**Supporting Quality in
Home-Based Child Care**

Final Brief

March 31, 2010

Diane Paulsell
Toni Porter
Gretchen Kirby

MATHEMATICA
Policy Research, Inc.

**Supporting Quality in
Home-Based Child Care**

Final Brief

March 31, 2010

Diane Paulsell
Toni Porter
Gretchen Kirby

MATHEMATICA
Policy Research, Inc.

SUPPORTING QUALITY IN HOME-BASED CHILD CARE

FINAL BRIEF

Introduction

Home-based child care—regulated family child care and child care provided by family, friends, and neighbors who are legally exempt from regulation—accounts for a significant share of the child care supply in the United States. [1] Researchers estimate that more than 40 percent of all children under age 5 receive care in these settings (Johnson, 2005), although the proportions of children in home-based child care vary by study. It is the most common form of child care for infants and toddlers (Brandon, 2005). Home-based child care also represents a significant proportion of the child care arrangements of families who use child care subsidies (Child Care Bureau, 2006).

In the past decade, recognition of the role that home-based child care plays has prompted an increasing interest in this type of child care among policymakers, child care administrators, and researchers. Researchers and child care administrators have endeavored to estimate the prevalence of home-based child care, to assess its quality, and to develop quality initiatives for home-based caregivers. These data collection and development efforts, however, have been largely scattered and small scale.

In 2007, the Office of Planning, Research and Evaluation within the Administration for Children and Families in the U.S. Department of Health and Human Services funded a research project, *Supporting Quality in Home-Based Child Care*, to: (1) systematically gather information from existing research on home-based child care and on initiatives that aim to support these caregivers, (2) synthesize the available evidence on home-based care, and (3) propose next steps for designing and evaluating initiatives that aim to improve the quality of care in these settings.

The project, conducted by Mathematica Policy Research, along with its subcontractor Bank Street College of Education, and consultants from Child Trends, has produced a series of four reports that present a more complete picture of home-based care based on the research evidence. These reports provide useful information for policymakers and administrators who aim to develop or fund initiatives for home-based caregivers and researchers seeking to build the knowledge base about home-based care. This information includes:

- **A literature review** of more than 135 articles—primary literature on home-based child care, related literature on family support and home visiting, and potentially related literature on parent well-being, work-family issues, and child development—that summarizes what is known about home-based child care and identifies knowledge gaps (Porter, Paulsell, Del Grosso, Avellar, Hass, & Vuong, 2010).

---

[1] For this project, the research team defined home-based child care as non-parental care provided to a child or a group of children in the caregiver's home. The caregiver may or may not be related to one or more of the children in care. Depending on the caregiver's relationship to the children and the number of children in care, the child care setting may be regulated—a family child care home—or exempt from regulation—a family, friend, or neighbor care setting.

- **A compilation of brief summaries** of 96 home-based care initiatives identified through a scan of the field that included reviews of state Child Care and Development Fund plans, the research literature, internet searches, and contacts with experts to solicit nominations (Porter, Nichols, Del Grosso, Begnoche, Hass, Vuong, & Paulsell, 2010).

- **A compendium of detailed profiles** of 23 well-established initiatives from the compilation with diverse goals, target outcomes, caregiver characteristics, program auspices, service delivery strategies, and intensity and duration of services. (Porter, Paulsell, Nichols, Begnoche, & Del Grosso, 2010).

- **A report on design options for home-based child care** that describes potential strategies for supporting quality in home-based child care settings as well as considerations for design and ongoing evaluation of home-based care initiatives (Paulsell, Porter, Kirby, Boller, Martin, Burwick, Ross, & Begnoche, 2010).

This brief presents an overview of key project findings. It begins with a summary of findings about the prevalence and quality of home-based child care, the characteristics of caregivers, quality initiatives for home-based care, and evidence of effectiveness for home-based care initiatives. It then presents an agenda for program development and research designed to foster effective quality initiatives for home-based care.

Key Findings from the Project

A synthesis of the home-based care research literature and information about recent home-based care quality initiatives points to a critical need for more systematic efforts to develop and test quality initiatives for this type of child care. Although it is a highly prevalent form of child care, research suggests the quality of most home-based care is of poor-to-mediocre quality. Most quality initiatives are not targeted to the specific needs and interests of home-based caregivers. Moreover, little is known about the effectiveness of these initiatives. This section summarizes key findings on the prevalence and quality of home-based care, caregiver characteristics, and quality initiatives.

The Prevalence of Home-Based Care

Home-based child care is widely used among families with young children, especially low-income families and families with infants and toddlers. Although the proportion of children estimated to be in this type of care varies by study, researchers estimate that more than 40 percent of all children under age 5 are in home-based care (Johnson, 2005). Home-based care is more common among children from birth to age 2—72 percent of all children in non-parental care—than among children ages 3 to 5—41 percent (Brandon, 2005). In addition, 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).

Although estimates vary across studies, care provided by a relative is the most prevalent type of home-based care and may account for 20 to 40 percent of young children in care (Johnson, 2005; Boushey & Wright, 2004; Capizzano, Adams, & Sonenstein, 2000). The proportion of young children in family child care (care provided by a non-relative in his or her home) ranges from 6 to 16 percent, depending on the sample used (Johnson, 2005; Tout, Zaslow, Papillo, & Vandivere, 2001; Capizzano et al., 2000). Care by a non-relative in the child's home is the least common type of care; it accounts for perhaps 3 to 6 percent of children ages 5 and younger with working mothers (Boushey & Wright, 2004; Capizzano et al., 2000; Tout et al., 2001).

The Quality of Home-Based Child Care

Existing research shows substantial variation in the quality of home-based child care, in part because studies use a wide range of measures to assess quality. Studies based on observations conducted using the Family Day Care Rating Scale (FDCRS); (Harms & Clifford, 1989) or the updated version, the Family Child Care Environment Rating Scales (FCCERS) (Harms, Cryer, & Clifford, 2007), point to a mixed picture of quality. Some studies indicate that average quality is minimal to good, with scores between 3 and 5 (on a 7-point scale) on the FDCRS or FCCERS (Paulsell, Boller, Aikens, Kovac, & Del Grosso, 2008; Shivers, 2006). Other studies find that average quality is inadequate, with scores of 1 to 3 on the FDCRS (Elicker et al., 2005; Fuller, Kagan, Loeb, & Chang, 2004). 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, Chase-Landsdale, & Li-Grining, 2001; Elicker et al., 2005; Fuller et al., 2004).

Research that uses other quality measures suggests some positive aspects of home-based care. In studies using the Arnett Caregiver Interaction Scale (Arnett, 1989), home-based caregivers tend to show a fairly good level of engagement with children and few instances of harsh or ignoring behavior (Coley et al., 2001; Fuller & Kagan, 2000; Paulsell, Mekos, Del Grosso, Rowand, & Banghart, 2006; Peisner-Feinberg, Bernier, Bryant, & Maxwell, 2000).

Two studies which used the Quality of Early Childhood Care Settings: Caregiver Rating Scale (Goodson, Layzer, & Layzer, 2005) found that most homes were safe and healthy and that many contained adequate age-appropriate materials for children. Caregivers were affectionate and responsive, and they were involved with the children most of the time (Layzer & Goodson, 2006; Tout & Zaslow, 2006). A study using the Child Care Assessment Tool for Relatives (Porter, Rice, & Rivera, 2006) found that nurturing behavior, such as kissing or patting the child, was common, and that harsh or neglectful behavior was infrequent among relative caregivers (Paulsell et al., 2006).

Home-based care settings, however, may have relatively low levels of cognitive stimulation. A significant proportion of the children's activities involve routines, and little time is spent on learning activities such as reading. Caregivers often do not engage children in higher-level talk, and television use is common (Layzer & Goodson, 2006; Paulsell et al., 2006; Tout & Zaslow, 2006; Fuller & Kagan, 2000).

In summary, research suggests that most home-based child care is of poor-to-moderate quality. While studies show that many caregivers are positively engaged with children and provide safe and healthy environments, home-based care settings may provide low levels of cognitive stimulation.

Characteristics of Home-Based Caregivers

Three differences among home-based caregivers are important to consider in developing quality initiatives targeted to this type of care: (1) demographic characteristics, (2) motivations to provide care, and (3) needs and interests.

Demographic Characteristics. Ages of home-based caregivers vary widely, from teens and early 20s to 70s and 80s (Porter, Paulsell, Del Grosso, et al., 2010). On average, caregivers are in their mid 40s. Educational levels and special training in early childhood development or education can vary. Research shows that family child care providers are more likely to have a high school degree or higher levels of education than family, friend, and neighbor caregivers, and non-relative

caregivers are more likely than relatives to have specialized training. Family, friend, and neighbor caregivers tend to share the same race and ethnicity as the parents of children in their care, mainly because many are relatives, and many speak a language other than English as their home language. In general, both regulated family child care providers and family, friend, and neighbor caregivers tend to have low incomes.

Motivation to Provide Care. The motivation for providing child care varies among home-based caregivers (Porter, Paulsell, Del Grosso, et al., 2010). Research indicates that some caregivers, particularly relatives, provide care because they want to help their families or keep child care within the family rather than use other sources of care. Money is not often a primary motivation for relative caregivers. For regulated family child care providers, a primary motivation for providing home-based care is to start a business and earn income. Providing child care also enables them to stay home with their own children while earning some income.

Needs and Interests. Family, friend, and neighbor caregivers and regulated family child care providers share some challenges in caring for other people's children (Porter, Paulsell, Del Grosso, et al., 2010). Findings point to isolation, work-related stress and physical exhaustion, as well as conflicts with parents. For family, friend, and neighbor caregivers, conflicts arise from differences in child-rearing styles. For regulated family child care providers, conflicts emerge with parents because the providers perceive a lack of respect for their professional status or problems occur with scheduling (often late pickups) and payment.

Research suggests that most family, friend, and neighbor caregivers are not interested in pursuing a formal career in child care (Porter et al., 2010a). These caregivers are, however, interested in information about health, safety, child development, and activities to promote school readiness. They may be attracted to initiatives that employ experiential learning approaches to convey this information—such as home visiting, support groups, or play and learn groups—rather than formal training workshops or academic courses that lead to a certificate or a degree. In contrast, research shows that regulated family child care providers who are already licensed want opportunities for increased income or professional advancement (Porter, Paulsell, Del Grosso, et al., 2010).

Quality Initiatives for Home-Based Caregivers

There are multiple service delivery strategies for home-based child care (see Table 1), but they are not one-size-fits-all. When deciding on a strategy, initiative designers need to consider such factors as initiative goals, target audience, and available resources including staff, time, and finances. The choice of service delivery should be shaped by these factors.

The research team identified 96 initiatives in the field aimed at supporting quality in home-based child care that provide examples of variation in service delivery strategies (Porter, Nichols, et al., 2010). This section describes the goals of those initiatives, the service delivery strategies they used, approaches to combining strategies within a single initiative, and strategies for recruiting and engaging caregivers.

Types of Goals and Strategies. The scan resulted in a set of 96 initiatives with four types of primary goals: (1) general quality improvement initiatives (80 initiatives), (2) certificate programs that offer college credits and/or lead to a degree or a certificate such as a Child Development Associate credential (4 initiatives), (3) support for licensing or registration (7 initiatives), and (4) support for

4

obtaining accreditation from the National Association for Family Child Care or a local accrediting agency (5 initiatives) (Porter, Paulsell, Nichols, et al., 2010).

The initiatives used a wide range of service delivery strategies (Table 1). Training through workshops was the most common strategy (40 initiatives), followed by home-based technical assistance (27 initiatives). Many initiatives supplemented their primary strategy with other activities, such as distributing materials and equipment. Intensity and duration of services varied widely across the initiatives. Some offered a single workshop or one or two home visits; others offered an intensive series of workshops, regular in-home coaching, or consultation over an extended period.

Table 1. Service Delivery Strategies for Home-Based Child Care

Strategy	Description
Home-based technical assistance	Technical assistance and other services to caregivers in their homes using coaching, consultation, and home visiting approaches
Professional development through formal education	Credit-bearing courses, as well as financial assistance and supportive services to help caregivers access professional development opportunities
Training through workshops	Workshops to improve caregiver knowledge and skills, either as stand-alone offerings or in a series
Play and Learn	Drop-in events in which caregiver-child dyads interact in a range of activity centers; staff model the activities for caregivers
Peer support	Group meetings in which caregivers discuss shared experiences and exchange ideas, information, and strategies
Grants to caregivers	Monetary grants to caregivers for enhancing the quality of the home-based care environment or pay for caregiver training
Materials and mailings	Dissemination of information such as newsletters or activity sheets, as well as items such as books, toys, fire extinguishers, or first aid kits to enhance the care environment or caregiver knowledge
Reading vans	Visits by mobile reading vans to distribute children's books, other literacy materials, and information for caregivers

Source: Paulsell et al., 2010.

Combining Strategies in a Single Initiative. Many initiatives identified by the research team combine multiple strategies to provide services to home-based caregivers. For example, an initiative might provide biweekly home visits as its primary service, supplemented by materials and mailings and monthly peer support meetings. Another might offer coaching visits to some caregivers, workshops to others, and grants to purchase home safety equipment to all participants. Initiative developers should select strategies and consider combining multiple strategies in a single initiative based on four main factors:

1. Targeted caregiver, child, and parent outcomes

2. Content to be conveyed

3. Characteristics, needs, and interests of the target population of caregivers

4. Supports and incentives needed to facilitate and sustain caregivers' participation

Two approaches to combining these eight strategies have emerged from the literature on home-based child care and initiatives that exist in the field:

1. **Creating a continuum of services based on levels of service intensity, formality of approach to training and education, and caregiver interest in professionalization.** For example, an initiative could offer a continuum of services ranging from weekly coaching visits for caregivers interested in quality improvement to monthly reading van visits and peer supports for relative caregivers. Likewise, an initiative could offer formal education services leading to a degree for caregivers interested in professionalization and hands-on workshops for caregivers who may not be comfortable in a classroom setting.

2. **Tailoring services to individual needs.** An initiative might provide a core service—such as home-based technical assistance or training workshops—and offer a range of supplemental services depending on caregivers' interests and needs. Supplemental services could include peer support groups, grants, or Play and Learn groups.

Recruiting and Engaging Caregivers. Quality initiatives use a range of strategies to identify and recruit home-based caregivers. Initiatives often recruit caregivers who participate in the regulatory system (registered or licensed family child care providers) or the child care subsidy system (exempt family, friend, and neighbor caregivers or regulated providers) by obtaining lists of these caregivers form state regulatory and subsidy agencies and local Child Care Resource & Referral agencies. These lists can provide initiative developers with a good basis for estimating the size of the target population. Supplemental strategies for recruiting regulated and unregulated caregivers include:

- Making presentations at provider licensing orientation sessions and local conferences

- Posting fliers in neighborhoods, schools, churches, and, social service agencies

- Word-of-mouth referrals

Strategies specifically for recruiting caregivers who do not participate in the regulatory or subsidy system include:

- Working through trusted community organizations and individuals

- Housing initiatives within programs for families with young children, such as Head Start and family support programs, and engaging parents in recruiting their children's caregivers

- Conducting door-to-door recruitment drives

- Participating in community events and fairs with booths or presentations

Engaging caregivers and sustaining their participation over time is essential for ensuring participants receive the intended dosage of services. Strategies for engaging caregivers include tailoring services to the learning styles of the target population, tailoring services to caregivers' home language and culture, and offering supports (for example, transportation and child care) to help caregivers access services. Initiatives also use a range of incentives to encourage participation, including:

- **Informational incentives**, such as information on health, safety, nutrition, and child development, as well as technical assistance on how to become licensed or access a state child care subsidy or quality rating and improvement system (QRIS)

- **Financial incentives**, such as cash payments for achieving specific milestones, provision of materials and equipment, or help leveraging other resources such as increased subsidy payments or quality funds

- **Social incentives**, including opportunities for meetings and gatherings with other caregivers and participate in events with parents and children

- **Public and professional recognition**, such as obtaining a child care license, a Child Development Associate credential, accreditation, or a higher quality rating in a QRIS

Evidence of Effectiveness of Home-Based Care Initiatives

Research on initiatives that aim to improve quality in home-based child care is limited. Most available studies document implementation outcomes and experiences (Pittard, Zaslow, Lavelle, & Porter, 2006) Among initiatives identified for the compilation, fewer than half (40 of 96) reported conducting an evaluation (Porter, Nichols, et al., 2010). Of these, 28 examined caregiver outcomes, largely through pre- and post-assessments of caregivers' knowledge or practices. Beyond the evaluations associated with the initiatives in the compilation, the team identified 17 studies of other home-based care initiatives (Porter, Paulsell, Del Grosso, et al., 2010). Of these, seven were descriptive or correlational and six used comparative designs, but not random assignment. Four studies used a random assignment design to establish comparison groups.

The study findings suggest some positive effects. Several studies, for example, suggested associations between participation in the initiatives and higher quality as measured by the Family Day Care Rating Scale, the Arnett Caregiver Interaction Scale, and the Child Care Assessment Tool for Relatives, but selection bias—caregiver characteristics that potentially increase the likelihood that a caregiver will participate in the initiative and are related to the quality of care even without that initiative—may influence the results.

The four random assignment studies found positive effects on caregiver outcomes, but little to no effect on children's outcomes. Two initiatives that used coaching and consultation also resulted in significant improvements in caregiver quality but did not produce effects on children's outcomes (Bryant et al., 2009; Ramey & Ramey, 2008). A third initiative that provided home visits to caregivers produced significant improvements in observed quality but had no effect on child outcomes (McCabe & Cochran, 2008). Participation in a series of three workshops produced improvements in caregivers' behavior management practices and decreases in children's problem behavior, but the effects faded after six months (Rusby, Smolkowski, Marquez, & Taylor, 2008).

In sum, because of the lack of rigorous methods to isolate the effects of the initiatives and small sample sizes, the research team could not draw conclusions about the effectiveness of different strategies for improving the quality of home-based care.

Next Steps for Building Quality Initiatives

Most initiatives identified by the research team were not well specified and would benefit from additional development and testing. For example, many initiatives identified in the review lacked the

foundation—a clear logic model with specific target outcomes linked to program services and activities—needed to monitor and evaluate their quality (see Figure 1 for an illustrative model for a home-based care initiative). Most lacked documentation of key program characteristics—such as service delivery and training manuals that specify staff qualifications, training requirements, intended

frequency and duration of services, content of services, and program measures—needed to ensure high quality implementation and replication.

Moreover, some initiatives identified intermediate and long-term outcomes that did not align with the comprehensiveness and intensity of the planned services. For example, an initiative that provides monthly visits to caregiver homes by a mobile reading van to distribute books and provide a story time is likely to increase the number of children's books available in the home. Without additional services (for example coaching visits or training workshops on strategies to promote early literacy), however, it is not likely to produce changes in caregiver knowledge and skills in promoting early literacy or changes in children's literacy and language development outcomes. Table 2 presents a set of illustrative outcomes for home-based care initiatives, according to the potential for service intensity and for individualizing services for caregivers. Low- and moderate-intensity initiatives could be expected to affect caregiver outcomes and aspects of the care environment, but high-intensity services would be needed to influence child and parent outcomes.

This section presents a research and program development agenda outlining work needed to more fully develop initiatives for supporting quality in home-based care and for testing the effectiveness of fully-developed initiatives. As presented in Figure 2, research that informs model specification should help ground the entire initiative in a theoretical framework that connects to expected outcomes. Implementation evaluations focus on examining the early boxes in the logic model—such as whether the initiative is reaching its target population, what level of inputs and resources have been committed to the initiative, and how well actual implementation strategies are aligned with the intended framework. Outcome evaluations then measure expected intermediate and long-term outcomes. The level of rigor in these evaluations and their designs determines whether they monitor program progress or assess effectiveness.

Model Specification and Implementation Research

Model Specification. Research and development work are needed to delve deeper into the theories of change for specific strategies. For example, research is needed to map the mechanisms through which varying strategies might improve quality. Program development work can identify program elements that require greater definition or structure in order to have a significant influence on quality. In addition, future research can explore different caregiver and child outcomes that might warrant consideration in tests of the effectiveness of the strategies. This research could be used to develop detailed logic models before pilot tests or evaluations of specific initiatives are launched.

Feasibility of Implementation. Some service delivery strategies are implemented more feasibly with home-based caregivers than others, whereas others may prove especially challenging. More research is needed to understand the challenges of implementation and whether and how those challenges can be met. For example, implementing the service at the intensity intended by the developer is essential for achieving the targeted outcomes, but achieving those dosage levels may be difficult. Home visits and coaching or consultation visits should be completed at the frequency and for the length of time that the developers believe is necessary to produce the desired results. Research is needed to determine the number, frequency, and intensity of home visits that can be

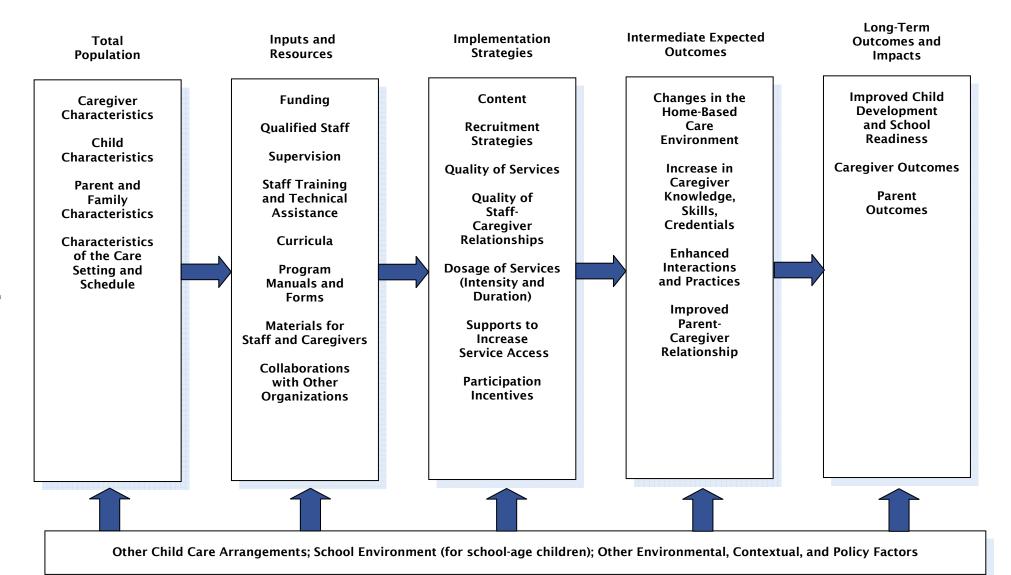**Figure 1. Illustrative Logic Model for a Home-Based Care Initiative**

Total Population	Inputs and Resources	Implementation Strategies	Intermediate Expected Outcomes	Long-Term Outcomes and Impacts
Caregiver Characteristics Child Characteristics Parent and Family Characteristics Characteristics of the Care Setting and Schedule	Funding Qualified Staff Supervision Staff Training and Technical Assistance Curricula Program Manuals and Forms Materials for Staff and Caregivers Collaborations with Other Organizations	Content Recruitment Strategies Quality of Services Quality of Staff-Caregiver Relationships Dosage of Services (Intensity and Duration) Supports to Increase Service Access Participation Incentives	Changes in the Home-Based Care Environment Increase in Caregiver Knowledge, Skills, Credentials Enhanced Interactions and Practices Improved Parent-Caregiver Relationship	Improved Child Development and School Readiness Caregiver Outcomes Parent Outcomes

Other Child Care Arrangements; School Environment (for school-age children); Other Environmental, Contextual, and Policy Factors

Table 2. Illustrative Outcomes of Home-Based Care Initiatives, by Potential for Intensity and Individualization

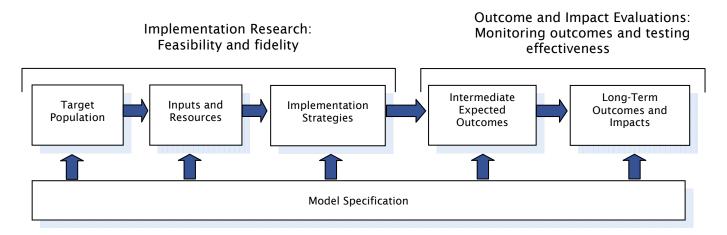|	Low Intensity Strategies[a]	Moderate Intensity Strategies[b]	High Intensity Strategies[c]
Potential Caregiver Outcomes			
Caregiver knowledge	Greater knowledge of safety precautions, first aid, CPR Greater knowledge of instructional practices to promote children's early literacy and mathematics development Greater awareness of supportive services in the community	Greater knowledge of safety precautions, first aid, CPR Greater knowledge of engaging book reading practices with children Greater knowledge of positive behavior management techniques	Greater knowledge of child development Greater knowledge of strategies that can foster children's development (such as talking to children, book reading) Greater knowledge of environmental and temporal supports for positive behavior
Physical environment	Greater safety of the environment; use of grants for safety equipment in the home More books for children in the home	Greater use of safety devices in the home Space and furnishings facilitate healthy practices More books for children in the home Variety of stimulating toys and materials available to children	Greater safety of the environment Arrangement of the environment and the schedule to help reduce conflicts More children's books in the home and accessible to children Variety of stimulating toys and materials available to children Increase in overall quality of home-based care environment
Caregiver practices	Read books to children more frequently Use instructional materials and assessments purchased through the grant	More engaging and more frequent book reading and conversations with children Demonstration of toys and materials supports children's exploration and play	Improved health and safety practices More engaging and more frequent book reading Greater and more consistent use of positive behavioral support strategies Use of questions requiring expanded response, use of waiting time for children's response, and elaboration of child's response to promote language development
Professionalism	Progress toward licensing or accreditation	Progress toward registration, licensing, or accreditation Greater ability to establish hours of care and payment policies with parents	Progress toward registration, licensing, or accreditation Greater ability to establish hours of care and payment policies with parents More positive relationship with parents

10

Table 2 *(continued)*

	Low Intensity Strategies[a]	Moderate Intensity Strategies[b]	High Intensity Strategies[c]
Caregiver well-being	None expected	Increased satisfaction with role as a caregiver	Increased satisfaction with role as a caregiver
		Reduced isolation Increased access to community resources and government supports	Reduced isolation, Increased social support
			Increased access to community resources and government supports
Potential Child Outcomes			
Cognition, language, and literacy	None expected	None expected	Increased communication skills and language development
Social-emotional	None expected	None expected	Increase in positive social behavior
			Decrease in problem behavior
			Improved peer interactions
			Greater self-regulation
			Greater attachment to caregiver
			Greater sense of security and willingness to explore the environment
Physical health and development	Reduced accidental injuries in care	Reduced accidental injuries in care	Reduced accidental injuries in care
			Reduced infections and absences from care
			Reduced incidence of neglect and abuse
Potential Parent Outcomes			
Parent well-being	None expected	More positive perceptions of the care environment	Reduced stress and depression
			Increased self-efficacy
			More positive perceptions of the care environment
Employment-related behavior	None expected	None expected	Fewer absences from work
			Less time missed from work
Knowledge of child development	None expected	None expected	Increased stimulation of child's development

[a]Strategies with low potential for intensity and individualization are grants to caregivers, materials and mailings, and mobile reading vans.

[b]Strategies with moderate potential for intensity and individualization are training through workshops, peer support, and Play and Learn groups.

[c]Strategies with high potential for intensity and individualization are home-based technical assistance and professional development through formal education.

Figure 2. Types of Research and Evaluation Activities to Inform Development of Quality Initiatives for Home-Based Child Care

Implementation Research:
Feasibility and fidelity

Outcome and Impact Evaluations:
Monitoring outcomes and testing
effectiveness

| Target Population | → | Inputs and Resources | → | Implementation Strategies | → | Intermediate Expected Outcomes | → | Long-Term Outcomes and Impacts |

Model Specification

feasibility implemented as well as the necessary resources to guide initiative developers' knowledge of what can be reasonably achieved in the field. Caregivers also face multiple challenges to participating in training and education programs such as the logistics of participating (for example. the timing and location of services), others to the educational backgrounds of the caregivers. Research is needed to assess the suitability of training and education programs for different types of caregivers and the supports that can sustain caregivers' participation so that services can be targeted appropriately.

Fidelity Standards and Measures. Measures of implementation fidelity assess the degree to which the initiative is implemented as planned. Few of the initiatives we identified have fidelity standards for service delivery or methods and measures for assessing fidelity. Moreover, research on some strategies, such as coaching and consultation, indicates that implementing the strategy with fidelity is challenging and may be difficult to achieve. When models have been specified and the content, intensity, duration, and approach to delivery of services have been defined, implementation can be measured and quantified. These data will allow researchers to develop standards for levels of fidelity that must be achieved to produce desired outcomes. For example, fidelity standards could include the minimum amount and quality of services needed to implement with fidelity, the time and training needed for staff to achieve fidelity, and the supervision and staff support required to maintain it. Research is also needed to develop and test measures of fidelity that can be used for ongoing monitoring and program improvement and for assessing levels of fidelity achieved in the context of an evaluation.

Model Adaptation. Because home-based caregivers are so diverse, strategies may have to be adapted to meet a variety of needs. For instance, Play and Learn groups, which are by nature interactive and suitable for one-on-one pairs of adults and children, target primarily family, friend, and neighbor caregivers caring for only one or two children. It might be useful to explore how this strategy could be adapted for caregivers caring for greater numbers of children. Adaptation of content is needed for caregivers from diverse cultural backgrounds and translations are necessary for those who do not speak English as a home language. Adaptations of content and materials may also be needed for caregivers who care for dual-language learners.

Outcome Evaluations

Descriptive Outcomes Studies. These studies examine the changes in expected outcomes only for participants in an initiative; there is no comparison group. Such studies are useful for monitoring and ensuring that an initiative is "on track." They are often extensions of implementation or fidelity studies, particularly when initiatives are at the lowest levels of intensity or in an early stage of development. For example, a descriptive outcomes study of reading vans might assess the changes in the number of books available among participating providers. Or a home-visiting program in a pilot stage might use observational measures to track changes in specific caregiver practices or improvements in the quality of the care environment. Descriptive outcomes studies might examine outcomes for the same group of participating caregivers at different points in time (longitudinal) to assess mean changes or compare changes in the aggregate outcomes of participating caregivers at any two points in time (cross-sectional).

Conclusive Causal Studies. The true test of effectiveness is whether the initiative caused the differences between expected outcomes of caregivers or children who were in the initiative and the outcomes of those who were not. To assess effectiveness, an evaluation needs to examine the outcomes relative to what would have happened without the initiative. These studies rely on a

comparison or control group that does not participate in the initiative but is otherwise just like the group that does participate. When participant and control groups are created in this way, the outcomes for both groups can be compared, and any differences can be attributed to the initiative because the groups are essentially similar in characteristics, on average.

Some strategies or broader initiatives may be ready for rigorous evaluations using randomized controlled trials or quasi-experimental designs to test the effectiveness of these initiatives to improve quality and achieve the expected caregiver, child, and parent outcomes. Initiatives should also be tested with different types of caregivers and groups of children to determine for whom different strategies are effective. Planned variation studies can provide useful information on two dimensions—by testing which service delivery strategy (or combination of strategies) is most effective for delivering specific content or by testing the relative impact of different conditions within a strategy (such as staff qualifications or dosage).

Conclusion

Additional research on strategies for supporting quality in home-based child care is essential for moving the field forward to ensure quality child care for our nation's youngest and most vulnerable children. *Supporting Quality in Home-Based Child Care* has sought to gather and synthesize what is known about home-based child care and how to support its improvement. A full range of research and development activities is urgently needed to develop well-specified initiatives grounded in detailed logic models that link services to expected outcomes; adapt initiatives to meet the needs of this highly diverse group of caregivers; and identify the strategies, dosage of services, and staffing configurations needed to improve quality, support caregivers and parents, and promote children's optimal development in home-based child care settings.

REFERENCES

Arnett, J. (1989). Caregivers in day-care centers: does training matter? *Journal of Applied Developmental Psychology, 10,* 541-552.

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.

Bryant, D., Wesley, P., Burchinal, M., Sideris, J., Taylor, K., Fenson, C., Iruka, I., Hegland, S., Hughes, K., Tout, K., Zaslow, 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.

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.

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.* Washington, DC: U.S. Department of Health and Human Services, Administration for Children, Youth, and Families.

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.

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.

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.

Goodson, B.D., Layzer, J.I., & Layzer, C.J. (2005). *Quality of Early Childhood Care Settings: Caregiver Rating Scale (QUEST).* Cambridge, Massachusetts: Abt Associates.

Harms, T. , & Clifford, R. (1989). *Family Day Care Rating Scale.* New York: Teacher's College Press, 1989.

Harms, T., Cryer, D. & Clifford, R.M. (2007). *Family Child Care Environment Rating Scale Revised Edition.* New York: Columbia University, Teachers College Press.

Johnson, J. O. (2005). *Who's minding the kids? Child care arrangements: Winter 2002.* Washington, DC: U.S. Census Bureau.

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.

McCabe, L. & Cochran, M. (2008, October). *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.

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.

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

Paulsell, D. Porter, T., Kirby, G., Boller, K., Sama Martin, E., Burwick, A., Ross, C., and Begnoche, C. (2010). *Supporting quality in home-based child care: Initiative design and evaluation options.* Princeton, NJ: Mathematica Policy Research.

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., Nichols, T., Del Grosso, P., Begnoche, C., Hass, R., Vuong, L., & Paulsell, D. (2010). *A compilation of initiatives to support home-based child care.* Princeton, NJ: Mathematica Policy Research.

Porter, T., Paulsell, D., Del Grosso, P., Avellar, S., Hass, R., and Vuong, L. (2010). *A review of the literature on home-based child care: Implications for future directions.* Princeton, NJ: Mathematica Policy Research.

Porter, T., Paulsell, D., Nichols, T., Begnoche, C., & Del Grosso, P. (2010). *Supporting quality in home-based child care: A compendium of 23 initiatives.* Princeton, NJ: Mathematica Policy Research.

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.

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.

Rusby, J.C., Smolkowski, K., Marquez, B., & 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.

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.

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.

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.