# Supporting Quality in Home-Based Child Care: Initiative Design and Evaluation Options

March 30, 2010

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# CONTENTS

I INTRODUCTION ..... 1

Key Findings Indicate a Critical Need for Further Development and Testing of Quality Initiatives for Home-Based Child Care ..... 2

The Prevalence of Home-Based Child Care ..... 2
The Quality of Home-Based Child Care ..... 2
The Diversity of Home-Based Caregivers ..... 3
Quality Initiatives for Home-Based Caregivers ..... 4
Evidence of Effectiveness of Home-Based Care Initiatives ..... 5

Purpose and Organization of this Report ..... 6

Limitations of the Report ..... 7

II DEVELOPING A LOGIC MODEL AND DEFINING THE INITIATIVE ..... 9

Purpose and Uses of a Logic Model ..... 9

Setting Goals ..... 9
Guiding Decision Making ..... 10
Monitoring Implementation Progress ..... 10
Testing Effectiveness ..... 10

Defining a Pathway for Change: Developing the Logic Model ..... 10

Identifying the Purpose of the Initiative: Intermediate and Long-Term Outcomes ..... 14

Child Outcomes ..... 14
Caregiver Outcomes ..... 15
Parent Outcomes ..... 17

Targeting the Initiative to Specific Populations ..... 17

Characteristics of Caregivers ..... 17
Characteristics of Children in Care ..... 19
Characteristics of Parents ..... 19
Characteristics of Care ..... 20

III BUILDING INITIATIVES TO SUPPORT QUALITY IN HOME-BASED CARE: SETTING EXPECTATIONS AND SELECTING STRATEGIES ..... 21

Setting Expectations about Strategies and Their Outcomes ..... 21

Specifying a Realistic Pathway of Change ..... 21

Specifying a Timeframe for Change ..... 24
Making Refinements in Expectations When Strategies Change ..... 24

Service Delivery Strategies for Home-Based Care Initiatives ..... 24

Potential for Intensity and Individualization ..... 25
Suitability for Home-Based Care ..... 29
Approaches to Combining Strategies ..... 29
Creating a Continuum of Services ..... 32
Tailoring Services to Individual Needs ..... 33

IV HOME-BASED TECHNICAL ASSISTANCE ..... 35

Home-Based Technical Assistance in Home-Based Care Initiatives ..... 36

Implementation of Home-Based Technical Assistance Initiatives ..... 36

Target Population ..... 36
Content ..... 42
Dosage of Services ..... 44
Strategies for Sustaining Participation ..... 45
Staffing Requirements ..... 45
Cost Categories ..... 46

Expected Outcomes ..... 47

Caregiver Outcomes ..... 47
Child and Parent Outcomes ..... 49

Evidence of Effectiveness ..... 49

Findings on Child Outcomes ..... 51
Findings on Fidelity ..... 51

Research Gaps and Needs ..... 52

V PROFESSIONAL DEVELOPMENT THROUGH FORMAL EDUCATION ..... 55

Professional Development Through Formal Education in Home-Based Care Initiatives ..... 55

Implementation of Professional Development Through Formal Education Initiatives ..... 56

Target Population ..... 57
Content ..... 58
Dosage of Services ..... 59
Strategies for Sustaining Participation ..... 59
Staffing Requirements ..... 59
Cost Categories ..... 59

Expected Outcomes ..... 60

Caregiver Outcomes ..... 60
Child and Parent Outcomes ..... 62

Evidence of Effectiveness ..... 62

Findings on Caregiver Outcomes ..... 62
Findings on Child Outcomes ..... 63
Findings on Fidelity ..... 63

Research Gaps and Needs ..... 64

VI TRAINING THROUGH WORKSHOPS ..... 65

Training Through Workshops in Home-Based Care Initiatives ..... 65

Implementation of Training Through Workshops Initiatives ..... 72

Target Population ..... 72
Content ..... 73
Dosage of Services ..... 74
Strategies for Sustaining Participation ..... 74
Staffing Requirements ..... 75
Cost Categories ..... 76

Expected Outcomes ..... 76

Caregiver Outcomes ..... 77
Child and Parent Outcomes ..... 79

Evidence of Effectiveness ..... 79

Findings on Home-Based Child Care Quality Outcomes ..... 79
Findings on Caregiver Outcomes ..... 81
Findings on Child and Parent Outcomes ..... 81
Findings on Fidelity ..... 82

Research Gaps and Needs ..... 82

VII PLAY AND LEARN ..... 85

Play and Learn in Home-Based Care Initiatives ..... 85

Implementation of Play and Learn Initiatives ..... 89

Target Population ..... 89
Content ..... 89
Dosage of Services ..... 90
Strategies for Sustaining Participation ..... 90
Staffing Requirements ..... 91
Cost Categories ..... 91

Expected Outcomes ..... 92

Caregiver Outcomes ..... 92
Child and Parent Outcomes ..... 92

Evidence of Effectiveness ..... 93

Findings on Caregiver Outcomes ..... 93
Findings on Child Outcomes ..... 95
Findings on Fidelity ..... 95

Research Gaps and Needs ..... 95

VIII PEER SUPPORT ..... 97

Peer Support in Home-Based Care Initiatives ..... 97

Implementation of Peer Support Initiatives ..... 100

Target Population ..... 100
Content ..... 100
Dosage of Services ..... 101
Strategies for Sustaining Participation ..... 102
Staffing Requirements ..... 102
Cost Categories ..... 103

Expected Outcomes ..... 104

Caregiver Outcomes ..... 104
Child and Parent Outcomes ..... 105

Evidence of Effectiveness ..... 106

Findings on Caregiver Outcomes ..... 106
Findings on Child and Parent Outcomes ..... 107
Findings on Fidelity ..... 108

Research Gaps and Needs ..... 108

IX GRANTS TO CAREGIVERS ..... 111

Grants to Caregivers in Home-Based Care Initiatives ..... 111

Implementation of Grants to Caregivers Initiatives ..... 111

Target Population ..... 111
Content ..... 113
Dosage of Services ..... 114
Strategies for Sustaining Participation ..... 115
Staffing Requirements ..... 115
Cost Categories ..... 115

Expected Outcomes ..... 116

Caregiver Outcomes ..... 116
Child and Parent Outcomes ..... 117

Evidence of Effectiveness ..... 118

Research Gaps and Needs ..... 118

X MATERIALS AND MAILINGS ..... 121

Materials and Mailings in Home-Based Care Initiatives ..... 121

Implementation of Materials and Mailings Initiatives ..... 121

Target Population ..... 121
Content ..... 123
Dosage of Services ..... 124
Strategies for Sustaining Participation ..... 124
Staffing Requirements ..... 124
Cost Categories ..... 125

Expected Outcomes ..... 125

Caregiver Outcomes ..... 125
Child and Parent Outcomes ..... 126

Evidence of Effectiveness ..... 126

Findings on Caregiver Outcomes ..... 127
Findings on Child and Parent Outcomes ..... 127
Findings on Fidelity ..... 127

Research Gaps and Needs ..... 128

XI READING VANS ..... 129

Reading Vans in Home-Based Care Initiatives ..... 129

Implementation of Reading Vans Initiatives ..... 129

Target Population ..... 129
Content ..... 131
Dosage of Services ..... 132
Strategies for Sustaining Participation ..... 132
Staffing Requirements ..... 132
Cost Categories ..... 132

Expected Outcomes ..... 134

Caregiver Outcomes ..... 134
Child and Parent Outcomes ..... 135
Findings on Caregiver and Child Outcomes ..... 136
Findings on Fidelity ..... 136

Research Gaps and Needs ..... 136

XII NEXT STEPS FOR DESIGN AND EVALUATION ..... 139

Model Specification ..... 140
Implementation Research ..... 141
Outcome Evaluations ..... 145

Setting a Research Agenda for Quality Improvement Initiatives for Home-Based Child Care ..... 147

Conclusion ..... 148

REFERENCES ..... 149

# TABLES


II.1 Menu of Potential Target Caregiver, Parent, and Child Outcomes for Initiatives to Support Quality in Home-Based Care ..... 16

II.2 Characteristics Defining the Target Population ..... 19

III.1 Service Delivery Strategies for Home-Based Child Care ..... 25

III.2 Illustrative Outcomes of Home-Based Care Initiatives, by Potential for Intensity and Individualization ..... 26

III.3 Suitability of Service Delivery Strategies for Home-Based Caregivers, by Potential for Intensity and Individualization ..... 30

IV.1 Examples of Initiatives Providing Home-Based Technical Assistance ..... 37

IV.2 Overview of Implementation Information for Home-Based Technical Assistance ..... 42

IV.3 Cost Categories for Home-Based Technical Assistance ..... 47

IV.4 Potential Outcomes of Home-Based Technical Assistance ..... 48

IV.5 Design Elements of Studies of Home-Based Technical Assistance ..... 50

V.1 Examples of Initiatives Providing Professional Development Through Formal Education ..... 56

V.2 Overview of Implementation Information for Professional Development Through Formal Education ..... 57

V.3 Cost Categories for Professional Development Through Formal Education ..... 60

V.4 Potential Outcomes of Professional Development Through Formal Education ..... 61

V.5 Design Elements of Studies of Professional Development Through Formal Education ..... 63

VI.1 Examples of Initiatives Providing Training Through Workshops ..... 66

VI.2 Overview of Implementation Information for Training Through Workshops ..... 72

VI.3 Cost Categories for Training Through Workshops ..... 76

VI.4 Potential Outcomes of Training Through Workshops ..... 77

VI.5 Design Elements of Studies of Training Through Workshops ..... 80

VII.1 Examples of Play and Learn Initiatives ..... 86

VII.2 Overview of Implementation Information for Play and Learn ..... 89

VII.3 Cost Categories for Play and Learn ..... 91

VII.4 Potential Outcomes of Play and Learn ..... 93

VII.5 Design Elements of Studies of Play and Learn ..... 94

VIII.1 Examples of Initiatives Providing Peer Support..... 98

VIII.2 Overview of Implementation Information for Peer Support ..... 100

VIII.3 Cost Categories for Peer Support..... 104

VIII.4 Potential Outcomes of Peer Support..... 106

VIII.5 Design Elements of Studies of Peer Support..... 107

IX.1 Examples of Initiatives Providing Grants to Caregivers ..... 112

IX.2 Overview of Implementation Information for Grants to Caregivers ..... 113

IX.3 Cost Categories for Grants to Caregivers ..... 116

IX.4 Potential Outcomes of Grants to Caregivers..... 117

IX.5 Design Elements of Studies of Grants ..... 118

X.1 Examples of Initiatives Providing Materials and Mailings ..... 122

X.2 Overview of Implementation Information for Materials and Mailings ... 123

X.3 Cost Categories for Materials and Mailings ..... 125

X.4 Potential Outcomes of Materials and Mailings..... 126

X.5 Design Elements of Studies of Materials and Mailings ..... 127

XI.1 Examples of Initiatives Providing Reading Vans..... 130

XI.2 Overview of Implementation Information for Reading Vans ..... 131

XI.3 Cost Categories for Reading Vans..... 134

XI.4 Potential Outcomes of Reading Vans ..... 135

XI.5 Design Elements of Studies of Reading Vans..... 136

XII.1 Implementation and Fidelity Measures..... 142

# FIGURES

II.1 Illustrative Logic Model for a Home-Based Care Initiative ..... 12

II.2 Arizona Kith and Kin Project Logic Model..... 13

III.2 Pathways of Change for an Initiative to Improve Language Development and Literacy Skills ..... 23

XII.1 Types of Research and Evaluation Activities to Inform Development of Quality Initiatives for Home-Based Child Care ..... 140

# I. INTRODUCTION

Home-based child care—including regulated family child care and exempt care provided by family, friends, or neighbors—forms a significant part of the child care supply in the United States. It is the most common form of nonparental care for infants and toddlers (Brandon, 2005). Although proportions of children vary by study, researchers estimate that more than 40 percent of all children under age 5 are in these settings (Johnson, 2005). Home-based child care is an important source of care for low-income families, and it represents a significant proportion of the child care used by families that receive child care subsidies (Child Care Bureau, 2006). Parents use these arrangements for a variety of reasons, including convenience, affordability, flexibility, trust, shared language and culture, and individual attention from the caregiver.

In the past decade, a growing recognition of the role that home-based child care settings play in the child care supply has prompted policymakers, researchers, and child care administrators to seek more information about this type of care and strategies for supporting its quality. Efforts have been made by researchers and program administrators 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 (OPRE) within the Administration for Children and Families in the U.S. Department of Health and Human Services (ACF/DHHS) funded a research project, *Supporting Quality in Home-Based Child Care*, to (1) systematically gather information from the varied research and development initiatives that exist, (2) synthesize the available evidence on home-based care, and (3) propose next steps for designing and evaluating quality initiatives. The project, conducted by Mathematica Policy Research along with subcontractor Bank Street College of Education and consultants from Child Trends, has produced three reports that synthesize the evidence on home-based child care:

- **A literature review** summarizing what is known and identifying gaps in a wide array of topics related to home-based child care (Porter, Paulsell, Del Grosso, Avellar, Hass, & Vuong, 2010a)
- **A compilation with brief summaries** of 96 quality initiatives for home-based child care (Porter, Nichols, Del Grosso, Begnoche, Hass, Vuong, & Paulsell, 2010b)
- **A compendium of home-based child care initiatives** profiling in detail 23 quality initiatives for home-based care that use a range of service delivery strategies (Porter, Paulsell, Nichols, Begnoche, & Del Grosso, 2010c)

This report describes potential strategies for supporting quality in home-based child care settings as well as considerations for decision-making and ongoing evaluation of these strategies. This introductory chapter summarizes key findings from the products of *Supporting Quality in Home-Based Child Care* that point to a need for further and more systematic development efforts to design and test quality initiatives targeted to this type of care. We then discuss the purpose and organization of the report and its limitations. Throughout this report, the term "strategies" refers to specific service delivery strategies to support quality in home-based care settings such as professional development, training through workshops, and home-based technical assistance (presented in later chapters). The term "initiatives" refers to programs or broader approaches that involve the use of one or more of the service delivery strategies to provide services to home-based caregivers.

## Key Findings Indicate a Critical Need for Further Development and Testing of Quality Initiatives for Home-Based Child Care

Our synthesis of research on home-based child care and recent initiatives designed to support quality in these settings points to a critical need for more systematic efforts to develop and evaluate quality initiatives for home-based child care settings. In this section, we summarize what is known about the prevalence of home-based child care and its quality. Next, we describe the diverse population of home-based caregivers as well as their needs and interests. Finally, we summarize what is known about the range of quality initiatives currently or recently in the field that target home-based caregivers, emphasizing the need for well specified initiatives, improved documentation to facilitate monitoring and replication, and rigorous evaluations of their effectiveness.

### The Prevalence of Home-Based Child Care

**High levels of use of home-based care for our nation's youngest children and those children at higher risk indicate a pressing need for initiatives to support the quality of care provided in these settings.**

Home-based child care is widely used among families with young children, especially low-income families and families with infants and toddlers. As noted earlier, 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 ages birth to 2—72 percent of all children in nonparental 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 nonrelative 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 nonrelative 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

**Although studies vary, findings of poor-to-mediocre levels of quality as measured by environmental rating scales and low levels of cognitive stimulation found using other observational measures underscore the pressing need for quality initiatives targeted to home-based caregivers.**

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 Family Child Care Environment Rating Scales (FCCERS) (Harms, Cryer, & Clifford, 2007), its updated version, point to a mixed picture of quality. Some studies indicate that average quality is minimal to good, with scores between 3 and 5 (out of a total of 7) 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 CIS) (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 (QUEST) (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 (CCAT-R) (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).

### The Diversity of Home-Based Caregivers

**Home-based caregivers are very diverse in terms of their demographic characteristics, motivations to provide care, and their needs for and interests in support to improve the quality of care they provide. Initiatives to improve the quality of home-based care should be responsive to this diversity, targeting specific types of caregivers and tailoring services to the characteristics of individual caregivers.**

For the purpose of this report, home-based care is defined as nonparental 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. This broad definition includes a varied and diverse set of caregivers. Three differences among home-based caregivers are important to consider in developing quality initiatives targeted to this type of care: (1) their demographic characteristics, (2) their motivations to provide care, and (3) their needs and interests.

**Demographic Characteristics.** Ages of home-based caregivers vary widely, from teens and early 20s to 70s and 80s (Porter et al., 2010a). On average, caregivers are in their mid 40s. Educational levels and special training in early childhood can vary. Research shows that family child care providers are more likely to have a high school degree or higher than are family, friend, and neighbor caregivers, and nonrelative 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 they are relatives, and many speak a language other

than English as their home language. In general, all types of home-based caregivers (family, friend, and neighbor caregivers and regulated family child care providers) tend to have low incomes. (Paulsell et al., 2006; Brandon, Maher, Joesch, Battelle & Doyle, 2002; Anderson, Ramsburg & Scott, 2005).

**Motivation to Provide Care.** The research indicates that the motivation to provide care among home-based caregivers also varies (Porter et al., 2010a). 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 caregivers who are relatives. For regulated 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.** The research literature also indicates that family, friend, and neighbor caregivers and regulated family child care providers share some challenges in caring for other people's children (Porter et al., 2010a). These include isolation, work-related stress and physical exhaustion, and 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 often 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 also be attracted to initiatives that employ experiential learning approaches—such as home visiting, support groups, or play and learn groups—rather than formal training workshops. In contrast, research shows that regulated family child care providers who are already licensed want opportunities for increased income or professional advancement (Porter et al., 2010a).

### Quality Initiatives for Home-Based Caregivers

**Initiatives to improve quality in home-based care settings range in their degree of specification of outcomes, program processes, and implementation standards. There is a need for more systematic development and specification of these initiatives to support refinement, testing, and replication.**

As part of the *Supporting Quality in Home-Base Child Care* project, the research team conducted an extensive scan of the field to identify initiatives aimed at supporting quality in home-based child care (Porter et al., 2010b).[1] This scan resulted in a set of 96 initiatives with four types of primary goals:[2] (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 (CDA)

[1] We included initiatives operating at the time of the scan and recent initiatives no longer in operation that had adequate documentation. Search methods included a review of state Child Care and Development Fund (CCDF) plans, a search for literature about initiatives to support home-based care, internet searches, and consultation with child care experts and state child care administrators.

[2] We classified each initiative by its primary goals. These goals, however, are not mutually exclusive; many initiatives work toward more than one of these goals.

credential (4 initiatives), (3) support for licensing or registration (7 initiatives), and (4) support for obtaining accreditation from the National Association for Family Child Care (NAFCC) or a local accrediting agency (5 initiatives) (Porter et al., 2010b).

The initiatives used a wide range of service delivery strategies. 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 or regular in-home coaching or consultation over an extended period.

Most initiatives we identified 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. Moreover, 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.

**Evidence of Effectiveness of Home-Based Care Initiatives**

**Little is known about the effectiveness of quality initiatives for home-based child care. Insufficient rigorous research has been done to assess whether these initiatives actually improve quality or child outcomes. There is a need for further evaluation and ultimately, large-scale, rigorous research to test the effectiveness of specific quality initiatives.**

Research on initiatives to support quality in home-based care is limited. Most available studies document implementation outcomes and experiences (Pittard, Zaslow, Lavelle, & Porter, 2006). In our scan of the field, about half of the initiatives we identified (40 of the 96) reported conducting an evaluation (Porter et al., 2010b). Of these, 28 examined caregiver outcomes, largely through pre- and post-assessments of caregivers' knowledge or practices. Beyond the evaluations associated with the initiatives identified through our scan of the field, we also identified 17 studies of other home-based care initiatives (Porter et al., 2010a). 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.

Several studies suggested associations between participation in the initiatives and higher quality as measured by the FDCRS, the Arnett CIS, and the CCAT-R, but selection bias—caregiver characteristics that potentially increase the likelihood a caregiver participates in the initiative and are related to the quality of care even without that initiative—may influence the results. The results of one correlational study suggested that participation in workshops might improve attachment between children and caregivers (Howes, Galinsky & Kontos, 1998); another study suggested that caregiver participation in home visits might be positively associated with children's language and cognitive development as well as self-regulation (McCabe & Cochran, 2008).

The four random assignment studies found positive effects on caregiver outcomes, but little to no effect on children's outcomes. 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). Two initiatives that used coaching and consultation also resulted in significant improvements in

caregiver quality but did not produce positive effects on children's outcomes (Bryant et al., 2009; Ramey & Ramey, 2008). A fourth initiative that provides home visits to caregivers produced significant improvements in quality but not on child outcomes (McCabe & Cochran, 2008).

In sum, we cannot draw conclusions about the effectiveness of different strategies for improving the quality of home-based care because of the lack of rigorous methods to isolate the effects of the initiative (most studies lack a randomly assigned comparison group) and the small sample sizes.

## Purpose and Organization of this Report

This report was developed as a resource for program administrators and others who must make decisions about the design, funding, and evaluation of initiatives to improve quality in home-based care. The report is structured to achieve three goals:

1. To guide the design and development of initiatives including the identification of target populations of caregivers, expected outcomes, and appropriate service delivery strategies based on available inputs and resources
2. To support decision-making about specific elements and activities of initiatives based on what is known from existing implementation and outcome evaluations of home-based care initiatives
3. To promote monitoring and evaluation efforts, suited to the stage of an initiative's development, that will address the gaps in knowledge that exist in the field

The report draws on all the information collected over the course of the project, *Supporting Quality in Home-Based Child Care*. Specifically, it is based on a literature review (Porter et al., 2010a), a compilation of 96 brief initiative profiles (Porter et al., 2010b), and a compendium of 23 detailed initiative profiles (Porter et al., 2010c). We incorporated additional research literature or initiative descriptions that became available after these documents were completed. We have also drawn on literature about the effectiveness of similar strategies used with other populations, such as center-based child care teachers and parents.

After this introductory chapter, Chapter II discusses the uses and development of a logic model to help plan, guide, and monitor a quality initiative for home-based child care. In Chapter III, the discussion focuses on setting expectations and selecting strategies to build an initiative to support quality in home-based care. The report then provides detailed descriptions of the primary strategies and components of initiatives that support the quality of home-based child care as identified through the methods described above. The eight primary strategies discussed separately in Chapters IV through XI are (1) home-based technical assistance, (2) professional development through formal education, (3) training through workshops, (4) play and learn groups, (5) grants to caregivers, (6) peer support, (7) materials and mailings, and (8) reading vans. For each strategy we present what is known about how the strategy has been implemented with home-based caregivers—including dosage, staffing requirements, costs, expected outcomes, and evidence of effectiveness. We also identify research gaps and needs for each strategy. Chapter XII discusses next steps in developing quality initiatives for home-based caregivers and provides information to guide decisions about when an initiative is ready to be evaluated, and through which design and measurement approaches. The chapter concludes with a brief discussion of the priorities for a research agenda focused on quality in home-based child care.

## Limitations of the Report

Sparse research evidence regarding the effectiveness of quality initiatives for home-based child care settings limits the guidance than can be given about which of the strategies in this report may be more effective than others and for which types of home-based caregivers. Moreover, most strategies for supporting quality in home-based child care that we identified are not well documented. We have used all the information available on the strategies to provide guidance about how they are implemented; however, we do not have information about specific requirements identified by the developers. Therefore, this report can only suggest *potential directions* for designing initiatives and which strategies might be well matched to the circumstance and needs of home-based caregivers.

# II. DEVELOPING A LOGIC MODEL AND DEFINING THE INITIATIVE

Producing meaningful improvements in home-based child care—and ultimately in outcomes for children in these settings—requires a focused, well-defined roadmap detailing what an initiative should achieve, for whom, and how. A logic model is a tool that can be used to plan, guide, monitor, and test such an initiative. Logic models specify all key elements of a program, showing the linkages between an initiative's expected outcomes, target population, activities and services, and resources needed to implement the initiative. In this chapter, we describe the uses of a logic model and the steps to develop a logic model for initiatives to improve the quality of child care in home-based settings.

## Purpose and Uses of a Logic Model

A logic model concisely summarizes all aspects of a well-defined initiative. Program developers, administrators, and funders can use a logic model to identify the outcomes they want to achieve through an initiative. The model can also be used to define the target population (children, caregivers, and parents) as well as the services and activities that best fit the target population and are most likely to produce the target outcomes.

A logic model is usually grounded in some assumptions, based on research evidence, about the desired outcomes and the strategies needed to achieve them. The model illustrates the linkages between the initiative and the outcomes, showing the expected pathway of change. It can be used to identify the components of the initiative that are expected to lead to specific outcomes, to assess the feasibility of achieving the expected outcomes with the resources available, and to illustrate the external factors that may affect the initiative and its ability to produce the desired outcomes. These models can vary greatly in their complexity.[3]

When used to their full extent, logic models are dynamic guideposts that can serve multiple purposes over the course of an initiative, as described below.

### Setting Goals

Logic models assist in initial goal-setting by allowing program staff to explicitly put to paper the desired outcomes of an initiative. This process typically involves multiple stakeholders and decision makers and includes a review of what is known from prior research along with discussions about existing context and resources. This is not necessarily an easy process, but it leads to well-defined intermediate and long-term expected outcomes.

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[3] *The Toolkit for Evaluating Initiatives to Improve Child Care Quality*, which focuses broadly on child care quality improvement efforts, is a useful resource for developing a logic model (or theory of change model) that can guide an initiative and serve as the basis for evaluating its results. The kit can be accessed at http://www.bankstreet.edu/iccc/toolkit.html. Another resource is the W.K. Kellogg Foundation's *Logic Model Development Guide*, which uses a more complex approach for developing a logic model. The guide can be accessed at http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf.

### Guiding Decision Making

Once goals are defined, the logic model can be further refined to include the strategies and intensity of service delivery needed to achieve expected outcomes, methods for recruiting targeted caregivers, and the resources necessary to implement the strategies. Using the logic model to shape the initiative forces a continued focus on the connection between implementation and expected outcomes.

### Monitoring Implementation Progress

Developing and refining an initiative is an iterative process that functions best when there are planned feedback cycles that assess how (and how well) the initiative is working. A logic model that includes specific actions to take and clear indicators of progress supports a continued focus on monitoring, self-assessment, and evaluation. For example, a logic model that specifies the types and dosage of services to be provided and the qualifications of staff who will deliver them can serve as the starting point for developing implementation fidelity standards and measures for assessing fidelity. Ongoing monitoring and self-assessment helps ensure that the initiative is on track and indicates when an adjustment is needed. A logic model is not static; it should reflect the changes in resources, activities, and goals that can happen over the course of an initiative.

### Testing Effectiveness

The ultimate question is whether the initiative is meeting its goals—a question answered only through rigorous evaluation. It takes time for an initiative to be ready for this type of evaluation. Mature initiatives that are ready for rigorous evaluation are fully developed with well-documented service delivery processes and standards. In addition, they have been fully implemented with a high degree of fidelity to the program model. Once initiatives have reached this level of development, a logic model provides an important framework for evaluating effectiveness by defining the key elements for measurement—the short- and long-term outcomes. (See Chapter XII for more information on evaluation.)

We use a logic model to structure the information throughout this report. In this chapter, we present a somewhat simplified logic model for an initiative to improve home-based child care—in other words, the steps required to link the various pieces of the initiative with the desired outcomes. We also discuss the goal-setting function of a logic model. The next chapter discusses the process of defining the service delivery strategies to be used. Chapters IV through XI present information about eight specific strategies that can help guide decision making to "fill in" the details of the logic model. In the last chapter, we discuss next steps for design and evaluation, which involve the last two functions of the logic model—monitoring progress and testing effectiveness.

## Defining a Pathway for Change: Developing the Logic Model

We begin with a description of the general structure of a logic model, followed by a discussion of how to identify intermediate and long-term expected outcomes for children, caregivers, and parents. We then discuss strategies for targeting the initiative to specific populations of caregivers, children, and families.

Figure II.1 illustrates the basic components to consider when developing a logic model for home-based child care. The model depicts the pathway for change as you move from left to right.

Change is affected by the characteristics of the **target population** (caregivers, parents, and children), the available **inputs and resources** that support the initiative, and the **implementation strategies** used. Change occurs within the context of other **environmental factors**, such as other child care arrangements for the child, as well as **policy changes** that may influence the initiative (depicted in the bottom box of Figure II.1). As the logic model illustrates, any **long-term impacts** on children's outcomes will be affected by **intermediate outcomes**, such as improvements in the care environment, caregiver interactions with children, or caregiver practices.

Although Figure II.1 depicts the general structure, a logic model for a home-based child care initiative should be more detailed, clearly showing how its components will lead to desired outcomes. In our scan of initiatives, we found several logic models with varying levels of specificity and complexity, and all could benefit from further refinement. For example, the logic model in Figure II.2 shows the target population and desired outcomes for the Arizona Kith and Kin Project. As the title implies, this initiative's target population is family, friend, and neighbor (or "kith and kin") caregivers. The right side of the model shows the initiative's expected outcomes—improvement of caregivers' knowledge of health and safety practices. In between, the model shows the services and activities to be implemented—developing collaborations with community partners to recruit participants, educating the caregivers through facilitated support groups, and providing safety equipment—and the intermediate outcomes, including improved safety of the home environment.

Research on home-based child care is a useful starting point for developing a logic model for an initiative to improve home-based child care; such research can point to potential expected outcomes and promising strategies for achieving them. As noted in Chapter I, however, research on the effectiveness of home-based care initiatives is sparse; initiative developers may therefore need to look beyond this body of research. For example, developers could look to the broader child care literature, the home visiting literature, or the family support literature and consider how to adapt promising strategies in those fields for home-based child care settings and caregivers. (See Porter et al., 2010a for a discussion of how findings from these other sources might be applied to home-based child care.) Using research findings from child care or related literature is important to ensure that (1) the expected outcomes can be realistically achieved through the planned services and activities and (2) staff have the qualifications and training needed to deliver the services.

Creating the logic model early on facilitates thinking about the broad pathway of change, but as the particular components of the initiative are developed, the logic model will likely need to be refined. Constructing a logic model is usually an iterative process, moving between the big picture and specific components of the initiative. Throughout this process, the logic model shows how the program components are linked to specific changes in the home-based care setting and expected outcomes for the caregiver, parent, or child. In other words, the logic model serves as an anchor or reminder that any future changes in the initiative should be tied to the outcomes and follow the proposed pathway of change.

When developing the logic model, it can be helpful to first consider the goals of the initiative and the characteristics of the target population, and then develop the pathway for change. This implies working from the beginning and end points of the model (the target population and anticipated outcomes) and moving inward because these decisions—what the initiative should do and for whom—shape the middle components of the model. Accordingly, the rest of this chapter focuses on the beginning and end points of the logic model, starting with the outcomes and then turning to the target population.

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

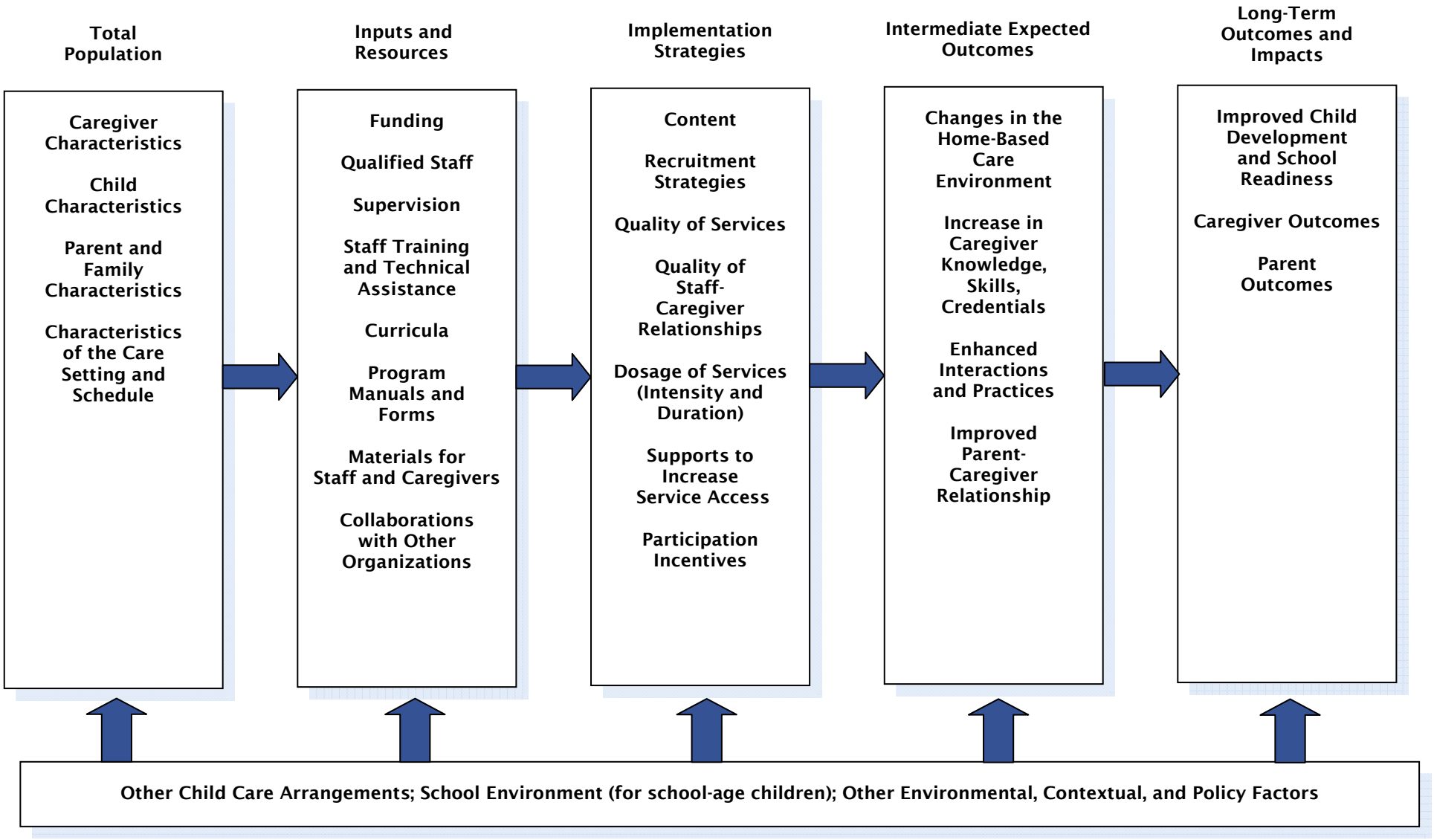


**Figure II.2. Arizona Kith and Kin Project Logic Model**

**Agency Name:** Association for Supportive Child Care
**Program Name:** Arizona Kith and Kin Project

| INPUTS | STRATEGIES | OUTPUTS | OUTCOMES | INDICATORS |
|---|---|---|---|---|
| 2.5 full-time bilingual employees.<br><br>Eight community partners provide space for the meeting and child care as well as group co-facilitators and child care staff.<br><br>Videos, books, hands-on games, role playing kits and activities, reference materials, printed resources and community related information.<br><br>Special skills utilized: Certified Child Passenger Safety Technicians, CPR and First Aid instructors, Registered Nurse volunteers, Fire and Police Department staff.<br><br>Conduct recruitment and outreach activities.<br><br>Host an annual health and safety training day, supply providers with smoke detectors, fire extinguishers, car seats, outlet covers, first aid kits and cribs<br><br>Professional training for staff. | Establish collaborations with community partners as point of contact for each site<br><br>Conduct outreach to participants.<br><br>Provide transportation to and from the meetings.<br><br>Provide on-site child care during meetings.<br><br>Educate kith and kin providers on early childhood related topics.<br><br>Create supportive relationships for kith and kin providers.<br><br>Educate kith and kin providers on resources and opportunities for future growth that are available.<br><br>Provide the necessary safety devices to improve the safety of children. | Kith and Kin support-training sessions were offered at eight (8) sites in 2008. Two 14-week sessions took place between January 2008 and December 2008 (224 training sessions total during this time period).<br><br>480 kith and kin child care providers received training and support in 2008.<br><br>A total of 248 kith and kin providers became CPR and First Aid certified in 2008.<br><br>Approximately 1,440 children were impacted by services provided to kith and kin child care providers.<br><br>161 car seats were properly installed by kith and kin providers and verified by a certified car seat technician in 2008. | **SHORT-TERM**<br>-Participants will gain a better understanding and increased knowledge of quality child care by the end of the 14 week support-training.<br><br>-Participants receive the opportunity to get respite from their normal child care responsibilities and an opportunity to network with other providers in their community.<br><br>**MID-TERM**<br>-Participants have the opportunity to attend the Annual Health and Safety Training Day and gain additional skills and materials upon completion of the 14 week training-support session.<br><br>-Participants will be better equipped to provide a safe child care environment by the end of each 14-week session.<br><br>**LONG-TERM**<br>-Kith and Kin participants gain long term peer support that continues beyond the 14-week training-support session.<br><br>-Kith and kin participants will increase their knowledge and understanding of children's development, health and safety issues.<br><br>-Kith and kin participants will increase their knowledge and skills regarding the utilization of home safety devices and child safety seats. | **SHORT-TERM**<br>-At least 85% of group participants will show an increase in knowledge of quality care by the end of the 14-week session as measured by pre/post-test.<br><br>-All group participants will have on-site child care during their two hour training throughout the 14-week session as measured by child care sign-in roster.<br><br>**MID-TERM**<br>-22% of group participants attended the Annual Health and Safety Training Day as measured by registration and sign-in forms.<br><br>-At least 85% of Training Day participants will have increased knowledge of health and safety issues as measured by the Health and Safety Training Day survey.<br><br>-100% of participants attending the Health and Safety Training Day received safety equipment including smoke detectors, fire extinguishers, and outlet covers.<br><br>-At least 75% of new group participants will become CPR and First Aid certified as measured by training sign-in forms and training exam.<br><br>**LONG-TERM**<br>- 85% of group participants will have an increased knowledge of child development and health and safety related issues by the end of the 14-week session as measured by the pre/post-test.<br><br>-At least 85% of group participants will show a better understanding of home and child safety devices by the end of the 14-week session as measured by staff observations. |

## Identifying the Purpose of the Initiative: Intermediate and Long-Term Outcomes

The goal of the initiative—the change that should occur if the initiative is effective—shapes most of its other aspects. Along with identifying the target population, identifying the goals of an initiative is one of the first basic, but essential, decisions to make during the development process. Goals can be thought of as two-pronged, consisting of (1) the intermediate outcomes, such as improvements in the care setting or in child-caregiver interactions, that appear in the middle of a logic model and (2) the long-term outcomes that appear at the end of a logic model. The intermediate changes must take place before the long-term outcomes can be achieved.

In general, home-based care initiatives are designed to improve the quality of care children receive from family, friend, and neighbor caregivers or regulated family child care providers. Higher-quality care is linked to improved child outcomes (Clark-Stewart, Vandell, Burchinal, O'Brien & McCartney, 2002; Elicker et al., 2005; and Loeb, Fuller, Kagan, & Carrol, 2004). In many such initiatives, program staff often focus on the caregiver and the environment in which the care is provided, assuming that changes in these aspects of care will promote children's development. Outcomes for caregivers are typically related to improving the care setting and adult-child interactions—for example, improving safety equipment to prevent accidents involving children, enhancing caregivers' knowledge of children's language development, or increasing credentials in early childhood education. Outcomes for children are often related to developmental domains—cognitive, social-emotional, and physical development, for example—and children's characteristics, such as their age, family income, or home language. Initiatives to improve home-based child care may also include outcomes for parents, such as parental employment. Although parental outcomes are not typically viewed in the child care field as an aspect of child care quality, they might be indirectly associated with the effects of child care on children's development (Bromer et al., in press).

To keep the long-term expected outcomes manageable and achievable, the intermediate outcomes should narrow the focus of the initiative. Intermediate outcomes should be detailed and specific, focusing on aspects of the care setting and practices that must change to increase the possibility of achieving the long-term outcomes. For example, an intermediate outcome for improving the safety of the care environment might be to install more safety equipment, such as electrical outlet covers, locks on cabinet doors, or secured electrical cords, in the care setting. For caregivers, it might include practices such as putting children to sleep on their backs, putting poisons out of reach, or keeping children within eye- or earshot at all times. Whether the outcomes are intermediate or long-term, they should be highly focused, targeted, and concrete. With well-defined desired outcomes, the developer can flesh out the logic model, filling in the components that increase the likelihood of obtaining the desired results.

### Child Outcomes

Working with the technical advisory group for *Supporting Quality in Home-Based Child Care*, we developed a list of possible outcomes for children in home-based child care (Table II.1). The list is based on research on the positive effects of high-quality child care on children, including possible benefits of home-based child care. These benefits may include support for children's social-emotional development and positive racial and ethnic socialization, which may be particularly salient for home-based caregivers since their race and ethnicity frequently correspond to those of the

children in care. Other child outcomes may include improved language and early literacy skills, improved health, and reduced injuries and accidents.

In our review of 96 home-based child care initiatives, we found a relatively small proportion that specified outcomes for children and a slightly larger proportion in which child outcomes might be identified as a long-term goal, although they were not clearly stated as such (Porter et al., 2010b). One initiative that identified a long-term outcome for children is the Great Beginnings Quality Child Care Project, which aims to improve the social-emotional development of infants and toddlers in family, friend, and neighbor care. The goal of this initiative is to help children form healthy attachments and positive peer relationships through home visits with a mental health focus. Another example is Right from Birth, which uses workshops and intensive consultation to improve children's language development in unregulated home-based care settings and child care centers.

**Caregiver Outcomes**

Home-based care initiatives may choose to target a wide range of caregiver outcomes (Table II.1). These outcomes define the purpose of the initiative because they influence the nature of the services it will offer. As indicated earlier, caregiver outcomes may be depicted in a logic model as the long-term, ultimate outcomes of an initiative (such as helping a caregiver obtain professional credentials) or intermediate outcomes that ultimately lead to improved child outcomes (such as changing caregiving practices to better support children's cognitive or social-emotional development). Most of the initiatives that we reviewed identified a vague long-term outcome—often "quality improvement." This lack of specificity makes it difficult for developers to assess the fit between planned services and target outcomes, and ultimately to evaluate the initiative's effectiveness.

However, some initiatives identified more specific long-term outcomes. Two examples are the Alabama Kith and Kin Project and the Infant Toddler Family Day Care Program in Fairfax County, Virginia. The former aims to enhance understanding of a range of child development issues among family, friend, and neighbor caregivers. The latter's desired outcome is even more sharply focused: to improve knowledge about caring for infants and toddlers among the regulated family child care providers for whom it provides workshops.

Many initiatives associate licensing and regulation with quality improvement and thus focus on structural changes within the child care environment. For some initiatives, the change in regulatory status alone is viewed as a long-term outcome. In many states, obtaining a license or becoming a registered provider enables the caregiver to enter the state's Quality Rating and Improvement System (QRIS), which may make the caregiver eligible for additional support, high subsidy reimbursement rates, or additional quality improvement initiatives. For example, the Registered Family Home Development Project in San Antonio, Texas, offers a series of workshops to help caregivers become regulated. Other initiatives view licensing as an intermediate outcome. The Child Care Initiative Project, a statewide initiative in California, and Acre Family Child Care in Lowell, Massachusetts, are two examples. Both initiatives work with individuals to help them become regulated and then offer other services to enhance the quality of their care as a long-term goal.

**Table II.1. Menu of Potential Target Caregiver, Parent, and Child Outcomes for Initiatives to Support 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 professionalization | Reduced stress | Improved health status |
| Improved satisfaction with role as caregiver | Reduced work absenteeism | Reduced injuries and accidents in child care |
| Improved access to community resources and government supports | Improved psychological well-being | Positive racial/ethnic socialization and identity |
| Improved access to social support | | |
| Reduced isolation | | |
| Improved psychological well-being | | |
| Increased income | | |
| Increased access to health insurance | | |
| Reduced social service needs | | |

Source: Porter et al., 2010a.

A number of initiatives focus on the professional development of the caregiver to effect change in the child care environment and quality of care. Professional development systems such as Idaho Stars or QRIS (for example, Pennsylvania's Keystone STARS Project) regard some aspects of professional development—additional credentials such as child development associate (CDA) credentials or educational degrees—as intermediate outcomes. Typically, the long-term outcome is accreditation by a professional child care organization, such as the National Association of Family Child Care (NAFCC). Accreditation is also a long-term outcome for other kinds of efforts, such as Provider and Child Care Education Services (PACES) in Iowa as well as Satellite Family Child Care in Wisconsin.

Some initiatives aim to facilitate other changes for the caregiver that may be indirectly related to child care quality. Among them are improved psychological well-being among caregivers or increased social supports to help reduce stress and isolation associated with providing child care at home (Porter et al., 2010a). In several instances, these are specified as intermediate outcomes that will precede long-term outcomes. For example, to achieve its long-term outcome of promoting optimal learning experiences at home, Tutu and Me—a family interaction program in Hawaii that

targets grandparent caregivers (tutu)—identifies grandparents' improved emotional and mental well-being as an intermediate outcome. Satellite, a family child care network, identifies increased social support for family child care providers as an intermediate outcome, which leads to its long-term expected outcome of expanding the number of accredited providers. This is based on the assumption that providers who have networks of support are more likely to remain in the field.

### Parent Outcomes

As Table II.1 indicates, a variety of outcomes for parents are also possible. Children may benefit from improved relationships between the parent and the caregiver as parents gain a better understanding of child development from the caregiver. This shared knowledge may lead to closer congruence in child-rearing practices, providing more consistency for the child. Improved relationships between parents and caregivers can also increase parents' satisfaction with the child care arrangement, which may reduce parental stress. Stress reduction is significant as parental stress can directly and indirectly hinder children's social-emotional development. Greater satisfaction with the child care arrangement may, in turn, result in more stable child care situations, leading to more positive child outcomes.

We found fewer examples of these kinds of outcomes in our scan of the field and literature review. One initiative, Michigan Better Kid Care (MiBKC), specifies increased worker productivity for parents as a long-term outcome. In most cases, however, parent outcomes are regarded as intermediate outcomes that will ultimately lead to child outcomes. Homelinks, an initiative in Hartford, Connecticut, identifies parents' support for children's school readiness as an intermediate outcome that leads to the long-term outcome of enhanced school readiness. Acre Family Day Care also has an intermediate desired outcome of increasing parents' knowledge of how to support their children's development.

## Targeting the Initiative to Specific Populations

Because an initiative for home-based child care will not be able to address all the different needs, backgrounds, and characteristics of caregivers and settings, it should target a specific population or populations. As shown on the far left of the logic model (Figure II.1), the target populations will shape the initiative because services and supports will be tailored specifically for them. Identifying a target population in home-based child care means taking into account the characteristics of the caregiver, the children in care and their families, and the care environment itself (Table II.2). In the rest of this section, we discuss factors to consider in targeting initiatives in home-based child care.

### Characteristics of Caregivers

The characteristics of the caregivers in home-based child care are a major factor to consider in identifying a target population. These considerations will help determine the goals of the initiative as well as the design of services and activities that it will offer. For example, an initiative intended for family, friend, and neighbor caregivers who are legally exempt from regulation may have different goals—licensing, for example—than an initiative designed for family child care providers who are already licensed or regulated. The appeal of any initiative is likely to vary depending on the caregivers' characteristics—their motivations for providing child care, their educational backgrounds and experience, and their culture. As presented in Chapter I, there is evidence of wide variation within and across these categories.

**Table II.2. Characteristics Defining the Target Population**

| Target Population | Characteristics |
|---|---|
| Caregivers | Regulation status<br>Relationship to children in care<br>Motivation for providing care<br>Interest in professionalization<br>Training and education<br>Demographics and personal characteristics such as health status<br>Other needs |
| Children | Age (infants, toddlers, preschoolers, school-age)<br>Special needs, including disabilities or delays<br>English language learners<br>Whether children are siblings or otherwise related to each other |
| Parents | Relationship to caregiver<br>Employment and income<br>Home language and culture<br>Education |
| Care setting | Purpose of care (primary arrangement while parents work; supplemental, wraparound, backup, or emergency care)<br>Schedule (daytime, weekend, overnight)<br>Intensity (part-time, full-time, more than full-time, occasional)<br>Group size and mix of ages |

Appealing to caregivers' interests, needs, and backgrounds is one of the best ways to promote engagement in the initiative. The first consideration in designing an initiative should be the type of caregiver—family, friend, and neighbor caregivers; regulated family child care providers; or both—because their motivations for providing care vary. This difference in motivation can influence the strategies best suited for different caregivers and the type of incentives that will sustain their participation over time. Next, educational backgrounds and specialized training should be taken into account in determining the initiative's content and how it is delivered. For example, caregivers with low literacy levels will need modified written materials or services based on direct interaction with staff or coaching in the home rather than classroom-based training. Caregivers who do not speak English will need materials in their home language. Materials should also be culturally appropriate for the caregivers and families using them.

### Characteristics of Children in Care

Initiatives that aim to improve children's outcomes will be more likely to succeed if they take into account the characteristics of the target population of children. Activities and content should be chosen based on the ages of the children, whether they have disabilities or delays, and whether they are dual language learners. In addition, the characteristics of children being cared for in the home, such as whether different ages are served together, should influence the content and focus of the initiative. An initiative may be appropriate for children with different characteristics, but suitable adaptations based on children's needs and circumstances will likely be a deliberate part of the design.

### Characteristics of Parents

The characteristics of families who use home-based child care are also relevant. Research shows that families with low incomes, single-parent households, and families headed by parents who have a high school degree or less are more likely to use home-based care than their peers (Porter et al.,

2010a). In addition, Hispanic and African American families use home-based care more often than white families, although patterns of use vary by age of the child.

The needs of these parents and their resources will inevitably affect the children and some aspects of the caregiving situation. The parents' employment, for example, is likely to influence the need for care as well as the schedule and length of time in care. Furthermore, parents' employment is likely to shape their flexibility in terms of ability to take time off from work if the child is sick or the caregiver is not available. Other characteristics, such as the parents' education or relationship to the caregiver, might affect how the initiative is developed, particularly if the initiative has a parent education or parent involvement component or is designed to improve caregiver-parent relationships.

**Characteristics of Care**

The amount of time a caregiver spends with children and his or her interactions with them are influenced by the purpose of care (including whether the care is a primary, supplemental, backup, or emergency arrangement); the schedule (daytime, overnight, or weekends); and intensity of care (part-time or full-time). These characteristics may affect the initiative's content, how it can be delivered, and the intensity of services. Children in home-based care for shorter periods of time or overnight, for example, might be less likely to be affected by a home-based care initiative and may require more intensive services.

# III. BUILDING INITIATIVES TO SUPPORT QUALITY IN HOME-BASED CARE: SETTING EXPECTATIONS AND SELECTING STRATEGIES

Building on the introduction of the logic model in the previous chapter, this chapter ties the specific strategies used in the field into an initiative-building effort to support quality in home-based child care. The prior chapter focused on building the beginning and end of the logic model—identifying the target population and expected outcomes. In this chapter, we introduce the service delivery strategies that fill in the center of the logic model and make the connection to appropriate and realistic expectations about outcomes and their timing based on initiative components and service intensity.

We begin the chapter with a discussion about setting these expectations and then introduce the strategies along with a framework for considering how intensively they can be provided and the potential to tailor them to the circumstances and interests of individual home-based caregivers. We also provide examples about the range of outcomes that may be expected from strategies at different levels within this framework. Next, we provide an assessment of the suitability of the service delivery strategies to the unique circumstances, needs, and interests of home-based caregivers. The chapter concludes with a discussion of how the individual strategies may be combined within a broader initiative by creating a continuum of services to target different kinds of caregivers and outcomes. Decision-makers can use the information provided in this chapter, together with the details presented for each individual strategy in the chapters that follow, to build initiatives by specifying the service delivery strategies and links to expected outcomes in their logic models.

## Setting Expectations about Strategies and Their Outcomes

The previous chapter discussed broadly the need to identify outcomes for caregivers, children, and parents that could result from initiatives to support quality in home-based care. Ultimately, the logic model should provide specific predictions about the intermediate and long-term outcomes the initiative is expected to influence and how long it will take. This specificity is developed through decisions about the resources available for the initiative and the service delivery strategies that will be used. The expectations for changes in outcomes and the timeframe in which these changes may be expected are intricately tied to decisions about the type and intensity of service delivery.

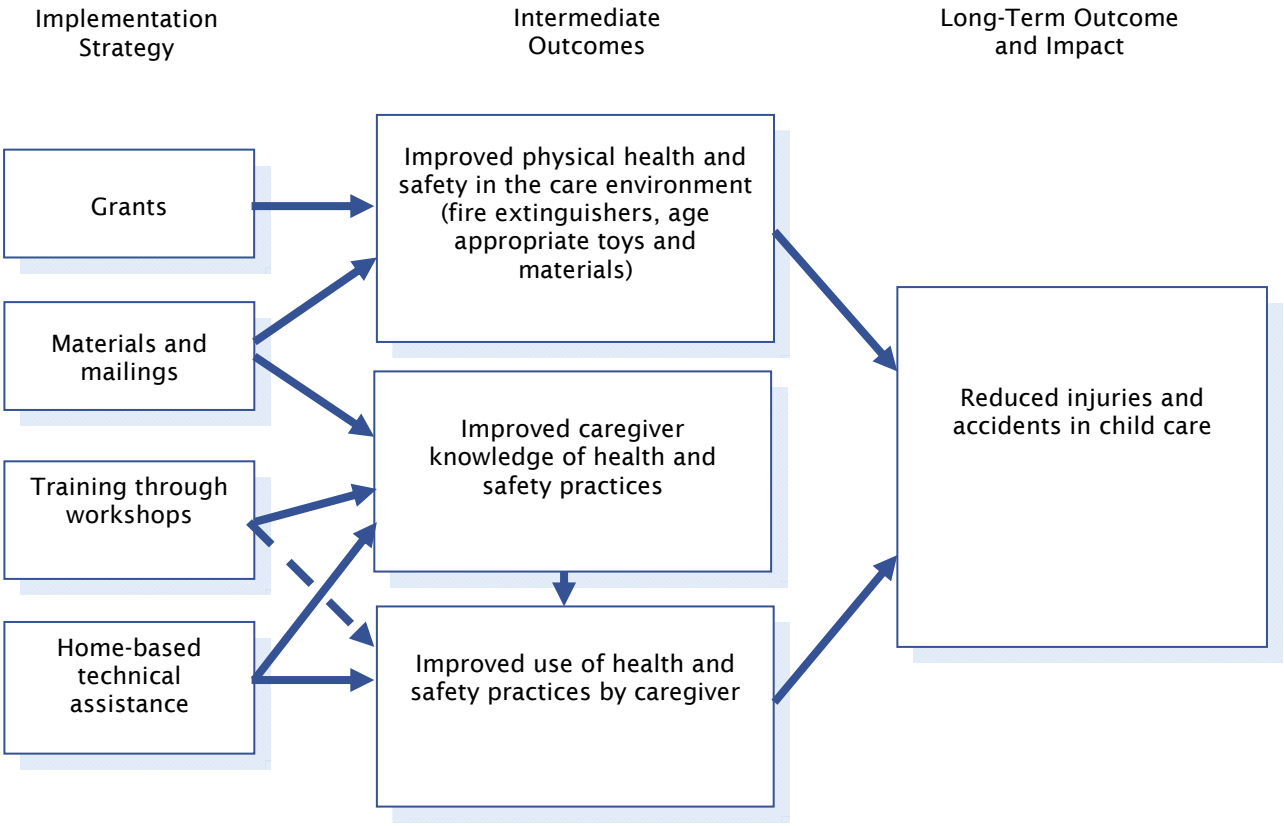
## Specifying a Realistic Pathway of Change

Once the long-term expected outcomes of an initiative are identified, it is necessary to work backwards through the logic model to determine specifically how to achieve them. And, if the inputs, resources, or strategies that are feasible are not sufficient to achieve these outcomes, then the expectations about outcomes must be adjusted. Expectations about specific measurable intermediate and long-term outcomes in an initiative must align with the level of comprehensiveness and intensity of the effort. We use two examples to illustrate the pathway of change between strategies and outcomes.

The first example is an initiative with a long-term expected outcome of reducing injuries and accidents in child care—a child outcome but one that can have a relatively direct and timely connection to changes in the child care environment and caregiver knowledge and behavior. As shown in Figure III.1, this initiative should also identify specific intermediate outcomes—the changes expected to occur in the home-based care environment (such as the appropriate number and placement of smoke detectors) and in the caregiver's knowledge and practices (such as learning

cardiopulmonary resuscitation [CPR] and First Aid). An implementation strategy that can support improvement in the physical health and safety of the care environment is a grants program that provides funds to home-based caregivers to make purchases or renovations that address health and safety issues. This strategy alone could help achieve the long-term outcome through the changes in the physical environment.

**Figure III.1. Pathways of Change for an Initiative to Reduce Injuries and Accidents in Child Care**




Note: The solid lines represent direct links between implementation strategies and outcomes. The dotted line represents a more indirect link.

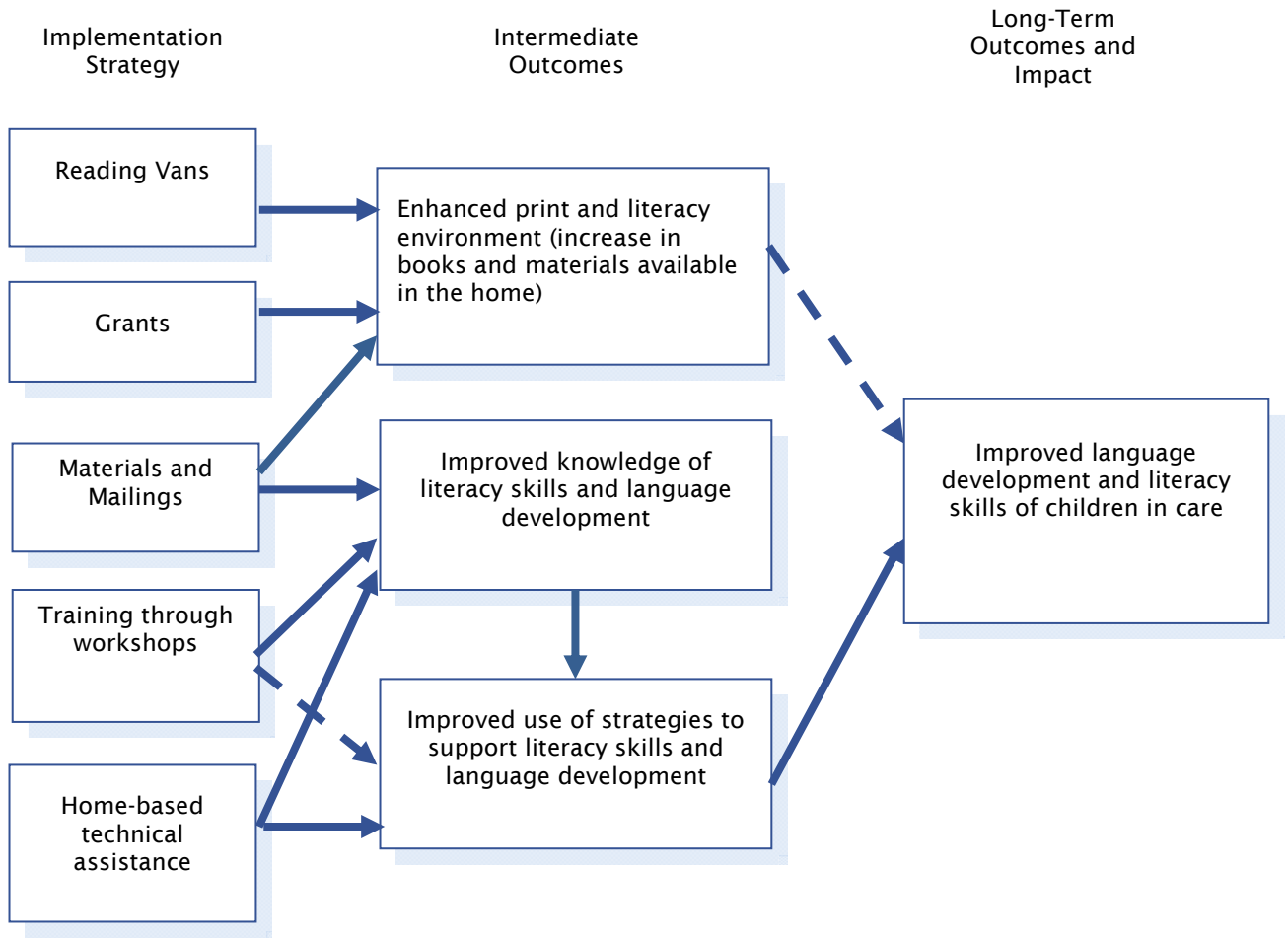
Additional strategies are needed to improve caregivers' knowledge and use of health and safety practices. These strategies range in type and intensity from materials and mailings that provide basic information, to training on specific topics (such as CPR), to coaching and consultation services provided directly in the care setting in which initiative staff observe practices and help guide caregivers toward improvements. All of these strategies can produce changes in the intermediate outcome of improved knowledge and practice, but will do so to varying extents. Moreover, these strategies could be implemented on their own (without a grants program) and still produce changes in the physical environment. However, the ability of caregivers to make changes in the physical environment—even when they know what *should* be done—may be limited by the resources they have to make such changes.

The specific intermediate and long-term outcomes targeted will depend on which strategy or combination of strategies is implemented. Any one of the strategies alone could potentially produce changes in the long-term outcome of reduced injuries and accidents, but may do so to a greater or lesser extent. The most comprehensive initiative in this example would include some combination of

a grants program that can directly improve the physical health and safety of the care environment with another strategy (or strategies) that would increase caregiver knowledge of safety practices and support the caregiver in implementing the new practices in the care setting.

While the first example is one of magnitude in what can be expected for long-term outcomes depending on the service delivery strategies used, the second example illustrates the inability to reach the long-term outcome if strategies are not sufficiently intensive. Figure III.2 depicts an initiative aimed at improving children's early literacy and language development outcomes. In this example, an initiative that includes a small grants program to purchase books or monthly visits to caregiver homes by a mobile reading van to distribute books and provide a story time is likely to produce changes in the child care environment by increasing the amount of children's books available in the home. 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.

**Figure III.2. Pathways of Change for an Initiative to Improve Language Development and Literacy Skills**




Note: The solid lines represent direct links between implementation strategies and outcomes. The dotted lines represent more indirect links.

To achieve these outcomes, more intensive services would be required For example, provision of workshops or home-based technical assistance may increase caregivers' knowledge of strategies to promote early literacy skills—such as greater use of rich and varied language, more frequently reading books to children, and talking about stories during the day. In-home coaching may help

caregivers practice these techniques and integrate them into their daily interactions with children. In addition, coaching or other home-based technical assistance might support caregivers in developing and implementing daily schedules that incorporate focused time for book reading and other activities to promote early literacy. Together, these strategies would be more likely to achieve the long-term outcome of improving children's early literacy skills than simply providing books.

### Specifying a Timeframe for Change

The logic model should also indicate the timing of the initiative's activities and the length of time over which changes in intermediate and long-term outcomes are expected to emerge. For example, how long will it take to complete safety improvements in the caregiving environment, such as installing cabinet locks, smoke detectors, and safety gates? How long for a caregiver to integrate book reading into the daily routine? Once these changes are in place, how long will it take to measure changes in children's outcomes, such as reductions in the number of accidents and injuries, or improvements in children's early literacy skills?

The timing of changes in outcomes will depend again on the strategies implemented, as well as on the theory explaining what aspects of caregiver behavior and child outcomes are likely to be affected and when. For example, an increase in the availability of books in the home-based care setting could occur soon after funds from a grants program are awarded or a reading van program starts. Caregiver knowledge of methods to support young children's literacy skills could be measured soon after a particular training series has ended, but changes in the caregiver's practices may take more time to develop with continued support from a coach. Child outcomes, in turn, will take longer to observe as caregivers put into practice the techniques learned in workshops or from coaches or home visitors.

### Making Refinements in Expectations When Strategies Change

Refinements to each element of the logic model are dynamic and interdependent on each other. For example, if the level of resources available to support a specific strategy decreases, that strategy may remain in place but be modified by decreasing frequency and duration of home visits, or the range of services provided or topics covered. The intensity of the effort—in terms of frequency, duration, or method of service delivery—is an important distinction between strategies (reading vans versus in-home coaches) and within strategies (duration of different workshops; frequency of consultation sessions) in terms of the expectations for changes in outcomes and the timing of these changes. When contextual factors, inputs, or resources change that affect implementation of service delivery strategies, then a reconsideration of the intermediate and long-term outcomes may also be necessary.

## Service Delivery Strategies for Home-Based Care Initiatives

This report provides detailed implementation information about eight specific strategies that have been used alone or in combination to deliver services to home-based caregivers (Table III.1). We introduce them here; details are provided in the eight chapters that follow.

**Table III.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 funding 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 |

Because so little research on the effectiveness of quality initiatives for home-based child care is available, we developed two frameworks for assessing the potential of these service delivery strategies to produce favorable outcomes for caregivers, children, and parents. Although clearly not a substitute for evidence of effectiveness, these frameworks are intended to supplement the available evidence. The first assesses the potential of each service delivery strategy to be offered at a level of intensity likely to produce favorable outcomes, as well as the potential for the strategy to be individualized to the specific circumstances and needs of particular caregivers. The second framework assesses the suitability of each strategy for various populations of home-based caregivers. In addition to the detailed information about each strategy provided in subsequent chapters, these frameworks can serve as tools for initiative developers as they assess the strategies' fit with their target populations and potential for producing the outcomes they are trying to achieve.

### Potential for Intensity and Individualization

We sorted the eight service delivery strategies into three groups based on their potential to deliver services at a high level of intensity and to individualize services to the circumstances and interests of caregivers: (1) high, (2) moderate, and (3) low. Each strategy's potential for delivering intensive and individualized services has implications for the outcomes that can be expected from it. While we expect all of the strategies to increase caregiver knowledge, higher-intensity, individualized initiatives are needed to help caregivers translate that knowledge into practice, and to do so in a way that positively influences child and parent outcomes. We describe each of the service delivery levels below, and Table III.2 illustrates the types of outcomes that would be realistic to expect from each.

**Table III.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<br>Greater knowledge of instructional practices to promote children's early literacy and mathematics development<br>Greater awareness of supportive services in the community | Greater knowledge of safety precautions, first aid, CPR<br>Greater knowledge of engaging book reading practices with children<br>Greater knowledge of positive behavior management techniques | Greater knowledge of child development<br>Greater knowledge of strategies that can foster children's development (such as talking to children, book reading)<br>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<br>More books for children in the home | Greater use of safety devices in the home<br>Space and furnishings facilitate healthy practices<br>More books for children in the home<br>Variety of stimulating toys and materials available to children | Greater safety of the environment<br>Arrangement of the environment and the schedule to help reduce conflicts<br>More children's books in the home and accessible to children<br>Variety of stimulating toys and materials available to children<br>Increase in overall quality of home-based care environment |
| Caregiver practices | Read books to children more frequently<br>Use instructional materials and assessments purchased through the grant | More engaging and more frequent book reading and conversations with children<br>Demonstration of toys and materials supports children's exploration and play | Improved health and safety practices<br>More engaging and more frequent book reading<br>Greater and more consistent use of positive behavioral support strategies<br>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<br>Greater ability to establish hours of care and payment policies with parents | Progress toward registration, licensing, or accreditation<br>Greater ability to establish hours of care and payment policies with parents<br>More positive relationship with parents |

Table III.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<br>Reduced isolation<br>Increased access to community resources and government supports | Increased satisfaction with role as a caregiver<br>Reduced isolation, Increased social support<br>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<br>Decrease in problem behavior<br>Improved peer interactions<br>Greater self-regulation<br>Greater attachment to caregiver<br>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<br>Reduced infections and absences from care<br>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<br>Increased self-efficacy<br>More positive perceptions of the care environment |
| Employment-related behavior | None expected | None expected | Fewer absences from work<br>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.
[s]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.

**Strategies with High Potential for Intensity and Individualization.** We identified two strategies—home-based technical assistance and professional development through formal education—with high potential for intensive service delivery and a high degree of individualization. Although not all initiatives using these strategies provide intensive services, these strategies have the most potential to do so. For example, home-based technical assistance initiatives can offer frequent home visits over a year or longer; professional development initiatives offer opportunities to take multiple courses. Depending on the length of the initiative, home-based technical assistance and professional development initiatives can deliver in-depth content over time to support caregivers' knowledge of child development and strategies to foster children's development and positive behavior. Because home-based technical assistance is delivered by a coach, consultant, or home visitor during one-on-one sessions in caregivers' homes, specific content and desired outcomes of the initiative can be tailored to meet the needs and interest of individual caregivers. For example, depending on the mix of children in care, a caregiver may be particularly interested in learning about infant-toddler development, how to support positive behavior, how to support the development of a special needs child, or how to support the language development of dual language learners. Professional development initiatives that support attendance at higher education institutions address the interests of caregivers who are "budding professionals" wishing to pursue advanced degrees or credentials. They also may offer caregivers the opportunity to take courses of interest as they work toward a degree or certificate.

**Strategies with Moderate Potential for Intensity and Individualization.** Three strategies—training through workshops, peer support, and Play and Learn—have the potential to offer services at a moderate level of intensity and individualization. Typically, initiatives using these strategies deliver content during a limited series of group meetings rather than one-on-one. Many of these group meetings—such as Play and Learn or peer support groups—are open entry, open exit. A caregiver may attend a single group or multiple groups, limiting somewhat the potential to provide intensive services. Workshops also vary—some initiatives provide single, stand-alone workshops; others offer more intensive workshop series.

Because content is delivered in a group setting, it must meet the needs of a broader set of caregivers and thus may not be targeted to the specific needs of individuals. For example, an initiative might offer a workshop on promoting positive behavior, but it might not focus on the age group of children in the care of a particular caregiver. It might not be offered in the caregiver's home language, or in a format that best matches a caregiver's learning style. In addition, caregivers may have only limited opportunities to ask questions, practice the new skills introduced during the workshop, or discuss how the new ideas introduced might apply to a specific care setting.

**Strategies with Low Potential for Intensity and Individualization.** These initiatives—grants to caregivers, materials and mailings, and mobile reading vans—focus on providing information or resources to caregivers, but opportunities to interact with initiative staff are quite limited. For example, some initiatives provide newsletters or activity sheets with suggested adult child activities as their primary service. How the information is used is left completely up to the caregiver. Similarly, mobile reading vans offer children's books, but caregivers may or may not read them to children regularly. Some initiatives also provide limited technical assistance, such as help selecting materials to purchase under grant programs or help using the materials (for example, installing safety equipment). In addition, some mobile reading van programs include a librarian who provides a story time for the group of children in care and can provide limited technical assistance to caregivers about book reading techniques.

### Suitability for Home-Based Care

Not all service delivery strategies are equally suitable for home-based caregivers. Some strategies may be a better match for family child care providers than for family, friend, and neighbor caregivers. Some strategies may not be appropriate for caregivers with low literacy levels or for caregivers who do not have access to transportation. In addition to assessing a strategy's potential for intensity and individualization, initiative developers should assess the fit between potential strategies and the circumstances and needs of the target population of caregivers they plan to recruit. We suggest five criteria for assessing the suitability of strategies for home-based caregivers:

- **Relevance.** Addresses a critical dimension of quality in home-based child care; strategies are clearly linked to intended outcomes.
- **Responsiveness to Caregiver Needs and Interests.** Addresses needs identified by caregivers, such as reducing isolation, providing strategies for communicating with parents and addressing child behavior issues, improving business skills, and helping to obtain a license or registration.
- **Accessibility.** Offers services at convenient locations and times; offers supports (such as child care or transportation) to facilitate participation.
- **Links to Resources.** Connects participants with relevant community resources.
- **Strengths-Based.** Builds on features of home-based care that experts hypothesize are positive for children, such as close family ties between parents and caregivers, shared culture and language, and scheduling flexibility.

Based on these criteria, Table III.3 provides an assessment of each strategy's suitability for home-based caregivers. For each criterion, we provide one of three ratings: (1) partially meets criterion, (2) meets criterion under certain conditions, or (3) fully meets criterion.

### Approaches to Combining Strategies

As noted earlier, many initiatives 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) the caregiver, child, and parent outcomes they seek to target; (2) the content they want to convey; (3) the characteristics, needs, and interests of the caregivers they aim to recruit and, (4) the supports and incentives that may be needed to facilitate and sustain caregivers' participation over time.

Two approaches to combining these nine strategies have emerged from the literature on home-based child care and from initiatives that exist in the field: (1) creating a continuum of services and (2) tailoring services to individual needs. We describe each of these approaches below.

**Table III.3. Suitability of Service Delivery Strategies for Home-Based Caregivers, by Potential for Intensity and Individualization**

| High Potential for Intensity and Individualization | | | | |
|---|---|---|---|---|
| | Home-Based Technical Assistance | | Professional Development Through Formal Education | |
| Criteria | Rating | Description | Rating | Description |
| **Relevance:** Addresses a critical dimension of quality; strategies linked to intended outcomes | *** | Well suited to address multiple dimensions of quality | *** | Addresses caregiver education and training, which may be linked to quality and child outcomes |
| **Responsiveness:** Addresses caregiver needs and interests | *** | Well suited to adult learners, adaptable to caregiver culture and language, reduces isolation; well suited to addressing specific problems and goals | ** | Addresses the interests of caregivers who seek professional development or wish to earn a credential or degree |
| **Accessibility:** Facilitates caregiver participation | *** | Services provided in caregiver's home | * | Classes or trainings can be scheduled at convenient times or locations. Accessibility can be enhanced with supports. Eligibility requirements may impede access |
| **Links to resources:** Connects caregivers to community resources | ** | Home visitors, coaches, and consultants could make appropriate referrals | *** | Establishes links between caregivers and institutions of higher learning or local training resources |
| **Strengths-Based:** Builds on strengths of home-based child care | ** | Could build on strengths such as close family and cultural links between parents and caregiver | | Does not specifically address strengths of home-based care |

| Moderate Potential for Intensity and Individualization | | | | | | |
|---|---|---|---|---|---|---|
| | | Training through Workshops | | Play and Learn | | Peer Support |
| **Criteria** | Rating | Description | Rating | Description | Rating | Description |
| **Relevance:** Addresses a critical dimension of quality; strategies linked to intended outcomes | *** | Well suited to address multiple dimensions of quality | ** | Teaches caregivers how children learn through play | * | Discussion could include topics linked to quality |
| **Responsiveness:** Addresses caregiver needs and interests | ** | Teaching strategies can be tailored to adult learning styles, can reduce isolation | *** | Well suited to adult learners, adaptable to culture and language, reduces isolation | *** | Well suited to adult learners, adaptable to caregiver culture and language, reduces isolation; well suited to addressing specific problems and goals |
| **Accessibility:** Facilitates caregiver participation | ** | Can be provided at convenient locations and times. Accessibility can be enhanced with supports | *** | Both caregiver and child attend. Accessibility can be enhanced with supports | ** | Can be provided at convenient locations and times; accessibility can be enhanced with supports |

Table III.3 *(continued)*

| Criteria | Rating | Training through Workshops Description | Rating | Play and Learn Description | Rating | Peer Support Description |
|---|---|---|---|---|---|---|
| **Links to resources:** Connects caregivers to community resources | ** | Trainer could provide links to resources | ** | Facilitators could provide links to resources | * | Group members could provide links to resources |
| **Strengths-Based:** Builds on strengths of home-based child care | * | Could build on strengths, but depends on topics covered | ** | Could build on strengths such shared language and culture | ** | Discussion could build on strengths such as close family and cultural ties |
| **Low Potential for Intensity and Individualization** | | | | | | |
| **Criteria** | Rating | Grants to Caregivers Description | Rating | Materials and Mailings Description | Rating | Reading Vans Description |
| **Relevance:** Addresses a critical dimension of quality; strategies linked to intended outcomes | ** | Can address multiple dimensions of quality, but links to outcomes depend on follow up | * | Can address multiple dimensions of quality, but links to outcomes depend on uptake by caregiver | ** | Can address the literacy environment but links to child outcomes are limited |
| **Responsiveness:** Addresses caregiver needs and interests | ** | Can address some needs, but will not reduce isolation | ** | Addresses caregivers' needs for information and materials | *** | Addresses caregivers' needs for materials; reduces isolation |
| **Accessibility:** Facilitates caregiver participation | ** | Outreach and application process affect accessibility | *** | Caregivers are able to use materials in their homes | *** | Reading vans come to caregivers' homes |
| **Links to resources:** Connects caregivers to community resources | * | Could provide links to resources if technical assistance is provided | ** | Mailings can provide links to resources | ** | Van can provide information on community resources |
| **Strengths-Based:** Builds on strengths of home-based child care | | Does not address strengths of home-based care | | Does not address strengths of home-based care | ** | If support is provided on book reading in a home setting, could build on strengths |

*Partially meets criterion.
**Meets criterion under certain conditions.
***Fully meets criterion.

**Creating a Continuum of Services**

Because home-based caregivers are such a diverse group, no one size fits all. No single service delivery strategy or content focus will be attractive or appropriate for all types of home-based caregivers. One option for combining multiple strategies into a single initiative that can target a broad range of home-based caregivers is to create a continuum of services, ranging from lower to higher levels of intensity or lesser to greater levels of formality in the approach to training and education. A continuum of services could also be created for caregivers with different levels of interest in professionalization.

**Continuum Based on Levels of Intensity.** Caregivers who are highly motivated to improve quality and are eager for one-on-one attention and support could benefit from enrollment in a home-based technical assistance initiative that offers frequent coaching, consultation, or home visiting from a trained staff member who would work with caregivers on specific quality improvement goals. On the other hand, a grandmother who is not interested in a program that requires a significant commitment of time and participation, but seeks information about how to support the school readiness of the children in her care, may benefit from less-intensive strategies. For example, she may welcome regular visits from a reading van, a peer support program for grandparents caring for their grandchildren, or a regular newsletter with information on child development and activity sheets. A single initiative could offer services such as these at different levels of intensity and target each component to caregivers with different levels of interest in receiving services. Such an initiative could have a single content focus, such as promoting development of language and early literacy skills, or a more varied focus for each component.

**Continuum Based on Formality of Approach to Training and Education.** Home-based caregivers vary in their educational backgrounds, English literacy skills, and interest in pursuing formal education. Some caregivers, such as those who participate in the regulatory system, may be motivated to pursue formal education leading to a degree, especially if it leads to a higher rating in a quality rating and improvement system (QRIS). These caregivers, however, may need support from an initiative to do so. Others may be interested in training but lack the educational background needed to pursue a degree or may not be interested in formal education. For these caregivers, training workshops may be appropriate. For others, experiential learning approaches, such as peer support, home visiting, or coaching, may be more suitable. A single initiative could offer a variety of options for training and therefore meet the needs of a wide range of caregivers.

**Continuum Based on Interest in Professionalization.** Home-based caregivers vary in their interest in professionalization. Some caregivers, especially relatives, may not be interested in entering the regulatory system but may still want information and support to provide better quality care. Other family, friend, and neighbor caregivers, however, may be interested in becoming registered or licensed, but they may need support to do so. Initiatives can provide support in the form of materials and equipment needed to comply with regulations, grants to make necessary changes in the caregiving environment, or a coach or consultant to lead them through the licensing process. Some licensed family child care providers may want to obtain accreditation. Initiatives can support these providers through a range of strategies—coaching, consultation, home visiting, grants, and provision of materials. A single initiative could offer such a continuum, with some caregivers participating in only one component and others moving through the full range of services over time.

**Tailoring Services to Individual Needs**

Another approach to combining multiple strategies into a single initiative is to 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. For example, some caregivers receiving home-based technical assistance may also want to participate in a peer support network because they feel isolated and have few opportunities for socializing with other caregivers. Some caregivers, especially relatives who are caring for small groups of children, may enjoy attending Play and Learn events with the children in their care. Other caregivers may need grants for taking courses or for making improvements in the care environment. Still others may not be able to attend Play and Learn events outside the home but may want visits from a reading van that includes a regular story time for the children. Finally, some caregivers participating in training workshops may need one-on-one visiting from coaches or home visitors to support them in implementing the new techniques they learn about in training.

# IV. HOME-BASED TECHNICAL ASSISTANCE

A range of home-based care initiatives provide technical assistance and other services to caregivers in their homes. These initiatives typically use one of four strategies that we define below: (1) coaching, (2) consultation, (3) home visiting, and (4) other home-based technical assistance. These strategies are closely related and, to some extent, overlapping. All four focus on providing support during one-on-one visits to a caregiver's home.

**Coaching.** Under this approach, a "coach" works directly with a "learner" to develop new knowledge and skills (Hanft, Rush, & Sheldon, 2005). This approach has its roots in the fields of athletics and business as well as teacher education and adult learning (Buysse & Wesley, 2005). Coaching has been used most often in the early intervention field to help professionals and families learn skills for working with young children with disabilities, usually in a home environment. In early childhood initiatives, coaches typically work with early childhood teachers or caregivers to help them learn specific skills, teaching strategies, or child-focused interventions and apply or reinforce them in a classroom or home care setting (Sheridan, Pope Edwards, Marvin, & Knoche, 2009).

**Consultation.** Although clear consensus on the definition of consultation does not exist, most definitions emphasize the triad of consultant, consultee, and client; the collegiality and equal nature of the relationship; and shared responsibility between the consultant and consultee for meeting goals. A commonly accepted definition of consultation in the field of early childhood is "an indirect, triadic service delivery model in which a consultant (such as an early childhood professional or therapist) and a consultee (early childhood professional or parent) work together to address an area of concern or a common goal for change" (Buysse & Wesley, 2005). The "client" in this triad can be an individual child or a group of children. The goal of the consultation is to address a specific concern or goal for the child or group of children, as well as to prevent a similar problem from happening in the future.

**Home visiting**. Home visiting is defined as the process by which a professional or paraprofessional provides help in the context of a family's home (Wasik & Bryant, 2001). Several initiatives for home-based caregivers have adapted home visiting models developed for parents to their work with caregivers, or have used information from these models. Home visiting is a strategy used to accomplish numerous goals, which focus both on the adults who are the target of a given behavior change intervention and on the children in their care. Home visiting programs often include approaches designed to support home-based caregivers in meeting their personal and professional goals; reducing their isolation; increasing their access to needed services; improving the safety of the home environment; enriching the quality of the environment with needed equipment, materials, and books; and providing modeling and training on high quality interactions with children. The "heart" of home visiting is the relationship between the visitor and the participant (Roggman et al., 2008; Wasik & Bryant, 2001).

**Other Home-Based Technical Assistance.** Many home-based care initiatives that provide services to caregivers in their homes do not fit the definitions of coaching, consultation, or home visiting. These initiatives may use a mix of approaches, or they may provide focused and short-term technical assistance on specific issues such as health and safety or support for licensing. Typical activities include a home inspection, use of a health and safety checklist to identify areas in need of correction, and provision of materials and training on specific topics.

This chapter first provides an overview of existing initiatives that offer home-based technical assistance. The chapter then follows the flow of a logic model. The discussion of implementation begins with the target population for the initiative (the beginning of a logic model) and then moves to inputs, resources, and implementation strategies (the middle of a logic model). Next, the discussion turns to expected outcomes (the end of a logic model). The chapter concludes with a summary of the evidence of effectiveness and an overview of research gaps and needs.

## Home-Based Technical Assistance in Home-Based Care Initiatives

We identified 27 examples of initiatives for which the primary strategy is home-based technical assistance (Table IV.1). Of those, 7 used a coaching approach, 3 used consultation, 6 used home visiting, and 11 offered other kinds of home-based technical assistance.

The coaching initiatives use one-on-one interactions between a coach and a trainee to work on skill development or implementation of specific interventions rather than on issues or goals related to a specific child or group of children. Four of the initiatives focus on improving the quality of the caregiving environment and on caregiver-child interactions, two provide support for obtaining National Association for Family Child Care (NAFCC) accreditation, and one supports implementation of specific practices to promote language and literacy skills. Half of the consultation initiatives provide consultation with nurses or dieticians on specific health issues. One aims to address specific goals to improve children's language and literacy outcomes, and two target overall quality improvement. The home visiting initiatives use specific home visiting curricula, or approaches adapted from curricula or approaches used with parents, such as the Supporting Care Providers through Personal Visits (Parents as Teachers National Center, 2002) and Promoting First Relationships (Kelly, Zuckerman, & Rosenblatt, 2008). The other home-based technical assistance initiatives focus on a range of caregiver and child outcomes.

## Implementation of Home-Based Technical Assistance Initiatives

In this section, we describe options for designing and implementing home-based technical assistance initiatives for home-based child care. Specifically, we discuss options for the target population, content, dosage of services, strategies for sustaining participation, staffing requirements, and costs. These topics are summarized in Table IV.2.

### Target Population

Home-based technical assistance is a flexible approach that is suitable for working with all types of caregivers on a broad range of goals and target outcomes. These approaches may be especially helpful for serving caregivers with distance or transportation concerns (see strategies for sustaining participation, below). Initiatives adapted from parent home visiting program models might be especially suitable for family, friend, and neighbor caregivers because this group has many of the same strengths and needs as the families such programs serve.

**Table IV.1. Examples of Initiatives Providing Home-Based Technical Assistance**

| Initiative and Location | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|
| | | **Coaching Initiatives** | |
| Accreditation Facilitation Project (KS, MO) | ✓ Family child care providers | Coaches and an accreditation specialist lead training workshops on steps to accreditation; coaches provide technical assistance on how to meet NAFCC quality standards during site visits and phone calls. | **Caregiver:**<br>• NAFCC accreditation<br>• Increased knowledge of developmentally appropriate practices<br>**Child:**<br>• Improved school readiness |
| Arizona Self-Study Project (AZ) | ✓ Family child care providers<br>✓ Child care center providers | Coaches work with child care providers to assess their readiness for accreditation and then provide support to work toward accreditation through quarterly site visits, monthly phone calls, and workshops. | **Caregiver:**<br>• NAFCC accreditation |
| Early Childhood Resource and Training Center Project (MN) | ✓ Family, friend, and neighbor caregivers | Licensed child care center staff mentor American Indian caregivers to support quality improvement. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved language and literacy skills |
| Great Start Professional Development Initiative (MI) | ✓ Family child care providers | A 45-hour community college course on language and literacy development and 32 weekly visits from a coach to support implementation of the strategies learned in the course. | **Caregiver:**<br>• Improved knowledge of language and literacy development<br>• Improved practices to support language and literacy<br>**Child:**<br>• language and literacy skills |
| LA Universal Preschool (LAUP) (CA) | ✓ Family child care providers | Coaches work with providers to develop quality improvement plans and goals and then provide support through site visits, phone calls, and training workshops tailored to the providers' needs. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved school readiness |
| Right from Birth (MS) | ✓ Family, friend, and neighbor caregivers | Coaches assess caregiver needs using an environmental rating scale and a checklist and then provide 20 days of consecutive coaching to address quality improvement needs. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved language and literacy skills |

Table IV.1 *(continued)*

| Initiative and Location | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|
| Tennessee's Outstanding Providers Supported Through Available Resources (TOPSTAR) (TN) | ✓ Family child care providers | 20 hours of one-on-one coaching from peer mentors over a two-month period and four support group meetings annually. | **Caregiver:**<br>• Improved child care quality<br>• Reduced isolation<br>• Increased provider retention in the regulated child care system |
| **Consultation Initiatives** | | | |
| Child Care Health Consultant Program (IN) | ✓ Family child care providers<br>✓ Family, friend, and neighbor caregivers<br>✓ Child care center providers | Registered nurses and dieticians provide workshops and on-site consultation about health issues for specific children, menu preparation, and other health and sanitation issues. Caregivers can request a health assessment of the caregiving environment. | **Caregiver:**<br>• Improved health and safety of the environment |
| Child Care Nurse Consultant Program (IA) | ✓ Family child care providers<br>✓ Family, friend, and neighbor caregivers<br>✓ Child care center providers | Registered nurses provide workshops and consultation about health issues for specific children and the health and safety of the environment during site visits, phone calls, or email exchanges. | **Caregiver:**<br>• Improved health and safety of the environment |
| Partnerships for Inclusion (CA, IA, MN, NC, NE) | ✓ Family child care providers<br>✓ Child care center providers | Consultants provide 12 to 17 site visits over 6 to 10 months to guide providers through a six-stage consultation process that includes: (1) relationship building, (2) assessment, (3) goal setting, (4) developing an action plan, (5) implementing the plan, and (6) evaluating changes made. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved language and literacy skills |
| **Home Visiting Initiatives** | | | |
| Caring for Quality (NY) | ✓ Family child care providers<br>✓ Family, friend, and neighbor caregivers | Home visitors trained to deliver the Supporting Care Providers through Personal Visits curriculum visit twice monthly (for two hours) for 9 to 12 months. Visits focus on child development and how to enhance child care quality. Providers also attend network meetings. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved development |
| Cherokee Connections (OK) | ✓ Family, friend, and neighbor caregivers | Home visitors conduct monthly one- to two-hour visits with one three-hour meeting per month over the course of a year. Home visitors use the Parents as Teachers Supporting Care Providers through Personal Visits curriculum and provide books and Cherokee language materials. A Cherokee language incentive fund for teaching Cherokee to the children in care and Play and Learn groups are also offered. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved school readiness |

Table IV.1 *(continued)*

| Initiative and Location | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|
| Early Head Start Enhanced Home Visiting (Various) | ✓ Family child care providers<br>✓ Family, friend, and neighbor caregivers | Twenty-four Early Head Start grantees implemented home visiting approaches designed to (1) improve the quality of care, (2) increase the consistency of caregiving practices across home and child care settings, (3) improve parent-provider relationships, and (4) meet provider needs. Grantees varied in the frequency and length of the visits, ranging from weekly to monthly. Content and focus of the visits also varied. Workshops and materials were provided. | **Caregiver:**<br>• Improved quality of care<br>**Child:**<br>• Enhanced development |
| Fairfax County Preschool Pilot Initiative (VA) | ✓ Family child care providers | Mentors trained in the Portage home visiting curriculum provide 1.5- to 2-hour home visits at least biweekly for 10 months for providers serving at-risk 4 year olds. Mentors encourage providers to attend additional training activities. | **Caregiver:**<br>• Improved health and safety of the environment<br>**Child:**<br>• Improved school readiness |
| Promoting First Relationships (WA) | ✓ Family, friend, and neighbor caregivers | Curriculum training for programs interested in PFR is offered at four levels ranging from awareness building to reflective practice and conducting a series of 20 joint home visits with a master trainer. Mentored visits last 2.5 hours and include a 75-minute visit with the family and a one-hour reflection with the mentor. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved relationships with providers and others |
| Supporting Care Providers through Personal Visits (Multiple) | ✓ Family child care providers | Parents as Teachers provides a two-day training on this home visiting curriculum. Other training options include customized, on-site approaches and curriculum only. Training covers personal visiting, building partnerships, engaging providers, child observation and individualization, and cultural sensitivity. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved school readiness and success |
| **Other Home-Based Technical Assistance** | | | |
| CareQuilt (ME) | ✓ Family, friend, and neighbor caregivers | For providers serving Head Start families, home visitors provide monthly 1.0 to 1.5 hours visits for one year focused on completing health and safety checklists to identify needs, and providing health and safety equipment, educational materials, and activity kits. Providers are invited to participate in group meetings with parents. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Enhanced development and health and safety needs |
| Community Connections (IL) | ✓ Family child care providers<br>✓ Family, friend and neighbor caregivers | State pre-k teachers providing part-day, center-based services to children visit family child care providers twice per month to train providers on child development. Training and technical assistance as well as other enrichment activities—such as museum visits—are offered. No curriculum is specified. | **Caregiver:**<br>• Improved child care quality |

Table IV.1 *(continued)*

| Initiative and Location | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|
| Educare (MO) | ✓ Subsidized family child care providers<br>✓ Family, friend, and neighbor caregivers | Contractor staff conduct a minimum of seven monthly home visits (for 1.0 to 1.5 hours) focused on child development, emotional availability, and relationship-building skills. Providers may stay in the program as long as they meet the eligibility requirements. Contractors draw from three curricula. On-site training, peer support, seminars, and environment and quality rating assessments are provided. | **Caregiver:**<br>• Improved quality of care<br>**Child:**<br>• Enhanced learning |
| Family Child Care Support Project (CT) | ✓ New family child care providers | An early childhood specialist conducts a one-hour home visit that is sometimes followed by a second visit over the course of a 12-month period. Phone or email support is available and providers receive materials and equipment valued at $100. The curriculum Teaching Strategies is used. | **Caregiver:**<br>• Improved quality and strengthen businesses for new providers |
| Homelinks (CT) | ✓ Family, friend, and neighbor caregivers | Home visitors provide weekly 1.5- to 2-hour home visits over five to six months to train and coach providers in child safety and health, child development and supports for school readiness, and learning experiences. Workshops are offered on a range of topics. Librarians make three home visits to model early literacy skills. Home visitors draw from a number of different curricula. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved school readiness |
| Louisiana Child Care Home Visitation Program (LA) | ✓ Registered family child care providers serving children on subsidy | Two visits (one to three hours each) over the course of six months that include technical assistance on working with parents, administrative/management activities, and provision of materials such as books and art supplies. | **Caregiver:**<br>• Help providers become more professional |
| Minnesota FFN Grant Program – White Earth Indian Reservation Tribal Council (MN) | ✓ Family, friend, and neighbor caregivers | Certified staff/trainers provide assistance to train and mentor family, friend, and neighbor caregivers. Works with the Children's Readmobile to provide material. | **Caregiver:**<br>• Improved knowledge of language and literacy<br>• Improved home environment through books<br>**Child:**<br>• Improved school readiness |
| Nurturing Homes (MS) | ✓ Family, friend, and neighbor caregivers | Trainers conduct biweekly two-hour home visits over 12 months focused on assessing quality using the FCCERS-R and implementing lessons based on the observation. The program provides materials to support the lessons (art materials), instructional videos, and pays for NAFCC membership. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved health and safety, language development, and behavior management |

Table IV.1 *(continued)*

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| Play Partners Program (VA) | ✓ | Family child care providers | Volunteers conduct weekly one-hour visits for nine months focused on modeling reading with the children and conducting enrichment activities. Each child receives a copy of the book of the month. For the summer months when visits do not occur, providers receive a mini-kit with materials. | **Caregiver:**<br>• Improved child care quality<br>**Child:**<br>• Improved language and literacy skills to support school readiness |
| Provider and Child Care Education Services (IA) | ✓ | Family child care providers | Home visitors conduct monthly 45-minute to one-hour visits that include technical assistance keyed to criteria at five different levels of support. The assistance ranges from helping new providers become registered to quality observations, payment of NAFCC dues, and reaccreditation. Providers are encouraged to progress through the five levels (each level may last from 12 to 36 months). At all levels, training is offered and funds are available to purchase needed materials and equipment. | **Caregiver:**<br>• Increased registered and accredited providers |
| Satellite Family Child Care (WI) | ✓ | Family child care providers | Home visitors conduct a minimum of four home visits in a year focused on supporting providers as they seek NAFCC accreditation. Visits, monthly support groups, and three annual conferences are offered. By paying a fee, providers can obtain kits, use a lending library, and borrow large equipment. | **Caregiver:**<br>• Support and sustain accreditation |

Sources: Porter et al., 2010b; Porter et al., 2010c; Koh & Neuman, 2009.

CDA = Child Development Associate; FCCERS-R = Family Child Care Environment Rating Scale Revised; FFN = Family, Friend, and Neighbor; LAUP = Los Angeles Universal Preschool; NAFCC = National Association for Family Child Care; PRE = Promoting First Relationships.

**Table IV.2. Overview of Implementation Information for Home-Based Technical Assistance**

| Implementation Component | Summary |
|---|---|
| Target population | Family, friend, and neighbor caregivers; regulated family child care providers |
| Content | Topics align to initiative's goals and target population's needs; may rely on formal curricula |
| Dosage of services | No conclusive information; monthly visits of one to two hours is typical |
| Strategies for sustaining participation | Positive relationship between staff and caregivers, incentives, convenient service delivery locations |
| Staffing requirements | Typically one manager supervising numerous coaches or home visitors; variation in coach/visitor caseloads and training or education |
| Cost categories | Direct services, supervision and training, materials, outreach and recruitment, fidelity monitoring, and administration and overhead |

Coaching and consultation models, in particular, appear well suited to caregivers who are less experienced, who have limited formal training in early childhood education, who face cultural barriers to classroom-based training or have limited English proficiency, or who require personal encouragement and support to pursue quality improvement (Bryant et al., 2009). The individualization of services—through individual assessment, observation, goal setting, and plan development—as well as their on-site provision makes it easy for caregivers to receive training and assistance regardless of their reading level, home language, knowledge of child development, or prior educational attainment. Nonetheless, evaluation results suggest that more experienced caregivers may have the most to gain from coaching and consultation (Bryant et al., 2009). It is possible that caregivers with more education or practical experience are better prepared to identify their own needs in collaboration with a coach or consultant and are more motivated to address them.

Research also suggests that coaching and consultation in particular may be more effective for home-based caregivers than for center-based teachers (Bryant et al., 2009; Koh & Neuman, 2009). It might be that the relationship between a coach or consultant and a caregiver is especially meaningful to a caregiver who does not have daily interaction with coworkers. Moreover, home-based caregivers have the autonomy to immediately implement any suggestions from a coach or consultant and to do so in a manner that best suits their needs, abilities, and resources.

## Content

The content of home-based technical assistance initiatives is shaped by the approach to delivering services and the intended outcomes. Coaching initiatives, in which coaches work with caregivers to develop and apply new knowledge and skills, focus on the particular knowledge and skills being developed and then on related caregiver practices and child outcomes. Consultation initiatives are shaped by the steps of the consultation process itself; specific content is determined by the goals set by the consultant and consultee. Home visiting programs use specific curricula adapted from home visiting approaches for parents. Other home-based technical assistance usually focuses on delivering specific information, training, and materials.

**Coaching Initiatives.** Most coaching initiatives are characterized by a series of steps that include establishing the coach-learner relationship, observation and assessment, demonstration and practice, and reflection (Hanft et al., 2005). The focus of the initiative—for example, quality of the

caregiving environment or supporting children's language development—will determine the specific tools and curricula used for each step. For example, initiatives that support caregivers who want to obtain NAFCC accreditation use the NAFCC accreditation standards and assessments to measure the caregiver's progress. Once they identify deficiencies, coaches will use the standards to help caregivers work toward improving aspects of care that do not meet standards. Other initiatives use environmental rating tools, such as the Family Day Care Rating Scale (FDCRS) (Harms & Clifford, 1989) or its updated version, the Family Child Care Environment Rating Scale-Revised (FCCERS-R) (Harms, Cryer, & Clifford, 2007), in a similar way.

Some coaching initiatives use specific curricula to provide information to caregivers about the skills they seek to develop and to shape opportunities for application of those skills. For example, Right from Birth (RFB) is based on the "seven learning essentials"—principles for promoting children's development identified by the initiative's developers (Ramey & Ramey, 2008). Coaches use videos and written materials to deliver this content, and then guide caregivers in how to implement these principles (for example, encouraging active exploration and providing language-rich interactions).

Coaching may also be combined with other service delivery strategies to provide caregivers with specific content knowledge. For example, the Great Start Professional Development Initiative delivered content on early language and literacy development through a 45-hour community college course based on core competencies of related accreditation standards set by the National Association for the Education of Young Children (NAEYC), the International Reading Association (IRA), and state child care licensing requirements (Koh & Neuman, 2009). Coaches visited caregivers weekly in conjunction with the course to support them in applying their new knowledge and skills with the children in their care.

**Consultation Initiatives.** Although consultation initiatives may also focus on specific domains, such as health or early literacy, they are shaped by the consultation process itself. Specific goals set by the caregiver and consultant will determine the content, which is likely to vary from one consultancy to another. For example, the Partnership for Inclusion (PFI) specified six stages of the consulting process: (1) gaining entry and building a relationship, (2) conducting a joint assessment, (3) identifying the caregiver's needs, (4) developing a written action plan, (5) implementing the plan and, (6) evaluating changes and consulting services and identifying future needs.

Once specific goals for the consultation are set, whether for one child or the group of children in care, the consultant must bring specific content to the caregiver to facilitate working toward the goal. For example, a nurse consultant may provide information about menu planning and promoting healthy eating habits to address the needs of a fussy eater or a child at risk for obesity, or may provide information about behavior management to address the needs of a child who is biting or hitting other children in care. A consultant working with a caregiver on early literacy might provide information on book reading strategies.

Like coaching, consultation initiatives may also incorporate specific assessment tools. PFI consultants worked with caregivers to jointly assess quality using the FDCRS, which helped to build their relationship and also provided the caregiver with a self-evaluation tool.

**Home Visiting Initiatives.** Home visiting initiatives use a curricula designed to be delivered through home visits as the basis for working with the caregiver. These include *Supporting Care-Providers through Personal Visits* (adapted from the family home visiting curriculum *Parents as Teachers*), *Portage* (National Portage Association, no date, accessed November 9, 2009), and *Promoting First*

*Relationships (*Kelly et al., 2008*)*. These curricula often include tools the home visitor can use with caregivers, such as assessments of caregiver goals, needs, and strengths; visit-by-visit activity plans; and educational materials to leave with caregivers. Additional goals may also guide the visits' content. For example, Cherokee Connections in Oklahoma encourages caregivers to use the Cherokee language with children by supplying books and materials in Cherokee as well as financial incentives. The content of home visits in this initiative includes explanations of why this is important for supporting children's cultural understanding and development.

**Other Home-Based Technical Assistance.** These initiatives use a mix of approaches—including some aspects of coaching, consultation, and home visiting—to deliver content focused on specific quality improvement goals. Many aim to improve the health and safety of the environment and caregiver knowledge about various aspects of child development. Others, such as Provider and Child Care Education Services (PACES) in Iowa and Satellite Family Child Care in Wisconsin focus home-based services on helping caregivers obtain a license or NAFCC accreditation. To achieve these goals, a number of the initiatives use quality observations or checklists to identify caregivers' needs and work together to address problem areas and reinforce strong areas. (These observation tools include health and safety checklists, the FCCERS-R, and criteria required by the NAFCC for accreditation.) Goals and visit content can be targeted to address these areas. For example, if the home does not have smoke detectors, the visitor can discuss why this is important, where to purchase them, and check on subsequent visits to ensure they were installed.

In all types of home-based technical assistance initiatives, staff members use a range of approaches to provide one-on-one training and information to caregivers. For example, they may share printed materials (nutrition requirements of children by developmental stage), provide coaching and reflection about what the caregiver is doing with children (asking about ways to engage children in a book reading activity), role-play (acting out a parent discussion about paying the caregiver on time), or model an approach (reading a book to children using questions to keep them engaged and extend their learning).

### Dosage of Services

Available research evidence on dosage of services does not provide a clear indication of the optimal frequency or length of home-based technical assistance visits. Monthly site visits lasting one to two hours is a common level of service delivery among these initiatives; in the absence of clear evidence regarding optimal dosage, attempting to tailor the frequency and intensity of services to the content being delivered and needs of caregivers is a reasonable approach.

The PFI evaluation found that consultants conducted an average of about 16 visits over a 10-month period. Higher doses of services (a larger number of consultant site visits) produced greater improvements in quality among center-based caregivers; but in a counterintuitive finding, slightly lower doses were more effective for home-based caregivers (Bryant et al., 2009). RFB was designed to provide an intensive level of services over a short time—20 nearly consecutive full days of coaching—to produce rapid improvements in caregivers' knowledge and skills. This approach was based on the idea that such rapid gains would produce clear benefits for caregivers and children that would, in turn, motivate continued use of the new strategies and skills. Evaluation results indicate that this intensive dosage of coaching may be more effective than a series of workshops over a more extended period that covered the same content (Ramey & Ramey, 2008).

Coaching and home visiting initiatives that use specific curricula or assessment tools may require a specific number of sessions to deliver all of the content. For example, the Great Start

Professional Development Initiative provided coaching visits in conjunction with a weekly community college course. Caregivers received visits during and following the course to integrate the new knowledge and skills they learned into their practice with children.

Consultation and other home-based technical assistance initiatives may be more suited to individualization of dosage. Initiatives may define a minimum frequency for visits, particularly in the early stages of an initiative when the critical activities are establishing a relationship, conducting an assessment, and planning. Subsequently, the frequency of visits may be guided by the specific goals that the caregiver and consultant have established (for example, meal planning and promoting healthy eating for a health consultation initiative) and the services and supports the caregiver needs to achieve them. Some home-based technical assistance initiatives with specific and limited goals, especially those focused on licensing and professionalization, deliver the initiative content in only a few home visits.

**Strategies for Sustaining Participation**

Attrition of caregivers from home-based technical assistance initiatives may limit changes on targeted outcomes. Attrition may happen for a number of reasons: (1) caregivers no longer serve children, (2) the burden of participation is too high, (3) caregivers do not find the visits engaging or worthwhile, (4) the visitor leaves the position and the caregiver does not want to continue with a new visitor, and (5) the caregiver and visitor are not compatible or their relationship goes awry. Voluntary parent home visiting programs report that a large proportion of parents do not remain enrolled through the intended service period (Love et al., 2005; Olds et al., 2004). PFI experienced substantial attrition among home-based caregivers, with nearly 40 percent dropping out before the end of the study period (Bryant et al., 2009). Evaluation results show that less-experienced caregivers were more likely to drop out than those who were more experienced.

These findings suggest that initiative designers should consider various incentives to sustain participation once caregivers begin receiving coaching or consultation services. Building positive and supportive relationships between visitors and caregivers can motivate participation (Sheridan et al., 2009; Zaslow, 2009). Tailoring the approach and content to the caregiver's learning needs—such as reading level, language, and cultural relevance of the materials—can also motivate participation. Providing financial incentives, such as cash payments or reimbursement for materials or for achieving specific goals or milestones, is another promising strategy.

When home-based technical assistance is combined with other service delivery strategies such as workshops or community college courses, initiative developers must assess the accessibility of these services to the target population and determine whether assistance may be needed to support participation. In particular, some caregivers may need transportation to attend outside courses and workshops and depending on the time of the workshops, may need child care. A related issue is scheduling. Some caregivers, particularly grandparents or caregivers with health problems, may find it difficult to attend evening events after a full day of caregiving.

**Staffing Requirements**

A typical staff configuration for home-based technical assistance initiatives is a program manager overseeing multiple coaches, consultants, or visitors—each of whom carries an individual caseload. The program manager provides ongoing supervision to staff. Such supervision could include group and individual meetings, case note reviews, and periodic observations of service

delivery. In larger programs, staff may include an assistant manager and/or a trainer/specialist, who provides professional development services for staff who provide direct services in the home.

Caseloads vary both within and across approaches. In the PFI evaluation, for example, consultants worked with a median of 44 caregivers, but individual caseloads ranged from 5 to 200. It is reasonable to assume, however, that a lower caseload allows consultants to provide more intensive and personalized services.

Evaluation evidence does not point to specific educational qualifications that may be necessary for effective service delivery in the home. Programs requiring staff to hold a bachelor's degree, such as RFB, and those employing staff with a wider range of credentials, such as PFI, have both had positive results. Consultants, in particular, may need content knowledge to help caregivers work toward a range of individual goals. Some initiatives, such as health consultation programs, may need consultants with specific training, such as registered nurses and dieticians. Beyond academic qualifications, researchers point to such abilities as providing feedback in a specific and supportive fashion, facilitating reflection, and adjusting services to match the provider's interests and needs as important skills of coaches or consultants (Koh & Neuman, 2009).

Promising initiatives provide staff with training at the outset as well as ongoing professional development and supervision. RFB coaches, for example, received extensive pre-service training on implementing the RFB model, conducting observations using the FDCRS, and working with caregivers in the role of coach. Other characteristics that coaches or consultants should possess include interpersonal skills, understanding of curricula, and familiarity with coaching resources and best practices (Koh & Neuman, 2009).

Staff turnover creates a challenge for many programs and is a potential impediment to achieving program goals. The PFI evaluation recorded a consultant turnover rate of 36 percent over 18 months. When trained staff members leave a program, relationships with caregivers may be disrupted and improvements in quality threatened (Bryant et al., 2009). Initiatives may prevent turnover by minimizing the burden of agency tasks and responsibilities beyond the coaching or consultation responsibilities and by providing a clearer career path for people in these positions.

**Cost Categories**

The expected costs of home-based technical assistance initiatives fall into six main categories: (1) direct services, (2) supervision and training, (3) materials, (4) outreach and recruitment, (5) fidelity monitoring, and (6) administration and overhead (Table IV.3). Staff compensation for providing direct services is likely to make up the largest cost category for these initiatives. Numerous factors will affect the magnitude of direct services costs. For example, the qualifications and experience of staff members will influence their compensation because those with more education or expertise are likely to earn more. In addition, the expected intensity of an initiative and the caseload size for individual visitors will affect the cost of direct services per participant. Supervision and training is likely to account for a significant share of initiative costs, but costs will depend on the length of the initial training (because more time involves greater staff compensation) and on the frequency of follow-up trainings and fidelity monitoring.

Few precise estimates of the expected costs of home-based technical assistance exist in the research literature. However, the evaluation of the RFB initiative, which reported that intensive coaching costs $5,000 to $6,000 per caregiver, offers illustrative cost information (Ramey & Ramey, 2008). These costs reflect the 20 full-day, one-on-one coaching sessions that staff members provided

as part of the initiative. In addition, participants received a stipend of $800 to spend on materials for the caregiving environment.

**Table IV.3. Cost Categories for Home-Based Technical Assistance**

| Category | Description |
|---|---|
| Direct services | Staff time spent providing services in caregivers' homes; time spent preparing to deliver services to a specific caregiver, for example, by developing a plan for a weekly session |
| Supervision and training | Time spent by a manager or supervisor providing feedback to staff; compensation and materials related to the initial training of program staff and ongoing staff development |
| Materials | Expenses for worksheets, texts, and other instructional materials for caregivers, or for stipends to purchase educational materials for children and to enhance the caregiving environment |
| Outreach and recruitment | Recruiting materials and time spent publicizing the initiative, explaining services to potential participants, and establishing referral relationships with other organizations |
| Fidelity monitoring | Time spent by a manager or supervisor reviewing coach or consultant activities and notes to ensure that delivery of services (such as intensity and content) meets the standard established by a program model |
| Administration and overhead | Costs of space, utilities, coach or consultant transportation, and such administrative functions as accounting and payroll |

## Expected Outcomes

In this section, we describe the types of outcomes that initiative developers and administrators could expect from providing home-based technical assistance (Table IV.4). The research on home-based technical assistance initiatives to support quality in home-based care shows that these initiatives can improve the quality of the caregiving environment and caregiver knowledge and skills. None of the studies we identified found positive effects on children's development, and none examined the initiatives' effects on parent outcomes. Moreover, expected outcomes will vary according to the intensity and focus of the initiative. Neither initiatives that provide only a few in-home technical assistance sessions nor those that focus solely on licensing are likely to affect child outcomes.

### Caregiver Outcomes

The expected outcomes for home-based technical assistance initiatives will differ depending upon their focus. Typically, the most direct outcome is caregiver knowledge—such as knowledge of child development in a particular domain. For example, a literacy coach might tell the caregiver about the importance of talking with children about stories she reads to them and how to do so. The first outcome may be whether the caregiver can explain reasons for reading to children and describe some strategies, such as asking questions about the story, that could be used to stimulate their literacy development. Another type of gained knowledge may be understanding developmental milestones for children and the variety of ways children meet them. If the focus of the home-based technical assistance is on obtaining NAFCC accreditation, the first outcome may be helping the caregiver to understand the accreditation requirements and criteria.

**Table IV.4. Potential Outcomes of Home-Based Technical Assistance**

| Domain | Description of Outcomes |
|---|---|
| **Caregiver Outcomes** | |
| Caregiver knowledge | • Appropriate expectations and understanding of supports for cognitive, language, and literacy development<br>• Strategies for supporting language development and prereading skills for children learning multiple languages<br>• Appropriate expectations and strategies to support social-emotional development of children (such as positive interactions with adults and peers)<br>• Strategies to reduce illness and injury<br>• Strategies to promote gross and fine motor skills<br>• Strategies to promote nutritious eating and physical activity |
| Physical environment | • Provision of a sufficient number of different types of materials to avoid conflict among children<br>• Changes to schedule to promote positive behavior (reduced waiting)<br>• Variety of age-appropriate materials (such as puzzles and manipulatives)<br>• Enhancement of the print environment (children's books and magazines) |
| Caregiver practices | • Use of health and safety practices (hygienic practices supported; potential physical dangers addressed; safe and accessible eating, sleeping, and toileting environment)<br>• Frequency of high quality language modeling and reading to children<br>• Open-ended questions and longer waiting time for response<br>• Problem solving supports<br>• Consistent use, quality, and/or modeling, of positive behavior guidance strategies<br>• Increased nurturing behavior and positive affect to enhance attachment<br>• Demonstration and supports for fine and gross motor activities |
| Professionalism | None expected |
| Caregiver well-being | • Increased satisfaction with role as caregiver<br>• Increased access to community resources and government supports<br>• Increased social support |
| **Child Outcomes** | |
| Cognition, language, and literacy | • Age-appropriate cognitive, language, and literacy skills |
| Social-emotional | • Increase in positive social behavior (cooperation, negotiation)<br>• Decrease in problem behavior (aggression, withdrawal) |
| Physical health and development | • Number of child care-related accidents, injuries, illnesses, and infections<br>• Number of child care-related emergency room visits |
| **Parent Outcomes** | |
| Parent well-being | • More positive perception of child care setting |
| Employment-related behavior | • Less work time missed<br>• More on-time arrival |
| Knowledge of child development | • Stimulation of child's development<br>• High quality and contingent communication during interactions<br>• Sensitivity to child's cues<br>• Positive guidance<br>• Reduced harshness |

The quality of the caregiving environment is an intermediate outcome that may support positive child outcomes. Changes in caregiver behavior, daily routines, and the home environment can be expected if the home-based technical assistance initiative provides information, support, and materials needed to make those changes. Again, expectations about changes in the quality of care should be tempered by the intensity, duration, and focus of the initiative.

### Child and Parent Outcomes

Evidence from decades of early care and education research documents the challenge of making meaningful and lasting impacts on children's outcomes. Even relatively long-term parent home visiting programs that offer services prenatally and through age 3, such as Early Head Start, find only modest impacts on children's outcomes and parent well-being and self-sufficiency (ACF, 2002; Olds et al., 2007). Often, improvements in outcomes are detected only while families are eligible to receive the services. Some studies of home visiting have documented lasting impacts on child and parent outcomes, but often these interventions were conducted under the supervision of the program model developer (Infant Health and Development Program, 1990; Edwards & Lutzker, 2008).

Home-based technical assistance initiatives for home-based caregivers may affect child outcomes depending on their focus, intensity, and other services provided. Simple changes in the safety of the environment and procedures that reduce the likelihood of child illnesses (hand washing, diapering, and food preparation) may affect the frequency of child infections and absences and may reduce parenting stress and absences from school or work. Relationship-focused home visiting initiatives may improve the security of children's attachment to their caregivers and thereby improve children's ability to explore the environment and regulate their own behavior. Literacy-focused initiatives may increase vocabulary and children's school readiness.

## Evidence of Effectiveness

Four studies have rigorously examined the effects of home-based technical assistance for home-based caregivers. In addition, a number of descriptive, pre-post, and implementation studies have been conducted for the initiatives described in this chapter. In this section, we describe the results of these studies, focusing primarily on the four rigorous studies because they provide the best evidence about the potential effectiveness of this strategy to improve caregiver and child outcomes. These include Caring for Quality (McCabe & Cochran, 2008), the PFI evaluation (Bryant et al., 2009), the RFB evaluation (Ramey & Ramey, 2008), and Project Great Start (Dwyer, 2006; Koh & Neuman, 2009). Table IV.5 provides an overview of the design elements of these four studies.

### Findings on Caregiver Outcomes

The random assignment study of Caring for Quality found a significant increase in quality as measured by the FDCRS overall and on all of the subscales except basic care and space and furnishings (program group scores rose from 3.94 to 4.25). The study also documented a decrease in quality for the comparison group overall and in all subscales except professional development (McCabe & Cochran, 2008). Evaluators found the largest impacts on quality for caregivers with the least amount of experience (fewer than two years) and quality improvements were larger for registered providers than for family, friend, and neighbor caregivers. On a qualitative measure of home visitor engagement, caregivers rated as more engaged showed greater improvements than those rated as less engaged. This study unequally allocated providers to the study groups, resulting in a treatment group more than three times as large as the comparison group. The study's relatively

small sample size and the uneven split across the groups may limit its applicability to subsequent implementation efforts.

**Table IV.5. Design Elements of Studies of Home-Based Technical Assistance**

| Focus of Study | Study Design | Methods | Sample Size/ Unit of Analysis | Outcome Measures | Limitations |
|---|---|---|---|---|---|
| Caring for Quality | Random assignment to program or comparison group | Impact analysis | 74 program group; 23 comparison group | *For Caregivers:* FDCRS, perceived social support, knowledge of child development, child-rearing beliefs, program satisfaction<br>*For Children:* PPVT, Walk the Line Task, Gift Wrap Task | Small sample size; uneven assignment |
| Partnerships for Inclusion | Two-stage random assignment:<br>(1) consultants assigned to PFI or not, (2) child care providers assigned to consultants | Impact analysis | 101 consultants, 263 family child care homes, 108 child care center classrooms | *For Caregivers:* FDCRS, ECERS-R<br>*For Children:* PLS-IV Auditory Comprehension Scale | Low level of fidelity |
| Right from Birth | Random assignment | Impact analysis | 32 family child care providers;<br>28 center teachers | *For Caregivers:* FDCRS<br>*For Children:* PLS-IV | Small sample size |
| Project Great Start | Random assignment | Impact analysis | 128 family child care providers | *For Caregivers:* CHELLO | |

**Sources:** McCabe & Cochran, 2008; Bryant et al., 2009; Ramey & Ramey, 2008; Dwyer, 2006; Koh & Neuman, 2009.

Family child care providers receiving PFI demonstrated significant improvement on several dimensions of quality measured by the FDCRS—teaching and interactions, provisions for learning, and literacy/numeracy—over the course of the consultation period. 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 providers persisted. The analysis indicated that quality improvements in the PFI group were greater for caregivers with more experience than for those with less experience. Among classroom teachers, PFI had no impact; teachers in both the treatment and control groups demonstrated improvement on the Early Childhood Environment Rating Scale-Revised (ECERS-R) (Harms, Clifford, & Cryer, 1998), with no significant differences between the groups.

Among family child care providers, RFB had positive effects on quality in both the workshop group and the intensive coaching group between baseline and each of the observations, and the effects were sustained after one year. However, the intensive coaching group showed much greater gains—two to three times those of the workshop group. Center-based providers exhibited a similar pattern.

Home-based caregivers who received coaching through Project Great Start in addition to a course scored significantly higher on the Child/Home Environmental Language and Literacy Observation (CHELLO) than both those who received only the course and those in the control group (Koh & Neuman, 2009). Language and literacy practice scores of the group receiving coaching also improved more compared to the scores of the other two groups. The combination of coaching and the course was especially effective for home-based caregivers, who improved more than center-based caregivers in the same treatment group.

Together, these studies indicate that home-based technical assistance initiatives have the potential to improve quality in home-based child care settings. All four studies found positive impacts on observed child care quality.

**Findings on Child Outcomes**

Despite promising findings on caregiver outcomes, these evaluations found no impacts on child outcomes for children in home-based care. PFI impacts on the PLS-IV Auditory Comprehension Scale were observed among children in center classrooms but not among those in family child care. Children in classrooms in the PFI group scored higher on measures of receptive language than those in classrooms receiving typical consultation services. Child outcomes, as also measured by the PLS-IV, in the RFB study demonstrated a similar pattern; the intensive coaching model had a positive effect on language development among children in centers but not among those in family child care. The evaluation of Project Great Start did not include an assessment of child outcomes.

Caring for Quality did not find an overall effect on children's outcomes but evaluators reported differential effects for children in regulated family child care compared with those in family, friend, and neighbor care (Cochran & McCabe, 2008; McCabe & Cochran, 2008). Children in regulated family child care in the program group had higher scores on the Peabody Picture Vocabulary Test (PPVT; Dunn & Dunn, 2007) in the post-test than those in family, friend, and neighbor care in the program group. A higher proportion of children in family child care in the program group in the post-test demonstrated more self-regulation (as measured by the Walk the Line Task and the Gift Wrap Task) than those in the control group (McCabe, 2007). The results suggest that this model may have some potential for an initiative for home-based caregivers—family child care providers in particular—but issues related to the design and the small sample size limit the ability to generalize from the study.

**Findings on Fidelity**

Researchers assessed fidelity to the PFI model using an index that addressed exposure, implementation of key components of the model, and quality of service delivery. Data for completing the index were drawn from documentation completed by consultants. The study found that implementing the initiative with fidelity to the PFI model was challenging; in particular, consultants had difficulty making regular visits, correctly scoring rating scales, and tailoring plans to providers' identified needs. Only 25 percent of PFI consultants were rated as "high level"

implementers. Levels of fidelity were not linked to specific consultant or agency characteristics but may have been related to supervisory or management practices.

According to the RFB evaluators, workshop leaders and coaches maintained a high level of fidelity to the model, delivering services at the intensity expected. Training and ongoing supervision by researchers may have supported this result.

Evaluators for Project Great Start attempted to ensure fidelity in the delivery of services in several ways. Coaches recorded their activities in a weekly log and used a reflection form to document their work with individual caregivers. The reflection forms required coaches to specify the literacy content and goals of their sessions as well as future plans for work with a caregiver. Debriefing sessions with other coaches and supervisors also helped coaches compare their experiences and promote consistent delivery of services. The researchers do not report on the levels of fidelity actually achieved during the study period, however.

In sum, findings on implementation fidelity are mixed. While one study reported maintaining high levels of fidelity, another reported that implementing the initiative with fidelity was challenging.

## Research Gaps and Needs

Rigorous evaluations of home-based technical assistance initiatives show that they can have a positive effect on the quality of home-based child care. However, the evidence does not show improvements in child outcomes. Research is needed to identify factors that help translate improvements in care practices into better child outcomes. Services may need to be more intensive or more tailored to focus on specific target outcomes for children. In addition, as researchers in the PFI study note, research is needed to identify the specific strategies that are effective with particular types of caregivers (such as those with varying levels of experience, those working with dual language learners, and so on) and to develop methods to ensure that home-based technical assistance initiatives are delivered with fidelity (Bryant et al., 2009). Specific research needs include:

- **Develop and Refine Fidelity Standards and Measurement Tools.** Future work is needed to further refine fidelity standards—the minimum amount and quality of services needed to implement with fidelity, the time and training it takes for staff to achieve fidelity, and the supervision and supports it takes to help them maintain fidelity. Studies of these initiatives could collect caregiver-level data on the services received by caregivers. These data should be reported by the home visitors, coaches, or other staff going to caregiver homes using a service tracking tool (database or MIS) and caregivers should be asked to report on the number of visits received, how long they remained in the program, and, if they left before the program ended, why they did not continue. This triangulation of information will inform improvements in initiatives because implementing agencies and developers will be able to address the stated reasons providers leave the program early and address any implementation issues during the life of the initiative and as it is used in other agencies.
- **Examine Alignment of Models, Theories of Change, and Outcome Measures.** None of the four rigorous evaluations found positive impacts on child outcomes, even though the quality of care improved. Further research is needed to explore whether the structure or intensity of services could further improve the quality of care to produce positive effects for children. Another line of research could delve deeper into strategies'

theories of change and explore different child outcomes and measures of these outcomes that may better test the effectiveness of home-based technical assistance.

- **Test Approaches to Improving Child Outcomes and their Applicability to Caregivers with Different Characteristics.** Rigorous evaluation is needed to determine whether home-based technical assistance models to support quality improvement can be enhanced to support improvements in specific child outcomes, such as language or social-emotional development. And if so, what intensity and duration of services and levels of fidelity are needed to produce these outcomes, and what qualifications do staff need to implement them? Additional research questions should focus on the kinds of adaptations that are needed to provide home-based services to caregivers with different education backgrounds, levels of experience, motivations and interests, and cultural and linguistic backgrounds and caregivers that care for children with specific characteristics.

# V. PROFESSIONAL DEVELOPMENT THROUGH FORMAL EDUCATION

Initiatives focusing on professional development through formal education make coursework or training available to home-based caregivers. These initiatives provide caregivers with funding and support to help them achieve educational goals. Initiatives of this type are based on the premise that increased education and training for caregivers is linked with increased quality of care and improved child outcomes. Indeed, research has found that more educated caregivers in family child care homes are associated with learning environments of higher quality and warmer, more sensitive caregiving (Clarke-Stewart et al., 2002). Studies have also found associations between caregivers' completion of coursework specifically in early childhood education and higher quality care. Caregivers with more education may provide higher quality care than those with less education because they can expose children to larger vocabularies, are better at developing individualized lesson plans, and are more able to address challenges such as working with children who have learning disabilities (Barnett, 2004). Analyses of large data sets from Head Start and other prekindergarten programs, however, suggest no strong association between higher education for classroom teachers and children's outcomes (Early et al., 2007). Nevertheless, associations between caregivers' education and care quality suggest that offering formal education to home-based caregivers may be a promising method for enhancing the quality of the care they provide.

This chapter first provides an overview of existing initiatives that offer professional development through formal education. The chapter then follows the flow of a logic model. The discussion of implementation begins with the target population for this strategy (the beginning of a logic model) and then moves to inputs, resources, and services (the middle of a logic model). Next, the discussion turns to expected outcomes (the end of a logic model). The chapter concludes with a summary of evidence of effectiveness for this strategy and an overview of research gaps and needs.

## Professional Development Through Formal Education in Home-Based Care Initiatives

We identified four examples of initiatives whose primary strategy is professional development through formal education (Table V.1). We identified two initiatives offering professional development through formal education in our initial scan of the field (Porter et al., 2010b); the Alaska Professional Development System and Idaho STARS are career lattices that offer opportunities for professional development and training. Additional research identified another two initiatives. These two initiatives offer financial aid and supportive services to caregivers enrolling in degree or credential programs: the California Comprehensive Approaches to Raising Educational Standards (CARES) Project and the Teacher Education and Compensation Helps (T.E.A.C.H.) Early Childhood Project that originated in North Carolina and is now offered in 19 other states. These programs incorporate incentives for caregivers to pursue continuing education and to remain in the early childhood field. For example, T.E.A.C.H. requires caregivers to execute a contract in exchange for scholarship funds. Once caregivers complete the coursework or other educational requirement outlined in their contracts, they are eligible to receive increased compensation in the form of a raise or bonus. Participants must also commit to remaining at their child care program for six months to a year after completing their scholarship-funded education.

**Table V.1. Examples of Initiatives Providing Professional Development Through Formal Education**

| Initiative and Location | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|
| Alaska Professional Development System for the Early Education Workforce (AK) | ✓ Family, friend, and neighbor caregivers<br>✓ Licensed family child care providers | A professional development/career lattice system that provides opportunities for early childhood educators and caregivers to obtain additional education and training. | **Caregiver:**<br>• Improved knowledge of child development and early care and education<br>• Improved sense of professionalism |
| California Comprehensive Approaches to Raising Educational Standards (CARES) Project (44 counties in CA) | ✓ Family, friend, and neighbor caregivers<br>✓ Licensed family child care providers<br>✓ Center-based providers | Annual stipends of $50 to $5,100 to early childhood educators to promote and reward educational attainment. Stipends are based on the participants' current education level and county-level policies. They are renewable if the participant continues his or her education. Liaisons at college partners help participants select courses and prepare professional development plans. | **Caregiver:**<br>• Increased training and credentials<br>• Improved knowledge of child development<br>• Increased professionalization<br>• increased income |
| Idaho STARS (ID) | ✓ Family, friend, and neighbor caregivers<br>✓ Licensed family child care providers | A career development system that provides opportunities for training and professional development. | **Caregiver:**<br>• Improved knowledge<br>• Improved professional status through increased education |
| Teacher Education and Compensation Helps (T.E.A.C.H.) Early Childhood Project (NC and other states) | ✓ Licensed or registered family child care providers<br>✓ Center-based providers | Provides educational scholarships to caregivers to study early childhood education at community colleges and some universities. Caregivers are eligible to receive increased compensation in the form of a bonus or raise after completing their educational requirement. Participants must then remain in the early childhood field for at least six months to a year. | **Caregiver:**<br>• Increased training and credentials<br>• Improved knowledge of child development<br>• Improved caregiving skills<br>• Increased professionalization<br>• Increased income |

Sources: Cassidy, Buell, Pugh-Hoese, & Russell, 1995; Porter et al., 2010b; Whitebook et al., 2008.

## Implementation of Professional Development Through Formal Education Initiatives

In this section, we describe promising approaches to the design and implementation of initiatives offering home-based caregivers opportunities for professional development through formal education. The discussion covers the target population, content, service dosage (such as the amount of formal education provided and supported), staffing requirements, and costs and is summarized in Table V.2. To identify potentially successful practices, we draw on examples of existing initiatives as well as on the results of outcome and process evaluations, published literature reviews, and papers summarizing expert opinion.

**Table V.2. Overview of Implementation Information for Professional Development Through Formal Education**

| Implementation Component | Summary |
|---|---|
| Target population | Better suited to needs and interests of family child care providers; also feasible for family, friend, and neighbor caregivers |
| Content | Financial assistance, courses and training modules, and supportive services |
| Dosage of services | No conclusive information; suggestive findings that three to four courses for child care center teachers may influence caregiver practices |
| Strategies for sustaining participation | Provision of supportive services |
| Staffing requirements | Administrative, outreach, and expert staff to coordinate services, recruit participants, and teach courses |
| Cost categories | Outreach and recruitment, financial assistance, supportive services, and overhead |

## Target Population

Home-based caregivers working in family child care homes are a promising target population for formal education. Lack of professional support may frustrate family child care providers, who may feel they have fewer opportunities for training and professional development than center-based teachers (Hamm, Gault, & Jones-DeWeever, 2005). For this reason, family child care providers may be particularly receptive to initiatives offering formal education opportunities. In contrast, family, friend, and neighbor caregivers may not be as likely to be a receptive target population for formal education initiatives. These caregivers have diverse levels of prior education and in general, express a greater interest in workshops and experiential learning opportunities (Chase, Schauben, & Shardlow, 2005; Drake, Unti, Greenspoon, & Fawcett, 2004; Porter, 1998; Todd, Robinson, & McGraw, 2005). Approaches to professional development other than formal coursework may be more appropriate for them.

A single initiative can target both family child care providers and family, friend, and neighbor caregivers by tailoring eligibility requirements and education opportunities to each group. The target populations of the four initiatives cover a range of caregiver types; all include licensed family child care providers and three include family, friend and neighbor caregivers. T.E.A.C.H. restricts eligibility to caregivers working at licensed or registered family child care homes. CARES, for example, aims to include many types of caregivers by offering multiple tracks to meet the needs of caregivers with different levels of previous education and training.

Finally, initiatives can be targeted to caregivers at the lowest ends of the pay scale in order to build a career ladder for them and promote greater retention within the field of home-based care. Eligibility requirements for T.E.A.C.H., for instance, set a maximum hourly wage of $14.60 for caregivers in order to target raises and bonuses to staff who will realize the most comparative gains when they complete the required coursework.

**Content**

Formal education initiatives for home-based caregivers typically include one or more of three components described below: (1) financial assistance and incentives to pursue education, (2) courses or training modules, and (3) supportive services to help participants pursue education or training.

**Financial Assistance and Incentives.** Financial stipends provide participants resources for enrolling in education or training programs and incentives for completing coursework. A system of tiered stipends, in which the value of financial assistance and incentives increases with the level of education attained by participants, can motivate caregivers to continue their education. Participants in CARES indicated that scholarships and other financial assistance were an essential factor in their decision to enroll in college or university programs (Whitebook et al., 2008). Flexibility in stipend use may also facilitate continued participation. Caregivers use flexible stipends in a variety of ways, including for tuition and books, materials or equipment for the child care program where they work, or personal and family needs (E3 Institute, 2007). Some stipends enable participants to work fewer hours in order to attend courses.

**Courses and Training Modules.** Little research is available to guide the academic content of formal education initiatives. A recent literature review concludes that the coursework for early childhood educators should emphasize three elements: (1) knowledge of both child development and pedagogical methods, (2) an understanding of how to work with children from diverse linguistic and cultural backgrounds, and (3) opportunities for practice through fieldwork and teacher mentorships (Whitebook, Gomby, Bellm, Sakai, & Kipnis, 2009). Some studies indicate that the extent to which coursework includes early childhood education content is an important factor in the association between caregiver education and quality. Indeed, higher levels of formal education are not more likely to improve quality than is the inclusion of early childhood content at lower education levels (Tout et al., 2006).

Given the limited guidance that current research provides on content, supporting a wide scope of formal education and training opportunities appears to be a viable way for initiatives to address differences in experience and interests among potential participants. For example, CARES and T.E.A.C.H. both provide caregivers with assistance and incentives for studies ranging from basic skills education and ESL classes to baccalaureate or master's degree programs.

**Supportive Services.** Supportive services can contribute to caregivers' successful participation in formal education initiatives. CARES in Santa Clara County, for example, partners with local educational institutions that provide advisors for participants in the initiative. Advisors help participants select courses and degree paths, prepare professional development plans, and address needs or issues related to their education. These supports help participants define their educational goals and remove obstacles to achieving them (E3 Institute, 2007). Support can be provided through cohort programs, which enable groups of early childhood educators to enroll in and pursue a course of study together. The cohort model helps establish a community that can enhance the educational experience by serving as a source of academic assistance and offering opportunities for reflection (Whitebook et al., 2008). Finally, facilitating access to courses and training—through such steps as holding classes off campus or after work hours, providing transportation assistance, and offering options for distance learning—appears to be a valuable element of some initiatives.

The Head Start Higher Education Grantee (HEG) program can also provide insight into the important role of supportive services. The HEG program provides funds to Head Start grantees to pay for teachers' postsecondary education, allowing staff members to select a historically black

college or university (HBC), a Hispanic-serving institution, or a tribal college or university. The 2006 implementation study of the HEG program emphasized the importance of providing supportive services to home-based caregivers, given the added stresses involved in juggling work, school, and family responsibilities For those who are first-generation college students, basic activities like registering for classes online or seeking tutoring available through the college may pose challenges to successful degree completion.

**Dosage of Services**

No conclusive evidence exists regarding the threshold of education and training required to bring about a specific level of improvement in the quality of care (Tout et al., 2006) or about the relative utility of specific types of degrees (Whitebook, 2003). The T.E.A.C.H. evaluation suggests that three or four courses may be enough to positively influence caregiver practices among center-based providers (Cassidy et al., 1995). Whether this finding would apply to home-based caregivers is unknown.

**Strategies for Sustaining Participation**

As described earlier, strategies for engaging and sustaining caregiver participation in formal education are key content elements of professional development initiatives. Other methods to sustain participation among home-based caregivers in formal education focus on addressing the particular challenges they face. For instance, family child care providers may encounter more difficulty than center-based providers in finding or compensating substitutes while they attend classes. Initiatives can diminish this obstacle by helping participants to access and pay substitute caregivers. Family child care providers may also lack the mentoring or encouragement that directors or supervisors can provide to center-based teachers. To address this gap, initiatives can connect participants with advisors at educational institutions or have program staff provide guidance and support directly. As described above, existing initiatives have also implemented such retention strategies as offering transportation assistance, encouraging mutual support among cohorts, and offering courses at convenient times and locations or through distance learning opportunities, particularly for those caregivers who live in rural communities.

**Staffing Requirements**

Research is lacking to suggest an ideal configuration or set of qualifications for staff and trainers in formal education programs for home-based caregivers. With variations depending on the specific services offered, training initiatives will likely require a combination of administrative, outreach, and expert staff to coordinate services, recruit participants, and teach courses. Initiatives that offer financial assistance will require managerial and administrative staff to oversee policy development, participant selection, and disbursement of funds. Initiatives may also require professional development advisors, if such services are provided.

**Cost Categories**

Initiatives offering formal education to caregivers are likely to have four general cost categories (Table V.3): (1) outreach and recruitment of participants, (2) financial assistance or costs of training, (3) supportive services for participants (if applicable), and (4) administration and overhead. Costs for financial assistance or training may be the largest category, depending on the size and number of stipends or scholarships awarded or the frequency and types of training supported. However, specific features of each initiative will determine the relative sizes of these categories as well as

overall costs. Two large California counties implementing CARES—Santa Clara County and Alameda County—offer examples of a relatively costly initiative. Funding allocated for CARES in the 2007–2008 fiscal year was nearly $6 million in Santa Clara County and $3.7 million in Alameda County.

**Table V.3. Cost Categories for Professional Development Through Formal Education**

| Category | Description |
|---|---|
| Outreach and recruitment | Costs of staff time and materials for disseminating information about the initiative, developing application materials, and evaluating applications |
| Financial assistance or training modules | Costs of stipends or scholarships for participants; costs of developing training modules and/or compensating professionals for conducting trainings with caregivers |
| Supportive services | Costs of staff time for providing academic guidance and logistical support to participants; costs for transportation benefits, if offered |
| Administration and overhead | Costs of staff time for program oversight and management; costs of space, utilities, and such functions as accounting and payroll |

## Expected Outcomes

In this section, we describe the types of outcomes that initiative developers and administrators could expect from providing professional development through formal education (Table V.4). Expected outcomes will vary with the intensity and focus of the courses pursued by the caregiver and the extent that the caregiver translates knowledge into practice. The discussion that follows focuses primarily on caregiver outcomes. Child outcomes may also be possible in the long-term but outcomes for parents are very distal (distant or indirect) to these initiatives and for this reason, are not shown in Table V.4.

Expected outcomes may be greater and more widespread if professional development through formal education initiatives is coupled with other strategies described in this report. If coupled with home-based technical assistance, for example, caregivers could have increased support in translating their gained knowledge into practices to affect greater changes in child outcomes, and possibly parent, outcomes. Without these services, the initiative may need to limit expectations about the outcomes focused on the caregiver practices and child outcomes shown in Table V.4. Even coupled with a less intensive strategy—such as grants or distributing materials—would enhance the ability of the initiative to achieve certain outcomes. For example, caregivers may learn about the value of having a range and adequate supply of developmentally-appropriate materials in the care setting (as shown in the physical environment domain in Table V.4) but not have the resources to purchase them. The availability of grants for this purpose or distribution of materials would also help caregivers translate knowledge into practice.

### Caregiver Outcomes

The specific goals, purposes, and amount of funding and support for caregivers and the eligibility requirements for participation will influence their expected outcomes. For example, if a formal education initiative is focused on caregivers with no college credits, outcomes may take longer to materialize than if it is focused on caregivers with some college experience. General education course requirements (history, English, science) may mean that students do not

immediately take early childhood education classes, and thus expected outcomes in the area of quality of care for children are less likely in the short term. If caregivers only take one or two classes each semester, the pace of course completion will probably be slow compared to the pace of traditional students. This also affects the timeline for observing changes in caregivers and the quality of care they provide to children.

**Table V.4. Potential Outcomes of Professional Development Through Formal Education**

| Domain | Description of Outcomes |
|---|---|
| **Caregiver Outcomes** | |
| Caregiver knowledge | • Appropriate expectations and understanding of supports for children's cognitive, language, and literacy development<br>• Appropriate expectations and strategies to support social-emotional development of children (such as positive interactions with adults and peers)<br>• Strategies to reduce illness and injury<br>• Appropriate expectations and strategies to create positive relationships with parents |
| Physical environment | • Variety of age-appropriate materials (such as puzzles and manipulatives)<br>• Enhancement of the print environment (children's books and magazines)<br>• Provision of a sufficient number of different types of materials to avoid conflict among children |
| Caregiver practices | • Use of health and safety practices (hygienic practices supported; potential physical dangers addressed; safe and accessible eating, sleeping, and toileting environment)<br>• Nature and frequency of caregiver-child interactions that supports child development<br>• Quality of the environment that supports child development |
| Professionalism | • Changes in educational levels ( completion of an AA, BA or graduate degree)<br>• Change in professional status ( accreditation)<br>• Increase in income due to degree or certification |
| Caregiver well-being | • Increased satisfaction with role as caregiver |
| **Child Outcomes** | |
| Cognition, language, and literacy | • Age-appropriate cognitive, language, and literacy skills |
| Social-emotional | • Age-appropriate pro-social behavior and interactions with adults and peers |
| Physical health and development | • Number of child care-related accidents, injuries, illnesses, and infections<br>• Number of child care-related emergency room visits |

Caregiver knowledge about children's development and how a caregiver can support that development is a primary outcome for initiatives that provide professional development through formal education. Coupled with changes in what caregivers do to enhance the care environment, these changes may be measurable using an observation tool that assesses global quality. As their knowledge increases, caregivers may try new approaches with children, from decreasing the use of television and other electronic media to finding new ways for children to express themselves

through art and pretend play. In addition, caregivers may learn how to observe and assess children and individualize activities to meet their needs.

### Child and Parent Outcomes

If caregivers understand how to translate classroom lessons into their daily work, child and parent outcomes may be affected by caregiver education initiatives. Such translation may be a challenge for caregivers, which is why other supports such as coaching and consultation or home visits may be required if the target of the initiative is improved child outcomes. Expectations about child outcomes must also be realistic given the rate at which the initiative is expected to change caregiver behavior. Children may move in and out of care over the years that a caregiver is working toward a degree, which means that child outcomes may not be possible until an appreciable number of courses (particularly early childhood courses) are completed. However, as quality increases, enhanced child development may be observed broadly, or in certain areas if the caregiver is working toward a specific certificate.

Caregivers may also share their new knowledge with parents, which may affect parent behavior. However, how far these changes can go depends not only on how well the caregiver has internalized gained knowledge but also how receptive the parent is to learning from the caregiver. It is possible that parents may experience greater satisfaction with care if the communication between the caregiver and the parent improves as a result of new information that the caregiver has gained about working with parents. In addition, any changes in how caregivers interact with children may lead to changes in how children interact with their parents. For example, if the child has learned self-regulation strategies from the caregiver, the child may practice them at home and this may reduce parent-child conflict and relationship issues.

## Evidence of Effectiveness

Two studies have examined the association between the level of education of caregivers and the quality of child care they provide; one study also examined child outcomes. The first is an outcomes evaluation of T.E.A.C.H., and the second used data from the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development (NICHD SECCYD) to assess the relationship between features of family child care homes and children's development. Table V.5 provides an overview of the design elements of these studies.

### Findings on Caregiver Outcomes

The evaluation of T.E.A.C.H. found that the classrooms of scholarship recipients made significantly larger gains on measures of classroom quality (Cassidy et al., 1995). Specifically, the mean environmental rating score for the classrooms of teachers in the scholarship group increased by 0.19 points on a 7-point scale, while the mean score for the classrooms of comparison group teachers declined by 0.12 points. Scholarship recipients also improved significantly more on scores of a self-administered measure of teacher beliefs than did nonrecipients.

**Table V.5. Design Elements of Studies of Professional Development Through Formal Education**

| Focus of Study | Study Design | Methods | Sample Size/ Unit of Analysis | Outcome Measures | Limitations |
|---|---|---|---|---|---|
| T.E.A.C.H. project | Outcomes study of center-based providers | Pre-post test of participants and non-participants | 19 participants; 15 non-participants | Quality of the care environment using ECERS or ITERS | Small sample size. Does not include home-based caregivers. Does not address fidelity of implementation. |
| Quality of family child care homes | Secondary analysis of NICHD SECCYD data over three time periods | Mulitvariate analysis to determine predictive power of caregiver characteristics on quality and child outcomes | 164 children (age 15 months); 172 children (age 24 months); 146 children (age 36 months) | Quality of the care environment using Child Care HOME Inventory | Does not study a specific initiative. |

Sources: Cassidy et al., 1995; Clarke-Stewart et al., 2002.

The study of family child care homes in the NICHD SECCYD identified positive associations between caregiver education levels and the quality of care (Clark Stewart et al., 2002). Caregivers with more education and training provided higher quality learning environments and were more sensitive in their caregiving. Specifically, a one-level increase in education was associated with a 2.44 point increase on the observational measure of child care quality, and a one-level increase in training was associated with a 1.09 point increase on the measure. These relationships remained significant when controlling for caregiver characteristics.

In sum, both studies found positive associations between caregiver education levels and child care quality. However, as described below, studies using more rigorous methods are needed to determine whether specific professional development initiatives produce positive effects on caregivers' education and child care quality.

### Findings on Child Outcomes

The NICHD SECCYD study found that children with caregivers who had higher levels of education and training scored significantly higher on measures of cognitive ability. In addition, children with college-educated caregivers scored significantly higher than children without college-educated caregivers on cognitive tests at age 24 and 36 months. The T.E.A.C.H. evaluation did not address child outcomes.

### Findings on Fidelity

The T.E.A.C.H. evaluation did not address fidelity of the initiative's implementation. NICHD SECCYD was not a study of a specific initiative.

## Research Gaps and Needs

Additional research is needed to refine the components of professional development through formal education initiatives as well as to establish and clarify relationships between formal education, quality, and child outcomes, particularly among home-based caregivers. Specifically, such research should:

- **Analyze the Links between the Type, Content, and Amount of Formal Education among Home-based Caregivers; the Quality of the Care Environment; and Child Outcomes.** Ascertaining the type of coursework and level of education that is associated with higher levels of quality in the home-based care setting will help initiative designers determine the "dosage" of education they should aim for caregivers to achieve.
- **Identify the Challenges that Home-based Caregivers Face in Pursuing Formal Education.** To develop initiatives that encourage enrollment in and completion of education and training, researchers must better understand the barriers these caregivers may face and the methods that may help to alleviate those barriers.
- **Explore the Potential Benefits of Initiatives that Promote Formal Education Among Family, Friend, and Neighbor Caregivers.** Family, friend, and neighbor caregivers and family child care providers vary a great deal in their interest in pursuing formal education and professionalization. To the extent initiatives exist to encourage formal education among these caregivers, monitoring efforts to document the types of courses pursued, the types of supports offered, and the outcomes of participants would lay an important foundation in determining their potential. Exploratory research could help ascertain whether these initiatives can create a route through which these types of caregivers make a transition into child care as a formal career option.
- **Test the Effectiveness of Specific Formal Education Initiatives and Strategies.** Experimental studies of specific initiatives will help identify which models have the greatest effects on caregivers' education and setting quality, as well as pinpointing the individual components of initiatives that are most valuable in producing the intended effects.

# VI. TRAINING THROUGH WORKSHOPS

Training workshops offered to caregivers may be stand-alone offerings, or may be a sequenced series that addresses specific topics to enhance knowledge of a particular topic (such as regulatory requirements) or to improve knowledge of and skills in child care quality or child development (Zaslow & Martinez-Beck, 2006). Workshops can include a variety of teaching strategies—lectures, video demonstrations, and interactive exercises such as role plays, vignettes, and small group discussions (Sheridan, Pope, Edwards, & Knoche, 2009). They may also offer a variety of materials, such as tip sheets, books, or art supplies that can be used in the home environment. Some workshops may also teach participants how to use these materials.

This chapter first provides an overview of existing initiatives that offer training through workshops. The chapter then follows the flow of a logic model. The discussion of implementation begins with the target population for this strategy (the beginning of a logic model) and then moves to inputs, resources, and services (the middle of a logic model). Next, the discussion turns to expected outcomes (the end of a logic model). The chapter concludes with a summary of evidence of effectiveness for this strategy and an overview of research gaps and needs.

## Training Through Workshops in Home-Based Care Initiatives

There is no clear definition of training through workshops in the child care field (Zaslow & Tout, 2004). This makes it difficult to summarize research findings on workshops and to identify particularly effective quality improvement approaches. One study that defined and measured professional development found that training through workshops is often viewed broadly as professional development (Maxwell, Field, & Clifford, 2006). To distinguish it from other activities, such as formal education and credentials, the study's researchers defined training through workshops as activities or experiences that "take place outside the formal educational system."

In this report, we define training workshops as activities that are offered outside of the formal educational system and that provide specific instruction or content to build skills in early childhood development (Sheridan et al., 2009). Activities can either be part of a series or stand-alone, and can use a variety of techniques to enhance practice among participants. Workshops may be offered in a single session or in several sessions over a period of weeks or months (Sheridan et al., 2009). Trainers are regarded as experts, and the trainees as individuals who are not familiar with the content or skills. The flow of information is often one-directional, imparted by the trainer to the trainees. There is often little contact between the trainer and the trainee outside of the training setting and there are few opportunities for feedback by the trainer on observed practice.

We identified 40 initiatives that used training workshops as a primary service delivery strategy (Porter et al., 2010b); half use other strategies as well (Table VI.1). Most commonly, workshops are paired with the distribution of materials and equipment (or reimbursement for the purchase of these items), but some initiatives offer home visits in addition to workshops. The majority of these initiatives define their goal broadly as improving caregivers' knowledge about an aspect of child development or, more generally improving the care provided in home-based settings. Twelve of the workshop initiatives aim to support changes in the regulatory status of home-based caregivers. Two offer workshops as a primary strategy in the context of career lattice systems. Four initiatives identify improving children's school readiness as an outcome; two include outcomes for parents—improved relationships with the caregiver in one case, and improved productivity at work in another.

**Table VI.1. Examples of Initiatives Providing Training Through Workshops**

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| Acre Family Child Care (MA) | ✓ | Family child care providers | Offers *Benchmarks*, a 66-hour classroom training course to help providers become licensed. Also offers home visits, materials, and support for a CDA credential and NAFCC accreditation. | **Caregiver:**<br>• Improved knowledge of child development; Changes in regulatory status (licensing) or accreditation; Improved home environment; Reduced isolation; Improved relationship with parents<br>**Parent:**<br>• Improved knowledge of child development; Strengthened social connections |
| Alabama Kids and Kin Program (AL) | ✓ | Family, friend, and neighbor caregivers | Voluntary Certification Program offers incentives to caregivers who complete a total of 20 hours of training. Participants receive reimbursement for $50 of materials if they complete Level 1 and an additional $150 if they complete all 20 hours (Level 2). | **Caregiver:**<br>• Improved knowledge of child development; Enhanced satisfaction with caregiving role; Improved home environment |
| All Our Kin (CT) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor caregivers | Offers three primary services: (1) the Toolkit Box Project, which takes individuals through the licensing process; (2) Family Child Care Mentorship, which provides support to new providers through program visits for three months; and (3) the Family Child Care Network, which supports providers through a variety of individualized and group services including trainings and workshops. | **Caregiver:**<br>• Improved child care quality; Changes in regulatory status (licensing)<br>**Child:**<br>• Improved foundation for success in school and life |
| Better Kid Care Program (PA) | ✓ | Family child care providers | Training activities meet Keystone STARS's core series training requirements. Also provides video distance education units and a telephone mentoring help line. | **Caregiver:**<br>• Improved knowledge of child development and care; Improved knowledge of business practices |
| Building Blocks: Laying the Foundation for Quality Family Child Care (WA) | ✓ | Family child care providers | A 20-hour training course for new or prospective licensed family child care providers. | **Caregiver:**<br>• Improved knowledge of child development, child care and child care as a business; Changes in regulatory status (licensing) |
| CA Exempt Care Training Project (CA) | ✓ | Family, friend, and neighbor caregivers | Contracts with individual CCR&Rs who must provide 16 hours of "training" on 4 modules. | **Caregiver:**<br>• Improved knowledge of health, safety, and nutrition; Improved knowledge of family literacy; Improved knowledge of discipline, guidance and family support<br>**Child:**<br>• Improved school readiness |

Table VI.1 *(continued)*

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| California Child Care Initiative Project (CA) | ✓ | Family child care providers | Offers 25–30 hours of introductory training for new providers and 9–12 hours of training for second- and third-year providers in the program. | **Caregiver:**<br>• Change in regulatory status through becoming licensed; Enhanced understanding of providing quality child care and managing a child care business; To encourage retention in the field |
| Care to Care (CT) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor caregivers | The primary services are training workshops on child health and wellness as well as infant and child CPR, medication administration, and training related to licensing requirements. | **Caregiver:**<br>• Changes in regulatory status (licensing); Enhanced understanding of providing quality child care and managing a child care business; Improve retention in the field |
| Caring for Children (CT) | ✓ | Family, friend, and neighbor caregivers | Offers one statewide workshop twice a year on child development statewide. Also provides a kit of materials as an incentive for participation. | **Caregiver:**<br>• Improved knowledge of child development and activities to support cognitive, language, social-emotional and physical development; Improved home environment |
| Catholic Family and Child Services (WA) | ✓ | Family child care providers | Offers a 20-hour basic training, "Building Blocks," twice per year. | **Caregiver:**<br>• Improved knowledge of child development and child care; Improved business practices |
| Child Care Boost (NH) | ✓ | Family, friend, and neighbor caregivers | Provides support for training in core competency areas in the New Hampshire Early Childhood Professional Development System. | **Caregiver:**<br>• Improved knowledge of child development, child care and child care as a business; Changes in regulatory status (licensing) |
| Child Care Connection (OH) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor care caregivers | Offers one 7.5-hour full-day course every other month for health and safety for family child care. Also provides referrals of parents to providers, a resource library, and information about managing a child care business. | **Caregiver:**<br>• Improved knowledge of health and safety in child care; Improved environment |
| Child Care Improvement Program (CCIP) (OR) | ✓ | Family child care providers | A system of nine community-based family child care networks that provide monthly networking and training meetings. A $300 annual grant for resources is available. Also provides scholarships for classes and conference attendance. | **Caregiver:**<br>• Improved child care quality; Improved home environment; Improved income from family child care business; Improved sense of professionalism; Changes in educational level if participants use the scholarships for classes<br>**Parent:**<br>• Increased satisfaction with high quality care |
| Early Learning Community (MI) | ✓ | Family, friend, and neighbor caregivers | Provides workshops on use of the *High/Scope* curriculum; supplemented through distribution of materials. | **Caregiver:**<br>• Improved knowledge of health, safety, and child development; Improved home environment |

Table VI.1 *(continued)*

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| Family Child Care Business Training (CA) | ✓ | Family child care providers | Provides four 2.5-hour weekly business training workshops for regulated family child care providers. | **Caregiver:**<br>• Improved sense of professionalism as child care business managers |
| Family Child Care Home Pre-Licensing Workshops (NC) | ✓ | Family, friend, and neighbor caregivers | A one-day (five-hour) workshop for individuals who plan to operate a family child care business. | **Caregiver:**<br>• Improved knowledge of the regulatory system as well as policies and procedures for licensing; Changes in regulatory status (licensing) |
| Family, Friend, and Neighbor Orientations (OR) | ✓ | Family, friend, and neighbor caregivers | A 1.5 to 2-hour session that provides information about reimbursement requirements and procedures for caregivers who participate in the subsidy system. Caregivers who attend can receive a materials kit. | **Caregiver:**<br>• Improved understanding of the reimbursement system policies and procedures |
| First Five LA Early Care and Education Workforce Development Initiatives FFN Training and Mentoring Project (LA) | ✓ | Family, friend, and neighbor caregivers | Delivered through six community-based agencies, each of which is required to provide training workshops. | **Caregiver:**<br>• Improved knowledge of child development; Enhanced social connectedness with other providers; Improved knowledge and utilization of community resources |
| FUTURES Initiative (MI) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor caregivers | Offers 16-hour courses and 10-hour advanced courses through CCR&Rs across the state. Also provides books and CDS. | **Caregiver:**<br>• Improved knowledge and skills |
| Great Beginnings (OR) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor caregivers | Includes 60 hours of professional development linked to the core knowledge categories of the Oregon Registry | **Caregiver:**<br>• Improved knowledge of how infants and toddlers form healthy attachments, develop positive peer relationships, regulate their emotions, and safely explore their environment; Improved child care quality; Improved professional status through professional development registry |
| Hands-On Teach to Learn (MN) | ✓ | Family, friend, and neighbor caregivers | Provides biweekly training to child care providers who do not speak English as their first language. | **Caregiver:**<br>• Enhanced understanding of Minnesota Kindergarten Readiness Domains and Core Competency areas and how they relate to hands-on activities; Improved practice<br>**Child:**<br>• Improved school readiness |
| Home-Based Care Microenterprise Network (NY) | ✓ | Family, friend, and neighbor caregivers | Offers 15-hour cycles of training series and a variety of individual workshops. | **Caregiver:**<br>• Improved child development knowledge and skills of network members and new providers; Changes in regulatory status (licensing); Improved financial well-being |

Table VI.1 *(continued)*

| Initiative and Location | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|
| Infant Toddler Family Day Care (VA) | ✓ Family child care providers<br>✓ Family, friend, and neighbor caregivers<br>✓ Center-based care providers | Offers approximately 100 hours of pre-service training, including 12 hours of medical administration training (CPR, first aid), child development, play and temperament, interviewing skills, and communication skills. | **Caregiver:**<br>• Improved knowledge and skills for caring for infants and toddlers; Improved child care quality; Changes in regulatory status (licensing) |
| Informal Family Child Care Training (NY) | ✓ Family, friend, and neighbor caregivers | Offers a 1.5 hour monthly workshops as well as materials and a newsletter. | **Caregiver:**<br>• Improved child care quality through increased knowledge of child development and child care; Improved home environment; Reduced isolation and improved social supports |
| License-Exempt Assistance Project (CA) | ✓ Family child care providers<br>✓ Family, friend, and neighbor caregivers | Offers 60 hours of training workshops year-round to encourage family, friend, and neighbor caregivers to become licensed, and to improve the quality of care for licensed family child care providers. | **Caregiver:**<br>• Changes in regulatory status (licensing); Enhanced understanding of providing quality child care and managing a child care business; Encourage retention in the field |
| LUMMA (CO) | ✓ Family child care providers<br>✓ Family, friend, and neighbor caregivers | Offers 15 hours of pre-licensing courses, first aid (3.5 hours), CPR (3.5 hours), universal precautions (1.5 hours), medication administration (4 hours), and child abuse and neglect reporting (2 hours). Reimburses participants for $300 worth of equipment. | **Caregiver:**<br>• Changes in regulatory status (licensing); Improved home environment |
| Michigan Better Kid Care (MI) | ✓ Family child care providers<br>✓ Family, friend, and neighbor caregivers | Provides two extensive trainings: (1) an 18-hour training for relative care providers and day care aides, and (2) a 36-hour training for those interested in opening a child care business. | **Caregiver:**<br>• Improved knowledge of child development and providing child care; Increased commitment to professionalism and business practices; Increased health and safety in home environments; Reduced turnover<br>**Parent:**<br>• Improved worker productivity<br>**Child:**<br>• Improved school readiness |
| Monadnock Little Houses (MN) | ✓ Family child care providers<br>✓ Family, friend, and neighbor caregivers | Provides three trainings, a home visit, and technical support to help potential providers start their businesses. | **Caregiver:**<br>• Improved knowledge of infant/toddler development and starting a small business; Changes in regulatory status (licensing) |

Table VI.1 *(continued)*

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| Ohio Ready to Learn: Professional Development for Family Child Care Providers (OH) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor caregivers | Provides workshops for family child care providers on children's television viewing. | **Caregiver:**<br>• Improved knowledge about how to use television programming; Improved adult-child television watching together; Reduced use of inappropriate television watching<br>**Child:**<br>• Improved language and literacy |
| Ohio State Institutes for Reading Instruction (SIRI) (OH) | ✓<br>✓ | Family child care providers<br>Center-based care providers | The Pre-K/K SIRI program provides training workshops on language and literacy to child care providers and preschool and kindergarten teachers. | **Caregiver: :**<br>• Improved knowledge of research-based skills in effective reading instruction<br>**Child:**<br>• Improved school readiness |
| Provider Appreciation Day (NH) | ✓ | Family, friend, and neighbor caregivers | Six hours of workshops in one day. | **Caregiver:**<br>• Improved knowledge of children's cognitive development; Increased satisfaction of role as provider |
| Provider Training Resource Activity Center (CA) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor caregivers | Supports providers through training, home visiting, peer support networks, and consultation. Also has a resource library. | **Caregiver:**<br>• Improved knowledge of child care and child development. Improved home environment |
| Quality Child Care Initiative Funded by Sisters of Charity Foundation of Canton (OH) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor caregivers | Six hour training sessions one Saturday a month. Also has a resource library. | **Caregiver:**<br>• Improved knowledge of child development and child care; Improved credentials (CDA); Improved home environment |
| Ready to Learn Providence (R2LP) (RI) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor caregivers | Provides Heads-Up Reading (15 three-hour workshops), Mind in the Making (3 two-hour home visits and 12 two-hour workshop sessions), and Early Literacy Curriculum (15 three-hour sessions). | **Caregiver:**<br>• Improved knowledge about language and literacy development; Improved educational status for providers who enroll in college courses; Improved literacy environment in the home<br>**Child:**<br>• Improved language and literacy development |
| Registered Family Home Development Project (TX) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor caregivers | Training component comprises a minimum of 16 hours (four 4-hour training courses). All participants are required to take a pre-service training that meets state licensing requirements. | **Caregiver:**<br>• Enhanced understanding of Texas's prelicensing requirements; Changes in regulatory status (licensing); Completion of continuing education requirements for registered family child care providers |

Table VI.1 *(continued)*

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| Relative Caregivers Training (DE) | ✓ | Family, friend, and neighbor caregivers | Relative caregivers of children who are subsidized through the Delaware Division of Social Services are required to participate in 45 hours of training. The initiative also provides a kit of materials. | **Caregiver**<br>• Improved knowledge of health and safety practices, early literacy and language development, child development and children's behavior; Improved skills at offering First Aid and CPR; Improved home environment |
| The School Readiness Project Family Day Care Satellite Project | ✓ | Family child care providers | The initiative provides one or two 2-hour trainings monthly. It also provides business boxes for materials and supplies. | **Caregiver:**<br>• Improved retention and increased enrollment; Improved child care quality |
| State University of New York Early Childhood Education and Training Program (NY) | ✓<br>✓ | Family child care providers<br>Family, friend, and neighbor caregivers | Offers video conferencing and e-learning downloads for providers. Training sessions provide information on topics related to child care and professional development. Also administers state-funded scholarships for college courses and other training in early childhood education. | **Caregiver:**<br>• Improved caregiving skills; Improved health and safety of the home; Improved nutritional practices Increased training and credentials |
| Training for Spanish-Speaking, Unlicensed Providers (WY) | ✓ | Family, friend, and neighbor caregivers | Offers a training course to help predominantly Spanish-speaking unlicensed providers obtain licensing | **Caregiver:**<br>• Improved knowledge about regulation and licensing |
| YMCA Family Child Care Network Accreditation Initiative (PA) | ✓ | Family child care providers | Provides weekly training, technical assistance, and access to resources to help licensed family child care providers meet prerequisites for accreditation by NAFCC. | **Caregiver:**<br>• Changes in professional status (NAFCC accreditation or CDA) |

Source: Porter et al., 2010b.

CDA = Child Development Associate

NAFCC = National Association of Family Child Care

## Implementation of Training Through Workshops Initiatives

This section describes options for designing and implementing workshop initiatives for home-based child care (Table VI.2). Specifically, we discuss options for the content, target population, dosage of services, strategies for sustaining participation, staffing requirements, as well as the costs of workshop initiatives.

**Table VI.2. Overview of Implementation Information for Training Through Workshops**

| Implementation Component | Summary |
|---|---|
| Target population | All types of home-based caregivers |
| Content | Varies by workshop objective, topic, and length |
| Dosage of services | No conclusive information; median is 16 hours in two-hour weekly sessions |
| Strategies for sustaining participation | Convenient scheduling, relevant and high quality content, financial incentives, positive trainer-trainee relationship |
| Staffing requirements | Varies by program; trainers need to have knowledge, experience, and skills that align to workshop objectives |
| Cost categories | Direct services, supervision, materials, outreach and recruitment, fidelity monitoring, and administration and overhead |

### Target Population

Workshops are a common strategy for initiatives that aim to improve child care quality in all types of settings. A study of 339 initiatives supported through the Child Care Development Fund (CCDF) in 35 states found that training through workshops was a high priority (Pittard, Zaslow, Lavelle, & Porter, 2006). Ninety-seven percent of the states had at least one initiative with caregiver training as an objective; 40 percent of the 339 had training as a strategy (Pittard et al., 2006). Training workshops are also frequently used to support home-based caregivers. A study of CCDF initiatives specifically intended to improve quality in family, friend, and neighbor care found that workshops were the most common strategy (Porter & Kearns, 2005).

The most common target population for workshop initiatives we identified was family, friend, and neighbor caregivers (Porter et al., 2010a). Fourteen initiatives identified these caregivers as a primary target population. Another 16 initiatives aimed to provide services to both family, friend, and neighbor caregivers and regulated family child care providers. Ten initiatives were targeted only to regulated family child care providers. Two of the initiatives aimed to serve center-based teachers as well.

Workshops may be an appropriate strategy for family, friend, and neighbor caregivers if the content is related to subsidy system requirements or licensing, but they may not be a useful strategy for quality improvement. Many family, friend, and neighbor caregivers do not have an interest in child care as a career, and therefore, do not see themselves as candidates for training (Porter et al., 2010a). Initiatives that target these caregivers may address this concern by avoiding the term "training" in recruitment strategies, using different language to describe the activities instead (Porter et al. 2010c.). For example, the initiative can emphasize that the intended population is family,

friend, and neighbor caregivers by using the term in its name, or by using terms such as support groups or networking meetings to describe the activities.

**Content**

The content of workshop initiatives is determined by their objectives or goals. Content for those that aim to improve quality by increasing caregivers' practical knowledge can include a range of topics that relate to promoting child development and enhancing the home environment. Typical topics include health and safety practices, nutrition, children's development, activities for children, setting limits, and sometimes, caregiver-parent relationships. Workshop initiatives can also focus on a single aspect of child development (such as language and literacy) or a particular age group (such as infants and toddlers). In those cases, the workshop content reflects the objective. Workshops with other aims, such as helping caregivers understand the subsidy system, can focus on requirements and procedures for obtaining reimbursements. Those that aim to help caregivers through the licensing process can include topics related to child care as a business (such as taxes and marketing) as well as topics related to child development. Whatever the objective, initiatives should consider caregivers' interest in obtaining information on a particular topic as well as any previous experience and training they may have had.

Many workshop initiatives for home-based caregivers create their own curriculum materials, drawing from published curricula, such as *The Creative Curriculum for Family Child Care* (Dodge & Colker, 2003), as well as other materials that have been widely used in the child care field. Some initiatives rely on Spanish curricula for Spanish-speaking caregivers; others use simultaneous translation or translate some of the material for handouts. Little information is available on how, if at all, workshop initiatives accommodate participants with low literacy—for example, whether they rely on videos and experiential learning rather than written materials.

Although evidence from the field points to the types of content areas that are covered in workshop initiatives, less is known about the actual content that is delivered (Zaslow & Tout, 2004). The variation in the length of individual workshops as well as the number of workshops that are offered suggests that individual topics might not be covered in depth. Some initiatives, for example, address health and safety or child development in one two-hour session, which would allow for attention to only a small number of individual topics or for only superficial overview of a wide range of areas. Nor is there much information about the types of teaching strategies that trainers use to convey the material. One observational study of 31 workshops for "early childhood educators"[4] conducted as part of the PBS Ready To Learn Television Service impact evaluation in 20 stations across the country found that 19 of the observed workshops were a mix of lecture and interactive activities (including role playing) and only 6 used a lecture-only approach (Boller et al., 2004). Given the paucity of research findings available, it is difficult to assess the effectiveness of workshops that may cover the same content but use different strategies to convey it, or to determine whether particular strategies are most effective for delivering content.

[4] The educator workshops were open to family child care; family, friend, and neighbor caregivers; and center teachers. Forty-four percent of the educators provided care in their homes.

**Dosage of Services**

Our scan of workshop initiatives revealed wide variation in dosage, ranging from one 1.5 hour workshop to 100 hours of training through a series of four workshops, to six-hour workshops offered over a four- to six-week period in four cycles annually (Porter et. al., 2010b). The median dosage was 16 hours in two-hour weekly workshops, although some initiatives offered monthly workshops year-round and others did not provide information on training duration. Data do not indicate how much workshop time was dedicated to content delivery rather than introductory exercises and refreshments.

Vagueness about dosage stems from the lack of research evidence on this question, in large part because there are difficulties in measuring the extent of dosage, and because most studies of training have focused on whether some training is better than none (Child Trends, 2007). For example, a study of 90 regulated family child care providers in Maine found that those who had taken one or more workshops (or had a credential or had taken one or more college courses) were more than 2.5 times more likely to meet the "good" benchmark (generally a score of 5 out of 7) on the Family Day Care Rating Scale than those who had no training (Marshall et al., 2004). Regular training workshop participation rather than more isolated workshop experiences may be associated with improvements in quality in family child care (Kansas Infant Toddler Study, 2003; Norris, 2001).

Research is limited in three areas related to dosage. First, it is unclear whether the positive associations between workshop participation and improved quality of care might apply to workshops that are simply intended to provide specific information on procedures or requirements, such as orientations to the subsidy system or pre-licensing sessions. Second, the research does not point to optimal dosages for training workshops that are intended to help caregivers meet or maintain licensing or subsidy requirements. Finally, little information exists on the ideal length, number, or frequency of workshops that would make them most effective. Given variations in adult learning styles, stand-alone workshops may be effective for caregivers who are able to understand and incorporate new ideas and skills into their daily activities, but others will need learning to be distributed over time with ideas reinforced at multiple workshops.

Absent this evidence, it seems reasonable to approach the issue of dosage from the perspective of an initiative's targeted outcomes and the content that needs to be communicated. For limited and specific content, as in an orientation, one relatively brief workshop may be sufficient. However, if the objective is to improve quality broadly or even a specific aspect of quality, then several workshops over a period of time might be more appropriate. Use of a specific curriculum may affect the dosage as well, because the required number of modules may determine the number of sessions needed.

In any case, determining the dosage will depend on the needs of caregivers. Some may not be able to attend an all-day workshop without a substitute to provide child care coverage. Others may not be able to sustain participation in a three-hour workshop because they are not accustomed to being in a classroom setting for that length of time. Still others may not be likely to participate in workshops scheduled for particular times—during after-school hours or evenings, for example, because of family or caregiving responsibilities.

**Strategies for Sustaining Participation**

Although there is little evidence about effective strategies for retaining caregivers in workshop initiatives, some data suggest reasons for lack of participation. In the Maine family child care study,

for example, half of the providers indicated that the scheduling of the training represented the most difficult problem for them; another 30 percent indicated that they did not have time for additional training (Marshall et al., 2004). Only a small percentage of providers reported that transportation was a problem. Other concerns were the quality of the training, which was regarded as poor, and the perception that the training did not offer any particular benefits (Marshall et al., 2004). A study of home-based caregivers who provided child care to subsidized school-aged children in Georgia found similar responses to workshops (Todd, Robinson, & McGraw, 2005). The caregivers reported that the lack of variety in workshop training topics as well as shallow coverage on topics affected their willingness to attend. The caregivers also indicated it was often difficult for them to participate in the training because of distance.

Findings from the descriptive studies discussed above suggest that convenient scheduling and matching content to caregivers interests and needs could play a role in attracting caregivers and in sustaining their participation. Other strategies such as financial incentives through reimbursement for materials or cash payments for completing workshops may also contribute to caregivers' engagement. Positive trainer/trainee relationships may also encourage continued workshop participation. Staff members who have been trained to develop supportive relationships with caregivers may be able to create stronger and more effective relationships with the caregivers with whom they work (Bromer, van Haitsma, Daley, & Modigliani, 2009).

**Staffing Requirements**

A typical staffing configuration for a workshop initiative consists of a program coordinator or manager who oversees one or more trainers. The program manager supervises the staff in regular meetings; he or she may also observe the training workshops and review any workshop evaluations. Trainers may specialize in workshops with particular content, or they may offer a workshop series with a variety of content topics. Some workshop initiatives may hire consultants to offer certain material. Larger programs may also have a program assistant who schedules trainings and manages logistics, and possibly a curriculum development specialist.

The number of individuals one trainer can manage in a workshop varies by content type and delivery. For example, in an orientation that relies on a lecture format, one trainer might be sufficient for a large group of up to 80 participants. Skilled trainers using mixed formats can also accommodate groups with 40 to 50 participants. If, however, the training is intended to build relationships among participants, or if it includes role playing and other interactive exercises in addition to conveying material, smaller groups of 20 to 30 may be preferred. Small groups may also be more effective if the trainer is working with caregivers with low literacy levels or English language learners, if the trainer is relying on translators or there are no materials available in the language spoken by the caregivers.

Research provides little evidence on specific educational qualifications that may be effective for trainers. Many workshop initiatives require trainers to have a bachelor's degree in early childhood education or a related field. For example, in a survey of 250 child care resource and referral (CCR&R) agencies, the most common service delivery agency for workshop initiatives, found that most staff had college degrees and specialized preparation in early childhood (Smith, Sarkar, Perry-Manning, & Schmalzried, 2007). Nevertheless, some initiatives rely on trainers who have completed a child development associate (CDA) credential or an associate's degree and have experience in family child care (Porter et al., 2010c).

Training staff need expertise in the content and practices that they teach. Some evidence suggests that trainers' background and understanding of their own role predict their effectiveness as trainers, but the interaction among background variables and how each affects training needs further investigation (Sheridan et al., 2009).

In addition to educational background, initiatives may require that trainers themselves obtain additional training to add to their content knowledge or sharpen their training skills. Our scan of initiatives indicates that this in-service training often takes the form of attendance at conferences of professional organizations such as the NAEYC or the NAFCC (Porter et al., 2010a). We do not have evidence of the effect of this in-service training on staff ability to deliver workshops, but reason that exposure to new information or additional information may enhance staff's knowledge, skills, and perceptions of their professional role.

### Cost Categories

The expected costs of workshop initiatives fall into six main categories: (1) direct services, (2) supervision, (3) materials, (4) outreach and recruitment, (5) fidelity monitoring, and (6) administration and overhead (Table VI.3). Staff compensation for providing direct services and expenses for supervision and materials are likely to comprise the largest categories. Many factors, including staff qualifications, experience, hours worked, and number of trainers needed will affect the magnitude of direct service costs. Materials also represents a significant share of the costs of workshop initiatives, depending on the type and quantity of materials given to caregivers.

**Table VI.3. Cost Categories for Training through Workshops**

| Category | Description |
|---|---|
| Direct services | Staff time for providing training to caregivers and preparing for workshop sessions (including copying hand-outs, organizing materials for hands-on activities, arranging for audio-visual equipment, and contacting participants); consultant fees (if used); costs for off-site room rental, refreshments, child care, and transportation |
| Supervision and training | Managerial or supervisory time for feedback to trainers, compensation and materials related to the initial training of program staff and ongoing staff development |
| Materials | Expenses for curricula, materials for workshops or for caregivers' home environment, or stipends for reimbursement of caregivers' purchase of materials to enhance the caregiving environment |
| Outreach and recruitment | Recruiting materials and time spent publicizing the initiative, explaining services to potential participants, and establishing referral relationships with other organizations serving the target population |
| Fidelity monitoring | Supervisory or managerial time for reviewing workshop activities, trainers to ensure that services (intensity, content, and so on) meet the standard established by a program model |
| Administration and overhead | Costs of space, utilities, insurance, local travel to off-site locations; travel to professional conferences for in-service training; administrative functions as accounting and payroll |

## Expected Outcomes

This section focuses on the types of outcomes that could be expected from workshop initiatives (Table VI.4). Developers, administrators, and evaluators must weigh the purpose of the workshops and what can be reasonably achieved with the dosage and content provided. Some targeted

outcomes are better suited to a workshop format than others. For example, workshops are the most common way for teaching caregivers about blood-borne pathogens and how to do infant and child first aid and cardiopulmonary resuscitation (CPR). These topics are particularly suited to a workshop format because they are discrete topics and skills that allow for in-person practice and testing. Similar to professional development through formal education, the expected outcomes for training through workshops are focused on caregivers' knowledge and practices and the child care environment.

**Table VI.4. Potential Outcomes of Training Through Workshops**

| Domain | Description of Outcomes |
|---|---|
| **Caregiver Outcomes** | |
| Caregiver knowledge | • Appropriate expectations and understanding of supports for cognitive, language, and literacy development<br>• Appropriate expectations and strategies to support social-emotional development of children (such as positive interactions with adults and peers)<br>• Strategies to reduce illness and injury |
| Physical environment | • Provision of a sufficient number of different types of materials to avoid conflict among children<br>• Variety of age-appropriate materials (such as puzzles and manipulatives)<br>• Enhancement of the print environment (children's books and magazines)<br>• Changes to schedule to promote positive behavior (reduced waiting) |
| Caregiver practices | • Use of health and safety practices (hygienic practices supported; potential physical dangers addressed; safe and accessible eating, sleeping, and toileting environment)<br>• Increased frequency of high quality language modeling and reading to children<br>• Use of open-ended questions and longer waiting time for response<br>• Use of problem solving supports<br>• Consistent use, quality, and/or modeling, of positive behavior guidance strategies<br>• Demonstration and supports for fine and gross motor activities |
| Professionalism | • Progress toward licensing or accreditation |
| Caregiver well-being | • Increased satisfaction with role as caregiver<br>• Increased access to community resources and government supports<br>• Increased social support |
| **Child Outcomes** | |
| Physical health and development | • Number of child care-related accidents, injuries, illnesses, and infections<br>• Number of child care-related emergency room visits<br>• Child maltreatment reported and substantiated cases |

## Caregiver Outcomes

Expected caregiver outcomes for workshop initiatives will vary depending on the goal of the workshop and whether it is a stand-alone experience or part of a series. If the initiative seeks to help

caregivers understand regulatory or subsidy requirements, for example, a reasonable outcome may simply be a clear confirmation that the participants know how to comply with the "rules" and complete necessary forms. Or, drawing from the earlier example, an outcome of CPR training would be a test of the caregivers' ability to conduct CPR.

Different outcomes can be expected for workshop initiatives that aim to improve the quality of care or support for specific aspects of child development. The proximal (closest or more direct) outcome would be a change in the caregiver's knowledge about how to create a positive environment for children, such as practices that will keep children healthy and safe, or ages and stages of children's development. In a health and safety workshop, for example, the trainers may discuss the danger of open electrical outlets or of keeping medicines within reach of children. The proximal outcome would be whether the caregivers understand the reasons for using electrical outlet covers or cabinet locks. Similarly, the trainers may discuss how infants develop language, and the proximal outcome would be the caregivers' awareness of the need to talk, sing, and read to very young children.

Another possible outcome from workshop initiatives may be measurable changes in the home environment as a result of the new knowledge gained in the sessions. This outcome may be proximal if the initiative provides materials such as electrical outlet covers, books, or puzzles, or it may be more distal (distant or indirect) if the materials are not provided and caregivers have to purchase them. Regardless, it will be important to ensure that caregivers know how to use the materials—a change in practice—such as how to install a smoke detector or how to read to children effectively.

Change in practice is a more distal outcome that can be expected from workshop initiatives. New skills can be gained through instruction or modeling, and they can be improved through feedback, guidance, and continuous use (Sheridan et al., 2009). For example, trainers can use interactive exercises such as role playing to help providers learn how to read to children; caregivers then use these techniques at home. Although changes in practice may be a possible outcome from workshop initiatives, supplemental services such as home visits or consultation may be needed to provide the opportunities for caregivers to work individually with staff in the workshop or at home to effectuate these changes (Sheridan et al., 2009).

Other caregiver outcomes that can be expected from workshop initiatives include changes in professional status and an improved sense of efficacy. Initiatives that aim to help providers become licensed can identify that particular change in status as a long-term outcome. Initiatives that focus on licensing may also identify increased income as an outcome, especially if the workshop addresses methods of managing a child care business. But, this outcome is distal and will be affected by external factors in the child care market. With or without a change in licensing status, workshops targeted to family, friend, and neighbor caregivers that focus on the importance of the role they play in supporting children's development may improve caregivers' sense of efficacy. Similarly, workshops for regulated family child care providers that include content about professionalism and child development issues may enhance their perceptions of their careers.

Increased social support for caregivers can be a workshop outcome, but the initiative must be designed to promote interaction among the caregivers and with the trainers during the sessions. Workshops that rely on a lecture format without individual attention from the trainer to the participants, those that do not include icebreakers or small group work, or those that do not have time for refreshments may not provide adequate opportunities for participants to create relationships.

### Child and Parent Outcomes

Most outcomes for children and parents are distal for workshop initiatives, although some aspects of the initiative (such as installing electrical outlet covers or a gate at the stairs) may have a more immediate and measurable effect. Table VI.4 includes only child outcomes related to their physical health and development that could be reasonable proximal outcomes of workshops. Improving children's language by reading to them or improving infants' physical development by engaging in gross motor activities on the floor, may depend on how long a child is in care and how frequently the activities occur. The same reasoning applies to outcomes for parents. Caregivers may be able to make immediate improvements in parents' satisfaction with care by discussing their expectations for the arrangement in detail; improving parents' relationship with the caregiver may take longer because it may involve communication over time. Although what caregivers learn in workshops may affect children, these effects will likely not be large and changes in caregivers or children may not affect parents' relationships with their children.

## Evidence of Effectiveness

Eight studies have examined outcomes of training initiatives for home-based caregivers; all of them assessed caregiver outcomes, either focused on the experiences and knowledge of caregivers themselves or the quality of the care environment. Two examined child outcomes as well. Most of the studies described caregiver or child outcomes after participating in the initiative, but they did not use rigorous designs that would allow them to attribute changes in outcomes to participation in the workshops. Table VI.5 provides an overview of the design elements of these studies.

### Findings on Home-Based Child Care Quality Outcomes

Four of the studies identified in the literature review examined effects on the quality of care. They found that participation in training workshops is associated with higher scores on the Family Day Care Rating Scale (FDCRS), although self-selection may have been a factor in the results. For example, one study comparing quality among providers who had never attended training, those who attended training intermittently, and those who had attended training regularly throughout their professional careers found higher overall FDCRS and subscale scores among those who had participated in regular training (Norris 2001). Providers who attended training regularly, however, may have been more motivated to improve quality, with or without the workshops. Another study of participation in a workshop initiative that aimed to improve quality in infant-toddler care found small improvements in FDCRS global quality scores from 3.7 to 3.9. A higher proportion of providers who had participated in workshops showed improvement than those who did not, and scores increased from pre-test to post-test for providers who had attended four or more workshops, although these providers may have been more motivated to improve their care (Kansas Association of Child Care Resource and Referral Agencies, Infant/Toddler Project, 2003). A third study of regulated family child care providers found similar results about participation levels: although the average FDCRS score was 3.61, providers who had had participated in half or more of 20 types of quality improvement activities such as workshops had higher scores on the FDCRS than those who had not (Peisner-Feinberg et al., 2000). The fourth study focused on the quality of care provided by regulated family child care providers who were members of family child care networks (Bromer et al., 2009). It found higher quality scores on the FDCRS among the providers in networks that had trained staff and that offered a variety of activities, such as workshops and home visits, although the study acknowledged that there may have been selection issues in the sample.

**Table VI.5. Design Elements of Studies of Training Through Workshops**

| Focus of Study | Study Design | Methods | Sample Size/ Unit of Analysis | Outcome Measures | Limitations |
|---|---|---|---|---|---|
| Workshop participation study | Correlational | Observations and interviews with workshop participants 5 counties | 70 regulated family child care providers | Global quality using the FDCRS | Small sample; no comparison group |
| Project CREATE (Caregiver Recruitment, Education and Training Enhancement) | Pre-post | Observations of workshop participants in 1 site | 22 providers in total; 10 were family child care providers | Global quality and sensitivity and detachment using the FDCRS | Small sample; no comparison group |
| Kansas Association of Child Care Resource and Referral Agencies Infant/Toddler Project | Pre-post | Observations of a randomly stratified sample of all caregivers statewide | 196 center-based and family child care providers in baseline; 153 in followup | Global quality using the FDCRS | Selection bias; caregivers choose to participate or not |
| Family Child Care Network Study | Correlational | Observations and surveys with caregivers in 1 site | 150 family child care providers | Global quality using the FDCRS | Selection bias |
| Family-to-Family | Pre-post | Observations of participating providers in 3 sites | 71 regulated family child care providers | Sensitivity and detachment using the Arnett CIS | No comparison group; small sample size |
| Smart Start (NC) | Correlational | Observations and survey data of providers statewide; 64 nominated by Smart Start directors; 87 randomly selected from regulation lists | 151 family child care providers | Global quality using the FDCRS; sensitivity and responsiveness with the Arnett CIS | Selection bias |
| Carescapes | Randomized control trial | Impact analysis based on observations of providers in one site | 57 regulated family child care providers | Behavior management and children's problem behavior | Small sample |
| Ready to Learn | Randomized control trial | Impact analysis based on surveys and interviews for 20 PBS stations nationwide | 1,415 randomly selected parents and 904 randomly selected educators (including 406 family child care providers) | Self-reported attitudes towards viewing television with children; frequency of viewing television with children; and time spent reading to children | Findings for regulated family child care providers not analyzed separately from teachers; self-reported outcomes |

Sources: Adams & Buell, 2002; Boller et al., 2004; Kansas Association of Child Care Resource and Referral Agencies Infant/Toddler Project, 2003; Rusby, Smolkowski, Marquez, & Taylor, 2008; Norris, 2001; Howes et al., 1998; Bromer et al., 2009; Peisner-Feinberg et al., 2000.

FDCRS = Family Day Care Rating Scale

CIS = Caregiver Interaction Scale

Our scan of initiatives identified four additional workshop initiatives that aimed to assess effects on quality (Porter et al. 2010a). Of the four initiatives, 3 used the FDCRS to measure quality in family child care and 1 used the Child Care Assessment Tool for Relatives (CCAT-R) (Porter et al. 2006) to measure quality in family, friend, and neighbor care. Pre-test to post-test observations with the FDCRS showed improvements on global scores as well as subscales; observations with the CCAT-R showed mixed changes.

In sum, the results of these studies suggest that participation in training workshops may improve child care quality. However, as described below, evaluations using rigorous designs are needed to determine whether specific training workshop initiatives can produce positive changes in child care quality.

**Findings on Caregiver Outcomes**

We found four studies that examined outcomes for caregivers who participated in workshop initiatives. Two used pre-post designs. One study examined outcomes for staff who attended workshops in addition to three college-credit modules and technical assistance on caregiver knowledge; it found increased knowledge of developmentally appropriate practice and environments from pre-test to post-test among providers who participated in community-based workshops (Adams & Buell, 2002). The other study found increases in sensitivity and reductions in detachment, as measured by the Arnett CIS, when examining the outcomes of participation in a six-month workshop series on provider sensitivity and detachment (Howes et al., 1998).

Two other studies used random assignment designs to evaluate effects. One evaluated the impact of video-based workshop training for promoting positive social development among preschoolers in family child care (Rusby et al., 2008). Among those providers who participated in the workshops, the evaluation found a significant increase in use of effective behavior management practices and a decrease in children's problem behavior, although these effects faded out five months after the training. The other random assignment study evaluated the effects of an initiative that used workshops to improve media literacy and the use of specific children's television programming as a learning tool for children (Boller et al., 2004). The sample consisted of parents and educators; approximately 45 percent of the 904 educators were family child care providers. The study did not analyze the findings separately for classroom teachers versus home-based caregivers, so findings should be interpreted cautiously because they could be driven by the classroom-based educators. The study found a few statistically significant impacts on educator-reported targeted outcomes three months after the workshop but they were not sustained at the time of the second interview conducted six months after the workshop. Educators in the treatment and control groups reported similar attitudes toward viewing television with children, frequency in viewing television with the children in their care and using the targeted read-view-do approach, and time spent reading with children.

Together, these studies provide a mixed picture of the potential for training workshops to improve caregivers' knowledge and skills. While the studies indicate that training workshops may have the potential to improve caregiver knowledge and skills, two rigorously designed studies found that initial positive impacts fade out within a few months after training.

**Findings on Child and Parent Outcomes**

Two studies of workshop initiatives examined effects on children. One found that infants with caregivers who participated in workshops on infant-toddler social development, among other topics,

showed higher infant attachment security (Howes et al., 1998). The study that examined the effects of training workshops on media literacy also included child outcomes, and found no impact (Boller et al., 2004).

We found no literature that examined parent outcomes (Porter et al., 2010a), and none of the 40 workshop initiatives in our scan of the field addressed this issue in their evaluations (Porter et al., 2010b).

**Findings on Fidelity**

No studies in the literature review identified fidelity measures for determining whether the initiative was faithful to the model (Porter et al., 2010a). We also did not find fidelity measures in the workshop initiatives we identified in our scan of the field (Porter et al., 2010b).

The Ready To Learn evaluation included fidelity observations of all 85 workshops (31 were for educators, including home-based caregivers). The 34-item fidelity observation tool was developed by the evaluators based on the guidelines PBS provided to participating stations about the key content to be covered during workshops (Boller et al. 2004). In addition to assessing the content of the workshop, the tool observed a range of other indicators of dosage and quality. These included the length of the workshop, time devoted to participant planning and practice of a focal activity, general atmosphere, facilitator knowledge of and skill in delivering the material and engaging participants, and format of the workshop (lecture versus interactive). The close alignment of the workshop observation tool to the developer's fidelity requirements allowed for an assessment of whether and how facilitators conveyed expected content and used recommended approaches designed to reinforce participant learning. For example, 97 percent of the educator workshops introduced the main topic of viewing a program—reading a related book—and doing a related activity, but only 65 percent included time for participants to plan such an activity and only 48 percent allowed 5 or more minutes for workshop participants to practice using this approach.

The general lack of fidelity measures is likely related to the intent of most of the evaluations, which was to assess changes over time in the participants without a comparison or control group. Fidelity measures may not have even been considered for some of the evaluations because the initiatives may not have been fully developed.

## Research Gaps and Needs

The limited research evidence on the effectiveness of training workshops suggests that the strategy may have promise for improving quality in home-based child care as well as improving caregiver knowledge. The gaps in the research are significant, given the prevalence of workshops as a strategy in home-based child care. Specific research needed on workshops includes:

- **Document the Dimensions of Workshop Initiatives that Aim to Achieve Different Objectives.** Because of wide variation in workshop initiatives, more work is needed to document the range of approaches to this strategy—such as approaches used to serve different kinds of caregivers and the range of strategies used to sustain participation in workshops. More information is needed about participation rates and how they change over time. In addition, little is known about workshop content beyond the broad topics covered. More documentation is needed about the actual content of workshops, how content is adapted for caregivers with limited English proficiency or low literacy levels, and how content is delivered. More information is also needed about the characteristics

of workshop trainers, the cost per participant of different kinds of workshops, and use of supplemental service delivery strategies in conjunction with workshops.

- **Develop Fidelity Standards and Fidelity Measurement Tools.** To support high-quality implementation of workshop initiatives, developers should create standards for implementation fidelity, such as the minimum dosage of workshops needed to achieve different objectives, and measures to assess trainers' fidelity to different kinds of content and teaching strategies. Once fidelity standards and measures are in place, research is also needed on how long it takes for trainers to achieve fidelity and the kinds of training and supervisions they need to achieve and maintain fidelity over time.
- **Test Adaptations of Workshop Models for Different Objectives and for Caregivers with Different Characteristics.** Rigorous research is needed to assess the effectiveness of workshop initiative models for achieving different kinds of goals, such as broad quality improvement and changes in specific aspects of quality. Similarly, workshop initiative models should be rigorously evaluated to determine their effectiveness with different populations of caregivers, such as family, friend, and neighbor caregivers; regulated family child care providers, or a mix of the two. In addition, researchers should assess whether models can be adapted to meet the needs of caregivers with different educational backgrounds, cultural backgrounds, and experiences.
- **Conduct Rigorous Evaluations of Workshop Models Targeting Specific Caregiver or Child Outcomes.** Rigorous research is also needed to determine whether workshops can produce improvements in specific caregiver outcomes—such as the use of techniques to support children's social-emotional or language development—as well as whether they can produce positive changes in child outcomes. If workshop models can produce positive changes in caregiver and child outcomes, these evaluations can help determine the levels of fidelity needed to do so.

# VII. PLAY AND LEARN

Play and Learn initiatives allow children from birth through age 5 and their parents or home-based caregivers to interact in an informal setting. Caregivers typically attend Play and Learn sessions with one or two children. Most Play and Learn initiatives function as drop-in centers, without required attendance. Schedules vary, but usually they are available weekly for one to three hours. Play and Learn groups can be offered at a variety of locations in the community, including parks, houses of worship, schools, and even shopping centers (Organizational Research Services, 2008).

Activities in Play and Learn initiatives typically are organized around "centers," child-sized tables with materials such as play dough, puzzles, art supplies, and manipulatives such as blocks. There is often a book center equipped with choices for children of different ages, a center for sand and water play, and some equipment such as small slides for gross motor play. Children and caregivers choose the activities in which they want to engage. Staff model the activities for caregivers. There is little formal structure, although some initiatives include "circle" time during which a staff member reads a book to the full group or sings songs with the children and the adults. Often, the staff provide information on resources to individual caregivers. Group size can range from 20 adult-child pairs to as many as 50, depending on the space and the number of Play and Learn staff.

Current Play and Learn initiatives are loosely based on a traveling preschool model that was developed in the early 1990s for the Kamehameha Schools in Hawaii to enhance parents' understanding of how children learn through play and to prepare them for school (Porter et al., 2010c). Play and Learn is now characterized as a family interaction approach because relative caregivers engage in activities with the children and are expected to extend this learning into the home environment (Porter, 2007).

This chapter first provides an overview of existing initiatives that offer Play and Learn groups. The chapter then follows the flow of a logic model. The discussion of implementation begins with the target population for this strategy (the beginning of the logic model) and then moves to inputs, resources, and services (the middle of the logic model). Next, the discussion turns to expected outcomes (the end of the logic model). The chapter concludes with a summary of evidence of effectiveness for this strategy and an overview of research gaps and needs.

## Play and Learn in Home-Based Care Initiatives

Our scan of the field identified five initiatives that used Play and Learn as a primary service delivery activity (Porter et al., 2010b). All five use other strategies as well (Table VII.1). Four of the initiatives distribute materials and equipment, generally through book bags or backpacks for children. Some of the initiatives provide additional resources, such as information for caregivers. Two of the Play and Learn initiatives also offer peer support groups and workshops; one offers home visits. Play and Learn groups are a supplemental strategy for five additional initiatives: four that use training through workshops as a primary strategy, and one that uses home visiting as a primary strategy (not shown in Table VII.1).

**Table VII.1. Examples of Play and Learn Initiatives**

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| For the Love of Kids – Family, Friends and Neighbor Child Caregiver Support Program (WA) | ✓ | Family, friend, and neighbor caregivers | Half-hour weekly groups throughout the year, along with a range of other services for interested caregivers and parents | **Caregiver:**<br>• Improved knowledge of how children learn through play<br>• Improved knowledge of caregivers' role in supporting school readiness<br>• Improved support of children's language and literacy development<br>• Improved opportunities for social interaction<br>**Parent:**<br>• Improved knowledge of how children learn through play<br>• Improved knowledge of caregivers' role in supporting school readiness<br>• Improved support of children's language and literacy development<br>• Improved opportunities for social interaction<br>**Child:**<br>• Improved language and literacy<br>• Improved social-emotional development |
| Madison Metropolitan School District Play and Learn (WI) | ✓ | Family, friend, and neighbor caregivers | Weekly three-hour groups; Early Learning Kits provide activity sheets and materials for caregivers to use with children throughout the month | **Caregiver:**<br>• Improved knowledge of how children learn through play<br>• Improved knowledge of caregivers' role in supporting school readiness<br>• Improved support of children's language and literacy development<br>• Improved opportunities for social interaction<br>**Parent:**<br>• Improved knowledge of how children learn through play<br>• Improved knowledge of caregivers' role in supporting school readiness<br>• Improved support of children's language and literacy development<br>• Improved opportunities for social interaction<br>**Child:**<br>• Improved language and literacy |

Table VII.1 *(continued)*

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| Play and Learn (TX) | ✓ | Family, friend, and neighbor caregivers | Two-and-a-half-hour sessions three times per week. Offers a resource van from which participants can borrow materials, and a quarterly newsletter with information about events and activities. | **Caregiver:**<br>• Improved knowledge of how children learn through play<br>• Improved knowledge of caregivers' role in supporting school readiness<br>• Improved support of child development<br>• Improved opportunities for social interaction<br>• Improved home environment<br>**Parent:**<br>• Improved knowledge of how children learn through play<br>• Improved knowledge of caregivers' role in supporting school readiness<br>• Improved support of child development<br>• Improved opportunities for social interaction<br>• Improved home environment<br>**Child:**<br>• Improved language and literacy<br>• Improved social and emotional development |
| Tutu and Me (HI) | ✓ | Family, friend, and neighbor caregivers | Twice weekly two-hour groups in August through June; includes a mini-lecture for tutu (the grandparent) with information about child development, health, or safety. Other components include an annual home visit, a backpack with children's books and other materials as well as a monthly activity sheets, and regular field trips for the adults and children to local sites. Child assessments are conducted twice a year; caregiver skills are also assessed. | **Caregiver:**<br>• Improved knowledge of how children learn through play<br>• Improved knowledge of caregivers' role in supporting school readiness<br>• Improved support of child development<br>• Improved opportunities for social interaction<br>• Improved home environment<br>**Parent:**<br>• Improved knowledge of how children learn through play<br>• Improved knowledge of caregivers' role in supporting school readiness<br>• Improved support of child development<br>• Improved opportunities for social interaction<br>• Improved home environment<br>**Child:**<br>• Improved language and literacy<br>• Improved development |

Table VII.1 *(continued)*

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| The Supportive, Teaching and Educational Programs for Understanding Preschoolers (STEP-UP) (LA) | ✓ | Family, friend, and neighbor caregivers | Provided three primary services in the pilot year: Play and Learn groups, group meetings with speakers, and Mobile Teacher Resource Vans. Information and licensing support also provided. | **Caregiver:**<br>• Improved understanding of how to support child development<br>• Improved environment<br>• Improved training and credentials |

Source: Porter et al., 2010b.

## Implementation of Play and Learn Initiatives

This section outlines typical and promising approaches to implementing Play and Learn initiatives, drawing on examples from existing initiatives as well as the results of evaluations, literature reviews, and academic papers that were identified during our scan of the available literature. Specifically, we discuss the target population, content, service dosage, strategies for sustainability, staffing requirements, and costs that should be considered in developing and instituting a Play and Learn initiative (Table VII.2).

**Table VII.2. Overview of Implementation Information for Play and Learn**

| Implementation Component | Summary |
|---|---|
| Target population | Family, friend, or neighbor caregivers and the children in their care |
| Content | Activity centers for children and child development education for caregivers |
| Dosage of services | Typically year-round, though session length and number of sessions per week varies and individual participation levels differ |
| Strategies for sustaining participation | Convenient location and timing; attractive physical layout and offerings for caregivers and children |
| Staffing requirements | Staff background in child development; staff numbers depend on the number of participants and number and length of regular group offerings |
| Cost categories | Direct services (staff compensation) and materials, but transportation of staff and materials may also be considered |

### Target Population

The Play and Learn initiatives that we identified in our scan all target family, friend, and neighbor caregivers, and mostly those who care for children under age 3 (Porter et al., 2010b). Play and Learn is a particularly appropriate strategy for this population because it provides opportunities for caregivers to interact, which can address the issue of isolation identified in the research (Porter et al., 2010a). Play and Learn groups can also allow children in family, friend, and neighbor care to socialize; research indicates that most family, friend, and neighbor caregivers care for only one or two children (Porter & Kearns, 2005).

### Content

Play and Learn initiatives aim to prepare young children for school by helping caregivers understand how children learn through play. Children use activity centers that are designed to provide opportunities for their cognitive, language, and physical development, and enhance their social-emotional development through interactions with their caregivers. Staff facilitate caregivers' learning about children's development by modeling activities, describing the domains that the activities are intended to support, and explaining how the activities in the center support development. Some initiatives also provide explanatory signs next to the activities. Circle time, if staff offer it, can focus on enhancing emergent literacy through reading books or singing, or can support physical development through music and movement.

Some Play and Learn initiatives base their activities on a formal curriculum, such as *The Creative Curriculum for Family Child Care* (Dodge & Colker, 2003) or materials from ZERO TO THREE. One initiative designed a formal curriculum organized around learning themes. Several initiatives do not

rely on curricula, depending instead on staff knowledge and experience in working with children. One of the challenges in designing the content of Play and Learn groups, which can serve mixed-age groups of children, is how to meet the needs of infants and toddlers as well as preschoolers.

Most available information on the Play and Learn strategy focuses on the activities offered to children rather than specifics on the content that is conveyed to caregivers. The content can vary depending on the facilitator's skills and the form in which additional information is provided (such as signs at the activity tables, tip sheets, or mini-lectures during circle time). The initiatives aim to enhance understanding of how children learn through play, so introducing new activities with some explanation may be sufficient. But, there may be missed opportunities if caregivers do not receive research-based information that can enable them to understand how to maximize the activities to promote children's development.

Information about how Play and Learn initiatives adapt their activities and materials to differences in participants' culture or literacy levels is also limited. One initiative integrates the language and the values of the population it is intended to serve throughout the activities, but whether other initiatives use a similar strategy is unclear. Regarding caregivers with low literacy levels, modeling by a trained facilitator and the opportunity to participate in the activities themselves may be appropriate adaptations, but we do not know whether written materials that are distributed are sensitive to this issue.

**Dosage of Services**

Most Play and Learn initiatives offer year-round services. However, our scan of the literature and the field revealed some variation in the number of groups offered per week (from one to three), and length of groups (ranging from half an hour to three hours). With one exception, the initiatives we identified did not require participants to enroll formally. The dosage for participants may vary regardless of how often the services are offered because some participants may attend more regularly than others. Without information about participation rates, it is difficult to determine the typical or optimal dosage.

**Strategies for Sustaining Participation**

Play and Learn initiatives use several strategies for sustaining participation. One is to offer the groups in convenient locations in caregivers' neighborhoods. Another is to offer the groups at convenient times for caregivers to attend with the children in their care. Opportunities for sharing information and interaction among the caregivers and children may also incentivize continued participation; distributing materials that caregivers and children can use in the child care setting may serve the same function.

Play and Learn groups may also attract family, friend, and neighbor caregivers because they provide early education opportunities for children in a preschool-like setting, which can complement the activities that are offered in the home. If the primary target population for these initiatives, however, is family, friend, and neighbor caregivers—especially grandparents—initiative designers should take the physical needs of caregivers into account. Some caregivers may not be comfortable sitting in child-sized chairs at low tables; others may have difficulty moving around to follow the children from one activity center to another.

## Staffing Requirements

The number of staff at the five initiatives varies by the number of Play and Learn groups they offer and the size of the groups. One or two staff members may be able to facilitate the activities in a group of 20 to 25 adult-child pairs, but more may be necessary for larger groups. Some initiatives have as few as five part-time staff members for individual weekly half-hour sessions; one has 64 full-time staff for 11 "teaching teams" that each offer Play and Learn groups for as many as 50 adult-child pairs twice a week. The number of staff also increases if initiatives offer additional services, such as workshops, although the same staff may facilitate the Play and Learn groups and lead these training sessions. Staffing may also include a program coordinator who oversees the program and supervises the facilitators.

There is little evidence on specific educational qualifications that may be effective for Play and Learn service delivery. Many initiatives require facilitators to have a bachelor's degree in early childhood education or a related field. Content on early childhood development may be essential for staff because the activities are intended to enhance caregiver knowledge and skills in promoting healthy child development. Expertise in working with children may also be an important factor in staff selection because Play and Learn programs model adult-child interactions as a primary strategy. Staff may also need to understand how to develop supportive relationships with caregivers, because interactions with adults are a key element of the approach.

## Cost Categories

Among Play and Learn initiatives, staff compensation for providing direct services and expenses for materials are likely to comprise the largest cost categories (Table VII.3). Staff costs will depend on the number and qualifications of staff that are needed, as well as whether they work part-time or full-time. Materials can represent a significant share of the budget, especially if the initiative regularly changes the materials that are offered in the activity centers. And, if the initiative functions as a mobile preschool by setting up the program at different sites then transporting the materials and equipment may represent a large cost. Supervisory and overhead costs may not be significant if the initiative is small, but these costs will vary depending on where the initiative is housed and how it is managed.

**Table VII.3. Cost Categories for Play and Learn**

| Category | Description |
|---|---|
| Direct services | Staff time spent facilitating groups and setting up materials and equipment |
| Supervision and training | Compensation and materials related to the initial training of program staff; ongoing management and staff development |
| Materials | Expenses for curricula and materials and equipment for the groups |
| Outreach and recruitment | Recruiting materials and time spent publicizing the initiative, explaining services to potential participants, and establishing referral relationships with other organizations |
| Fidelity monitoring | Time spent by a manager or supervisor reviewing sites and by facilitators to ensure that delivery of services (such as intensity and content) meets the standard established by the model |
| Administration and overhead | Costs of space rental, utilities, insurance, and any other expenses related to setting up one (or multiple) group(s) |

## Expected Outcomes

Play and Learn initiatives aim to help caregivers understand how children learn through play. Because the groups are offered year-round, caregivers can gain additional knowledge every time they attend a session. However, unless an initiative has a home-based technical assistance component or additional caregiver support, caregivers may not know how to translate what they learn into their everyday activities with children. Expectations for outcomes must be tempered with an understanding of the intensity of the Play and Learn initiative, including its frequency and typical participation patterns among caregivers. Lasting outcomes would not be expected from attending one or two sessions. In this section, we focus on the outcomes that might be expected from Play and Learn initiatives, primarily focused on caregiver outcomes (Table VII.4).

### Caregiver Outcomes

The primary outcomes expected of Play and Learn initiatives are in caregiver knowledge about supporting children's development and in decreased caregiver isolation. The explicit goal of most existing Play and Learn groups is to provide opportunities for caregivers to engage in activities with children, learn about and interact with materials that support children's development, and observe and try using the materials with children. Facilitators may model activities for the caregivers and then may provide feedback based on observing caregivers' interactions with the children, or may reinforce the goals of a given session with a group discussion or written materials caregivers can take home.

A group setting may decrease caregiver isolation and provide social support. As in peer support initiatives, caregivers may stay in contact with one another between sessions, which may reduce their stress and depression. That is, the group dynamic may help the caregivers realize that their concerns are shared by others, which may in turn affect their sense of efficacy. For example, they may realize that the approaches they have tried when managing difficult child behaviors are the suggested approaches, thus validating their ideas and increasing feelings of competence and mastery.

The quality of the caregiving environment and caregiver practices are more distal outcomes for Play and Learn groups, but if intensity and participation are sustained, improvements in these areas may be possible. If caregivers are motivated to rearrange the space they use for caregiving after learning about and seeing areas tailored to supporting children's exploration of the natural world (for example, science activities), the quality of the environment may increase. As described earlier, it is possible that these initiatives may affect caregiver practices, but these are more difficult outcomes to achieve without facilitators providing ongoing reinforcement, encouragement, and feedback.

### Child and Parent Outcomes

Child and parent outcomes may be more difficult to achieve and are not shown in Table VII.4 for this reason. Some evidence indicates that Play and Learn approaches affect children's cognitive and language development, but the data are scant. The informal nature of these initiatives, combined with the low dosage, suggests that effects on children are less likely than caregiver effects, unless other strategies supplement the group activities.

Most Play and Learn initiatives are not intended to address parent outcomes, but outcomes in this area might be possible if they were an objective. For example, parents may increase their knowledge of and support for their children's development if the initiative aims to encourage caregivers to share their new knowledge with parents and provides them with guidance in how to do

so. In addition, parents who notice improvements in the environment may be more satisfied with the care environment and experience less parenting stress.

**Table VII.4. Potential Outcomes of Play and Learn**

| Domain | Description of Outcomes |
|---|---|
| | **Caregiver Outcomes** |
| Caregiver knowledge | • Appropriate expectations and understanding of supports for cognitive, language, and literacy development<br>• Appropriate expectations and strategies to support social-emotional development of children (such as positive interactions with adults and peers)<br>• Strategies to reduce illness and injury |
| Physical environment | • Enhancement of the print environment (children's books and magazines)<br>• Variety of age-appropriate materials (such as puzzles and manipulatives)<br>• Provision of a sufficient number of different types of materials to avoid conflict among children<br>• Changes to schedule to promote positive behavior (reduced waiting) |
| Caregiver practices | • Use of health and safety practices (hygienic practices supported; potential physical dangers addressed; safe and accessible eating, sleeping, and toileting environment)<br>• Use of new or existing materials, equipment, or curricula with children |
| Professionalism | None expected |
| Caregiver well-being | • Increased satisfaction with role as caregiver<br>• Increased access to community resources and government supports<br>• Increased social support<br>• Reduced isolation |

## Evidence of Effectiveness

The evidence on the effectiveness of Play and Learn approaches is limited, and there are no rigorous evaluations of Play and Learn initiatives. We identified two studies in the research literature (Porter et al., 2010a) and one through our scan of the field (Porter et al., 2010b). All three studies used a pre-post design to assess changes in either caregiver or child outcomes among Play and Learn participants (Table VII.5). Although they point to the potential of the Play and Learn groups as a strategy for improving quality, the designs are not rigorous enough to provide evidence about effectiveness.

### Findings on Caregiver Outcomes

The findings from the survey of Play and Learn groups in Seattle, Washington indicate that participants reported increased knowledge of how children learn through play and the importance of their roles in preparing children for school. It found that 86 percent of respondents reported that they had gained "a lot" more knowledge in one of three areas: understanding their roles in preparing their children for school; how children learn through play; and how children develop (Organizational Research Services, 2008). Again, although these findings are promising, they should be interpreted with caution because samples are not randomly selected, there are no comparison groups, and knowledge increases are self-reported.

**Table VII.5. Design Elements of Studies of Play and Learn**

| Focus of Study | Study Design | Methods | Sample Size/ Unit of Analysis | Outcome Measures | Limitations |
|---|---|---|---|---|---|
| Play and Learn groups in Seattle, WA, including For The Love of Kids | Pre-post on group participants | Survey of participants in Play and Learn groups | 856 participants | Self-reported knowledge, skills, and practices related to child development and child care | Low response rate (55 percent response rate); no comparison group |
| Step-Up | Pre-post on child participants; post only on adult participants | Observations of care settings of Play and Learn group participants | 51 matched child-adult pairs at 3 sites | Child care quality using the CCAT-R | No comparison groups; no pre-test for caregivers |
| Tutu and Me | Pre-post; randomly selected participants | Observations of care settings of Play and Learn participants; child assessments; staff assessments of caregivers | 58 matched child-adult pairs at 16 sites | Child care quality using the CCAT-R; cognitive and language development of children using the PPVT-III and WSS; program developed Caregivers Skills Assessment Checklist | Small sample size; no comparison group |

Sources: Organizational Research Services, 2008; Step Up, unpublished; Porter and Vuong, 2008.

CCAT-R = Child Care Assessment Tool for Relatives (Porter, Rice & Rivera, 2006); PPVT-III = Peabody Picture Vocabulary Test-III (Dunn and Dunn, 1997); WSS = Work Sampling System (Meisels, Liaw, Dorman, & Nelson, 1995)

There was also some indication of changes in behavior, although findings should be interpreted with similar caution. In the survey, 88 percent of the participants reported changing their behavior in at least one area. Helping children "get along" with other children was the most frequently cited, followed by providing opportunities for children to try things independently, and engaging in more talk and activities with children (Organizational Research Services, 2008). Nearly 60 percent of the participants also indicated that they experienced decreased isolation because they talked to other adults more about caregiving (Organizational Research Services, 2008). The study found that higher proportions of participants who did not speak English reported changes in knowledge and behaviors than those who were English speakers.

The results of the pre-post test observations of caregiver participants in both the Step Up and the Tutu and Me Play and Learn groups found increases in quality. In Tutu and Me, there were improvements in the quality of interactions between the caregivers and children under age five on three out of the four CCAT-R factors: bidirectional communication, unidirectional communication, and engagement (Porter & Vuong, 2008). (There was a slight increase in the nurturing scores for children under age three.) The changes in the language and engagement factors were statistically significant for parents who cared for children under age three, but there were no statistically significant findings for grandparents who cared for children in this age group, although the trends were positive. The analysis also found significant correlations between quality and specific caregiver characteristics, such as training and child care work experience. The Step Up study found significant

improvements in the factor scores for nurturing, bidirectional communication, and unidirectional communication for children under three and for engagement, bidirectional communication, and unidirectional communication for children three and over (Step-Up, unpublished).

One initiative developed a Caregivers Skills Assessment Checklist to assess changes in caregiver skills (Porter & Vuong, 2008). Caregivers were rated by staff on the frequency of 14 desired behaviors, such as "caregiver encourages a sense of wonder, discovery, and experimentation" when working the child in his or her care. A post-test revealed that 80 percent of the caregivers were consistently exhibiting effective behaviors, but no pre-test data were collected. These caregivers may have already been highly motivated and exhibiting effective behaviors before participating in the Play and Learn group.

### Findings on Child Outcomes

The same initiative also assessed cognitive and language outcomes for children with the Peabody Picture Vocabulary Test-III (PPVT-III) and the Work Sampling System (WSS). Pre-post tests on all children age 3 and older showed significant gains on the PPVT-III (Porter & Vuong, 2008). There also were improvements in the WSS for all 3- and 4-year-old children. Between September and May, there were increases in the percentage of those 3-year-old and 4-year-old children who showed proficiency in four outcome domains: personal/social, language and literacy, physical development, and mathematical thinking (Porter & Vuong, 2008).

### Findings on Fidelity

Of the five initiatives, only one has fidelity standards in the form of a comprehensive community site checklist. It includes items for the environment, activities, and personnel. Multiple staff members at each community site use the checklist twice per year. Although the initiative has fidelity standards, the evaluation did not include a fidelity assessment.

Several factors may contribute to the lack of fidelity standards in Play and Learn initiatives. One may be the newness of this approach for supporting home-based caregivers. Another may be the relatively informal nature of this approach. The third may be the kinds of evaluations that have been conducted, which mainly seek to gain an understanding of effects through participant self-reports.

## Research Gaps and Needs

The limited research evidence on the effectiveness of the Play and Learn approach suggests that the strategy may have promise for improving the quality of care as well as improving caregiver knowledge. There is minimal evidence, however, about its potential impact on child or parent outcomes. Specific research needs on the Play and Learn strategy include the following:

- **Document Implementation Details of Play and Learn Initiatives.** Play and Learn initiatives are little understood at this time due to their relative newness and their informality. Implementation studies are needed to understand the content and delivery of Play and Learn initiatives; facilitators' characteristics, training, and access to continued support; whether and how Play and Learn is used in combination with other strategies such as home visiting or peer support; and how, how often, and for how long children and their caregivers become involved with Play and Learn.
- **Develop Fidelity Standards and Fidelity Measurement Tools.** Practices in these initiatives can become formalized without losing their intended personal qualities.

Implementation studies can provide useful information about key aspects the developers intend for such models, how initiatives are actually put into practice, and how they can be structured for broader replication. Building on this information, additional research can support the development of fidelity standards and measures to assess the quality of the instruction and the interactions between the trainer and adult-child pairs, to set intended dosage levels, and to specify appropriate education and experience criteria for trainers.

- **Explore Adaptations of the Model for Broader Use by Home-Based Caregivers and for Serving a Range of Children in Ages and Backgrounds.** The current Play and Learn model primarily targets family, friend, and neighbor caregivers because of the interactive nature of the training for one-on-one adult and child pairs. To serve the needs of home-based caregivers, who care for multiple children, it could be useful to explore how the training could be delivered to allow the caregiver to use it with groups of children. Possibilities include having the caregiver bring different children to different sessions or offering an on-site interactive training in the home-based care setting.
- **Test the Effectiveness of Play and Learn Initiatives at Improving Caregiver and Child Outcomes.** Rigorous evaluations can assess whether initiatives improve specific caregiver outcomes, such as support for children's social-emotional or language development, and whether Play and Learn models can reach their intended goals of improving school readiness for children. These evaluations can also explore the dimensions and levels of fidelity the initiatives will need to produce these outcomes.

# VIII. PEER SUPPORT

Peer support provides opportunities for regular meetings among home-based caregivers to discuss shared experiences and to exchange ideas, information, and strategies (Mead & MacNeil, 2006). Participation is voluntary on the assumption that individuals will perceive involvement as beneficial to them. For example, they may appreciate the opportunity to empathize with and validate peers and exchange practical advice, knowledge, and skills that may not be available from professionals (Mead & MacNeil, 2006). Sometimes materials and refreshments are provided. Our review of the literature on home-based child care did not identify a clear definition of peer support (Porter et al., 2010a). Nor did we find a definition of peer support in the limited literature on family support we reviewed. Instead, to define peer support for this population, we extrapolated elements from literature on peer support in health and mental health. Peer support is often a component of family support and parenting education programs (Layzer, Goodson, Bernstein, & Price, 2001). It is also used as a primary or supplemental strategy in initiatives for home-based caregivers (Porter et al., 2010b).

Because the group meetings are intended to enable participants to share their experiences and learn from each other, they are intended to be nonhierarchical, informal, and flexible (Mead & MacNeil, 2006). In home-based child care initiatives, peer support generally differs from the pure model of meetings that are organized and facilitated by participants and instead typically consists of meetings that are organized and facilitated by the organization sponsoring the initiative. The key difference between peer support and training through workshops (Chapter VI), is that a facilitator, rather than a trainer, leads peer support group meetings. The facilitator is expected to guide the discussion among the participants and manage the group according to the rules the group itself has established (such as maintaining participants' privacy). Another difference is that discussion topics are selected by the group rather than imposed by the facilitator (Mead & MacNeil, 2006). Group meetings can be offered weekly, monthly, or quarterly, and they can vary in length, depending on participants' needs.

This chapter first provides an overview of existing initiatives that offer peer support. The chapter then follows the flow of a logic model. The discussion of implementation begins with the target population for this strategy (the beginning of a logic model) and then moves to inputs, resources, and services (the middle of a logic model). Next, the discussion turns to expected outcomes (the end of a logic model). The chapter concludes with a summary of evidence of effectiveness for this strategy and an overview of research gaps and needs.

## Peer Support in Home-Based Care Initiatives

We identified eight initiatives in our scan of the field that used peer support as a primary service delivery strategy (Table VIII.1). Seven of the eight initiatives had a stated goal of improving quality through improving caregivers' knowledge of some aspect of child development; one aimed to improve parents' knowledge of child development as well. Peer support was identified as a supplemental strategy in 19 other initiatives in our scan, most frequently as a secondary strategy in initiatives that used training through workshops. Two consultation initiatives, two Play and Learn initiatives, and one initiative that used materials and mailings to support home-based caregivers included peer support as well.

**Table VIII.1. Examples of Initiatives Providing Peer Support**

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| Arizona Kith and Kin (AZ) | ✓ | Family, friend, and neighbor caregivers | Provides training through 12 two-hour weekly support group sessions on issues related to child development. Also provides health and safety materials at an annual conference and car seats on car seat safety day. | **Caregiver:**<br>• Improved knowledge of child development and health and safety in the home<br>• Improved health and safety of the home environment<br>• Reduced isolation and improved social supports<br>**Child:**<br>• Reduced isolation and improved social supports |
| Bridgeport Kith and Kin Project (CT) | ✓ | Family, friend, and neighbor caregivers | Provides training through weekly two-hour support groups for 12 to 14 weeks. | **Caregiver:**<br>• Improved knowledge of child development<br>• Enhanced practices<br>• Improved caregiver-parent relationship |
| Conversations Pilot (NM) | ✓ | Family, friend, and neighbor caregivers | An 18-hour workshop training offered in nine weekly, two-hour sessions. | **Caregiver:**<br>• Improved knowledge of child development and child care<br>• Reduced sense of isolation |
| Informal Caregiver Pilot (KS) | ✓ | Family, friend and neighbor caregivers | Part-time facilitators lead monthly support group meetings on health, safety, nutrition, child development, and language and literacy. | **Caregiver:**<br>• Improved knowledge of child development<br>• Reduced isolation<br>• Improved social supports |
| Minnesota FFN Grant Program – Neighborhood House (MN) | ✓ | Family, friend, and neighbor caregivers | Provides support, information, and technical assistance. Community partners provide culturally relevant services, interactive activities, resource fairs, and support. Partners' services include a networking system for caregivers, access to community services, on-site programming, support group meetings at low-income housing sites, and child abuse prevention training sessions. | **Caregiver:** No information<br>**Child:** No information |

Table VIII.1 *(continued)*

| Initiative and Location | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|
| Minnesota FFN Outreach Program (MN) | ✓ Family, friend, and neighbor caregivers | Collaborative effort to provide training materials and children's activities based on the Minnesota Early Childhood Indicators of Progress. | **Caregiver:**<br>• Improved child development and child care knowledge and skills<br>• Improved knowledge of early education resources<br>**Parent:**<br>• Improved knowledge about child development and improved skills to support it<br>**Child:**<br>• Improved school readiness |
| Starting Points Family Child Care Networks (NH) | ✓ Family child care providers | Provider-led networks offer monthly network support group meetings as well as training through Northern Lights, the state's career development system. Also offers books and other materials for providers. | **Caregiver:**<br>• Improved knowledge of child development and providing child care<br>• Reduced isolation and improved social supports<br>• Improved home environments<br>• Improved professional status and education for training participants |
| The Early Childhood Partnership of Southern Pima County (AZ) | ✓ Family, friend and neighbor caregivers<br>✓ Family child care providers | Monthly support group meetings, a mentoring program, and technical assistance. | **Caregiver:**<br>• Improved knowledge of child care and child development<br>• Reduced isolation through improved social supports<br>• Improved practice for technical assistance recipients |

Sources: Porter et al., 2010a; Porter et al., 2010b.

FFN = family, friend, and neighbor

## Implementation of Peer Support Initiatives

In this section, we describe options for designing and implementing peer support initiatives for home-based child care. Specifically, we discuss the target population, content, dosage of services, strategies for sustaining participation, staffing requirements, and the costs of peer support initiatives, as summarized in Table VIII.2.

**Table VIII.2. Overview of Implementation Information for Peer Support**

| Implementation Component | Summary |
|---|---|
| Target population | Family, friend, and neighbor caregivers; family child care providers |
| Content | Determined by caregivers; guided and supplemented by facilitators |
| Dosage of services | No conclusive information |
| Strategies for sustaining participation | Attractive discussion topics and times, provision of supportive services, incentives |
| Staffing requirements | Typically requires full-time manager and part-time facilitators |
| Cost categories | Direct service costs; possibly supervision and materials |

### Target Population

Among the eight initiatives that used peer support as a primary strategy, six identified family, friend, and neighbor caregivers as the target population, one identified family child care providers, and one was available to any type of home-based caregiver (Porter et al., 2010b). Both types of caregivers identify isolation as a common problem and peer support provides opportunities for social support and interaction (Porter et al, 2010a). Peer support may also be appropriate for family, friend, and neighbor caregivers, in particular, because they are interested in "get-togethers" rather than training (Porter et al., 2010a). Because peer support is based on the assumption that individuals with shared interests and concerns can learn from each other (Mead & MacNeil, 2006), this strategy is particularly appropriate for responding to caregivers' needs.

One important factor to consider in identifying the most appropriate target population is the goal of the initiative. If it is intended to enhance caregivers' knowledge and skills, peer support may be a useful strategy for home-based caregivers who can benefit from both shared experiences and the expertise that a staff member may provide. As discussed in Chapter I, family, friend, and neighbor caregivers have different motivations for providing child care than do regulated family child care providers, suggesting that initiative developers may want to consider targeting only one type of caregiver for specific peer support groups.

### Content

Peer support initiative developers face a particular challenge in regard to content. Consistent with the definition of peer support, participants should determine the content of the groups for home-based caregivers, but initiative developers may want to ensure that specific topics are covered in their effort to improve child care quality. Encouragement of specific topics may vary by the population attending each group.

Family, friend, and neighbor caregivers want to learn about a variety of topics—such as health, safety, nutrition, child development, activities to do with children, setting limits, and working with parents—that relate to child care quality improvement (Porter et al., 2010a). Therefore, initiative developers may be able to assume that the group will select some or all of these topics for discussion. If initiative developers seek to ensure that specific topics are covered, the facilitator—whether a member of the group or a staff member—can elicit suggestions for topics from the group and propose to first discuss those that correspond to the priorities of the initiative. To enhance the discussion and to ensure that essential research-based information is conveyed to participants, the initiative can have prepared handouts or resource lists on specific topics.

Family child care providers may be most interested in topics such as working with parents and dealing with stress (Porter et al., 2010a); both of these areas might emerge as "natural" topics in their informal gatherings. Again, initiative developers can identify materials or provide additional information to help expand the discussion, or staff facilitators may suggest specific topics. For regulated family child care providers who want more advanced information about specific topics on child development or starting and managing a child care business, training through workshops or home visiting might be more appropriate strategies than peer support. Or, peer support might be a useful supplemental strategy to allow both new and experienced family child care providers to share the successes and challenges of operating a family child care business.

Regardless of the type of caregiver to whom peer support is targeted, initiative developers should consider participants' culture and home language. The content should be provided in the caregivers' language(s), and should be sensitive to strongly held cultural values or childrearing practices that underlie varied views on developmentally appropriate practice. In addition, developers should be cognizant of cultural values and beliefs about individual privacy because one of the premises of peer support is open sharing of experiences. Some cultural groups may not feel comfortable discussing what are regarded as personal issues in a group setting; in this case, strategies such as home visiting or training through workshops might be more appropriate.

We found little information about the specific content of peer support initiatives from our literature review. The scan of the field, however, indicated that peer support initiatives tended to prescribe topics beforehand, although there was no information about the use of specific curricula. Whereas the content areas—health, safety, child development, behavior management—aligned with caregivers' interests, little attention was given to working with parents, a common concern for home-based caregivers (Porter et al., 2010a). The literature review and the scan of the field found little information about the format (peer vs. facilitator initiated) or actual content of the discussions. Nor was there much information about the depth of discussion about specific content areas—for example, how the facilitator addresses different cultural views about child-rearing beliefs or practices, or incorporates theory and research into the discussion.

**Dosage of Services**

Of the eight peer support initiatives, three offered weekly and three offered monthly support group meetings. No information on dosage was available for two of the initiatives. The weekly groups generally met for two hours during a 9 to 12 week period; the length and duration of the monthly groups was unspecified (Porter et. al., 2010b).

The information about dosage of peer support in the literature about home-based child care is sparse, perhaps due to the infrequent use of this strategy in efforts to improve child care quality and the lack of evaluation of initiatives that employ it. Outside the child care area, peer support has been

used in family support and parenting education initiatives that aim to improve outcomes that are similar to those targeted by child care programs, such as parents' attitudes, knowledge, and behavior (Porter et al., 2010a). Data about the dosage in these efforts may be helpful for developers of initiatives for home-based child care providers. A meta-analysis examining family support programs for parents found an average dosage of 60 hours of parenting education, which included peer support among other types of activities (Layzer et al., 2001). However, there was wide variation in the number of hours offered, with about one third of the programs providing less than 20 hours and another third providing between 20 and 40 hours. Programs that offered peer support produced greater effects for parents than those that did not, which suggests that peer support may be a promising strategy for home-based child care initiatives, although the study did not examine dosage thresholds.

The lack of evidence about dosage presents a challenge. Practical considerations about caregiver interests and needs can provide some guidance. Developers who seek to use peer support as a strategy can turn to caregivers to learn how often they would like to meet. Some family, friend, and neighbor caregivers may like to meet weekly or biweekly, whereas others may prefer to meet monthly (Porter, 1998). Whatever the dosage, developers should consider a variety of meeting times: evenings may be appealing for some caregivers, because they are not providing child care, whereas mornings may be appropriate for others who care for school-age children.

**Strategies for Sustaining Participation**

Wide gaps in the literature about the use of peer support initiatives for home-based child care result in limited details about effective strategies for sustaining participation among caregivers. Caregivers may respond to different kinds of incentives for initial participation including information, social supports, or financial incentives. Such strategies may also encourage ongoing participation.

While an interest in social support may initially attract participants, initiative developers should consider aspects of leadership and logistics to sustain that initial interest. For example, discussion topics should correspond to caregivers' interests so they will want to return to the group in the future. Another factor is the management of the group. Social networking (a function of peer support) research suggests that best practices include fostering mutual trust and respect within the group, addressing communication barriers such as language and literacy, and using reminder phone calls, newsletters, and special events to enhance connections among members (Mendoza, Katz, Robertson, & Rothenberg, 2003). Finally, initiative developers may be able to enhance participant retention if they provide other supports such as child care and transportation.

**Staffing Requirements**

Based on our scan of the field, a typical staffing configuration is a full-time program coordinator who manages the program and supervises one or two part-time peer support group facilitators (Porter et al., 2010b). The program coordinator may meet with staff regularly and observe the support group meetings. The part-time staff is often responsible for recruiting the caregivers, facilitating the support groups, preparing additional materials (such as handouts), and arranging any logistics that the meetings require (such as refreshments, transportation, or child care).

The typical number of caregivers in a support group ranges from 10 to 20 (Porter et al., 2010b). Research gives no indication of an optimal size, but common sense suggests that small group sizes like these would lead to greater participation in the discussion. The group size may also be limited if

child care is provided, because the sponsoring agency may only be able to accommodate a specific number of children per caregiver.

Little evidence exists on specific educational qualifications for staff that may be effective in implementing these initiatives. Information on the coordinators' qualifications were only available for one initiative we identified, which required a master's degree in early childhood education for that position. Peer support initiatives that are sponsored by child care resource and referral agencies are likely to require staff to have a bachelor's degree in early childhood or a related field (Smith, Sarkar, Perry-Manning, & Schmalzried, 2007). A meta-analysis of family support and parenting education programs found that most programs rely on professional staff—those with formal education and training—to serve parents (Layzer et al., 2001). The findings indicated that professional staff members were more effective in delivering peer support to parents than paraprofessional staff who lacked a degree or training before they were hired (Layzer et al., 2001). Nonetheless, the use of professional staff did not predict better cognitive outcomes for children (Layzer et al., 2001).

To offer peer support groups, staff will likely need special training in group facilitation, which differs significantly from workshop training. Facilitation requires balancing peer information sharing with providing research-based information, guiding the discussion to encourage maximum participation without domination from single individuals, and keeping the group on the topic (Rice, 2001). In addition, some research on the kinds of social networking opportunities that peer support is intended to provide suggests that relational trust between the staff and the participants is an important element. To create trusting relationships, staff may need special training to understand the importance of respect and regard for the caregivers as well as perceptions of their competence (Mendoza et al., 2003). There is some evidence of the effectiveness of relational training in one study of family child care networks, which found higher quality among providers in networks with staff who had received this training than those who belonged to networks where staff had not (Bromer, van Haitsma, Daley, & Modigliani, 2009). However, the study could not conclude whether providers who offered higher quality care were more likely to participate in staffed networks, whether participation in staffed networks improved quality, or whether the staff training produced the effects.

## Cost Categories

The expected costs of peer support initiatives fall into six main categories: (1) direct services, (2) supervision, (3) materials, (4) outreach and recruitment, (5) fidelity monitoring, and (6) administration and overhead (Table VIII.3). Among peer support initiatives, the largest cost categories will likely be those for staff compensation for providing direct services and expenses for supervision and materials. Several factors will affect direct service costs, including the qualifications of the staff, the number of staff required by the initiative, and whether they are full- or part-time employees. Depending on the nature and extent of the supervision and the type and amount of materials provided, these costs may represent a significant share of the budget as well. Other direct service costs can include room rental (if the peer support groups are not offered at the organization's site), refreshments, child care, and transportation.

**Table VIII.3. Cost Categories for Peer Support**

| Category | Description |
|---|---|
| Direct services | Time spent preparing for the group meetings, including copying handouts, contacting participants, and organizing materials for hands-on activities, if offered; time spent facilitating the groups; possible additional costs for off-site room rental, refreshments, and child care and transportation provided to group participants |
| Supervision and training | Time spent by a manager or supervisor providing feedback to support group facilitators; compensation and materials for the initial training of program staff and ongoing staff development |
| Materials | Expenses for materials for support groups or stipends for reimbursement for caregivers' purchase of materials to enhance the caregiving environment |
| Outreach and recruitment | Recruiting materials and time spent publicizing the initiative, explaining services to potential participants, and establishing referral relationships with other organizations |
| Fidelity monitoring | Managerial or supervisory time for reviewing workshop activities and trainers to ensure that service delivery (such as intensity and content) meets the standard established by the model |
| Administration and overhead | Costs of space, utilities, insurance, staff travel to off-site locations, staff travel to professional conferences for in-service training, and such administrative functions as accounting and payroll |

## Expected Outcomes

This section focuses on the outcomes that could be expected from peer support approaches (Table VIII.4). In designing logic models for peer support initiatives, developers should be realistic about their potential to achieve specific outcomes. Expectations should take into account the recommended dosage, the consistency with which caregivers attend the support meetings, and what can reasonably be achieved. A primary focus of peer support is reducing caregiver isolation by helping caregivers to understand that their problems are shared by others, and through this pathway potentially improving their psychological well-being. In addition, members of the peer support group may stay in contact between group meetings. The studies described below in the evidence of effectiveness section suggest that peer support for caregivers may affect caregiver knowledge and practice, and through this pathway affect the quality of the environment for children. Some studies of parent support programs indicate that this approach may enhance child outcomes, but there is no evidence of this result from the few home-based care initiatives that offered peer support as a primary strategy. Peer support may be more effective in improving quality and enhancing children's outcomes if paired with another, high-intensity initiative such as coaching and consultation or home visiting.

### Caregiver Outcomes

Providing the setting for caregivers to share experiences and develop interpersonal bonds is the primary objective of peer support initiatives, so increased opportunities for social support is an appropriate long-term outcome to expect from these initiatives. By learning that other caregivers share their concerns and issues, caregivers may feel less isolated, gain confidence in trying new activities with children, or be clearer with parents about the expectations for child care arrangements. These experiences may be the pathway to improved caregiver psychological well-being.

Improved satisfaction with caregiving may be an additional outcome from peer support initiatives because participants support each other in their roles as caregivers. Increased satisfaction may also contribute to improved psychological health, which in turn may influence the quality of care that caregivers provide to children. Improved relationships with parents can be another outcome from these approaches, especially if the discussion addresses this topic and caregivers learn how to negotiate conflicts or differences with parents.

Another possible goal is improved caregiver knowledge of child development and of providing child care as caregivers share information and experiences. A related goal might be increased knowledge of community resources. Without a staff facilitator who has knowledge grounded in research, however, peer support approaches may be less successful in these areas because participants may share misinformation with peers.

Changes in the home environment might also be expected from peer support initiatives, especially if the initiatives provide materials or if caregivers follow up on peer or facilitator suggestions for purchases. Caregivers often name health and safety as areas of interest (Porter, 1998; Todd, Robinson, & McGraw, 2005.); peers can help caregivers learn how to promote health and safety, with the earlier caveat about the need for valid information.

Change in practice is another, more distal outcome that peer support initiatives may promote: some research on family support suggests that these approaches can have an effect on behavior (Layzer et al., 2001; U.S. Department of Education, Planning and Evaluation Service, 1998). However, additional supports such as home visits may be necessary to achieve this kind of outcome because peer support approaches do not provide an opportunity for caregivers to apply their new knowledge and to obtain feedback as they try new strategies with children.

**Child and Parent Outcomes**

Outcomes for children are more distal to peer support approaches than those for caregivers because there is little emphasis on direct changes to practice. These approaches may have an effect on children's development in the areas of cognition, language, and literacy; social-emotional development; and physical health, but these effects will likely be related to the intensity of the discussions about how to support such changes. Peer support approaches intended to include a wide array of topics or those that have limited dosage, for example, may not be effective. Although a single focus does not appear to be consistent with the peer support approach, peer-directed groups might be organized around one aspect of child development, or may focus on providing care for children with disabilities.

Parental outcomes are likely to be distal to peer support approaches. These approaches may have an effect on parent-caregiver relationships if this topic is discussed and caregivers put their new skills into practice. Peer support approaches may contribute to improved parent-caregiver communication if this is a focus of the discussion. Improvements in these aspects of care may have an effect on parents' satisfaction because caregivers may be more responsive to their needs (Bromer et al., in press).

**Table VIII.4. Potential Outcomes of Peer Support**

| Domain | Description of Outcomes |
|---|---|
| **Caregiver Outcomes** | |
| Caregiver knowledge | • Appropriate expectations and understanding of supports for children's cognitive, language, and literacy development<br>• Appropriate expectations and strategies to support social-emotional development of children (such as positive interactions with adults and peers)<br>• Strategies to reduce illness and injury<br>• Strategies to communicate with parents |
| Physical environment | • Changes to schedule to promote positive behavior (reduced waiting)<br>• Sufficient supply of materials and equipment to avoid conflict among children<br>• Variety of age-appropriate materials (such as puzzles and manipulatives)<br>• Enhancement of the print environment (children's books and magazines) |
| Caregiver practices | • Use of health and safety practices (hygienic practices supported; potential physical dangers addressed; safe and accessible eating, sleeping, and toileting environment)<br>• Use of new or existing materials, equipment, or curricula with children |
| Professionalism | • Improved relationships with parents |
| Caregiver well-being | • Increased social support<br>• Reduced stress, depression, and isolation<br>• Increased self-efficacy |

## Evidence of Effectiveness

Our review of the literature on home-based child care did not reveal any studies on the effectiveness of peer support as a strategy for improving child care quality, but we did find a meta-analysis of evaluations of family support programs that provided some insight into the impact of this approach on parents (Layzer et al., 2001). We also identified two evaluations of other efforts that included peer support for parents that may be relevant for home-based child care, but the results may have been affected by selection bias—that is, families who chose to participate in these initiatives may have been more motivated to improve. Findings from these three studies may relate to home-based child care, especially family, friend, and neighbor care, because these child care arrangements are often provided within the family and they may be more like parents than are regulated family child care providers (Porter & Rice, 2000). The design elements of each of the three studies are summarized in Table VIII.5.

### Findings on Caregiver Outcomes

None of the studies that included peer support examined findings on caregiver outcomes because they were programs targeted to parents.

**Table VIII.5. Design Elements of Studies of Peer Support**

| Focus of Study | Study Design | Methods | Sample Size/ Unit of Analysis | Outcome Measures | Limitations |
|---|---|---|---|---|---|
| Family Support Programs That Include Peer Support | Examination of findings from experimental or quasi-experimental studies | Meta-analysis | 260 studies of 665 family support programs | Parenting attitudes and knowledge; parenting behavior; family functioning | Does not study a specific initiative; focuses on parents rather than caregivers |
| Minnesota Early Learning Design (MELD) Program | Pre-post | Survey of parent participants | Seven sites over two years | Self-reported awareness of child development; changes in attitudes toward the care of children | Focuses on parents rather than caregivers; no comparison group |
| Even Start | Pre-post | Survey and observation of program participants | 57 families | Quality of cognitive stimulation and emotional support using HOME | Focuses on parents rather than caregivers; no comparison group |

**Sources:** Layzer et al. (2001); Groark, Mehaffie, McCall, Greenberg, & Universities Children's Policy Collaborative (2002); U.S. Department of Education, Planning and Evaluation Service (1998)

HOME = Home Observation for the Measurement of the Environment Screening Questionnaire (Caldwell & Bradley, 1984)

## Findings on Child and Parent Outcomes

The meta-analysis found that all of the programs under study produced modest benefits for parents and children (Layzer et al., 2001). There were small but statistically significant effects on parenting attitudes and knowledge; parenting behavior; family functioning; parents' mental health or risk behaviors; and changes in families' economic self-sufficiency. Programs that provided opportunities for peer support had larger average effects on parents' attitudes and knowledge than those that did not offer these opportunities. The study also found small but statistically significant positive effects on children's cognitive development and children's social and emotional development, but no meaningful effects on their physical health and development and safety. The authors suggest that some of the observed parent and child effects may have been mediated by the nature of the population served: a small group of programs that served vulnerable families (such as those headed by teenage mothers or those whose children had behavior problems) accounted for the average effects (Layzer et al., 2001).

One of the evaluations used a pre-post design to assess the effects of the Minnesota Early Learning Design (MELD) program, which used peer-led support groups for parents with young children to increase parents' knowledge of child development and improve decision-making and management skills (Groark et al., 2002). The evaluation, conducted over two-years in seven sites, found improved parental awareness of children's development and changes in parental attitudes toward caring for their children. The other evaluation examined the effects of Even Start, a two-

generation program that provided peer support in addition to parent-child activities, early childhood services, and adult education activities for low-income families (U.S. Department of Education, Planning and Evaluation Service, 1998). Using the HOME Screening Questionnaire, the study found modest gains between pre- and post-tests on the quality of cognitive stimulation and emotional support that parents with children under age six provided for their children. This evaluation, however, could not explore the association between the outcome measures and peer support on its own.

### Findings on Fidelity

We did not find any studies in the literature on home-based care that identified fidelity standards for peer support initiatives (Porter et al., 2010b). The meta-analysis of family support programs did not discuss fidelity standards, nor did the two other evaluations of efforts that included peer support (Groark et al., 2002; Layzer et al., 2001; U.S. Department of Education, Planning and Evaluation Service, 1998). There was also no information on fidelity standards in the peer support initiatives we identified in our scan of the field, in large part because two of the initiatives were pilot programs and none had been evaluated (Porter et al., 2010b). Limited information about specific program models (especially in home-based child care), the diversity and lack of specificity in family support models, and the difficulty of developing standards for informal group meetings may all partially explain the lack of fidelity data.

## Research Gaps and Needs

Significant gaps exist in the research on the effectiveness of peer support approaches for home-based child care. We know very little about how peer support is delivered, the content of peer support groups, the staff preparation and support, and the effectiveness of these types of initiatives. There is also little information about the types of caregivers for whom this approach might be appropriate or whether it is effective as a stand-alone strategy or as one used to supplement other strategies. Among other issues, specific research needed on peer support includes the following:

- **Develop or Refine the Logic Model for Peer Support Initiatives.** An improved understanding of the potential role of peer support in improving child care quality must precede any assessment of the initiatives. Little work has been done to identify and map out the pathways through which peer support may achieve outcomes related to quality in home-base care settings. Further work is necessary to identity the elements of peer support that are in need of greater definition or structure in order to have an influence strong enough to improve caregiver knowledge and practice that will, in turn, produce changes in the quality of care.
- **Explore Peer Support as a Primary Versus Supplemental Strategy, and Examine How Implementation Details and Initiative Structure Vary.** Studies of implementation could describe the goals of peer support initiatives and how these initiatives function for home-based caregivers. Studies could also examine the differences between caregiver- and staff facilitator-led peer support groups and identify the kind of training that staff have. Studies could also explore how and to what extent peer support models vary when they are a primary or supplemental strategy and how they may further vary to meet caregivers' cultural needs.
- **Identify Elements Critical to Sustaining and Replicating Peer Support Initiatives.** Peer support is intended to be informal and flexible to meet the needs of group

participants. This feature is not at odds with a well-specified model, but it does warrant exploration of which elements should be aligned across initiatives in order to increase the potential for intended effects.

- **Test the Effectiveness of Peer Support in Improving Quality (and Possibly Child Outcomes) as a Stand-alone Strategy, a Supplemental Strategy, or Possibly Both.** Rigorous evaluations could determine whether peer support initiatives, alone or in combination with other strategies, improve child care quality by supporting children's social-emotional or language development.

# IX. GRANTS TO CAREGIVERS

Grants to caregivers or networks of caregivers can fund investments to enhance the quality of home-based care environments or caregiver training. This strategy aids caregivers who wish to make specific quality enhancements but lack the resources to do so. Grant funding may be used in a variety of ways depending on the guidelines established for a particular award. Agencies offering grants to caregivers can tailor this strategy to emphasize quality-related goals. For instance, funders can allow caregivers to identify their individual priorities while requiring that grant awards go toward specific items anticipated to influence quality, such as staff training or educational materials and curricula. Agencies can also offer grant recipients additional services to support effective use of grant funding, such as consultation or assistance with conducting assessments.

This chapter first provides an overview of existing initiatives that offer grants to caregivers. The chapter then follows the flow of a logic model. The discussion of implementation begins with the target population for this strategy (the beginning of a logic model) and then moves to inputs, resources, and services (the middle of a logic model). Next, the discussion turns to expected outcomes (the end of a logic model). The chapter concludes with a summary of evidence of effectiveness for this strategy and an overview of research gaps and needs.

## Grants to Caregivers in Home-Based Care Initiatives

This chapter presents five examples of initiatives that offer grants to home-based caregivers (Table IX.1). Three general approaches characterize these initiatives. One is single-installment funding for discrete facility improvements, purchases of materials, or other purposes. The First 5 San Joaquin Mini-Grants and Nebraska Child Care Grants follow this model. A second approach creates funding tiers that encourage caregivers to advance toward specific goals, such as licensing and accreditation, or to access specific types of training. Utah's Family Child Care Provider Start-Up Grants are an example of this model. In the third approach, initiatives offer grants to caregivers as part of a larger effort to improve quality or expand access to care. These tend to be larger grants relative to other approaches, and guidelines for grant use stress improvements that will enable providers to participate in a well defined system of quality child care programs. Initiatives using this approach include the Massachusetts Universal Pre-Kindergarten (UPK) Pilot Program and the County of Los Angeles Steps to Excellence Project (STEP).

## Implementation of Grants to Caregivers Initiatives

In this section, we discuss options for the design and implementation of initiatives providing grants to home-based caregivers (Table IX.2). We address the target population, the content of these initiatives, the value of grants (the dosage of services), strategies for sustaining participation, staffing requirements, and costs.

### Target Population

Of the five initiatives presented in Table IX.1, only one targets home-based caregivers exclusively: the Family Child Care Provider Start-Up Grants initiative. The others offer grants to both center care centers and home-based caregivers. All five initiatives extend eligibility for grants to family child care providers and three initiatives also include family, friend, and neighbor caregivers.

**Table IX.1. Examples of Initiatives Providing Grants to Caregivers**

| Initiative and Location | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|
| Universal Pre-Kindergarten (UPK) Pilot Program (MA) | ✓ Family child care providers<br>✓ Agencies representing child care homes<br>✓ Child care center providers<br>✓ School districts | Offers grants of $5,000 to $120,000 ($500 per child and an additional $1,500 per subsidized child) for curriculum and materials purchases, professional development, staff compensation, service expansion, and approved administrative costs. Focuses on providers who demonstrate commitment to quality practices through use of a developmentally appropriate program assessment system and accreditation. | **Caregiver:**<br>• Improved caregiving practices and environment<br>**Child:**<br>• Improved cognitive, language, physical, and socio-emotional development |
| Family Child Care Provider Start-Up Grants (UT) | ✓ Family child care providers | Funds: (1) providers who want to become fully licensed ($250 grant for licensing fees or health and safety items); (2) licensed providers seeking accreditation ($250 grant to be used toward materials and equipment related to quality measures); and (3) providers who have been licensed for 12 months and who complete a 40-hour specialty training course ($250 to be used toward professional quality toys and materials). | **Caregiver:**<br>• Licensing, training and credentials<br>• Improved care environment |
| First 5 San Joaquin Child Care Mini-Grants (CA) | ✓ Family child care providers<br>✓ Child care center providers | Grants of up to $2,000 (for caregivers serving up to 8 children) or $3,000 (for caregivers serving up to 14 children) to fund equipment, books and materials, or curricula. | **Caregiver:**<br>• Improved care environment |
| County of Los Angeles Steps to Excellence Project (STEP) Mini-Grants for Quality Improvement (CA) | ✓ Family, child care and center providers participating in the STEP child care | Offers grants of up to $5,000 to fund improvements in STEP quality areas before providers receive a STEP rating and to provide an incentive for providers to maintain standards. STEP quality areas are: (1) regulatory compliance, (2) teacher/child relationships, (3) learning environment, (4) identification and inclusion of children with special needs, (5) staff qualifications and working conditions, and (6) family and community connections. | **Caregiver:**<br>• Licensing, training and credentials<br>• Improved caregiving practices<br>• Improved environment |
| Nebraska Health and Human Services Child Care Grants (NE) | ✓ Family child care providers<br>✓ Family, friend, and neighbor caregivers<br>✓ Child care center providers | Four types of grants are available: (1) up to $5,000 for home-based facilities ($10,000 for centers) making minor building modifications to meet licensing requirements or increase capacity; (2) emergency mini-grants up to $2,000 to licensed providers requesting items required by licensing standards; (3) legally exempt provider grants up to $100 for safety items, playpens, mats, and toys; and (4) grants up to $500 to licensed homes or centers serving low-income children, for items to enhance the child care quality. | **Caregiver:**<br>• Licensing<br>• Improved health and safety of the home<br>• Improved care environment |

Source: Porter et al., 2010b.

**Table IX.2. Overview of Implementation Information for Grants to Caregivers**

| Implementation Component | Summary |
|---|---|
| Target population | All types of home-based caregivers; grant size and duration may inform the appropriate target groups |
| Content | Used to fund equipment, staff training, or renovations intended to improve quality; additional technical assistance sometimes provided |
| Dosage of services | Key elements are value and periodicity |
| Strategies for sustaining participation | Accessibility of application process and fairness in selection process |
| Staffing requirements | Basic (one staffer) or complex (multiple staff with specialized roles), depending on the size and complexity of the grant |
| Cost categories | Grant awards, outreach and selection of grantees, technical assistance and other ancillary services, monitoring, and administration and overhead |

Two initiatives that provide grants to both centers and family child care homes—the First 5 San Joaquin Mini-Grants and the Nebraska Child Care Grants—offer smaller amounts of funding to family child care homes than to centers.

Little evidence exists about which types of home-based caregivers are most likely to benefit from grants, but funders could consider grant size and duration when selecting a target population. For example, smaller, one-time grants may facilitate substantial incremental changes among family, friend, and neighbor caregivers. These types of caregivers are less likely to provide care in cognitively stimulating settings (Porter et al., 2010a). Their less formal settings may also lack basic safety features. Grants of several hundred dollars may be sufficient to purchase educational materials (children's books) or safety equipment (cabinet locks or safety gates) that meaningfully improves the quality and safety of the care environment.

Initiatives can direct larger or longer-term grants to caregivers who are on the path toward offering quality care but require resources or encouragement to make further improvements. For example, the Massachusetts UPK Grants Pilot Program targets caregivers who have already demonstrated their commitment to quality by providing a developmentally appropriate program, obtaining specific credentials, and achieving accreditation status. Such providers are expected to be able to use grant resources to achieve more comprehensive improvements in quality to support children's cognitive, language, literacy, physical, and socio-emotional development.

## Content

We discuss the content of a grants-based initiative by providing an overview of the types of organizations that typically administer grants to caregivers and under what parameters, as well as the additional activities that may be incorporated into the initiative, such as technical assistance and monitoring.

**Auspice and Structure.** The grants-based initiatives we identified all operate under the auspice of a government agency, such as the Massachusetts Department of Early Care and Education, or a commission, such as California's state and local First 5 commissions. These agencies appear to be well suited to undertake this type of initiative because they have a relatively consistent funding stream for awards and experience in soliciting and evaluating grant applications. However, nonprofit

organizations or child care resource and referral agencies might also be able to implement grant initiatives successfully, given adequate funding. Agencies with specific expertise in early education and child care would be in a strong position to create grant usage guidelines for caregivers, directing them toward investments that have the potential to influence quality. They could also have the resources to plan and implement quality improvement initiatives that employ grants as one element of a larger project.

Funds are often used to purchase materials or equipment, but may also support staff compensation, implementation of assessments, training, expansion of services, the renovation or repair of facilities, or other expenditures. Eligibility for grants can be structured to incentivize caregivers to focus on quality—for example, by restricting eligibility to those who use a curriculum or by offering additional grant opportunities for steps toward licensure or certification.

**Additional Services and Monitoring.** Initiatives offering grants to caregivers may do so as part of a larger set of services to promote quality. These services may support effective use of grant funds and sustained improvements, perhaps by offering caregivers technical assistance with assessing the quality of their care environments or creating a quality improvement plan. Grants may be an incentive for caregivers to achieve specific quality improvement milestones or to attend training to enhance knowledge of child development. The Los Angeles STEP Project, for instance, offers grantees training on such topics as using developmental screening tools and including children with special needs. Grantee monitoring typically focuses on confirming whether funds were used appropriately, but a more valuable approach may be to combine review of grant expenditures with a discussion of further steps the caregiver might take toward improving quality.

### Dosage of Services

The monetary value of a grant and the possibility of its renewal are indications of the "dosage" or "intensity" of a grants-based initiative. Available research does not offer evidence for the effectiveness of a specific grant value. An evaluation of the Massachusetts UPK Pilot Program reported that caregivers perceived grants of $5,000 or more to be sufficient to make changes in their programs (Fountain & Goodson, 2008). However, the same may be true for smaller grants that are used to support key changes in a care environment, such as the installation of safety equipment or introduction of age-appropriate educational materials, toys, and books.

In establishing the value of a grant, funders should consider the capacity of targeted caregivers to use additional resources effectively. A family, friend, or neighbor caregiver or a newly established family child care provider may be better served by smaller, easier to administer grants that will address an immediate, basic need in the caregiving environment. Caregivers with more experience or training may be able to effectively use a larger award by, for example, fully implementing a high-quality curriculum or set of assessments. Agencies may also opt to allow caregivers to renew funding, permitting them to build on improvements they accomplished with previous funding.

Another factor defining the intensity of initiatives is the amount of technical assistance offered to help caregivers use grant funds judiciously. Evaluation evidence on specific technical assistance methods may help initiative designers gauge the amount of assistance that should be offered to grant recipients. When such evidence is not available, making the frequency and intensity of technical assistance services sufficient to identify the key quality improvements caregivers can accomplish with their grant is a reasonable approach. (See Chapter IV for a discussion of service dosage for a home-based technical assistance strategy.) Follow-up assistance may also be helpful in ensuring that caregivers implement quality improvements successfully over time.

**Strategies for Sustaining Participation**

Gaining and sustaining caregiver participation in a grants program depends on the accessibility of the application process and the fairness of the selection process. The complexity and transparency of a grant program's application and selection process will affect its accessibility to home-based caregivers. An application that collects essential information on the applicant and the proposed use of a grant without creating an undue burden is likely to aid caregivers who may be inexperienced in seeking grant funding. The application process can also be simplified by providing caregivers a list of activities, materials, and improvements that can be funded with the available grants. Outreach efforts to inform caregivers about the availability of the grant and technical assistance with the application process can also encourage participation. Finally, clear standards for eligibility and criteria for awarding grants are important to establishing a fair selection process. Some existing initiatives ensure objectivity in evaluating applications through a scoring system; requests for funding are awarded points according to a scheme outlined in the application materials.

**Staffing Requirements**

The staff structure for initiatives providing grants to caregivers can be basic or complex, depending on the approach of the initiative and the services it offers to grant applicants and recipients. The Nebraska Health and Human Services Child Care Grants initiative, for example, has a single staff member who oversees the program, reviews applications, awards the grants, and monitors recipients' compliance with the grant requirements. An initiative that incorporates grants into a larger quality improvement effort may be more complex, involving staff with varied duties and expertise. The Massachusetts UPK Grants Pilot Program, for example, has two staff members that work on the initiative full time and a number of staff members who help plan and implement the program on a part-time basis. The budget and contract staff process amendments, budget requests, and payments. The Department of Early Education and Care's regional staff and staff in programs, research, and administration departments work with the UPK staff to review proposals and negotiate activities and budgets with providers.

Similarly, the staff qualifications needed to support effective implementation of grants-based initiatives will depend on the initiative's approach. Staff members who understand the needs and challenges of home-based caregivers and who have experience administering grant funds, are likely to be able to identify and prioritize opportunities for investing in quality improvements among individual providers. For initiatives that offer grants along with other supports for implementing quality enhancements, staff members may need expertise in such areas as program assessment, provision of technical assistance or consultative services, or training of providers.

**Cost Categories**

The costs of grant initiatives are likely to fall into five general categories (Table IX.3): (1) grant awards, (2) outreach and selection of grantees, (3) technical assistance and other ancillary services, (4) monitoring, and (5) administration and overhead. Specific program features will determine the relative size of these cost categories. In initiatives that focus on single-installment grants for discrete improvements, the cost of these grants may be the greatest line item. For initiatives that enroll caregivers receiving grants in a larger quality improvement initiative, staff time spent delivering substantial technical assistance to caregivers or advising caregivers on how to expend grant funds may account for a large share of costs.

**Table IX.3. Cost Categories for Grants to Caregivers**

| Category | Description |
|---|---|
| Grant awards | Direct disbursements to caregivers for approved expenditures |
| Outreach and selection | Activities to publicize grant opportunities and distribute applications; staff time for the review and selection of applicants |
| Technical assistance and ancillary services | Additional services can include assessments of child care environments to identify needs, assistance completing budgets for grant applications, or consultation with grantees on the selection and use of educational materials purchased with grant funds |
| Monitoring | Staff time to review grantee expenditures and ensure conformity to grant guidelines, and to conduct site visits assessing implementation of grant-funded quality improvements |
| Administration and overhead | Costs of space, utilities, coach or consultant travel, and such administrative functions as accounting and payroll |

The *overall* costs of an initiative offering grants to caregivers generally will be affected by the value and number of grants offered and the types of ancillary services that may be available. The Massachusetts UPK Pilot Grant Program offers an illustration of costs for a large, statewide initiative. In fiscal year 2009, the state legislature allocated $10.9 million to the initiative, which awarded grants of $5,000 to $200,000 to a total of 293 programs, including 129 family child care providers (Massachusetts Department of Early Education and Care, 2009). In contrast, First 5 San Joaquin allocated approximately $75,000 to child care mini-grants for fiscal year 2009, with individual awards of up to $5,000 (First 5 San Joaquin, 2009).

## Expected Outcomes

This section enumerates the types of outcomes that initiative developers and administrators could expect from providing grants to caregivers. Guidelines governing the use of grant funds will affect the expected outcomes for these initiatives. Caregiver outcomes may include changes to the physical environment and improved quality of the care setting (Table IX.4). Improved caregiver practices and knowledge are possible if funding is used for curricula or training.

### Caregiver Outcomes

Expected outcomes for grants to caregivers must be aligned with the anticipated goals of the initiative as well as funding levels and eligibility requirements for caregivers. As described earlier, grant purposes may range from supporting physical environment improvements (for example, purchasing play equipment) to adopting a child assessment and individualization approach (for example, purchasing a specialized assessment). When the grant's purposes are not clearly specified, caregivers must decide how they will use the funds. Caregivers who participate in a Quality Rating and Improvement System (QRIS), which has different levels based on specific indicators of quality, or those who seek to obtain accreditation may have improvement plans or goals in place to which grant funds can be directed. For example, an unsafe outdoor play area (an unfenced yard backed up to a busy street), would result in a low rating of the environment on the FCCERS-R and might result in a low rating in a QRIS. If grant funds were used for a fence, the QRIS rating might be higher and the caregiver may be able to receive a higher reimbursement for subsidized children in their care. Similarly, if caregivers used newly purchased child assessment materials to enhance their knowledge

of the stages of child development and change their expectations accordingly, they might be less harsh and more supportive of children and their own stress might decrease.

**Table IX.4. Potential Outcomes of Grants to Caregivers**

| Domain | Description of Outcomes |
|---|---|
| **Caregiver Outcomes** | |
| Caregiver Knowledge | None expected |
| Physical Environment | • Provision of a sufficient number of different types of materials to avoid conflict among children<br>• Variety of age-appropriate materials (such as puzzles and manipulatives)<br>• Enhancement of the print environment (children's books and magazines)<br>• Enhanced safety of the environment through physical changes or new equipment |
| Caregiver Practices | • Use of health and safety practices (hygienic practices supported; potential physical dangers addressed; safe and accessible eating, sleeping, and toileting environment)<br>• Use of new or existing materials, equipment, or curricula with children |
| Professionalism | None expected |
| Caregiver Well-Being | • Increased self-efficacy |
| **Child Outcomes** | |
| Cognition, Language, and Literacy | None expected |
| Social-Emotional | • Increase in positive social behavior (cooperation, negotiation)<br>• Decrease in problem behavior (aggression, withdrawal) |
| Physical Health and Development | • Number of child care-related accidents, injuries, illnesses, and infections<br>• Number of child care-related emergency room visits |

## Child and Parent Outcomes

Given that grants are often targeted to improving health and safety or to purchasing basic equipment, expectations for direct effects on child and parent outcomes are minimal. However, to maximize the likelihood of affecting these indirect (more distal) outcomes, initiative developers and administrators could combine grants with components of other types of initiatives, such as coaching and consultation. For example, simply purchasing a curriculum or assessment will not affect child outcomes; coaches or consultants could provide active support to caregivers to help them incorporate the curriculum or assessment into their daily practices with children.

Caregivers often cannot afford to purchase furniture and equipment that support children's independence. For example, child-sized tables and chairs allow children to work on activities by themselves and encourages their autonomy and self-efficacy. Caregivers may use grant funds to purchase this type of furniture, or step stools that young children can use to independently toilet themselves and wash their hands. These opportunities foster children's self-efficacy and mastery of new skills and also remove these activities from the list of supports caregivers need to provide to children.

## Evidence of Effectiveness

Our scan of initiatives to improve quality in home-based care identified one implementation study of an initiative making grants to providers (Table IX.5). The authors of this UPK study interviewed two groups: (1) child care agencies that received grants and (2) a random sample of individual teachers and family child care providers affiliated with the agencies.

The study reported that grantees spent funds on areas that were expected to produce positive outcomes for children, including quality curricula, assessment, and staff development and compensation. In 2008, first full fiscal year of the grants, the largest share of funding covered staff expenditures (48 percent), followed by instructional materials (including assessments, curricula, and support for attaining credentials—28 percent) and program operations (17 percent). Compared to other types of grantees, family child care providers spent a larger share of their funds on instructional materials (40 percent) and the same or less on staff and full-day, full-year services (40 and 10 percent, respectively). The evaluation also found that caregivers valued the funding highly as a support and incentive for quality improvement. Providers generally felt that the UPK grants had improved program quality. More than 70 percent of providers affirmed that the grants had substantially improved the quality of assessments and curricula. The evaluation did not conduct assessments to determine whether quality improved among providers who received the grants.

**Table IX.5. Design Elements of Studies of Grants**

| Focus of Study | Study Design | Methods | Unit of Analysis | Outcome Measures | Limitations |
|---|---|---|---|---|---|
| Massachusetts UPK Pilot Program | Implementation study | Interviews with agency administrators, center-based teachers, family child care providers | Caregivers | Not applicable | Did not measure outcomes |

**Sources:** Fountain & Goodson, 2008.

## Research Gaps and Needs

Given the lack of evidence for how grants impact the quality of home-based care, research is needed to determine whether and how such initiatives can improve caregiver outcomes, such as the quality of the caregiving environment or professional development. Specific issues that future studies should address include the following:

- **Examine Patterns in Take-up Rates Among Eligible Caregivers and How These Vary by Outreach Methods and/or Application Processes.** Funding availability can attract caregivers, but the ultimate success of a grant program can depend on whether caregivers even know about the availability of grants and/or the extensiveness of the application process. Descriptive studies that analyze the take-up rate among eligible caregivers and the characteristics of caregivers that choose to pursue the grant and those that do not can provide early insights into the upfront process. The important question here is to determine whether the program is reaching the caregivers it most intends to

assist, particularly because there is a selection process (intended or not) that can occur even before applications are reviewed.

- **Test the Effectiveness of Grant Programs.** A rigorous evaluation comparing grant recipients and nonrecipients could help establish whether grants translate into impacts on caregivers and the caregiving environment. Such an evaluation could usefully explore the extent to which grant-funded quality improvements were successfully accomplished, the effects of these improvements, if any, and whether effects were sustained over time.
- **Assess the Effectiveness of Different Grant Program Models to Identify Features That Are Most Effective.** Rigorous evaluations comparing different models of grant initiatives could help identify specific design features and characteristics that are most likely to succeed. These studies could help inform decisions on the amount of funding to award, the types of caregivers most likely to benefit from certain types of grants, and whether specific kinds of guidance or technical assistance can help caregivers use grant funds effectively.

# X. MATERIALS AND MAILINGS

Materials and mailings strategies disseminate information or items to home-based caregivers that can be useful in enhancing the home environment or caregivers' knowledge. Materials are free items provided to a caregiver to enhance the environment and can range from health and safety equipment to books and art supplies. Most often, materials are purchased by the initiative and provided directly to the caregivers but in some cases, initiatives reimburse providers for purchasing items from a specific list. Mailings (sent via the post office or electronically via the internet) can include newsletters that cover a wide range of topics, announcements of events, or information about specific activities that caregivers can do with children. In some cases, initiatives send packets of materials that include a newsletter, activity sheets, and information about community resources. Although some initiatives for home-based caregivers use materials and mailings as a primary strategy, most rely on this strategy to supplement another approach.

This chapter first provides an overview of existing initiatives that provide materials and mailings to home-based caregivers. The chapter then follows the flow of a logic model. The discussion of implementation begins with the target population for this strategy (the beginning of a logic model) and then moves to inputs, resources, and services (the middle of a logic model). Next, the discussion turns to expected outcomes (the end of a logic model). The chapter concludes with a summary of evidence of effectiveness and an overview of research gaps and needs.

## Materials and Mailings in Home-Based Care Initiatives

In our scan of the field, we identified five initiatives for home-based child care that used materials, mailings, or both as a primary service delivery strategy (Porter et al., 2010b). Three rely on mailings as a primary strategy; two distribute materials as the primary strategy (Table X.1). Materials distribution is also a common supplemental strategy. Almost two-thirds of the 96 initiatives in our scan provided materials to caregivers. For example, many of the initiatives that relied on training through workshops also provided materials, as did many home-based technical assistance.

## Implementation of Materials and Mailings Initiatives

In this section we describe options for implementing materials and mailings initiatives for home-based caregivers (Table X.2). Specifically, we discuss the target population, content, dosage of services, strategies for sustaining participation, staffing requirements, and costs of materials and mailings initiatives.

### Target Population

Mailings and materials can be targeted to family, friend, and neighbor caregivers as well as regulated family child care providers. Materials can be an appropriate strategy for family, friend, and neighbor caregivers, because these caregivers tend to be interested in obtaining items to improve the health and safety of the environment as well as to promote child development (Porter et al., 2010a). Family, friend, and neighbor caregivers who want to pursue regulation may also want to obtain materials about the requirements and process of licensing. Regulated family child care providers are also an appropriate target for materials because they may want to improve the quality of their home environment, and such quality may be a factor in their ratings in a quality rating and improvement system (QRIS) or accreditation system. Distributing materials may also prompt initial participation in an initiative that uses other strategies.

**Table X.1. Examples of Initiatives Providing Materials and Mailings**

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| Family, Friend and Neighbor Toolkit Project (OR) | ✓ | Family, friend, and neighbor caregivers | Kit including a book, a cassette, a DVD, and child development information distributed to caregivers who attend an orientation on the child care subsidy program | **Caregiver:**<br>• Improved environment<br>• Improved knowledge of child development |
| Nevada Accreditation Project (NE) | ✓ | Family child care providers | Materials for providers who are seeking accreditation | **Caregiver:**<br>• Improved environment<br>• Improved professionalism through accreditation |
| Family Child Care Professionals of South Dakota (SD) | ✓ | Family child care providers | Monthly online newsletter with information about child development and child care as well as announcements of events, meetings, and conferences | **Caregiver:**<br>• Improved child development knowledge<br>• Improved knowledge of operating a child care business<br>• Improved knowledge of community resources |
| Informal Caregivers Project (MD) | ✓ | Family, friend, and neighbor caregivers | Monthly newsletters with information on child development topics, activities to do with children, and lists of recommended books; caregivers also receive a kit of materials and home visits | **Caregiver:**<br>• Improved child development knowledge<br>• Improved practice<br>• Improved environment<br>**Child:**<br>• Improved language and cognitive development |
| Learning to Grow (HI) | ✓ | Parents whose children are in care with subsidized family, friend, and neighbor caregivers | Monthly packets include a newsletter, an activity ideas sheet, and a community resource flyer; parents who complete the activity sheet with their children receive a book | **Parents:**<br>• Improved knowledge of child development<br>• Improved knowledge of community resources<br>• Improved relationship with caregiver<br>**Child:**<br>• Improved language and literacy |

Source: Porter et al., 2010b.

DVD = digital video disc

**Table X.2. Overview of Implementation Information for Materials and Mailings**

| Implementation Component | Summary |
|---|---|
| Target population | Family, friend, and neighbor caregivers; family child care providers |
| Content | Topics and format of materials align to initiative's goals and target population's needs |
| Dosage of services | Varies by initiative, may be monthly or one-time |
| Strategies for sustaining participation | Ongoing use and demand is not known; materials and mailings are often used as strategies to encourage participation in other types of services (such as workshops or peer support groups) |
| Staffing requirements | Typically small-scale, requiring one to three staff members; formal education may be necessary for materials development |
| Cost categories | Materials/mailings preparation and distribution, staff and supervisory time, administrative costs |

Mailings can also be used with both types of providers to offer information. This strategy can be particularly appropriate for caregivers who live in rural areas, for whom participation in group activities may be difficult, or for caregivers who may not have the time or the interest to participate in other activities. Caregivers who have low literacy levels may struggle to use mailings unless the information is presented in ways—with pictures and few words, for example—that make it accessible.

## Content

The type of materials and content of mailings is determined by initiatives' goals and target outcomes. Materials distribution can include electrical outlet covers, first aid kits, and smoke detectors to improve health and safety; books, compact discs, and cassettes to support language and literacy development; puzzles and art supplies to support cognitive development; and play equipment to support physical development. In some cases, initiatives provide information about how to install or use these materials. Initiatives can also use materials to help providers become licensed or obtain accreditation by providing materials required to meet specific regulations and standards. Initiatives that broadly aim to improve child care quality through mailings distribute content that generally covers a wide range of areas such as health and safety, child development, behavior management, and activities for children. When the objective is to improve children's school readiness, especially their language and literacy development, the content can be related to helping caregivers understand how children learn, and provide tips on how to read to children or how to engage them in activities. The mailings may also include activity sheets focusing on particular skills that caregivers can use with children in their care. Mailings may also include information about business issues, as well as community resources, events, and professional development opportunities.

The literature contains limited evidence about the effectiveness of different types of content delivered by materials and mailings for home-based caregivers. There is some indication that providing specific materials—books, for example, will increase their availability for children (St. Pierre et al., 1995). We do not have information about the effects of providing health and safety materials on incidence of accidents and injuries, but common sense supports the assumption that some of this kind of equipment is better than none. There is also little information about whether

other types of materials correspond to the ages of the children in care or whether they are culturally appropriate—dolls of color, for example, or books in the child's language or about the child's culture or traditions. We also know little about the variety of the content that should be offered in a newsletter, how content should be conveyed—the balance between text and illustrations, for example, or the length of the newsletter or individual articles. Some initiatives that serve caregivers whose home language is not English offer bilingual newsletters, but it is difficult to know the exact match of appropriate language for all targeted caregivers.

**Dosage of Services**

There is little research on the optimal frequency of mailings and materials distribution; it is unclear whether more or fewer mailings or materials distributions affect caregivers' knowledge, practice, or use of other resources. Again, these decisions are connected to the initiative's goals. For example, if the objective is to encourage caregivers to participate in an orientation or to help them become licensed, a one-time distribution may be sufficient. On the other hand, ongoing efforts with consistent periodicity may be warranted if the materials or mailings are used as a primary strategy to improve a particular aspect of quality in the home-based setting.

**Strategies for Sustaining Participation**

Whether there is sustained participation in initiatives that use mailings as a primary strategy is unclear, because participation depends on caregivers' reading of the information. Initiatives can enhance participation by offering incentives, such as books or other materials, for returning questionnaires about the use of the information, but only one of the initiatives we identified used this approach. To increase utilization, initiatives can use responses to reader surveys to modify the format and the content of newsletters, but our scan of the field indicated that this, too, is not a frequently used approach.

Initiatives whose primary strategy is to distribute materials may sustain participation if the materials are useful for participants and are distributed regularly, but this has not been documented. Using materials as a supplemental strategy, on the other hand, may be an effective approach for sustaining participation in workshops, home visits, or other program activities. Caregivers may want regular offerings of materials and equipment that will improve the environment and help promote children's development. Distributing materials in the context of these initiatives also offers the advantage of providing additional information or modeling practices.

**Staffing Requirements**

In our scan, we found mailing initiatives that were staffed by one to three staff. The number of staff for initiatives that used distribution of materials as a primary strategy also varied. Staffing of initiatives that use materials as a secondary strategy will depend on the type of initiative—training through workshop or home-based technical assistance, for example—and the caseload.

Educational backgrounds for staff in mailing and materials initiatives depend on their roles. Staff who write newsletters, for example, may have bachelor's degrees or advanced degrees in early childhood education as may staff who design or select materials. They should have some cultural competence as well, especially if the initiative serves a culturally diverse caregiver population. Staff who mail the newsletters or distribute the materials may not need formal education.

### Cost Categories

For most initiatives that use materials and mailings as a primary strategy, the primary costs are (1) direct services, (2) supervision and training, (3) outreach and recruitment, and (4) administration and overhead. The bulk of the costs are likely to be direct—to purchase or prepare and distribute the materials and mailings—and will vary with the frequency of mailings and the type of materials (Table X.3). Staffing costs will also vary depending on the qualifications of the staff needed. There are also staffing and administrative costs associated with supervising the staff members (depending on the size of the initiative), identifying or recruiting caregivers, and distributing the materials and mailings.

**Table X.3. Cost Categories for Materials and Mailings**

| Category | Description |
|---|---|
| Direct services | Staff time to prepare content and produce mailings, purchase materials, or prepare kits |
| Supervision and training | Supervision of staff members who prepare and distribute materials (if necessary, depending on size) |
| Outreach and recruitment | Staff time spent identifying and/or recruiting participants |
| Administration and overhead | Space, utilities, insurance, and any other expenses related to distribution (such as postage or delivery costs) |

## Expected Outcomes

The types of potential outcomes that can be expected from materials and mailings are focused on the caregiving environment and caregiver knowledge and skills (Table X.4). On their own, materials and mailings as a strategy are not likely to affect child and parent outcomes. The ability of these strategies to affect caregiver outcomes may also be limited. Materials and mailings may only be likely to increase provider knowledge, and particularly practice, when combined with additional support about how to use the information, equipment, or supplies provided, possibly through an on-site component.

### Caregiver Outcomes

Typically, the most proximal (closer or more direct) outcomes of materials and mailings strategies have to do with an enhanced caregiver environment. Some initiatives that provide materials aim to give caregivers something tangible that they can use in the home with the children in their care. For example, the environment may be improved to prevent injuries or disasters by new equipment, such as a fire extinguisher. These are clear and immediate improvements. However, whether the caregiver actually incorporates the equipment, supplies, or information they receive into improved practice is less of a guaranteed outcome. For example, information and specific activities related to teaching literacy skills to children may be included in materials or mailings, but there is no assurance that the caregiver will first, read and understand the material, and second, use the information to inform future practice. It is unknown whether caregivers can implement the content of information or use of equipment or supplies correctly and with enough frequency to affect outcomes related to practice without additional support. This may also be affected by the education level or literacy level of the caregiver.

### Child and Parent Outcomes

There is no evidence and there is little expectation that materials and mailings alone will affect caregiver behavior in a way that could bring about changes in child or parent outcomes. The materials and information may be present without being used, or they may be used inappropriately or in ways that could be harmful. For example, if the caregiver insists on using a new strategy learned from a newsletter but does not coordinate her approach with the parent, this could lead to conflict for which the caregiver is unprepared. The presence of additional supports like a coach or home visitor would help the caregiver partner with parents to implement recommended changes.

**Table X.4. Potential Outcomes of Materials and Mailings**

| Domain | Description of Outcomes |
|---|---|
| | **Caregiver Outcomes** |
| Caregiver knowledge | • Appropriate expectations and understanding of supports for cognitive, language, and literacy development<br>• Appropriate expectations and strategies to support social-emotional development of children (such as positive interactions with adults and peers)<br>• Strategies to reduce illness and injury |
| Physical environment | • Provision of a sufficient number of different types of materials to avoid conflict among children<br>• Changes to schedule to promote positive behavior (reduced waiting)<br>• Variety of age-appropriate materials (such as puzzles and manipulatives)<br>• Enhancement of the print environment (children's books and magazines) |
| Caregiver practices | • Use of health and safety practices (hygienic practices supported; potential physical dangers addressed; safe and accessible eating, sleeping, and toileting environment)<br>• Use of new or existing materials, equipment, or curricula with children |
| Professionalism | None expected |
| Caregiver well-being | None expected |

## Evidence of Effectiveness

We identified two evaluations of initiatives that have made use of materials and mailings; one that examined the use of materials as a primary strategy with parents in the Learning to Grow initiative and one from our literature review that was focused on literacy kits. Both are descriptive studies that used surveys to obtain feedback from parents or caregivers who received the materials (Table X.5). The self-reported outcomes cannot be directly attributed to the information they received from the materials.

**Table X.5. Design Elements of Studies of Materials and Mailings**

| Focus of Study | Study Design | Methods | Sample Size/ Unit of Analysis | Outcome Measures | Limitations |
|---|---|---|---|---|---|
| Learning to Grow | Pre-post | Survey of participants | 279 parents | Self-reported practices to promote children's learning | Focused on parents rather than caregivers; no comparison group; self-reported outcomes |
| Distribution of Literacy Kits (one-time) | Pre-post | Survey of literacy kit recipients | 209 family, friend, and neighbor caregivers | Self-reported literacy activities | No comparison group; self-reported outcomes |

**Sources:** Fong & Nemoto, unpublished; Rider & Atwater, 2009.

### Findings on Caregiver Outcomes

One evaluation sought to document how parents who relied on subsidized family, friend, and neighbor caregivers used the monthly activity sheets that were distributed (Fong & Nemoto, unpublished). Although the initiative aimed to serve parents as a target population, the evaluation results may provide some insight into the potential of similar efforts that might be designed for home-based caregivers. The study found that almost 90 percent of the parents reported that they spent more time than before they started using the activity sheets in various types of activities that promoted their children's learning; 59 percent reported that they spent more time playing with children; and 53 percent used everyday activities more often to help their children learn (Fong & Nemoto, unpublished).

In our scan of the field we found one evaluation of an initiative that distributed a one-time kit of materials to family, friend, and neighbor caregivers as a primary strategy. The findings indicated that 46 percent of the caregivers reported reading to the children in their care more than five times a week at the post-test, compared with 33 percent at the pre-test; the percentage of caregivers who reported having 11 or more books in the home increased from 77 percent to 85 percent; and 74 percent of the caregivers reported having a library card, up from 72 percent (Rider & Atwater, 2009). These findings should be interpreted with caution, however, because of selection bias.

### Findings on Child and Parent Outcomes

Evaluations of materials and mailings have not examined child and parent outcomes, and rightly so. As a stand-alone strategy, materials and mailings are not likely to produce changes for children or parents.

### Findings on Fidelity

None of the studies identified fidelity measures for determining whether the initiative was faithful to the model (Porter et al., 2010a). We also did not find fidelity measures in the materials and mailings initiatives we identified in our scan of the field (Porter et al., 2010b).

## Research Gaps and Needs

The limited research evidence on the effectiveness of materials and mailings provides little information about the potential for materials and mailings to contribute to improvements in the quality in home-based child care. Questions remain about the frequency of delivering materials and mailings and the relative advantages of sending materials and mailings without providing other support (such as training through workshops or home-based technical assistance). We also know very little about the kinds of materials and mailings that are effective for different types of home-based caregivers or for those with different levels of education or experience. Specific research needed on materials and mailings includes:

- **Develop or Refine the Logic Model for Materials and Mailings Initiatives.** An improved understanding of the potential role of specific materials or mailings in improving child care quality is needed before such initiatives are examined for the changes they may bring about on caregiver outcomes. Additional research is needed to examine whether the pathways to achieving expected outcomes are direct and strong enough in materials and mailings initiatives.
- **Assess the Degree of Receipt and Responses by Targeted Home-Based Caregivers.** Descriptive studies could document the extent to which materials and mailings reach targeted caregivers, how much attention caregivers give to the materials and mailings, whether they make use of the materials and content in the mailings, and what would make the materials or mailings more appealing and useful to them in enhancing the care they provide to children.
- **Test the Effectiveness of Materials and Mailings in Improving Specified Caregiver Outcomes and Child Care Quality as a Stand-Alone Strategy, or a Supplemental Strategy.** Rigorous evaluations could be used to determine whether materials or mailings initiatives alone or in combination with other strategies support improvements in child care quality, such as improved support for children's social-emotional or language development.

# XI. READING VANS

Deploying mobile reading vans to the homes of home-based caregivers is a strategy used to provide children's books and other materials—such as puppets, music and story compact discs, and magazines—to promote the development of young children's language and early literacy skills. These initiatives can also provide home-based caregivers with information about child development, health and safety, nutrition, behavior management, and other topics of interest. Another function of the mobile reading vans can be to provide home-based caregivers with handouts and other parent education materials that caregivers can provide to parents of the children in their care.

This strategy is very similar to materials and mailings (discussed in Chapter X) but differs in two important ways. First, the materials and information are brought directly to a caregiver's home by a trained staff member who is available to answer questions. Second, the staff person who operates the reading van also models developmentally appropriate reading strategies for the caregiver by conducting a circle time or reading a story for the children in care.

This chapter first provides an overview of existing initiatives that offer reading vans. The chapter then follows the flow of a logic model. The discussion of implementation begins with the target population for this strategy (the beginning of a logic model) and then moves to inputs, resources, and services (the middle of a logic model). Next, the discussion turns to expected outcomes (the end of a logic model). The chapter concludes with a summary of evidence of effectiveness and an overview of research gaps and needs.

## Reading Vans in Home-Based Care Initiatives

We identified two initiatives in our scan of the field that used mobile reading vans as a primary strategy (Porter et al., 2010b). The Children's Readmobile Services, although recently discontinued, provided monthly visits to home-based caregivers that included a story time and materials circulation (Table XI.1). The other initiative, Read Rover II, also provides a monthly interactive story time and circulation of books during its visits to home-based caregivers. We did not identify any initiatives that used mobile reading vans as a secondary strategy.

## Implementation of Reading Vans Initiatives

In this section, we describe options for implementing a mobile reading van program for home-based caregivers. Specifically, we discuss the content, target population, dosage of services strategies for sustaining participation, staffing requirements, and operational costs of reading van initiatives (Table XI.2).

### Target Population

Reading vans may be a suitable strategy for all types of home-based caregivers. The Children's Readmobile Service targeted any caregiver, whether regulated or exempt from regulation, who received child care subsidies. Read Rover II also targeted all types of home-based caregivers, who could benefit from receiving a regular supply of new children's books; the children in care would benefit from the books and the regular story time.

**Table XI.1. Examples of Initiatives Providing Reading Vans**

| Initiative and Location | | Target Population(s) | Description | Target Outcomes |
|---|---|---|---|---|
| Read Rover II (IA) | ✓ | All types of home-based caregivers | Monthly visits by reading vans to caregivers' homes to circulate books, "Books in a Box," and provide a story time for the children in care; also provides parent education materials to caregivers | **Caregiver:**<br>• Improved literacy environment<br>• Improved knowledge of methods to read books to children that promote literacy<br>**Child:**<br>• Improved literacy skills<br>**Parent:**<br>• Improved knowledge of children's development of language and literacy skills |
| Children's Readmobile Service (MN) | ✓ | All types of home-based caregivers who receive child care subsidies | Visited caregivers' homes monthly to circulate books and other materials to promote language and literacy development (puppets, music compact discs, magazines, and other media) and provided a story time for the children in care | **Caregiver:**<br>• Improved literacy environment<br>**Child:**<br>• Improved literacy skills |

Source: Porter et al., 2010b.

**Table XI.2. Overview of Implementation Information for Reading Vans**

| Implementation Component | Summary |
|---|---|
| Target population | All types of home-based caregivers |
| Content | Provision of literacy materials to children and caregivers; literacy activities |
| Dosage of services | No conclusive information; monthly for about two hours is typical |
| Strategies for sustaining participation | Not applicable |
| Staffing requirements | Librarians, literacy specialists, or untrained staff, depending on content |
| Costs categories | Vans and accompanying operating costs, books and other materials, staff time |

Reading vans may be an especially useful strategy for providing information to family, friend, and neighbor caregivers. These caregivers may not be aware of resources available in the community, such as reading vans and other resources they may learn about from the reading van staff. These caregivers typically do not view themselves as professionals and are not interested in formal training; they are, however, interested in receiving information on a wide range of child development and caregiving topics (Porter et al., 2010a). They may also benefit from observing the reading techniques used by reading van staff during story time.

## Content

The content of an initiative deploying mobile reading vans to child care homes can be specified in terms of the provision of materials and the literacy activities and technical assistance conducted during the visits.

**Provision of Materials.** In both of the initiatives we identified, mobile reading vans served as extensions of local public library systems. The vans were stocked with age-appropriate children's books; in some cases, caregivers could access any materials available for loan in the library systems' collections through a request process. In addition to books, mobile reading vans can circulate other media and materials designed to promote children's language and literacy development. For example, the Children's Readmobile Service also offered magazines, puppets, and music compact discs. Read Rover II offered "Books in a Box," which contains books and supplemental materials to extend the use of the book and its themes beyond the story time.

In addition to providing resources for children, mobile reading vans can provide materials targeted to caregivers. For example, the vans could distribute a range of print materials, videos, and other media on child development, developmentally appropriate caregiving, health and safety, nutrition, and other topics. Mobile reading vans can also distribute parent education handouts and materials to home-based caregivers to share with the parents of children in their care. For example, Read Rover II provided information such as a kindergarten readiness checklist, information on dental care, and appropriate discipline strategies. These materials may be useful to both parents and caregivers.

**Literacy Activities.** During visits to caregivers' homes, mobile reading vans can also provide a circle or story time for the children in care. The goal of such an activity is twofold: (1) to provide an enriching experience for the children in care that builds their interest in reading and early reading

skills and, (2) to model age-appropriate book reading for the caregivers. For example, staff of the Children's Readmobile Services sought to model specific skills for caregivers: setting the stage for designated story time, reading the title of a book, reading in a warm and positive manner, establishing routines for beginning and ending a story, adding animation and making eye contact when reading a story, and helping children learn vocabulary through picture identification.

Librarians or other staff who operate the vans can also support caregivers in their book selection and can answer any questions they have during the visits. For example, the Children's Readmobile Service encouraged caregivers to establish a designated story time during the day and select sufficient books for each day of the week. In addition, staff supported caregivers by helping them select age-appropriate books for the range of children in their care.

**Dosage of Services**

The two reading van initiatives we identified visited home-based caregivers on a monthly basis for about two hours. Visit activities included the story time and checking out and returning books and other materials. There is no research available that indicates the optimal frequency of visits. Monthly visits seem reasonable for circulating materials. However, monthly observation of book reading, without additional coaching or other support, may not be sufficient to help the caregivers learn to implement new book-reading techniques.

**Strategies for Sustaining Participation**

There is no information available from the initiatives we identified, nor is there existing research, about strategies used to sustain participation in reading van initiatives over time. Because the reading vans come to the caregivers' homes, however, these initiatives require very little participation from caregivers. Moreover, both caregivers and children benefit from the initiative's regular supply of books and materials as well as the story time. As a result, these initiatives may be quite attractive to caregivers and may not require additional incentives to sustain their participation.

**Staffing Requirements**

There is no research available to indicate the necessary staffing patterns and qualifications of reading van staff. The Children's Readmobile Service was staffed by librarians with training in early literacy promotion and interactive reading techniques. Read Rover II was also staffed by literacy specialists. Such training would be necessary if staff are to provide a story time using specific book-reading techniques, model specific strategies for caregivers, and answer their questions about literacy promotion. If staff are only circulating materials and providing written information to caregivers, less training may be required.

**Cost Categories**

The primary costs for reading vans are (1) direct services, (2) supervision and training, (3) materials, and (4) administration and overhead. The largest costs for this strategy are likely to be the vans themselves and their operating costs, books and other materials stocked on the vans, and staff time (Table XI.3). Costs will vary depending on the frequency of visits to caregivers' homes and the number of caregivers enrolled. If reading vans are operated by or in partnership with local library systems and can use books and materials from library collections to stock the vans, costs for books and other materials may be minimal.

**Table XI.3. Cost Categories for Reading Vans**

| Category | Description |
|---|---|
| Direct services | Staff time to stock the vans and visit caregivers homes |
| Supervision and training | Supervision of literacy specialists who staff the vans through regular meetings and periodic observations of visits |
| Materials | Purchase or rental and maintenance of vans, fuel, books and other materials stocked in the vans |
| Administration and overhead | Limited, if any, space and utility costs (since most services are conducted off-site); insurance |

## Expected Outcomes

Reading vans provide additional support to help caregivers translate knowledge into practice (beyond that of just materials and mailings), but the relatively light touch of reading vans still suggests that changes in outcomes beyond those related to the caregiving environment (such as a greater number of books) or caregiver knowledge will be difficult to affect. Even to achieve changes in caregiver knowledge and especially practice, logic models for reading van initiatives need to develop dosage requirements and specify the pathways to these targeted outcomes given the frequency of visits and the potential for use of the materials provided. The modeling of reading techniques and the possibility that the staff member can answer caregiver questions may be the pathway of influence to improving the quality of care. Given how challenging it is to improve children's language and literacy skills in full-day, full-year classroom-based settings, unless the reading van visits frequently (twice per month or more), or is coupled with another strategy, changes in targeted outcomes may not be observed. In this section, we describe the types of outcomes that could be expected from reading van initiatives (Table XI.4).

### Caregiver Outcomes

Reading vans focus on exposing caregivers and children to books and other materials that support language and literacy skills. In addition, reading vans are usually affiliated with local libraries and may facilitate library use by caregivers and children and their families. Reading van staff may share strategies and knowledge with caregivers about reading to children, and may advertise library events to which caregivers can bring children during the day. By making books and supports for using them with children readily accessible, reading vans encourage caregivers to try new reading strategies with children and to enrich the print environment. Vans that include lending capabilities also enrich the environment by adding more books to the caregivers' homes.

Reading vans may also convey information about specific themes, such as health and safety, and reinforce them by engaging children in stories about the themes. Reading van staff may share related newsletters or curriculum materials with caregivers to extend the learning and provide additional resources. In this way, caregivers may make changes in the environment that support healthy and safe practices.

**Table XI.4. Potential Outcomes of Reading Vans**

| Domain | Description of Outcomes |
|---|---|
| **Caregiver Outcomes** | |
| Caregiver knowledge | • Appropriate expectations and understanding of supports for cognitive, language, and literacy development<br>• Strategies for supporting language development and prereading skills for children learning multiple languages<br>• Strategies to keep children engaged in reading activities<br>• Appropriate expectations for children about how long they can stay engaged before behavior problems arise<br>• Strategies for health and safety of children (hygienic practices supported; potential physical dangers addressed; safe and accessible eating, sleeping, and toileting environment) |
| Physical environment | • Enhancement of the print environment (such as children's books and magazines)<br>• Provision of books that are selected and valued by individual children<br>• Presence of books that address health and safety issues<br>• Provision of a sufficient number of different types of materials to avoid conflict among children<br>• Variety of age-appropriate materials (such as puzzles and manipulatives) |
| Caregiver practices | • Frequency of high quality language modeling and reading to children<br>• Use of open-ended questions and longer waiting time for response<br>• Increased use of and/or trips to the library<br>• Use of health and safety practices (hygienic practices supported; potential physical dangers addressed; safe and accessible eating, sleeping, and toileting environment) |
| Professionalism | None expected |
| Caregiver well-being | None expected |

## Child and Parent Outcomes

Outcomes for children and parents are distal and may not be reasonable to expect from reading vans as a stand-alone strategy. For this reason, such outcomes are not shown in Table XI.4 but are briefly discussed as possibilities. By increasing the number of available books and making reading an enjoyable experience, reading vans may encourage children as they learn about books and print and reinforce developing knowledge and skills. If provided more frequently (such as weekly) and reinforced with other strategies, such as training through workshops, reading vans may affect the quality of the environment and caregivers' interactions with children around books. Through this pathway, children's language and literacy skills may improve. Practice with listening to stories and discussing them with reading van staff also prepares young children for similar experiences in kindergarten.

Given the lack of evidence about reading vans and their effects, extrapolating to parent outcomes is challenging. As children's interest in books increases and their ability to attend to stories grows, they may be more likely to engage their parents in reading books and telling stories. Parents

may also appreciate caregivers providing school readiness supports in this area. This may affect parents' perceptions of children's school readiness.

## Evidence of Effectiveness

We found no rigorous evaluations of reading van initiatives. A small descriptive study of the Children's Readmobile Service was conducted in 2005 (Table XI.5). In that study, librarians provided weekly visits (more frequent than the usual intensity of monthly visits) to home-based caregivers; the librarians provided library services and a story time and coached caregivers on how to implement 10 interactive reading skills. These 10 skills were: (1) setting the stage for a designated reading time, (2) reading the title of a book, (3) knowing when to reread stories, (4) reading with a warm and positive manner, (5) effectively holding the book, (6) age-appropriate book selection, (7) routines for beginning and ending a story, (8) adding animation and making eye contact when reading a story, (9) helping children learn vocabulary by picture identification, and (10) encouraging designated story times per day.

**Table XI.5. Design Elements of Studies of Reading Vans**

| Focus of Study | Study Design | Methods | Sample Size/ Unit of Analysis | Outcome Measures | Limitations |
|---|---|---|---|---|---|
| Children's Readmobile Service | Pre-post descriptive study over 5 months | Qualitative interviews and story-reading skills questionnaire with caregivers; child assessment | 16 home-based caregivers; 6 children | *For Caregivers*: Increased knowledge and practice of story-reading skills<br>*For Children:* Literacy skills | Small sample size; descriptive, with no comparison group; self-reported outcomes for caregivers |

**Source:** Tanabe et al., 2005.

### Findings on Caregiver and Child Outcomes

Caregivers reported increasing the frequency of reading to children and an increased knowledge of the targeted interactive reading skills (Tanabe et al., 2005). Children in the study sample also showed improvement in three specific skills: picture naming, alliteration, and rhyming. These results, although promising, should be interpreted with caution because the evaluation was conducted on a very small and selected sample. Caregivers who agreed to participate were likely to be highly motivated to develop their book-reading skills. Moreover, the frequency of service delivery was more intensive—weekly rather than monthly—than is typical for reading van initiatives.

### Findings on Fidelity

No information about fidelity of implementation was provided in the study findings.

## Research Gaps and Needs

The very limited research evidence on the effectiveness of reading van initiatives does not provide much information about this strategy's potential for improving quality in home-based child care. Specific research needed on reading van initiatives includes the following:

- **Develop or Refine the Logic Model for Reading Vans.** It is not clear that the current reading van initiatives have extensive goals related to improving child care quality or child outcomes. Certainly, these initiatives want to support and expand reading practices that promote early literacy and language, but they may view reading vans as one component of a larger mission (the public library system for example) and do not have expectations that reading vans on their own will achieve more than modest goals.
- **Develop Fidelity Standards and Measurement Tools for Use in Replication.** Implementation studies that explore the practices of current reading van initiatives can help in refining a model that holds promise for replication. Specific elements of these initiatives that warrant systematic documentation are the qualifications of reading van staff, the content of visits with providers, and the frequency and duration of these visits.
- **Assess the Responses by Home-Based Caregivers of All Types to Reading Vans.** Descriptive studies can also provide important information about how well received reading van services are among caregivers and whether there are differences in responses from family, friend, and neighbor caregivers versus regulated family child care providers. Studies can gather information about patterns in accessing books and other materials from the vans or the library systems, and the use of reading practices and strategies modeled by reading van staff.

# XII. NEXT STEPS FOR DESIGN AND EVALUATION

In recent years, policymakers, child care administrators, and researchers have recognized the pressing need for initiatives to support quality in home-based child care settings. Home-based child care represents a significant portion of our nation's child care supply—especially for infants and toddlers and children from low-income families. Limited research on the quality of home-based child care indicates overall levels of quality in the poor-to-moderate range.

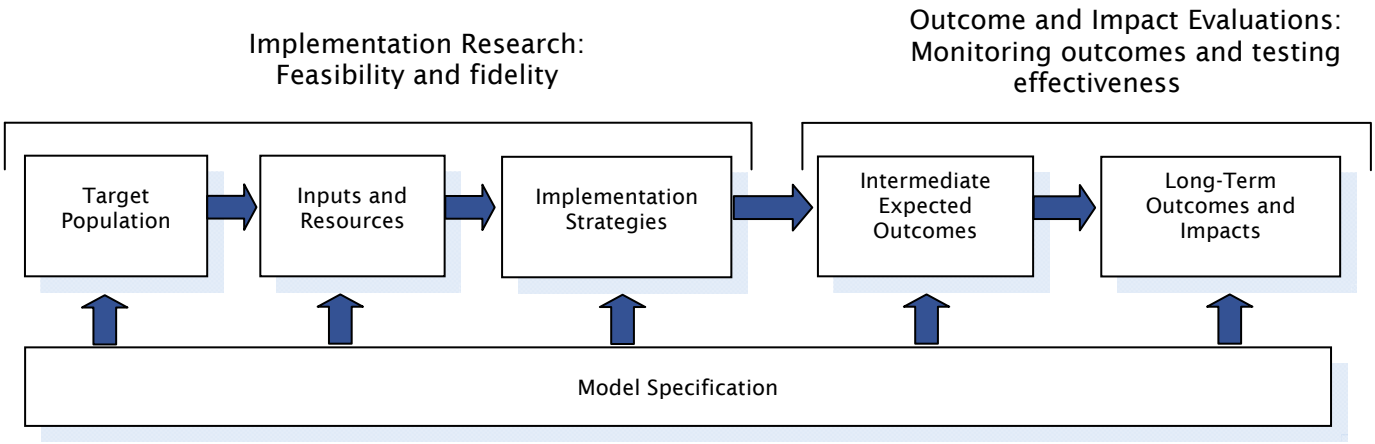
A number of challenges, however, have impeded the development of strong initiatives that are likely to make a difference. First, the wide diversity of home-based caregivers—in terms of their demographic characteristics, educational backgrounds and experience, regulation status, motivation for providing care, needs, and interests—means that no single initiative is likely to be effective with this group as a whole. If high-quality caregivers are to be attracted and retained and their needs met, initiatives will have to be tailored to many different subgroups. Second, quality improvement strategies that are effective with early childhood teachers in center-based settings may not be appropriate for home-based caregivers. However, little rigorous research has been done on the effectiveness of quality initiatives for home-based caregivers. Initiative developers do not have adequate information to guide their choices of service delivery strategy, content, and expected outcomes. Moreover, many initiatives currently or recently in the field are not well specified; they lack clear logic models, documentation of program processes and staffing requirements, and fidelity standards and measures.

Together, these factors all point to a critical need for the development and testing of strong quality improvement initiatives for home-based child care settings. This report compiles the available research literature on home-based child care and related fields, as well as information about the range of initiatives currently or recently in the field to support subsequent development efforts. We have presented information about eight different service delivery strategies that range in their intensity, discussing implementation elements of each strategy as a stand-alone initiative. In reality, however, most initiatives are likely to employ a combination of these strategies, as discussed in Chapter III. In this chapter, we propose a set of next steps for developing effective quality improvement initiatives for home-based child care through evaluation.

## Research and Evaluation Activities Needed to Inform Development of Quality Initiatives for Home-Based Child Care

We discuss the types of research and evaluation activities that can inform the development of quality improvement initiatives for home-based care by connecting back to the logic model. As presented in Figure XII.1, 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.

**Figure XII.1. Types of Research and Evaluation Activities to Inform Development of Quality Initiatives for Home-Based Child Care**




The time frame needed to produce evaluation findings increases in length as the focus moves from left to right in the logic model. Implementation studies can be relatively short-term, depending on the purposes for which the information will be used. Outcome and effectiveness studies need a much longer time frame, one that is dependent upon the theory about how long it may take to produce changes, first in intermediate and then in long-term outcomes.

The ultimate question for evaluation is whether the initiative is effective in achieving the expected outcomes. However, the effectiveness of home-based care initiatives should not be evaluated until they are fully developed and have been piloted to assess the feasibility of implementation. Evaluations of initiatives in the developmental stages should focus on implementation. As initiatives evolve, outcome studies can monitor their progress and suggest areas in need of improvement or adaptation. Fully-developed initiatives that are well specified and well implemented can provide the best tests of effectiveness. Consideration of a clear logic model, attention to fidelity issues and measurement, and learning from preliminary, less-intensive outcomes studies can guide decisions about when evaluations of initiatives should estimate impacts for caregivers, children, and parents.

## Model Specification

As noted earlier, many quality initiatives for home-based child care are not well specified: they lack well-developed logic models with specific target outcomes. Consequently, they may not target services to specific types of caregivers and services offered may not be closely linked to desired outcomes. Research is needed to delve deeper into the theories of change for specific strategies—mapping the mechanisms through which the strategies might improve quality, identifying the elements that require greater definition or structure to have a strong enough influence on quality, and exploring different caregiver and child outcomes that might warrant further examination 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.

## Implementation Research

Research focused on implementation is informative throughout the life of an initiative, but particularly so in the early development stages. These evaluations explore the feasibility of implementation, the need for model adaptation, and the development of implementation fidelity standards and measures for assessing fidelity.

**Feasibility of Implementation.** Some strategies described in this report are implemented more feasibly than others, and some 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 assess the feasibility of completing frequent visits as well as for sustaining caregivers' interest and participation in the visits for long enough to make a difference. Caregivers also face multiple challenges to participating in formal education programs. Some challenges may be related the logistics of participating (such as timing and location of services), others to the educational backgrounds of the caregivers. Research is needed to assess the suitability of formal education programs for different types of caregivers and the supports that can sustain caregivers' participation so that services can be targeted appropriately.

**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 who would need to bring multiple children to these events. Adaptation of content is needed for caregivers from diverse cultural backgrounds and 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.

**Fidelity Standards and Measures.** Measures of implementation and 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, indicate 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, research is needed 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.

Measures of implementation and fidelity that could be useful as part of an evaluation are shown in Table XII.1. To simplify, we have divided the initiatives into the three categories of intensity, as described in Chapter III.

**Table XII.1. Implementation and Fidelity Measures**

| | Low Intensity Strategies[a] | Moderate Intensity Strategies[b] | High Intensity Strategies[c] |
|---|---|---|---|
| **Education and Experience of the Trainer and Caregiver** | | | |
| Trainer's Education and Experience | Not applicable | Education level and experience of workshop teacher, leader of Play and Learn sessions, or peer support | Education level and area of study for home visitor, coach, or educator;<br>Years of experience in this role |
| Technical Assistance Provided to Trainer | Not applicable | Review of workshop sessions, Play and Learn sessions, and peer support sessions and feedback to providers of these services to improve content knowledge and ability to engage caregivers; frequency, length, and content of these review and feedback sessions | Technical assistance provided to coaches or home visitors to improve content knowledge and ability to engage caregivers—frequency and length of sessions |
| Caregiver Characteristics and Prior Education or Training | Education level;<br>Years as a home-based caregiver;<br>Other caregiving experience;<br>Whether registered, licensed, or providing subsidized care | Education level;<br>Years as a home-based caregiver;<br>Other caregiving experience;<br>Whether registered, licensed, or providing subsidized care | Education level<br>Years as a home-based caregiver;<br>Other caregiving experience;<br>Whether registered, licensed, or providing subsidized care |
| Caregiver Knowledge and/or Credentials | Whether caregiver has a CDA, teacher's license<br>Certified in first aid and/or CPR;<br>Knowledge of child development and developmentally appropriate practice | Whether caregiver has a CDA, teacher's license;<br>Certified in first aid and/or CPR;<br>Knowledge of child development and developmentally appropriate practice | Whether caregiver has a CDA, teacher's license;<br>Certified in first aid and/or CPR;<br>Knowledge of child development and developmentally appropriate practice |
| **Training and Technical Assistance Provided** | | | |
| Initial Training Required | Not applicable | Not applicable | Prerequisite education required for the formal education course |
| **Dosage of the Initiative and Provider Engagement** | | | |
| Dosage/Intensity of Initiative from Caregiver's Perspective | Amount of grant and specific spending requirements;<br>Technical assistance provided for administering or using the grant;<br>Frequency and length of visits from reading van;<br>Frequency of informational materials (e.g., newsletters) | Length and frequency of workshops;<br>Length and frequency of Play and Learn sessions;<br>Length and frequency of peer support sessions | Frequency and length of home visits;<br>Frequency and length of formal education classes;<br>Frequency and length of coaching sessions |

Table XII.1 *(continued)*

| | Low Intensity Strategies[a] | Moderate Intensity Strategies[b] | High Intensity Strategies[c] |
|---|---|---|---|
| Dosage/Intensity from Child's Perspective | Hours per day and days per week in care setting;<br>Weeks per year in care setting | Hours per day and days per week in care setting;<br>Weeks per year in care setting | Hours per day and days per week in care setting;<br>Weeks per year in care setting |
| Content of Initiative | Information provided by reading van staff;<br>Types of materials and content of information provided | Content of workshops, Play and Learn, or peer support | Content of home visits – curriculum used;<br>Topics covered in course (or syllabus);<br>Content of coaching |
| Provider Engagement in Initiative | Whether provider sought the grant and used it for its intended purpose;<br>Whether and how often caregiver used the books borrowed from the reading van;<br>Whether caregiver read the materials | Level of interest in the workshop;<br>Whether provider attended all of a multipart workshop series;<br>Number of play and learn sessions attended;<br>Number of peer support sessions attended | Number of sessions attended; number of months of participation;<br>Efforts made to practice techniques and activities discussed in home visiting, coaching, or class sessions |
| **Fidelity of Delivery** | | | |
| Fidelity: Curriculum | Not applicable | Extent to which workshop covered expected topics | Fidelity to curriculum used for home visit (using measure designed by the curriculum developer);<br>Extent to which formal course covered topics in the syllabus |
| **Quality of Caregiving Environment and Caregiver Outcomes** | | | |
| Changes in Physical Caregiving Environment | Safety of the environment;<br>More children's books available | Safety of the environment;<br>More children's books available;<br>Arrangement of the caregiving environment to promote exploration and play and minimize conflict | Safety of the environment;<br>More children's books available;<br>Arrangement of the caregiving environment to promote exploration and play and minimize conflict |
| Responsiveness of Caregiver to Children | Not applicable | Use of positive behavior management techniques | Use of positive behavior management techniques |

Table XII.1 *(continued)*

| | Low Intensity Strategies[a] | Moderate Intensity Strategies[b] | High Intensity Strategies[c] |
|---|---|---|---|
| Quality of Language Environment | Not applicable | More frequent book reading | More frequent book reading;<br>Extends reading during play time;<br>Increase in the complexity and variety of language used;<br>Allows waiting time for child to respond;<br>Reflects on and elaborates child's speech;<br>Uses why and how questions to encourage more expressive language from children |
| Quality of Caregiving Environment | Higher average Family Child Care Environment Rating Scale (FCCERS) score; Higher Child/Home Early Language and Literacy Observation (CHELLO) score | Higher average Family Child Care Environment Rating Scale (FCCERS) score; Higher Child/Home Early Language and Literacy Observation (CHELLO) score | Higher average Family Child Care Environment Rating Scale (FCCERS) score; Higher Child/Home Early Language and Literacy Observation (CHELLO) score |
| Engagement of Families in Care Setting and/or Initiative | Not applicable | Not applicable | Parents' satisfaction with the quality of the home-based care environment;<br>Turnover in the care setting |
| Professionalism | Not applicable | Caregiver reports fewer conflicts with parents over hours of care;<br>Caregiver progresses toward registration and licensing | Caregiver progresses toward licensing or accreditation;<br>Caregiver develops policies regarding timely payment, hours of care, and payment for extra time |

[a]Includes grants to providers, materials and mailings, and reading vans.
[b]Includes Play & Learn, training through workshops, and peer support.
[c]Includes home-based technical assistance and professional development through formal education.
CDA = child development associate; CPR = cardiopulmonary resuscitation.

**Outcome Evaluations**

There are a number of methods for assessing the progress an individual service delivery strategy or a broad initiative is making in achieving expected outcomes. These methods fall along a spectrum that may be thought of in a general sense as progressing from descriptive, to suggestive, to conclusive in assessing the influence of the initiative on the expected outcomes. The methods are all useful but address different purposes and research questions. In terms of methodology, the differences arise from three elements: (1) the presence of a comparison group to participants in the initiative, (2) the method used to select the two groups, and (3) the use of the same groups over time.

**Descriptive Outcome Studies.** These studies examine the changes in expected outcomes only for participants in the strategy or initiative; there is no comparison group. Such studies are useful for monitoring to ensure 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).

**Correlational Outcome Studies.** These studies examine the differences in expected outcomes between comparison groups. Many of these types of studies use a pre-post design that compares—from a baseline period (before services) to a specified future period (into or after service receipt)—the changes in outcomes of caregivers or children in an initiative with the changes in outcomes of those who are not. In these studies, the groups are selected into participants and nonparticipants either by the program (through eligibility criteria) or by decisions made by the individual. The groups can have substantial differences in both measured and unmeasured characteristics that can influence the patterns of outcomes external to the initiative. These outcome studies produce suggestive findings about the correlations between the initiative and the expected outcomes, but do not provide evidence that the initiative caused the differences in outcomes between participants and nonparticipants. Nonetheless, findings from these studies can produce useful information about whether the initiative is heading in the right direction, whether certain elements of the initiative need refinement, or when the initiative is ready for rigorous evaluation. The majority of the studies referenced throughout this report are correlational.

**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 determine this causality, 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. In measurement of the impacts of an initiative, the most important comparison is between treatment and control groups at a follow-up point when changes are likely to be observed. Nevertheless, evaluations often include not just follow-up measures, but also baseline measures of caregiver and child outcomes.

**Criteria for Selecting Measures of Expected Outcomes.** Initiative developers should work closely with evaluators to select appropriate measures for any outcome evaluation they pursue. Outcomes of the initiative for caregivers, children, and parents will be specified by the logic model but there are some general principles and guidance to follow in the selection of measures. The timing of the measurement should coincide with the expected timing of changes in caregivers, children, and parents. Many potential outcome measures exist, but the list can be winnowed down using criteria that focus on the characteristics of the initiative and of the caregivers and children targeted. The following criteria are useful for deciding among outcome measures to use in an evaluation. The rigor of the method will also contribute to the selection of outcome measures and to decisions on how closely these criteria should be applied.

- **Relevance and Sensitivity to Goals of the Initiative and Potential Spillover.** The measures should focus on aspects of the caregiving environment and behavior, as well as child and parent outcomes targeted by the initiative, but they should also be broad enough to capture other changes that might occur. Including a global measure of environmental quality enables evaluators to determine whether the initiative results in any additional positive or negative effects on the care setting besides those directly targeted by the initiative. Measures should have demonstrated sensitivity to changes in staff training, education, and experience.

- **Appropriateness to the Target Population.** Measures of caregiver outcomes should be appropriate for use with the target population of caregivers in terms of cultural appropriateness, primary language, and literacy level. Measures of the outcomes of children and parents should also be appropriate to culture, language, and reading level (for parents), as well as developmentally appropriate (for example, for dual-language learners or infants and toddlers).

- **Adequate Psychometric Properties.** All measures should have adequate reliability and validity. In general, measures should have a demonstrated internal consistency reliability of 0.70 or higher (this level is generally accepted as an adequate demonstration of reliability). Measures collected through observation must also demonstrate good inter-rater reliability. The general standard for this reliability is an agreement that is exact or within one rating point, or a kappa correlation of at least 0.90 between observers.

- **Prior Use in Large-Scale Surveys and Evaluations.** To increase the comparability with other national studies and evaluations, evaluators should select measures used in other studies of similar populations (for example, early care and education providers, low-income children and families, dual-language learners, infants and toddlers). If a measure taps an important outcome but has not been used in a large study, evaluators should determine whether it has ever been used in settings similar to those in the study.

- **Reasonable Cost and Burden.** It should be possible for trained field staff to administer the measures reliably; highly experienced graduate students or evaluators should not be needed. In addition, the outcome measures should impose minimal burden on caregivers, children, and parents. For observational measures, a few clarifying questions can be asked of caregivers, but minimal disruption of the setting is the usual standard for observational measures.

## Setting a Research Agenda for Quality Improvement Initiatives for Home-Based Child Care

Research is needed to inform the development, refinement, and potential replication of quality improvement initiatives for home-based child care. For each strategy described in this report, we identified a set of research gaps and needs. It is neither appropriate nor cost-effective to rigorously evaluate each strategy. As discussed above, the type of evaluation depends on the stage of development; however, the questions of what to evaluate and how are wide ranging and vary with the intensity and individualization across service delivery strategies. It is beyond the scope of this report to present the detailed considerations necessary in designing evaluations. However, building on the information that has been presented in this report about what is known and what gaps remain, we provide some examples of potential approaches to the evaluation of the individual service strategies as food for thought in moving forward.

**Developmental Evaluation on Individual Strategies.** A great deal of research is still needed to inform model specification and fidelity to implementation across the strategies. Strategies such as home-based technical assistance and workshops are being widely adapted and show promise, but have been challenging to document with the specificity necessary to support replication and more rigorous research. For initiatives that include home-based technical assistance, for example, it is important to document the requirements for fidelity to the model in terms of the number of visits, their content, and the duration of services. Studies of these initiatives should collect caregiver-level data on the services received by caregivers. These data could be reported by the home visitors, coaches, or consultants using a service tracking tool (database or MIS) and caregivers should be asked to report on the number of visits received, how long they remained in the program, and, if they left before the program ended, why they did not continue. This triangulation of information will inform model refinements based on understanding the specific type and level of services provided as well as caregiver experiences and responses. A similar, but possibly less extensive, data collection effort could also inform refinement of the strategies at the lowest end of intensity—and may comprise the full extent of evaluation needed for such strategies. For example, the limited use of reading vans and small scale of the current initiatives that do exist suggests that modest efforts of evaluation are reasonable. Research could focus on documenting the qualifications of staff (such as literacy specialists) and the frequency and duration of visits to home-based caregivers, as well as the response to the reading vans on the part of caregivers. Data collection could rely on interviews with reading van staff; logs kept by reading van staff to collect data on frequency, duration, and types of services at each caregiver location; as well as surveys and possibly focus groups with caregivers. Outcome measures can largely be obtained by caregiver self-reports through surveys.

**Tests of Effectiveness with Different Types of Caregivers and Children.** Some strategies or broader initiatives may be ready for rigorous evaluations using randomized control 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. Four rigorous evaluations of home-based technical assistance strategies have already been conducted, demonstrating that random assignment is a feasible study design for evaluating the effects of this type of strategy. Experimental or quasi-experimental evaluations also seem feasible in evaluating a number of the other service delivery strategies discussed in this report. Random assignment between caregivers who receive the services (the treatment group) and those who do not (the control group) could be accomplished with relative ease for strategies that include workshops, Play and Learn, peer support, materials and mailings, and reading vans. The important considerations are whether the

scale of such strategies on their own is large enough to expect changes in outcomes and which outcomes to evaluate. For many of these strategies, tests of effectiveness may be limited to examining caregiver rather than child outcomes.

**Planned Variation to Test Different Strategies or Different Components of Initiatives.** 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). To test different strategies, caregivers enrolled in an initiative that aims to improve children's language and early literacy skills, for example, could be randomly assigned to training workshops, visits from a reading van and trained literacy specialist, or training workshops plus visits. The evaluation could assess the relative impacts of each service delivery strategy on the literacy environment, the overall quality of the environment, the caregiver's skills in promoting literacy and child outcomes in the areas of language and early literacy. To examine the importance of other aspects of the model, caregivers could be randomly assigned to initiatives with different levels of staff qualifications, or with different levels of training and support provided to staff. Such an evaluation could shed light on the qualifications or levels of training and support needed to achieve desired outcomes.

We use the example of training through workshops to further exemplify the use of planned variation designs that could test a variety of conditions. These include: (1) whether higher levels of dosage of a workshop matters in producing effects through random assignment to a control group that does not participate in workshops and to two or more treatment groups that vary in frequency and/or duration of the workshops; (2) whether other elements of the workshops—such as trainer qualifications, delivery approaches, or degree of structure to the content—matter to outcomes (using a planned variation approach with multiple treatment groups); or (3) whether effects vary depending on the delivery of workshops alone or in combination with an approach to followup such as coaching, consultation, or home visiting again through random assignment of caregivers to a control group (no services) and multiple treatment groups (one with workshops alone and one with workshops plus additional services).

## 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. This report and other products created for this project are designed to disseminate what is known, identify gaps in our knowledge, and suggest a future research agenda. 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

Adams, J. H., & Buell, M. (2002). *Project CREATE: Caregiver Recruitment, Education and Training Enhancement.* Newark, DE: University of Delaware, Center for Disabilities Studies.

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.

Barnett, W. S. (2004). *Better teachers, better schools: Student achievement linked to teacher qualifications.* Preschool Policy Matters, Issue 2. New Brunswick, NJ: National Institute for Early Education Research.

Boller, K., Vogel, C., Johnson, A., Novak, T., James-Burdumy, S., Crozier, L., & Uhl, S. (2004). *Using television as a teaching tool: The impact of Ready to Learn workshops on parents, educators and the children in their care. Final report.* Princeton, NJ: Mathematica Policy Research.

Boushey, H., & Wright, J. (2004). *Working moms and child care.* Washington, DC: Center for Economic and Policy Research.

Bradley, R. H., Caldwell, B. M., & Corwyn, R. F. (2003). The Child Care HOME Inventories: Assessing the quality of family child care homes. *Early Childhood Research Quarterly, 18*, 294–309.

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. J., Joesch Battelle, J. M., & Doyle, S. (2002). *Understanding family, friend, and neighbor care in Washington State: Developing appropriate training and support.* Report submitted to the Washington Department of Social and Health Services, Division of Child Care and Early Learning. Seattle, WA: University of Washington.

Bromer, J., van Haitsma, M., Daley, R., & Modigliani, K. (2009). *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.

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.

Buysse, V., & Wesley, P. (2005). *Consultation in early childhood settings.* Baltimore, MD: Brookes Publishing.

Caldwell, B.M., & Bradley, R. H. (1984). *Home observation for measurement of the* environment. Little Rock, AK: University of Arkansas at Little Rock.

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.

Cassidy, D. I., Buell, M. I., Pugh-Hoese, S., & Russell, S. (1995). The effect of education on child care teachers' beliefs and classroom quality: Year one evaluation of the TEACH early childhood associate degree scholarship program. *Early Childhood Research Quarterly,* 10, 171–183.

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

Child Trends. (2007). *A focus on caregiver training.* Presentation at the National Association of Child Care Resource and Referral Agencies National Symposium, February, 2007.

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*, 52–56.

Cochran, M., & McCabe, L. A. (2008). Can Home Visiting Increase the Quality of Family Child Care? Findings from the Caring For Quality Project? Presentation at the Head Start Research Conference, Washington, DC.

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.

Dodge, D. T., & Colker, L. (2003) *The creative curriculum for family child care.* Washington, DC: Teaching Strategies, Inc.

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.

Dunn, L.M, & Dunn, L.M. (1997). *Peabody picture vocabulary test manual* (3rd ed.). Circle Pines, NM: American Guidance Services.

Dunn, L. M., & Dunn, D. (2007). *Peabody picture vocabulary test manual* (4th ed.). Circle Pines, NM: American Guidance Services.

Dwyer, J. (2006). *Project Great Start professional development initiative: Changing the odds.* Presentation at the National Association for the Education of Young Children Annual Conference, Atlanta, GA.

E3 Institute. (2007). *Five years of learning: A report on the first five years of Santa Clara CARES 2002–2006*. San Jose, CA: WestEd.

Early, D. M., Maxwell, K. L., Burchinal, M., Alva, S., Bender, R. H., Bryant, D., Cai, K., Clifford, R. M., Ebanks C., Griffin, J. A., Henry, G. T., Howes, C., Iriondo-Perez, J., Jeon, H., Mashburn, A. J., Peisner-Feinberg, E., Pianta, R. C., Vandergrift, N., & Zill, N. (2007). Teachers' education, classroom quality, and young children's academic skills: Results from seven studies of preschool programs. *Child Development, 78*, 558–580.

Edwards, A., & Lutzker, J. R. (2008). Iterations of the SafeCare model: An evidence-based child maltreatment prevention program." *Behavior Modification*, *32,* 736–756.

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.

First 5 San Joaquin. (2009). *Child care mini-grant application packet: Round 21*. Stockton, CA: First 5 San Joaquin. Retrieved from http://www.sjgov.org/firstfive/base/documents/20090629-170357.pdf

Fong, G., & Nemoto, M. A. (unpublished). *Learning to grow.* Honolulu, HI: Center of the Family, University of Hawai'i at Manoa.

Fountain, A. R., & Goodson, B. (2008). *Massachusetts Universal Pre-Kindergarten Pilot Program evaluation.* Cambridge, MA: Abt Associates.

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, S. L., Loeb, S. & Chang, Y-W. (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).* Abt Associates, Inc.: Cambridge, Massachusetts.

Groark, C. J., Mehaffie, K. E., McCall, R. B., Greenberg, M. T., & the Universities Children's Policy Collaborative. (2002). *Executive summary: From science to policy: Research on issues, programs, and policies in early care and education.* Pittsburg, PA: Author.

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.

Hanft, B. E., Rush, D. D., & Sheldon, M. L. (2005). *Coaching families and colleagues in early childhood.* Baltimore, MD: Brookes Publishing.

Harms, T., & Clifford, R. M. (1989). *Family day care rating scale.* New York: Teacher's College Press, 1989.

Harms, T., Clifford, R. M., & Cryer, D. (1998). *Early childhood environment rating scale: Revised edition.* New York: Columbia University, Teachers College Press.

Harms, T., Cryer, D., & Clifford, R. M. (2007). *Family child care environment rating scale revised edition.* New York: Columbia University, Teachers College Press.

Howes, C., Galinsky, E., & Kontos, S. (1998). Child care sensitivity and attachment. *Social Development, 7*(1)*,* 25–36.

Infant Health and Development Program. (1990). Enhancing the outcomes of low-birth-weight, premature infants: A multisite, randomized trial. *Journal of the American Medical Association, 263,* 3035–3042.

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

Kansas Association of Child Care Resource and Referral Agencies, Infant/Toddler Project. (2003). *Child care quality study.* Topeka, KS: Author.

Kelly, J. F., Zuckerman, T., & Rosenblatt, S. (2008). Promoting first relationships: A relationship-focused early intervention approach. *Infants and Young Children, 21,* 285–295.

Koh, S., & Neuman, S. B. (2009). The impact of professional development in family child care: A practice-based approach. *Early Education and Development, 20,* 537–562.

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.

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.

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. M. & others. (2005). The effectiveness of Early Head Start for 3-year-old children and their parents: Lessons for policy and programs," *Developmental Psychology, 41,* 885–901.

Marshall, N., Creps, C. L., Burstein, N. R., Roberts, W. J., Dennehy, J., Robeson, W. W., & Wang, S. Y. (2004). *The cost and quality of family child care in Maine.* Wellesley, MA: Wellesley College Center for Research on Women.

Massachusetts Department of Early Education and Care. (2009). *Fact sheet: Universal Pre-Kindergarten (UPK) pilot grant program.* Boston, MA: Commonwealth of Massachusetts. Retrieved from http://www.eec.state.ma.us/docs/UPKFactSheet08192009.pdf

Maxwell, K. L., Field, C. C., & Clifford, R. M. (2006). Defining and measuring professional development in early childhood research." In M. Zaslow & I. Martinez-Beck (Eds.), *Critical Issues in Early Childhood Development*. Baltimore, MD: Paul H. Brookes Publishing.

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. (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. Ithaca, NY: Cornell University.

Mead, S., & MacNeil, C. (2006). Peer support: What makes it unique? *International Journal of Psychosocial Rehabilitation. 10*, 29–37.

Meisels, S. J., Liaw, F. R., Dorman, A., & Nelson, R. (1995). The Work Sampling System: Reliability and validity of a performance assessment for young children. *Early Childhood Research Quarterly*, *10*, 277–296.

Mendoza, J., Katz, L. G., Robertson, A., & Rothenberg, D. (2003). *Connecting with parents in the early years: Executive summary*. Urbana-Champaign, IL: University of Illinois at Urbana-Champaign College of Education Early Childhood and Parenting Collaborative.

National Portage Association. *Portage*. Retrieved November 9, 2009 from http://www.portage.org.uk/index.html

Neuman, S. B., Koh, S., & Dwyer, J. (2008). CHELLO: The child/home early language and literacy observation. *Early Children Research Quarterly, 23,* 159–172.

Norris, D. J. (2001). Quality of care offered by providers with differential patterns of workshop participation. *Child and Youth Care Forum, 30*, 111–121.

Organizational Research Services. (2008). *Family, friend and neighbor caregiver project: 2007 report*. Seattle, WA: Author.

Parents As Teachers National Center (2002). *Supporting care providers through personal visits* (2nd ed.). St. Louis, MO: Author.

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., 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.

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. (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. (2007). Assessing initiatives for family, friend, and neighbor child care: An overview of models and evaluations. *Child Care & Early Education Research Connections.* Research-to-Policy Connections No. 5. Retrieved November 2, 2009, from http://www.researchconnections.org/location/11787

Porter, T., & Kearns, S.M. (2005a). 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., & Kearns, S.M. (2005b). *Supporting family, friend and neighbor caregivers: Findings from a survey of state policies.* New York: Bank Street College of Education.

Porter, T., Paulsell, D., Del Grosso, P., Avellar, S., Hass, R., and Vuong, L. (2010a). *A Review of the Literature on Home-Based Child Care: implications for Future Directions.* Princeton, NJ: Mathematica Policy Research.

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

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

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., & 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. Retrieved May 11, 2009, from http://www.bankstreet.edu/gems/ICCC/CCATR final5.8.06

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.

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.

Rice, R. (2001). *Working with kith and kin caregivers: A guide for trainers.* New York: Bank Street College of Education.

Rider, S., & Atwater, R. (2009). Evaluation of Family, Friend, and Neighbor Toolkit Project. Portland, OR: Pacific Research and Evaluation, LLC.

Roggman, L. A., Cook, G. A., & Jump Norman, V. K., Christiansen, K., Boyce, L. K., & Innocenti, M. S. (2008). Home Visit Rating Scales. In L. A. Roggman, L. K. Boyce, and M. S. Innocenti, *Developmental Parenting: A Guide for Early Childhood Practitioners* (pp. 209-217). Baltimore: Paul H. Brookes Publishing.

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.

Santos, R. G. (2005). *Development and validation of a revised short version of the Working Alliance Inventory.* Unpublished doctoral dissertation, University of Manitoba, Winnipeg, Manitoba, Canada.

Sheridan, S. M., Pope Edwards, C., Marvin, C. A., & Knoche, L. L. (2009). Professional development in early childhood programs: Process issues and research needs. *Early Education and Development*, *20,* 537–562.

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.

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.

St. Pierre, R., Swartz, J., Gamse, B., Murray, S., Deck, D., & Nickel, P. (1995) *National evaluation of the Even Start Family Literacy Program: Final report.* Cambridge, MA: Abt Associates Inc.

Step Up (unpublished). *Participant survey.* San Jose, CA: Choices for Children.

Tanabe, M. D., McConnell, S. R., Achor, D., Schimitz, J., Strauchon, J., Tracy, S., & Wronka, G. (2005). Hennepin County Library children's Readmobile evaluation. Presentation at the American Library Association Meeting.

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.

Tout, K., Zaslow, M., Papillo, A. R., & Vandivere, S. (2001). *Early child care and education: Work support for families and developmental opportunities for young children.* Occasional Paper #51. Washington, DC: Urban Institute.

Tout, K., & Zaslow, M. (2006a). *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. (2006b). *The consultant's role in early care and education.* Presentation at the National Association for the Education of Young Children Annual Conference, Atlanta, GA.

Tout, K., Zaslow, M., & Berry, D. (2006). Quality and qualifications: Links between professional development and quality in early care and education settings. In Zaslow, M. and Martinez-Beck, I., (Eds.), *Critical Issues in Early Childhood Professional Development,* (pp. 77–110). Baltimore, MD: Paul H. Brooks Publishing Co.

Tutu and Me (2008). *Tutu and Me statewide data SY 2007–2008*. Honolulu, HI: Tutu and Me Traveling Preschool.

U.S. Department of Education, Planning and Evaluation Service. (1998). *National evaluation of the even start family literacy program, 1994–1997 final report*. Washington, DC: Author.

Washington State Institute for Public Policy (2004). *Benefits and costs of prevention and early intervention programs for youth*. Olympia, WA: Washington State Institute for Public Policy.

Wasik, B. H., & Bryant, D. M. (2001). *Home visiting: Procedures for helping families, 2nd edition*. Thousand Oaks, CA: Sage.

Whitebook, M. (2003). *Early education quality: Higher teacher qualifications for better learning environments: A review of the literature*. Berkeley, CA: Center for the Study of Child Care Employment, University of California at Berkeley.

Whitebook, M., Sakai, L., Kipnis, F., Almaraz, M., Suarez, E., & Bellm, D. (2008). *Learning together: A study of six B.A. completion cohort programs in early care and education. Year I report*. Berkeley, CA: Center for the Study of Child Care Employment, University of California at Berkeley.

Whitebook, M., Gomby, D., Bellm, D., Sakai, L., & Kipnis, F. (2009). *Preparing teachers of young children: The current state of knowledge, and a blueprint for the future*. Berkeley, CA: Center for the Study of Child Care Employment, Institute for Research on Labor and Employment, University of California at Berkeley.

Zaslow, M. J. (2009). Strengthening the conceptualization of early childhood professional development initiatives and evaluations. *Early Education and Development, 20,* 537–562.

Zaslow, M., & Martinez-Beck, I. (2006). C*ritical issues in early childhood*. Baltimore, MD: Paul H. Brookes Publishing Company.

Zaslow, M., & Tout, K. (2004). *Creating high quality preschool education*. Paper prepared for the Brookings-University of North Carolina Conference on Preschool Education September 9–10, 2004 Washington, DC.

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