jobs in Los Angeles found that parents wanted care that was close to home, because they did not want long commutes to work and they wanted their children to be near them (Henly & Lyons, 2000).

Summary Points

- The limited research on quality in home-based care presents a mixed picture; assessments of quality vary across studies and across studies that used different observational measures.
- As measured by the FDCRS, most home-based child care is of inadequate to minimal quality.
- Research using other measures of quality suggests that most home-based child care settings are largely safe, and most caregivers warm and nurturing.
- Home-based settings may have relatively low levels of cognitive stimulation. Some studies have found limited learning activities in these settings, and others have found fairly low scores on global measures of quality, which includes indicators of learning activities and support for cognitive development.
- Structural features such as adult-child ratios, provider education and training, licensing and regulation, and caregiver beliefs about childrearing may relate to higher quality in home-based child care. Caregiver experience has not been shown to predict quality, and research has shown only a modest association with the cost of care. These associations, however, should not be interpreted as causal claims.
- Parents identify their relationship with the caregiver, including communication, as an
 important aspect of quality in home-based care. Safety of the setting, trust in the
 caregiver, flexibility of scheduling, and convenience of the location also are identified as
 features of quality. These aspects are not often included in measures or studies of quality.

V. INITIATIVES THAT AIM TO SUPPORT HOME-BASED CHILD CARE

The literature on initiatives that aim to support quality in home-based child care offers useful insights for developing future initiatives to support these caregivers. Findings from research provide information about the characteristics of the initiatives, their implementation, and the outcomes for participants. Data on characteristics of the initiatives can help us understand the range of service delivery strategies that have been used to date, the content and intensity of these programs, and the fit between these features and caregivers' interest in supports. Evaluations of implementation can point to operational strengths and weaknesses within specific initiatives, which can contribute to stronger designs and implementation strategies for future efforts to support caregivers. Outcome data indicate the range of outcomes that have been expected for caregivers and children and the extent to which they have been achieved, as well as insight into outcomes that have not been targeted or measured.

In our review of the literature, we found many articles that addressed these issues. Most focus on a single category of caregiver—either regulated family child care or family, friend, and neighbor care—but a few include both categories. We have grouped the studies into five categories: (1) studies that examined general characteristics of initiatives that aim to improve child care quality, including quality in regulated family child care and family, friend, and neighbor care; (2) studies of initiatives that used training and professional development as strategies; (3) studies of initiatives that used consultation as an approach; (4) studies that examined the use of home visiting strategies; and (5) studies of initiatives that used a family support approach. The level of available evidence about the effects of these initiatives on outcomes for caregivers and children varies, depending on the intended population of caregivers.

Research on efforts to support home-based caregivers—family, friends, and neighbors in particular—is limited. Many initiatives for this population of caregivers, including those supported with public and private funds, reported data about implementation processes and experiences. Fewer studies included assessments of caregiver outcomes. Most outcome studies of initiatives for family, friend, and neighbor caregivers relied on self-reports from the participants, such as responses to survey questionnaires about changes in knowledge or practices (Porter, 2007; Porter & Kearns, 2005a). Even fewer studies of initiatives to support home-based child care reported data on child outcomes (Pittard, Zaslow, Lavelle, & Porter, 2006; Porter, Habeeb, Mabon, Robertson, Kreader, & Collins, 2002; Porter & Kearns, 2005a). Most of the studies are descriptive or correlational; only a small proportion of the initiatives used comparative designs, such as pre-post or quasi-experimental designs. Three studies used a random assignment design. Because of the lack of evidence based on rigorous evaluation designs, we cannot draw firm conclusions about the effectiveness of the initiatives studied. Nevertheless, the studies provide important descriptive information about the caregivers and the initiatives, highlight important implementation issues, and point to potential avenues for further field testing and study.

⁹These initiatives are funded by a variety of sources: the federal Child Care and Development Fund (CCDF); other federal, state, and local funders; and private foundations. Many of the initiatives on which we have literature are supported by CCDF.

In this chapter, we present the main findings from the literature about initiatives for home-based child care. The first section focuses on general characteristics of Child Care and Development Fund (CCDF)-quality improvement initiatives, including those for regulated family child care and family, friend, and neighbor care. The second section focuses on specific initiatives for these caregivers, with discussions of training and professional development initiatives; consultation and home visiting, including the Early Head Start Enhanced Home Visiting Pilot; and initiatives that use a family support approach.

General Characteristics of Child Care Quality Improvement Initiatives

States must use a minimum of 4 percent of their Child Care Development Funds (CCDF) to improve child care quality. Three studies of states' use of this "quality set-aside" provide useful information about the characteristics of quality improvement initiatives, including those that aim to serve home-based caregivers (Pittard et al., 2006; Porter et al., 2002; Porter & Kearns, 2005a). In one of these studies, Porter and Kearns (2005a) examined initiatives developed specifically to support family, friend, and neighbor caregivers. Findings about goals, target populations, strategies, service delivery agencies, staffing, content, and recruitment can enhance our understanding of efforts to improve quality in general, and those that aim to improve quality in home-based care in particular.

These studies show that most initiatives funded by the CCDF quality set-aside identify a broad goal of improving child care quality (Porter et al., 2002; Porter & Kearns, 2005a), but there is some evidence of a focus on more specific goals (Pittard et al., 2006). One study of 339 initiatives funded with a minimum of \$1,000 in CCDF funds in 35 states found that overall (regardless of type of care), healthy and safe environments and professional development, including formal education and training, were high priorities for efforts to improve child care quality, and that many initiatives aimed to improve emotionally supportive caregiving and early learning as well (Pittard et al., 2006).

Research also indicates that many CCDF quality improvement efforts target several types of child care providers, but family, friend, and neighbor caregivers represented a significantly smaller percentage of the target population of providers than regulated family child care or center providers (Pittard et al., 2006; Porter et al., 2002). In the study of 339 initiatives, 17 percent targeted family, friend, and neighbor caregivers, compared to 95 percent for centers and 70 percent for family child care (Pittard et al., 2006). In many states, initiatives were not open to family, friend, and neighbor caregivers or to caregivers who did not participate in the subsidy system. For example, a study of 104 selected CCDF-funded initiatives found that one in five exclusively served caregivers with subsidized children in their care, and that others gave preference to caregivers participating in the subsidy system (Porter et al., 2002). Other research indicated that most CCDF-funded initiatives specifically intended for family, friend, and neighbor caregivers were not open to caregivers outside the subsidy system: of the 23 initiatives identified in a 48-state survey, only 4 provided services to the broad population of family, friend, and neighbor caregivers (Porter & Kearns, 2005a).

Studies on CCDF quality improvement efforts show that states use a variety of strategies to improve the quality of care offered in home-based settings. These include professional development and training to enhance caregivers' knowledge, skills, and practice; distribution of materials and equipment to improve the quality of the environment (as an independent strategy or additional component of another strategy); and technical assistance, which can include home visiting (Pittard et al., 2006; Porter et al., 2002; Porter & Kearns, 2005a). To a large extent, these strategies reflect caregivers' interest in obtaining information and the ways they would like to receive it. Some of the

caregivers' stated interests or preferred delivery strategies—for example, support groups, computer-based programs, and radio and television programs—are not typically among the strategies used.

These studies indicate that Child Care Resource and Referral (CCR&R) agencies are the most common service delivery agencies for home-based caregivers, although community organizations and institutions of higher education provide these services as well (Pittard et al., 2006; Porter et al., 2002, Porter and Kearns, 2005a). Qualifications of staff who offer services to home-based caregivers vary: the study of specific initiatives for family, friend, and neighbor caregivers found wide variations in education and experience (Porter & Kearns, 2005a). Education levels can range from some college and college degrees with early childhood specializations to graduate degrees; experience can range from no previous child care experience to prior experience in child care as a family child care provider or teacher. A survey of CCR&Rs, however, indicated that overall (regardless of the type of provider for whom services were targeted), most staff had college degrees and specialized preparation in early childhood (Smith et al., 2007).

Only one study of CCDF-sponsored quality improvement initiatives—the survey of those for family, friend, and neighbor care—systematically examined the content of the initiatives. Health and safety, child development, and behavior management and discipline strategies were the most common topics (Porter & Kearns, 2005a). Caregiver-parent communication was not often included, although this topic is a primary concern for caregivers. Other research has indicated that many of the initiatives that aim to serve regulated family child care providers offered information about health, safety, child development, and behavior management (Hamm et al., 2005). In addition, they often included topics on managing a family child care business, which reflects providers' interest in this issue. ¹¹ Information about caregiver-parent communication, if it is offered at all, is generally included under topics related to professionalism.

Some of the research on CCDF-funded quality improvement initiatives has explored the recruitment strategies that organizations use to attract home-based caregivers, although evidence about the effectiveness of these strategies is lacking. Common strategies included mailings to caregivers in the subsidy system, presentations at professional conferences, and fliers and newsletters (Porter et al., 2002). Some initiatives for family, friend, and neighbor caregivers used other approaches, such as advertising in the newspaper, knocking on doors, or networking with other community organizations with which these caregivers might be associated (Porter & Kearns, 2005a).

Specific Initiatives for Home-Based Caregivers

Research on individual efforts to support the quality of care provided by home-based caregivers includes findings that may be useful for developing future initiatives. We found a small number of

¹⁰A survey of a sample of 250 CCR&Rs that offered training found that regulated family child care providers accounted for the largest proportion of providers served (47 percent), followed by centers (44 percent), and family, friend, and neighbor caregivers (4 percent) (Smith, Sarkar, Perry-Manning, & Schmalzried, 2007).

¹¹As part of its 56-hour customized training, for example, Acre Family Child Care offered workshops on business practices and marketing. The California Child Care Improvement Project, an effort to recruit family child care providers, also offered business management to help providers who are new to the field (Hamm et al., 2005).

studies that provide data related to implementation of an initiative, its outcomes, or both. The target populations of these initiatives were, for the most part, either regulated family child care providers or family, friend, and neighbor caregivers.

While these studies have implications for the design of initiatives for home-based caregivers, their results must be interpreted with caution. Samples vary, as do study designs. There is wide variation in the size and location of the samples, as well as in the depth of information about caregivers. Therefore, it is difficult to know whether the results might apply to caregivers who share similar characteristics—for example, relationship to the child or education levels—even though their regulatory status differs. In addition, there is wide variation in the rigor of the study designs; some are descriptive studies, some are correlational, and some have pre-post designs. Only three used experimental designs in which caregivers were randomly assigned to program and control groups. As stated earlier, due to the lack of rigorous study designs, we cannot draw firm conclusions about the effectiveness of the initiatives.

In the rest of this section, we summarize findings from studies of these initiatives; Table V.1 provides an overview of the initiatives we included. First, we present the findings from six studies of training initiatives, one study of a professional development initiative, and two studies of an initiative that used multiple training approaches. We then discuss two studies of consultation models. Following those, we present findings from three studies of home visiting programs that aim to support quality in home-based child care, and three studies of initiatives that used a family support approach for supporting caregivers. Throughout this overview, it is important to keep in mind the limitations on generalizability that are related to the different samples included, and the limitations on causality that result from the less rigorous designs that are most typically used in these studies.

Training and Professional Development Models

A range of delivery strategies, level of intensity, and available certification is demonstrated in the training and professional development initiatives across these studies. For example, training strategies may include a single workshop or a workshop series intended to help caregivers meet regulatory requirements or improve a specific aspect of the quality of care they offer (Zaslow & Martinez-Beck, 2006). Professional development initiatives may offer formal education through credit-bearing higher-education courses, often in conjunction with increased compensation or accreditation. Professional development can include certificate programs, credentialing programs (for example, ability to earn a Child Development Associate [CDA] credential), or degree programs in which caregivers work toward an associate's or bachelor's degree.

Three main implementation issues emerged from the literature we found on training and professional development initiatives: (1) strategies for recruiting caregivers and engaging them to participate, (2) the auspice of the sponsoring organization and its commitment to the initiative, and (3) collaboration with community partners to implement the initiative. In the rest of this section, we discuss each of these issues and then summarize what is known about the outcomes of training initiatives for home-based caregivers. None of these studies examined outcomes for the children in care.

Table V.1. Summary of Initiatives Identified in the Literature Review That Aim to Support Home-Based Child Care

Initiative and Citation	Location	Study Sample	Study Design		
Training and Professional Development Initiatives					
Carescapes Rusby, J.C., Smolkowski, K., Marquez, B., & Taylor, T.K. (2008). A small-scale randomized efficacy trial of Carespaces: Enhancing children's social development in child care homes. <i>Early Childhood Research Quarterly</i> , 23(4), 527-546.	Oregon	57 regulated family child care providers	Randomized control trial		
Family Child Care Network Study Bromer, J., van Haitsma, Daley, R., Modigliani, K. (2008). Staffed support networks and quality in family child care: findings from the family child care network impact study. Chicago, IL: Local Initiatives Support Corporation.	Illinois	150 family child care providers: 80 in staffed networks, 30 in provider associations, and 40 not affiliated	Correlational		
Family-to-Family Howes, C., Galinsky, E., & Kontos, S. (1998). Child care sensitivity and attachment. <i>Social Development</i> , 7(1), 25-36.	San Fernando Valley, California; Charlotte, North Carolina; Dallas, Texas	71 regulated family child care providers	Pre-post		
Georgia study of subsidized family, friend, and neighbor caregivers Todd, C., Robinson, V., & McGraw, L. (2005). <i>Contextual influences on informal caregivers: Implications for training.</i> Paper presented at the Society for Research on Child Development Biennial Meeting, Atlanta, GA.	Georgia	162 caregiver interviews, 564 caregiver surveys, 15 caregivers in focus groups	Descriptive		
Kansas Association of Child Care Resource and Referral Agencies Infant/Toddler Project Kansas Association of Child Care Resource and Referral Agencies Infant/Toddler Project. (2003). <i>Child Care Quality Study.</i> Topeka, KS: author.	Kansas	196 providers in baseline; 153 in followup: 78 licensed homes; 18 licensed group homes; 35 registered homes	Pre-post		
License-Exempt Assistance Project Shivers, E. M. & Wills, S. (2001). License-Exempt Assistance Project Final Report. Los Angeles, CA: Crystal Stairs, Inc.	Los Angeles, CA	118 low-income African American and Latina family, friend, and neighbor caregivers	Descriptive process evaluation		
Project CREATE (Caregiver Recruitment, Education and Training Enhancement) Adams, J. H., & Buell, M. (2002). Project CREATE: Caregiver Recruitment, Education, and Training Enhancement. Newark, DE: University of Delaware, Center for Disabilities Studies.	Delaware	22 providers: 12 center- based teachers; 10 family child care providers	Pre-post		

Table V.1 (continued)

Initiative and Citation	Location	Study Sample	Study Design		
Smart Start Peisner-Feinberg, E., Bernier, E., Bryant, D., & Maxwell, K. (2000). Family child care in North Carolina. Chapel Hill: University of North Carolina at Chapel Hill: Frank Porter Graham Child Development Center.	North Carolina	151 family child care providers: 64 nominated by Smart Start directors; 87 randomly selected from regulation lists	Correlational		
Workshop Participation Study Norris, D. (2001). Quality of care offered by providers with differential patterns of workshop participation. <i>Child Care and Youth Forum</i> , 30(2), 111-121.	5 counties (urban and rural) in California	70 regulated family child care providers: 18 who had never participated in workshop training; 34 who had intermittently attended training; 18 who had continuously attended training throughout their careers	Correlational		
Consultation Initiatives					
Partners for Inclusion Bryant, D. (2007). Preliminary findings from the QUINCE study: Quality interventions for early care and education. Presentation at State Administrators Management Institute and Child Care Policy Research Consortium Meeting, Washington, DC.	24 sites in 5 states: California, Iowa, Minnesota, Nebraska, North Carolina,	181 teachers and family child care providers in the program group; 188 teachers and family child care providers in the control group	Randomized control trial		
Right from Birth Grace, C. & Davis, L. (2005). Right from birth: A model of professional development that builds on the science of early child brain and behavior development. Presentation at State Administrators Management Institute and Child Care Policy Research Consortium Meeting, Washington, DC.	Mississippi	22 family child care providers and other center providers	Randomized control trial		
Home Visiting Initiatives					
Caring for Quality McCabe, L & Cochran, M. (2008). Can home visiting increase the quality of home-based child care? Findings from the Caring for Quality project Cornell Early Childhood Program Research Brief, No. 3.	Rochester, New York	46 home-based providers: 36 in the program group; 9 in the control group	Quasi-experimental		

Table V.1 (continued)

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Initiative and Citation	Location	Study Sample	Study Design
Early Head Start Enhanced Home Visiting Pilot Project Paulsell, D., Mekos, D., Del Grosso, P., Rowand, C., & Banghart, P. (2006). Strategies for supporting quality in kith and kin child care: Findings from the Early Head Start Enhanced Home Visiting Pilot Project Evaluation. Final Report. Princeton, NJ: Mathematica Policy Research, Inc.	23 Early Head Start programs nationwide	74 home-based caregivers who cared for infants and toddlers enrolled in Early Head Start	Descriptive process evaluation
Promoting First Relationships Maher, E.J., Kelly, J.F., & Scarpa, J.P. (2008). A qualitative evaluation of a program to support family, friend, and neighbor caregivers. NHSA Dialog 11 (2), 69-89	Seattle, Washington	20 low-income grandmothers	Pre-post
Family S	upport Initiatives		
Seattle Play and Learn Network Organizational Research Services. (2006). Summary of mid- year play and learn participants results, January-July. Seattle, WA: Organizational Research Services.	Seattle, Washington	582 survey respondents	Post-test survey
Sparking Connections O'Donnell, N., Cochran, M., Lekies, K., Diehl, D., Morrissey, T., Ashley, N., & Steinke, P. (2006). Sparking Connections Phase II: A multi-site evaluation of community-based strategies to support family, friend and neighbor caregivers of children. New York: Families and Work Institute.	St. Paul and Minneapolis, Minnesota; Cherokee Nation, Oklahoma; Seattle, Washington	3 pilot sites	Descriptive process evaluation
Tutu and Me Porter, T., & Vuong, L. (2008). Tutu and me: Assessing the effects of a family interaction program on parents and grandparents. New York: Bank Street College of Education.	Hawaii	58 parents and grandparents	Pre-post

Recruiting and Retaining Participants. The research we reviewed points to several potential strategies for recruiting caregivers for training initiatives. All involve tailoring the initiative's implementation to address the specific reported needs of the caregivers. Studies of initiatives for family child care providers and family, friend, and neighbor caregivers consistently find that building on caregivers' interests and needs is a useful approach (Hamm et al., 2005; Powell, 2008; Porter & Rice, 2000; Shivers & Wills, 2001). Two studies—one on selected family child care initiatives and another on initiatives for family, friend, and neighbor caregivers—suggest that a needs assessment of caregivers in the community should be done first so that the initiative can be tailored to address the needs identified (Hamm et al., 2005; Porter & Rice, 2000). Both studies indicate that relying on innovative strategies—for example, using announcements on Spanish-language radio or meeting with church groups—may help increase enrollment. A third study of a Minnesota initiative that aimed to find, engage, and support family, friend and neighbor caregivers indicated that direct communication with caregivers by trusted individuals was also a promising approach (Powell, 2008). In addition, it found that reaching out to families to identify caregivers was a useful strategy.

Designing programs that are intended to respond to caregivers' specific needs for information also seems to play a role in retaining caregivers in an initiative. An evaluation of a six-month workshop series for family, friend, and neighbor caregivers in Los Angeles, for example, found that most of the participants enrolled because they wanted both the general information on child development and health and safety that the program offered and the specific information it offered about licensing (Shivers & Wills, 2001). Workshops on business practices were reported as most useful by African American participants, while Latina caregivers found the workshops on infant and toddler care the most useful (Shivers & Wills, 2001). The subsidized caregivers in the Georgia study cited earlier reported that they did not participate in workshops that offered introductory materials because they had already learned about this information in earlier trainings. They would have been more likely to participate if the workshops offered advanced or different topics (Todd et al., 2005).

Scheduling services at convenient times may be another factor in recruiting and retaining caregivers. The Los Angeles program found that Saturday workshops represented a barrier for some participants, and they dropped out of the program (Shivers & Wills, 2001). In contrast, the Georgia caregivers preferred Saturdays for workshops because they had more time to attend them (Todd et al. 2005). These findings imply that services must be tailored and timed to caregivers' needs.

Characteristics and expertise of the training program staff may also influence caregivers' continued participation in a program. Caregivers in the Los Angeles program reported that the training staff strengths—their knowledge of the material and their responsiveness to caregivers' learning styles—were one of the reasons they continued to come to workshops (Shivers & Wills, 2001). These strengths may be related to staff preparation: a review of 13 flagship programs for family, friend, and neighbor caregivers indicated that staff who were aware of the distinctive nature of this population of caregivers (the caregivers' relationships with parents, in particular) and were culturally responsive seemed to play a role in caregivers' continued participation in the program (Porter & Rice, 2000). The Minnesota evaluation pointed to the need for staff training as well. It found that even seasoned staff who were familiar with the community and the target population could benefit from specific training to work with this population of caregivers (Powell, 2008).

Working with Partners. Several studies pointed to the role of partnerships in successful implementation of training initiatives. A report on an initiative to increase the supply of regulated family child care providers through a collaborative effort between family resource centers and CCR&Rs reported that the partnerships accomplished more working together than they would have

individually (California Child Care Resource and Referral Network, 2005). Substantial numbers of providers were recruited and trained, families had greater access to information about child care options, and family child care providers increased their enrollment. The report suggested, however, that such collaboration should be carefully planned and nurtured, and that time should be set aside to provide opportunities for staff to understand how the partner agencies work. Regularly scheduled inter-agency meetings can, for example, provide information about staff roles and responsibilities as well as internal procedures and routines.

Other findings of training initiatives suggest more specific benefits from partnerships in recruitment and retention. One review of programs for family, friend, and neighbor caregivers indicates that partnerships can be useful for recruiting participants: several CCR&Rs worked with Head Start and child care centers in their communities to reach out to caregivers who were providing care to children outside of program hours (Porter & Rice, 2000). Another review pointed to a program that links family child care providers with pre-kindergarten programs, providing opportunities for children to attend the center-based programs in the morning and spend the rest of the day with the caregiver (Schulman & Blank, 2007). Teachers from the classrooms provide additional support to the caregivers through biweekly visits.

Obtaining Organizational Commitment. Organizational commitment is another factor in effective implementation of training initiatives. The review of programs for family, friend, and neighbor caregivers found that professional child care organizations such as CCR&Rs may have initial difficulties adjusting to the notion of providing training to a population of unregulated providers, and this may affect their commitment to providing services (Porter & Rice, 2000). It also found that service delivery was more effective when the services for family, friend, and neighbor caregivers were integrated into the agency mission rather than isolated in one part of the agency. It found that this is particularly salient for those agencies that are perceived as playing a monitoring role, because caregivers may be more trusting of community organizations than those that are viewed as professional child care organizations (Porter & Rice, 2000). These findings suggest that training initiatives for home-based child care should consider using a wide range of service delivery agencies, including CCR&Rs.

Outcomes of Training and Professional Development Initiatives. In our review of the literature, we found six articles with findings about outcomes for training initiatives for home-based caregivers, and one article about the results of a professional development initiative. The sample in all seven studies consisted of regulated family child care providers, although one study included family, friend, and neighbor caregivers as well. Five of the seven studies relied on the FDCRS alone or in conjunction with other instruments; another used the Adult Involvement Scales (AIS; Howes and Stewart, 1987). The seventh study used an adapted version of Assessing School Settings: Interactions of Students and Teachers (ASSIST; Rusby, Taylor, & Milchak, 2001) and the Child Care Ecology Checklist (CCEC) adapted from the Early Childhood Classroom Ecology Checklist (Kaminski & Stormshak, 2006). All the studies reported positive results. However, because samples were small and the rigor of the study designs varied widely, these results should be interpreted with caution.

¹²The Minnesota evaluation found that an orientation towards licensing represented a challenge for agencies that sought to work with family, friend and neighbor caregivers (Powell, 2008).

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The first study compared quality among 70 licensed family child care providers who were randomly selected from the licensing list in five rural and urban counties in California: those who had never attended training (18), those who had intermittently attended (34), and those who had attended regularly throughout their professional careers (18) (Norris, 2001). Providers were observed with the Family Day Care Rating Scale (FDCRS) and interviewed about their levels of workshop participation, their membership in professional organizations, and their motivations for providing care. The study found that those who had participated in workshops on a regular basis had significantly higher overall FDCRS scores, as well as higher scores on such FDCRS subscales as learning activities, than those who had never attended trainings or those who had attended training intermittently. However, it is possible that caregivers who participated in regular training were already highly motivated to provide good-quality care and may have had higher FDCRS scores without attending the training.

Participation in training and technical assistance was also associated with higher quality on the FDCRS in an evaluation of the Kansas Infant/Toddler Project, an effort to enhance child care quality for infants and toddlers in a wide range of child care settings (Kansas Association of Child Care Resource and Referral Agencies Infant/Toddler Project, 2003). The sample consisted of 196 providers selected from a randomly stratified sample of all categories of regulated child care in Kansas—centers, licensed group family homes (78), licensed family child care homes (16), and registered family child care homes (35).¹³

The study found that there was a slight increase in FDCRS scores from 3.7 to 3.9 for the sample overall, and that a higher proportion of licensed homes and registered homes (40 percent) showed improvement than centers or licensed group family homes (30 percent), although the sample included providers who had participated in the infant-toddler training and technical assistance, as well as those who had not. Among the 108 providers who participated in the services, 43 percent showed improvements in the FDCRS scores, compared to 29 percent of the 40 who had not. Scores on the FDCRS also increased from pre- to post-test for providers who had participated more often in the workshops (four or more), although this finding may have been influenced by self-selection: providers who participated in workshops may have been more motivated to improve their care in the first place. Higher participation rates were also associated with work on a CDA credential or completion of it. The 17 providers with the highest ratings were more likely to be working on their CDA and have accepted subsidies. Among the home-based providers, basic care, learning activities, and social development were the most highly attended workshops. Participation in activities varied. Group family homes completed the highest number of hours (8.4) and registered family homes, the lowest (1.9).

Participation in training and other kinds of activities was also linked to higher quality in a study of the quality of family child care in North Carolina (Peisner-Feinberg et al., 2000). The study used the FDCRS and the Arnett CIS to assess quality in 151 regulated family child care homes, 67 of which were nominated and 87 randomly selected, in eight Smart Start partnerships that supported quality improvement activities such as training workshops and lending libraries. The family child

¹³Registered family child care homes are the equivalent of family, friend, and neighbor child care. The difference between group family child care homes and family child care homes is the number of children in care.

¹⁴Of the 17, 15 were home-based, that is, registered homes, licensed homes, or group homes.

care providers who were nominated were selected by the executive directors of the Smart Start partnerships because they participated in most Smart Start activities; the others were randomly selected from the county lists of regulated family child care providers. The study consisted of two visits to the homes in spring and summer, during which the researchers conducted observations with the FDCRS and the Arnett CIS and interviewed the providers. Scores from both visits were averaged, and correlated with participation levels in Smart Start, provider background characteristics, and program characteristics such as enrollment and fees.

The findings showed that average quality on the FDCRS was minimal to good (an average score of 3.61) for all the participating providers, but the providers who had higher levels of participation in Smart Start activities (those who had participated in 10 to 14 of the 20 activities) had higher quality on the FDCRS than those who had participated in a smaller number of activities. Like the Kansas research, the study found that higher family child care quality was associated with several provider characteristics. More formal education, a CDA, or membership in a professional organization was associated with higher FDCRS scores, but there was no statistically significant correlation between accreditation by the National Association of Family Child Care and providers' experience and quality. The authors suggest that the higher-quality care among providers with greater participation in Smart Start may be related to better initial levels of care, but they did not discuss whether providers with specific characteristics were more likely to have higher rates of participation in Smart Start.

Another study of 71 licensed family child care providers, who had participated in Family-to-Family, a six-month training program that offered classroom instruction on working with young children, in the San Fernando Valley in California, Charlotte, North Carolina, and Dallas, Texas examined the effects of training on providers' sensitivity and detachment in a pre-post design. It found that participation in the training increased levels of sensitivity and reduced incidences of detached behavior as measured by the Arnett CIS (Howes, Galinsky, & Kontos, 1998). The study also looked at the attachment of the toddlers in care using the Attachment Q-Sort for the child and caregiver (Waters, 1985) and concluded that even such modest training could improve infant attachment security to the caregiver, based on the results of the post-test.

A study of Carescapes, a video-based training program to teach regulated family child care providers strategies for promoting positive social development in preschoolers, randomly assigned 57 providers to an intervention group or a waitlist group who would receive the training at a later time (Rusby, Smolkowski, Marquez, & Taylor, 2008). Providers participated in a series of three workshops, approximately two weeks apart, that covered strategies for setting up the environment to support social development, proactive approaches for managing children's behavior, and understanding and dealing with problem behavior. The study found a significant increase in use of effective behavior management practices among intervention group providers as well as a decrease in children's problem behavior. These positive effects, however, had faded out five months after the training.

The study of staffed family child care networks used matched samples of providers to examine the quality of child care offered by providers in staffed networks, provider associations, or no network (Bromer, van Haitsma, Daley, & Modigliani, (2008)). The sample consisted of 150 family child care providers: 80 in staffed networks; 40 providers who were not affiliated with networks; and 30 providers who were affiliated with provider associations. Findings indicated that providers in staffed networks had significantly higher quality than those in the comparison groups. These effects were associated with coordinators who had participated in specific training designed to support their

work with family child care providers as well as one or more direct services such as workshop training and home visiting. Due to selection issues, however, the study cannot draw conclusions about whether providers offering higher quality care are more likely to participate in staff networks, or whether participation in staffed networks improves quality.

Our review of the literature includes one study that examined the outcomes of a professional development model on global quality and caregiver sensitivity (Adams & Buell, 2002). The initiative, Project CREATE (Caregiver Recruitment, Education and Training Enhancement) consisted of three components: (1) three college-credit modules offered at community colleges, (2) community-based training, and (3) technical assistance through home visits. The sample included 10 licensed family child care providers and 12 center-based providers, none of whom had experience with college course work. They were recruited through mailings and newspaper ads. Each agreed to participate in the three components of the program, although there was wide variation in the levels of participation across the components. In comparing pre- and post-tests, the FDCRS was used to assess changes in the quality of caregiver practices and the caregiving environment; the Arnett CIS was used to assess changes in caregiver sensitivity. In addition, pre- and post-tests based on the curriculum, Delaware First Again, which was used in the community training, were used to measure changes in caregiver knowledge and skills.

Participation in college courses improved scores on the FDCRS and the Arnett CIS for regulated family child care providers.¹⁵ The community-based training resulted in increases in their knowledge about developmentally appropriate environments and practice on pre-post tests, while the technical assistance component produced changes in their environment and practices. Here, too, it is difficult to disentangle potential selection factors from the results, because providers who were more motivated to change may have taken more advantage of the program components, and, as a result, showed greater improvements in quality than might be expected among the population generally.

Consultation Models

In this model, a consultant works with a caregiver to jointly identify needs for training and support and then to address them. In this section, we discuss some findings from the Quality Interventions for Early Care and Intervention (QUINCE) study evaluations on two consultation initiatives: (1) Partners for Inclusion (PFI), and (2) Right From Birth (Bryant, 2007; Bryant, Wesley, Burchinal, Sideris, Taylor, Fenson, Iruka, Hegland, Hughes, Tout, Zaslow, Raikes, Torquati, Susman-Stillman, Howes, & Jeon, 2009; Grace & Davis, 2007; Ramey & Ramey, 2008; Ramey, Ramey, & Timraz, 2008). The three-year study, which was funded by the Child Care Bureau, sought to examine the effects of providing on-site consultation on child care quality—the quality of the environment, providers' problem-solving skills, and children's language, cognitive, and social-emotional development. Each of the evaluations used the FDCRS to assess the impact of the individual consultation models, as well as the Preschool Language Scale IV (PLS-IV) to assess children's language development (Zimmerman, Steiner, & Pond, 2002). Findings from these two

¹⁵Participation also increased the commitment to continue with college-level course work, despite self-reported difficulties with literacy skills during the course assignments.

studies have important implications for how initiatives that aim to use this type of approach should be implemented.

Implementation. The PFI model consists of consultation with center teachers and family child care providers based on joint needs assessments between the consultant and the consultee with the ECERS-R, FDCRS, or ITERS-R. The consultees identified goals, which they attempted to achieve through a minimum of one monthly on-site visit with the consultant during a 6- to 12-month period. Consultants participated in five days of training and five follow-up seminars in the PFI model, as well as continued support from the PFI staff. Ninety-one consultants were randomly assigned to deliver the PFI services or those that were typically offered by their agency. The random assignment intervention was conducted in 24 sites in 5 states (California, Iowa, Minnesota, Nebraska, and North Carolina), with 181 center teachers and family child care providers in the treatment group and 188 teachers and providers in the control group.

The study found that, even after extensive training, about a quarter of the consultants failed to implement the model fully. Personal characteristics of the providers were not predictive of fidelity of implementation. The research team hypothesizes that factors at the agency level may be related to implementation—in particular, agency commitment to the project and support for consultants in implementing the model (Bryant, 2007; Bryant et al., 2009). To some degree, this hypothesis parallels findings about organizational commitment in studies of training programs.

Other factors that the research group hypothesizes may be related to limited fidelity to the PFI model are high caseloads, lack of materials, and staff who implemented more than one consultation model or did not have the relationship skills to work collaboratively with a provider on achieving the provider's goals. In addition, the researchers hypothesized that provider factors were also involved, especially home-based providers' lack of full awareness of the commitment they would be making to the program, in terms of the intensity and regularity of the consultation visits they would receive.

In the Right from Birth evaluation, a small sample of 32 family child care providers was randomly assigned to Right from Birth training in a workshop format or in an intensive 20-day coaching format. Observations of quality of care using the FDCRS occurred at baseline, 3 months, and 12 months. Child language development was assessed using the PLS-IV at baseline and 12 months. According to the evaluators, workshop leaders and coaches maintained a high level of fidelity to the model, delivery services at the intensity expected. Training and ongoing supervision by researchers may have supported this result.

Outcomes. Family child care providers receiving PFI demonstrated significant improvement on several dimensions of quality measured by the FDCRS—teaching and interaction, provisions for learning, and literacy/numeracy—over the course of the consultation period (Bryant et al, 2009). Treatment effect sizes were moderate. Providers in the control group showed no improvement. In addition, six months after the consultation ended, quality improvements among the PFI group of family child care providers persisted. Analysis using hierarchical linear modeling indicated that improvements in quality in the PFI group were greater for caregivers with more experience than for those with less experience. Despite promising findings on caregiver outcomes, PFI found no impacts on child outcomes.

Among family child care providers, Right from Birth had positive effects on quality in both the workshop group and the intensive coaching group between baseline and each of the observations (Ramey & Ramey, 2008). However, the intensive coaching group showed much greater gains—two

to three times those of the workshop group. The gains were sustained at one year for both groups. Like PFI, Right from Birth did not find positive impacts on child outcomes for children in family child care, despite promising findings on quality.

Home Visiting Models

Three of the studies we reviewed examined initiatives that use home visiting as a primary strategy to improve aspects of quality in home-based child care. ¹⁶ One examined the implementation of the Early Head Start Enhanced Home Visiting Pilot, an initiative that used home visits as a strategy to support family, friend, and neighbor caregivers of children enrolled in home-based Early Head Start programs. The other two studies aimed to assess the effects of specific home visiting models that had been developed for parents. One used Promoting First Relationships, a model that was designed for homeless families, with grandparent caregivers; the other, Caring for Quality, examined the effectiveness of the Parents as Teachers (PAT) model, which has been adapted for use with home-based caregivers. Each study used a different design: the Enhanced Home Visiting Pilot was a descriptive process evaluation; the Promoting First Relationships study was a pre/post comparison; and Caring for Quality was a quasi-experimental design with a treatment and a control group.

The Early Head Start Enhanced Home Visiting Pilot. In 2004, the Office of Head Start funded 23 home-based Early Head Start programs to implement the Enhanced Home Visiting Pilot, an initiative developed to support the quality of care that family, friend, and neighbor caregivers provided to infants and toddlers enrolled in Early Head Start (Paulsell et al., 2006). Although programs worked toward this common goal, each grantee designed unique initiatives that responded to the needs of its target population. Grantees' enrollment targets were modest, ranging from 10 to 50 across the sites. All the programs provided home visits to caregivers (in addition to the home visits they provided to parents as part of Early Head Start). Almost all grantees planned to provide home visiting at least monthly; most attempted to provide them biweekly. In addition, grantees held group training and support events and provided materials, equipment, toys, and books to caregivers. The average duration of caregiver enrollment was 9 months. On average, grantees completed about half the number of home visits per caregiver they had intended to provide each month. One-third of the caregivers attended at least one training workshop, support group, or play group. Two-thirds of caregivers received materials and equipment.

Several lessons learned from the evaluation of the pilot's implementation may be useful for designing an initiative for home-based caregivers (Paulsell et al., 2006). Some of these lessons parallel findings from other studies of efforts to improve quality in home-based child care that are discussed above. Results from the study suggest that hosting an initiative for home-based caregivers within programs for families with young children, such as Head Start or Parents as Teachers, may make it easier to recruit caregivers. Enhanced Home Visiting grantees found that, because they had already established positive relationships with the Early Head Start families, parents wanted their children's caregivers to enroll and often helped program staff recruit them.

¹⁶All three initiatives included group activities as a supplemental component.

The study found that several scheduling and other challenges hindered home visitors' ability to complete more than two visits per month, and some caregivers were reluctant to commit to more frequent visits. Caregivers responded positively to services that were individualized to their needs and the needs of children in care. In particular, caregivers responded well to child-focused visits in which the caregiver, child, and home visitor did an activity together. Group events provided important opportunities for learning and much-needed social interaction; tailoring events to the interests of caregivers and providing transportation and child care increased participation. Caregivers (and parents) responded positively to the toys, children's books, and materials provided or loaned by grantees. In-home observations conducted with the CCAT-R revealed that most of the caregivers' homes were safe and healthy and that caregivers engaged in safe practices, such as putting children to sleep on their backs. On the other hand, the observations indicated that electrical outlet covers and dangerous substances within reach were the most common safety hazards, a situation that could easily be remedied.

Finally, strengthening parent-caregiver communication emerged as an important focus of service delivery in nearly all the pilot sites. Home visitors implemented a range of strategies for improving communication and increasing consistency in caregiving practices between parents and caregivers. These included sharing information about the caregiver home visits with parents, conducting periodic joint visits, encouraging parents and caregivers to attend group events together, sharing consistent information about child care and development with both parties, and encouraging direct communication.

Promoting First Relationships. This initiative was intended as a pilot effort to test the effectiveness of the Promoting First Relationships (PFR: Kelly, Zuckerman, Sandoval, & Buelhman, 2003) curriculum, which aims to enhance awareness of children's social and emotional development, to improve child care quality among 20 low-income relative caregivers in Seattle, Washington (Maher, Kelly, & Scarpa, 2008; Maher, 2007b). The pilot was not expanded to a full research study because funding was not available. The sample of convenience consisted of grandmothers who were recruited through services agencies, child care centers, libraries, and local media. The services included weekly home visits or group meetings that were delivered for 8 weeks. The study used the Nursing Child Assessment Teaching Scale (N-CATS: Barnard, 1994) and the Center for Epidemiologic Studies Depression Scale (CES-D) in a pre-post comparison with 19 participants, along with questionnaires about changes. The findings indicated that there were significant decreases in caregiver depression, positive trends in changes in caregivers' behavior, and self-reported changes in caregivers' knowledge of child development, increased social support, and responsiveness to children. These results may be related to self-selection for participation in the pilot study: the caregivers who opted to participate may have been predisposed to change.

Caring for Quality. The Caring for Quality (CFQ) project used the Supporting Care Providers through Personal Visits curriculum, a version of the PAT curriculum for family child care providers to improve quality in home-based child care in Rochester, New York. It offered two home visits a month and network meetings for nine months to a year. Participants were recruited through phone calls to family child care providers and family, friend and neighbor caregivers who were providing care to subsidized children; fliers posted at local businesses; and announcements at trainings (McCabe & Cochran, 2008). The sample consisted of 97 providers—74 randomly assigned to the program group and 23 randomly assigned to the comparison group. The program group included 38 family child care providers and 36 family, friend and neighbor caregivers, while the comparison group included 15 family child care providers and 8 family, friend, and neighbor caregivers.

The evaluation consisted of pre-post observations with the FDCRS and questionnaires completed by the providers as well as questionnaires completed by the home visitors. Results indicated that there were improvements on the FDCRS scores from 3.94 to 4.25 in the program group, while those for the comparison group declined overall. Scores for family, friend, and neighbor caregivers in the program group also increased between the pre-test and the post-test, but the scores were lower than those for licensed family child care providers at the pre- and post-test. Engagement in the program, based on home visitors' ratings, was related to improvement in overall quality: three-quarters of the providers who were rated as more engaged showed increases in FDCRS scores, compared to 50 percent of those who were rated as less engaged.

The Caring for Quality study also assessed children's outcomes. All the children in the study were under age 5 and in care for at least 20 hours a week. Results indicated that children in regulated family child care in the program group had higher scores on the Peabody Picture Vocabulary Test (PPVT) in the post-test than those in family, friend, and neighbor care in the program group, and that a higher proportion of children in family child care in the program group in the post-test demonstrated more self-regulation on the Walk The Line Task and the Gift Wrap Task than those in the control group (MacCabe, 2007). The results indicate that a model based on PAT may have some potential for an initiative for home-based caregivers—family child care providers in particular—but the design and the small sample size suggest that the findings should be interpreted with some caution.

Initiatives That Use a Family Support Approach

In our review of the literature, we found some research on initiatives that use a family support approach to support home-based caregivers—primarily family, friends, and neighbors. These initiatives apply family support principles—participant-driven programming, services in the community, culturally responsive programming, and activities for participants and children together—to provide services for caregivers. Many include parents as well as caregivers. Findings from these studies may be useful for design of initiatives because some home-based child care looks closer to parent care than professional care, and caregivers may be attracted to these services for that reason.

We report here on three studies: (1) an implementation study of Sparking Connections, a two-year national demonstration project that used family support strategies to support family, friend, and neighbor child care (O'Donnell, Cochran, Lekies, Diehl, Morrissey, Ashley, & Steinke, 2006); (2) an evaluation of the Seattle Play and Learn Network, a family interaction program that provides opportunities for adults and children to engage in joint activities (Organizational Research Services, 2006); and (3) an evaluation of Tutu and Me, a family interaction program in Hawai'i that uses a structured version of the Play and Learn model to support Native Hawaiian grandparents and parents (Porter & Vuong, 2008).

Sparking Connections. The Sparking Connections evaluation reports on the experience of three pilot sites—Child Care Resources in Seattle, Washington; Minnesota's Child Care Resource and Referral Network, which used a combination of training and Play and Learn groups; and the Cherokee Nation in Oklahoma, which used PAT. Five "Learning Community Partner" sites—those that had participated in Sparking Connections but had not participated in the evaluation—reviewed the draft report and contributed comments and suggestions. Some of the findings parallel others we have reported earlier on efforts to support home-based child care.

The study found that the most effective strategy for recruiting caregivers was working with natural leaders in the community—individuals whom the participants trusted. Programs that used culturally respectful approaches (such as using caregivers' language and family support principles) were most effective at building relationships with caregivers, which in turn, contributed to increased recruitment and retention. Partnerships with other organizations were essential for making these connections. Among the service delivery strategies, those that brought services directly to caregivers through home visits or activities in the neighborhood were most effective at recruiting and engaging caregivers. Participants reported that providing opportunities for caregivers and families to meet together reduced isolation and contributed to the development of social networks.

Seattle Play and Learn Network. This initiative, which was part of the Sparking Connections evaluation, was also evaluated by an independent evaluator surveying parents and caregivers to assess whether they had gained any new knowledge as a result of their participation in the Play and Learn groups (Organizational Research Services, 2006). The study found that at least half of the 582 participants who responded to the survey—most of whom were parents—reported an increased understanding of how children learn through play, and how to help children "get along" with other children, two of the goals of the program. These results were associated with higher levels of participation in the program: parents and caregivers who attended fewer sessions reported less new knowledge.

Tutu and Me. The evaluation of Tutu and Me, another Play and Learn model, also showed positive results. The program, which is more structured ¹⁷ than many other programs that use the Play and Learn model, is intended to serve Native Hawaiian grandparents, although, like the Seattle Play and Learn network, most of the participants are parents. The evaluation, which used pre-post observations with the CCAT-R with a sample of 58 parents and grandparents, found that the program had a statistically significant impact on parents in terms of their engagement and use of language with children (Porter & Vuong, 2008). Positive trends were found for grandparents as well, although there were no significant differences. The evaluation hypothesized that the less robust results for grandparents may be related to lower engagement in the adult-child activities, because grandparents may bring greater experience with children to the program, and as a consequence, feel less pressured to be sure that their children "perform." The study results indicate that the model may have some potential for an initiative for home-based caregivers, but the limitations of the design—the small sample, the lack of a comparison group or random assignment, and the lack of effects on grandparents—point to concerns.

Summary Points

- The characteristics of initiatives for home-based caregivers vary by service delivery strategy, content, intensity, and funding sources.
- Studies of the implementation of initiatives for home-based caregivers point to some common lessons:

¹⁷In addition to opportunities for adult-child activities, Tutu and Me includes mini-lectures on aspects of child development that are accompanied by tip sheets, caregiver resource centers, and monthly activity calendars. Participants are required to enroll in the program, which is free, and can be dropped from it if they are absent three times without notifying the staff.

- Build on caregivers' interests and needs. Tailor services to individual caregivers: one size does not fit all.
- Relationships matter for caregiver recruitment—using natural leaders or organizations that are trusted in the community facilitates recruitment. Trust and rapport between the staff and the caregivers are crucial for continued caregiver participation.
- Use staff who have the skills and knowledge to deliver the services. Those who offer training need to have knowledge of the material, as well as an understanding of adult learning principles to deliver the training in ways that will meet caregiver needs. Those who offer home visiting need to have skills to develop relationships with caregivers, deliver the content of the program without becoming enmeshed in other issues that caregivers may present in these intimate settings, and maintain professional boundaries. Services should be culturally responsive.
- Bring services to the caregivers or provide transportation and child care to help caregivers participate in group activities. Provide opportunities for caregivers to meet together.
- Develop partnerships with other organizations in the community to provide additional services and supports, as well as to help with recruitment.
- Ensure that the implementing organization is fully committed to the project and that it will support the staff. Organizations need to integrate project services into their mission, culture, and operation rather than isolating services for home-based caregivers. In addition, they must build in adequate time for staff to provide the services—with opportunities for preparation of workshops or appropriate caseloads for home visiting; opportunities for in-service training; and regular supervision with opportunities for staff feedback and learning.
- Content should be tied to the goals of the initiative. If the initiative aims to improve the environment and caregiver practices, it should include topics about health and safety, as well as designing spaces for children and using appropriate materials. Topics related to caregiver practices should include information about children's development in all domains, facilitating positive adult-child interactions, and information on how to use activities to support children's development.
- Several studies of these initiatives suggest associations between participation in the initiatives and higher quality as measured by the FDCRS, the Arnett CIS, and the CCAT-R, but selection bias may influence the results. Moreover, most of the studies have small sample sizes and do not use rigorous designs; therefore, the results should be interpreted with caution.
- Two small studies of consultation initiatives found impacts on quality as measured by the FDCRS.
- Few studies have examined the effects of these initiatives on children's outcomes. The results of one study suggested that participation in workshops may improve attachment between children and caregivers; another suggested that caregiver participation in home visiting might be positively associated with children's language and cognitive

development, as well as self-regulation. Two studies found no impacts of consultation on child outcomes. However, like studies that assess caregiver outcomes, sample sizes are small and many study designs are not rigorous enough to provide strong evidence.

VI. FINDINGS FROM RELATED LITERATURE ON FAMILY SUPPORT, HOME VISITING, AND THE FAMILY CONTEXT

This chapter examines the literature in three primary areas—family support, home visitation, and selected research on parent well-being and child development—to identify how initiatives to support quality in home-based child care might be developed or strengthened based on research findings in these areas. Strategies that family support programs use to support parents in promoting positive child outcomes for their children warrant examination as potentially promising strategies for supporting home-based caregivers in promoting positive outcomes for the children in their care. As we noted earlier, home-based child care may share some characteristics with parental care—it is provided in the home, often to a mixed-age group of children who may be related or resemble a sibling group, and caregivers may be related to some or all of the children in care.

Family support programs are grounded in a family development model that is drawn from family systems theory, as well as an ecological view of child development that assumes that children develop within families and that families function within the community (Walker, 2005). Family and community culture is regarded as a significant factor in the family support approach (Emarita, 2006; Walker, 2005). Home-based caregivers may be members of a child's family and certainly part of the community in which the family functions. As noted in Chapter III, home-based caregivers are often from the same culture as the children in their care. If child care is regarded as a continuum, home-based child care holds a place between parents and centers (Porter & Rice, 2000). Therefore, family support strategies may be appropriate for supporting home-based caregivers, especially relatives and those whose primary motivation is to help their family members.

Home visiting is a service delivery approach often used by family support programs; we discuss it separately here to examine literature on its effectiveness as a strategy for supporting parents and to assess whether the findings might be relevant for initiatives to support quality in homed-based care. Indeed, as noted in Chapter V, many initiatives for supporting home-based caregivers have used home visitation to deliver services. This strategy might be particularly appropriate for caregivers who are relatives or who do not see themselves as professionals who need training or credentials, and thus may not be interested in participating in more formal training or consultation initiatives. Home visiting may also be an appropriate strategy for reducing isolation and providing information and support to caregivers who cannot attend programs outside the home because of caregiving responsibilities, commitments to other work outside the home, or transportation barriers.

Most of the literature on home-based child care focuses on caregiver outcomes. In this chapter, we also review selected literature on work-family balance issues, parent well-being, and child development. Our purpose is to examine research findings on parent and child outcomes included in our logic model that have not been measured in studies of home-based child care. In consultation with OPRE and our TWG, we included in the project logic model several outcomes that we hypothesize may be positively supported by some of the unique features of home-based child care (see Table I.6). For example, research shows that many parents use home-based child care in part because it is flexible and convenient, especially for parents who work changing or nontraditional schedules. Therefore, we hypothesize that high-quality home-based care may help families balance work and family responsibilities and reduce parent stress. We also hypothesize that high-quality home-based care may, due to the presence of mixed-age groups and shared culture between families and caregivers, promote children's self-regulation, social competence, and positive racial and ethnic identity.

Literature on Family Support Programs

Family support programs typically aim to improve child outcomes by enhancing parenting capacity. They use a wide variety of strategies, including home visitation (examined in more detail in the next section), parent-child activities in a group setting, peer support groups, and parent training. While many programs espouse family support principles—such as participant-driven services, mutually respectful relationships, and a strengths-based approach to working with families—some research has examined a set of programs that explicitly identify themselves as family support programs. In this section, we summarize findings from research on family support that is drawn from two studies—a meta-analysis of evaluations of family support programs (Layzer, Goodson, Bernstein, & Price, 2001) and a smaller study that examines evaluations of 13 "family-strengthening" programs (Caspe & Lopez, 2006).

The meta-analysis of family support programs in the United States, Great Britain, and Canada sought to determine their effects on families and children, as well as to identify the effectiveness of different kinds of programs and services (Layzer et al., 2001). It included 665 studies associated with 260 programs and analyzed data for five parent outcomes (parenting knowledge, behavior, family functioning, adult mental health/health risks, and family economic self-sufficiency) and four child outcomes (cognitive development and school performance, physical development and health, child safety, and social-emotional development). The meta-analysis only included evaluations that used experimental or quasi-experimental designs—that is, studies that compared a group of families who received the services with group who did not, or that compared a group of families who received one set of services with a group of families who received another set.

The study found that nearly all the programs had a two-generation focus: they aimed to support parents and promote the healthy development of their children (Layzer et al., 2001). Approximately half aimed to serve low-income families, like many of the families who use home-based child care and the caregivers who provide it. Another quarter served families with young children born at a low birth weight and/or with developmental delays. Research indicates that home-based caregivers may serve a relatively high proportion of children with special needs (Paulsell et al., 2006; Brandon et al., 2002).

The study identified four primary family support service delivery methods—home visiting, parent meetings or classes, parent-child activities, and group education for children. There was considerable overlap between family support programs and home visitation: nearly half of the programs provided primary support through home visits, and another 12 percent provided home visits in addition to other services. Almost 60 percent offered classes or workshops for parents, and another quarter offered group activities for parents and children. Some of these approaches—home visiting and parent-child activities, for example—have also been used in initiatives for home-based caregivers.

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¹⁸Only a fifth of the programs indicated social supports for parents as a goal, and a slightly smaller proportion—17 percent—indicated health care as a goal. Those that aimed to improve child behavioral outcomes accounted for only 2 percent of the total.

Intensity and duration of the programs varied widely. On average, programs provided services for 15 months, but more than half intended to provide services for less than a year, and most of those intended to provide services for less than six months. Programs provided an average of 60 hours of parenting education, but the range of hours across programs was wide, with a third of the programs providing less than 20 hours and another third between 20 and 40 hours. As described in Chapter V, the duration and intensity of initiatives designed to support quality in home-based care also varies, with many initiatives offering services for six months at varying levels of intensity.

Most family support programs relied on professional staff—those with formal education and training—to deliver services. Approximately one-third used paraprofessionals. Slightly more than a quarter of the professional staff were social workers or trained counselors, another fifth were medical personnel such as doctors or nurses, and slightly less than a fifth were teachers. In contrast, most initiatives for home-based caregivers rely on trained early childhood educators.

Using health professionals may be appropriate for initiatives for home-based care, depending on the anticipated outcomes. For example, it may be effective to use mental health workers if the outcome targeted for intervention is improved caregiver mental health; doctors or nurses may be appropriate staff for initiatives for children with developmental delays or other special health care needs. On the other hand, if the objective of the initiative is to improve caregiver knowledge of child development and developmentally appropriate practices, it may be more appropriate to use early childhood specialists as staff.

The meta-analysis found that, overall, family support programs produced modest benefits. There were small, but statistically significant, effects in all five parent outcome domains. A small group of programs, however, accounted for the average effect; in each domain, more than half of the programs reported effect sizes smaller than .20. The findings also indicated that family support services can be most effective with especially vulnerable populations (such as teenage mothers with young children) or families whose children have special needs or behavior problems. Moreover, findings suggest that family support programs are effective in promoting children's cognitive development and school readiness outcomes only if they supplement services to support parents with services provided directly to children, such as center-based preschool (Layzer et al., 2001).

Another smaller study also examined outcomes from a group of programs with a "family-strengthening" component that were included in the Department of Health and Human Service's Substance Abuse and Mental Health Services Administration database (Caspe & Lopez, 2006). This study examined evaluations of 13 programs that met criteria for a content focus on children's academic achievement; family-strengthening components such as parent-child workshops and parent-child trainings that aimed to effect child outcomes through changes in family behaviors and environment; a theoretical framework based on research evidence about the relationship between psychological and social factors and behavior changes; and a quasi-experimental evaluation design. Among the programs were Strengthening Families, which aimed to serve 3- to 17-year-old children with behavior problems; High Scope, a preschool program model; and Dare To Be You, a program for ethnically diverse preschool settings.

The study found that these types of programs can have impacts on four parenting processes: (1) the family environment (characteristics of the home, parents' well-being, and the availability of routines and structures); (2) parent-child relationships (involvement, bonding, and communication); (3) parenting (childrearing practices, discipline); and (4) family involvement in learning at home or in school. It also found that these programs can have an impact on child outcomes (conduct,

emotional problems, social competence, self-control, social skills, and school achievement) if they are part of large, comprehensive interventions that include multiple services to effect children's outcomes (Caspe & Lopez, 2006). The study also identified three program characteristics—opportunities for parent-child bonding, culturally sensitive recruitment, and staff preparation—that are associated with positive results.

Findings from these two meta-analytic studies have some implications for initiatives to support quality in home-based child care. If caregivers respond to the family support-type services as parents in these studies did, initiatives based on a family support approach could have modest effects on such outcomes as caregivers knowledge, behavior, and well-being and on such child outcomes as improved social competence, self-regulation, and social skills. The findings also suggest that intensive services may produce larger effects, and that family support services may be more beneficial for especially vulnerable children, such as those with special health care needs.

The findings also point to some directions for program design in home-based care initiatives. The conclusion of Caspe and Lopez (2006) that culturally sensitive recruitment and staff preparation—that takes into account language, mores, and values—are linked to results reflects some of the findings from studies of implementation in initiatives for home-based care, and suggests that these are important characteristics of an initiative for home-based caregivers. The findings also suggest that using family support approaches with caregivers may not be enough to positively affect children's cognitive and school readiness outcomes. Supplementary services, such as high-quality preschool, may be necessary if these outcomes are targeted (Layzer et al., 2001).

Literature on Home Visiting Programs

In our search of the literature, we found two studies that consider the outcomes from a broad range of home visitation programs. One is a literature review of programs in the United States that provide home visits to families with pregnant women, newborns, or children under age 5 (Gomby, 2005). The other is a meta-analysis of evaluations of 60 home visitation programs that were implemented and evaluated since 1965 (Sweet & Appelbaum, 2004). Both studies report mixed results on the effects of these programs on parent and child outcomes.

The home visiting literature review included descriptions of programs with three different goals: (1) promoting child health and development and/or preventing child abuse and neglect; (2) enhancing school readiness in combination with early childhood education services such as preschool; and (3) improving child health as part of enhanced pediatric practice (Gomby, 2005). The author suggests that the popularity of home visitation programs has been driven, in part, by studies of a few programs, such as Nurse Family Partnership, that demonstrated long-term benefits for both parents and children (Olds, Kitzman, & Cole, 2004; Olds, 2002). Most evaluations have assessed only short-term outcomes. The results are mixed and vary widely across programs with different goals and models, among sites implementing the same model, and across families within a single program site.¹⁹

19The review included the following home visiting programs: Nurse-Family Partnership, Parents as Teachers,

Parent-Child Home Program, Home Instruction Program for Preschool Youngsters, Healthy Families America, and Early Head Start. In addition, the review draws on the family support meta-analysis cited earlier (Layzer et al. 2001), the

Like the meta-analysis of family support programs, Gomby's review found that most home visiting programs produce only modest benefits for parents (parenting knowledge and attitudes, stress, social support and mental health, and economic self-sufficiency and education), and children (child health and nutrition, health and safety, cognitive and social-emotional development) with small effect sizes. They appeared to benefit families most when the initial need was greatest and/or when parents believed that their children needed the services—such as programs that served parents whose children were born at a low birth weight, for example, or whose children had special needs or behavior problems that parents were trying to address. Similar to findings on family support programs, children also seemed to benefit more in cognitive and school readiness outcomes if home visiting services were offered in conjunction with direct early childhood education services for children.

The meta-analysis reached similar conclusions, although it did not include home visitation programs specifically designed to serve families with children with developmental delays, physical challenges, or chronic illnesses (Sweet & Appelbaum, 2004). The study analyzed articles from several databases, as well as coded data from home visiting programs included in the Layzer et al. (2001) family support meta-analysis. Among the initiatives in the analysis were several national parenting education programs, such as the Parent-Child Home Program, the Home Instruction Program for Preschool Youth (HIPPY), Parents as Teachers, and the Parent and Teachers Together project. It analyzed data for five parent and five child outcomes, and identified effective program features.

The study found evidence of some positive effects on parent and child outcomes, but effect sizes varied widely, with modest average effect sizes for two outcomes for parents (parenting attitudes and behavior) and three outcomes for children (child cognitive and socioemotional development and abuse). The program features that contributed to these effects, however, were unclear. There were no clear patterns about the program characteristics—single-site or multisite, staffing type, or location—that were associated with these effects, and analyses by the types of families that programs aimed to serve or their goals were inconclusive.

The findings from these two reviews of studies of home visitation are similar to those for family support programs. Home visitation may have modest effects on such caregiver outcomes as caregiver knowledge, behavior, and attitudes. Again, like the conclusions from the research on family support, the findings seem to indicate that certain program characteristics, such as staff preparation, strong curricula, and intensive services, may produce larger effects.

Findings from Related Literature on Parenting and Child Development

As stated earlier in the chapter, we also reviewed selected literature on work-family balance issues, parent well-being, and child development to examine research findings on selected parent and child outcomes included in our logic model that have not been measured in studies of home-based child care. In consultation with OPRE and our TWG, we included in the project logic model several outcomes that we hypothesize may be positively supported by some of the unique features of

Sweet and Appelbaum meta-analysis (2004), and a meta-analysis of international programs (Elkan, Kendrick, Hewitt, & Robinson, 2000).

⁽continued)

home-based child care (see Table I.6). The patterns of use of home-based child care as described in Chapter II, for example, indicate that families use this type of care in part because it meets their work schedules. Therefore, we reviewed articles about work-family issues to explore how an initiative to support home-based child care might support parents in balancing work and family responsibilities. We also hypothesized that an initiative for home-based care might have an effect on parent's knowledge of child development through a close relationship between the parent and caregiver. As a result, we found some articles related to parent efficacy, which may be affected by this knowledge. These associations, however, are necessarily somewhat speculative, depending as they do on assumptions about the transferability of findings from one research area to another.

The characteristics of children in home-based child care—often mixed-age and sibling groups—also pointed to some possible child outcomes beyond those that have been measured in studies of child care quality (although, as noted in Chapter IV, most studies of quality in home-based child care do not include assessment of child outcomes). These outcomes might include improved social skills and self-regulation, which are also identified in the family support literature. In addition, because home-based child care is culturally diverse, and the characteristics of the caregivers often mirror those of the families, we posited that home-based child care might contribute to children's positive racial and ethnic identification.

Literature on Work-Family Issues

One of the dual goals of the CCDF subsidy program is supporting parental employment. Several studies have examined how parents use the child care subsidy system and the degree to which it meets low-income parents' needs. In some cases, these studies go beyond the issue of satisfaction with care to pose questions about whether child care settings accommodate work schedules and transportation needs, whether the care is dependable and reliable, and whether parents perceive caregivers as understanding their needs. These findings provide insight into ways that initiatives for home-based care might help parents balance work and family.

The Three-City study sought to examine this issue in interviews with 181 mothers receiving welfare with young children who were enrolled in child care centers, regulated family child care, and unregulated care settings (Coley et al., 2001). The study used 5-point scales to measure parents' satisfaction with care (whether the setting was safe, warm, and healthy); accessibility (perceptions of choice that met her expectations, the degree of transportation problems, and access to a provider who shared her values); flexibility (how flexible caregivers were about scheduling); and the communication between the parent and the provider (the level of communication and degree of emotional support the parent provided). Unregulated caregivers were rated highest on all four dimensions, with regulated family child care ranking second, ahead of center care.

Another study of rural low-income working mothers found similar results (Reschke & Walker, 2005). The 42 mothers in the sample relied on their own mothers for care. The flexibility of the care—during nontraditional hours, unpredictable work schedules, and when children were ill—was regarded as one of the most positive aspects of the child care arrangement.

Other research from caregivers' perspectives supports the notion that parents consider accessibility and flexibility to be important elements of quality. One qualitative study of the ways in which 29 providers in Chicago—including regulated family child care providers, centers, and family, friend, and neighbor caregivers—supported parents' work and economic well-being found that providers play a variety of roles (Bromer & Henly, 2009). It found that family, friend, and neighbor

caregivers, in particular, offered flexible hours and days for care; helped make alternative child care arrangements when parents needed it; and helped with transportation, grocery shopping, and even children's doctor appointments. Another study of providers in the subsidy system, including home-based providers, found that they made adjustments around payment to help families who were struggling (Adams, Rohacek, & Snyder, 2008).

Several small studies have found similar results. In one series of focus groups, family, friend, and neighbor caregivers reported that they took children to doctors' appointments and that they provided additional concrete services, such as cooking for the family when the parents came home from work (Porter et al., 2003). Research with a sample of grandparent caregivers in Hawaii also found that support for the family extended beyond child care (Porter & Vuong, 2008). Most reported that they provided transportation for the children and did other chores, such as paying the bills and picking up prescriptions. Eighty percent of caregivers observed as part of the Enhanced Home Visiting Evaluation reported providing other support to families, in addition to child care, such as running errands and cooking meals (Paulsell et al., 2006). Some research indicates that providers, especially regulated family child care providers and family, friend, and neighbor caregivers, may also offer non-concrete supports such as parenting and childrearing advice as well as marital advice and health information (Bromer, 2005). This evidence suggests that home-based care may be valued by parents because it helps them balance work and family. Initiatives to support quality in-home-based child care may help caregivers to strengthen their support for parents by providing caregivers with strategies to enhance the flexibility of these arrangements. We discuss these strategies in the next chapter under emerging areas for development of initiatives. Moreover, initiatives to support quality in homed-based care should be careful not to recommend changes in the caregiving arrangement that would limit flexibility and accessibility of these arrangements to families.

Parent Well-Being

Research on parent well-being has implications for both caregiver and parent outcomes in home-based child care. Confidence that child care may meet scheduling needs, and the attendant job security and income, may contribute to parents' psychological well-being. Improved well-being may, in turn, contribute to better outcomes for children. A number of studies have demonstrated an association between parental mental health and child outcomes, especially those related to socialemotional development and cognitive development (Halle, Zaff, Calkins, & Margie, 2000; Maccoby, 2000; McLoyd, 1998). Several studies have established a link between maternal stress and infants' attachment and preschoolers' development (Coyl, Roggman, and Newland 2002; Jackson, Brooks-Gunn, Huang, & Glassman., 2000). Similar arguments could apply to caregivers: less stress in a caregiving role and increased income could contribute to improved well-being, which may have an impact on children's well-being. There is also some evidence that parental self-efficacy—parents' views of their own effectiveness in rearing their children—is linked to parental competence, and, to a lesser degree, parent well-being (Jones & Printz, 2005). Because self-efficacy can affect parental competence, it can have an effect on children's development. Caregivers, too, may not have confidence in their own effectiveness, which may have an effect on the children in their care. These hypotheses, are speculative, however, and would need to be tested in the context of an evaluation of an initiative that aims to reduce parent and caregiver stress, and increase self-efficacy.

An initiative for home-based caregivers may be able to address both of these issues.²⁰ An initiative could, for example, aim to reduce caregiver stress by providing opportunities for interaction with other adults and support in stress management techniques. An initiative could also reduce stress associated with financial issues by helping caregivers gain access to the subsidy system or increase enrollment in their child care businesses. Reduction of parent stress could be targeted by aiming to address parents' scheduling needs. Offering information about how children develop, how to set limits for children, and how to deal with behavioral issues may enhance caregivers' confidence in their own abilities and their own self-efficacy in caring for children. To the extent that caregivers share this information with parents, parent self-efficacy could be targeted as well.

Children's Self-Regulation

While both parenting and child self-regulation are factors in the formulation of social competence, parenting styles have also been found to affect a child's ability to self-regulate. When mothers set limits and teach children the reasons for the limits, the children demonstrate self-control on a more consistent basis at ages 3 and 5 (Houck & Lecuyer-Maus, 2004). When limit-setting was based on the mother's power over the child, adverse affects were found for later self-imposed control (Houck & Lecuyer-Maus, 2004). Thus, how parents approach the task of setting limits on a child influences the child's ability to engage in self-regulation at a later date (Houck & Lecuyer-Maus, 2004). This may apply to caregivers as well.

Parenting is partially dictated by societal factors, and different cultural communities can encourage self-regulation with different levels of priority. Parenting for children as young as 3 months old can affect how soon children develop self-regulation and self-recognition at 18 to 20 months (Keller et al., 2004). Keller et al. (2004) found that a culture that encourages development of an interdependent self raises children who develop self-regulation earlier than their peers raised in other cultures. Families who encourage independence see earlier developments of self-recognition in children (Keller et al., 2004). The emphasis that parents and society place on different values can thus facilitate how children learn to self-regulate. Home-based care may be particularly suited to improving children's self-regulation because caregivers often share the culture of the parents and the children. As a result, the values that the caregiver promotes may parallel those of the family. This consistency may contribute to strengthening of children's self-regulation.

Children's Social Competence

The development of social competence in children depends on a variety of factors—children's ways of relating to peers are dictated by the different social contexts that they experience. Individual differences in the child's personality, temperament, and self-regulation influence how peers may respond to that child. Parents, siblings, and friends all help in the formulation of social competence by shaping the child's approach to interactions. Lengua, Honorado, and Bush (2007) found the level of a 3-year-old's social competence could be predicted by the self-regulation the child showed six

²⁰A model for how this kind of family-sensitive caregiving might affect parent outcomes is posited in a forthcoming volume on new measures for child care quality (Bromer, Paulsell, Porter, Weber, Henly, & Ramsburg, with Families and Quality Workgroup members. (Forthcoming.) In *Measuring quality in early childhood settings*. Brooks Publishing.

months earlier. In addition, mothers' parenting styles that demonstrate positive affect and interactivity could predict social competence in the child six months later. These findings could be applied to home-based care, because caregivers may have a close relationship with the child and can help in the development of social competence.

One of the earliest forms of socialization that children experience is with their siblings. How children interact with siblings can affect their aggression tendencies, the ways they communicate, and their style of play. Ostrov, Crick and Stauffacher (2006) found that an older sibling's use of relational or physical aggression predicted the aggressive tendencies of their younger sibling. Siblings also help children develop language skills through interaction and play. Children who demonstrated successful communication with siblings also possessed social cognitive skills and the ability to engage in pretend play (Cutting & Dunn, 2006). McAlister and Peterson (2006) found that children with child-age siblings show greater ability to engage in pretend, imaginative play than only children or children with adult siblings. Childish interactions can thus accelerate a child's use of his or her imagination.

Sibling interactions also prepare children for interpersonal relationships when they enter school. Downy and Condron (2004) found that children with at least one sibling negotiated peer relationships better upon entering kindergarten. Through sibling interactions at home, children learn and sharpen the interpersonal skills they require to succeed outside the home (Downy and Condron, 2004). Home-based care is in an almost unique position to promote these relationships, because siblings may be placed with the same caregiver. Moreover, the mixed-age groups of children prevalent in home-based child care offers opportunities for interactions and play similar to those of siblings in a home-like setting.

Racial/Ethnic Identity

Many studies have recognized the impact that race and culture have on the development of children. How parents and the community they socialize in express and teach their children about race and ethnicity lays the groundwork for identity formation. The rules and regulations within a cultural frame provide children with guidelines for behavior (Super and Harkness, 2002). Children gain knowledge about their ethnic-racial group through everyday activities as a source of their cultural socialization, which helps promote positive attitudes about their heritage (Hughes et al., 2006). Family socialization influences the formation of ethnic identity and can affect one's self-esteem (Hughes et al., 2006).

Ethnic socialization can produce various forms in which individuals transmit cultural beliefs. Cultural socialization within parental practices and routines shaped by racial/ethnic heritage and history promote children's cultural customs, traditions, and their ethnic pride (Hughes et al., 2006). Strong ethnic identification encourages emotional resilience in youth, which has positive developmental implications (Quintana et al., 2006). Socialization of racial pride is associated with fewer reported behavior problems, which can indirectly affect children's success in school (Hughes et al., 2006). Racial socialization has also been associated with greater cognitive skills in younger children (Caughy et al., 2002) and academic achievement in adolescents (Hughes & Chen, 1999). To the extent that caregivers and the children in their share the same racial/ethnic identity, home-based child care may provide an opportunity to support positive racial/ethnic socialization.

Summary Points

- Family support and home visiting initiatives that aim to improve outcomes for parents and children may have potential for supporting quality in home-based care, because home-based child care shares some characteristics with care within the family.
- Studies of family support and home visiting initiatives show modest effects on a range of
 parent and child outcomes. The studies indicate family support programs are effective in
 promoting children's cognitive development and school readiness outcomes only if they
 supplement services to support parents with services provided directly to children, such
 as center-based preschool.
- The research shows that family support and home visiting initiatives are most effective with families who are most in need of services or those who perceive that their need is great.
- The home visiting literature suggests that initiatives can be more effective if they rely on solid curricula, focus on staff preparation and in-service training, and offer an intense level of services.
- Research on work-family conflicts, parenting, and aspects of child development suggest potential areas for an initiative for home-based caregivers to address.

VII. NEW DIRECTIONS FOR RESEARCH AND DEVELOPMENT IN HOME-BASED CHILD CARE

Our review of the literature indicates that there are significant gaps in the research on home-based child care and the initiatives designed to improve its quality. Some gaps are related to policy issues, others to programmatic issues, and still others to measurement of quality. These areas can, and do, overlap. Program issues—for example, design and implementation—can be a function of policies. Questions of quality—how to measure it and what anticipated outcomes can or should be expected—can also be related to policies—as well as program fit.

The lack of research on some of these issues may be the result of several factors. One reason is historical. As we have noted earlier, the focus on family, friend, and neighbor care—the most prevalent type of home-based care—is relatively new: most of the studies have been conducted since 2000. In addition, less attention has been paid to regulated family child care—another aspect of home-based care—than to center care. Another factor is emerging concern within the child care field about how to define and measure quality, and the extent to which current measures assess dimensions of care that are strongly related to child outcomes. The appropriateness of some measures in particular settings is another aspect of this issue. There is also growing awareness that culture (including language, beliefs, values, and practices) plays a significant role for children, families, and caregivers in our increasingly diverse society, and that it warrants consideration in how we provide and assess child care.²¹

In this final chapter, we describe the primary gaps in the literature on home-based child care identified by our review. We also suggest a set of new directions for developing initiatives to support quality in home-based child care related to targeted outcomes for caregivers, parents, and children. The chapter concludes with a discussion of next steps for developing one or more initiatives to support quality in home-based child care that can be systematically implemented and rigorously evaluated.

Gaps in the Literature

In this section, we discuss key gaps in the literature on home-based child care. These include a lack of (1) meaningful definitions for different types of home-based child care, (2) a clear definition of quality in home-based child care and tools for measuring quality, and (3) reliable evidence about the effectiveness of strategies to improve quality in home-based child care.

²¹For example, a recent report, which was intended to inform recommendations for implementation of Minnesota's Early Learning Standards for diverse cultural communities, explored the values that families hold for the children's development and the practices they use to promote it (Emarita, 2006). It found that families across the four cultures—Hmong; Latino-Mexican-Chicano; African American; and American Indian Obijwe—aimed to foster emotional intelligence to help children form relationships, self-mastery, and spiritual values of empathy, reciprocity, and cooperation.

Variation in Definitions of Home-Based Child Care

Variation in definitions of home-based child care across states—distinctions between care that is regulated (family child care) and that is legally exempt from regulation (usually referred to as family, friend, and neighbor care)—have been well documented in many studies and policy reports. Although relatives are exempt from regulation in all 50 states, there is wide variation in regulations for individuals who care for children who are not related to them. The differences across states between who is regulated and who is not have created challenges in conducting research and interpreting the findings. For example, it is difficult to compare findings on the quality of care across studies because samples of caregivers who may be providing child care as regulated family child care providers in one state might be license-exempt in another. In addition, this situation confounds our understanding of the outcomes of initiatives that aim to improve quality in home-based care: we do not know if initiatives that have produced positive results for family child care providers in one state might produce similar results with unregulated providers in another.

Thus, categorization of home-based caregivers into regulated family child care providers and family, friend, and neighbor caregivers is not a useful framework for developing initiatives to support home-based caregivers. As discussed in Chapter I, we suggest an alternative categorization of home-based caregivers according to characteristics that, unlike regulation, are not as likely to vary by state (see Figure I.3) and can inform identification of caregivers' needs and guide provision of more targeted services. These characteristics include the purpose of care provided, the schedule and intensity of care, and the characteristics of the children in care. They also include other caregiver characteristics, such as their relationship to the children in care, motivation for providing care, interest in professionalism, and training and educational background. An understanding of these characteristics may be useful for defining services that are responsive to caregivers' needs for support and may influence an initiative's service intensity, content and targeted outcomes, and service delivery strategies.

Defining and Measuring Quality in Home-Based Child Care

One of the significant research questions that has emerged since 2000 is how to measure quality in home-based child care. This issue is related, in part, to the notion that child care provided by family, friends, and neighbors—relatives in particular—may be different from child care provided by regulated family child care providers. Although the two types of caregivers may share some of the same characteristics, their motivations for providing child care and the nature of the arrangements they make with parents may differ. In addition, while both types of caregivers provide care in a home, there may be some differences in the caregiving environment, because regulated family child care providers must comply with specific regulations for health and safety from which relative caregivers are exempt. As a result, some researchers have argued that measures such as the FDCRS, an instrument designed for regulated family child care that has commonly been used in studies of both regulated family child care and family, friend, and neighbor care, may not be appropriate for settings exempt from regulation (Maher, 2007a; Porter, Rice, & Mabon, 2003; Porter, Rice, & Rivera, 2006). Moreover, some researchers and practitioners suggest that environmental rating scales like the FDCRS may not adequately capture some unique features of relative care that are positive for the child, such as a warm and sustained relationship between a young child and a grandparent, in which the grandparent has an in-depth understanding of the child's cultural background, home life, health conditions, and family (Maher, 2007a; Porter et al., 2006; Shivers, 2006).

In response to this concern, several new child care quality measures have been developed that use time sampling to assess the frequency of specific child-adult interactions with a focal child rather than a global assessment of quality. These new measures may come closer to capturing dimensions of quality related to relationships and interaction between children and caregivers than the environmental rating scales. These measures include the ORCE (NICHD ECCRN, 1996), the C-COS (Boller et al., 1998); the CCAT-R (Porter et al., 2006), and QUEST (Goodson et al., 2005). Two of these measures—the CCAT-R and QUEST—were developed specifically to measure quality in home-based child care that may be exempt from regulation. In addition to time sampling, these measures include checklists for health, safety, and materials that the developers believe are appropriate for assessing the quality of unregulated home-based child care environments.

While these measures might provide information that adds to our knowledge base about quality in home-based care, all of them are new and have been used in only a few studies. Much more work needs to be done to understand whether they measure features of child care that are linked to child outcomes and to validate them with more established measures.

Other pressing questions about quality measurement, in both home-based and center-based child care, still remain unanswered. Culture is acknowledged as a major factor in children's development, but research on this aspect of child care is just beginning to emerge. Nor is there much work on the relationship between caregivers' physical and mental health on the quality of child care or the role, if any, that the caregiver-parent relationship plays in quality. In addition, the research on the relationship between quality measures and specific measures of child outcomes is sparse, although the body of research is expanding.

Effective Strategies for Improving Quality in Home-Based Child Care

One of the clearest gaps in the literature about home-based care is the lack of evidence of the effectiveness of strategies for improving quality in these settings. There are a small number of studies on the outcomes of initiatives to improve quality in regulated family child care, and only a few studies have examined this issue in family, friend, and neighbor care, although new research is emerging. As noted in Chapter V, the lack of information from carefully conducted implementation studies and rigorously designed evaluations of quality improvement initiatives limits our understanding of strategies that can work with different caregivers under different circumstances. As a result, there is little clear guidance about how to best support home-based caregivers, including both those who are not interested in a career in child care and those who seek to become professionals. We do not know whether single approaches work better than a combination, the kinds of recruitment strategies that are most effective for attracting caregivers with different characteristics, or the characteristics and qualifications of staff that are needed to deliver the services. Little research has been done on initiatives that aim to support school-age children in home-based care or how initiatives that aim to improve quality in home-based child care address the needs of school-age children. In addition, as we noted earlier, not much work has been done on how initiatives to address caregiver-parent relationships or work-family conflicts.

In addition to the gaps in broad information about strategies for improving quality in home-based child care, there is little information about specific issues that are emerging on the policy landscape. One is the effect of unionization on home-based care, another is the role of quality rating and improvement systems and their impact on home-based care, and a third is the role of incentives (such as tiered reimbursement) on quality and caregivers' participation in education and training activities.

New Areas for Development in Initiatives for Home-Based Child Care

The literature review points to several areas that might be considered for further development of initiatives to support quality in home-based child care. These areas are related to a conceptualization of quality in home-based child care that builds on some of the potential strengths of home-based child care and the unique benefits these kinds of arrangements can provide for children and families. For example, as noted in Chapters II and V, home-based child care has the potential to support parents in meeting their family and work responsibilities. Another characteristic of home-based child care is the presence of mixed-age groups of children, including siblings, in a warm, family-like setting. This environment has the potential to support social-emotional aspects of children's development, and our project logic model includes these potential outcomes (see Table I.6). In the rest of this section, we suggest new areas for development of initiatives to support home-based child care that target specific outcomes for caregivers, parents, and children. These include improved caregiver-parent relationships, work-family balance, links to center-based child development services, and initiatives targeted to mixed-age groups of children.

Improved Caregiver-Parent Relationships

One theme that emerged from the literature review is the importance of caregiver-parent relationships in home-based care. As noted in Chapter III, several studies have found that home-based caregivers consistently report conflicts with parents as a challenge they face. These conflicts can be related to schedules and payment, as well as differences in childrearing practices (such as discipline, feeding, toileting, and sleeping).

The relationship between caregivers and parents may be particularly salient for home-based care because it is a distinguishing feature of these child care arrangements. The caregiver is often related to the parent—her mother or sister, for example—or the relationship can evolve into a close friendship in which the parent turns to the caregiver for advice about a wide range of issues, including care of her child. These relationships can have positive benefits for parents—emotional and concrete support and guidance, for example—but they can create tensions as well, as caregivers attempt to resolve boundary or role issues. Poor relationships may have an effect on the child, such as when conflicts result in the abrupt end of a child care arrangement and thus the child's close relationship with a caregiver. Disagreements about care routines or behavior management may also result in inconsistent routines and behavior expectations for a child across home and care settings. In addition, children may be exposed to tension from both caregivers and parents if there is conflict in the relationship.

At the same time, few initiatives to support quality in home-based care have addressed the relationships between parents and caregivers, and communication between the two in particular. Only a small number have included topics on these issues, and those were intended for specifically family, friend, and neighbor caregivers (for example, the Enhanced Home Visiting Pilot).

The significant role that this relationship may play in home-based care suggests that it warrants more attention. Initiatives for home-based caregivers could include specific content to help caregivers communicate with parents about childrearing practices, negotiate conflicts, and address other issues. In addition, initiatives could develop strategies to inform parents about the learning activities in which the caregivers are engaged and to provide opportunities for parents to engage in these activities at home, thus strengthening alignment between the child's experiences in both settings.

Identifying improvement of caregiver-parent relationships as an outcome for initiatives for home-based caregivers also has implications for program staff implementing an initiative. Staff need knowledge about how to maintain their own relationships with caregivers without taking one side or another; they need skills to maintain their own role without becoming enmeshed in family conflicts; and they need support to relieve the stresses that may be related to difficult situations. This requires additional training for those staff who may lack this knowledge and skills, and it requires agency support for staff in their work.

Work-Family Conflicts for Parents

Another theme that emerges from the literature review is related to parent outcomes, especially difficulties balancing work and family obligations. The flexible schedules of some home-based care arrangements—during nontraditional hours, nights, and weekends—is one of its potential strengths. There is some evidence that this flexibility may benefit parents whose work hours are neither standard (from 8 a.m. to 6 p.m.) nor consistent (from Monday to Friday). Caregivers' willingness to accommodate schedules may allow parents to hold a job and maintain their income. The literature suggests that economic instability and low income can be factors in maternal stress, which is associated with child outcomes. In addition, regular stable employment provides economic resources that can benefit children.

Initiatives to improve child care quality have not often considered parental work-related stress as a potential target outcome, although child care is viewed in part as an employment support for parents. How child care meets parents' needs and the role that caregivers can play in improving parents' capacity to work represent another area that initiatives for home-based caregivers can address. ²² Programs can help caregivers develop an explicit understanding of parents' work-family needs by discussing schedules, learning about other child care arrangements in which the children may participate, helping develop back-ups plans, and offering information about additional supports that may be available in the community.

Links to Center-Based Child Development Services

As noted in Chapter V, literature reviews and meta-analyses of family support and home visiting programs suggest that such programs have the potential to have modest effects on parent knowledge, attitudes, and behaviors. Only programs that included a direct service component for children, such as center-based child development services, had effects on child outcomes. If such strategies are used in programs to support home-based caregivers (see Chapter V for examples of initiatives based on family support or home visiting models), the same patterns of outcomes might hold true.

One option for strengthening such initiatives to support home-based care—in particular, to increase the potential to improve children's outcomes—is to pursue partnerships between home-based caregivers and public pre-kindergarten, Head Start and Early Head Start, or other

²²As noted earlier, a model for how this kind of family-sensitive caregiving might affect parent outcomes is posited in a forthcoming volume on new measures for child care quality (Bromer, J., Paulsell, D., Porter, T., Weber, R., Henly, J., & Ramsburg, D., with Families and Quality Workgroup members (in press). Family-sensitive caregiving: A Key component of quality in early care and education. In M. Zaslow, K. tout, T. Halle, & I. Martinez-Beck (Eds.), Next steps in the measurement of quality in early childhood settings. Baltimore, MD: Brookes Publishing).

center-based programs. This might include helping families and caregivers enroll children in these programs, providing transportation to and from the home-based child care arrangement, and providing information and support to caregivers to connect activities taking place in the program in the home-based care setting.

Initiatives Targeted to Caregivers with Mixed-Age Groups of Children

The mixed-age groups, sibling groups, and homelike settings that are characteristic of home-based care are also potential strengths of some home-based child care settings. Mixed-age groups and the presence of siblings, for example, can contribute to increased social competence and self-regulation (as older children help to care for younger children and young children observe play and interact with their older peers), both of which are important for school readiness.

While highly educated and trained providers may be thoughtful about working with mixed-age groups, others may benefit from more support to become intentional about strategies for supporting the development of children of different ages in the same setting. Several curricula for family child care address this topic—for example, Manfredi-Petit's "Circle of Love"—(Baker & Manfredi-Petit, 1998) and others include information on working with school-age children as well.

Initiatives could also draw on approaches intended to support social competence and self-regulation in center-based settings. These include designing space and activities to support authentic activities for children, in which older children are naturally engaged in appropriate ways with those who are younger, or using approaches that create "scripts" to manage play, such as Tools of the Mind (Bodrova & Leong, 2005).

Next Steps

This literature review lays the groundwork for future efforts to support home-based child care by summarizing what we know about this type of care, identifying gaps in the research, and identifying promising approaches for further exploration. As stated in Chapter I, it is likely that no one set of services or program design will meet the needs of home-based caregivers, because the caregivers and the settings in which they provide care are so diverse. Findings in the literature we reviewed indicate that, to be responsive to caregivers' needs and provide appropriate support, a menu of services is necessary. Our logic model proposes using key characteristics of the care arrangement, the child in care, and the caregiver to target services (see Figure I.3).

Because little research exists on initiatives to support home-based care (see Chapter V), identifying the most promising approaches or the need for testing new approaches will be challenging. Most of the strategies that seem promising based on initial implementation successes in the field (such as high rates of uptake among caregivers, sustained participation in services, or caregiver satisfaction with services) will likely benefit from additional development to ensure that all materials needed to implement them are available, including program manuals, procedures, staff training curricula, program curricula and materials, and measures for monitoring fidelity of implementation. Moreover, additional field testing and research may be necessary to ensure that services are tailored to the needs and interests of the specific groups of caregivers targeted for participation, that the staff selected to implement the initiative have the necessary skills and training, and that the initiative can be implemented at a reasonable cost.

Finally, to add to the knowledge about initiatives that have the potential to improve the quality of home-based child care and positively affect children's outcomes, any new initiative must be rigorously evaluated. This literature review begins to lay the foundation for planning such an evaluation by identifying the range of measures available for assessing changes in quality of care and potential caregiver, parent, and child outcomes that should be measured.

BIBLIOGRAPHY SUPPORTING QUALITY IN HOME-BASED CHILD CARE

- Achenbach, T. M., & Edelbrock, C. S. (1981). Behavioral problems and competencies reported by parents of normal and disturbed children ages four through sixteen. *Child Development*, 46(1), 1-82.
- Adams, J. H., & Buell, M. (2002). Project CREATE: Caregiver Recruitment, Education and Training Enhancement. Newark, DE: University of Delaware, Center for Disabilities Studies.
- Adams, G., Rohacek, M. & Snyder, K. (2008). *Child care voucher programs: Provider experiences in five counties.* Washington, DC: The Urban Institute.
- Administration for Children and Families. (2002). Making a difference in the lives of infants and toddlers and their families: The impacts of Early Head Start. Volume 1: Final technical report. Washington, DC: U.S. Department of Health and Human Services.
- Administration for Children and Families. (2004). The role of Early Head Start programs in addressing the child care needs of low-income families with infants and toddlers: Influences on child care use and quality. Washington, DC: U.S. Department of Health and Human Services.
- Anderson, S., Ramsburg, D., & Rothbaum, B. (2003). *Illinois Study Of License-Exempt Child Care: Interim Report*. Illinois Department of Human Services.
- Anderson, S., Ramsburg, D., & Scott, J. (2005). *Illinois study of license-exempt care*. Urbana-Champaign, IL: University of Illinois at Urbana-Champaign.
- Arnett, J. (1989). Caregivers in day-care centers: does training matter? *Journal of Applied Developmental Psychology*, 10, 541-552.
- Atkinson, A. M. (1988). Providers' evaluations of the effect of family day care on their own family relationships. *Family Relations*, *37*(4), 399-404.
- Baker, A. C., & Manfredi-Petit, L. A. (1998). Circle of love: Relationships between parents, providers and children in family child care. St. Paul, MN: Redleaf Press.
- Barnard, K. (1994). Nursing Child Assessment Satellite Training (NCAST) Parent-Child Interaction Teaching Scale. Seattle, University of Washington, School of Nursing.
- Bodrova, E., & Leong, D. J. (2005, September). Uniquely preschool. What research tells us about the ways young children learn. *Educational Leadership*, 63(1), 44-47.
- Boller, K., S. Sprachman, and the Early Head Start Research Consortium. (1998). *The Child-Caregiver Observation System (C-COS) Instructor's Manual.* Princeton, NJ: Mathematica Policy Research, Inc.
- Boushey, H., & Wright, J. (2004). Working moms and child care. Washington, DC: Center for Economic and Policy Research.

- Brandon, R. N. (2005). Enhancing family, friend and neighbor caregiving quality: The research case for public engagement. Seattle, WA: University of Washington, Human Services Policy Center.
- Brandon, R. N., Maher, E., Joesch, J., Battelle, J. M., & Doyle, S. (2002). *Understanding family, friend and neighbor care in Washington State: Developing appropriate training and support.* Seattle, WA: University of Washington, Human Services Policy Center.
- Bromer, J. (2005). Ways of caring: How relative caregivers support children and parents. In R. Rice (Ed.), *Perspectives on family, friend and neighbor child care*: Research, programs and policy (pp. 14-21). New York: Bank Street College of Education.
- Bromer, J., & Henly, J.R. (2004). Child care as family support: Caregiving practices across child care providers. *Children and Youth Services Review*, 26, 941-964.
- Bromer, J., & Henly, J.R. (2009). The work-family support roles of child care providers across settings. *Early Childhood Research Quarterly*, 24, 271-288.
- Bromer, J., van Haitsma, Daley, R., & Modigliani, K. (2008). Staffed support networks and quality in family child care: Findings from the family child care network impact study. Chicago, IL: Local Initiatives Support Corporation.
- Bromer, J., Paulsell, D., Porter, T., Weber, R., Henly, J., & Ramsburg, D., with Families and Quality Workgroup members (in press). Family-sensitive caregiving: A Key component of quality in early care and education. In M. Zaslow, K. tout, T. Halle, & I. Martinez-Beck (Eds.), Next steps in the measurement of quality in early childhood settings. Baltimore, MD: Brookes Publishing.
- Brown-Lyons, M., Robertson, A., & Layzer, J. (2001). *Kith and kin—informal child care: Highlights from recent research.* New York: National Center for Children in Poverty.
- Bryant, D. (2007). Preliminary findings from the QUINCE study: Quality Interventions for Early care and Education. Paper presented at the meeting of the State Administrators Management Institute and Child Care Policy Research Consortium, Washington, DC.
- Bryant, D., Wesley, P., Burchinal, M., Sideris, J., Taylor, K., Fenson, C., Iruka, I., Hegland, S., Hughes, K., Tout, K., Zalsow, M., Raikes, H., Torquati, J., Susman-Stillman, A., Howes, C., & Jeon, H. (2009). *The QUINCE-PFI study: An evaluation of a promising model and delivery approaches for child care provider training.* Draft final report. Chapel Hill, NC: University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute.
- Burchinal, M., Howes, C., & Kontos, S. (2002). Structural predictors of child care quality in child care homes. *Early Childhood Research Quarterly*, 17(1), 87-105.
- California Child Care Resource and Referral Network. (2005). Linking child care and family support: Three successful collaborations. Sacramento, CA: Author.
- Capizzano, J., Adams, G., & Sonenstein, F. (2000). *Child care arrangements for children under 5: Variations across states.* (Findings from the 1999 Survey of America's Families, Series B, no. B7.) Washington, DC: Urban Institute.

- Capizzano, J., Tout, K., & Adams, G. (2000). *Child care patterns of school-age children with employed mothers*. (Urban Institute Occasional Paper No. 41.) Washington, DC: Urban Institute.
- Caspe, M., & Lopez, E. M. (2006). Lessons from family strengthening interventions: Learning from evidence-based practice. Cambridge, MA: Harvard Family Resource Project.
- Caughy, M. O., O'Campo, P. J., Randolph, S. M., & Nickerson, K. (2002). The influence of racial socialization practices on the cognitive and behavioral competence of African American preschoolers. *Child Development*, 73, 1611-1625.
- Ceglowski, D. (2004). How stakeholder groups define quality in child care. *Early Childhood Education Journal*, 32, 101-111.
- Center for the Child Care Workforce and Human Services Policy Center (2002). Estimating the Size and Components of the U.S. Child Care Workforce and Caregiving Population. Seattle, WA: University of Washington.
- Chase, R., Schauben, L., & Shardlow, B. (2005). Family, friend, and neighbor caregivers: Results of the 2004 Minnesota statewide household child care survey. St. Paul, MN: Wilder Research.
- Child Care Bureau. (2006). Table 6—Child Care and Development Fund preliminary estimates: Average monthly percentage of children served in all types of care (FFY 2005). FFY 2005 data tables (preliminary estimates). Washington, DC: U.S. Department of Health and Human Services, Administration on Children, Youth and Families.
- Clarke-Stewart, K. A., Vandell, D. L., Burchinal, M., O'Brien, M., & McCartney, K. (2002). Do regulable features of child-care homes affect children's development? *Early Childhood Research Quarterly*, 17(1), 52-56.
- Coley, R. L., Chase-Landsdale, P. L., & Li-Grining, C. P. (2001). *Child care in the era of welfare reform:*Quality, choices, and preferences. (Policy Brief 01-4, Reform of Welfare, Children, and Families: A Three-City Study.) Baltimore, MD: Johns Hopkins University.
- Conners-Tadros, L. & Ramsburg, D. (2008). Home-based care plays an important role in meeting families' needs. In D.B. Hiatt-Michael, (Ed.), *Promising practices for partnering with families in the early years*. Charlotte, NC: Information Age Publishing.
- Coyl, D. D., Roggman, L. A., & Newland, L. A. (2002). Stress, maternal depression, and negative mother-infant interactions in relation to infant attachment. *Infant Mental Health Journal*, 23, 145-163.
- Cutting, A. L., & Dunn, J. (2006). Conversations with siblings and with friends: Links between relationship quality and social understanding. *British Journal of Developmental Psychology*, 24, 73-87.
- Downy, D. B., & Condron, D. J. (2004). Playing well with others in kindergarten: The benefit of siblings at home. *Journal of Marriage and Family, 66,* 333-350.
- Drake, P. J., Unti, L., Greenspoon, B., & Fawcett, L. K. (2004). First 5 California Informal Child Caregiver Support Project: Focus group and interview results. Sacramento, CA: First 5 California Children and Families Commission.

- Elicker, J., Clawson, C., Hong, S-Y., Kim, T-E., Evangelou, D., & Kontos, S. (2005). *Child care for working poor families: Child development and parent employment outcomes. Community child care research project: Final report.* West Lafayette, IN: Purdue University.
- Elkan, R., Kendrick, D., Hewitt, M., & Robinson, J.J.A. The effectiveness of domiciliary health visiting: a systematic review of international studies and a selective review of the British literature. *Health Technology Assessment* 2000; Vol 4(13).
- Emarita, B. (2006). Family, friend and neighbor care best practice: How culturally diverse families teach their children to succeed and how early education systems can learn from them. Condensed Report. St. Paul, MN: Ready 4 K.
- Faddis, B. J., Ahema-Gray, P., & Klein, K. L. (2000). Evaluation of Head Start Family Child Care Demonstration: Final report. Washington, DC: Administration on Children, Youth and Families, Commissioner's Office of Research and Evaluation and the Head Start Bureau.
- Fergusson, D. M., Grant, H., Horwood, L. J., & Ridder, E. M. (2006). Randomized trial of the Early Start program of home visitation: Parent and family outcomes. *Pediatrics*, 117(3), 781-786.
- Folk, K. F. (1994). For love or money: Costs of child care by relatives. *Journal of Family and Economic Issues*, 15(3), 243-260.
- Frosch, C. A., & Mangelsdorf, S. C. (2001). Marital behavior, parenting behavior, and multiple reports of preschoolers' behavior problems: Mediation or moderation? *Developmental Psychology*, 37(4), 502-519.
- Fuller, B., Holloway, S. D., & Liang, X. (1996). Family selection of child care centers: The influence of household support, ethnicity, and parental practice. *Child Development*, 67(6), 3320-3337.
- Fuller, B. & Kagan, S. L. (2000). Remember the children: Mothers balance work and child care under welfare reform. (Growing up in poverty project: Wave 1 findings). Berkeley, CA: University of California, Berkeley; New Haven, CT: Yale University.
- Fuller, B., Kagan, L., Loeb, S., & Chang, Y. (2004). Child care quality: Centers and home settings that serve poor families. *Early Childhood Research Quarterly*, 19, 505-527.
- Gomby, D. S. (2005). *Home visitation in 2005: Outcomes for children and parents.* Washington, DC: Committee for Economic Development Invest in Kids Working Group.
- Goodson, B.D., Layzer, J.I., & Layzer, C.J. (2005). *Quality of Early Childhood Care Settings: Caregiver Rating Scale (QUEST)*. Abt Associates, Inc.: Cambridge, Massachusetts.
- Grace, C., & Davis, L. (2007). Right from birth: A model of professional development that builds on the science of early child brain and behavior development. Paper presented at the meeting of the State Administrators Management Institute and Child Care Policy Research Consortium, Washington, DC.
- Green, B. (2004, July-September). Strengths-based practices inventory: A tool for measuring strengths-based service delivery in early childhood and family support programs. Families in Society.

- Halle, T., & Vick, J.E. (2007). Quality in early childhood settings: A compendium of early childhood measures. Washington, DC: Prepared by Child Trends for the Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Halle, T., Zaff, J., Calkins, J., & Margie, N. (2000). Part II: Reviewing the Literature on Contributing Factors to School Readiness. In *Background for community-level work on school readiness: A review of definitions, assessments, and investment strategies.* Washington, DC: Child Trends.
- Hamm, K., Gault, B., & Jones-DeWeever, A. (2005). *In our own backyards: Local and state strategies to improve quality in family child care.* Washington, DC: Institute for Women's Policy Research.
- Harms, T., & Clifford R. (1989). Family Day Care Rating Scale. New York: Teacher's College Press, 1989.
- Harms, T, R.M. Clifford, & D. Cryer. (1998). *Early Childhood Environment Rating Scale Revised Edition*. New York: Columbia University, Teachers College Press, 1998.
- Harms, T., D. Cryer, & R.M. Clifford. (2007). Family Child Care Environment Rating Scale Revised Edition. New York: Columbia University, Teachers College Press.
- Helburn, S. W., & Howes, C. (1996). Child care cost and quality. *The Future of Children, 6*(2), 62-82. Henly, J. R., & Lyons, S. (2000). The negotiation of child care and employment demands among low-income parents. *Journal of Social Issues, 56*(4), 683-705.
- Henly, J.R & Lyons, S. (2000). The negotiation of child care and employment demands among low-income parents. *Journal of Social Issues*, 56(4), 683-706.
- Houck, G. M., & Lecuyer-Maus, E. A. (2004). Maternal limit setting during toddlerhood, delay of gratification, and behavior problems at age five. *Infant Mental Health Journal*, 25(1), 28-46.
- Howes, C., Galinsky, E., & Kontos, S. (1998). Child care sensitivity and attachment. *Social Development*, 7(1), 25-36.
- Howes C., & Stewart, P. (1987) Child's play with adults, toys, and peers. An examination of family and child-care influences. *Developmental Psychology*, 23(3), 423-430.
- Hughes, D., & Chen, L. (1999). The nature of parents' race-related communications to children: A developmental perspective. In L. Balter & C. S. Tamils-Lemonda (Eds.), *Child psychology: A handbook of contemporary issues* (pp. 467-490). Philadelphia: Psychology Press.
- Hughes, D., Rodriguez, J., Smith, E., Johnson, D., Stevenson, H., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology*, 42, 747-770.
- Jackson, A. P., Brooks-Gunn, J., Huang, C., & Glassman, M. (2000). Single mothers in low-wage jobs: Financial strain, parenting, and preschoolers' outcomes. *Child Development*, 7(15), 1409-1423.

- Johnson, D. J., Jaeger, E., Randolph, S. M., Cauce, A. M., Ward, J., & NICHD Early Child Care Network. (2003). Studying the effects of early child care experiences on the development of children of color in the United States: Towards a more inclusive research agenda. *Child Development*, 74, 1227-1244.
- Johnson, J. O. (2005). Who's minding the kids? Child care arrangements: Winter 2002. Washington, DC: U.S. Census Bureau.
- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical Psychology Review*, 25, 341-363.
- Kaminski, J. W., Valle, L. A., Filene, J. H., & Boyle, C. L. (December, 2007). A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology*.
- Kaminski, R. A. & Stormshak, E. A. (2006). Project STAR: Early intervention with preschool children and families for the prevention of substance abuse. In S. Sambrano, P. Tolan, & J. Szapocznik (Eds.), *Preventing youth substance abuse: Science based programs for children and adolescents* (pp. 89-109). Washington, DC: American Psychological Association.
- Kansas Association of Child Care Resource and Referral Agencies Infant/Toddler Project. (2003). *Child care quality study.* Topeka, KS: author.
- Keller, H., Yovsi, R., Borke, J., Kartner, J., Jensen, H., & Papaligoura, Z. (2004). Developmental consequences of early parenting experiences: Self-recognition and self-regulation in three cultural communities. *Child Development*, 75(6), 1745-1760.
- Kelly, J. F., Zuckerman, T. G., Sandoval, D., & Buehlman, K. (2003). Promoting First Relationships: A curriculum for service providers to help parents and other caregivers meet young children's social and emotional needs. Seattle, WA: NCAST-AVENUW Publications
- Knox, V., London, A., Scott, E., & Blank, S. (2003). Welfare reform, work and child care: The role of informal care in the lives of low-income women and children. (MDRC Policy Brief.) New York: MDRC.
- Kontos, S., Howes, C., & Galinsky, E. (1996). Does training make a difference to quality in family child care? *Early Childhood Research Quarterly*, 11(4), 427-445.
- Kontos, S., Howes, C., Shinn, M., & Galinsky, E. (1995). *Quality in family child care and relative care.* New York: Teachers College Press.
- Kreader, J. L. (2005). *Infant and toddler child care quality*. New York: Kreader, J., Ferguson, D., & Lawrence, S. (2005). *Impact of training and education for caregivers of infants and toddlers*. New York: Columbia University Mailman School of Public Health, National Center for Children in Poverty, Child Care and Early Education Research Connections.
- Larner, M. (1994). In the neighborhood: Programs that strengthen family day care for low-income families. New York: Columbia University Mailman School of Public Health, National Center for Children in Poverty.

- Layzer, J., & Goodson, B. (2006). Care in the home: A description of family child care and the experiences of the families and children that use it: The national study of child care for low-income families: Wave 1 report. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families.
- Layzer, J., Goodson, B., Bernstein, L., & Price, C. (2001). *National evaluation of family support programs:* Final report volume a: The meta-analysis. Cambridge, MA: Abt Associates.
- Lawrence, S., & Kreader, J. K. (2006). *School-age child care arrangements*. New York: Columbia University Mailman School of Public Health, National Center for Children in Poverty, Child Care and Early Education Research Connections.
- Lengua, L. J., Honorado, E., & Bush, N. R. (2007). Contextual risk and parenting as predictors of effortful control and social competence in preschool children. *Journal of Applied Developmental Psychology*, 28, 40-55.
- Loeb, S., Fuller, B., Kagan, S. L., & Carrol, B. (2004). Child care in poor communities: Early learning effects of type, quality, and stability. *Child Development*, 75(1), 47-65.
- Love, J., Kisker, E. E., Ross, C., Raikes, H., Constantine, J., Boller, K., Brooks-Gunn, J., Chasen-Cohen, R., Trujillo, L. B., Brady-Smith, C., Fuligni, A. S., Sidle, A., Schochet, P., Paulsell, D., & Vogel, C. (2005). The effectiveness of Early Head Start for 3-year-old children: Lessons for policy and programs. *Developmental Psychology*, 41(6), 885-901.
- Maccoby, E. (2000). Parenting and its effects on children: On reading and misreading behavior genetics. *Annual Review of Psychology*, 51(1), 1-27.
- Maher, E. J. (2007a). Measuring quality in family, friend, and neighbor care: Conceptual and practical issues. New York: Columbia University Mailman School of Public Health National Center for Children in Poverty, Child Care and Early Education Research Connections.
- Maher, E. J. (2007b). Evaluation of a pilot program for low-income grandmothers to support infant and toddler development. Paper presented at the biennial meeting of the Society for Research in Child Development, Boston, MA.
- Maher, E. J., & Joesch, J. (2005). The prevalence and characteristics of child care provided by family, friends and neighbors. Paper presented at the biennial meeting of the Society for Research in Child Development, Atlanta, GA.
- Maher, E. J., Kelly, J.F., & Scarpa, J.P. (2008). A qualitative evaluation of a program to support family, friend and neighbor caregivers. *NHSA Dialog* 11 (2), 69-89.
- Marshall, N. L., Creps, C. L., Burstein, N., Cahill, K., Robeson, W. W., Wang, S., Keefe, N., Schimmenti, J., & Glantz, F. B. (2003). *Massachusetts family child care today: A report of the findings from the Massachusetts cost and quality study*. Wellesley, MA: Wellesley Centers for Women.
- Maxwell, K., & Kraus S. (2005). A longitudinal study of legal unregulated family child care providers who participate in the subsidy system. Chapel Hill, NC: University of North Carolina at Chapel Hill.

- McAlister, A., & Peterson, C. C. (2006). Mental playmates: Siblings, executive functioning and theory of mind. *British Journal of Developmental Psychology*, 24, 733-751.
- McCabe, L. (2007). *Caring for Quality*. Paper presented at the biennial meeting of the Society for Research in Child Development, Boston, MA.
- McCabe, L. & Cochran, M. (October, 2008). Can home visiting increase the quality of home-based child care? Findings from the Caring for Quality project. Cornell Early Childhood Program Research Brief, No. 3.
- McLoyd, V.C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53, 185-204.
- Morgan, G., Azer, S., & Lemoine, S. (2001). Family child care: What's in a name? Boston, MA: Wheelock College Institute for Leadership and Career Initiatives.
- Morrissey, T. (2007). Family child care in the United States. New York: Columbia University Mailman School of Public Health, National Center for Children in Poverty, Child Care and Early Education Research Connections.
- Mueller, M. M., & Elder, G. H. (2003). Family contingencies across the generations: Grandparent-grandchild relationships in holistic perspective. *Journal of Marriage and Family*, 65, 404-417.
- National Institute of Child Health and Human Development Early Child Care Research Network (NICHD, ECCRN). (1996). Observational Record of the Caregiving Environment. *Early Childhood Research Quarterly*, 11(3), 269-306.
- National Institute of Child Health and Human Development Early Child Care Research Network (NICHD, ECCRN). (2000). Characteristics and quality of child care for toddlers and preschoolers. *Applied Developmental Science*, 4.
- National Institute of Child Health and Human Development, Early Child Care Research Network (NICHD, ECCRN). (2004). Type of child care and children's development at 54 months. Early Childhood Research Quarterly, 19(2), 203-230.
- Nelson, M. (1991). Negotiated care: The experience of family day care providers. Philadelphia, PA: Temple University Press.
- New Jersey Association of Child Care Resource and Referral Agencies (2006). The state of family child care in New Jersey. Trenton, NJ: author.
- Norris, D. J. (2001). Quality of care offered by providers with differential patterns of workshop participation. *Child and Youth Care Forum*, 30(2), 111-121.
- O'Donnell, N., Cochran, M., Lekies, K., Diehl, D., Morrissey, T., Ashley, N., & Steinke, P. (2006). Sparking Connections Phase II: A multi-site evaluation of community-based strategies to support family, friend and neighbor caregivers of children. New York: Families and Work Institute.
- Olds, D.L. (2002). Prenatal and infancy home visiting by nurses from a randomized control trial for community replication. *Prevention Science 3* (3) 153-172.

- Olds, D.L., Kitzman, H., & Cole, R. Effects of nurse-home visiting on maternal life course and education: Age 6 follow-up results of a randomized control trial. *Pediatrics* 114 (1550-1559).
- Organizational Research Services. (2006). Summary of mid-year play and learn participants results, January-July. Seattle, WA: Author.
- Ostrov, J. M., Crick, N. R., & Stauffacher, K. (2006). Relational aggression in sibling and peer relationships during early childhood. *Applied Developmental Psychology*, 27, 241-253.
- Paulsell, D., Boller, K., Aikens, N., Kovac, M., & Del Grosso, P. (2008). Better beginnings: The state of early learning and kindergarten readiness in East Yakima and White Center. Princeton, NJ: Mathematica Policy Research, Inc.
- Paulsell, D., Mekos, D., Del Grosso, P., Rowand, C., & Banghart, P. (2006). Strategies for supporting quality in kith and kin child care: Findings from the Early Head Start Enhanced Home Visiting Pilot Program evaluation final report. Princeton, NJ: Mathematica Policy Research, Inc.
- Peisner-Feinberg, E., Bernier, E., Bryant, D., & Maxwell, K. (2000). Family child care in North Carolina. Chapel Hill, NC: University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center.
- Pittard, M., Zaslow, M., Lavelle, B., & Porter, T. (2006). *Investing in quality: A survey of state Child Care and Development Fund initiatives.* Washington, DC: National Association of State Child Care Administrators and Child Trends.
- Porter, T. (1991). Just like any parent: The child care choices of welfare mothers in New Jersey. New York: Bank Street College of Education.
- Porter, T. (1998). Neighborhood child care: Family, friends and neighbors talk about caring for other people's children. New York: Bank Street College of Education.
- Porter, T. (2005). Evaluating quality in family, friend and neighbor child care: Results from two case studies. Paper presented at the annual conference of the National Association of Child Care Resource and Referral Agencies, Washington, DC.
- Porter, T. (2007). Assessing initiatives for family, friend and neighbor child care: An overview of models and evaluations. New York: Columbia University Mailman School of Public Health, National Center for Children in Poverty, Child Care and Early Education Research Connections.
- Porter, T., Habeeb, S., Mabon, S., Robertson, A., Kreader, L., & Collins, A. (2002). Assessing Child Care and Development Funds (CCDF) investments in child care quality: A study of selected state initiatives. Volume 1. New York: Bank Street College of Education.
- Porter, T., & Kearns, S. M. (2005a). Supporting family, friend and neighbor caregivers: Findings from a survey of state policies. New York: Bank Street College of Education.
- Porter, T., & Kearns, S. M. (2005b). Family, friend and neighbor child care: Crib notes on a complex issue. In R. Rice (Ed.), *Perspectives on family, friend and neighbor child care:* Research, programs and policy (pp. 5-13). New York: Bank Street College of Education.

- Porter, T., & Rice, R. (2000). Lessons learned: Strategies for working with kith and kin caregivers. New York: Bank Street College of Education.
- Porter, T., Rice, R., & Mabon, S. (2003). *Doting on kids: Understanding quality in kith and kin child care.* New York: Bank Street College of Education.
- Porter, T., Rice, R., & Rivera, E. (2006). Assessing quality in family, friend, and neighbor care: The child care assessment tool for relatives. New York: Bank Street College of Education.
- Porter, T., & Vuong, L. (2008). Tutu and me: Assessing the effects of a family interaction program on parents and grandparents. New York: Bank Street College of Education.
- Powell, D. (2008). Who's watching the babies? Improving the quality of family, friend and neighbor care. Washington, DC: Zero to Three.
- Quintana, S., et al. (2006). Race, ethnicity, and culture in child development: Contemporary research and future directions. *Child Development*, 77, 1129-1141.
- Raikes, A., Raikes, H., & Wilcox, B. (2005). Regulation, subsidy receipt, and provider characteristics: What predicts quality in child care homes? *Early Childhood Research Quarterly*, 20, 164-184.
- Raikes, H., Green, B., Atwater, J., Kisker, E. E., Constantine, J., & Chased-Cohen, R. (2006). Involvement in Early Head Start home visiting services: Demographic predictors and relations to child and parent outcomes. *Early Childhood Research Quarterly*, 21, 2-23.
- Ramey, S., & Ramey, C. (2008). The Right from Birth study: An evidence-informed training model to improve the quality of early child care and education. Presentation at the Child Care Policy Research Consortium Meeting, Washington, DC.
- Ramey, S.L., Ramey, C.T., & Timraz, N. (2008). The "Right from Birth" study: An evidence-informed training model to improve the quality of early child care and education. Poster presented at the meeting of the Child Care Policy Research Consortium, Washington, DC.
- Reschke, K. L., & Walker, S. K. (2005). Grandmothers as child care caregivers: A unique arrangement. In R. Rice (Ed.), *Perspectives on family, friend and neighbor child care: Research, programs and policy* (pp. 33-38). New York: Bank Street College of Education.
- Roggman, L. A., Boyce, L. K., Cook, G. A., & Jump, V. K. (2001). Inside home visits: A collaborative look at process and quality. *Early Childhood Research Quarterly*, 16(1), 53–71.
- Ross, C., & Gleason, P. M. (1998). Sustaining employment among low-income parents: Options for child care research. Princeton, NJ: Mathematica Policy Research, Inc.
- Ross, C., & Paulsell, D. (1998a). Sustaining employment among low-income parents: The role of quality in child care: A research review. Princeton, NJ: Mathematica Policy Research, Inc.
- Ross, C., & Paulsell, D. (1998b). Sustaining employment among low-income parents: The problems of inflexible jobs, child care, and family support: A research review. Princeton, NJ: Mathematica Policy Research, Inc.

- Rusby, J. C., Smolkowski, K., Marquez, B., and Taylor, T. K. (2008). A small-scale randomized efficacy trial of Carescapes: Enhancing children's social development in child care homes. *Early Childhood Research Quarterly*, 23(4), 527-546.
- Rusby, J. C., Taylor, T. K., Milchak, C. (2001). Assessing school settings: Interactions of students and teachers. Eugene, OR: Oregon Research Institute.
- Sanders, M. R., & Woolley, M. L. (2004). The relationship between maternal self-efficacy and parenting practices: Implication for parent training. *Child: Care, Health & Development, 31*(1), 65-73.
- Schulman, K., & Blank, H. (2007). Close to home: State strategies to strengthen and support family, friend and neighbor child care. Washington, DC: National Women's Law Center.
- Shivers, E. M. (2005). Predicting provider-child relationships from provider characteristics and conditions of care. Presentation at the Society for Research on Child Development Biennial Meeting, Atlanta, Georgia.
- Shivers, E. M. (2006). A closer look at kith and kin care: Exploring variability of quality within family, friend and neighbor care. *Applied Developmental Psychology*, 27, 411-426.
- Shivers, E. M., (2007). Ways of caring: Examining racial-ethnic socialization practices and emotional availability among African-American family, friend, and neighbor providers. Paper presented at annual meeting of the National Alliance of Family, Friend and Neighbor Child Care, Chicago, IL.
- Shivers, E., & Wills, S. (2001). *License-Exempt Assistance Project Final Report 2001*. Los Angeles, CA: Crystal Stairs, Inc.
- Smith, L., Sarkar, M., Perry-Manning, S., & Schmalzried, B. (2007). NACCRRA's national survey of child care resource and referral training: Building a system for the child care workforce. Arlington, VA: National Association of Child Care Resource and Referral Agencies.
- Snyder, K., & Adelman, S. (2004). The use of relative care while parents work: Findings from the 1999 National Survey of America's Families. (Discussion Paper 04-09.) Washington, DC: Urban Institute.
- Stahl, D., O'Donnell, N.S., Sprague, P., & Lopez, M. (2003). Sparking connections: Community-based strategies for helping family, friend and neighbor caregivers meet the needs of employees, their children and employers. New York: Families and Work Institute.
- Super, C., & Harkness, S. (2002). Culture structures the environment for development. *Human Development*, 45, 270-274.
- Susman-Stillman, A., & Banghart, P. (2008). *Demographics of family, friend and neighbor child care in the United States*. New York: Child Care and Early Education Research Connections.
- Sweet, M. A., & Appelbaum, M. I. (2004). Is home visiting an effective strategy? A meta-analytic review of home visiting programs for families with young children. *Child Development*, 75,(5), 1435-1456.

- Thompson, L., & Uyeda, K. (2004). Family support: Fostering leadership and partnership to improve access and quality. In N. Haflon, T. Rice, and M. Inklas (Eds.), Building state early childhood comprehensive systems series. (No. 14.) Washington, DC: National Center for Infant and Early Childhood Health Policy.
- Todd, C., Robinson, V., & McGraw, L. (2005). Contextual influences on informal caregivers: Implications for training. Paper presented at the biennial meeting of the Society for Research in Child Development, Atlanta, GA.
- Todd, C. M., & Deery-Schmitt, D. M. (1996). Factors affecting turnover among family child providers: A longitudinal study. *Early Childhood Research Quarterly*, 11(3), 351-376.
- Tout, K., & Zaslow, M. (2006). Observations of family, friends and neighbors in Minnesota: A report of the Minnesota child care research partnership. St. Paul, MN: Minnesota Department of Human Services.
- Tout, K., Zaslow, M., Papillo, A. R., & Vandivere, S. (2001, September). Early child care and education: Work support for families and developmental opportunities for young children. (Occasional Paper #51.) Washington, DC: Urban Institute.
- Vortruba-Dzal, E., Coley, R. L., & Chase-Lansdale, P. L. (2004). Child care and low-income children's development: Direct and moderated effects. *Child Development*, 75(1), 296-312.
- Walker, J. R. (1992). New evidence on the supply of child care: A statistical portrait of family child care and an analysis of their fees. *Journal of Human Resources*, 27(1), 40-89.
- Walker, S. (2005). Family-centered principles applied to research and program support to family, friend and neighbor child care providers. Paper presented at the annual conference of the National Association for the Education of Young Children, Washington, DC.
- Waters, E. (1985). Attachment Q Sort. Monographs of the Society for Research in Child Development, 50, 41-65.
- Weaver, R. H. (2002). Predictors of quality and commitment in family child care: Provider education, personal resources, and support. *Early Childhood Research Quarterly*, 13(3), 265-282.
- Weisner, T. (2002). Ecocultural understanding of children's developmental pathways. *Human Development*, 45, 275-281.
- Weiss, H. (2005). Pathways from workforce development to outcomes. *Evaluation Exchange, XI*(4).. Cambridge, MA: Harvard Graduate School of Education, Harvard Family Resource Project.
- Weiss, H., & Klein, L. (2006). Changing the conversation about home visiting: Scaling up for quality. Cambridge, MA: Harvard Graduate School of Education, Harvard Family Resource Project.
- Whitbeck, L. B. S., Conger, R. D., Wickrama, K. A. S., Ackley, K. A., & Elder, G. H., Jr. (1997). The effects of parents' working conditions and family economic hardship on parenting behaviors and children's self-efficacy. *Social Psychology Quarterly*, 60, 291-303.

- Whitebook, M., Phillips, D., Bellm, D., Crowell, N., Alvarez, M., & Jo, J. Y. (2004). Two years in early care and education: A community portrait of quality and workforce stability. Alameda County, California. Berkeley, CA: University of California at Berkeley, Institute of Industrial Relations, Center for the Study of Child Care Employment.
- Williamson, S. G. (1995) Establishing a mentor program for family child care. In A. Restaino- Kelly (Ed.), *Profiles in professional development in early care and education*. Union, NJ: Kean College of New Jersey, Department of Early Childhood and Family Studies, Dart Center.
- Willinger, U., Diendorfer.-Radner, G., Willnauer, R., Jorgl, G., & Hage, V. (2005). Parenting stress and parental bonding. *Behavioral Medicine*, *31*, 63-69.
- Wishard, A. G, Shivers, E. M., Howes, C., & Ritchie, S. (2003). Child care program and teacher practices: Associations with quality and children's experiences. *Early Childhood Research Quarterly*, 18, 65-103.
- Zaslow, M., Halle, T., Martin, L., Cabrera, N., Calkins, J., Pitzer, L., & Margie, N. G. (2006). Child outcomes measures in the study of child care quality. *Evaluation Review*, *30*(5), 577-610.
- Zaslow, M., & Martinez-Beck, I. (2006). Critical issues in early childhood. Baltimore, London and Sydney: Paul H. Brookes Publishing Company.
- Zaslow, M., & Tout, K. (2008). *Introductory remarks*. Presented at "New Directions in Measuring Quality," Washington, DC.
- Zimmerman, I.L., Steiner, V.G., & Pond, R.E. (2002). Preschool language scale, fourth edition, examiner's manual. San Antonio, TX: Harcourt Assessment, Inc.
- Zinsser, C. (1991). Raised in East Urban: Child care changes in a working class community. New York: Teachers College Press.



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