

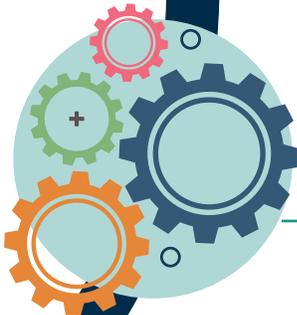
A Research Agenda for Home-Based Child Care



Availability of home-based child care



Provider experiences and quality features



Policy contexts



Early care and education and community-oriented strategies

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A RESEARCH AGENDA FOR HOME-BASED CHILD CARE

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OVERVIEW

Introduction

Millions of families with children from birth to age 12 rely on home-based child care (HBCC)—early care and education (ECE) offered in a provider’s or child’s home. Research on HBCC settings, however, lags behind research on center-based ECE settings, Head Start, and prekindergarten. Moreover, within HBCC, regulated family child care (FCC) providers are more likely to be the focus of research than family, friend, and neighbor (FFN) providers. Generally, the field lacks research about how the dynamics of HBCC availability and the features of HBCC settings relate to child and family outcomes.

To build the evidence base on HBCC availability and quality, the Home-Based Child Care Supply and Quality (HBCCSQ) project, funded by the Office of Planning, Research, and Evaluation (OPRE) within the Administration for Children and Families (ACF), developed an equity-focused research—or learning—agenda. The goal of an equity-focused research agenda is to use research to help ensure everyone, especially people from historically excluded and/or marginalized communities, has fair and equitable access to resources and opportunities and the capacity to take advantage of them. An equity-focused research agenda asks questions and pursues research that helps uncover how historical or current policies and prejudice might create roadblocks, or inequities, for particular groups and what might be needed to address these inequities and level the field of opportunity for those groups. Children and families from underserved communities—including communities of color, communities of people from immigrant backgrounds, areas of concentrated poverty, and rural communities—are much more likely to experience these inequities than are children and families in other groups. The agenda is a proposed set of research questions about how the conditions and systems that affect HBCC and how HBCC providers’ practices and experiences influence positive and equitable outcomes for children and families in these HBCC settings.

Primary topics

The research agenda encompasses the following topics:

- The gaps in the knowledge base about HBCC availability and quality, and the research questions that need to be answered to fill the knowledge gaps
- Research activities that could be conducted at the national, state, and local levels to answer the research questions
- Recommendations for future research activities that could be conducted as part of the HBCCSQ project

Purpose

The research agenda is intended to (1) help ACF, state and local agencies, and other stakeholders deepen their understanding of HBCC availability and quality, and the factors that influence its availability and quality; (2) reveal key gaps in knowledge and data and propose research questions that can help fill those gaps; (3) propose study designs to inform policy and practice; and (4) set the stage for the HBCCSQ project's next steps.

Key highlights

The HBCCSQ research agenda provides a pathway to understanding how to improve equity in ECE. It prioritizes research questions that can help the field understand and address some of the systemic, institutional, and community-based factors that perpetuate inequitable experiences among HBCC providers, children, and families, many of whom live in underserved communities. It also prioritizes questions that highlight features of quality that are implemented differently or are more likely to occur in HBCC than in other ECE settings. The implementation of these features might support more positive outcomes for children and families in HBCC. The research agenda also highlights the need to better understand how access to resources, policies, and programs can support HBCC providers in offering opportunities that build equitable and positive outcomes for children and families.

The research questions in the agenda are grouped under the following four topic areas:

- A.** Availability of HBCC, the providers who offer it, and the families who use it
- B.** HBCC provider experiences caring for children and families, and the relationship between quality features and outcomes
- C.** Policy contexts in which HBCC operates, including the opportunities and challenges associated with these policies and regulations
- D.** ECE and community-oriented strategies (such as FCC networks and play and learn groups) that contribute to HBCC providers' engagement in quality improvement

For each question in the agenda, research should examine how characteristics vary both within and across HBCC settings, provider backgrounds, the children and families who use HBCC, and the communities in which HBCC is provided. This research should also consider how these categories of characteristics intersect or interact with one another in different ways. In addition, throughout the research agenda, there are questions exploring the ongoing challenges and pressures faced by HBCC providers during the COVID-19 pandemic.

Methods

The research agenda builds on the knowledge and insights of ACF, previous project tasks, and experts, including the following activities:

- A targeted literature review that synthesized existing evidence on HBCC quality and illuminated the gaps in research on HBCC quality.
- Development of a conceptual framework that includes components of quality in HBCC; factors and influences associated with quality; and hypothesized child and family outcomes.
- A review focused on quality measures and indicators used in research, quality rating and improvement systems, and accreditation processes. The review showed gaps in measurement that will help guide development of future measures.
- A data scan that identified and described the information currently available from selected states and from national studies about HBCC availability and quality.
- Group and individual discussions with research and practice experts, including (1) a group of research experts convened by the project; (2) the Office of Child Care's Collaborative for FCC; (3) state and regional representatives from the National Association for Family Child Care; and (4) a learning community of organizations that receive funding from the Packard Foundation and deliver a variety of activities to FFN caregivers in California.

Recommendations

This report presents recommendations for four research activities that can help fill gaps, which is critical for advancing knowledge of HBCC availability and quality, and could be carried out through the HBCCSQ project. These recommendations include:

1. Analysis of data from the 2012 and 2019 National Survey of Early Care and Education, which are primary sources of nationally representative information about HBCC providers
2. A multisite mixed-methods study of HBCC, with a particular focus on FFN in underserved communities, which has received less attention in prior research
3. Case studies of state and local ECE systems and community-oriented strategies designed to support HBCC
4. Measures development focused on quality features that are implemented differently or are more likely to occur in HBCC than in other ECE settings, but where there is little or no research

EXECUTIVE SUMMARY

Millions of families with children from birth to age 12 rely on home-based child care (HBCC)—early care and education (ECE) offered in a provider’s or child’s home. HBCC includes regulated (licensed, certified, registered) family child care (FCC) and care legally exempt from regulation (license-exempt) that is provided by family, friends, or neighbors (FFN). HBCC is the most common form of nonparental child care for infants and toddlers (National Survey of Early Care and Education [NSECE] Project Team 2016). Many HBCC providers care for and educate mixed-age groups of children from infants through school-age children, allowing family members (for example, siblings) to receive care in the same setting. HBCC is especially prevalent in underserved communities, including communities of color, communities of people from immigrant backgrounds, areas of concentrated poverty, and rural communities (Laughlin 2013; Liu 2015; Liu and Anderson 2012; NSECE Project Team 2015b; Porter et al. 2010). National estimates show that regulated HBCC providers account for only a small fraction of all such providers (NSECE Project Team 2016). Providers who are not part of regulatory systems may or may not receive payment for providing child care and may have limited access to resources and supports to enhance the quality of care they offer.

Research on HBCC settings lags behind research on center-based ECE settings, Head Start, and prekindergarten (Bromer et al. 2021a). Moreover, within HBCC, regulated FCC providers are more likely to be the focus of research than FFN providers (Doran et al. forthcoming). Generally, the field lacks research about how the dynamics of HBCC availability and the features of HBCC settings relate to child and family outcomes.

To build the evidence base on HBCC availability and quality, the Home-Based Child Care Supply and Quality (HBCCSQ) project, funded by the Office of Planning, Research, and Evaluation (OPRE) within the Administration for Children and Families (ACF), developed an equity-focused research—or learning—agenda. The goal of an equity-focused research agenda is to use research to help ensure everyone, especially people from historically excluded and/or marginalized communities, has fair and equitable access to resources and opportunities, and the capacity to take advantage of those resources and opportunities. An equity-focused research agenda asks questions and pursues research that helps uncover how historical or current policies and prejudice might create roadblocks, or inequities, for particular groups and what might be needed to address them and level the field of opportunity for those groups. Children and families from underserved communities are much more likely to experience these inequities than other groups. The agenda is a proposed set of research questions about how the conditions and systems that affect HBCC and how HBCC providers’ practices and experiences influence positive and equitable outcomes for children and families in these HBCC settings. This focus on equity in the research agenda accomplishes the following:

- Raises awareness of the strengths and challenges HBCC providers face; the strategies and resources they use to support positive and equitable outcomes for children and families; and the ways that race, ethnicity, culture, language, and income may shape these experiences.

- Uncovers the conditions under which HBCC providers, children, and families thrive, and what is needed to honor their strengths, knowledge, and resilience, and address and support their challenges.
- Places HBCC providers at the center of inquiry, reflecting the field’s lack of deep knowledge about their experiences in providing care, including the conditions under which they operate, their interactions with ECE systems (such as licensing, subsidies, and quality rating and improvement systems), and the support they receive.

The research agenda builds on knowledge and insights provided by ACF and research and practice experts, and gleaned through foundational project tasks, including a targeted literature review of quality in HBCC, development of a conceptual framework, a review of available measures and indicators of quality, and a scan of currently available national and state data sets.

The agenda contains 10 research questions across four topic areas (Exhibit ES.1). The broad questions aim to fill gaps in knowledge about HBCC with a focus on HBCC availability and quality—two areas for which we have only limited or no research evidence. The questions in this chapter provide a guide for future research on HBCC. For each question, research should examine how characteristics vary both within and across HBCC settings, provider backgrounds, the children and families who use HBCC, and the communities in which HBCC is provided (see Box 1). This research should also consider how these categories of characteristics intersect or interact with one another in different ways. In addition, throughout the research agenda, we present questions that explore the ongoing challenges and pressures HBCC providers face during the COVID-19 pandemic.

Box 1. Research questions should explore variation across the following categories, as well as the intersection of characteristics within each category:

- **HBCC settings**, including regulatory status (particularly FFN); number and ages of children in care (particularly school-age children and mixed-age groups); previous relationships among providers and children in care; hours of care (particularly nontraditional hour care); and presence of other adults who regularly work with children
- **Providers**, including cultural, racial, ethnic, and linguistic backgrounds (particularly providers in underserved communities); immigration documentation/refugee status; financial and economic well-being; and psychological well-being
- **Children and families**, including cultural, racial, ethnic, and linguistic backgrounds (particularly children and families in underserved communities); ages and abilities of children; and socioeconomic status of families
- **Local community characteristics**, including conditions such as urbanicity (particularly rural); poverty/wealth; and demographics (particularly communities that are underresourced)

The research agenda is designed to inform research investments at the national, state, and local levels. To this end, it describes potential research activities and study design elements that could be used to address the research questions and shape future research endeavors.

Exhibit ES.1. Research questions by topic area

A. Availability of HBCC, the providers who offer it, and the families that use it	
A1	What is the availability of HBCC, and who offers it?
A2	What are provider experiences in offering HBCC, and how do these experiences relate to its availability? What opportunities and challenges do providers face with respect to caring for and educating children, and supporting families?
A3	Who uses HBCC? Why do they use it?
A4	What are children’s and families’ experiences in using HBCC?
B. HBCC provider experiences in caring for children and families, and the relationship between quality features and child and family outcomes in HBCC settings	
B1	How do HBCC providers define and implement quality for children and families? What is the relationship between these practices and equitable child and family outcomes?
B2	How do HBCC providers across settings; communities; and cultural, racial, ethnic, and linguistic groups enact quality, given the pressures of ECE policies and regulations? How do policies and regulations shape the ways that providers offer care to children and families?
B3	How do families perceive quality in HBCC?
C. Policy contexts in which HBCC operates, including ECE policies and regulations as well as other policies that govern HBCC providers, and the opportunities and challenges associated with these policies and regulations	
C1	How do ECE policies and regulations reflect and affect the experiences of HBCC providers? How do ECE policies and regulations dismantle or perpetuate inequities across HBCC providers and the families and children in these settings? In what ways do ECE policies and regulations exclude or include providers?
D. ECE and community-oriented strategies that contribute to HBCC providers’ engagement in quality improvement, the challenges and opportunities associated with delivering support for quality improvement, and the experiences of ECE staff who support HBCC providers	
D1	What types of strategies are used with HBCC providers? How are ECE and community-oriented strategies implemented? What are the experiences of ECE agency staff ^a who work directly with HBCC providers? What are the experiences of HBCC providers with agency staff?
D2	What ECE and community-oriented strategies contribute to HBCC providers’ experiences in improving quality and sustainability? What strategies are effective in reducing inequities in outcomes for HBCC providers and the children and families in HBCC settings?

^a ECE agency staff include those who work directly with HBCC providers through visits, coaching, mentoring, monitoring, or training. Agencies include professional development or quality improvement initiatives, networks, child care resource and referral agencies, and Head Start/Early Head Start programs, as well as licensing, child care subsidies, quality rating and improvement systems, and the Child and Adult Care Food Program (CACFP).

It also presents recommendations for four research activities that can help fill gaps, which is critical for advancing knowledge of HBCC availability and quality, and could be carried out through the HBCCSQ project. These recommendations include the following:

1. Analysis of data from the 2012 and 2019 NSECE, which are primary sources of nationally representative information about HBCC providers
2. A multisite mixed-methods study of HBCC, with a particular focus on FFN in underserved communities, which has received less attention in prior research
3. Case studies of state and local ECE systems, and community-oriented strategies (such as FCC networks and play and learn groups) designed to support HBCC
4. Measures development focused on quality features that are implemented differently or are more likely to occur in HBCC than in other ECE settings, but where there is little or no research

Together, these research activities will fill significant knowledge gaps related to the following:

- Who offers HBCC and changes in the availability and use of HBCC over time
- The strengths, resources, and strategies HBCC providers across settings use to support equitable outcomes for children and families, and how these experiences intersect with culture, race, ethnicity, language, and income
- How ECE systems and community-oriented strategies align with HBCC provider experiences, and corresponding opportunities and challenges
- Measures of quality in HBCC that shed light on the provision of care and education in HBCC that may contribute to equitable and positive child and family outcomes, and how best to support the strengths and enhance the quality of HBCC settings

Knowledge about the strengths and resources that HBCC providers bring to their work and their experiences, in particular among different cultural groups and communities, could expand the field's definitions of quality and indicate what is needed to serve children in different communities and contexts. Stakeholders could then use this knowledge to offer, or help HBCC providers access, resources and opportunities that honor the strengths and resources they bring to this work. In addition, the proposed research can inform how ECE policies and regulations could improve the experiences of HBCC providers and increase equitable access to high-quality care and education for *all* children and families that use HBCC. Furthermore, lessons learned about HBCC based on the HBCCSQ research agenda might identify potential gaps in knowledge about serving children and families in other types of ECE settings.

GLOSSARY

Family child care (FCC) refers to regulated (licensed, certified, or registered) HBCC.

Family, friend, and neighbor (FFN) care refers to HBCC that is legally exempt from licensing or other regulation, whether paid or unpaid. FFN care includes care given by grandparents, other relatives, and non-relatives.

Home-based child care (HBCC) providers are a heterogeneous population of providers who offer care and education to children in their own or the child's home. (Although we use "HBCC" throughout the report, we recognize the role providers play both caring for and educating children.) Providers' HBCC status is fluid, and individuals' roles may change—those who care for a few children who are related to them, whether with or without pay; those who offer care as a professional occupation and a business; those who care for children over many years; and those who care for children sporadically in response to changing family needs. We assume a variety of factors influence these patterns, which may shift over time.

I. INTRODUCTION AND METHODS

A research—or learning—agenda identifies and prioritizes research questions, research designs, and activities for answering the research questions, and products and strategies for disseminating the results to the appropriate audiences to guide policy and practice (Till and Zaid 2019; Nightingale et al. 2018). Specifically, the Home-Based Child Care Supply and Quality (HBCCSQ) research agenda suggests research questions that can help fill major gaps in knowledge and data to increase understanding of the availability and quality of home-based child care (HBCC). In addition, it describes methods that could potentially be used to collect and analyze the data needed to guide policy and research. The research agenda prioritizes building the research base of information needed to ensure that all families have access to and receive care that supports equitable outcomes for children and families. In Box I.1, we present a full list of key terms we use throughout this research agenda report.

The HBCCSQ research agenda was developed as part of a project funded by the Office of Planning, Research, and Evaluation (OPRE) within the Administration for Children and Families (ACF) to examine the availability and quality of HBCC. The overall purpose of the project is to examine gaps in understanding of the availability of HBCC and challenges defining and measuring quality in HBCC.

In this chapter, we provide a brief background on HBCC and gaps in HBCC research. We also describe the process for developing the agenda, including the incorporation of an equity framework, and the process for building on knowledge from ACF, other project tasks, and experts.

Box I.1. Key terms

Availability of early care and education (ECE) includes all nonparental care for children either in or out of their homes and encompasses both center-based and home-based settings. This availability is sometimes referred to as supply. Per the definition used by the National Survey of Early Care and Education (NSECE), the supply of HBCC providers includes the availability of care for children under age 13 in a provider's or child's own home.

Community refers to a place where people reside and interact, or a larger group of which people are a part. In this report, members of a community (for example, an Indigenous community) may have shared characteristics, experiences, or interests (Andrews et al. 2019).

Communities of color include providers, children, or families other than those who are non-Hispanic White-only, including Black, Hispanic/Latino/a, and Indigenous and Native American persons; Asian Americans and Pacific Islanders; and other persons of color.

ECE policies and regulations include licensing (or certification or registration), subsidy, quality and rating improvement systems (QRIS), Child and Adult Care Food Program (CACFP), Head Start, and publicly funded prekindergarten. The literature often discusses specific ECE policies and regulations as systems, although there is no single ECE system. States, territories, and Tribes include HBCC providers in various ways. For example, each state or territory sets forth its own licensing regulations; as of 2020, 44 states and three local areas had a fully operational QRIS (NCECQA 2020b; BUILD Initiative and Child Trends 2019). HBCC providers may participate in several regulatory systems, such as licensing, subsidy, or QRIS, or none at all. FFN caregivers who are not involved in any ECE systems are still considered part of the supply of HBCC providers.

Box I.1. Key terms (continued)

Equity in HBCC considers what is fair, unbiased, and just regarding HBCC providers' access to supports and resources. In a fully equitable system, all HBCC providers and the children and families in these settings have access to resources and opportunities, and the capacity to take advantage of them. Fully equitable systems seek to understand and address disparities in access and opportunity for HBCC providers compared to other ECE settings, such as center-based and school-based programs. For example, in a system in which racial equity exists, race and ethnicity are not predictors of the outcomes for children, families, and providers in HBCC that enable them to reach their full potential (Lee and Gilbert 2021). Similarly, a provider's, child's, or family's geographic location, immigration status, and socioeconomic level should not predict their outcomes.

Families refers to children and their biological or adoptive parents, legal guardians, or other individuals who may or may not be legally related to the child but who identify as a member of the family.

Family child care (FCC) refers to regulated (licensed, certified, or registered) HBCC.

Family, friend, and neighbor (FFN) care refers to HBCC that is legally exempt from licensing or other regulation, whether paid or unpaid. FFN care includes care given by grandparents, other relatives, and non-relatives.

HBCC providers are a heterogeneous population of providers who offer care and education to children in their own or the child's home. (Although we use "HBCC" throughout the report, we recognize the role providers play both caring for and educating children.) Providers' HBCC status may be fluid, and individuals' roles may change—those who care for a few children who are related to them, whether with or without pay; those who offer care as a professional occupation and a business; those who care for children over many years; and those who care for children sporadically in response to changing family needs. We assume a variety of factors influence these patterns, which may shift over time. See Box I.2 for a discussion of terms used to categorize HBCC settings.

Local programs, policies, and policymakers refer to locally governed and determined initiatives, regulations, or standards, as well as policymakers who shape the initiatives, programs, regulations, or standards that influence the lives of HBCC providers.

Quality in HBCC refers to the features of HBCC most likely to contribute to positive outcomes for children, families, and providers. For the HBCCSQ project, we have grouped these features into four components: (1) a safe and healthy home environment that fosters development, learning, and equity; (2) culturally, linguistically, and racially responsive provider-child interactions that nurture children's self-identity and healthy development; (3) supportive provider-family relationships and family supports that promote family well-being; and (4) healthy working conditions and resources for sustaining home-based care and education.

Quality improvement programs or supports include efforts that engage HBCC providers in both improving the care offered to children and families, and sustaining their care work. They include efforts funded by federal, state, local, foundation, private, and community-based agencies, organizations, or other resources.

Underserved communities refer to populations sharing a particular characteristic and geographic communities that have been systematically denied equal access to the resources, opportunities, and power they need to reach their full potential. Underserved communities relevant to HBCC include communities of color, communities of people from immigrant backgrounds, communities in areas of concentrated poverty, and rural communities.

A. Background on HBCC settings

Millions of families with children from birth to age 12 rely on HBCC—ECE offered in a provider's or child's home. Among HBCC providers, there is wide variability in providers' relationships with the children they care for and their motivations, experiences, education, and receipt of training and professional development related to ECE (Hooper and Hallam 2019, 2021). Some HBCC providers are regulated (licensed, certified, registered) FCC providers, whereas others are family, friends, or neighbor (FFN)

providers legally exempt from licensing or other regulation. Whether a provider is required to be regulated or not is determined by state licensing regulations, which differ between states. This variability makes distinguishing between settings as FCC or FFN difficult because a regulated FCC setting in one state may fall into the category of an FFN setting in another state. In Box I.2, we describe how we define and categorize HBCC providers in this report.

Box I.2. A note about definitions of HBCC settings used in this report

The HBCCSQ project distinguishes between FCC and FFN settings. These terms reflect the definitions of HBCC settings used most frequently in the research literature (Bromer et al. 2021a). FCC most commonly refers to regulated and paid HBCC. FFN most commonly refers to HBCC that is legally exempt from licensing or other regulation, whether paid or unpaid. Some studies focus specifically on child care by relatives—usually grandparents—as a distinct subcategory within the broader FFN category.

When describing data from the NSECE in this report, we rely on the survey’s definitions. The NSECE defines HBCC providers as individuals who regularly provide care in a home setting for children under age 13 who are not their own (NSECE Project Team 2015a). The NSECE groups these providers into two broad categories: (1) listed providers, who were sampled through state or national administrative lists; and (2) unlisted providers, who were identified through a household survey and regularly cared for a child who was not their own in a home setting at least five hours a week. The unlisted providers were grouped into two categories: those who were paid and those who were not paid. The NSECE also distinguishes among HBCC providers based on their relationships to the child, assuming that providers without a previous relationship may be more likely to be available to the public.

State licensing regulations typically focus on the characteristics of HBCC settings, including the number of children and the number of hours that providers may offer regulated care (NCECQA 2020b). Some states, for example, require a provider who cares for one non-relative child to be regulated (NCECQA 2020b). As a result, regardless of the number of children in their care, providers may be considered as licensed (FCC) in some states and as legally exempt from regulation (FFN) in others (NCECQA 2015a).

According to the 2012 NSECE, approximately 3.6 million out of 3.8 million HBCC providers are categorized as “unlisted” providers (likely FFN, according to the HBCCSQ project definitions; Box I.2). These providers may also be considered legally exempt from regulation because they did not appear on any national or state lists. Most of these unlisted providers (2.7 million) were not paid for caring for children (NSECE Project Team 2016). More than three-quarters of these unlisted and unpaid providers reported that they cared for only one or two children with whom they had a previous relationship, and they were motivated by a desire to help the children’s parents.

Regulated providers—those identified through national or state lists—account for only a small proportion of all HBCC providers. These “listed” providers (likely FCC, according to the HBCCSQ project definitions; Box I.2) may care for small groups of children without an assistant, whereas others may work with an assistant to offer care for larger groups, depending on state or territory regulations (NCECQA 2020a).

Across settings, many HBCC providers care for mixed-age groups of children from birth through age 12, allowing family members (for example, siblings) to receive care in the same setting. HBCC is the most common form of nonparental child care for infants and toddlers; providers cared for nearly 3.8 million children younger than age 3 in 2012 (NSECE Project Team 2016). Of those infants and toddlers, more than 3.3 million (90

percent) received care in unlisted HBCC settings, and 377,000 children (10 percent) in listed HBCC settings (NSECE Project Team 2015a).

Many HBCC providers care for children in underserved communities and are themselves members of these communities (see key terms in Box I.1). Research shows families of color, families from immigrant backgrounds,¹ those with low incomes working nontraditional hour jobs, and those living in rural areas are more likely to use HBCC than center-based ECE settings, including Head Start (Laughlin 2013; Liu 2015; Liu and Anderson 2012; NSECE Project Team 2015b; Porter et al. 2010). Moreover, unlisted providers care for many of the nation's most vulnerable children. According to the 2012 NSECE, 39 percent of unlisted HBCC providers offered care in areas with a high density of poverty compared with 17 percent of listed HBCC providers (NSECE Project Team 2015a).

Families of children with special needs or chronic illness may also depend on HBCC, particularly relatives (Henly and Adams 2018; Liu 2015). The 2012 NSECE found that a fifth of listed and unlisted paid HBCC providers and 10 percent of unlisted unpaid HBCC providers reported caring for at least one child with a disability (Hooper and Hallam 2021).

Families choose HBCC for a wide variety of reasons. HBCC providers offer care in ways that families often value, including care that is located within their own communities, offers flexible hours, and is affordable (or free). Trust is a major factor for parents of infants and toddlers who might prefer care in a home setting, as well as for families who prefer providers who share their culture, language, and child-rearing practices (Porter et al. 2010; Forry et al. 2013). Families who work in low-wage jobs with evening, night, weekend, or unpredictable, just-in-time schedules often rely on the flexibility offered by HBCC to meet their needs (Sandstrom et al. 2018; Stoll et al. 2015). Some families choose HBCC because they cannot afford center-based ECE or lack access to centers near their homes or jobs, especially in rural areas where HBCC settings may be the only available option (Henly and Adams 2018). For some families of children with special needs, the smaller group sizes, familiar home settings, and flexibility may make HBCC a preferred option (Booth-LaForce and Kelly 2004; Knoche et al. 2006).

Despite their prevalence in providing care in underserved communities, HBCC providers, regardless of regulatory status, may not have the same access to resources and supports that staff in ECE centers do (Henly and Adams 2018), and many of them face substantial challenges as they work to provide quality care. Such challenges include those related to sustainability, such as lower subsidy rates, exclusion from QRIS, and isolation and stress (NCECQA 2020a; Bromer et al. 2021b, 2021c). FFN providers typically lack access to the resources and professional development opportunities available to FCC providers.

¹ Families from immigrant backgrounds include mixed-status families, whose members fall into different citizenship and immigration classes.

B. Gaps in research on HBCC

Research on HBCC lags behind research on center-based ECE settings, Head Start, and prekindergarten. Moreover, existing ECE research and measurement has primarily adopted a center-based perspective. For example, many HBCC quality measures and QRIS standards and indicators are rooted in measures and indicators developed for centers and might not capture the features of care associated with quality in HBCC—especially features that are implemented differently or are more likely to occur in HBCC than in other ECE settings (Bromer et al. 2021a; Forry et al. 2013; Porter et al. 2010; Tonyan et al. 2017). Additionally, regulated FCC providers are the focus of research and measurement more often than FFN providers.

This project’s literature review on features of quality in HBCC found that the field lacks research about how the features of HBCC settings relate to child and family outcomes (Bromer et al. 2021a). Importantly, only a few studies explored characteristics common in HBCC settings, such as mixed-age groups that accommodate siblings and/or school-age children in the same child care arrangement. Few studies explored the potential strengths of informal learning opportunities and continuity of care in a familiar environment that is racially, culturally, and linguistically responsive to children’s needs.

In developing the HBCCSQ research agenda and considering priorities for the agenda, we used an equity framework, described further in the processes and methodology section below. Applying an equity framework calls for research to investigate the underlying causes of unequal access and outcomes associated with underserved communities, and to learn more about what might address those inequities and level the field of opportunity for those communities. It calls on researchers to highlight the strengths and resources of HBCC providers. Attention to both inequities and strengths is highlighted throughout this research agenda. Important considerations especially relevant to HBCC providers include several factors that current ECE policies and regulations or research often fail to address:

- HBCC providers are overwhelmingly female and racially and ethnically diverse, although differences exist by HBCC setting. For example, the 2012 NSECE found that 62 percent of listed providers (who account for a small percentage of the overall HBCC workforce) were non-Hispanic White, 16 percent were non-Hispanic Black, and 16 percent were Hispanic or Latino/a (Hooper and Schweiker 2020). Among unlisted paid providers, 53 percent were non-Hispanic White, 22 percent were non-Hispanic Black, and nearly 20 percent were Hispanic/Latino/a. By comparison, unlisted unpaid providers were 62 percent non-Hispanic White, 20 percent were non-Hispanic Black, and 13 percent were Hispanic/Latino/a.
- Listed providers tend to care for children who share the same racial and ethnic background (Hill et al. 2021) and, whereas less is known about the racial and ethnic match among unlisted providers and the children in their care, some studies have shown similar trends. Access to providers of a cultural, racial, ethnic, and linguistic background similar to that of families may be especially important to families of color and families from immigrant backgrounds. Children receiving care in a setting with providers who are culturally, racially, ethnically, or linguistically similar may experience positive outcomes, such as building positive racial and ethnic identities

(Caughy et al. 2002; Caughy and Owen 2015). This type of match may be a particularly important support for dual language learners (Shivers et al. 2016a). Research from school-based settings finds that children of color, and Hispanic/Latino/a² children in particular, have better outcomes when they experience a racial/ethnic match with their classroom teacher (Downer et al. 2016). However, studies of HBCC and measures of quality rarely examine the link between these features and child outcomes in HBCC (Bromer et al. 2021a).

- According to data from the American Community Survey (ACS), poverty rates among working women are higher for Black and Latina women than among other racial and ethnic groups. These disparities are magnified for Black and Latina women working in child care. The poverty rates for Black mothers (34 percent overall and 44 percent of Black single mothers) and Latina single mothers (54 percent) in the child care workforce are greater than those for other racial and ethnic groups (Vogtman 2017).
- State and federal policies that have increased professional development and higher education requirements over time may further magnify wage gaps for providers of color without equitable access or supports to meet those requirements. For example, even though research shows a relationship between increases in educational requirements and decreases in diversity among ECE center-based teachers (Bassok 2013; Chang 2006), continuing education programs with financial, academic, and access supports have demonstrated success for early educators of color (Kipnis et al. 2012). HBCC providers of color, specifically Black and Hispanic/Latino/a providers, face many additional barriers accessing resources associated with high quality care, including access to affordable housing that meets child care safety standards and guidelines, and access to culturally and linguistically relevant professional development supports. These unequal working conditions reflect the lack of public recognition and respect for home-based labor and women's work, especially work performed by women of color (Sethi et al. 2020; Tuominen 2003; Vogtman 2017). Despite barriers to resources, HBCC providers continue to provide child care in ways that families in their communities value.
- In many rural communities, HBCC is typically one of the only options for families in need of child care. Compared to metropolitan families, rural families have access to significantly fewer options for care in center-based or licensed FCC settings, especially for their infants and toddlers (Henly and Adams 2018). Unsurprisingly, research shows that rural children are cared for by FFN providers at higher rates than center-based or FCC providers (Anderson and Mikesell 2019). However, the field lacks research on whether rural families prefer FFN providers, and why. Barriers to finding child care in rural areas include distance and transportation issues, which may also limit the potential for HBCC providers to participate in quality

² For the HBCCSQ project, we use the term Hispanic/Latino/a to describe the population of people tracing their roots to Latin America and Spain. Although the term Latinx has emerged as a gender-neutral alternative to Latino/a, it is not yet a widely recognized term among all Hispanic/Latino/a populations (Noe-Bustamante et al. 2020), so for purposes of this report, we used the standards for ethnicity classifications as defined by the Office of Management and Budget (1997).

improvement efforts or obtain support for professional development. In some rural areas, the availability of high-speed Internet in homes is limited, reducing providers' options for connecting with resources. Research about the provision of HBCC in rural areas is sparse and limits what is known about potential strategies for supporting HBCC.

- Families with children who have disabilities or other special needs experience numerous barriers finding child care, especially stable and consistent care (Booth-LaForce and Kelly 2004; Knoche et al. 2006). Some families report HBCC providers meet more of their child care preferences compared to center-based teachers (Booth-LaForce and Kelly 2004). However, little is known about the supports provided to HBCC providers who care for children with disabilities and other special needs. There are no current studies of HBCC quality that examine features of HBCC and outcomes for children with disabilities or special needs (Bromer et al. 2021a).
- Although much of the research on HBCC providers focuses on children from birth to age 5, research also shows many families require school-age child care (also known as out-of-school-time care) as a work support (Afterschool Alliance 2020). Evidence suggests out-of-school-time programs may support student academic achievement and reduce health disparities (Lauer et al. 2006). However, results from the Afterschool Alliance's nationally representative survey of parents or guardians of school-age children (2020) found that families with school-age children in underserved communities faced unmet needs, including a lack of affordable care during before- and after-school hours and in the summer months. This situation was particularly true for children from Black and Hispanic/Latino/a families. In its third wave, the survey also found that families with low incomes have increasingly experienced unmet needs for school-age child care (Afterschool Alliance 2020).
- The COVID-19 pandemic has brought attention to the pivotal role played by HBCC providers in child care and highlighted systemic inequities facing HBCC providers and families, and the fragility of HBCC providers' financial conditions that existed before the pandemic. Provider reports gathered after the start of COVID-19 underscored the financial challenges faced by providers, including lack of income to meet rent, mortgage, or utility payments; lack of health insurance during a time of significant risk; and challenges in paying for food for their own families and for the children in their care (Home Grown 2020; Porter et al. 2020). During the early stages of the pandemic, some reports suggested a shift from center-based care to HBCC for some families, including many essential workers who relied on HBCC to care for their children (Adams 2020; Smith and Morris 2020). FCC providers were initially more likely than centers to remain open (Bipartisan Policy Center 2020). Yet, many HBCC providers faced challenges with decreased enrollment and the consequent decline in income (Home Grown 2020; Porter et al. 2020).
- HBCC providers, especially FFN providers, historically have been left out of federal and state ECE policies that aim to help provide affordable and high quality care to children and families. For example, many states do not permit unlicensed providers to participate in QRIS (BUILD and Child Trends 2019). As a recent example, in nearly all states (42), only ECE centers and licensed HBCC received funding from

the CARES Act (Schulman 2020). The American Rescue Plan Act, passed in March 2021, included much larger funding for child care than previous pandemic relief legislation, and applied to providers eligible to receive subsidies, which includes unlicensed HBCC providers (Hardy and Gallagher Robbins 2021). However, state decisions about how to administer the additional funding and existing barriers related to HBCC provider participation in licensing and subsidy systems will affect how much of this funding helps HBCC providers and families in underserved communities, who are among those who have experienced the pandemic's most adverse health and economic outcomes.

In Chapter II, we discuss more specific gaps in research on HBCC that can be filled by the research questions listed in that chapter. As discussed in the next section, we identified these gaps by applying an equity framework and building on the knowledge of ACF, previous project tasks, and experts in the field.

Future research about how HBCC providers sustain their work, the strengths they bring to this work, and the ways they nurture children and families can provide new insights into how HBCC contributes to equitable outcomes for families and children. Additional research is also needed to explore promising approaches to support HBCC providers' caregiving practices and the conditions likely to sustain their caregiving work. Research on service delivery strategies that support HBCC providers may also offer new insights into how to stabilize and expand the field of HBCC amid the documented decline in regulated and subsidized FCC (NCECQA 2020a), and the continued challenges and pressures faced by HBCC providers during the COVID-19 pandemic.

The HBCCSQ research agenda will help ACF, state and local ECE agencies, and other stakeholders (such as provider professional organizations and community-oriented service delivery agencies) deepen their understanding of HBCC availability and quality, and the factors that influence its availability and quality. The research agenda assigns great importance to understanding the availability and quality of HBCC within communities of color, communities of people from immigrant backgrounds, communities in areas of concentrated poverty, and rural communities. Knowledge about the strengths and resources that HBCC providers bring to their work and their experiences, particularly among different cultural groups and communities, could expand the field's definitions of quality and indicate what is needed to serve children in different communities and contexts. Stakeholders could then use this knowledge to offer, or help HBCC providers access, resources and opportunities that honor the strengths and resources they bring to this work. In addition, the proposed research can inform how ECE policies and regulations could improve the experiences of HBCC providers and increase equitable access to high-quality care and education for *all* children and families that use HBCC. Furthermore, lessons learned about HBCC based on the HBCCSQ research agenda might identify potential gaps in knowledge about serving children and families in other ECE settings.

C. Process and methodology

1. Applying an equity framework

The HBCCSQ research agenda provides a pathway to understanding how to improve equity in ECE. It prioritizes research questions that can help the field understand and address some of the systemic, institutional, and community-based factors that perpetuate inequitable experiences among HBCC providers, children, and families, many of whom live in underserved communities. It also prioritizes questions that highlight features of quality that are implemented differently or are more likely to occur in HBCC than in other ECE settings, and that might support more positive outcomes for children and families. The research agenda also highlights the need to better understand how policies and programs can better support the ways HBCC providers offer opportunities that can build equitable and positive outcomes for children and families (see Box I.3).

The questions in the research agenda focus on understanding the strengths of HBCC providers, as well as the challenges they face, particularly those living in underserved communities and supporting children and families in these communities. Furthermore, the agenda acknowledges that the backgrounds and experiences of providers, children, and families (such as race and ethnicity, socioeconomic status, language, age, culture, social capital), as well as community characteristics (such as community wealth, urbanicity) all intersect in different ways to influence the work of HBCC providers with children and families. Future research should account for these multilayered and complex relationships.

Box I.3. Equitable outcomes for children and families

We use this phrase to acknowledge a foundational goal that all children and families have opportunities to achieve their full potential through the same long-term outcomes, including social-emotional well-being and cognitive, language, and physical development for children, as well as positive family-child relationships, economic stability, and reduced stress for families. Yet we recognize that pathways toward these outcomes may look different depending on access to the resources needed for healthy development and success, as well as experiences with systemic racism and economic inequities.

Examination of equitable outcomes for children and families in HBCC requires that research acknowledges the ways that race, ethnicity, language, and culture may intersect with the experiences of providers, children, and families. Future research should examine the ways HBCC settings and providers may both buffer inequities as well as support the strengths of children and families from underserved racial, ethnic, cultural, and linguistic groups.

2. Building on knowledge of ACF, previous project tasks, and experts

The research agenda builds on the knowledge and insights of ACF, previous project tasks, and experts.

Previous project tasks

- **Targeted literature review.** As a first step, the project team conducted a targeted literature review (Bromer et al. 2021a). It synthesized existing evidence on HBCC quality and illuminated the gaps in research on HBCC quality.

- **Conceptual framework development.** Building on findings from the literature review, and incorporating expert and stakeholder input, the team developed a revised conceptual framework that provides an overarching guide to the major research questions and priorities. It includes components of quality in HBCC; factors and influences associated with quality; and the hypothesized child and family outcomes. However, new research is needed to understand features of quality that are implemented differently or more likely to occur in HBCC than in other ECE settings, and the factors and influences that may shape implementation of those features.
- **Quality measures and indicators review.** The team searched for quality measures and indicators used in research, QRIS, and accreditation processes (Doran et al. forthcoming). The review showed gaps in measurement that will help guide development of future measures. The review highlighted how the currently available measures are derived from measures of center-based ECE for specific age ranges.
- **Data scan.** Finally, the data scan identified and described the information currently available from states and from national studies about HBCC availability and quality. It identified secondary data sources for answering major research questions and highlighted gaps in information about HBCC providers, including non-licensed care and HBCC providers from underserved communities.

Consultation with research and practice experts. The project conducted group and individual discussions with research and practice experts. These experts included (1) a group of research experts convened by the project; (2) the Office of Child Care's Collaborative for FCC; (3) state and regional representatives from the National Association for Family Child Care; and (4) a learning community of organizations that receive funding from the Packard Foundation and deliver a variety of activities to FFN caregivers in California. The experts provided information about differences in how HBCC providers offer care across different settings and communities. In addition, they encouraged greater focus on both the inequities that HBCC providers often encounter and the unique strengths they bring to child care, particularly providers of color and those who care for children and families from underserved communities. The experts also provided guidance on equitable approaches to conducting research on HBCC, including an emphasis on the importance of making HBCC providers' experiences the focus of all aspects of the research agenda. Their recommendations played a central role in shaping the research questions presented in this agenda.

D. Organization of the research agenda

The research agenda lists high-level research questions and detailed subquestions (Chapter II), followed by a description of research activities that could be conducted to answer the research questions (Chapter III). In Chapter IV, we discuss recommendations for future research.

II. RESEARCH QUESTIONS TO FILL GAPS IN THE KNOWLEDGE BASE ABOUT HBCC

In this chapter, we present 10 research questions across four topic areas (Exhibit II.1). These broad questions aim to fill gaps in knowledge about HBCC, with a focus on HBCC availability and quality, two areas for which we have only limited or no research evidence. These gaps generated a series of subquestions (Exhibits II.2 through II.11) intended to shed light on HBCC in the broader context of the ECE policy landscape. The questions could be priorities for research going forward, and the results could guide policies for ensuring positive and equitable outcomes for HBCC providers, children, and families, particularly in underserved communities. Answering the questions will require research investments at the national, state, and local levels. In Chapter III, we discuss the types of research activities that can be used to answer the questions presented in this chapter.

The questions place HBCC providers at the center of the research agenda, reflecting the lack of deep knowledge about their experiences in providing care—the conditions under which they operate, the practices they use to support children and families, their interactions with ECE systems, and the support they receive. Across the questions in this chapter, future research should examine variation in providers' experiences, including the role of the characteristics of HBCC settings, providers, children and families in HBCC, and their communities (see Box II.1).

Box II.1. Research questions should explore variation across the following categories, as well as the intersection of characteristics within each category:

- **HBCC settings**, including regulatory status (particularly FFN); number and ages of children in care (particularly school-age children and mixed age groups); previous relationships among providers and children in care; hours of care (particularly nontraditional hour care); and presence of other adults who regularly work with children
- **Providers**, including cultural, racial, ethnic, and linguistic backgrounds (particularly providers in underserved communities); immigration documentation/refugee status; financial and economic well-being; and psychological well-being
- **Children and families**, including cultural, racial, ethnic, and linguistic backgrounds (particularly children and families in underserved communities); ages and abilities of children; and socioeconomic status of families
- **Local community characteristics**, including conditions such as urbanicity (particularly rural); poverty/wealth; and demographics (particularly communities that are underresourced)

Exhibit II.1. Research questions by topic area

A. Availability of HBCC, the providers who offer it, and the families who use it	
A1	What is the availability of HBCC, and who offers it?
A2	What are provider experiences in offering HBCC, and how do these experiences relate to its availability? What opportunities and challenges do providers face with respect to caring for and educating children, and supporting families?
A3	Who uses HBCC? Why do they use it?
A4	What are children's and families' experiences in using HBCC?
B. HBCC provider experiences in caring for children and families, and the relationship between quality features and child and family outcomes in HBCC settings	
B1	How do HBCC providers define and implement quality for children and families? What is the relationship between these practices and equitable child and family outcomes?
B2	How do HBCC providers across settings; communities; and cultural, racial, ethnic, and linguistic groups enact quality, given the pressures of ECE policies and regulations? How do policies and regulations shape the ways that providers offer care to children and families?
B3	How do families perceive quality in HBCC?
C. Policy contexts in which HBCC operates, including ECE policies and regulations as well as other policies that govern HBCC providers, and the opportunities and challenges associated with these policies and regulations	
C1	How do ECE policies and regulations reflect and affect the experiences of HBCC providers? How do ECE policies and regulations dismantle or perpetuate inequities across HBCC providers and the families and children in these settings? In what ways do ECE policies and regulations exclude or include providers?
D. ECE and community-oriented strategies that contribute to HBCC providers' engagement in quality improvement, the challenges and opportunities associated with delivering support for quality improvement, and the experiences of ECE staff who support HBCC providers	
D1	What types of strategies are used with HBCC providers? How are ECE and community-oriented strategies implemented? What are the experiences of ECE agency staff ^a who work directly with HBCC providers? What are the experiences of HBCC providers with agency staff?
D2	What ECE and community-oriented strategies contribute to HBCC providers' experiences in improving quality and sustainability? What strategies are effective in reducing inequities in outcomes for HBCC providers and the children and families in HBCC settings?

^a ECE agency staff include those who work directly with HBCC providers through visits, coaching, mentoring, monitoring, or training. Agencies include professional development or quality improvement initiatives, networks, child care resource and referral agencies, and Head Start/Early Head Start programs, as well as licensing, child care subsidies, QRIS, and CACFP.

The timing of the development of the HBCCSQ project research agenda. The development of the HBCCSQ project's research agenda began in late 2020, almost eight months into the COVID-19 pandemic and in the aftermath of a summer that saw historic civil unrest accompanied by demands for redress of long-standing racial inequities in access to resources and opportunity in the United States. The COVID-19 pandemic has highlighted the critical role played by HBCC in supporting families, as well as the vulnerability of HBCC providers to the disproportionate impacts of the pandemic on underserved communities. Studies conducted during the pandemic underscored the fragility of providers' financial status, including lack of income to meet rent, mortgage, or utility payments; lack of health insurance during a time of significant

risk; and challenges in paying for food for their own families and for the children in their care (Home Grown 2020; Nagasawa and Tarrant 2020; Porter et al. 2020). The crisis also pointed to the challenges of sustaining HBCC amid a decline in enrollment and the associated decrease in income (Home Grown 2020; Porter et al. 2020). These findings demonstrated the need for research into policy and service delivery strategies to better understand the inequities that HBCC providers experience, and suggested that the pandemic was a justifiable focus of the HBCCSQ's research agenda. However, our team—in collaboration with OPRE—decided to concentrate on a broader set of research questions. Therefore, we have included subquestions specific to the COVID-19 pandemic throughout the research agenda because experiences during this extraordinary period may provide insights into new directions for research and policy.

A. Understanding the availability of HBCC, the providers who offer it, and the families who use it

The NSECE, a nationally representative survey of the use and availability of ECE in the United States, is the primary source of data on the number and characteristics of HBCC providers. The survey, conducted in 2012 and again in 2019, provides a point-in-time look at the population of HBCC providers. Although the NSECE has answered many questions related to HBCC availability and use, no single survey could answer all questions about HBCC, including its availability, how its availability has changed over time, how providers move in and out of HBCC, ECE systems and other ECE settings, and HBCC providers' experiences in caring for children and the conditions under which they provide care. In Exhibits II.2 through II.5, we provide a list of subquestions related to these knowledge gaps. For each subquestion, research is needed on variation across the characteristics listed in Box II.1, as well as the intersection of these characteristics. Below each exhibit, we describe the gaps in the knowledge base motivating each subquestion.

A1. What is the availability of HBCC, and who offers it?

Availability of HBCC. Recent national licensing and subsidy data indicate that the number of licensed FCC providers has steadily declined since 2008 (NCECQA 2020a). These data indicate that the overall number of licensed FCC providers dropped by 42 percent between 2008 and 2017, potentially limiting options for families who prefer such care. A recent literature review on the factors behind the decline of regulated FCC suggests a constellation of factors that may influence provider decisions to stay in or leave FCC, including the intersection of systemic inequities, individual experiences, working conditions, and sustainability challenges (Bromer et al. 2021b). Further research is needed to explore changes in availability of HBCC over time, as well as how availability varies across and within settings; regulatory status; and by provider, child, family, and community characteristics.

Exhibit II.2. Subquestions for question A1

Subquestions	
A1a	What is the availability of HBCC , and how has it changed over the past 10 years?
A1b	What is the movement of HBCC providers in and out of HBCC, licensing and regulatory systems, and ECE ? What proportion of HBCC providers stop providing care altogether? When HBCC providers no longer provide child care, what non-child care work or activities do they pursue? What proportion of providers leaves HBCC to work in center- or school-based settings? What proportion of FFN providers becomes licensed? What proportion of FCC providers leaves licensed settings to offer FFN care? Which factors are the strongest predictors of HBCC tenure and exit?
A1c	To what extent are HBCC providers participating in ECE systems , such as subsidy programs, QRIS, the federal CACFP, federal Early Head Start-Child Care Partnerships (EHS-CCP), or publicly funded prekindergarten? How has participation in these systems changed over the past 10 years? What is the movement of HBCC providers in and out of these systems?
A1d	How are changes in the availability of other regulated ECE settings , such as Head Start, Early Head Start, or public prekindergarten for 3- and 4-year-old children related to changes in the availability of HBCC ?
A1e	How has the availability of HBCC changed since the start of the COVID-19 pandemic ?
A1a–A1e	For each question, what is the variation across and within HBCC settings; provider, child, and family backgrounds; and local community characteristics (see Box II.1)?

Providers' movement in and out of HBCC and in and out of regulatory and licensing systems within HBCC. The 2019 NSECE surveys will provide some insights into changes in the population of HBCC providers—those who do and do not participate in regulatory and other ECE systems; however, the surveys will not answer questions about the shifts in the population of HBCC providers. Given changes in the landscape of FCC providers, more research is needed on providers' movements in and out of ECE regulatory and licensing systems, across ECE settings (such as center-based care, Head Start, or care for children in the early grades of elementary school), and in and out of ECE altogether into another field. Research is also needed to answer questions about the potential shifts in the population of FFN caregivers, such as whether FFN caregivers move toward regulated care or stop providing care.

Providers' participation in ECE systems. National data provide estimates of providers' participation in ECE systems, but additional research is needed to answer questions about how participation in these systems varies across settings, as well as by provider, child, family, and community characteristics. For example, national data indicate that higher proportions of FCC providers than FFN caregivers participate in the Child Care and Development Fund (CCDF) subsidy system (Office of Child Care 2017), and the number of FCC providers in the subsidy system decreased by half between 2006 and 2015 (Mohan 2017; NCECQA 2020a). Similarly, between 2011 and 2017, the share of children in FFN subsidized care with relatives decreased by 15 percent and the share of children in FFN subsidized care with nonrelatives decreased by 25 percent (Office of Child Care 2017). Studies suggest that FCC providers participate in QRIS at lower rates than centers (BUILD and Child Trends 2019) and relatively few FCC providers participate in Early Head Start-Child Care Partnerships (Office of Child Care n.d.) or publicly funded prekindergarten programs (Friedman-Krauss et al. 2020). Similarly, HBCC participation in CACFP is relatively low (approximately 82,000 homes

in 2020), although program sponsors in most states do not permit providers who are legally exempt from regulation to participate (Food and Nutrition Service 2020; NCECQA 2015b).

How the availability of other regulated ECE settings affects HBCC availability.

Some research suggests that the availability of prekindergarten, in particular, may result in lower enrollment of preschool children in HBCC; however, research is needed to determine whether having fewer preschool-age children in care influences HBCC providers’ decisions to continue providing care (Bassok et al. 2016; Brown 2018; Sipple et al. 2020). Additional research also is needed to determine whether and how the availability of other regulated ECE settings in a community, such as Head Start, Early Head Start, and public prekindergarten, affects the availability of HBCC.

Changes in the availability of HBCC since the start of the COVID-19 pandemic.

Despite ongoing research on the pandemic’s impact on the availability of ECE, including HBCC (see the List of COVID-19 Child Care Surveys and Data Analysis maintained by the Urban Institute [2021]), we lack a systematic analysis of the sustained effects of state closures or essential workers’ child care exemptions on HBCC enrollment, income, and working conditions. For example, some research points to an increase in the enrollment of school-age children in HBCC during school closures, but other research indicates an overall decrease in enrollment and an associated decline in income among HBCC providers (Home Grown 2020). Providers’ movement in and out of HBCC associated with the COVID-19 pandemic may play out for years to come and have implications for the future availability of HBCC.

A2. What are provider experiences in offering HBCC, and how do these experiences relate to its availability? What opportunities and challenges do providers face with respect to caring for and educating children, and supporting families?

Exhibit II.3. Subquestions for question A2

Subquestions	
A2a	What are providers’ experiences in offering HBCC, and how do these experiences relate to HBCC availability ? Why do providers decide to leave or stay in HBCC? Why do providers stop caring for children altogether or continue caring for and educating children, but not in HBCC? What are their reasons for participating in regulatory and ECE systems? What are providers’ experiences in participating in several ECE and non-ECE systems?
A2b	What are the strengths, resources, and knowledge that HBCC providers bring to their work with children and families? What strategies do they use to continue this work and survive, cope, and thrive, despite multilayered challenges such as systematic racism? What sources of supports and strength do they access?
A2a–A2b	For each question, what is the variation across and within HBCC settings; provider, child, and family backgrounds; and local community characteristics (see Box II.1)?

Providers’ experiences in offering HBCC, and how these experiences relate to HBCC availability and stability. Despite some research on the decline of FCC availability, much less is known about FFN providers’ experiences in offering HBCC and how providers’ experiences relate to its availability. Data indicate that HBCC providers’

cultural, racial, ethnic, and linguistic backgrounds may shape their experiences in offering HBCC and interact with the demands of ECE systems; the process of obtaining credentials and identifying opportunities for professional development; and the pressures of sustaining their own economic, physical, and psychological well-being (Shivers et al. 2016a). Systemic inequities embedded in many ECE policies and regulations may create an additional layer of challenges for HBCC providers who are women of color (Souto-Manning and Rabadi-Raol 2018). Children and families of color who are in care in HBCC may also face challenges related to accessing services and resources, capitalizing on opportunities for educational advancement, or identifying schools that are responsive to the needs of all children. Given the complexity of the dynamics that shape both the availability and stability of HBCC, more research is needed to understand how systemic inequities may shape HBCC providers' decisions to stay or leave HBCC.

We also lack evidence about the conditions under which FCC providers offer small- or large-group care, defined as care offered with two or more adults (NCECQA 2020b). Despite the net decrease in FCC, national licensing data indicate that small-group FCC declined, whereas large-group FCC increased between 2005 and 2017 (NCECQA 2020b). Research is needed to understand providers' decisions to offer large-group care versus small-group care and their experiences in these two kinds of settings, including work with larger groups of children and assistants.

Further, there is little research about the experiences of HBCC providers who offer care during evenings, early mornings, nights, and weekends (often referred to as nontraditional hour care); the reasons providers offer care during these periods; and the resultant challenges (Bromer et al. 2021a; Tang et al. 2021). In addition, research is needed about the circumstances under which providers offer care to school-age children or children with disabilities.

Experiences and strategies that help HBCC providers thrive. Few studies examine the strengths, resources, and strategies that HBCC providers use to survive, cope with, and thrive, despite the multilayered challenges they face. HBCC is generally underrecognized across research, advocacy, and policy compared to center-based programs and prekindergarten (Bromer et al. 2021b; Blasberg et al. 2019). Furthermore, systemic racism poses an additional layer of challenges for HBCC providers of color and the children and families in their care. Research is needed on the strengths, such as resilience (for example, the capacity to cope with adversity; Beardslee et al. 2010) and cultural knowledge, that providers bring to their work with children and families.

Finally, research has not examined the roles and experiences that HBCC providers may play in their local communities. HBCC providers are rooted and embedded in local communities and may view their work as a calling to serve the community (Tuominen 2003). Earlier research has shown that community social processes, such as community cohesion and collective efficacy (the extent to which neighbors know and trust each other, share values, and rely on each other to look out for children and youth), are related to positive outcomes for children (Sampson et al. 1997). HBCC providers' connections to and roles in their local communities, and the ways they strengthen social ties and create a sense of belonging, may be strengths and resources

that motivate them to continue offering care. These community roles may also have the potential to contribute to neighborhood social processes that benefit children and families. For example, HBCC providers in urban neighborhoods, especially those who may be motivated in part to provide care to strengthen the community, may function as a neighborhood watch, offer a safe place for latch-key children after school, or function as a trusted resource for family support and communication about the community (Bromer 2002; Bromer and Henly 2009). In these ways, HBCC providers can play roles that may be fundamentally different than those of center-based teachers, who may not develop the same kinds of responsive relationships with families and children or offer the same kinds of supports (Bromer and Henly 2009; Fitz Gibbon 2002). More research is needed to explore these community and family support roles, and the ways these aspects of HBCC experiences contribute to positive provider, family, and child outcomes.

A3. Who uses HBCC? Why do they use it?

Exhibit II.4. Subquestions for question A3

Subquestions	
A3a	What is the percentage of children in nonparental child care served across HBCC settings ? How has this percentage changed over the past 10 years?
A3b	How have family preferences for HBCC changed over the past 10 years? How have family preferences for HBCC changed by families' employment patterns (including the need for nontraditional hour care)?
A3c	How does family use of HBCC relate to access factors (e.g., HBCC in a family's community, proximity to places of employment, or local transportation options or travel distance)? How do families address their child care needs in areas where no regulated ECE is available?
A3d	In their decisions to use HBCC, how do families consider providers' participation in regulatory and licensing systems, and other ECE systems , such as QRIS, CACFP, and Early Head Start-Child Care Partnerships? To what extent does HBCC participation in licensing and QRIS influence family decisions to use and stay in HBCC?
A3e	How did family preferences for HBCC change during the COVID-19 pandemic ?
A3a–A3e	For each question, what is the variation across and within HBCC settings; provider, child, and family backgrounds; and local community characteristics (see Box II.1)?

Families' use of HBCC. Additional research is needed on families' use of HBCC. Studies indicate that the following families tend to rely on HBCC: those living in poverty; Black and Hispanic/Latino/a families; those with member(s) working in nontraditional hour jobs; recent immigrants working in entry-level, low-wage jobs; and families with infants and toddlers and/or children with special needs (Henly and Adams 2018; Forry et al. 2013; Laughlin 2013; NSECE Project Team 2015b; Sandstrom et al. 2018). We do not fully understand the variation in the use of paid and unpaid HBCC among families living in poverty, although low-income families are more likely to rely on unlisted, unpaid HBCC providers than listed paid HBCC providers. We also do not fully understand how families' use of HBCC varies by their cultural, racial, ethnic, or linguistic backgrounds, or other family characteristics such as household composition (Forry et al. 2013), despite some research on the use of HBCC among families of Hispanic and Latino/a origin (Crosby et al. 2016).

In addition, we do not know much about the relationship between families' use of HBCC and community characteristics, even though findings indicate that families living in neighborhoods with high collective efficacy, defined as social cohesion and trust among residents (Sampson et al. 1997), are more likely to use nonrelative HBCC than centers. Families living in neighborhoods with large social networks are more likely to rely on relatives than other types of care (Burchinal et al. 2008).

Family preferences. Family preferences for care may differ from their actual use of it, depending on the available options and opportunities for care (Forry et al. 2013). Studies suggest that families prefer HBCC for several reasons, including the potential for individual attention that comes with a small group, as well as trust with someone familiar, particularly among families who choose FFN care (Porter et al. 2010). Families may also want culturally congruent care with providers who share their beliefs, values, practices, and language (Gordon et al. 2013; Porter et al. 2010).

Children's experiences in care may influence families' preferences for type of care. The 2012 NSECE survey, for example, found that families' ratings of care varied in relation to children's preparedness for school, opportunities for interactions with peers, and nurturing across center-based settings and between or within FCC or FFN care. Higher proportions of families rated centers as good or excellent with respect to educational preparedness compared to FCC (NSECE Project Team 2014). Other research also suggests that families may value center care for the same reason (Carlin et al. 2019). Higher proportions of families rated FFN higher than FCC on nurturing.

In addition, the cost of care is likely a significant factor in the selection and use of child care (Ben-Ishai et al. 2014; Morrissey 2017). Cost may put a preferred arrangement out of reach. For example, given that some research indicates center-based care costs more than FCC (Child Care Aware of America 2019; NSECE Project Team 2015a), families may choose FCC because it is the more affordable option. In addition, no-cost care, such as FFN or public prekindergarten, may be more attractive options for families than other settings. A study examining the use of child care between 1990 and 2011, for example, found that young children were more likely to be enrolled in no-cost public prekindergarten than in FCC or community-based centers, suggesting that families may have preferred or turned to that setting for financial reasons (Herbst 2018). Similarly, many FFN caregivers do not charge for care at all (NSECE Project Team 2015a), which may influence families' selection or use of these settings.

Research could extend these findings by examining the considerations behind parent decisions for care and the ways financial resources, preferences, and needs translate into the use of types of HBCC settings.

How families' use of and preferences for HBCC relate to access factors. Only a small body of research addresses the relationship between parents' employment patterns and reliance on HBCC. We do not know much about factors that may affect access to care, such as commuting time or transportation to the HBCC location, although we do know that parents who work nonstandard hour jobs are more likely to use FFN or unlisted HBCC settings (NSECE Project Team 2015b). In addition, little research has examined the choice and use of care in terms of the availability of other care settings in the community. Some studies have explored the effects of "child care

deserts”—defined as communities with limited or no regulated ECE settings (Malik et al. 2018; Sipple et al. 2020)—on the use of care, but the term misrepresents options by assuming that families make choices only among regulated settings. Some research also suggests that families’ use of HBCC rather than centers may shift over time as their children move from infancy to preschool and parents seek what they perceive as settings that support children’s school readiness (Coley et al. 2014; Gorden et al. 2013). However, we do not fully understand such patterns.

Families’ preferences related to providers’ engagement in ECE systems. Little research has addressed families’ perceptions of the value of provider engagement in ECE systems. We do not fully understand whether licensing factors into families’ choice of FCC or FFN, although the prevalence of FFN care suggests that it does not. HBCC participation in the subsidy system, by contrast, may influence families’ selection of type of care because it expands their access, as intended. Alternatively, many families may choose providers who accept private pay because it does not involve mandatory documentation and inflexible co-payments. In addition, although QRIS are intended in part to help families make informed choices about the quality of care, we do not know the extent to which HBCC providers’ participation in such systems plays a role in parents’ decisions to use HBCC.

Family preferences during the COVID-19 pandemic. Early analyses indicated that—compared to preschools and centers—more FCC programs may have continued offering in-person care during the early months of the COVID-19 pandemic (Bipartisan Policy Center 2020). Some research suggests that families’ choice of HBCC may have changed as a result of the pandemic. One survey of 12,000 parents of children from birth to age 12 in California found that families preferred FCC over FFN care (California Child Care Resource and Referral Network 2020). Parents who preferred FCC reported that they trusted the provider, believed the provider would adhere to cleanliness and sanitation standards, appreciated the small group sizes, and valued the communication with the provider. Families who preferred FFN care saw family members as the safest option (California Child Care Resource and Referral Network 2020). A national survey of 1,500 parents with children under age 5 found that higher proportions of parents viewed FFN care with family members as an ideal arrangement compared to that with friends or neighbors (Smith et al. 2021). Research is needed on how family preferences for child care may have shifted during the pandemic. The choice of HBCC care during the crisis warrants deeper examination because it may have implications for families’ future decisions.

A4. What are children’s and families’ experiences in using HBCC?

Exhibit II.5. Subquestions for question A4

Subquestions	
A4a	What are children’s and families’ experiences in using HBCC?
A4b	What were families’ experiences in using HBCC during the COVID-19 pandemic? What were the experiences of families in communities (both geographic and racial and ethnic) disproportionately affected by COVID-19? To what extent did families use HBCC for their school-age children during remote schooling? What challenges and opportunities did families face in finding and using HBCC during the pandemic?
A4a–A4b	For each question, what is the variation across and within HBCC settings; provider, child, and family backgrounds; and local community characteristics (see Box II.1)?

Children’s and families’ experiences in using HBCC. Another significant research gap is children’s and families’ experiences in using HBCC. We know that families face challenges in finding nontraditional hour care (Ben-Ishai et al. 2014; Enchautegui 2013; Henly and Adams 2018; Li et al. 2014), but we know little about their expectations for such care and whether HBCC satisfies expectations. Similarly, we know little about families’ experiences in using HBCC for their school-age children or children with disabilities, nor do we know about the experiences of these children. We also lack data on how children and families across cultural, racial, ethnic, and linguistic backgrounds, particularly those in underserved communities, experience HBCC.

Families’ experiences in using HBCC during the COVID-19 pandemic. Research on families’ experiences in using HBCC during the COVID-19 pandemic may be helpful in understanding reliance on HBCC and how families’ use of care may change over time. Some data suggest that FCC providers contacted families during the pandemic to offer supports ranging from the distribution of food and health and safety supplies to emotional support (Porter et al. 2020). Some HBCC providers took in additional school-age children during the pandemic to help family members who worked in essential jobs and could not stay home. However, we lack a full understanding of families’ experiences with HBCC during the pandemic, including the types of help families received from HBCC for themselves and their children.

B. Understanding HBCC provider experiences in caring for children and families, and the relationship between quality features and child and family outcomes in HBCC settings

The HBCCSQ project team conducted a review of existing literature on quality features in HBCC settings and the provider and community characteristics that may shape these features (Bromer et al. 2021a). One of the goals of the literature review was to examine quality features and the evidence for how they contribute to child and family outcomes as a prerequisite to designing interventions and supports that expand the availability of high quality HBCC. Although our literature review uncovered evidence of links between some quality features in HBCC and outcomes, most features lacked evidence. Further, most of the research in our review concentrated on FCC providers; few studies examined quality features in FFN settings. Our review also indicated a gap with respect to populations of HBCC providers, including communities of color and other underserved communities, those who work with school-age children and children with disabilities, and those located in rural and geographically isolated communities.

Further, both the literature review and the project's review of quality measures and indicators found that most studies of HBCC quality focus on features from center-based ECE programs (Bromer et al. 2021a; Doran et al. forthcoming). Existing measures do not capture quality features, such as mixed-age groups, that may be more common in HBCC. Therefore, correlational studies rarely use existing measures to examine how HBCC quality is related to child and family outcomes. Other quality features such as curriculum use, which are common in center-based programs, may look different in HBCC settings.

In this section, we present research questions that address the gaps in our understanding of quality features in HBCC, how provider characteristics shape quality, and the relationships between quality and child and family outcomes. In Exhibits II.6 through II.8, we provide a list of subquestions related to these gaps; a description of the gaps in the knowledge base follows each exhibit. The research questions do not represent the only gaps in the knowledge base about HBCC quality but they do address quality features that are implemented differently or are more likely to occur in HBCC than in other ECE settings.

The questions in this section also focus on the ways that culture, race, ethnicity, and income intersect to shape provider beliefs about and practices with children in HBCC. Given the rootedness of HBCC in family homes and communities, the role of culture, race, ethnicity, and language is central to how care is offered to children and families (Shivers and Farago 2016). To understand the links between HBCC quality and equitable outcomes for children and families, more research is needed to address children's experiences in HBCC settings within cultural, racial, ethnic, linguistic, and economic contexts. (See Box I.3 for a description of equitable outcomes.) More research is needed on how HBCC settings promote positive outcomes in areas such as racial identity, coping skills, and resilience. Positive outcomes in these areas may predict school readiness and success for children of color and Black children, in particular (Johnson et al. 2003).

B1. How do HBCC providers define and implement quality for children and families? What is the relationship between these practices and equitable child and family outcomes?

Exhibit II.6. Subquestions for question B1

Subquestions	
B1a	What are the ways in which HBCC providers across settings offer learning opportunities to children ? What is the nature of curriculum use in HBCC, and how does it support intentional learning activities? What is the nature of informal learning opportunities for children across HBCC settings? How do learning opportunities for children in HBCC contribute to child outcomes?
B1b	What are the ways in which HBCC providers across settings promote positive identity development for children and families? How does the promotion of positive identity development contribute to child and family outcomes?
B1c	What is the nature of support for mixed-age groups in HBCC settings that serve a wide range of age groups? How does support for mixed-age groups in HBCC contribute to child outcomes?
B1d	What is the nature of family engagement in HBCC settings? How do family engagement practices contribute to provider, child, and family outcomes?
B1e	How do HBCC providers connect families to community resources for themselves and their children? How do these referrals and connections contribute to family outcomes?
B1f	How do family-provider relationships and logistical supports in HBCC contribute to family and provider outcomes?
B1g	What are the core quality practices in nontraditional hour HBCC that are most likely to contribute to positive child and family outcomes?
B1h	How do working conditions in HBCC contribute to other quality features and child outcomes?
B1i	How do HBCC providers sustain their work in educating and caring for children and families , including their business practices? How are sustainability and business practices related to other quality features and provider, child, and family outcomes?
B1j	What combinations of quality features in HBCC most likely contribute to positive provider, child, and family outcomes ?
B1a–B1j	For each question, what is the variation across and within HBCC settings; provider, child, and family backgrounds; and local community characteristics (see Box II.1)?

Learning opportunities in HBCC. Research is needed to determine how HBCC providers conceptualize and implement learning opportunities for children in care and how these approaches relate to children’s outcomes. Existing research offers some evidence about the relationship between use of curricula and child outcomes in center-based ECE (Bromer et al. 2021a), but we do not know about the nature of curriculum use in HBCC, how its providers define curriculum, and the relationship between intentional learning activities in HBCC settings and children’s outcomes. In addition, we lack research on how HBCC providers—especially FFN—engage children in informal learning throughout the day and any associated child outcomes. Intentional learning opportunities, whether formal or informal, may involve traditional goals, such as school readiness activities, or activities that nurture children’s social development. In addition, intentional learning in HBCC may include goals related to supporting children’s cultural, racial, ethnic, and linguistic backgrounds or helping children understand and respond to bias. Such learning opportunities may be informal in HBCC, although research to date has rarely examined the varied ways that HBCC providers engage children in learning across domains.

Supporting positive identity development in HBCC. Understanding the ways that HBCC providers promote positive identity development among children and families is critical to understanding how HBCC settings are linked to positive and equitable child and family outcomes, especially for children of color (Johnson et al. 2003). Given that many HBCC settings offer children and families a cultural, racial, ethnic, and linguistic match between provider and children, the settings may hold promise as a place for positive identity development, healing, and respite, especially for families of color. For example, in some Black communities, HBCC providers may draw on the traditions and historical significance of “othermothering” or “activist mothering” as a strengths-based approach that intentionally seeks to build resilient and equitable communities for Black children and families (McDonald 1997; Collins 2000). Qualitative research with immigrant and Indigenous FFN providers and providers of color describes the ways these caregivers pass along generational wisdom and messages about cultural knowledge and traditions to children in care (Emarita 2008). More research is needed on the specific strategies HBCC providers use to promote aspects of positive identity development, such as children’s sense of agency, racial healing, and a sense of belonging and community.

Mixed-age groups in HBCC. The HBCCSQ literature review also indicated a gap in research evidence for how the accommodation of mixed-age groups in HBCC settings is linked to children’s outcomes (Bromer et al. 2021a). Some research on narrow ranges of mixed ages in center-based settings (for example, 3- and 4-year-olds) contains different findings for how mixed-age groups relate to children’s cognitive and social-emotional outcomes (Ansari and Purtell 2018; Guo et al. 2014; Plotka 2016). We know that many HBCC providers care for a wide range of mixed-age groups, including infants through school-age students. We identified a gap in descriptive data on the strategies providers use to manage mixed-age groups, as well as a gap in research on how these strategies are linked to children’s outcomes in HBCC settings.

Family engagement. There is a gap in evidence on how HBCC providers encourage families’ engagement in HBCC and how providers facilitate families’ engagement in their children’s learning (Bromer et al. 2021a). Research suggests that family engagement and comprehensive resources are important indicators of quality in center-based programs, and are associated with positive outcomes for families and children (Forry et al. 2012). Intermediary organizations, such as HBCC networks, may be able to facilitate delivery of comprehensive services for families in HBCC settings, but the research literature has not examined the role of such networks.

Logistical supports. The HBCCSQ literature review found ample descriptive data on the logistical supports that HBCC providers offer families of children in care, including flexible schedules and payments, and assistance with non-child care-related tasks (Bromer et al. 2021a). Yet we lack evidence on how such supports are linked to provider, family, or child outcomes, and the trade-offs that may be associated with these supports. For example, logistical supports may help families achieve their educational or employment goals, but the same supports might place additional burdens and stress on HBCC providers. Research could examine how the relationships among practices and outcomes are shaped by the experiences and backgrounds of HBCC providers, types of

familial employment experiences, the ages and abilities of children in care, and employment opportunities and constraints across communities.

Care offered during nontraditional hours. Many HBCC providers—FFN in particular—offer families nontraditional hours of care (NSECE 2015). We know that many parents who work in health, hospitality, retail, and food service industries need care offered early in the evenings or mornings or nighttime and weekend care (Henly and Lambert 2005; Sandstrom et al. 2018; Stoll et al. 2015), and that many of the parents who work these nontraditional hours have low incomes (Enchautegui 2013). Yet beyond these data, we do not know much about the families who need and use this care (Brady 2016; Siddiqui et al. 2017; Stoll et al. 2015). In addition, we do not have research evidence on the features of HBCC quality that families value or child and family outcomes associated with care during nontraditional hours, especially in FFN settings. We also lack information about which features of care are most important for children’s positive outcomes during nontraditional hours, and how the care offered by HBCC providers during evenings, overnight, and weekends may differ from care offered during traditional hours.

Working conditions. HBCC providers face some distinctive working conditions, such as working alone or without the support of staff members, the need to juggle several roles related to children and families, and the challenge of balancing work and family within the same physical space (Bromer et al. 2021a). Existing qualitative studies describe these challenges, but research is needed on how working conditions in HBCC settings may be related to children’s outcomes.

Sustainability. Related to working conditions, HBCC providers must attend to their own well-being and capacity to keep their doors open to children and families in a reliable and consistent manner. For FCC providers, sustainability requires clearly defined business practices, including financial management and marketing. For FFN providers, sustainability may be a function of a provider’s own economic well-being as a foundation for extending support to other families and their children. The literature on HBCC does not examine the relationship between these sustainability factors and provider, child, or family outcomes. Research could examine the ways that business practices in FCC settings are related to income and enrollment over time, as well as how business management practices suited to HBCC indirectly shape positive child outcomes by allowing providers to invest in quality improvement. For FFN, research could examine the ways that FFN providers set expectations with families related to payment and care, and how these agreements relate to provider well-being, which may indirectly shape children’s outcomes.

Combinations of quality features that contribute to outcomes. Research should continue to examine how combinations of quality features work together to contribute to provider, child, and family outcomes. For example, research could examine how individualization of care for children’s needs, combined with support for children’s positive peer interactions and prosocial skills, including mixed-age peer interactions, shapes children’s outcomes.

B2. How do HBCC providers across settings; communities; and cultural, racial, ethnic, and linguistic groups enact quality, given the pressures of ECE policies and regulations? How do policies and regulations shape the ways that providers offer care to children and families?

Exhibit II.7. Subquestions for question B2

Subquestions	
B2a	How is participation in ECE systems (including regulatory, subsidy, and quality initiatives) associated with provider, child, and family outcomes in HBCC?
B2b	How did policy and regulatory changes during the COVID-19 pandemic change the ways that HBCC providers offered care to children and families?
B2a–B2b	For each question, what is the variation across and within HBCC settings; provider, child, and family background; and local community characteristics (see Box II.1)?

Relationships between participation in ECE systems and outcomes. ECE policies aim to keep children safe and healthy, and help ensure children’s positive cognitive, language, social-emotional, and physical outcomes. Regulatory systems—licensing, registration, and certification—incorporate specific requirements for the ages and numbers of children in care; the health and safety of the environment; caregiving practices; and provider characteristics, such as age, health, and sometimes educational levels. Similarly, subsidy system requirements ensure a basic level of health and safety, including background checks and required training topics in child care settings, that meet the work needs of low-income families. QRIS standards build on licensing systems’ foundation of health and safety requirements, extending these requirements through training and professional development to strengthen caregiving knowledge and practices. QRIS standards often include other areas of practice—such as adult-child interactions, child assessments, and family engagement—that are mostly likely to shape positive child outcomes, and in some cases, family outcomes.

There is a gap in evidence about how these ECE systems shape the ways that HBCC providers—those who do and do not participate in ECE systems—implement quality practices. For example, FFN providers who do not participate in licensing systems may not be aware of licensing requirements (Hossain et al. 2017). They also may lack access to resources, such as state-funded grants to offset purchasing learning materials, that could help them implement quality practices with children. FCC providers who participate in their state or county QRIS may feel pressure to create mini-centers in their home environments that reflect the quality standards developed with preschools in mind. Research is needed to determine how policies and requirements shape HBCC provider caregiving and education practices, and the trade-offs and decisions that HBCC providers make in these contexts. Moreover, ECE policies and regulations may not fully align with the ways that HBCC providers across cultural, racial, ethnic, and linguistic groups approach caregiving and education. Some Black HBCC providers, for example, may see a particular strength of their work as offering a place for racial healing and respite for Black children and families (Emarita 2008), yet QRIS standards may not recognize this dimension of quality.

Research is also needed on the differential effects of ECE policies and regulations on outcomes among children across ages and abilities. ECE systems focus on care for children from birth through age 5, yet many HBCC providers care for school-age children up to age 13. The lack of recognition in ECE systems for mixed-age settings—in particular, those with school-age children—may shape the quality practices that HBCC providers implement to meet the needs of all children in their care. For example, we do not know how the use of formal curricula, often required by QRIS, relates to children’s outcomes across ages in HBCC settings. As noted earlier, we lack general research on how HBCC providers use curricula, regardless of QRIS participation, and whether the same effects of curriculum use on children’s outcomes are present in HBCC as in center-based programs.

Changes in ECE policies and regulations during the COVID-19 pandemic. ECE systems’ adaptations in response to the COVID-19 pandemic may provide some insights into changes that might affect HBCC quality practices and associated child outcomes. For example, some states lifted licensing requirements for group size and child-adult ratios to accommodate families’ increased reliance on HBCC (Porter et al. 2020). In addition, states imposed additional health and safety practices related to toothbrushing, hand washing, and social distancing. Research could examine the implications of these changes for future policy directions.

B3. How do families perceive quality in HBCC?

Exhibit II.8. Subquestions for question B3

Subquestions	
B3a	What are the quality features in HBCC that families across different cultural, racial, ethnic, and linguistic groups value ? How do these features align with available and accessible HBCC options?
B3b	How do families’ perceptions of quality align with ECE systems ?
B3a–B3b	For each question, what is the variation across and within HBCC settings; provider, child, and family backgrounds; and local community characteristics (see Box II.1)?

Features of quality valued by families. Research on parents’ perspectives about child care suggests that parents may choose HBCC settings for their convenience, affordability, and flexibility. Health and safety are also features of quality that research identifies as a constant among parents’ views on child care (Porter et al. 2010; Smith et al. 2021). Trust is another important feature of HBCC quality reported by parents across studies (Weber et al. 2018; Satkowski et al. 2016). Some research also points to the importance of cultural congruence between the HBCC provider and child. However, we know less about families’ values, the importance that families assign to aspects of care, and their priorities and goals for their children in HBCC. Nor do we understand how these family perceptions of quality vary across and within cultural, racial, ethnic, and linguistic groups. Research is needed on the variation within these groups. For example, future research might examine how factors such as socioeconomic status and urbanicity contribute to how families perceive HBCC quality within certain cultural, racial, or linguistic communities.

Alignment of family perceptions of quality and ECE systems. Unanswered questions remain about how families' perceptions of quality align with the ways in which ECE systems explicitly or implicitly define quality. For example, families may prefer that their infants are swaddled when they are sleeping, but licensing may prohibit this practice in HBCC. Similarly, QRIS often require that HBCC providers use a specific curriculum, but families may value both intentional learning and informal learning opportunities that are less structured and reflect cultural beliefs, values, and practices. Research on parents' perspectives about HBCC quality is needed to better understand the extent to which ECE policies and regulations reflect the priorities and values of families across communities and backgrounds. Such research may provide insights into the systemic inequities that may affect outcomes for children and families.

C. Understanding the policy contexts in which HBCC operates, including ECE policies and regulations as well as other policies that affect HBCC providers, and the opportunities and challenges associated with these policies and regulations

The questions in this section focus on the policy contexts in which HBCC operates. They address how ECE policies and regulations align with and affect the experiences of HBCC providers, the opportunities and challenges associated with these policies and regulations, and how ECE policies and regulations intersect with other non-ECE systems that affect HBCC providers (such as child welfare and housing). In Exhibit II.9, we list subquestions related to understanding the policy contexts in which HBCC operates; the sections following the exhibit describe the gaps in the knowledge base.

C1. How do ECE policies and regulations reflect and affect the experiences of HBCC providers? How do ECE policies and regulations dismantle or perpetuate inequities across HBCC providers and the families and children in these settings? In what ways do ECE policies and regulations exclude or include providers?

Alignment of ECE systems with quality features and characteristics of HBCC. Although providers participate in ECE systems to varying degrees, there are gaps in the knowledge base about the extent to which ECE policies and regulations reflect the experiences of HBCC providers. ECE system requirements often do not align with some characteristics that are more common in HBCC than in centers. For example, state licensing regulations may not include requirements that govern nontraditional hour care, and subsidy requirements for reimbursement may conflict with the flexible payment policies and schedules offered by many HBCC providers.

QRIS standards may not align with the characteristics and features of quality that are implemented differently or are more likely to occur in HBCC than in other ECE settings (Doran et al. forthcoming). For example, QRIS standards often do not align with the mixed-age groups more typical of HBCC settings. QRIS standards may advantage HBCC programs that dedicate separate spaces for infants, toddlers, and preschoolers, rather than using the same home spaces for all age groups together (Lehoullier 2012). Some research also suggests that QRIS standards for program management may not consider the characteristics of small FCC programs where the only staff is the provider

(Hallam et al. 2017). In addition, some QRIS standards may emphasize White middle-class standards for interactions between children and families who may not reflect the values held by individuals in a broad and diverse ECE workforce, including some HBCC providers (Dahlberg et al. 2007; Souto-Manning and Rabadi-Raol 2018).

Exhibit II.9. Subquestions for question C1

Subquestions	
C1a	To what extent do ECE policies and regulations (e.g., licensing, subsidy, QRIS, CACFP) align with quality features or characteristics of HBCC that are implemented differently or are more likely to occur in HBCC than in other ECE settings (e.g., mixed-age settings, provider working alone, care available during nontraditional hours)? To what extent do ECE system policies and procedures recognize the strengths of home-based settings?
C1b	How have changes in federal and state policies over time influenced HBCC participation in ECE regulatory, subsidy, and quality systems? Which federal or state policies are the strongest predictors of participation?
C1c	How do ECE system policies and regulations promote or inhibit participation in licensing, subsidy, QRIS, and other ECE systems?
C1d	How do ECE system policies and regulations mitigate or perpetuate inequities among HBCC providers?
C1e	What is the relationship among requirements across ECE systems ? To what extent do they align/overlap?
C1f	How do ECE system policies and regulations intersect with non-ECE policies and regulations that may govern the operations of HBCC providers?
C1g	How have changes in federal and state policies since the start of the COVID-19 pandemic affected HBCC participation rates in ECE systems?
C1a–C1g	For each question, what is the variation across and within HBCC settings; provider, child, and family backgrounds; and local community characteristics (see Box II.1)?

How changes in federal and state policies over time relate to HBCC participation in ECE systems. Although research is underway, gaps exist about how changes in federal or state policies relate to HBCC providers’ participation in ECE systems—particularly licensing and subsidy. Recent years have seen significant changes in both state licensing policies and federal subsidy requirements. Between 2011 and 2014, for example, half of the states enacted new licensing requirements, including higher pre-service requirements and new in-service training hours, nutrition and health regulations, mandatory orientation trainings, and inspections before licensure (NCECQA 2015a). Since the 2014 Child Care Development Block Grant (CCDBG) reauthorization, requirements for participation in the subsidy system have become more stringent. FCC providers must now undergo annual monitoring for compliance with health and safety requirements, participate in health and safety training, and submit to comprehensive background checks (Office of Child Care 2016). Many state QRIS are also revising their standards (BUILD Initiative and Child Trends 2019).

How ECE system policies and regulations promote or inhibit participation. Participation in ECE systems can offer opportunities for HBCC providers. Compliance with licensing regulations, for example, can enhance the safety and health of the environment, and ensure that the ratio of adults to children can support the needs of individual children (Banghart and Kreader 2012; Dowsett et al. 2008). Subsidy

participation can mean a steady income from reimbursement, especially for HBCC providers who depend on the subsidy for their household income (Rohacek and Adams 2017). Participation in QRIS can provide opportunities for increased knowledge and improved practice, and translate into financial benefits if higher ratings are tied to financial rewards (Hallam et al. 2017).

Yet requirements and regulations may also inhibit or impede participation by HBCC providers, who work long hours, assume a variety of roles (including caregiver and business owner), and balance work and their own family needs within the work environment. Licensing policies may exclude providers who live in rental housing that does not meet safety requirements, such as the need for two means of egress. Local zoning requirements or home owners' associations may prohibit the operation of a home business. Licensing requirements for outdoor safety, such as fences, may represent costs that HBCC providers may not be able or want to incur. In addition, subsidy reimbursement rates may not be sufficient because they do not cover the full costs of care (Washington and Reed 2008; Werner 2016) or fail to meet providers' basic needs (Adams et al. 2008; Rohacek and Adams 2017), including the purchase of health insurance (Bromer et al. 2021b, 2021c).

Similarly, we lack data on QRIS standards that predict participation. Many states do not permit unlicensed providers to participate in QRIS, thus excluding FFN caregivers from access to potential supports for their work with children and families (BUILD and Child Trends 2019). QRIS requirements for training and higher education may be disincentives for HBCC providers who work alone and lack the flexibility to close their programs to travel for professional development (Porter and Bromer 2020).

Further, the paperwork required by licensing, subsidy, and QRIS systems may be cumbersome and duplicative, as well as challenging for providers with low literacy levels. In addition, the increasing reliance on technology for submitting applications and documentation may be a disincentive for providers without computer proficiency or Internet access, especially a high-speed connection (Porter and Bromer 2020).

How ECE system policies and regulations mitigate or perpetuate racial and income inequities among HBCC providers. Some ECE systems may exacerbate income, racial, ethnic, linguistic, and educational inequities experienced by HBCC providers in underserved communities, pointing to the need for more research to understand these issues. System participation often requires significant costs (for retrofitting homes, purchasing liability insurance, submitting to background checks, and covering tuition to obtain credentials or enroll in higher education) that may be challenging for HBCC providers to meet (Bromer et al. 2021b, 2021c). Low subsidy reimbursement rates may not provide sufficient income to enable HBCC providers to purchase health insurance, take time off, or save for retirement. For FCC providers who are eligible, QRIS bonuses and grants may relieve some financial pressures related to maintaining child care environments, yet many HBCC providers (for example, FFN) are not eligible to participate in QRIS and so may lack access to these resources for sustaining and improving their child environments. An examination of how states allocate resources and incentives for HBCC versus center-based programs is important for understanding how ECE systems may contribute to racial and income inequities.

In addition, ECE policies and regulations may perpetuate racial and ethnic and linguistic inequities. Required background checks for all members of a household age 18 and older can disadvantage providers, especially providers of color, who live in communities characterized by high contact with the criminal justice system. Required documentation for health status can create burdens for providers who have been denied access to health services. Paperwork, training, and English-only materials may exclude providers whose first language is not English (Porter and Bromer 2020). Educational requirements may exceed the capabilities of HBCC providers who historically have been denied full opportunities and access to higher education. In addition, regulations that require citizenship may exclude immigrants and mixed-status families.

HBCC providers' experiences in participating in ECE systems may also be a function of the limits of the existing policy structures administered by various agencies or departments. Although some studies have examined these administrative issues, we lack systematic evidence of the extent to which licensing, subsidy, and QRIS system regulations and requirements overlap or are duplicative. Licensing, subsidy, and QRIS share the same broad objectives for children—keeping them safe and healthy, and supporting their positive development, but the lack of alignment and coordination among these systems often results in redundancy, such as the same documentation for multiple systems, as well as conflicting or inconsistent requirements (Bromer et al. 2021b; Maxwell et al. 2016; Porter and Bromer 2020; Sandstrom et al. 2018).

How ECE system policies and regulations intersect with non-ECE policies and regulations. HBCC providers operate in policy systems beyond the ECE system, and those systems can provide benefits or create challenges. Some research, for example, suggests that many HBCC providers care for children who have been placed in the child welfare system (Klein 2016; Bromer et al. 2020a), which may create additional stressors for providers who do not have adequate resources to support these families. Some providers, especially FCC providers, may interact with systems such as the Small Business Administration (SBA), which may offer financial supports, but others may not meet eligibility requirements for SBA grant or loan programs. Providers with access to public health and mental health services may be better able to maintain their care for children, yet those in underserved communities may lack this kind of support. Little research has examined the intersection of these policies and HBCC provider engagement, however.

How changes in federal and state policies since the start of the COVID-19 pandemic have affected HBCC participation rates in ECE systems. The pandemic has posed a significant challenge to maintaining HBCC providers' engagement with ECE systems. Nonetheless, ECE systems' responses to the COVID-19 pandemic may offer some insights into changes that might expedite future engagement of providers. For example, some state agencies revamped their service delivery strategies by enhancing their websites to provide up-to-date information on policy changes and recommended health and safety practices. To minimize the risks of face-to-face contact, some state agencies relied on the delivery of online support, providing technical assistance and training through individual consultations or video conferences (see for example, [Maine Roads to Quality](#)). Like states, some local agencies shifted their services to virtual service delivery, adapting home visits, training, support groups, and

play and learn programs to online delivery (see for example, [All Our Kin's COVID-19 response](#)). Local organizations also stepped up their day-to-day contacts with HBCC providers, many of whom reported that the organizations were the most valued source of support during the crisis (Home Grown 2020). States and local agencies also re-engineered their support by providing direct resources, such as materials and, in some cases, financial support, which may have enabled providers to sustain their businesses.

Research is needed to better understand the benefits of some of these ECE system strategies, including online and income supports, offered by states and local agencies. Such research would provide insights into consideration of wider implementation of online support, which may alleviate barriers related to face-to-face system-related activities such as training, or increased communication, which may reduce challenges related to navigating system requirements. Research could also examine the impacts of approaches that states implemented for paying providers during the pandemic, such as subsidy payments based on enrollment, not attendance.

D. Understanding the ECE and community-oriented strategies that contribute to HBCC providers' engagement in quality improvement, the challenges and opportunities associated with delivering support for quality improvement, and the experiences of ECE staff who support HBCC providers

Lack of engagement of HBCC providers in ECE systems has been a persistent issue, especially for FFN caregivers who may care for children outside of formal ECE systems. The research questions and subquestions presented in this section focus on understanding the strategies that offer potential to increase HBCC providers' engagement in systems and other quality improvement initiatives, as well as the experiences of state and local ECE agency staff who work directly with HBCC providers. A small body of research exists on implementing strategies aimed at supporting quality in HBCC (see Bromer and Korfmacher 2017; Bromer et al. 2020a; Paulsell et al. 2010); an even smaller evidence base examines outcomes associated with community or statewide support initiatives (Han et al. 2021; Rusby et al. 2016; Porter et al. 2016). We list the subquestions in Exhibits II.10 and II.11.

D1. What types of strategies are used with HBCC providers? How are ECE and community-oriented strategies implemented? What are the experiences of ECE agency staff who work directly with HBCC providers? What are the experiences of HBCC providers with agency staff?

Exhibit II.10. Subquestions for question D1

Subquestions	
D1a	What service delivery strategies and models have states and local ECE agencies developed for engaging HBCC providers in ECE systems and other quality improvement initiatives ? What challenges and opportunities do ECE agencies face in their strategies to recruit and engage providers in ECE systems? How, if at all, do they manage the challenges?
D1b	How are service delivery strategies aimed at HBCC implemented within ECE systems and local ECE agencies? Are service delivery strategies aimed at HBCC implemented as intended by their design?
D1c	What approaches or combinations of approaches (home visiting, coaching, peer mentoring, training) to service delivery with HBCC are used across and within initiatives?
D1d	What content and topics do community-oriented strategies focus on with HBCC?
D1e	How do relationship-based approaches to service delivery with HBCC contribute to the effectiveness of supports?
D1f	What are HBCC providers' experiences with community-oriented support strategies ? What are the challenges and opportunities of engaging in these supports?
D1g	How do service delivery strategies build on the strengths of HBCC providers?
D1h	What service delivery strategies did states, territories, Tribes, and local agencies use to continue engaging HBCC providers during the COVID-19 pandemic ? How did these strategies differ from existing approaches? Which strategies were promising?
D1i	What are HBCC providers' experiences with virtual service delivery strategies ? What virtual support strategies for HBCC are most likely to lead to changes in caregiving practices?
D1j	What qualifications for ECE agency staff who work directly with HBCC providers are associated with positive quality outcomes in HBCC settings ? How do qualifications vary by ECE agency auspices? What are ECE agency staff's knowledge and attitudes toward meeting the needs of HBCC providers?
D1k	What skills and practices of ECE staff who work directly with HBCC providers are associated with positive quality outcomes in HBCC ? How do skills and practices vary by agency auspices?
D1l	How do ECE agency staff who work directly with HBCC providers build on the strengths of those providers ?
D1m	How do reflective supervision and in-service staff training help ECE agency staff work effectively with HBCC providers ? How do supervision and training vary by agency auspices?
D1a-D1m	For each question, what is the variation across and within HBCC settings; provider, child, and family backgrounds; and local community characteristics (see Box II.1)?

Implementation of service delivery strategies. Service delivery strategies for HBCC providers include individualized approaches that support providers and group training and professional development (Bromer and Korfmacher 2017). Individualized approaches include technical assistance, such as consultation, coaching, home visiting, or mentoring. Group supports may include both in-person and online training of cohorts (groups of providers who receive a sequence of professional development together); communities of practice that provide opportunities for shared learning; and play and learn sessions, which provide opportunities for providers and children to interact. Some

organizations also provide materials, grants, and bonuses that serve as incentives for participation (Porter et al. 2010).

Research is needed on the types of organizations most effective in offering service delivery strategies that can produce positive child and family outcomes. For example, HBCC networks are one type of organizational strategy for service delivery that has received significant policy attention. Many states and communities are moving toward HBCC network implementation, and some preliminary studies suggest the promise of networks as a strategy for improving quality features in HBCC settings (Bromer et al. 2009; Porter et al. 2016; Bromer and Porter 2019; Muenchow et al. 2020; Porter and Bromer 2020). Yet we lack research on the different approaches and models that networks use to support HBCC providers, the dosage and content of supports, and staff training and preparation for delivering those supports. We also lack research on how these strategies are implemented and the “goodness of fit” between them and HBCC provider needs, backgrounds, strengths, and interests (Bromer and Korfmacher 2017).

Some research suggests that relationship-based approaches to the delivery of professional development to HBCC providers is a promising strategy for improving quality in these settings (Bromer and Korfmacher 2017; Bromer et al. 2020b), yet little research has examined the relationship between relationship-based service delivery and quality, provider, child, or family outcomes. Much of the work in this area has been conceptual and descriptive, and again focused on regulated FCC settings.

Service delivery strategies used by states, territories, Tribes, and local agencies to continue engaging HBCC providers during the COVID-19 pandemic. Changes in strategies to deliver services to providers during the COVID-19 pandemic may offer promise for addressing fundamental issues faced by HBCC providers. For example, we lack knowledge about strategies for supporting HBCC providers’ facilitation of remote learning for school-age children—a consideration that emerged as a significant issue during the COVID-19 pandemic and may continue to be an issue in the future.

HBCC provider experiences with strategies for virtual service delivery. Even before the COVID-19 pandemic, agencies often turned to virtual supports, such as online workshops, webinars, and communities of practice (Porter and Bromer 2020). During the pandemic, virtual supports extended to other areas, such as virtual home visits to HBCC providers when agency staff were unable to make in-person visits. Given the widespread use of virtual service delivery, research is needed on the effectiveness of these strategies for HBCC providers across a range of setting, provider, and community characteristics. Research is needed on whether virtual offerings increase access for providers (for example, by providing more flexible times to attend webinars or workshops, or eliminating the financial burden associated with participation, including travel costs). For some providers, virtual home visits or individual coaching may seem less intrusive. On the other hand, distance learning is not without its challenges, such as lack of proficiency with technology or lack of access to needed equipment or high-speed Internet service.

The qualifications, skills, and practices of ECE agency staff associated with positive quality outcomes in HBCC settings. ECE agency staff include those who work directly with HBCC providers through visits, coaching, mentoring, monitoring, or

training. Agencies include professional development or quality improvement initiatives, networks, child care resource and referral agencies, and Head Start/Early Head Start programs, as well as licensing, child care subsidies, QRIS, and CACFP.

ECE home visitors, coaches, mentors, monitors, licensing/QRIS and food program specialists, mental health consultants, and nurse consultants comprise a critical component of ECE systems and the agencies and organizations on which many HBCC providers depend. The broader ECE literature on coaching and technical assistance in quality systems found variation in approaches, models, and staff training and qualifications around coaching across ECE settings (Smith et al. 2012). A review of the quality of support to HBCC providers suggests that service quality depends on several factors, including staff qualifications, training, skills, and support (Bromer and Korfmacher 2017). Yet the field lacks research on the roles and responsibilities of agency staff members who work directly with HBCC providers, and there are few, if any, benchmarks or standards for HBCC coaches, mentors, or other support staff (Bromer and Weaver 2016; Smith et al. 2012).

How ECE agency staff recognize and honor the strengths of HBCC providers. For staff who work with parents, related fields, such as social work and home visiting, underscore the importance of skills related to adult learning styles (Bromer and Korfmacher 2017; Trivette et al. 2009). Understanding how to work with adults is a critical skill for supporting HBCC providers in technical assistance visits to homes and in training activities. Research on ECE staff use of adult learning styles can help fill the gap in knowledge about how agency staff build on the strengths and resilience of HBCC providers while helping them improve the quality of their caregiving practices.

How reflective supervision and in-service staff training may help ECE agency staff work effectively with HBCC providers. The number of staff members in any given agency who work with HBCC may be limited, thereby leading to high caseloads. High caseloads, in turn, may pose a challenge to staff members' efforts to balance their responsibility for ensuring regulatory compliance and their desire to support providers in their work with children. Resources for training and reflective supervision of agency staff are essential supports that may help staff implement relationship- and strengths-based practices with HBCC providers. Research in maternal, infant, and early childhood home visiting and early intervention settings suggests that reflective supervision is associated with reduced burnout, increase professionalism, and increased clinical skills (Watson et al. 2014). In programs that work with HBCC, strong staff-HBCC provider relationships are hypothesized as a core component of effective programs that may help HBCC providers develop strong relationships with children and families (Bromer and Korfmacher 2017; Bromer et al. 2020b), but no research has examined how this parallel process leads to effective interventions in HBCC quality improvement.

D2. What ECE and community-oriented strategies contribute to HBCC providers' experiences in improving quality and sustainability? What strategies are effective in reducing inequities in outcomes for HBCC providers and the children and families in HBCC settings?

Exhibit II.11. Subquestions for question D2

Subquestions	
D2a	How effective are ECE agencies' strategies for engaging HBCC providers in ECE systems? What types of organizations are most likely to be effective at delivering these services?
D2b	What strategies are most likely to succeed in recruiting new providers into HBCC, particularly new providers in underserved communities? What strategies are most likely to succeed in recruiting and retaining providers in underserved communities who can meet the needs of children and families from these same communities?
D2c	What service delivery strategies are most likely to improve the sustainability of HBCC settings?
D2d	What service delivery strategies are most likely to lead to changes in caregiving practices in HBCC settings? How do peer support strategies relate to changes in caregiving practices in HBCC? How do combinations of service delivery strategies (e.g., coaching and peer support; home visiting and training) relate to changes in caregiving practices in HBCC?
D2e	What service delivery strategies are most likely to be associated with positive and equitable child and family outcomes in HBCC settings?
D2a–D2e	For each question, what is the variation across and within HBCC settings; provider, child, and family backgrounds; and local community characteristics (see Box II.1)?

Effectiveness of service delivery strategies for increasing HBCC participation in ECE systems. We note significant gaps in what we know about strategies that are effective in engaging HBCC in quality improvement and accessing supports for sustainability. We also know little about the conditions under which providers seek these supports. Characteristics of the setting, including the hours during which providers offer care; regulatory status; and individual provider characteristics, such as educational levels and linguistic backgrounds, may all be factors that contribute to HBCC engagement and retention in ECE systems and quality improvement initiatives. In addition, community characteristics, such as the availability of public transportation, may affect providers' capacity to take advantage of community-level supports.

Strategies most likely to lead to the recruitment of new providers into HBCC.

Reaching providers, especially those in underserved communities and those who care for children outside of any ECE regulatory system, can pose a significant challenge. We have only limited descriptive research on existing strategies for attracting providers, and little research on how these strategies are implemented. Nor do we have evidence of strategies that succeed in bringing new HBCC providers into the field. Many publicly funded initiatives rely on websites or public service announcements to attract providers, but studies suggest that word of mouth may be a more promising strategy, especially for HBCC providers who care for relatives (Hossain et al. 2017; Jacobs Johnson et al. 2017; Porter et al. 2010). Some studies suggest that “trusted messengers” who share the same cultural, racial, ethnic, or linguistic background and come from the same community as potential HBCC providers may have promise for recruiting new caregivers as well (Hossain et al. 2017; Porter et al. 2010; Shivers et al. 2016b). Initiatives such as play and learn groups or organized activities at libraries that

encourage parent-child interactions may also offer opportunities for engaging parents to become HBCC providers (Engage R+D 2018; Harder + Company Community Research 2017; Hatfield and Hoke 2016).

Effectiveness of service delivery strategies in improving both caregiving practices and the sustainability of HBCC settings. Research suggests that some specific service delivery strategies may improve both caregiving practices and the sustainability of HBCC settings, but we lack evidence of their effectiveness, especially among FCC or FFN providers. Some research suggests that coaching and consultation with FCC providers in combination with training may be more effective than either strategy alone (Bromer and Korfmacher 2017; Porter et al. 2010), and that intensive, multipronged supports that include peer support, training, and regular one-on-one technical assistance may be more effective than supports implemented on an ad hoc basis (Han et al. 2021). Some studies have also examined support initiatives for FFN caregivers and find that facilitated peer support, mentoring, and visiting are promising strategies for supporting quality in these settings (Engage R+D 2018; Hatfield and Hoke 2016). However, we lack research on how support initiatives may shape specific features of quality in HBCC settings. For example, almost no research has examined strategies for improving HBCC sustainability, especially in relation to FCC business success or the sustainability of FFN programs. Some implementation research suggests that coaching and peer support focused on business supports may be a promising strategy for increasing business skills and knowledge (Zeng et al. 2020), but more research is needed on how these approaches may contribute to income, enrollment, and other measurable aspects of sustainability.

Effectiveness of service delivery strategies for improving outcomes for children and families. A handful of research on interventions for HBCC has found associations between program participation and children's outcomes (Bromer and Korfmacher 2017; Hatfield and Hoke 2016). For example, an evaluation of a play and learn initiative for FCC found positive associations with children's positive behavioral and language outcomes. Another evaluation of a facilitated support group combined with literacy coaching for FFN caregivers found an association with children's preliteracy skills (Shivers et al. 2016). A randomized controlled trial (RCT) study of a professional development intervention, consisting of workshops and consultation focused on the promotion of social development of preschool-age children in regulated FCC settings, found significant improvements in children's positive behaviors as reported by both providers and parents (Rusby et al. 2016). Significant gaps still exist in knowledge about the effectiveness of strategies aimed at improving HBCC outcomes for children across age groups and outcomes for families, however. Nor do we know which strategies or combinations of strategies contribute to positive child outcomes or the types of outcomes shaped by the strategies.

III. RESEARCH ACTIVITIES TO BUILD THE KNOWLEDGE BASE FOR HBCC

In this chapter, we describe potential research activities and study design elements that could be used to address the research questions outlined in Chapter II. We identify potential designs and data sources, including opportunities for secondary analysis, knowledge synthesis, and future data collection. We also discuss how measures and indicator development could guide these research activities. The information in this chapter draws on findings from earlier project activities.

We also discuss research activities that researchers and others in the ECE field could conduct at the national, state, and local levels to fill gaps in the knowledge on HBCC. (In the next chapter, we recommend research activities to address the high-priority gaps we identify in the knowledge base.) We describe how each type of research activity could answer the research questions, including the following:

- High-level study designs, sources/samples, benefits, and constraints of the research activity type; how to apply equitable principles to activities of this type; and other considerations for using the activity type in HBCC
- Examples of how research activities of this type can answer specific research questions (including lists of examples in exhibits throughout the chapter)
- How the research activity type fits with other activity types as part of a continuum or sequence of research

In Exhibit A.1 of Appendix A, we list each research question and subquestion from Chapter II, and the types of research activities that could help answer the question. In many cases, more than one research activity can address various aspects of a question. As part of addressing questions, research activities should also study whether and how findings vary by the characteristics of the HBCC settings, providers, children and families, and communities involved (see Box II.1 in Chapter II). Exploring these variations should go beyond standard subgroup analyses (for example, assessing whether there are statistically significant differences in means or frequencies for different groups) and be deeply integrated into research activities. This approach could involve the following:

- Tailoring research questions to the specific characteristics of those participating in the study. In particular, research questions should address the systemic and socioeconomic drivers that affect HBCC providers and families. For example, research on provider participation in ECE systems should study whether providers have been denied access to or had difficult experiences with similar systems (such as licensing or subsidies) in the past, and how that experience affects their decisions to participate in other systems or access other supports.
- Accounting for intersections between different kinds of characteristics. For example, for families, examining differences by race/ethnicity not just by itself but also in combination with child age, family socioeconomic status, or location.

- Contextualizing findings based on who was involved in the study. For example, contextualizing families' HBCC enrollment preferences, decisions, and patterns by examining factors relevant to families, such as proximity to places of employment, transportation options to HBCC settings, alignment of parent work hours to HBCC setting hours, and availability of teachers with a cultural or linguistic match to children.

Equitable research. In developing this research agenda, the HBCCSQ project team created and prioritized research questions based on principles of equitable research to try to keep HBCC providers at the center of that research. To this end, we recommend the ECE field move toward research activities that adopt an equity lens to ensure all aspects of research design and implementation account for all voices, especially those typically overlooked in research. Further, research activities should seek to identify not only challenges experienced in HBCC but also strengths and opportunities. The research will need to translate the findings in a way that includes the voices of HBCC providers, children, and families in explaining the issues and what is needed to achieve greater equity in outcomes. This approach could include engaging HBCC providers as research partners in developing research questions and data collection protocols, as well as sharing and discussing preliminary findings with providers to understand and incorporate their interpretations of findings, questions about the data, preferences for how findings are shared, and reflections on actionable solutions and next steps.

For example, researchers may draw from the principles of culturally responsive and equitable evaluation (CREE), which incorporates cultural, structural, and contextual factors into all phases of evaluation (Expanding the Bench 2020). Researchers should consider the following recommendations for equitable research:

- Engage research participants as partners through participant-centered research methods, in which community members and study participants co-create study elements throughout a project, including study design and recruitment approaches, data collection protocol development, data analyses, and study conclusions (Humble and Radina 2018; Israel et al. 2012; Wallerstein and Duran 2018).
- Build intentional self-reflection into research processes to ensure that researchers examine their own biases and how such biases and power dynamics might affect their engagement with research participants and communities (Andrews et al. 2019; Wallerstein et al. 2019). Self-reflection and implementation of other aspects of equitable research should occur at all stages of the research process, including landscape assessment, design and data collection, data analysis, and dissemination.
- Conduct a strategic assessment of systems (Annie E. Casey Foundation 2015) to understand contextual factors related to the equitable provision of resources and opportunities. This type of assessment calls for (1) identifying the underlying or root causes of inequities and factors that contribute to the perpetuation of those inequities; (2) identifying potential strategies for addressing barriers and problems; and (3) determining how to leverage strategies in ways that achieve desired goals and transform systems. This approach could include examining policies, practices, and/or attitudes that may contribute to inequitable outcomes for HBCC providers,

children, and/or families. For example, providers' experiences with systemic racism embedded in broader educational, health, housing, and financial systems may create challenges around their work with children, families, and communities.

- Descriptive research could learn more about how providers are affected by these broader systemic inequities, and implementation and evaluation research could study how ECE systems and supports can better support providers. For example, studies can assess whether providers from underserved communities have physical and mental health needs not being addressed by health care, or whether paid providers lack access to banking or other financial systems. The studies could then examine the degree to which ECE systems and supports can be better aligned with these other systems and help providers access the resources they need to thrive.

A. Secondary analysis and knowledge synthesis

1. National survey and administrative data sets

Recent studies have used national data sets, including the NSECE, to examine HBCC (Cavadel et al. 2017; Crosby et al. 2019; Hooper and Hallam 2019; Hooper and Scheweiker 2020; Matthews et al. 2015). Researchers can build on these studies and use the NSECE and other national data sets (see Box III.1) to answer several questions in the HBCCSQ research agenda, including questions about the availability of HBCC, some aspects of HBCC quality, families' use of HBCC, providers' participation in ECE systems, and changes in these findings over the past 10 years. In Exhibit III.1, we provide examples of the agenda's research questions that can be answered (fully or partially) with the use of national data sets.

The national data sets include information about the availability of HBCC across different settings, but no single national data set can differentiate HBCC providers by all settings (for example, licensed versus exempt, small versus large, or regulated versus legally exempt from regulation). In addition, the data have gaps involving features of HBCC settings and services, and providers' participation in quality improvement initiatives. Even though these data sets do not allow researchers to provide direct answers to why providers shift from one status to another or stop caring for children altogether, using the data to examine the availability of HBCC over time can help researchers build hypotheses for future study. Potential analyses include the following:

Box III.1: National data sets relevant to HBCC include the following:

National survey data sets

- 2012 and 2019 National Survey of Early Care and Education (NSECE)
- American Community Survey (ACS)
- Child Care Licensing Study
- Survey of Income and Program Participation (SIPP)
- Adolescent Health Longitudinal Study

National administrative data sets

- Administration for Children and Families 801 Reporting for States and Territories (ACF-801)
- Child and Adult Care Food Program (CACFP)

Exhibit III.1. Examples of research questions that can be addressed by national survey and administrative data sets

Number	Research question
A1b	What is the movement of HBCC providers in and out of HBCC, licensing and regulatory systems, and ECE ? What proportion of HBCC providers stop providing care altogether? When HBCC providers no longer provide child care, what non-child care work or activities do they pursue? What proportion of providers leaves HBCC to work in center- or school-based settings? What proportion of FFN providers becomes licensed? What proportion of FCC providers leaves licensed settings to offer FFN care? Which factors are the strongest predictors of HBCC tenure and exit?
A1c	To what extent are HBCC providers participating in ECE systems , such as subsidy programs, QRIS, the federal CACFP, federal Early Head Start-Child Care Partnerships (EHS-CCP), or publicly funded prekindergarten? How has participation in these systems changed over the past 10 years? What is the movement of HBCC providers in and out of these systems?
A1d	How are changes in the availability of other regulated ECE settings , such as Head Start, Early Head Start, or public prekindergarten for 3- and 4-year-old children, related to changes in the availability of HBCC ?
A3c	How does family use of HBCC relate to access factors (e.g., HBCC in a family's community, proximity to places of employment, or local transportation options or travel distance)? How do families address their child care needs in areas where no regulated ECE is available?
B1a	What are the ways in which HBCC providers across settings offer learning opportunities to children ? What is the nature of curriculum use in HBCC, and how does it support intentional learning activities? What is the nature of informal learning opportunities for children across HBCC settings? How do learning opportunities for children in HBCC contribute to child outcomes?
C1b	How have changes in federal and state policies over time influenced HBCC participation in ECE regulatory, subsidy, and quality systems? Which federal or state policies are the strongest predictors of participation?

- Analysis of the 2019 NSECE data can help answer questions about the population and characteristics of HBCC providers, especially FFN (categorized as “unlisted” providers). The NSECE data are cross-sectional for two points in time (2012 and 2019) and allow for limited state-level analysis. Descriptive comparisons of the data can reveal changes in selected characteristics of both providers and their settings, illuminating differences in the cultural, racial, ethnic, and linguistic backgrounds of providers, as well as in their payment sources, if any; the number and ages of the children in care; whether children with disabilities are served; the child care schedule; and participation in ECE systems.
- Researchers can also use the NSECE to examine the relationship of providers’ personal and professional characteristics to potential predictors of HBCC quality, including a provider’s flexibility to meet a family’s needs for nontraditional hour and affordable care, or a provider’s use of different learning activities.
- Researchers can use data from the ACS and Adolescent Health Longitudinal Study (ages 24 to 28) to examine the percentage of young adults who work in HBCC—especially paid FFN caregivers.
- Data from the Administration for Children and Families Reporting for States and Territories-801 (ACF-801) can answer questions about the availability of providers who are licensed and legally exempt from regulation and families who use subsidies

over time, whereas the Child Care Licensing Study includes data on the availability of licensed FCC providers.

- Many FFN providers who do not interact with any regulatory ECE systems take advantage of the CACFP; in fact, provider-level CACFP data are a unique source of national information that include FFN caregivers over time, although they provide an incomplete picture because they are grouped with FCC providers in the same category and states have inconsistent criteria for including FFN caregivers.

Researchers can conduct several types of analyses by using geographic identifiers in data sets, including the following:

- Data from the Survey of Income and Program Participation (SIPP) can answer questions about how the child care arrangements of families who use HBCC providers vary by demographic characteristics (such as racial and ethnic background, ages of children, and socioeconomic status). Using state identifiers to examine possible causal links between policy and HBCC availability, researchers could use a difference-in-differences regression model to analyze the availability of HBCC before and after the implementation of major regulations.
- The same method could be used to analyze changes in the availability of HBCC across groups of states that have or have not instituted a given policy (or combination of policies). The analyses would answer questions about the types of regulatory policies that influenced HBCC providers to exit ECE systems or stop caring for children altogether.
 - For example, by using data from ACF-801, researchers could examine changes in the numbers of HBCC providers who are licensed, legally exempt from regulation, and who care for children receiving CCDF subsidies before and after various state policy changes. State policies of interest include new regulations implemented by states as required by the 2014 Child Care and Development Block Grant Reauthorization Act, such as requirements for criminal background checks or group size limits.
 - Also, many states now require HBCC providers to participate in QRIS as a condition of receiving subsidy payments. To identify providers most affected by policy change, researchers could examine whether changes in availability before and after new regulations are different based on characteristics of HBCC settings, such as ages of children in care and whether providers offer nontraditional hour care. Researchers should use state policy or regulatory

Applying principles of equitable research to secondary analysis

Research activities should go beyond reporting differences between and among providers, children, and families based on various background characteristics. Researchers should examine the systemic and social determinants that might explain any observed variation and findings. It is important for researchers to explore intersecting backgrounds and contextualize findings—for example, across HBCC in multilingual communities located in areas with limited resources or concentrations of poverty (Andrews et al. 2019). In early research stages, researchers should identify data sets whose sample sizes permit an exploration of these questions. When disaggregation is not possible because of sample size, researchers should be careful not to draw overly general conclusions about subgroups that may be combined into “other” categories.

databases to identify and link state policy and regulatory information for state-level comparisons; we provide a list of databases with policy and regulatory information in Exhibit A.2 in Appendix A.

- Researchers might also use within-state geographic identifiers to explore differences in the availability of HBCC by community characteristics, such as the availability of center-based care, urbanicity, race/ethnicity, employment and income levels, or average residential rental prices. These analyses can illuminate disparities in HBCC providers' access to resources or opportunities, as well as disparities in families' access to their preferred child care settings. The ACS's sample size is likely to be sufficiently large to permit some analysis of subgroups by within-state geographic areas (for example, county, ZIP code, and Census tract).
- Researchers can also use geographic data to link the ACS to the NSECE, although limitations for analyses vary depending on the sample sizes available for any given research question and variable of interest. In the following section, we discuss ways to leverage existing state administrative data sets to explore within-state differences.

2. State, territory, and Tribal administrative data sets

As part of their regular program operations, states, territories, and Tribes³ collect data and maintain administrative data systems that include information on individual children, families, and/or child care providers. Recent research has used state data sets to conduct secondary analysis, particularly to examine declines in the number of FCC providers in individual states (Doromal 2019; Illinois Action for Children Research Department 2019; McCabe et al. 2020). Researchers can also use state data sets to help answer research questions posed by the HBCCSQ research agenda, especially those involving the availability and quality of HBCC, provider participation in state ECE systems and quality supports, the degree to which state ECE systems reflect HBCC quality features or characteristics, family preferences for and use of HBCC, and how the COVID-19 pandemic has affected all of these matters. In Exhibit III.2, we list examples of research questions that can be answered (fully or partially) with the use of state data sets.

Box III.2. Administrative data systems relevant to HBCC include the following:

- Child care licensing
- Child care subsidy
- Quality Rating and Improvement System (QRIS)
- State prekindergarten
- Head Start and Early Head Start
- Workforce registry
- Child Care Resource & Referral (CCR&R)
- Provision of technical assistance or quality improvement
- Temporary Assistance for Needy Families (TANF)
- Supplemental Nutrition Assistance Program (SNAP)

³ States, territories, and Tribes may collect and maintain varied data depending on their regulatory systems or programs. Recognizing that state data systems maintain the widest range of administrative data, this report focuses on state administrative data. However, researchers should identify relevant administrative data sets available for United States territories or Tribes to answer research questions specific to those geographic communities.

States, territories, and Tribes collect and maintain data on HBCC providers under various regulatory systems, including state QRIS data, CCDF subsidy data, and workforce registries; they also collect and maintain early childhood or child care tracking databases on children and families who use HBCC (see Box III.2). Some states are developing early childhood integrated data systems (ECIDS) that link data across ECE programs, and a few others link their ECIDS to statewide longitudinal data systems that further link early childhood (preschool) data to K-12 and postsecondary education (P-20) and workforce outcomes. The Early Childhood Data Collaborative has published a report on states' capacity to link child-, family-, program-, and workforce-level data across ECE programs (King et al. 2018).

Exhibit III.2. Examples of research questions that can be addressed by state administrative data sets

Number	Research question
A1d	How are changes in the availability of other regulated ECE settings , such as Head Start, Early Head Start, or public prekindergarten for 3- and 4-year-old children, related to changes in the availability of HBCC?
A1e	How has the availability of HBCC changed since the start of the COVID-19 pandemic?
A3c	How does family use of HBCC relate to access factors (e.g., HBCC in a family's community, proximity to places of employment, or local transportation options or travel distance)? How do families address their child care needs in areas where no regulated ECE is available?
C1c	How do ECE system policies and regulations promote or inhibit participation in licensing, subsidy, QRIS, and other ECE systems?
C1g	How have changes in federal and state policies since the start of the COVID-19 pandemic affected HBCC participation rates in ECE systems?
D2a	How effective are ECE agencies' strategies for engaging HBCC providers in ECE systems?

State administrative data sets allow researchers to explore within-state variation in HBCC availability and quality, and to compare trends in HBCC providers to nationwide trends. With proper data integration, state administrative data could encompass information about individual providers across time and different ECE systems. Researchers can examine variation across provider characteristics, including providers' racial, ethnic, and linguistic backgrounds. For example, studies could use state data to answer research questions about the characteristics of providers (such as FFN caregivers receiving CCDF payments) who are most likely to remain in regulated or licensed care or shift to a status of legally exempt from regulation.

State administrative data sets can also be used for descriptive and correlational analyses that answer questions about within-state HBCC availability, participation in quality supports, family preferences and use of HBCC, and other topics. Potential analyses include the following:

- To understand how HBCC providers' personal and professional characteristics relate to decisions to exit from or remain in child care, we could examine the relationship between exit (for example, by consulting licensing and subsidy lists) and selected personal and professional characteristics, such as providers' age, race/ethnicity, language, education level, professional development participation, and/or

professional credentials (Child Development Associate [CDA] Credential, certification, accreditation). Differences in the characteristics of providers who leave or stay can provide the basis for research questions about how to increase HBCC providers' access to resources that support their ability to provide care.

- By linking QRIS data with other administrative data (such as data from professional development registries), researchers can examine differences in QRIS participation among HBCC providers. Such research could study incentives or barriers to QRIS participation and access to subsidy reimbursements or the relationship between QRIS participation and engagement in state-funded service delivery strategies aimed at quality improvement (such as workshops, coaching, or peer support). The analyses can help reveal whether providers benefit from participating in QRIS or by accessing other opportunities. For example, in states that have a tiered reimbursement rate for QRIS participation, analyses of administrative data could look at outcomes such as movement up in QRIS ratings and receiving higher tiered reimbursement rates.

Applying principles of equitable research to analysis of state administrative data

State data systems exclude certain groups of the population, including providers who do not participate in state ECE systems or other state-operated programs. Therefore, analyses must acknowledge who is excluded or not represented in the data, and the types of conclusions that can be reasonably supported by the data as a result. Examples of key HBCC groups most likely to be excluded from state administrative data are providers, children, or families whose primary language is not English, who are undocumented or refugees, or who are not receiving/giving payment for care.

- Linked QRIS data can also answer research questions about how well ECE policies and regulations are tailored for HBCC, including whether quality standards in QRIS accurately reflect HBCC quality as well as center-based quality. The project's quality measures review found that most states primarily use indicators that were originally developed for center-based care and then adapted for use in HBCC, instead of being designed for HBCC at the outset (Doran et al. forthcoming). The largest gaps are for indicators of features that are implemented differently or are more likely to occur in HBCC than in other ECE settings, including mixed-age peer interactions, close provider-family relationships, and conditions for operations and sustainability.
- By linking licensing and subsidy data (including ACF-801 data), researchers can examine families' preferences for or use of HBCC by analyzing use over time of settings that offer nontraditional hour care or serve mixed-age groups. Analyses can extend to how use of HBCC changes with the availability of other care options in the community, such as Head Start, prekindergarten, and center-based care. The licensing and subsidy data can also answer questions about changes in state or local regulations—for example, increased subsidy rates in response to an escalation in housing costs. Exploring these data by families' characteristics, such as racial, ethnic, and linguistic backgrounds, can illuminate differences in HBCC families' access to their preferred child care settings. Researchers can use the same state policy or regulatory databases (Exhibit A.2 in Appendix A) to identify and link state policy and regulatory information.

By adding to state administrative data a set of community characteristics, such as wealth/poverty, urbanicity, and population density from the United States Census or ACS, researchers can further examine the above questions across communities, particularly as related to providers' equitable access to resources and opportunities to improve quality. Analysis of state data could also further investigate findings from future data collection activities, such as qualitative and survey research. For example, if interviewed providers highlighted specific regulatory policies as barriers to their participation in systems, researchers could study relationships between these policies and provider participation in those systems using state data. As another example, if a survey of families found that factors such as having providers located near home or work affected their decisions about using HBCC, researchers could examine state data for patterns of provider locations in different communities.

In the HBCCSQ project's data scan task, we identified nine states with relatively large numbers of HBCC providers and a variety of policy and regulatory systems related to child care subsidies, licensing, and QRIS (Exhibit A.3 in Appendix A). At least six states (Arizona, Colorado, Illinois, Minnesota, Texas, and Washington) can link within-state geographic indicators (for example, county or ZIP code) to HBCC providers across several data sets.

3. Literature and document reviews

Many of the research questions in Chapter II focus on HBCC providers' experiences in offering care, interacting with ECE and other systems, and, in particular, how these experiences intersect with providers' cultural, racial, ethnic, and linguistic backgrounds. In Exhibit III.3, we provide examples of research questions about providers' experiences that could be answered by reviewing research literature (including peer-reviewed articles and gray literature) and other documents (for example, state agency manuals, state policy guidance, and state planning documents).

Potential literature and document reviews include the following:

- **Experiences of HBCC providers.** A more focused review of ethnographic and qualitative research on the experiences of HBCC providers across cultural, racial, and ethnic backgrounds could help guide future ethnographic and qualitative research on HBCC providers' experiences, especially those that build on the strengths, resources, and resilience of providers living in underserved communities. Even though two recent literature reviews examined HBCC research (Bromer et al. 2021a, 2021b), most of the literature in these reviews focused on regulated FCC settings and did not include older ethnographic literature from the 1990s and early 2000s (for example: Nelson 1990; Tuominen 2003; Zinsser 1991).

Exhibit III.3. Examples of research questions that can be addressed by literature and document reviews

Number	Research question
A2b	What are the strengths, resources, and knowledge that HBCC providers bring to their work with children and families? What strategies do they use to continue this work and survive, cope, and thrive, despite multilayered challenges such as systematic racism? What sources of supports and strength do they access?
A3b	How have family preferences for HBCC changed over the past 10 years? How have family preferences for HBCC changed by families' employment patterns (including the need for nontraditional hour care)?
C1a	To what extent do ECE policies and regulations (e.g., licensing, subsidy, QRIS, CACFP) align with quality features or characteristics of HBCC that are implemented differently or are more likely to occur in HBCC than in other ECE settings (e.g., mixed-age settings, provider working alone, care available during nontraditional hours)? To what extent do ECE system policies and procedures recognize the strengths of home-based settings?
C1e	What is the relationship among requirements across ECE systems ? To what extent do they align/overlap?
D1a	What service delivery strategies and models have states and local ECE agencies developed for engaging HBCC providers in ECE systems and other quality improvement initiatives ? What challenges and opportunities do ECE agencies face in their strategies to recruit and engage providers in ECE systems? How, if at all, do they manage the challenges?
D1h	What service delivery strategies did states, territories, Tribes, and local agencies use to continue engaging HBCC providers during the COVID-19 pandemic ? How did these strategies differ from existing approaches? Which strategies were promising?

- Families' preferences for HBCC over time.** To answer questions about how families' preferences for HBCC have shifted over time, researchers could begin with a retrospective review of studies on parents' perceptions during the 1980s and 1990s (for example, Brayfield et al. 1995; Emlen et al. 1999; Porter 1991; Uttal 2002; Zinsser 1991) and how those findings compare to recent research on parents' child care preferences (for example, Smith et al. 2021). Such a targeted review could guide the development of new research on specific aspects of parents' experiences in finding, choosing, and using HBCC.
- ECE policies and regulations, and the circumstances of HBCC settings.** Reviewing existing and recent syntheses of policies could help deepen researchers' understanding of how ECE systems reflect the circumstances of HBCC settings. The QRIS compendium (BUILD and Child Trends 2019) and the recently published HBCC national policy scan (Kane et al. 2021), which drew on several policy and regulatory databases (including the QRIS compendium) and other documents (such as state CCDF plans) contain important information on state ECE policies. However, they do not focus on how ECE regulations and policies may disadvantage certain groups of HBCC providers, such as those who do not speak English, those who live in rural areas, those who live in rental apartments, or those with limited financial resources. A comprehensive scan of regulations and policies with an equity lens could guide efforts to revise ECE policies so that all providers have opportunities to receive equitable support. Scans could use existing policy and regulatory databases and resources, such as the National Center of Early Childhood Quality Assurance

(NCECQA) National Database of Child Care Licensing Regulations, the Urban Institute's CCDF Policies Database, NCECQA's National Program Standards Crosswalk Tool, and the Hunt Institute's COVID-19 State Child Care Actions database (see Appendix A.2 for a longer list). They also could use published guidelines, such as the CACFP provisions for "day care homes" (Food and Nutrition Service 2019). In addition, scans could directly review state documents, such as QRIS standards, as well as state early childhood department policies and procedures, potentially supplemented by collecting information from state child care administrators. A recent report assessing the child care subsidy system through an equity lens (Adams and Pratt 2021) is an example of this kind of scan.

- **Alignment of ECE policies and regulations.** Given issues with alignment across local, state, and federal ECE policies and regulations, a policy scan could examine the degree of alignment of ECE systems. For example, a scan could examine how well CACFP rules align with state licensing regulations and QRIS. This approach could mirror previous efforts to align quality standards and regulations for ECE settings, including FCC across policy systems, including QRIS, licensing, Head Start, and prekindergarten (Lehoullier 2012). More recent alignment efforts focus on alignment between Head Start and state and local ECE systems for center-based programs through information collected from a variety of policy databases and reports, including CCDF policies, state data systems, Head Start, and state preschool programs (Maxwell et al. 2019). Such a scan could help states and localities move toward coordinated ECE systems that include HBCC and reduce bureaucratic burdens on providers and families.
- **Interventions aimed at improving HBCC quality and sustainability.** An updated synthesis of the last five years' research on interventions aimed at improving HBCC quality and sustainability could answer questions about the types of service delivery strategies and local interventions that support quality improvement in HBCC settings. Such a synthesis would add to the most recent literature reviews on initiatives for HBCC providers (Bromer and Korfmacher 2017; Hatfield and Hoke 2016; Porter et al. 2010). The National Study of Family Child Care Networks landscape scan of HBCC networks (Bromer and Porter 2019) updated the review of Porter and colleagues (2010) for one type of initiative, but a more comprehensive

Applying principles of equitable research to literature and document reviews

Literature and document reviews can provide useful information to help researchers identify what is known and not known on a given topic, generate knowledge and theories based on a cumulative body of research, and identify the evidence base for given practices. However, researchers should consider how the research literature does or does not represent the perspectives of the study community or population. For example, research may rely on validated measures that do not reflect the strengths of HBCC providers. Using an equity lens to review existing literature involves a critical analysis of research findings compared to the voices and perspectives from HBCC providers' lives and experiences. Researchers should not assume that findings from a literature review will apply to all communities or groups of HBCC providers, families, and children. For example, there is limited existing HBCC research on FFN providers, children with special needs, and school-age care. Also, many studies include some providers of color, but few explicitly examine how experiences vary among these providers.

compendium of initiatives beyond networks is needed. This synthesis would need to search both peer-reviewed and gray literature because many evaluations of interventions are not published in journals, and interventions in early stages of development and evaluation have fewer published reports. This documentation could contribute new information about state and local innovation in HBCC and become the basis for future research and model development.

- **Experiences of HBCC providers and families during the COVID-19 pandemic.** Future research on HBCC during or resulting from the pandemic should start by synthesizing the recent literature and its findings, helping identify gaps in knowledge and guiding future research to examine the longer-term impact of COVID-19 on the HBCC sector. For example, a wealth of briefs, special journal issues, and other resources document how the COVID-19 pandemic has affected the ECE workforce and the families who rely on ECE settings. Some of these publications focus on the experiences of providers, families, and children in HBCC (for example, Porter et al. 2020; Nagasawa and Tarrant 2020) based on surveys and focus groups. Other resources—primarily surveys, with some administrative data analyses—are documented in a database maintained by the Urban Institute (2021). Although very few resources focus specifically on HBCC settings, some resources compare the experiences of FCC providers to those in center-based settings.
- **Changes to ECE policies and regulations during the COVID-19 pandemic that applied to HBCC.** Research that documents and synthesizes how ECE policies and regulations applicable to HBCC changed during the COVID-19 pandemic could support future efforts to develop more responsive ECE policies and regulations. For example, Kane et al. (2021) documented changes in subsidy funding during the pandemic; future scans could consider how states addressed subsidy policies regarding payment by enrollment versus attendance during the pandemic and examine licensing changes to ratios, group size, or health and safety guidelines.

B. Future data collection activities

1. Ethnographic and qualitative research

The use of ethnographic and qualitative methods with HBCC providers could yield rich sets of data on the motivations, decisions, perceptions of quality, and experiences of providers who interact at different levels of the policy, program, and community contexts in which they care for children and families. Studies using these methods would permit researchers to develop a fuller understanding of the experiences and strengths of HBCC providers, the challenges they face, and their vision for the future of their work. In addition, such studies could provide a voice for a group that has often been marginalized in the United States. Such research could also provide new insights into how quality features are enacted in HBCC settings, including the complex relationships that develop between providers, children, families, and community members; the types of activities and routines implemented for different ages of children and at different times of day; and the ways race, culture, language, income, and social capital may shape these practices (Buchbinder et al. 2006). Future research could prioritize the perspectives of HBCC providers living in and serving underserved communities,

including Black, Hispanic/Latino/a, immigrant, Indigenous, and rural communities. Studies might also focus on understudied populations, such as relative caregivers and other providers legally exempt from regulation in underserved communities. Ethnographic and qualitative research can help narrow gaps around “why” and “how,” and provide the foundation for future correlational and experimental research with larger samples of providers, families, and children (Exhibit III.4).

Exhibit III.4. Examples of research questions that can be addressed by qualitative and ethnographic research

Number	Research question
A2a	What are providers’ experiences in offering HBCC, and how do these experiences relate to HBCC availability ? Why do providers decide to leave or stay in HBCC? Why do providers stop caring for children altogether or continue caring for and educating children, but not in HBCC? What are their reasons for participating in regulatory and ECE systems? What are providers’ experiences in participating in several ECE and non-ECE systems?
A2b	What are the strengths, resources, and knowledge that HBCC providers bring to their work with children and families? What strategies do they use to continue this work and survive, cope, and thrive, despite multilayered challenges such as systematic racism? What sources of supports and strength do they access?
A4a	What are children’s and families’ experiences in using HBCC ?
B1d	What is the nature of family engagement in HBCC settings? How do family engagement practices contribute to provider, child, and family outcomes?
B1g	What are the core quality practices in nontraditional hour HBCC that are most likely to contribute to positive child and family outcomes?

Future ethnographic studies could explore the following topics:

- How HBCC providers experience the challenges and opportunities associated with ECE systems and regulations, and how these experiences intersect with daily caregiving practices.** A semi-ethnographic approach would also allow researchers to examine how race, class, and gender play a role in HBCC providers’ experiences in caring for children and families. This study could build on earlier ethnographic research on HBCC providers (Zinsser 1991) and the families who rely on HBCC (Holloway et al. 1997). For example, Tuominen’s 2003 study of FCC providers explored the intersection of women’s experiences of paid caregiving work and societal values related to nurturing and care. The study, however, took place before the adoption of QRIS across states as well as revisions to subsidy and licensing systems over the last 18 years.
- The types of caregiving routines, activities, and interactions involving HBCC providers and children (from infants to school-age children).** Specifically, semi-ethnographic observations of HBCC homes could collect field notes on the types of learning opportunities (both formal and informal), the use of home space, and the interactions among providers and children that may characterize HBCC more than other ECE settings. Interviews with providers could focus on their perspectives about how these practices contribute to positive outcomes for children. Future research could build on prior approaches, including using ethnographic interview approaches and photographs to capture the daily experiences of HBCC providers (Tonyan et al.

2017). Specific approaches might include the Ecocultural Family Interview as adapted for FCC providers (Tonyan et al. 2017).

- **The strengths, resources, and strategies that HBCC providers use to support children and families in their care.** Many studies include HBCC providers across diverse community contexts and racial, ethnic, and linguistic groups. However, fewer studies look within groups to unpack how community context or the intersection of community, race, and language may shape experiences, resources, and strategies. For example, although many studies have included HBCC providers of color, few studies have addressed the specific experiences of Black women who offer HBCC and the strategies they use to support racial healing amid systemic inequities. Some older research looked at the experiences of FFN providers who were recent immigrants or refugees, as well as those from Indigenous communities (Emarita 2008), yet more research is needed to understand the experiences of these providers and the children and families they support.
- **How HBCC providers engage families in their own children’s learning and development and on the types of resources and supports that HBCC providers offer families.** Interviews with families could also yield descriptive information on experiences of families who depend on HBCC.

Other qualitative research could answer more specific questions. For example, these studies could address the following topics:

- **The nature of HBCC quality during nontraditional hour care.** Researchers could conduct a series of interviews with HBCC providers who offer 24-hour care to learn about their experiences. Given that direct observation of nontraditional hour care could be logistically challenging and intrusive, researchers could learn about promising practices through video, audio, or text and photograph diaries (Alaszewski 2006; Glaw et al. 2017; Hawkes et al. 2009).

Applying principles of equitable research to ethnographic and qualitative research

Ethnographic and qualitative research have the potential to uncover underlying root causes, or the “why” behind trends or patterns. Qualitative interviews and focus groups that intentionally ask respondents to talk about challenges related to systemic inequities can help researchers apply an equity lens to their findings. Qualitative and ethnographic research teams should also, at minimum, include researchers with different life experiences from diverse racial and cultural backgrounds, and incorporate self-reflection on personal biases throughout the research process. Participatory approaches to qualitative research in which researchers partner with study participants to co-create research questions, coding, and analyses may also help to reduce researcher bias, especially during the data analysis phase (Vesely et al. 2018; Wallerstein et al. 2019). Researchers must take special care to build trust with participants, because qualitative and ethnographic methods might involve respondents sharing sensitive aspects of their personal experiences.

- **The types of supports that HBCC providers access that meet their needs and honor their strengths and knowledge.** Researchers could use eco-mapping to conduct a series of interviews to document providers’ relationships with families; personal support networks; participation in licensing, subsidy, and quality systems; and access to other supports (Jacobs Johnson et al. 2017). The eco-maps could facilitate discussions of connections across systems, gaps in support, barriers to

involvement, and drivers of providers’ decision making about remaining in or leaving the field.

Relationship to other research activities. Both ethnographic and qualitative studies could set the stage for developing measures and indicators for features of HBCC quality yet to be examined. Even though the samples of providers and families in the ethnographic and qualitative studies would be small and nonrepresentative, findings from the research could provide a foundation for designing larger, more representative studies.

2. Descriptive and correlational survey research

Surveys can produce descriptive and correlational evidence⁴ that answers research questions about HBCC providers’ and families’ experiences; how providers implement quality features; and how features of care are associated with provider, child, and family outcomes (Exhibit III.5). Such research does not produce findings as rich as those derived from qualitative and ethnographic research, but it can be used to examine whether findings from qualitative and ethnographic research are applicable to larger groups of providers and families. Representative surveys are powerful because their findings characterize an entire group of HBCC providers, not only study participants.

Exhibit III.5. Examples of research questions that can be addressed by survey and correlational research

Number	Research question
A1b	What is the movement of HBCC providers in and out of HBCC, licensing and regulatory systems, and ECE ? What proportion of HBCC providers stop providing care altogether? When HBCC providers no longer provide child care, what non-child care work or activities do they pursue? What proportion of providers leaves HBCC to work in center- or school-based settings? What proportion of FFN providers becomes licensed? What proportion of FCC providers leaves licensed settings to offer FFN care? Which factors are the strongest predictors of HBCC tenure and exit?
A3c	How does family use of HBCC relate to access factors (e.g., HBCC in a family’s community, proximity to places of employment, or local transportation options or travel distance)? How do families address their child care needs in areas where no regulated ECE is available?
B1h	How do working conditions in HBCC contribute to other quality features and child outcomes?
B1j	What combinations of quality features in HBCC most likely contribute to positive provider, child, and family outcomes ?
C1c	How do ECE system policies and regulations promote or inhibit participation in licensing, subsidy, QRIS, and other ECE systems?
D2e	What service delivery strategies are most likely to be associated with positive and equitable child and family outcomes in HBCC settings?

⁴ Descriptive evidence provides information about the characteristics or features of people, settings, actions, or other phenomena, usually by quantifying the prevalence, level, or degree of the characteristics or features. It can answer “what,” “who,” “when,” or “where” questions. Correlational evidence provides information about the relationships between two or more characteristics or features, often by trying to account for and remove the influence of other related characteristics or features. It can answer “how” questions and provide suggestions about “why” questions.

Survey research designs in HBCC. The groups of providers and families surveyed are especially important for HBCC because it takes place in a variety of settings, and many providers, such as FFN caregivers, are not connected to any formal ECE systems. Nationally representative surveys can reach large groups of providers and families in different settings and contexts, including FFN providers, and permit researchers to draw conclusions about all providers and families and among subgroups based on HBCC setting, provider, child and family, and local community characteristics. The NSECE is a model for nationally representative studies. Future surveys—whether an additional round of the NSECE or another survey—could address topics that go beyond those included in the most recent NSECE or focus exclusively on HBCC providers and families or a specific HBCC setting, such as FFN care. Nonetheless, such surveys are resource intensive and difficult to conduct. Researchers would need a national sampling frame to recruit providers or families and gain their consent for participation. Such an approach would pose a particular challenge among FFN providers—a group where there is not a readily available sampling frame. In addition, methodological challenges could arise in ensuring the collection of reliable information from relatively small subgroups that might need to be oversampled, such as providers serving children with special needs or those in rural areas.

Surveys of providers from a particular state, territory, Tribe, or local community would permit a focus on providers and families in a particular context. However, such surveys would pose similar challenges if they require the participation of a representative sample of FFN providers. Several methods can produce stronger evidence from research with nonrepresentative samples (Baker et al.

Applying principles of equitable research to descriptive and correlational research

Participant-centered methods can involve participants in the survey design process and in developing and pre-testing survey items. When surveying HBCC providers in underserved communities, researchers should involve “trusted messengers”—people and organizations in those communities—to encourage participation and help answer questions.

2013). For example, researchers might be able to use a nonrepresentative sample and make statistical adjustments to the findings by using benchmarks from nationally representative surveys such as the NSECE, although the results would not be representative to the extent that important but unmeasured factors affect the findings. Although this approach does not appear to have been used in ECE research, there are examples from surveys of households regarding health care (DesRoches et al. 2016) and surveys of public knowledge, behavior, and attitudes toward the COVID-19 pandemic (Lennon et al. 2021).

Another approach would be to survey providers based on their connection to a formal system, such as licensing, subsidies, or QRIS. Such providers would be easier to sample and well positioned to address topics about that system. However, by not surveying providers who do not participate in that system, such an approach could distort findings if the system includes barriers to participation for all HBCC providers or providers in underserved communities.

Examples of descriptive research topics that can be answered with surveys include the following:

- Surveys of HBCC providers can close knowledge gaps about providers' practices, engagement in ECE policies and regulations, and access to initiatives and supports. For knowledge gaps related to provider practices, such as support for mixed-age groups, family engagement, and working conditions, surveys can ask in-depth questions on specific practices in HBCC, allowing for collecting detailed data on the prevalence of these practices and a comparison of these practices in HBCC versus other ECE settings. They can include time-use surveys to gain detailed insights into activities that providers engage in throughout the day or specifically during nontraditional hours. Families can also be surveyed to fill in gaps about their use of HBCC. For example, researchers could survey families about how their HBCC use is affected by factors such as its availability in their community or near where they work.
- Both longitudinal and rapid-cycle surveys offer opportunities to gather real-time information on providers or families over a designated period. These surveys can explore HBCC providers' experiences working with children and families, interacting with community policies and systems, and dealing with ECE and non-ECE policies and regulations. One example involves tracking providers over time to understand when they enter or exit ECE systems; why they enter or exit; and whether upon exit they offer a different HBCC setting, seek employment at a center-based ECE program, or leave the ECE field. Research could also track families over time to understand which HBCC settings they use, how they combine HBCC with other child care options, and why they change arrangements. Rapid-cycle surveys can determine how a policy or experience influences providers' delivery of care.

Researchers can also use **surveys to provide correlational evidence** to answer the HBCCSQ agenda's research questions. Examples include the following:

- Researchers can study relationships between HBCC providers and the care they provide with respect to the provider, child, and family outcomes of interest to policymakers. In particular, the research could examine providers and their engagement in support initiatives. It could also examine specific system factors and providers' participation in HBCC initiatives; for example, the relationship between system practices or requirements (such as paperwork, materials and training requirements, language) and participation, or the relationships between the costs (economic, administrative, and personal) of professional development and providers' completion of such development.
- Correlational evidence can also emerge from linking provider surveys with surveys or assessments of families to determine whether quality features and provider practices are connected to outcomes. For example, correlational study designs could use surveys to assess working conditions and provider stress, as well as children's well-being and stress levels. Researchers could also study whether different combinations of quality features are associated with outcomes of interest.
- Longitudinal designs can generate correlational evidence by exploring the trajectories of provider outcomes over time or family and child outcomes during and after children's placement in HBCC. Such an approach parallels research on relationships between attendance in center-based care and later child outcomes,

such as school readiness. Similarly, studies can link newly collected data with administrative data from state P-20 systems on child academic and social-emotional outcomes (as noted in the secondary analysis section) or data from workforce systems on parent employment and earnings.

Relationship to other research activities. Survey research should be informed by qualitative and ethnographic research. Given the lack of attention to providers and families in underserved communities, qualitative research that focuses on such providers and families can highlight the aspects of care availability and quality that surveys should explore, such as the working conditions that may contribute to stress for providers or how providers offer learning opportunities to children or engage families in their children's learning. Researchers can use qualitative research findings to develop new survey items. Conversely, descriptive and correlational research can use newly developed measures to uncover more information about the emerging constructs, their prevalence in HBCC, and their associations with outcomes of interest.

3. Implementation and evaluation research

Implementation and evaluation research builds on earlier efforts to understand the experiences of providers and families, with the goal of determining whether and how ECE systems respond to the needs of HBCC providers, children, and families. Correlational evidence can suggest connections between providers' participation in systems or receipt of supports with quality features, practices, or changes in them, or with provider, child, and family outcomes, but only evaluation research can provide evidence that systems or supports affect outcomes. In addition, implementation research is needed to study the delivery of systems or supports and whether such delivery occurs as intended. This type of evidence can help policymakers make decisions about investments in systems and supports. Further, combining implementation and evaluation research can shed light on how and why a system or support achieves (or does not achieve) its intended outcomes. In Exhibit III.6, we list examples of research questions that implementation and evaluation research can answer.

Implementation and evaluation research designs in HBCC. Implementation research can take several forms. A mixed-methods study, for example, can examine a specific system or support to learn more about its implementation. Earlier phases of these studies can examine the strengths and weaknesses of a system or support to help develop and improve it. Later phases can study fidelity, such as whether the system is operating as intended, reaching desired groups, or conveying prepared information successfully. It can draw on existing documentation (as noted in Section A.3); administrative data on service or program delivery; and data collected (through interviews, focus groups, or surveys) from those implementing the system or supports, or the intended beneficiaries. Several implementation studies, many of FFN caregivers, have used these approaches (Bromer et al. 2020a; Forry et al. 2011; Paulsell et al. 2006; Porter and Rice 2000; Shivers and Wills 2001).

Exhibit III.6. Examples of research questions that can be addressed by implementation and evaluation research

Number	Research question
B1a	What are the ways in which HBCC providers across settings offer learning opportunities to children ? What is the nature of curriculum use in HBCC, and how does it support intentional learning activities? What is the nature of informal learning opportunities for children across HBCC settings? How do learning opportunities for children in HBCC contribute to child outcomes?
B2a	How is participation in ECE systems (including regulatory, subsidy, and quality initiatives) associated with provider, child, and family outcomes in HBCC ?
D1a	What service delivery strategies and models have states and local ECE agencies developed for engaging HBCC providers in ECE systems and other quality improvement initiatives ? What challenges and opportunities do ECE agencies face in their strategies to recruit and engage providers in ECE systems? How, if at all, do they manage the challenges?
D1b	How are service delivery strategies aimed at HBCC implemented within ECE systems and local ECE agencies? Are service delivery strategies aimed at HBCC implemented as intended by their design?
D1e	How do relationship-based approaches to service delivery with HBCC contribute to the effectiveness of supports?
D1h	What service delivery strategies did states, territories, Tribes, and local agencies use to continue engaging HBCC providers during the COVID-19 pandemic ? How did these strategies differ from existing approaches? Which strategies were promising?
D2a	How effective are ECE agencies' strategies for engaging HBCC providers in ECE systems? What types of organizations are most likely to be effective at delivering these services?
D2e	What service delivery strategies are most likely to be associated with positive and equitable child and family outcomes in HBCC settings?

For HBCC, providers' involvement in an implementation study is especially important because systems (including non-ECE systems) and support initiatives may affect the ways providers deliver care and education to children and families. HBCC supports that operate through a formal model, such as Early Head Start, can be studied to understand the process of implementing the supports and fidelity of implementation with respect to the model. Supports without a formal model, such as many FCC networks (Bromer and Porter 2019), can also be studied to see what strategies (for example, peer support, home visiting, or workshops), approaches (relationship based or strengths based), or combinations of approaches are used to deliver the support and the content and topics (for example, business practices, social-emotional learning, working with families) of their focus. Similarly, systems can be studied to determine whether the policies, regulations, and associated supports are implemented as intended, whether they are successful in reaching HBCC providers, and the experiences of HBCC providers who choose to engage.

One of the most frequently used designs for supporting causal inferences involves randomly assigning study participants to different interventions. These designs provide the strongest level of evidence about the effectiveness of a system or support. However, causal designs cannot necessarily determine which aspects of a system or supports drive changes in outcomes. For HBCC, several aspects of a system or supports might contribute to provider, child, and family outcomes. Moreover, the assignment of participants to a comparison group that does not receive an intervention

may raise ethical concerns, especially among HBCC providers in underserved communities. To address the challenge of identifying the features or supports responsible for the outcomes of interest, research could explore which specific features drive changes in outcomes. Another approach would be to rely on treatment arm or factorial designs that permit an evaluation of different combinations of system elements and features. To address the challenge related to the ethical delivery of services, researchers could offer comparison group participants the support on a delayed basis or provide information in different modes (for example, self-administered online vs. through individual coaching).

When randomized evaluations are infeasible, other, quasi-experimental design approaches can evaluate a system or support. For example, if a particular system element changes in different states at different times, researchers can use difference-in-difference designs to measure the effects of those changes. If some providers or families participate in a system or receive a particular support but others do not, researchers can look for changes in outcomes between the two groups. Porter et al. (2016) and Bromer et al. (2009) used such designs to evaluate FCC networks by comparing providers who were and were not participating in those networks. The strength of evidence of effectiveness from these designs relies on the degree to which any changes in outcomes are attributable to changes in the system or support, not to other factors; however, not all quasi-experimental designs can account for the influence of all other factors. For example, some providers might be more likely to participate in a system or receive a support and these providers might also be more likely to have different outcomes.

Applying principles of equitable research to implementation and evaluation research

Implementation and evaluation research should include the perspectives of community members who interact with or are part of the program model of study. This involvement should begin in the early phases of study development, from logic model design, protocol development and testing to data collection and analyses. Research teams may consider many approaches that involve program members, providers, families, and communities in research activities in culturally relevant ways that also do not put too much burden on these stakeholders.

Implementation and evaluation research can address many significant research questions about HBCC systems and supports (Exhibit III.6). **Examples of the topics these research activities can address** include the following:

- Researchers can conduct mixed-methods studies of specific types of support, such as technical assistance visits, coaching or consultation, on-site or distance workshops, peer mentoring, peer support groups, learning communities, and communities of practice. Studies might also examine the platforms through which these different types of strategies are delivered, such as FCC networks, school districts, Head Start and Early Head Start for FCC programs, publicly funded prekindergarten initiatives, child care resource and referral agencies, unions, or family support programs. Studies can assess how these approaches are implemented—use of relationship-based approaches, services offered separately or in combination, dosage, and frequency of services—and the content and topics that they focus on with providers. New or continued supports, such as online training or

virtual home visits and coaching sessions used during the COVID-19 pandemic, are good candidates for study. Studies can also uncover additional information about the ECE agency staff who deliver supports to providers, such as staff knowledge, attitudes, and practices in supporting providers, and the aspects of their skills and practices that prove most beneficial to providers. In particular, these studies could identify provider perceptions of the benefits of these supports, the nature of the supports, how and from whom providers want to receive them, and the alignment or gaps between their needs and what they receive from ECE agency staff. Additional implementation drivers of support initiatives might include practices around staff supervision and support, organizational culture and respect regarding HBCC, theory-of-change articulation, and staff training (Bromer and Korfmacher 2017; Bromer and Porter 2017). Examples of this type of research include studies of the Arizona Kith and Kin Project (Shivers et al. 2015) and the Community Connections Preschool Program (Forry et al. 2011), both of which used surveys and quality observations; a qualitative evaluation of the Promoting First Relationships initiative with FFN caregivers (Maher et al. 2008); and case studies that examined the implementation of two FCC networks through staff, provider, and parent interviews, focus groups, and quality observations (Bromer et al. 2020a).

- A study of curricula designed for HBCC could use a mixed-methods design: first, an implementation component could use interviews and observations to examine fidelity in practices and how providers implement the curricula relative to other, less formal learning activities and opportunities. An evaluation component could then use provider and family surveys and child assessments to look at other provider outcomes, such as efficacy, professionalism, and stress, and child outcomes, to see whether use of the curriculum and the practices to implement it produce differences in learning and development. Examples of this evaluation approach are the evaluation of the Carescapes professional development program for HBCC providers (Rusby et al. 2016) or the more recent evaluation of two states' professional development initiatives for FCC (Han et al. 2021). Both evaluations involved a variety of methods and sources, although neither included an implementation component.
- More broadly, researchers can study ECE systems and evaluate how participation in them affects provider, child, and family outcomes. These studies could compare providers who participate or do not participate in these systems using a variety of data sources, such as administrative data, surveys, observations, and assessments. For example, researchers could study how provider participation in states' credentialing programs contributes to provider caregiving practices for children and families with special needs, or affects continuity of care for these families.

Relationship to other research activities. Research on implementing and evaluating systems and supports should be supported by the findings from other data collection activities, such as qualitative and survey research. Research can examine new supports or propose modifications to existing systems and supports based on what providers or families say they need or how providers currently care for children and families. Secondary analysis, including data from existing systems and documentation on systems and supports, should guide this research.

C. Measures and indicator development and adaptation

Several research questions concerning HBCC availability and quality suggest the adaptation of existing or development of new measures and indicators.

1. Measures

The use of validated measures allows researchers to assess complex aspects of HBCC, including quality, in standardized ways that facilitate comparisons across studies. Systems and supports can also use measures in quality improvement efforts. Measures development and adaptation can produce measures that are valid, reliable, and appropriate for HBCC, thus filling measurement gaps for these settings.

Measures development approaches.

Measures development is an intensive, iterative process that faces the same challenges as other research activities involving HBCC. The iterative testing of measures requires several rounds of data collection. In addition, researchers must compare newly developed measures to similar ones with known psychometric properties to determine measure validity. Samples require careful selection to ensure the proper assessment of measures' reliability and validity with different populations of interest. In HBCC,

measures development must consider issues with existing measures, which often apply exclusively to either center-based care or regulated HBCC, and may not reflect the input of HBCC providers and families in underserved communities. Researchers should work to avoid these issues when developing new or adapting existing measures.

Examples of measures development to help answer questions. Measures development activities could adapt existing measures used in HBCC or develop new measures to help answer several of the research questions in this agenda. The HBCCSQ summary of existing measures and indicators report (Doran et al. forthcoming) lists several recommendations for future measures development (see Box III.3).⁵ Existing measures do not describe differences in quality during nontraditional hours versus more traditional or standard hours of care in HBCC; in addition, it is probably not appropriate to assess providers based on the standards in existing measures of quality. However, existing measures could be adapted to assess constructs that apply to care during these hours. To adapt measures for nontraditional hour care, research would first need to examine what care looks like during nontraditional hour routines and activities by using methods described earlier, such as interviews and having providers record diaries of their activities. An important

Applying principles of equitable research to measures and indicator development and adaptation

Studies must test measures with HBCC providers in the communities where the measures will be used. This approach might require testing several versions of measures in Spanish and other languages.

Researchers should also consider involving providers at early stages of the measures development process by soliciting their input on important constructs to measure, vocabulary commonly used for discussing relevant issues, or how well measures reflect their own experiences.

⁵ The recommendations in Box III.3 are drawn from a draft version of the summary of measures and indicators report. The final recommendations will be available in the published report.

nontraditional hour routine for research is support for healthy nighttime sleep routines, including culturally responsive practices to support healthy sleep hygiene. Establishing healthy sleep habits is important for all children, but particularly for children in underserved communities, who are more likely to experience insufficient sleep (Centers for Disease Control and Prevention 2017). For example, bedtime routines (including bath time, book sharing, or other calming activities) should be assessed separately from routines used during other times of day.

Box III.3. Recommendations for future measures development

- | | |
|--|---|
| <ul style="list-style-type: none"> • Working conditions and providers’ emotional and physical health • Work-family balance: Communicating about expectations and boundaries • Helping parents with non-child-care tasks: Pickup and drop-off from school, preparing meals outside of child care hours, laundry • Working alone or with other adults: Social connectedness, networking, peer support groups, other resources • Family support: Help from spouses/siblings/ adult children, interactions between and among family members, degree of support or stress added • Accessing community resources: Parks, libraries, playgrounds, neighborhood walks, neighbor visits, other community spaces and resources • Nontraditional hour care: Differences in routines and activities, sleep, family work shifts and schedules, evening/overnight care, weekend/summer care, out-of-school opportunities | <ul style="list-style-type: none"> • Trust in provider-family relationships • Support for social development: Empathy, perspective taking, social problem solving, antibullying (school-age children), support for mixed-age peer interactions • Support for emotional development: Dealing with stress and trauma • Positive ethnic and racial identity building: Ethnic-racial socialization, use of culturally responsive developmental practices • Cultural congruence: Cultural, racial, and linguistic background of providers and families, understanding and reflecting cultural values and expectations • Support for physical development: Aerobic activities, ability to control body in space, eye/hand coordination, space and outdoor play (including shared and community spaces) • Support for cognitive development: Problem-solving strategies, sharing knowledge and ideas • Learning activities: Building on children’s interests and/or expanding awareness of ideas; use of clear expectations, guided discovery, or adult modeling; help with schoolwork (school-age children); use of informal learning through activities such as cooking, chores, reading, experiments, playing with toys and games |
|--|---|

Measures development also needs to account for mixed-age groups and school-age children. The same standards within age-limited groups of children may not be realistic or appropriate for HBCC settings with mixed-age groups, especially those with a wide range of ages, such as from infants through school-age children. However, the project’s literature review found no research in HBCC settings about the link between provider practices for mixed-age groups and outcomes of children, families, or providers (Bromer et al. 2021a). Therefore, more research is needed to understand effective provider practices for different age ranges of children in care, including culturally responsive practices for supporting interactions. Based on the results from additional research, future measures may need to assess providers’ degree of flexibility in implementing

activities with children of different ages and different needs, as well as how providers guide interactions between younger and older children. In addition, measures may need to assess whether the provider gives space and time for age-appropriate activities. For example, measures might address how providers nurture independence and autonomy for school-age children and support learning by allowing uninterrupted time and space for homework.

Measures development could adapt or develop measures that address quality features yet to be or minimally studied in HBCC. For example, only one measure (the Caregiver Experience of Ethnic-Racial Socialization; Shivers and Farago 2016) currently addresses HBCC providers' role in building children's positive ethnic and racial identity, even though research indicates that positive ethnic-racial socialization practices can contribute to positive cognitive, language, and social-emotional development in Black and Hispanic/Latino/a children (Caughy et al. 2002; Caughy and Owen 2015). To develop such measures, research would first need to examine the nuances between providers who come from the same culture as some—but not all—children in their care. Similarly, measures development around cultural congruence would need to go beyond existing measures' inclusion of respect for diversity to include elements such as providers' understanding of families' cultural values and expectations, and how these elements support children's development and family functioning.

Relationship to other research activities. Earlier analysis and data collection should provide a basis for measures development, both to provide insight into initial measures development/adaptation and identify priority constructs for measurement. Information from surveys on the prevalence of quality features and associations with outcomes can point to areas in need of measures development or adaptation. For example, evidence from national and state survey data reveals the prevalence of care during nontraditional hours in HBCC; this finding suggests an area where deeper assessment is needed (NSECE Project Team 2015b; Sandstrom et al. 2018). Accordingly, more opportunities for measures development should emerge with the increase in HBCC research. Once new or adapted measures undergo testing and validation, researchers can incorporate them into future data collection activities, including survey and evaluation research. Measures also lend themselves to incorporation into tools that permit providers to self-assess and identify both strengths and areas for improvement.

2. Indicators

QRIS standards and indicators are another approach to assessing HBCC. Such an approach relies on standardized, comparable information to advise families, providers, and policymakers about HBCC quality. Indicators are often combined into a single overall rating, although a given QRIS often relies on several sets of standards and indicators, with many indicators assessed by using part or all of a measure.

Indicator development approaches. The development of new or adaptation of existing indicators for HBCC involves many of the same considerations used with measures development. For example, indicators based on center-based care have not undergone validation with HBCC providers, do not address FFN, and do not include FFN providers. However, indicators differ from measures in some important respects. Many indicators

focus on elements that are easy to measure, such as provider education and training, but that might be too narrow for HBCC, especially FFN providers (Doran et al. forthcoming). Indicator development therefore needs to account for the challenges involved in capturing the complex context of HBCC. Indicators can also find application outside of QRIS evaluations—for example, in professional development activities—by indicating the need for more support.

Examples of indicator development to help answer questions. State and research partners might develop indicators to fill gaps in existing QRIS on features of quality in HBCC, such as conditions for operations and sustainability (Doran et al. forthcoming). For example, indicators could determine whether providers develop written agreements with families that address activities they can or cannot do and hours for drop-off and pickup. Indicators could also address providers' access to and use of resources, such as parks, libraries, walks in the neighborhood, and local visits to community gatherings, to supplement children's experiences in the home.

Relationship to other research activities. Given that most indicators are part of a state's QRIS, indicator development can build on existing data maintained by these systems. Once new or adapted indicators are in place, researchers will be able to draw on the data behind the indicators for secondary analysis to address research questions.

IV. RECOMMENDATIONS FOR FUTURE RESEARCH

The research questions in this agenda aim to advance knowledge about HBCC availability and quality. Given the number of HBCC providers who care for children from underserved communities and are themselves members of the same communities, the research agenda assigns great importance to understanding the availability and quality of HBCC within communities of color, communities of people from immigrant backgrounds, communities in areas of concentrated poverty, and rural communities. The research agenda also identifies HBCC as a core but distinct sector within ECE. Therefore, we prioritize research that explores the features of HBCC quality that are implemented differently or are more likely to occur in HBCC than in other ECE settings. We also prioritize research that demonstrates how ECE systems and community-oriented strategies can support HBCC providers' delivery of sustained, high quality ECE. Across these topic areas, the questions seek to uncover the opportunities and challenges HBCC providers face. The information yielded by answers to the questions can help to reconceptualize ECE policies, regulations, and supports to ensure that all families have access to and receive care and education that supports equitable outcomes for children and families. Answering these questions will require research conducted at the national, state, and local levels.

In this chapter, we present our recommendations for four research activities that can help fill gaps critical for advancing knowledge of HBCC availability and quality. Together, the first three research activities will fill significant knowledge gaps related to the following:

1. Who offers HBCC, who uses it, and changes in its availability and use over time
2. The strengths, resources, and strategies HBCC providers use across settings to support equitable outcomes for children and families, and how these experiences intersect with culture, race, ethnicity, language, and income
3. How ECE systems and community-oriented strategies align with HBCC provider experiences and corresponding opportunities and challenges

In addition, we need better tools for understanding what is happening in HBCC that may contribute to equitable and positive child and family outcomes, and how best to identify needs for support or professional development. Toward that end, we recommend a fourth research activity: measures development to address the crucial gaps in quality measurement in HBCC (Doran et al. forthcoming).

Drawing on the findings from the recommended research activities, we propose several possible next steps for additional research into HBCC.

In identifying the recommendations described in this chapter, we considered several factors related to whether the research activities achieve the following:

- Keep providers and the children and families they care for at the center of the research
- Provide foundational information that can guide a range of research activities

- Contribute to knowledge on the following:
 - HBCC providers who care for children in underserved communities and are themselves members of the same communities
 - FFN providers and the care they offer children and families
 - HBCC offered during nontraditional hours
 - Care provided to children in mixed-age groups, including school-age children in HBCC
 - The intersection of the above characteristics of HBCC (such as FFN providers offering nontraditional hour care)
- Fill gaps about HBCC at the national level by including study sites in several states, territories, and communities

In addition to these factors, we focused our recommendations on research questions unlikely to be answered by other ongoing studies, including several commissioned by OPRE. For example, although important, we did not recommend studies about how families find and choose HBCC, which is the focus of the OPRE-funded Consumer Education and Parental Choice in Early Care and Education project. We expect that the Building and Sustaining the Early Care and Education Workforce project will help fill critical gaps about state and local strategies aimed at supporting the sustainability of the ECE workforce, including HBCC providers. In addition to these federally funded studies, the Erikson Institute, with a grant from the Foundation for Child Development, recently completed in-depth interviews and focus groups with a diverse sample of licensed FCC providers in four states to examine the factors that contribute to FCC engagement and retention (Bromer et al. 2021c). This study helped to fill some gaps about FCC providers' experiences but it did not address gaps on the experiences of FFN providers. In addition, we did not include questions explicitly about the effects of the COVID-19 pandemic on HBCC; the 2019 NSECE COVID-19 Follow-Up project is collecting longitudinal data on providers' experiences from 2019 through the initial months of the pandemic and then at one year after its onset. Further, many state-level studies are focusing on the effects of the pandemic. Rather, we propose future research activities that can provide necessary baseline information to build on or, given the comprehensive nature of the activity, capture the ways in which COVID-19 continues to influence providers and ECE systems.

A. Recommendations for research activities that could be conducted by the HBCCSQ project to advance knowledge of HBCC availability and quality, and the experiences of HBCC providers

1. Secondary analysis to fill the knowledge gaps about who offers HBCC, who uses it, and changes in its availability and use over time

Secondary analysis of the NSECE data, a primary source of nationally representative information about both listed and unlisted providers, will provide information to extend our understanding of the research questions listed in Exhibit IV.1. These analyses alone

may not fully answer many of these questions, but the data can support analysis as follows:

- Across HBCC settings, including by listed and unlisted providers, paid and unpaid unlisted providers, and providers with and without a previous relationship to the children in their care, and across providers with and without a connection to an ECE system
- Across providers with varying racial, ethnic, and linguistic backgrounds, and in both urban and rural communities
- Across time, by analyzing data elements in both the 2012 and 2019 data to determine who offered HBCC at these points in time and identify providers' motivations, experiences, and some of the opportunities and challenges associated with caring for and educating children and supporting families

Exhibit IV.1. Examples of research subquestions informed by the proposed secondary analysis of NSECE

Number	Research subquestion ^a
A1a	What is the availability of HBCC , and how has it changed over the past 10 years? ^b
A1c	To what extent are HBCC providers participating in ECE systems , such as subsidy programs, QRIS, the federal CACFP, federal Early Head Start-Child Care Partnerships (EHS-CCP), or publicly funded prekindergarten? How has participation in these systems changed over the past 10 years?
A2a	What are providers' experiences in offering HBCC, and how do these experiences relate to HBCC availability ? What are providers' experiences in participating in several ECE and non-ECE systems?
B1a	What are the ways in which HBCC providers across settings offer learning opportunities to children? What is the nature of curriculum use in HBCC? What is the nature of informal learning opportunities for children across HBCC settings?

^a This table only includes the parts of these subquestions that would be informed by the proposed secondary analysis of the NSECE.

^b All references to the last 10 years will examine differences between 2012 and 2019.

2. A multisite mixed-methods study to inform understanding of the experiences, strengths, resources, and strategies HBCC providers use across settings to support equitable outcomes for children and families, and how these experiences intersect with culture, race, ethnicity, language, and income

Exhibit IV.2 details the subquestions that a multisite mixed-method study can inform. Overall the study can describe the following:

- Providers' experiences in offering HBCC and the opportunities and challenges associated with caring for and educating children (such as opportunities for informal learning in a family context) and supporting families
- How HBCC providers define and implement quality, including hypothesized quality features with no or highly limited research in HBCC, and their priorities for children and families

Exhibit IV.2. Examples of research subquestions informed by the proposed mixed-methods study

Number	Research subquestion ^a
A2a	What are providers' experiences in offering HBCC, and how do these experiences relate to HBCC availability ? Why do providers decide to leave or stay in HBCC? Why do providers stop caring for children altogether or continue caring for and educating children, but not in HBCC? What are their reasons for participating in regulatory and ECE systems? What are providers' experiences in participating in several ECE and non-ECE systems?
A2b	What are the strengths, resources, and knowledge that HBCC providers bring to their work with children and families? What strategies do they use to continue this work and survive, cope, and thrive, despite multilayered challenges such as systematic racism? What sources of supports and strength do they access?
A3c	How does family use of HBCC relate to access factors (e.g., HBCC in a family's community, proximity to places of employment, or local transportation options or travel distance)? How do families address their child care needs in areas where no regulated ECE is available?
A3d	In their decisions to use HBCC, how do families consider providers' participation in regulatory and licensing systems, and other ECE systems , such as QRIS, CACFP, and Early Head Start-Child Care Partnerships? To what extent does HBCC participation in licensing and QRIS influence family decisions to use and stay in HBCC?
A4a	What are children's and families' experiences in using HBCC ?
B1a	What are the ways in which HBCC providers across settings offer learning opportunities to children? What is the nature of curriculum use in HBCC, and how does it support intentional learning activities? What is the nature of informal learning opportunities for children across HBCC settings?
B1b	What are the ways in which HBCC providers across settings promote positive identity development for children and families?
B1c	What is the nature of support for mixed-age groups in HBCC settings that serve a wide range of age groups?
B1d	What is the nature of family engagement in HBCC settings?
B1e	How do HBCC providers connect families to community resources for themselves and their children?
B1g	What are the core quality practices in nontraditional hour HBCC ?
B1i	How do HBCC providers sustain their work in educating and caring for children and families , including their business practices?
B3a	What are the quality features in HBCC that families across different cultural, racial, ethnic, and linguistic groups value ? How do these features align with available and accessible HBCC options?
B3b	How do families' perceptions of quality align with ECE systems ?
C1c	How do ECE system policies and regulations promote or inhibit participation in licensing, subsidy, QRIS, and other ECE systems?
C1d	How do ECE system policies and regulations mitigate or perpetuate inequities among HBCC providers?
D1f	What are HBCC providers' experiences with community-oriented support strategies ? What are the challenges and opportunities of engaging in these supports?
D1g	How do service delivery strategies build on the strengths of HBCC providers?
D1i	What are HBCC providers' experiences with virtual service delivery strategies ? What virtual support strategies for HBCC are most likely to lead to changes in caregiving practices?
D1l	How do ECE agency staff who work directly with HBCC providers build on the strengths of those providers ?

^a This table only includes the parts of these subquestions that would be informed by the proposed mixed-methods study.

- How ECE systems shape the ways providers offer care to children and families, including whether providers are aware of these systems; how they learn about them; their reasons for engaging in or opting out of the systems; and their experiences with them, including challenges and opportunities
- How ECE systems and community-oriented strategies contribute to HBCC providers' experiences in improving quality and sustainability

The multisite mixed-methods study should be designed to provide insights into how race and class may shape the experiences and quality practices of HBCC providers in underserved communities. It can also shed light on their experiences with ECE systems and contextual considerations, including the systems and community-oriented strategies for quality improvement available and accessible to providers.

We recommend that the study focus on FFN caregivers, given the scarcity of information about the care provided in these settings. Further, we recommend conducting the study in communities with areas of concentrated poverty and in rural communities, as well as in locations with high proportions of HBCC providers of color and providers from immigrant communities.

The study should be grounded in principles of equitable research, including participant-centered research methods. These principles can be applied throughout the research process, including development of the research questions, selection of the data collection methods, selection and development of data collection instruments, selection and training of data collectors, and methods of analysis and reporting. To address potential challenges in identifying, recruiting, and engaging HBCC providers, we recommend building partnerships with organizations that are connected to and trusted by HBCC providers (such as networks and play and learn groups). Intentional efforts to understand a community's prior experiences with research, hesitancy about participation, and reasons for disengagement in research may be important for guiding recruitment and data collection protocols.

The study should draw on ethnographic methods, such as in-depth interviews, observations of HBCC settings, and audio and photograph diaries. It can also incorporate other data collection methods, such as the development of graphic depictions (or eco-maps) to aid in understanding providers' connections to ECE and non-ECE systems, and other community-oriented strategies. In addition, data collection could capture rich data on how providers allocate their time among different types of activities, thus providing a detailed picture of their weekly experiences in caring for children.

3. Case studies to explore how systems and strategies align with HBCC provider experiences and corresponding opportunities and challenges

Once the multisite mixed-methods study has helped us learn about the ECE systems and community-oriented strategies with which providers engage, a second stage of the study could explore these systems and strategies to identify ways that policies and systems might better support all HBCC providers and the families they serve. Case

studies of these state or county systems and strategies could offer the opportunity to do the following:

- Document the characteristics and features of the policies, regulations, and strategies applicable and available to HBCC providers in a given community
- Assess the alignment of these policies, regulations, and strategies
- Examine implementation of the policies, regulations, and strategies, including intended engagement of providers and families, as well as unintended consequences
- Understand the experiences of ECE agency staff who work directly with HBCC providers

Exhibit IV.3 presents the subquestions that the HBCCSQ project team could address using case studies.

The case studies would encompass systems and strategies available to both FCC and FFN providers, thereby allowing us to understand the range of ECE systems (including licensing, subsidy programs, and QRIS) and community-oriented strategies (such as FCC networks and play and learn groups). The analysis of these systems and strategies would generate knowledge about the opportunities for supporting quality in HBCC and the factors that may, intentionally or unintentionally, serve as barriers to HBCC provider engagement.

Taken together, the multisite mixed-methods study and the case studies could offer insights into providers' experiences with ECE policies, systems, and strategies, including the opportunities and barriers they present to HBCC providers. This research could also offer insights into how systems and strategies are implemented and the system-level factors that contribute to provider engagement and participation, as well as the systemic inequities that need to be addressed.

In addition to interviews and observations with HBCC providers, data collection methods should also include semi-structured interviews with ECE system administrators and program directors of community-oriented strategies. These methods also should encompass interviews with ECE agency staff and direct observations of how supports are delivered to HBCC providers, including the approaches and strategies staff use. The case studies should also include analysis of documentation of ECE system policies and regulations, and implementation guides and guidelines available for community-oriented strategies.

Exhibit IV.3. Examples of research subquestions informed by the proposed case studies

Number	Research subquestion
C1a	To what extent do ECE policies and regulations (e.g., licensing, subsidy, QRIS, CACFP) align with quality features or characteristics of HBCC that are implemented differently or are more likely to occur in HBCC than in other ECE settings (e.g., mixed-age settings, provider working alone, care available during nontraditional hours)? To what extent do ECE system policies and procedures recognize the strengths of home-based settings?
C1b	How have changes in federal and state policies over time influenced HBCC participation in ECE regulatory, subsidy, and quality systems? Which federal or state policies are the strongest predictors of participation?
C1c	How do ECE system policies and regulations promote or inhibit participation in licensing, subsidy, QRIS, and other ECE systems?
C1d	How do ECE system policies and regulations mitigate or perpetuate inequities among HBCC providers?
C1e	What is the relationship among requirements across ECE systems ? To what extent do they align/overlap?
C1f	How do ECE system policies and regulations intersect with non-ECE policies and regulations that may govern the operations of HBCC providers?
C1g	How have changes in federal and state policies since the start of the COVID-19 pandemic affected HBCC participation rates in ECE systems?
D1a	What service delivery strategies and models have states and local ECE agencies developed for engaging HBCC providers in ECE systems and other quality improvement initiatives ? What challenges and opportunities do ECE agencies face in their strategies to recruit and engage providers in ECE systems? How, if at all, do they manage the challenges?
D1b	How are service delivery strategies aimed at HBCC implemented within ECE systems and local ECE agencies? Are service delivery strategies aimed at HBCC implemented as intended by their design?
D1c	What approaches or combinations of approaches (home visiting, coaching, peer mentoring, training) to service delivery with HBCC are used across and within initiatives?
D1d	What content and topics do community-oriented strategies focus on with HBCC?
D1e	How do relationship-based approaches to service delivery with HBCC contribute to the effectiveness of supports?
D1g	How do service delivery strategies build on the strengths of HBCC providers?
D1h	What service delivery strategies did states, territories, Tribes, and local agencies use to continue engaging HBCC providers during the COVID-19 pandemic ? How did these strategies differ from existing approaches? Which strategies were promising?
D1j	What qualifications for ECE agency staff who work directly with HBCC providers are associated with positive quality outcomes in HBCC settings ? How do qualifications vary by ECE agency auspices? What are ECE agency staff's knowledge and attitudes toward meeting the needs of HBCC providers?
D1k	What skills and practices of ECE staff who work directly with HBCC providers are associated with positive quality outcomes in HBCC ? How do skills and practices vary by agency auspices?
D1l	How do ECE agency staff who work directly with HBCC providers build on the strengths of those providers ?
D1m	How do reflective supervision and in-service staff training help ECE agency staff work effectively with HBCC providers ? How do supervision and training vary by agency auspices?

B. Recommendations for tools for understanding what is happening in HBCC that may contribute to equitable and positive child and family outcomes, and how best to identify needs for support or professional development

As discussed in Chapter III and shown in Box III.3, the HBCCSQ measures and indicators review revealed the significant gaps that exist in measures of inputs that influence quality and features of quality in HBCC (Doran et al. forthcoming). Given the wide range of gaps, the project team recommends conducting outreach to research and practice experts before beginning measures development, to help identify priorities for the HBCCSQ project and gather information on measures development that may be underway, and thus not captured in our review. When gathering input on priorities, it will be important to consider feasibility within the resources and timeline of the project. For example, it may not be within the scope of this project to develop a comprehensive measure of quality in HBCC, but it may be feasible to develop a measure of effective provider practices for supporting mixed-age groups of children in care, including culturally responsive practices for supporting interactions. Similarly, a measure of quality during nontraditional hour care may help fill a critical gap and fall within the scope of the HBCCSQ project. (In Chapter III, Section C, we discuss these examples in more detail.)

Based on this input, and in collaboration with OPRE, the next step would involve identifying key concepts that a future measure will address. For each concept, the team would then recommend whether it may be feasible to adapt an existing measure (and if so, which one) or whether a new measure will need to be developed.

We recommend involving providers to solicit their input on important information to measure within the prioritized concepts, challenges they experience in providing care in the proposed area for measurement, vocabulary commonly used for discussing relevant issues, or how well select proposed items reflect their own experiences.

C. Recommendations for follow-up research activities

Findings from the research activities described above can be used as the basis for several possible follow-up activities:

- Two analyses will be possible using findings about the opportunities and barriers existing within ECE systems that facilitate equitable access to supports aligned with the experiences of providing HBCC. The first analysis involves the documentation of state policies and regulations to examine the prevalence of opportunities and barriers to equitable access across states (beyond those included in the case studies) and whether policies in any of the states might provide greater opportunities. The second analysis relies on state-level data on subsidies, licensing, and QRIS to explore patterns of HBCC providers' participation in state systems. Further analysis could examine providers' participation in CACFP, which for some providers is the only system that they engage in.
- Findings about initiatives and strategies that may promote equitable access to quality supports for HBCC providers can serve as the basis for implementation

studies. These studies could focus on understanding the process of implementing the supports and fill gaps about what approaches or combinations of approaches are used to deliver the support and engage providers.

- By drawing on findings about providers' motivations and experiences in sustaining HBCC, a longitudinal study could collect information on the movement of providers in and out of HBCC, across FCC and FFN care, and across ECE settings, and on factors associated with HBCC providers' movement among different ECE settings.
- Findings about HBCC providers' practices, engagement in ECE policies and regulations, and access to initiatives and supports can serve as the basis for a provider survey that could reach a large number of providers. This survey could be nationally representative or focus on a subgroup of interest (such as providers who deliver care in areas with a high concentration of poverty).

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APPENDIX A.
SUPPLEMENTAL TABLES

Exhibit A.1. Crosswalk of research questions and research activities

Number	Research question/subquestion	Secondary analysis	Future data collection
A1	What is the availability of HBCC, and who offers it?		
A1a	What is the availability of HBCC , and how has it changed over the past 10 years?	NSECE; NATL; STATE	
A1b	What is the movement of HBCC providers in and out of HBCC, licensing and regulatory systems, and ECE ? What proportion of HBCC providers stop providing care altogether? When HBCC providers no longer provide child care, what non-child care work or activities do they pursue? What proportion of providers leaves HBCC to work in center- or school-based settings? What proportion of FFN providers becomes licensed? What proportion of FCC providers leaves licensed settings to offer FFN care? Which factors are the strongest predictors of HBCC tenure and exit?	NSECE; NATL; STATE	DESC
A1c	To what extent are HBCC providers participating in ECE systems , such as subsidy programs, QRIS, the federal Child and Adult Care Food Program (CACFP), federal Early Head Start-Child Care Partnerships (EHS-CCP), or publicly funded prekindergarten? How has participation in these systems changed over the past 10 years? What is the movement of HBCC providers in and out of these systems?	NSECE; NATL; STATE	DESC
A1d	How are changes in the availability of other regulated ECE settings , such as Head Start, Early Head Start, or public prekindergarten for 3- and 4-year-old children, related to changes in the availability of HBCC ?	NATL; STATE	DESC
A1e	How has the availability of HBCC changed since the start of the COVID-19 pandemic ?	NSECE; STATE	
A2	What are provider experiences in offering HBCC, and how do these experiences relate to its availability? What opportunities and challenges do providers face with respect to caring for and educating children, and supporting families?		
A2a	What are providers' experiences in offering HBCC, and how do these experiences relate to HBCC availability ? Why do providers decide to leave or stay in HBCC? Why do providers stop caring for children altogether or continue caring for and educating children, but not in HBCC? What are their reasons for participating in regulatory and ECE systems? What are providers' experiences in participating in several ECE and non-ECE systems?	NSECE	QUAL
A2b	What are the strengths, resources, and knowledge that HBCC providers bring to their work with children and families? What strategies do they use to continue this work and survive, cope, and thrive, despite multilayered challenges such as systematic racism? What sources of supports and strength do they access?	REV	QUAL

Appendix A Supplemental tables

Number	Research question/subquestion	Secondary analysis	Future data collection
A3	Who uses HBCC? Why do they use it?		
A3a	What is the percentage of children in nonparental child care served across HBCC settings ? How has this percentage changed over the past 10 years?	NSECE; NATL; STATE	
A3b	How have family preferences for HBCC changed over the past 10 years? How have family preferences for HBCC changed by families' employment patterns (including the need for nontraditional hour care)?	NSECE; NATL; STATE; REV	QUAL
A3c	How does family use of HBCC relate to access factors (e.g., HBCC in a family's community, proximity to places of employment, or local transportation options or travel distance)? How do families address their child care needs in areas where no regulated ECE is available?	NSECE; NATL; STATE	QUAL; DESC
A3d	In their decisions to use HBCC, how do families consider providers' participation in regulatory and licensing systems, and other ECE systems , such as QRIS, CACFP, and Early Head Start-Child Care Partnerships? To what extent does HBCC participation in licensing and QRIS influence family decisions to use and stay in HBCC?	NATL; STATE	QUAL; DESC
A3e	How did family preferences for HBCC change during the COVID-19 pandemic ?		QUAL; DESC
A4	What are children's and families' experiences in using HBCC?		
A4a	What are children's and families' experiences in using HBCC ?		QUAL
A4b	What were families' experiences in using HBCC during the COVID-19 pandemic ? What were the experiences of families in communities (both geographic and racial and ethnic) disproportionately affected by COVID-19? To what extent did families use HBCC for their school-age children during remote schooling? What challenges and opportunities did families face in finding and using HBCC during the pandemic?	STATE	QUAL
B1	How do HBCC providers define and implement quality for children and families? What is the relationship between these practices and equitable child and family outcomes?		
B1a	What are the ways in which HBCC providers across settings offer learning opportunities to children? What is the nature of curriculum use in HBCC, and how does it support intentional learning activities? What is the nature of informal learning opportunities for children across HBCC settings? How do learning opportunities for children in HBCC contribute to child outcomes?	NSECE	QUAL; DESC; EVAL
B1b	What are the ways in which HBCC providers across settings promote positive identity development for children and families? How does the promotion of positive identity development contribute to child and family outcomes?		QUAL

Appendix A Supplemental tables

Number	Research question/subquestion	Secondary analysis	Future data collection
B1c	What is the nature of support for mixed-age groups in HBCC settings that serve a wide range of age groups? How does support for mixed-age groups in HBCC contribute to child outcomes?	NSECE	QUAL; DESC
B1d	What is the nature of family engagement in HBCC settings? How do family engagement practices contribute to provider, child, and family outcomes?	NSECE	QUAL; DESC
B1e	How do HBCC providers connect families to community resources for themselves and their children? How do these referrals and connections contribute to family outcomes?	NSECE	QUAL; DESC; EVAL
B1f	How do family-provider relationships and logistical supports in HBCC contribute to family and provider outcomes?		DESC
B1g	What are the core quality practices in nontraditional hour HBCC that are most likely to contribute to positive child and family outcomes?		QUAL
B1h	How do working conditions in HBCC contribute to other quality features and child outcomes?	NSECE	DESC
B1i	How do HBCC providers sustain their work in educating and caring for children and families , including their business practices? How are sustainability and business practices related to other quality features and provider, child, and family outcomes?	NSECE	QUAL; DESC
B1j	What combinations of quality features in HBCC most likely contribute to positive provider, child, and family outcomes?		DESC; EVAL
B2	How do HBCC providers across settings; communities; and cultural, racial, ethnic, and linguistic groups enact quality, given the pressures of ECE policies and regulations? How do policies and regulations shape the ways that providers offer care to children and families?		
B2a	How is participation in ECE systems (including regulatory, subsidy, and quality initiatives) associated with provider, child, and family outcomes in HBCC?	NATL; STATE	DESC; EVAL
B2b	How did policy and regulatory changes during the COVID-19 pandemic change the ways that HBCC providers offered care to children and families?	NATL; STATE	DESC; EVAL
B3	How do families perceive quality in HBCC?		
B3a	What are the quality features in HBCC that families across different cultural, racial, ethnic, and linguistic groups value? How do these features align with available and accessible HBCC options?		QUAL
B3b	How do families' perceptions of quality align with ECE systems?		QUAL

Appendix A Supplemental tables

Number	Research question/subquestion	Secondary analysis	Future data collection
C1	How do ECE policies and regulations reflect and affect the experiences of HBCC providers? How do ECE policies and regulations dismantle or perpetuate inequities across HBCC providers and the families and children in these settings? In what ways do ECE policies and regulations exclude or include providers?		
C1a	To what extent do ECE policies and regulations (e.g., licensing, subsidy, QRIS, CACFP) align with quality features or characteristics of HBCC that are implemented differently or are more likely to occur in HBCC than in other ECE settings (e.g., mixed-age settings, provider working alone, care available during nontraditional hours)? To what extent do ECE system policies and procedures recognize the strengths of home-based settings?	NATL; STATE; REV	EVAL
C1b	How have changes in federal and state policies over time influenced HBCC participation in ECE regulatory, subsidy, and quality systems? Which federal or state policies are the strongest predictors of participation?	NATL; STATE	
C1c	How do ECE system policies and regulations promote or inhibit participation in licensing, subsidy, QRIS, and other ECE systems?	NATL; STATE; REV	DESC; EVAL
C1d	How do ECE system policies and regulations mitigate or perpetuate inequities among HBCC providers?	NATL; STATE; REV	DESC; EVAL
C1e	What is the relationship among requirements across ECE systems ? To what extent do they align/overlap?	NATL; STATE; REV	EVAL
C1f	How do ECE system policies and regulations intersect with non-ECE policies and regulations that may govern the operations of HBCC providers?	NATL; STATE; REV	DESC; EVAL
C1g	How have changes in federal and state policies since the start of the COVID-19 pandemic affected HBCC participation rates in ECE systems?	NATL; STATE; REV	
D1	What types of strategies are used with HBCC providers? How are ECE and community-oriented strategies implemented? What are the experiences of ECE agency staff who work directly with HBCC providers? What are the experiences of HBCC providers with agency staff?		
D1a	What service delivery strategies and models have states and local ECE agencies developed for engaging HBCC providers in ECE systems and other quality improvement initiatives ? What challenges and opportunities do ECE agencies face in their strategies to recruit and engage providers in ECE systems? How, if at all, do they manage the challenges?		EVAL; QUAL
D1b	How are service delivery strategies aimed at HBCC implemented within ECE systems and local ECE agencies? Are service delivery strategies aimed at HBCC implemented as intended by their design?		EVAL

Appendix A Supplemental tables

Number	Research question/subquestion	Secondary analysis	Future data collection
D1c	What approaches or combinations of approaches (home visiting, coaching, peer mentoring, training) to service delivery with HBCC are used across and within initiatives?		EVAL
D1d	What content and topics do community-oriented strategies focus on with HBCC?		EVAL
D1e	How do relationship-based approaches to service delivery with HBCC contribute to the effectiveness of supports?		EVAL
D1f	What are HBCC providers' experiences with community-oriented support strategies ? What are the challenges and opportunities of engaging in these supports?		EVAL; QUAL
D1g	How do service delivery strategies build on the strengths of HBCC providers?		EVAL; QUAL
D1h	What service delivery strategies did states, territories, Tribes, and local agencies use to continue engaging HBCC providers during the COVID-19 pandemic ? How did these strategies differ from existing approaches? Which strategies were promising?	REV	EVAL; QUAL
D1i	What are HBCC providers' experiences with virtual service delivery strategies ? What virtual support strategies for HBCC are most likely to lead to changes in caregiving practices?		EVAL; QUAL
D1j	What qualifications for ECE agency staff who work directly with HBCC providers are associated with positive quality outcomes in HBCC settings ? How do qualifications vary by ECE agency auspices? What are ECE agency staff's knowledge and attitudes toward meeting the needs of HBCC providers?	STATE	DESC; EVAL
D1k	What skills and practices of ECE staff who work directly with HBCC providers are associated with positive quality outcomes in HBCC ? How do skills and practices vary by agency auspices?		DESC; EVAL; QUAL
D1l	How do ECE agency staff who work directly with HBCC providers build on the strengths of those providers ?		EVAL
D1m	How do reflective supervision and in-service staff training help ECE agency staff work effectively with HBCC providers ? How do supervision and training vary by agency auspices?		EVAL
D2	What ECE and community-oriented strategies contribute to HBCC providers' experiences in improving quality and sustainability? What strategies are effective in reducing inequities in outcomes for HBCC providers and the children and families in HBCC settings?		
D2a	How effective are ECE agencies' strategies for engaging HBCC providers in ECE systems? What types of organizations are most likely to be effective at delivering these services?		EVAL

Appendix A Supplemental tables

Number	Research question/subquestion	Secondary analysis	Future data collection
D2b	What strategies are most likely to succeed in recruiting new providers into HBCC, particularly new providers in underserved communities? What strategies are most likely to succeed in recruiting and retaining providers in underserved communities who can meet the needs of children and families from these same communities?		EVAL
D2c	What service delivery strategies are most likely to improve the sustainability of HBCC settings?		EVAL
D2d	What service delivery strategies are most likely to lead to changes in caregiving practices in HBCC settings? How do peer support strategies relate to changes in caregiving practices in HBCC? How do combinations of service delivery strategies (e.g., coaching and peer support; home visiting and training) relate to changes in caregiving practices in HBCC?		EVAL
D2e	What service delivery strategies are most likely to be associated with positive and equitable child and family outcomes in HBCC settings?		EVAL

Secondary analysis and knowledge synthesis key: NSECE = National Survey of Early Care and Education; NATL = other national survey and administrative data sets; STATE = state, territory, and Tribal administrative data sets; REV = literature and document reviews.

Future data collection key: QUAL = ethnographic and qualitative research; DESC = descriptive and correlational survey research; EVAL = implementation and evaluation research.

Exhibit A.2. Databases and other resources with HBCC policy and regulatory information

Database with HBCC policy and regulatory information	Types of policy and regulatory information	Year of most recent publication	Frequency of publication
BUILD Initiative's Quality Compendium	State-level information on policies of quality initiatives, such as QRIS	2019	Annually since 2014
Center for the Study of Child Care Employment's Early Childhood Workforce Index	State-level information on workforce conditions and policies. It includes HBCC-specific policies on qualifications and educational supports, work environments, compensation and financial relief strategies, workforce data, and financial resources.	2018	Last updated using data from 2016
Child Care Aware of America's Licensing Database	State-level ratings for child care licensing requirements to the Child Care Aware's Caring for Our Children Basics guidelines	2018	Annually since 2014
Early Childhood Training and Technical Assistance System's Data Explorer and State Profiles tool	State-level information about licensing requirements	2014	Last updated using data from 2014
Hunt Institute's COVID-19 State Child Care Actions database	State-level information on COVID-19 policies, including child care closures, emergency child care provisions, group size limits, and CARES Act funding	2021	During COVID-19 pandemic, since 2020
National Center on Early Childhood Quality Assurance's National Database of Child Care Licensing Regulations	Tool for finding and searching state and territory licensing regulations and agency contact information	2021	Ongoing
National Center on Early Childhood Quality Assurance's National Program Standards Crosswalk Tool	Crosswalk of national early childhood program standards, designed to help states that are developing and aligning program standards	2021	Ongoing
National Institute for Early Education Research's State Preschool Yearbook series	State-level information on funding, access, and policies of state-funded preschool programs, including whether HBCC providers are eligible for preschool funding	2018	Annually since 2002
Urban Institute's CCDF Policies Database	State-level information on rules and policies of child care subsidy programs under the Child Care and Development Fund	2018	Annually since 2011 (policies from 2009 onward)

Source: HBCCSQ Data Scan, conducted between January and March 2020, supplemented in May 2021 for this report.

Exhibit A.3 describes the types of regulated HBCC providers and potential sample sizes for nine states with relatively large numbers of HBCC providers and a variety of policy and regulatory systems related to child care subsidies, licensing, and QRIS, based on information from this project's data scan task. When choosing state administrative data with which to work, users should note that state data sets are "owned" by different state agencies in data systems, and the possibility of linking the data sets varies. Even states with integrated data systems or high quality linkages between data sets require multiple

levels of inquiry to confirm data accessibility. Data users will need to apply formally for the data and/or establish a formal data use agreement that outlines how users will use, protect, and ultimately destroy the data. Users will need to work closely with state administrative staff to determine the availability of data, select appropriate variables for analysis, accurately link individuals across programs, and address data quality and/or privacy concerns. Researchers working with state administrative data should refer to resources developed by the Child Care Administrative Data Analysis Center (CCADAC). Funded by OPRE, the CCADAC works to strengthen the capability of state/territory child care administrators and their research partners to use administrative data to address policy-relevant ECE research questions.

Exhibit A.3. States with ECE administrative data systems and potential sample sizes for research

State	Types of regulated HBCC providers	Potential sample size: licensed providers ^a	Potential sample size: QRIS ^a
Arizona	Certified; License-exempt (including FFN) ^{bc}	1,210	121
Colorado	Licensed; License-exempt	1,734	1,734
Illinois	Licensed; License-exempt	7,132	7,132
Massachusetts	Licensed; License-exempt	5,410	3,099
Minnesota	Licensed; Certified; License-exempt (including FFN) ^c	7,684	1,133
North Carolina	Licensed; License-exempt	1,449	1,411
Texas	Licensed; Registered	4,907	127
Washington	Licensed; Certified; License-exempt (including FFN) ^c	3,248	1,296
Wisconsin	Licensed; Certified; License-exempt	1,580	1,090

Source: HBCCSQ Data Scan, conducted between January and March 2020.

^a Potential sample size for states includes the total number of licensed HBCC providers in the state and the number that participated in the state's QRIS as of 2019 according to the BUILD Initiative's Quality Compendium.

^b In Arizona, license-exempt FCC providers are labeled as registered FCC providers. They are not certified or monitored by the state and may care for no more than four children at one time for compensation.

^c Arizona, Minnesota, and Washington: list FFN providers and have state-sponsored FFN support or training.

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