

#### RESEARCH REPORT

# Evaluating Training and Professional Development for Home-Based Providers

A Brief for CCDF Lead Agencies and Researchers

January 2019

OPRE Report # 2019-11

# Evaluating Training and Professional Development for Home-Based Providers

January 2019

OPRE Report # 2019-11

Amelia Coffey and Julia Isaacs

#### **SUBMITTED TO**

Meryl Barofsky, project officer Office of Planning, Research, and Evaluation Administration for Children and Families U.S. Department of Health and Human Services

Contract Number: HHSP2332015000641

#### **SUBMITTED BY**

Julia Isaacs, project director Urban Institute 2100 M Street NW Washington, DC 20037

This report is in the public domain. Permission to reproduce is not necessary. Suggested citation: Coffey, Amelia, and Julia Isaacs. (2019). Evaluating Training and Professional Development for Home-Based Providers: A Brief for CCDF Lead Agencies and Researchers, OPRE Report #2019-11, Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

#### **DISCLAIMER**

The views expressed in this publication do not necessarily reflect the views or policies of the Office of Planning, Research, and Evaluation, the Administration for Children and Families, or the U.S. Department of Health and Human Services.

This report and other reports sponsored by the Office of Planning, Research, and Evaluation are available at www.acf.hhs.gov/opre.





## **Contents**

Acknowledgments	iv
Evaluating Training and Professional Development	1
Introduction	1
Evaluation Approaches in Recent Studies	2
Common Research Designs	3
Study Populations and Samples	5
Data Collection Methods and Instruments	7
Recruitment Challenges and Strategies for Engaging Providers	8
Conclusion	11
Appendix A. Data Sources and Methods	27
Appendix B. Glossary of Research Terms	28
References	31
About the Authors	33

CONTENTS

### Acknowledgments

This report was funded by the Office of Planning, Research, and Evaluation (OPRE) in the US Department of Health and Human Services' Administration for Children and Families under Contract # HHSP233201500064I. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

We express appreciation to Juliet Bromer, Diane Paulsell, and Eva Marie Shivers for providing their valuable advice and insights. We extend a special thank you to Toni Porter for extensive and thoughtful contributions in the role of senior adviser and to Meryl Barofsky, Alysia Blandon, Teresa Derrick-Mills, and Monica Rohacek for their careful review.

Cover image by Tim Meko.

IV ACKNOWLEDGMENTS

# Evaluating Training and Professional Development

#### Introduction

The 2014 reauthorization of the Child Care and Development Block Grant requires state child care agencies to establish a continuum of professional development "to enable child care providers to promote the social, emotional, physical, and cognitive development of children and to improve the knowledge and skills of the child care workforce." The legislation also requires all providers who care for children receiving assistance through the Child Care and Development Fund (CCDF) to receive preservice and ongoing training in certain health and safety topics. This training requirement extends to all providers except relatives, including small home-based providers who are otherwise exempt from licensing standards in some states. The federal legislation is part of broader efforts to improve the quality of home-based providers, who serve 23 percent of the 1.4 million children in subsidized care and millions more children in the population at large.<sup>2</sup>

As state agencies implement and expand training and professional development for home-based providers, now is the time to conduct research and evaluation to inform policy decisions. This brief is intended to support CCDF lead agency staff and others who oversee or conduct such research. You may want to gather descriptive information about provider populations or training programs to support the initial design of training and professional development. It may be time for an implementation evaluation to explore program operations at different sites in your state. You may be ready to conduct a full-scale evaluation to determine the effectiveness of an intervention. Accomplishing any such research requires recruiting and engaging home-based providers in evaluation activities.

In this brief, we aim to support CCDF lead agencies and researchers by summarizing methods used in previous research and evaluation projects. We review 19 recent studies that examine efforts to improve the skills and professional development of home-based child care providers. Summary tables allow you to identify and review studies most relevant to your research. Reviewing others' approaches to research and evaluation can help you think about how to address your own research questions within

<sup>&</sup>lt;sup>1</sup> Child Care and Development Block Grant Act of 2014, Pub. L. No. 113-186, 128 Stat. 1971 (2014).

<sup>&</sup>lt;sup>2</sup> "FY 2015 Preliminary Data Table 3–Average Monthly Percentages of Children Served by Types of Care," US Department of Health and Human Services, Administration for Children and Families, Office of Child Care, November 1, 2016, https://www.acf.hhs.gov/occ/resource/fy-2015-preliminary-data-table-3.

available resources. For example, reading about target populations in past studies could lead your research team to discuss how to focus your sample to best answer questions of interest.

Throughout the guide, we build upon the literature scan by sharing best-practice evaluation tips from a conversation with four experienced researchers. We hope this short summary of past research approaches and tips from research experts will help you design rigorous research that will inform state agencies and the field at large about how professional development and training interventions are being implemented and their effectiveness in improving caregiver skills, quality of care, and children's outcomes.

#### **Evaluation Approaches in Recent Studies**

To identify relevant research studies, we scanned the literature in the *Child Care and Early Education Research Connections* database published after 2010 and selected 19 studies that were focused on training or professional development for home-based child care providers and included a write-up of research methods (see appendix A for more on our data sources and methods).

We defined training and professional development broadly, to include various activities aimed at improving the skills of home-based providers. The interventions in these studies include online and community college courses for credit, classes and workshops for in-service training, community support and play-and-learn groups, home visits by mentors and coaches, staffed family child care (FCC) networks, and supported engagement in Quality Rating and Improvement Systems (QRIS).

The studies run the gamut of research designs and are diverse in the populations studied, sample sizes, and data collection methods. The study design, study population and sample size, and data collection methods and instruments are summarized below and in tables 1 through 5. Despite the diverse research approaches used in the identified studies, researchers reported common challenges in sampling, recruiting, and retaining home-based providers in research and evaluation activities. We therefore highlight strategies to engage home-based providers in the final section. Knowing how to engage with home-based providers is critical.

#### **Common Research Designs**

The studies can be classified into five groups: descriptive studies, process or implementation evaluations, and three types of outcomes studies.<sup>3</sup> Below, we outline basic information about the study designs and advice from experts about pros and cons of different study designs (see appendix B for a glossary of research terms).

- Descriptive studies explain how an intervention, problem, or phenomenon is functioning, without necessarily offering suggestions for program changes (as is typically the case with process or implementation studies). The eight descriptive studies in table 1 use varied methods, ranging from basic quantitative (numeric) descriptions of providers participating in an intervention to qualitative interviews with providers about their views. They answer questions such as these: Why do providers participate in training activities? What do they view as barriers and benefits to participation? Who participates in training? For instance, the California Child Development Division commissioned a study (Kreiner-Althen 2009) using provider focus groups and a telephone survey to learn what motivates providers to participate in quality-improvement activities. In another example, Durden and coauthors (2016) summarized the demographic characteristics of all providers completing on-line learning modules.
- Process or implementation studies determine how interventions are implemented in practice and whether they resulted in intended outputs (i.e., provided the materials, training, or other intervention content in the amount and format expected). The three examples in this category (table 2) use qualitative data sources, including document review and in-depth interviews with program participants and staff, as well as quantitative data sources, including administrative and survey data. They answer such questions as these: Was the program implemented as planned? Did participants complete the target number of training hours? Did they access supportive services? These studies provide information that can help agencies refine an intervention. For example, the study by Bradburn and coauthors (2011) was designed to inform improvements to the Virginia QRIS Family Child Care pilot program through systematic qualitative data collection about the program.
- Pre- and posttest nonexperimental outcomes studies measure change in program participants before, during, and after an intervention without a comparison group. Research questions include these: Was there an increase in provider knowledge after the program? Were there

<sup>&</sup>lt;sup>3</sup> The study by Boller and coauthors (2010) fell into two categories because it included both an implementation and outcomes study.

changes in provider practices or provider-child interactions (table 3)? These studies can show changes but may not be able to definitively attribute them to the intervention because they lack a control or comparison group. For example, Abell and coauthors (2014) assessed the change in caregiving quality and professional engagement through in-home observations and provider surveys before and after a quality-improvement intervention.

- Quasi-experimental outcomes studies use advanced statistical techniques to identify a comparison group similar to the treatment group and compare changes in the two groups. For example, Bromer and coauthors (2009) matched a treatment group of providers affiliated with staffed child care networks to comparison groups of unaffiliated providers and of providers affiliated with provider-led associations. Their basic research question was "Do [affiliated] providers offer higher-quality care than unaffiliated providers with similar characteristics?" The three studies in table 4 offer more credible evidence of intervention effects than pre-post designs, though the strength of the evidence depends on the quality of the match between the treatment and comparison group. Any time a comparison group is not randomly assigned from the same pool of study participants as the treatment group, there might be observed and unobserved differences between the two groups that affect their outcomes.
- Experimental outcomes studies involve random assignment of individuals or groups that receive the intervention (the treatment group) and those that do not (the control group) and measurement of outcomes of both groups. For example, Ota and Austin (2013), one of the two studies summarized in table 5, randomly assigned providers who agreed to participate in two professional development interventions into two treatment groups (one for each intervention) and a control group and measured changes in early language development practices before and after the intervention. An experimental design is the only design that can demonstrate an intervention's impact on the treatment group, to answer the question "What was the impact of the program on child care quality or other outcomes?" But, like other designs, experimental designs may involve bias that limits how representative the study results are. Ota and Austin (2013) caution that provider self-selection into their study and low response rate limit the potential for the study results to suggest generalized intervention effects beyond the providers included in the study (table 5).

Each study design can be useful for answering important research questions at different stages of an intervention. You should consider the research questions you want to answer before choosing a design. Research designs also differ in their resource requirements and timelines. The researchers that we consulted highlighted the importance of rigorous outcome studies, particularly those using random

assignment, for learning whether interventions with home-based providers improve quality of care (box 1).

#### BOX 1

#### Study Designs to Advance the Field: Tips from Experts

- We need implementation research, or the study of how interventions are carried out in practice, because we know less about quality-improvement initiatives for home-based caregivers than initiatives for centers. We need to know how services are delivered and received before we study outcomes.
- It may be hard to get an organization to agree to a random-assignment study, but we need the evidence they provide on what interventions are successful. Randomly assigning providers to a control group where services are delayed rather than denied sometimes works.
- A quasi-experimental design with a matched comparison group also can be difficult to implement because it can be hard to get providers in the comparison group to participate.
- Regardless of study design, researchers seeking to rigorously evaluate an intervention need a model with a clear theory of change, aligning program inputs to outputs and outcomes.

#### Study Populations and Samples

The diversity of home-based child care providers poses challenges for researchers. Home-based providers include licensed FCC homes, license-exempt home-based providers included on various state or local lists, and unlisted family, friends, and neighbors (FFN). Some care for only a few children, while others serve many children and employ an assistant. Because of differences in state licensing standards, a small home-based provider (e.g., caring for one to five children) might be licensed in one state and exempt from licensing in another. Furthermore, only some providers receive CCDF subsidies.

Given this diversity, most studies we reviewed limited their samples in different ways. Fourteen studies involved only licensed FCC providers, and six engaged FFN or other license-exempt providers, including one study that covered both. Most studies focused on providers engaged in one or more specific interventions. A few others restricted the sample further to providers engaged in training or those who provided care for a minimum number of hours. Some studies limited the sample to certain demographic populations (e.g., providers speaking a certain language) or providers serving children within a certain age range (e.g., 3 to 5 years old).

Some studies focused on a narrow geographic area, such as providers engaged in an intervention in one or more urban neighborhoods, which allowed for in-depth data collection at reduced cost. But others engaged providers across one or more states or regions within states, and one study (Durden et al. 2016) collected data from online participants nationally.

Many studies drew their samples from providers who participated in a select quality-improvement initiative or training program or were members of a network, association, or union. This can be an efficient sampling strategy, but you cannot conclude how the training programs would affect providers not already connected to networks.<sup>4</sup> A few studies, such as the one by Hallam and coauthors (2017), drew from state lists of licensed providers. It is harder to draw a sample that is representative of the population of unlisted providers, who may also be of interest.

Moreover, most studies used a nonrepresentative convenience sample. That is, providers were recruited based on their accessibility and willingness to participate, not on representing the population of all providers. Gray (2015) used informational sessions about the Circle of Security-Parenting intervention to recruit providers into an evaluation of the intervention, and they had the option to self-select into the study. Although for some research questions these sampling approaches are appropriate, a more representative sample offers more generalizable findings.

Four of the reviewed studies (Boller et al. 2010; Economic Opportunity Institute 2012; Kreiner-Althen 2009; Valorose and Chase 2012) selected participants using a stratified random sample—that is, a sample developed by dividing a population into smaller groups (strata) and randomly selecting individuals from each group. A fifth study (Ota and Austin 2013) randomly selected participants from the entire sample, without stratification. Stratification can help ensure that a sufficient sample of a subpopulation is chosen to allow for subgroup analysis (e.g., measuring effects of an intervention on members of different racial or ethnic groups).

Sample size also affects a study's ability to fully represent the diverse home-based provider population. Most studies had small sample sizes; 11 of the 19 we reviewed had fewer than 100 providers in the group that received the intervention. Many studies examined interventions targeted to a small group of providers, which means the pool of potential study participants is small. Small and

<sup>&</sup>lt;sup>4</sup> For an in-depth example of constructing a sampling frame of home-based providers, you may want to review materials related to the National Survey of Early Care and Education design phase: "Design Phase for National Survey of Early Care and Education (NSECE), 2007–2010," US Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation, accessed September 26, 2018, https://www.acf.hhs.gov/opre/research/project/design-phase-for-national-survey-of-early-care-and-education-nsece-2007-2010.

nonrandom samples of providers make it difficult to know whether an intervention would be effective for a wider population. That said, sample size varied greatly, with one study including nearly 6,000 providers who completed a mandatory online questionnaire as part of participation in online professional development (Durden et al. 2016).

The sampling approaches summarized here reflect the difficulty of obtaining large, representative samples of home-based providers. You may want to consider how these previous studies dealt with this challenge, and the advantages and disadvantages of their approaches, when making a sampling plan to best answer your own research questions

#### Data Collection Methods and Instruments

Researchers used various methods to collect data, with many studies using more than one. Common methods include provider surveys (10 studies), provider interviews (5 studies), provider focus groups (6 studies), and home observations (5 studies). Provider surveys were administered in various ways (i.e., paper, online, telephone, and in person). Studies differed as to whether in-person surveys and home observations were conducted by people affiliated with the intervention (e.g., a coach, trainer, or mentor) or unaffiliated researchers. Six studies collected data directly from providers or from people providing training and professional development services.

To measure provider quality, studies used various previously validated data collection instruments, including

- instruments designed to assess the home environment, such as the Family Day Care Rating Scale, the Family Child Care Environmental Rating Scale-Revised Edition, and the Environmental Rating Scale;
- instruments designed to assess child-adult interactions, such as the Parenting Interactions with Children Checklist of Observations Linked to Outcomes and the Arnett Caregiver Interaction Scale; and
- global assessments of care quality, such as the Child Care Assessment Tool for Relatives and the Child/Home Early Language and Literacy Observation.

One study used the Spanish-language Get Ready to Read!, a screening tool to measure child literacy, and one study used the Teacher Knowledge of Early Language and Literacy Assessment to measure provider knowledge.

Each of these instruments is validated for use with a specific population or set of populations. Researchers with expertise in home-based assessment highlighted the importance of aligning instruments to the study population (box 2). For further information on these and other measures of child care quality, see Child Care and Early Education Research Connections (2016) and Halle, Whittaker, and Anderson (2010). You might also find further useful information about instruments in the studies themselves (tables 1 through 5). Using or adapting a validated instrument can strengthen your confidence in your study results.

#### BOX 2

#### Tailoring Data Collection Instruments to the Target Population: Tips from Experts

- Measures designed to assess the quality of centers often do not translate well to homes. Consider adapting items from parent and family relationship instruments.
- Be aware of the high number of infants, toddlers, and children of mixed-age groups in home-based settings, and match data collection instruments to the ages of children.
- A measure that works in one population might not work in another. One measure of social supports that worked well in an African American population did not accurately capture diverse perspectives in a Latina population, possibly because of cultural hesitation to complain about not feeling supported.

# Recruitment Challenges and Strategies for Engaging Providers

A key consideration when doing research with home-based providers is how to connect and engage them. Many studies reviewed in tables 1 through 5 had low response rates, suggesting the difficulties you may face when you try to recruit home-based providers for studies. Hallam and coauthors (2017) invited 399 providers to participate in focus groups, but only 41 (10 percent) participated. Koh and Neuman (2009) contacted 1,038 providers to participate in home visits and recruited 128 (12 percent). Low response rates limit the validity and generalizability of study findings because the providers who participate in the research might differ from providers who do not participate. As a result, the findings may not apply to the broader population of providers affected by the intervention.

One research expert stated, "Getting them to respond to a survey is an uphill battle." It is hard because home-based providers work long hours caring for children while juggling other family responsibilities; some do not speak English as their native language and have literacy challenges; some lack access to the internet; and some are socially or geographically isolated. Another issue is that family, friends, and neighbors who provide care to children often do not identify or associate as a professional group. This can make it hard for researchers to find and engage these providers. Home-based providers are sometimes uncomfortable inviting strangers into their homes or answering questions about sensitive issues.

It also can be challenging to retain providers throughout the duration of a study. Some immigrant providers may leave the country over the summer while other providers may close their business completely. It took intensive efforts for Boller and coauthors (2010) to achieve 73 percent participation in follow-up data collection among providers.

It can also be challenging to recruit and retain control or comparison groups because persuading providers to participate in research when they are not benefiting from an intervention is difficult. Gray (2015) experienced this challenge, with 26 percent of providers invited to join the comparison group of survey respondents completing initial surveys and 17 percent completing follow-up surveys.

You can address these challenges by strategically planning your research. The studies in tables 1 through 5 and our conversation with four experienced researchers suggests that the following strategies might lead to more successful recruitment:

- Consider the person doing the recruitment. Research experts suggest you consider the value of working with a trusted partner organization or individual. Three studies (Kriener-Althen 2009; Shivers, Farago, and Goubeaux 2016; Shivers, Farago, and Yang 2016) got professional development program staff to recruit participants. Four studies engaged community partners (e.g., state and local Child Care Resource and Referral agencies, state officials, and community organizations). Four studies conducted outreach at the program or training location. These parties are potential trusted partners that researchers could work with to increase engagement rates.
- Experienced researchers suggest you allow providers to respond to surveys in several ways (e.g., web based, phone based, and hard copy both via mail and in person) to increase response rates.
  Relying solely on web-based surveys is problematic because many providers lack access to internet. It is also essential to have surveys translated into the study population's native language(s).
- Several studies made participation convenient for providers. Hallam and coauthors (2017) held focus groups at community locations, including public libraries, and invited providers to

- participate in the group closest to them. Douglass and coauthors (2017) recruited members of a support group and held the focus group at one of their already-scheduled meetings. Valorose and Chase (2012) provided snacks for focus group participants.
- Many studies also offered financial incentives to encourage participation. Five studies offered gift cards or cash (\$20 or less), while three studies offered cash or gift card incentives worth \$25 to \$150. Two studies (Shivers, Farago, and Goubeaux 2016; Shivers, Farago, and Yang 2016) offered child care materials. Two studies offered entry into a drawing to receive either materials (Abell et al. 2014) or a \$100 prepaid card (Valorose and Chase 2012).

For further guidance on recruiting home-based providers for research, consider adapting outreach practices used for engaging providers in quality-improvement initiatives. The National Center on Early Childhood Quality Assurance (2017) recommends active involvement of family child care providers in planning the initiatives, effective partnerships with diverse community and service agencies, multiple straightforward communication approaches, building on existing networks and social supports, and financial and material incentives (e.g., snacks, book baskets).

Engaging home-based providers often requires more work than engaging center-based providers, but one research expert shared a recent success story where the provider response was larger than expected. She attributed this to working closely with provider networks, being ready to send hard copy surveys or conduct surveys by phone (in English or Spanish) depending on the provider's preference, and offering a \$25 incentive. Box 3 has further tips.

#### BOX3

#### **Engaging Home-Based Providers: Tips from Experts**

- Consider hiring and training people within the community so there is a cultural and linguistic match between providers and field researchers.
- Take time to build relationships with community partners.
- Emphasize that you want to give a voice to a group that is often ignored.
- Sit down and talk through the survey. Providers work long hours and might be too busy to complete a self-administered survey, and some might struggle with adult literacy.
- Offer assurances of confidentiality to the extent possible when dealing with sensitive topics.
- Let the provider know that the goal is to evaluate the organization that provides the training, not judge the provider.

#### Conclusion

As states roll out new training initiatives, there are multiple opportunities for CCDF lead agencies to carry out research and evaluation to improve our understanding of home-based providers and how to and improve the quality of care provided to the children they serve. When the initiative is being developed, a descriptive study of home-based providers' needs and preferences could inform the design or redesign of training activities. Once the program has started, a process evaluation could uncover differences in how the program operates in different parts of a state, which might lead to hypotheses about how implementation affects outcomes. To rigorously evaluate effectiveness, a lead CCDF agency could structure a training initiative to provide enhanced training to a random sample of providers before it is rolled out to other providers who would be the control group in a random-assignment impact evaluation.

We hope the information in tables 1 through 5 will allow you and others who oversee or conduct research in this area to identify studies most relevant to your own intended research. To best use the table to inform your research and evaluation planning, we encourage you to do the following:

- 1. Review tables 1 through 5 to identify studies most relevant for you. For example, examine each study's research questions or goals, and identify those that align with policy problems that you are contending with or decisions that you are facing. Or select studies using a similar study design, study population, or data collection method to your proposed research. Once you identify relevant studies, find the full research reports for lessons you can apply to your own work.
- Consider the feasibility of the study designs and data collection methods used for these studies in the context of your agency or the intervention you wish to examine. Keep in mind the tips from research experts shared in this brief.
- 3. Think about how all the different aspects of the research approach—from study design to study population, sample size, recruitment strategies, and data collection methods—might affect your ability to recruit and retain home-based providers in your research.

In addition to reading a few of the studies in the summary tables, you might benefit from other reviews of home-based provider interventions and research. We recommend a comprehensive review of 96 interventions designed to support quality in home-based child care (Porter et al. 2010), a companion report on the need for different types of research and evaluation of such interventions (Paulsell et al. 2010), and a more recent literature review of support services for home-based providers

(Bromer and Korfmacher 2017). Further resources produced by the Center for Supporting Research on Child Care and Development Block Grant Implementation are available at https://urbn.is/2KC7CrT, including an annotated bibliography of resources for states, territories, and tribes seeking to build research and evaluation capacity (Rohacek, Coffey, and Stevens 2018).

TABLE 1

Descriptive Studies

Study	Douglass et al. (2017)	Durden et al. (2016)	Gerstenblatt et al. (2014)	Hallam et al. (2017)
Overview	Case study of efforts to engage family, friend, and neighbor (FFN) caregivers and families in an urban school readiness initiative	Online family child care (FCC) professional development study	Qualitative study of FCC providers' views on work stress and well-being	Qualitative evaluation of FCC providers' perspectives on QRIS
Research questions or goals	1. How and why do FFN providers engage with [the Families Engage intervention]? 2. What changes do FFN providers report because of participation in [the Families Engage intervention]? 3. How do [the Families Engage intervention] directors, advisory committee members, and parent leaders view identification, outreach, and engagement of FFN providers as a key strategy for [the Families Engage intervention]?	1. What are the demographic characteristics of FCC providers engaging in online professional development?  2. What professional development courses are FCC providers most likely to complete?	1. What are the sources of jobrelated stress for FCC providers? 2. How does work-related stress affect FCC providers? 3. How do FCC providers reduce work-related stress?	1. Why do family child providers join the Quality Rating Improvement System (QRIS)? 2. Among those who do participate in QRIS, what benefits and challenges do they experience?
Provider study population	FFN providers in underserved and immigrant communities in five urban neighborhoods	Home-based child care providers participating in an online PD (professional development) program available to early childhood education professionals	Registered, licensed family child care providers in central Texas	Licensed FCC providers in Delaware and Kentucky
Provider sample description	23 providers; 15 in a focus group and 8 interviews; 8 of the 23 providers contacted for interviews participated, 8 were screened out as licensed providers, and 8 did not return calls (50 percent of those eligible participated)	5,868 providers. Sample included all participants who created an account and completed at least one module from July 2011 to January 2015 and self-reported being home based; responses were required, so data were available for all who created an account	11 providers.  86 were providers contacted (12.8 percent response rate); sampling frame was a public list of licensed and registered child care homes obtained from the Texas Department of Family and Protective Services	41 providers. Participants were selected within rural and urban areas from state lists; in Kentucky, 10 of 95 providers contacted participated (10.5 percent); in Delaware, of 304 providers contacted, 31 participated (10.2 percent)

Study	Douglass et al. (2017)	Durden et al. (2016)	Gerstenblatt et al. (2014)	Hallam et al. (2017)
Provider data collection methods	Provider focus group was in Vietnamese; individual semistructured interviews with providers were conducted in multiple languages	Provider self-report questionnaire	Three focus groups	Nine focus groups in the two states; four with QRIS participants, five with nonparticipants
Strategies for engaging providers	Contacted providers for interviews from lists supplied by implementing neighborhood agencies; providers for the focus group were contacted through a Vietnamese grandmothers' support group in one of the neighborhoods; focus group was held at a regularly scheduled meeting	None reported	Each provider received a recruitment letter and follow-up call; focus groups were held on Saturday mornings and afternoons at a local university central to the geographic locations of the providers; all participants received \$15 gift cards and were compensated for parking	Research assistants called providers to invite them to focus groups scheduled closest to them; focus groups were held in community locations, mostly public libraries; small gift card incentive was offered
Reported limitations	Not reported	Study assumes participants engage in online PD to improve skills and not to avoid in-person trainings; providers self-reported; providers self-selected into the program; data were not available to distinguish the subset who are unregulated, unpaid, and unlisted	None reported	Only two states were studied; the study had a small sample size and low response rate

Sources: Douglass, Anne, Kira Taj, Mary Coonan, and Donna Haig Friedman. 2017. "Lessons from an Urban School Readiness Initiative: Including Family, Friend, and Neighbor Care Providers." Early Education and Development 28 (6): 640–54; Durden, Tonia, Claudia Mincemoyer, Leslie Crandall, Kit Alviz, and Aileen Garcia. 2016. "Gateway to Quality: Online Professional Development for Family Child Care Providers." Early Child Development and Care 186 (7): 1079–95; Gerstenblatt, Paula, Monica Faulkner, Ahyoung Lee, Linh Thy Doan, and Dnika Travis. 2014. "Not Babysitting: Work Stress and Well-Being for Family Child Care Providers." Early Childhood Education Journal 42 (1): 67–75; Hallam, Rena, Alison Hooper, Kaitlin Bargreen, Martha Buell, and Myae Han. 2017. "A Two-State Study of Family Child Care Engagement in Quality Rating and Improvement Systems: A Mixed-Methods Analysis." Early Education and Development 28 (6): 669–83.

TABLE 1
Descriptive Studies (cont'd)

Study	Kriener-Althen (2009)	Lanigan (2011)	Organizational Research Services (2016)	Valorose and Chase (2012)
Overview	Study of access to quality- improvement activities by California FCC providers	Qualitative study of FCC Providers' perspectives on professional development	Evaluation of a Play-and- Learn Program	Study of Minnesota Child Care Workforce Demographics, Training and Professional Development
Research questions or goals	For focus groups:  1. What motivates FCC home providers to participate in quality-improvement activities?  2. What are the points of entry for FCC home providers into quality-improvement programs?  3. How do FCC home providers access quality-improvement activities?  4. What do FCC home providers find challenging about participating in quality-improvement activities?  For telephone surveys:  1. What were the points of entry for FCC home providers into quality-improvement activities? How were the points of entry into quality-improvement programs the same or different across FCC home providers?  2. What motivated FCC home providers?  3. How accessible were the quality-improvement activities?  4. What was challenging about participating in quality-improvement activities for FCC home providers?	1. What facilitated professional development participation? 2. Which professional development components did FCC providers feel best and least supported quality improvements at their sites? 3. How do FCC providers view their role in the child care system?	1. To collect and compile information on the demographic characteristics of caregivers participating in Kaleidoscope Play and Learn groups. 2. To collect and compile information on participants' self-reported changes in knowledge, behavior, and social networks.	1. To inform the ongoing implementation of the child care professional development system in Minnesota.  2. To ensure that professional development opportunities are inclusive and accessible to all providers.

			Organizational Research	
Study	Kriener-Althen (2009)	Lanigan (2011)	Services (2016)	Valorose and Chase (2012)
Provider study population	Licensed FCC providers in California participating in Child Development Division-funded quality-improvement projects	Licensed FCC providers in Washington State in PD networks	FFN providers who participate in Kaleidoscope groups in King County, Washington State	Centers and licensed FCC providers in Minnesota
Provider sample description	76 FCC providers. participated in focus groups from lists supplied by program administrators.  130 FCC providers completed surveys, or 41 percent of 316 contacted; master list of 686 providers was compiled from program lists; master list was divided into seven regions; stratified random sample of 30 providers per region was initially generated; resampling was done as needed to reach target response in each region	54 providers. 26 participated throughout the study; 17 participated in year two only; 11 joined the network for year three	782 providers. 17 King County affiliates submitted caregiver feedback forms; median of 23 forms per affiliate; 77 percent of affiliates and 50 percent of participants submitted forms	352 FCC providers completed telephone surveys (61 percent of 576 contacted).  Data on current FCC providers from state R&R agencies were used to stratify providers by the metropolitan area and greater Minnesota and randomize.  56 FCC providers without postsecondary education were recruited for focus groups based on R&R data
Provider data collection methods	Provider focus groups in six regions; provider telephone surveys	Four focus groups annually for three years	Participant survey	Focus groups in six metropolitan areas; telephone surveys
Strategies for engaging providers	Focus groups: Staff from one of the programs helped researchers with recruitment; local resource and referral (R&R) agencies provided meeting space for focus groups; Spanish language accommodations were made  Surveys: Researchers made multiple attempts to call providers; interviewers were fluent in Spanish and English	None reported	Worked through King County affiliates	Survey: Researchers sent letters to providers from randomized lists explaining the study; providers were called up to 25 times at different times of the day and days of the week; virtual questionnaires were sent to nonrespondents; participants entered into drawing for \$100 Visa gift cards Focus groups: Researchers recruited providers by phone or mailed letters; hosting organization managed responses in two locations; participants received \$25 Target gift cards; snacks were provided

			Organizational Research	h
Study	Kriener-Althen (2009)	Lanigan (2011)	Services (2016)	Valorose and Chase (2012)
Reported limitations	None reported	Lack of generalizability	Providers opted in and self-reported	Providers in the metropolitan area were overrepresented; focus group results were not representative

Sources: Kriener-Althen, Kerry. 2009. Study of Access to Quality Improvement Activities by Family Child Care Home Providers. Washington, DC: WestEd; Lanigan, Jane D. 2011. "Family Child Care Providers' Perspectives Regarding Effective Professional Development and Their Role in the Child Care System: A Qualitative Study." Early Childhood Education Journal 38 (6): 399–409. Organizational Research Services. 2016. "Summary of Year-End Kaleidscope Play and Learn Participant Survey Results." Seattle: Organizational Research Services. Valorose, Jennifer, and Richard Chase. 2012. Child Care Workforce in Minnesota: 2011 Statewide Study of Demographics, Training, and Professional Development. St. Paul: Minnesota Department of Human Services.

TABLE 2
Process or Implementation Studies

Study	Boller et al. (2010)	Bradburn et al. (2011)	Harder+Company Community Research (2017)
Overview	Evaluation of The Seeds to Success modified field test	Virginia Star Quality Initiative (VSQI) family child care home provider demonstration pilot process evaluation	Process evaluation of four initiatives to engage FFN caregivers
Research questions or goals	1. Was Seeds implemented as planned? -Did staff members receive the targeted number of coaching hours? -Did the implementing agencies make coachprovider matches that facilitated cooperation? -Did coaches develop supportive relationships with staff members? -How well did the financial and educational supports work, and how did providers use these supports?	<ul> <li>1. Are the standards clear and comprehensible to multiple stakeholders and closely tied to verifiable data?</li> <li>2. Are the home-based standards reasonable for FCC providers?</li> </ul>	1. What are the pathways for reaching FFN informal caregivers? 2. What are the most promising ways to engage FFN informal caregivers? 3. What messages do FFN informal caregivers respond to? 4. What practices, mechanisms, tools, and resources can improve the quality of interactions between adult caregivers and the children they care for?
Provider study population	Centers and FCC providers in two Washington State communities with capacity to implement a community-wide early learning initiative.  70 percent of FCC providers cared for children receiving subsidy; 57 percent of FCC providers were Hispanic	FCC providers in six competitively selected geographically and culturally diverse regions of Virginia participating in the VSQI pilot	FFN providers in California participating in grant programming
Provider sample description	52 FCC providers. 26 were assigned to treatment; baseline observations and interviews with 94 percent; 73 percent follow-up response rate. Providers were stratified by geographic site and language of instruction and randomly assigned to treatment and control groups	87 providers. 55 pilot participants, 25 nonparticipants, and 7 providers who began the pilot and subsequently dropped out; 75 percent of pilot participants completed a telephone interview	Not reported
Provider data collection methods	Provider focus groups; provider progress data in Efforts to Outcomes (ETO™) database	Telephone interviews with providers; online surveys	Qualitative data collection, including interviews with participants
Strategies for engaging providers	Intermediary agency staff recruited providers to participate in the field test	Interview staff made at least six attempts to contact each provider	Engaged with providers during regular programming

Study	Boller et al. (2010)	Bradburn et al. (2011)	Harder+Company Community Research (2017)
Reported limitations	Data entered by coaches and coordinators might contain errors; staff who did not receive coaching are not accounted for in data system	Providers self-selected; researchers did not analyze mentoring activities	Developed measures and evaluating quality challenging without defined standards, and assessments used in formal care settings might not be appropriate

Sources: Boller, Kimberly, Patricia Del Grosso, Randall Blair, Yukimo Jolly, Ken Fortson, Diane Paulsell, Eric Lundquist, et al. 2010. The Seeds to Success Modified Field Test: Findings from the Impact and Implementation Studies. Princeton, NJ: Mathematica Policy Research; Bradburn, Isabel, Mary Beth Dunkenberger, Nancy White, and Elizabeth Allen. 2011. Virginia Star Quality Initiative Family Child Care Home Demonstration Pilot Evaluation Report. Blacksburg: Virginia Tech, Institute for Policy and Governance, Child Development Center for Learning and Research; Harder+Company Community Research. 2017. "Engaging Family, Friend, and Neighbor Informal Caregivers: Findings from Four Informal Child Care Projects." San Francisco: Harder+Company Community Research.

TABLE 3

Pre- and Posttest Nonexperimental Outcomes Studies

Study/ies	Abell et al. (2014)	Economic Opportunity Institute (2012)	Koh and Neuman (2009)	Shivers, Farago, and Goubeaux (2016); Shivers, Farago, and Yang (2016)
Overview	Evaluation of the Family Child Care Partnerships program	Evaluation of a training program for FFN caregivers	Project Great Start PD Initiative literacy intervention evaluation	The Arizona Kith and Kin project evaluation
Research questions or goals	1. Examine program effectiveness as measured by mentors' observational assessments of the global quality of caregiving practices and providers' self-reported professional engagement.	1. To explore whether the trainings increase providers' knowledge and skill level regarding early childhood education and caring for children.  2. To explore whether attending classes brought about additional broader outcomes, such as making positive professional connections with other providers, better understanding the role and efforts of their union, and increasing satisfaction in caregiving as a by-product of increasing knowledge and skills.  3. To gather demographic information on providers and the children in their care.	1. What is the influence of a practice-based professional development program on early literacy knowledge and practice in FCC?  2. What aspects of the professional development program might contribute to these outcomes?	<ol> <li>Are provider-child language and literacy interactions enhanced as a result of participating in the Arizona Kith and Kin Project?</li> <li>Do children's language and literacy assessment scores increase as a result of participating in the Arizona Kith and Kin Project's onsite curriculum?</li> <li>Do providers' home literacy environments and practices change as a result of participating in the Arizona Kith and Kin Project's literacy coaching pilot?</li> </ol>
Provider study population	Alabama-licensed FCC providers participating in the Family Child Care Partnerships (FCCP) program	Unlicensed members of SEIU 925 in Washington State who had taken between 10 and 40 hours of training provided by the union over one to four years	Providers in low-income Michigan communities employed at least 20 hours a week in a licensed FCC setting, caring for one or more 3-to-5- year-olds	Study 1: FFN providers in Arizona Study 2: FFN providers in Arizona and children in their care (subsamples: Latina FFN providers serving Spanish-speaking children; children ages 3 to 5)

Study/ies	Abell et al. (2014)	Economic Opportunity Institute (2012)	Koh and Neuman (2009)	Shivers, Farago, and Goubeaux (2016); Shivers, Farago, and Yang (2016)
Provider sample description	365 providers (78 percent of 456 program participants) completed enrollment surveys and permitted care observation. Subsample of 109 providers (66 percent of 165 providers contacted) provided additional information	82 providers.  A stratified, random sample performed using data provided by SEIU 925; providers were sorted into groups based on number of hours of training attended—10, 20, 30, or 40; random list was generated from each group; the first 200 in the 10- and 20-hour groups were included in sample to receive surveys. As there were fewer than 200 providers in the 30- and 40-hour groups, all received surveys	128 providers.  12 percent of the 1,038 licensed FCC providers identified using regional R&R databases agreed to participate	Full sample, studies 1 and 2: 4,121 providers. Subsamples: Study 1: 275 providers; Study 2: 142 provider-child observation dyads; 38 providers who were graduates of the Arizona Kith and Kin Project Read On Pilot Project. Study 1: 61 percent response rate on feedback survey (full sample); 86 percent response rate on child development posttest (subsample)
Provider data collection methods	Mentor-administered enrollment survey and structured observations in the care home; provider self-administered questionnaire for subsample Validated instruments used: Family Day Care Rating Scale (FDCRS)	Provider survey	Providers were assessed pre- and postintervention; qualitative field notes and in- depth interviews with the provider during two unannounced visits by the study team to each provider Validated instruments used: Provider Teacher Knowledge of Early Language and Literacy Assessment; Child/Home Early Language and Literacy Observation (CHELLO)	Study 1: Provider baseline data collection; provider pre- and posttests on child development knowledge; provider feedback survey; subsample structured observations in providers' homes. Study 2: Structured observations; child assessment; provider self-assessment Validated instruments used: Study 1: Child Care Assessment for Relatives (CCAT-R) caregiver interview and standardized observations; Arnett Caregiver Interaction Scale (CIS) Study 2: Spanish-language Get Ready to Read; CHELLO; CCAT-R

Study/ies Strategies for engaging providers	Abell et al. (2014)  Solicitations through county licensing officials, R&Rs, mailings, and phone. For subsample, mail or phone contact with providers who	Economic Opportunity Institute (2012)  521 surveys were sent to providers via postal mail; recipients had four weeks to return the survey; providers were told that the first 100	Koh and Neuman (2009)  Participants were recruited by the statewide referral agency in cooperation with the Department of Human Services (DHS); providers received	(2016); Shivers, Farago, and Yang (2016) Study 1: Kith and Kin staff recruited subsample on first day of their session. Training specialists called providers who expressed interest and scheduled an initial home
	had supplied additional data during enrollment; \$10 was paid upon return of questionnaire and entry into drawing for \$50 worth of child care materials	providers to respond would receive a \$10 gift card as an incentive	compensation from DHS after program completion	observation.  Study 2: Session facilitators collected the first round of observational data in providers' homes. Subsample received \$20 gift certificate for a local grocery store and bag of toys and materials for children after second data collection visit.
Reported limitations	Observations were completed by mentors; lack of control group	Providers self-reported; providers' recall of prior skills and knowledge were imperfect; low response rate	Lack of evidence about effectiveness of coaching intervention alone; lack of evidence about child outcomes; low response rate; provider self- selection	Study 1: Moderate subsample retention Studies 1 and 2: Providers self-selected; program facilitators collected data; variability in session implementation across training sites

Sources: Abell, Ellen, Dilbur D. Arsiwalla, Robin I. Putnam, and Ellaine B. Miller. 2014. "Mentoring and Facilitating Professional Engagement as Quality Enhancement Strategies: An Overview and Evaluation of the Family Child Care Partnerships Program." Child and Youth Care Forum 43 (5): 569–92; Economic Opportunity Institute. 2012. Training Makes a Difference: The Experience of Unionized Family, Friend, and Neighbor Child Care Providers in Washington State. Seattle: Economic Opportunity Institute; Koh, Serene, and Susan B. Neuman. 2009. "The Impact of Professional Development in Family Child Care: A Practice-Based Approach." Early Education and Development 20 (3): 537–62; Shivers, Eva Marie, Flora Farago, and Patricia Goubeaux. 2016. The Arizona Kith and Kin Project Evaluation Brief #1: Improving Quality in Family, Friend, and Neighbor (FFN) Child Care Settings. Phoenix: Indigo Cultural Center, Institute for Child Development With Family, Friend, and Neighbor Providers: Implications for Dual Language Leamers. Phoenix: Indigo Cultural Center, Institute for Child Development Research and Social Change.

Shivers, Farago, and Goubeaux

TABLE 4

Quasi-Experimental Outcomes Studies

Study	Bromer et al. (2009)	Gray (2015)	Porter et al. (2016)
Overview	FCC network impact study	Pilot program evaluation of Circle of Security-Parenting	All Our Kin provider quality evaluation
Research questions or goals	<ol> <li>Do FCC providers affiliated with a staffed network offer higher-quality care than unaffiliated providers with similar characteristics?</li> <li>Do staffed networks contribute to higher-quality care among affiliated providers?</li> <li>What characteristics and services of staffed networks are associated with higher-quality care among member providers?</li> <li>How do staffed networks compare with voluntary, provider-led associations?</li> <li>What policy recommendations can be made to improve the quality of services offered by staffed networks?</li> </ol>	1. To examine the effectiveness of an attachment-based, group professional development experience, Circle of Security-Parenting intervention on FCC providers' psychological resources and self-efficacy in managing children's challenging behaviors and supporting children's socioemotional development.	1. How does the quality of care that All Our Kin FCC providers offer compare with the quality of care of providers not associated with All Our Kin?
Provider study population	Child care providers in Chicago affiliated with networks	Licensed English- and Spanish-speaking FCC providers in Connecticut	Licensed FCC providers in four cities in Connecticut
Provider sample description	80 providers in treatment. Two comparison groups: 40 unaffiliated providers matched on key characteristics and 30 providers affiliated only with a provider-led association. 55 percent of both network and association providers agreed to participate.  Sample was drawn in stages, including replacing cases found ineligible	34 providers self-selected into the treatment group by completing the initial survey, 17 in comparison group.  17 percent of 100 providers that were randomly selected for the comparison group from a Department of Public Health listing of licensed FCC providers in areas where the intervention was offered completed initial and follow-up packets (another 9 percent completed initial packet only)	28 providers were randomly selected into treatment, and 20 were selected into the comparison group.  Comparison group was drawn from FCC providers in cities in Connecticut where the network is not offered

Study	Bromer et al. (2009)	Gray (2015)	Porter et al. (2016)
Provider data collection methods	Structured observations in provider homes; phone interviews with providers Validated instruments used: FDCRS; CIS	Provider self-report pre- and postintervention surveys	Structured observations; provider survey Validated instruments used: Family Child Care Environmental Rating Scale-Revised (FCCERS-R); Parenting interactions with children checklist of observations linked to outcomes
Strategies for engaging providers	For network providers: initial written contact made, providing a call-in number for those interested; providers screened for eligibility; took an average of 43 days and 9 recruiting attempts.  For association providers: took 43 days and 8 recruiting attempts on average; for unaffiliated providers, 43 days and 6 recruiting attempts.  Initial incentive was \$90 and was increased to \$100 to increase participation; increased a second time to \$150 to recruit from networks with few eligible providers	Informational sessions were advertised to networks and held to introduce providers to intervention content and collect baseline data; providers self-selected in; all who completed the initial survey were selected into the intervention group; packets were mailed to the comparison group; participating providers were compensated \$25 per class and \$50 for completing forms and surveys; comparison providers were compensated \$50 for survey completion	Not reported
Reported limitations	Network-comparison match was close but not perfect	Providers self-selected; background interventions were not monitored; small sample size; assessments were limited to provider reports	Small sample size; potential unobserved differences between treatment and comparison groups

Sources: Bromer, Juliet, Martha Van Haitsma, Kelly Daley, and Kathy Modigliani. 2009. Staffed Support Networks and Quality in Family Child Care: Findings from the Family Child Care Network Impact Study. Chicago: Herr Research Center for Children and Social Policy; Gray, Sarah A. O. 2015. "Widening the Circle of Security: A Quasi-Experimental Evaluation of Attachment-Based Professional Development for Family Child Care Providers." Infant Mental Health Journal 36 (3): 308–19; Porter, Toni, Kayla Reiman, Christina Nelson, Jessica Sager, Janna Wagner. 2016. "Quality in Family Child Care Networks: An Evaluation of All Our Kin Provider Quality." ZERO TO THREE 36 (4): 19–29.

TABLE 5
Experimental Outcomes Studies

Study	Boller et al. (2010)	Ota and Berghout Austin (2013)
Overview	Evaluation of The Seeds to Success Modified Field Test	Language Development professional development evaluation
Research questions or goals	<ul> <li>1. What was the impact of Seeds on the quality of child care and on provider education and child care experience?</li> <li>- Did Seeds increase the amount of education, training, and technical assistance services accessed by participating child care businesses?</li> <li>- Did Seeds improve the quality of child care available in participating child care businesses?</li> <li>- Did Seeds improve the level of education and experience for the workforce employed in participating child care businesses?</li> </ul>	<ol> <li>Is there a significant difference in the frequency of FCC provider linguistic inputs after provider participation in a 10-hour training program compared with a control group?</li> <li>Is there a significant difference in the frequency of FCC provider linguistic inputs after provider participation in a 10-hour training program combined with on-site mentoring compared with a control group?</li> <li>Is one model (training or training plus mentoring) associated with a greater increase in the frequency of provider linguistically stimulating inputs in FCC programs?</li> </ol>
Provider study population	Centers and FCC providers in two Washington State communities with capacity to implement a community-wide early learning initiative.  70 percent of FCC providers cared for children receiving subsidy; 57 percent of FCC providers were Hispanic	English-speaking, licensed FCC providers with four or more full-time children between 2 and 4 years old; primarily middle-income and Caucasian
Provider sample description	52 FCC providers. 26 were assigned to treatment; baseline observations and interviews with 94 percent; 73 percent follow-up response rate. Providers were stratified by geographic site and language of instruction and randomly assigned to treatment and control groups	50 programs in treatment or control groups 20 percent of 240 providers that researchers contacted by phone met the criteria and agreed to participate. Four regions of a western state were selected based on their large numbers of FCC programs using a statewide database; as contact was made with providers, they were assigned sequentially from a random starting point to one of the treatment groups or to the control group
Provider data collection methods	Classroom observations; interviews with FCC providers Validated instruments used: Environment Rating Scale; CIS	Four children in each program were randomly selected to wear audio recorders; other children were assigned mock recorders; provider linguistic inputs were assessed at baseline and follow-up Validated instruments used: Language Environment Analysis automatic speech recording and analysis tool

Study	Boller et al. (2010)	Ota and Berghout Austin (2013)
Strategies for engaging providers	Intermediary agency staff recruited providers to participate in the field test	Postcards were mailed to 800 providers announcing an opportunity to volunteer for a research study on verbal language in FCC; researchers made phone contact with 240 programs
Reported limitations	Small sample size; staff reporting inconsistencies; few quality measures were used as outcomes; short follow-up period (six months)	Provider self-selection and low response rate; no delayed follow-up observation

**Sources:** Boller, Kimberly, Patricia Del Grosso, Randall Blair, Yukimo Jolly, Ken Fortson, Diane Paulsell, Eric Lundquist, et al. 2010. The Seeds to Success Modified Field Test Findings from the Impact and Implementation Studies. Princeton, NJ: Mathematica Policy Research; Ota, Carrie L., and Ann M. Berghout Austin. 2013. "Training and Mentoring: Family Child Care Providers' Use of Linguistic Inputs in Conversations with Children." Early Childhood Research Quarterly 28 (4): 972–83.

# Appendix A. Data Sources and Methods

This brief is based on a scan of recent literature, supplemented by consultation with researchers experienced in evaluating home-based providers. For the literature scan, we searched the *Child Care and Early Education Research Connections* database for resources in English published after 2010. Our search terms included "evaluating child care provider professional development," "evaluating child care provider professional development home based," and "evaluating child care provider training home based." We reviewed the first 50 relevant results under each search term and refined the list to include those that focused on home-based providers and provided information about methods used. We supplemented the online search by reviewing two earlier literature reviews (Bromer and Korfmacher [2017] and the Administration for Children and Families–funded project Supporting Quality in Home-Based Care); studies in the reference lists of identified resources; and studies recommended by Toni Porter, a home-based child care researcher who was the senior adviser on this project. We also scanned the websites of several CCDF lead agencies to find examples of reports commissioned or published by those agencies. Through this process, we identified 19 publications that met the criteria set out above for guiding future evaluation work with home-based providers.

In addition, the authors held a structured, hour-long group discussion with four researchers to learn more about challenges and opportunities involved in engaging home-based providers in research. These researchers, all with substantial expertise in research on home-based providers, include Juliet Bromer, research scientist at the Erikson Institute; Diane Paulsell, director of human services research at Mathematica Policy Research; Toni Porter, principal at Early Care and Education Consulting and senior adviser to this project; and Eva Marie Shivers, director of the Indigo Cultural Center Inc.

APPENDIX 27

# Appendix B. Glossary of Research Terms

Words in italics are defined later in the glossary.

- Comparison group: A group of individuals whose characteristics are similar to those of program participants but who do not receive the *intervention*. A comparison group is assessed along with a *treatment group* to determine whether the intervention produced the expected changes. Comparison groups are typically constructed using statistical matching techniques so they are similar to the treatment group on various characteristics.
- Control group: In an experiment, a group of individuals whose characteristics are similar to those of the *treatment group* but do not receive the *intervention*. Control groups are constructed by *randomly assigning* participants to either the treatment group or the control group. The control group, along with the treatment group, is assessed to determine whether the intervention produced the expected changes in the treatment group.
- Convenience sample: A sample made up of individuals within the *population* who are easy to reach to engage in the study. Such a sample is not representative of the population.
- Data collection instruments: Methods used to gather information for the study (e.g., interview and focus group protocols, surveys). These may be preexisting or developed for a study.
- Descriptive studies: Studies designed to describe an intervention without assessing impacts of an intervention on outcomes or necessarily offering recommendations for improvements in implementation.
- **Experimental outcomes studies:** Studies designed to determine if the *intervention* has effects on *outcomes* and that do so by developing control and *treatment* groups through *random assignment* of individuals to each group. These studies offer the greatest potential to generate credible evidence of program effectiveness because random assignment to treatment and control groups reduces the likelihood of between-group differences that might affect how the intervention affects each group.
- Generalizability: The extent to which a study's results are applicable for a broader group of people or situations than those observed in the study.
- **Inputs:** Resources (e.g., funds, instructor time) used in an intervention.

28 NOTES

- Instrument validity: The extent to which a data collection instrument accurately measures
  what it claims to measure.
- Intervention: Inputs and activities provided to bring about outputs (e.g., providers completing a professional development course) that create changes or outcomes in the recipient group (e.g., improved kindergarten readiness of children in a provider's care).
- Intervention activities: Actions taken using inputs (e.g., funding and materials for a provider professional development course) to generate *outputs* (e.g., providers completing a professional development course).
- Logic model: A depiction of the intervention rationale that uses graphics to describe what the intervention aims to achieve and how. The graphic includes links between inputs, activities, *outputs*, and *outcomes* that demonstrate how these elements are related.
- Outcomes: Intended results or changes in the group receiving the intervention (e.g., improved kindergarten readiness of children in a provider's care).
- Outputs: The products or immediate changes resulting from an intervention that are necessary to achieve outcomes (e.g., providers completing a professional development course).
- **Population:** The group of individuals being studied, such as home-based child care providers in a state or individuals participating in a child care provider certification program.
- Pre- and posttest nonexperimental outcomes studies: Studies that attempt to measure outcomes of an intervention by comparing results of a test or measurement taken before an intervention begins (pretest) with the results of a test or measurement taken after an intervention takes place (posttest). These studies may not credibly show that the intervention drove the outcomes because they do not include measurement of outcomes of a control or comparison group to gauge changes absent the intervention.
- Process or implementation studies: Studies that examine how well an intervention is operating as intended. A process evaluation involves collecting data to describe the intervention in detail and offers guidance for potential changes to delivery of the intervention to improve effectiveness.
- Quasi-experimental outcomes studies: Studies that attempt to show intervention effects on outcomes using comparison groups but do not use *randomization* to create the treatment and control groups. The comparison group is typically selected to match an existing *treatment group* as closely as possible so that conclusions about the intervention's impacts can be made.

NOTES 29

- Random assignment: The assignment of individuals in the sample to either the treatment or control group entirely by chance. This is typically used in experimental studies.
- Random sampling: The selection of a subgroup of individuals within a population in such a way
  that all members of the population are equally likely to be selected.
- Randomized controlled trials: See experimental outcomes studies.
- Sample: A subset of participants selected from the full study population.
- Selection bias: The result of sampling and measuring a sample that is not representative of the entire population. This is an expected consequence of nonrandom sampling and means that the observed effects on the *treatment group* may not be generalizable.
- Stratified sample: A sampling technique where the population is divided into smaller groups, or strata, based on relevant characteristics (e.g., geography, hours of training received, and language of instruction), and then individuals are randomly selected from each strata.
- Treatment group: A group composed of individuals receiving the intervention being evaluated.

NOTES NOTES

### References

- Abell, Ellen, Dilbur D. Arsiwalla, Robin I. Putnam, and Ellaine B. Miller. 2014. "Mentoring and Facilitating Professional Engagement as Quality Enhancement Strategies: An Overview and Evaluation of the Family Child Care Partnerships Program." Child and Youth Care Forum 43 (5): 569–92.
- Boller, Kimberly, Patricia Del Grosso, Randall Blair, Yukimo Jolly, Ken Fortson, Diane Paulsell, Eric Lundquist, et al. 2010. *The Seeds to Success Modified Field Test: Findings from the Impact and Implementation Studies*. Princeton, NJ: Mathematica Policy Research.
- Bradburn, Isabel, Mary Beth Dunkenberger, Nancy White, and Elizabeth Allen. 2011. Virginia Star Quality Initiative Family Child Care Home Demonstration Pilot Evaluation Report. Blacksburg: Virginia Tech, Institute for Policy and Governance, Child Development Center for Learning and Research.
- Bromer, Juliet, and Jon Korfmacher. 2017. "Providing High-Quality Support Services to Home-Based Child Care: A Conceptual Model and Literature Review." *Early Education and Development* 28 (6): 745–72.
- Bromer, Juliet, Martha Van Haitsma, Kelly Daley, and Kathy Modigliani. 2009. *Staffed Support Networks and Quality in Family Child Care: Findings from the Family Child Care Network Impact Study*. Chicago: Herr Research Center for Children and Social Policy.
- Bryant, Donna. 2007. "Preliminary Findings from the QUINCE Study: Quality Interventions for Early Care and Education." Presentation at State Administrators Management Institute and Child Care Policy Research Consortium Meeting, Washington, DC.
- Child Care and Early Education Research Connections. 2016. "Infant and Toddler Child Care Quality Measures Bibliography." Ann Arbor: University of Michigan.
- Douglass, Anne, Kira Taj, Mary Coonan, and Donna Haig Friedman. 2017. "Lessons from an Urban School Readiness Initiative: Including Family, Friend, and Neighbor Care Providers." *Early Education and Development* 28 (6): 640–54.
- Durden, Tonia, Claudia Mincemoyer, Leslie Crandall, Kit Alviz, and Aileen Garcia. 2016. "Gateway to Quality: Online Professional Development for Family Child Care Providers." *Early Child Development and Care* 186 (7): 1079–95.
- Economic Opportunity Institute. 2012. Training Makes a Difference: The Experience of Unionized Family, Friend, and Neighbor Child Care Providers in Washington State. Seattle: Economic Opportunity Institute.
- Grace, Cathy, and Louise Davis. 2005. "Right from Birth: A Model of Professional Development That Builds on the Science of Early Child Brain and Behavior Development." Presentation at State Administrators Management Institute and Child Care Policy Research Consortium Meeting, Washington, DC.
- Gray, Sarah A. O. 2015. "Widening the Circle of Security: A Quasi-Experimental Evaluation of Attachment-Based Professional Development for Family Child Care Providers." *Infant Mental Health Journal* 36 (3): 308–19.
- Gerstenblatt, Paula, Monica Faulkner, Ahyoung Lee, Linh Thy Doan, and Dnika Travis. 2014. "Not Babysitting: Work Stress and Well-Being for Family Child Care Providers." *Early Childhood Education Journal* 42 (1): 67–75.
- Hallam, Rena, Alison Hooper, Kaitlin Bargreen, Martha Buell, and Myae Han. 2017. "A Two-State Study of Family Child Care Engagement in Quality Rating and Improvement Systems: A Mixed-Methods Analysis." *Early Education and Development* 28 (6): 669–83.
- Halle, Tamara, Jessica Vick Whittaker, and Rachel Anderson. 2010. *Quality in Early Childhood Care and Education Settings: A Compendium of Measures*, 2nd ed. Washington, DC: US Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation.

REFERENCES 31

- Harder+Company Community Research. 2017. "Engaging Family, Friend, and Neighbor Informal Caregivers: Findings from Four Informal Child Care Projects." San Francisco: Harder+Company Community Research.
- Koh, Serene, and Susan B. Neuman. 2009. "The Impact of Professional Development in Family Child Care: A Practice-Based Approach." *Early Education and Development* 20 (3): 537–62.
- Kriener-Althen, Kerry. 2009. Study of Access to Quality Improvement Activities by Family Child Care Home Providers. Washington, DC: WestEd.
- Lanigan, Jane D. 2011. "Family Child Care Providers' Perspectives Regarding Effective Professional Development and Their Role in the Child Care System: A Qualitative Study." *Early Childhood Education Journal* 38 (6): 399–409.
- Minton, Sarah, Katie Stevens, and Lorraine Blatt. 2016. "Implications of Child Care and Development Block Grant Reauthorization for State Policies: Changes to Requirements for Legally Unregulated Child Care Providers." Washington, DC: Urban Institute.
- National Center on Early Childhood Quality Assurance. 2017. "Engaging Family Child Care Providers in Quality Improvement Systems." Fairfax, VA: National Center on Early Childhood Quality Assurance.
- Organizational Research Services. 2016. "Summary of Year-End Kaleidscope Play and Learn Participant Survey Results." Seattle: Organizational Research Services.
- Ota, Carrie L., and Ann M. Berghout Austin. 2013. "Training and Mentoring: Family Child Care Providers' Use of Linguistic Inputs in Conversations with Children." *Early Childhood Research Quarterly* 28 (4): 972–83.
- Paulsell, Diane, Toni Porter, Gretchen Kirby, Kimberly Boller, Emily Sama Martin, Andrew Burwick, Christine Ross, et al. 2010. Supporting Quality in Home-Based Child Care: Initiative Design and Evaluation Options. Washington, DC: US Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation.
- Porter, Toni, Tahra Nichols, Patricia Del Grosso, Carol Begnoche, Rachel Hass, Lee Vuong, and Diane Paulsell. 2010. A Compilation of Initiatives to Support Home-Based Child Care. Washington, DC: US Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation.
- Porter, Toni, Kayla Reiman, Christina Nelson, Jessica Sager, and Janna Wagner. 2016. "Quality in Family Child Care Networks: An Evaluation of All Our Kin Provider Quality." ZERO TO THREE 36 (4): 19–29.
- Rohacek, Monica, Amelia Coffey, and Katie Stevens. 2018. Research and Evaluation Capacity Building: A Resource Guide for Child Care and Development Fund Lead Agencies. Washington, DC: Urban Institute.
- Rusby, Julie C., Keith Smolkowski, Brion Marquez, and Ted K. Taylor. 2008. "A Small-Scale Randomized Efficacy Trial of Carespaces: Enhancing Children's Social Development in Child Care Homes." *Early Childhood Research Quarterly* 23 (4): 527–46.
- Shivers, Eva Marie, Flora Farago, and Patricia Goubeaux. 2016. The Arizona Kith and Kin Project Evaluation Brief #1: Improving Quality in Family, Friend, and Neighbor (FFN) Child Care Settings. Phoenix: Indigo Cultural Center, Institute for Child Development Research and Social Change.
- Shivers, Eva Marie, Flora Farago, and Charles Yang. 2016. The Arizona Kith and Kin Project Evaluation Brief #3: Professional Development with Family, Friend, and Neighbor Providers: Implications for Dual Language Learners. Phoenix: Indigo Cultural Center, Institute for Child Development Research and Social Change.
- Valorose, Jennifer, and Richard Chase. 2012. Child Care Workforce in Minnesota: 2011 Statewide Study of Demographics, Training, and Professional Development. St. Paul: Minnesota Department of Human Services.

32 REFERENCES

### **About the Authors**

Amelia Coffey is a research analyst in the Center on Labor, Human Service, and Population at the Urban Institute. Her work focuses on research and evaluation of programs and policies designed to support family self-sufficiency.

**Julia B. Isaacs**, a senior fellow in the Center on Labor, Human Services, and Population, is an expert in child and family policy with wide-ranging knowledge of government programs and budgets. She directs research on early childhood education and is coprincipal investigator for Urban's Kids' Share analyses of public spending on children.

ABOUT THE AUTHORS 33

## ABOUT THE CENTER FOR SUPPORTING RESEARCH ON CCDBG IMPLEMENTATION

This brief is a product of the Center for Supporting Research on Child Care and Development Block Grant (CCDBG) Implementation. The Center supports the Administration for Children and Families (ACF) in learning from research on policies implemented in response to the goals of the CCDBG Act of 2014. Through a contract awarded to the Urban Institute, ACF is helping Child Care and Development Fund lead agencies and their partners build capacity to conduct high-quality, rigorous research; informing the development of evidence on CCDBG programs; and facilitating learning from state-, territory-, and tribal-level research on the CCDBG.

#### **ABOUT THE URBAN INSTITUTE**

The nonprofit Urban Institute is a leading research organization dedicated to developing evidence-based insights that improve people's lives and strengthen communities. For 50 years, Urban has been the trusted source for rigorous analysis of complex social and economic issues; strategic advice to policymakers, philanthropists, and practitioners; and new, promising ideas that expand opportunities for all. Our work inspires effective decisions that advance fairness and enhance the well-being of people and places.

#### STATEMENT OF INDEPENDENCE

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.



2100 M Street NW Washington, DC 20037

www.urban.org