

Early Care and Education Partnerships: A Review of the Literature



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Early Care and Education Partnerships: A Review of the Literature

OPRE Report #2014-64

November 2014

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Contract Number: HHSP23320095642WC

Mathematica Reference Number: 40283.140

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Suggested citation:

Del Grosso, P., L. Akers, A. Mraz Esposito, and D. Paulsell. "Early Care and Education Partnerships: A Review of the Literature." OPRE Report #2014-64. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation, 2014.

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OVERVIEW

To meet both children’s developmental needs and parents’ workforce needs, government leaders and policymakers have expressed support for partnerships at the point of service delivery to build more seamless systems of care and promote quality across settings. Recently, Congress further highlighted this approach by funding an expansion of early learning opportunities for children from birth to age 3 through Early Head Start-child care partnerships. The \$500 million in new grants will allow new or existing Early Head Start programs to partner with local child care centers and family child care homes serving low-income families with infants and toddlers.

The purpose of this literature review, conducted as part of the Study of Early Head Start-Child Care Partnerships, was to assess the current knowledge base for early care and education (ECE) partnerships, highlight promising models or components of models for these partnerships, and identify gaps in the research. We reviewed 78 studies of partnerships in the early childhood education field, including partnerships between Head Start and Early Head Start grantees and child care providers, school districts and child care providers and Head Start agencies, and other types of partnerships, including partnerships with informal caregivers and early intervention services.

We found that limited rigorous evidence was available about the elements that are critical for the successful implementation of ECE partnerships. However, the existing literature provided the following important information about the range of activities that are likely to support implementation of partnerships, barriers to partnerships, and factors that may facilitate partnerships:

- To develop and implement ECE partnerships, partners established agreements, drew on multiple funding streams, built relationships and maintained ongoing communication, supported quality improvement and staff development, and provided comprehensive services.
- Common barriers included poor collaboration quality, regulatory differences across funding streams, discrepancies in program standards across ECE settings, insufficient funding, and discrepancies in teacher pay and issues with teacher turnover.
- Factors that appeared to facilitate ECE partnerships included committed leadership, strong relationships and common goals among partners, joint staff trainings, formal agreements and communication plans, staff assigned to oversee the partnership, and structured planning processes.

In addition, we identified four gaps in the knowledge base related to Early Head Start–child care partnerships:

1. **Research on the characteristics and components of Early Head Start-child care partnerships.** Research is needed on the characteristics and components of partnerships implemented in the field, resources required, and organizational and contextual factors that facilitate the partnerships.
2. **Research on ECE partnerships with home-based child care providers.** Given the prevalence of home-based care for infants and toddlers, research is needed on strategies

for implementing partnerships in home-based settings, the strengths and needs of providers, and the quality improvement supports available to them.

3. **Child care providers' perspectives on the ECE partnerships.** More research is needed on child care providers' perspectives about their motivations to partner, experiences with partnerships, factors that facilitate partnerships, and partnership successes and challenges.
4. **Effectiveness of ECE partnerships in improving outcomes for children, families, providers, and communities.** Descriptive outcome studies are needed to assess whether partnerships are “on track” to meet short- and long-term outcomes for partners, families, and communities. Large-scale rigorous research is needed to test the effectiveness of Early Head Start-child care partnerships.

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EXECUTIVE SUMMARY

To meet both children’s developmental needs and parents’ workforce needs, government leaders and policymakers have expressed support for partnerships at the point of service delivery to build more seamless care systems and promote quality across settings. Recently, Congress further highlighted this approach by funding an expansion of early learning opportunities for children from birth to age 3 through Early Head Start–child care partnerships. The \$500 million in new grants will allow new or existing Early Head Start programs to partner with local child care centers and family child care homes serving low-income families with infants and toddlers. Yet the research base for how these partnerships support quality and meet low-income families’ needs is not well developed (Bryson, Crosby, and Stone, 2006; Chien et al., 2013).

The purpose of this literature review, conducted as part of the Study of Early Head Start–Child Care Partnerships, was to assess the current knowledge base for early care and education (ECE) partnerships, highlight promising models or components of models for these partnerships, and identify gaps in the research.

The literature review examined the following five research questions:

1. What are the characteristics or components of ECE partnerships?
2. What are the potential benefits of ECE partnerships to programs, providers, and families?
3. What are common barriers to forming and sustaining ECE partnerships?
4. What factors may facilitate ECE partnerships (such as funding supports, policies and procedures, technical assistance, or other infrastructure supports)? What are promising models or features of partnerships that the research literature suggests have the potential to improve quality and support child development and family well-being?
5. What are the gaps in the existing literature?

To answer these questions, we reviewed 78 studies that examined two or more entities partnering to plan and implement direct ECE services. We identified three primary categories of partnership studies:

1. Studies of partnerships between Head Start and Early Head Start grantees and child care providers (19 studies)
2. Studies of partnerships between school districts and child care providers and Head Start agencies to deliver state preschool programs (43 studies)
3. Studies that examined other types of partnerships, including partnerships with home-based caregivers (including family, friend, and neighbor caregivers and family child care providers) to enhance quality and partnerships between early intervention and other early education organizations to serve children with disabilities in inclusive environments (16 studies)

Key Findings

Across studies, we found that limited rigorous evidence was available about the elements that are critical for the successful implementation of ECE partnerships. However, the existing literature provides important information about the range of activities that are likely to support implementation of partnerships, the potential benefits of ECE partnerships, barriers to partnerships, and factors that may facilitate ECE partnerships. We also identified gaps in the literature.

Developing and Implementing ECE Partnerships

We identified six steps involved in developing ECE partnerships:

1. Surveying community needs and resources
2. Identifying partners
3. Recruiting partners
4. Clarifying partner expectations
5. Establishing agreements
6. Funding partnerships

Studies reported seven primary activities involved in implementing ECE partnerships:

1. Building relationships and maintaining ongoing communication among partners
2. Assessing partner needs
3. Supporting quality improvement
4. Supporting staff development
5. Implementing comprehensive services
6. Monitoring services
7. Implementing systems to promote both continuity of care across home and care settings and communication with families

Potential Benefits of ECE Partnerships

Based on 11 studies that measured and reported on outcomes, we found suggestive evidence of ECE partnerships' potential to improve the following:

- Quality of care
- Availability of comprehensive services for families
- Staff knowledge and skills
- Staff access to professional development supports

Other potential benefits of partnerships reported by key informants in studies included (1) improving the quality of early childhood education services; (2) increasing staff credentials, knowledge, and access to professional development; (3) increasing access to early childhood

education services that meet families' child care needs and preferences; and (4) benefiting partners by sharing expertise and ideas among partners and setting the stage for future collaboration.

Barriers to ECE Partnerships

Common barriers to ECE partnerships described in the literature included:

- Poor collaboration quality among partners
- Regulatory differences across funding streams
- Discrepancies in standards (Head Start Program Performance Standards, state preschool standards, and child care licensing regulations) across settings
- Insufficient or uncertain funding
- Discrepancies in teacher pay and issues with teacher turnover across settings

Factors That Facilitate ECE Partnerships

Studies reported that the following factors helped facilitate ECE partnerships:

- Committed leadership
- Strong relationships and trust among program administrators
- Common vision and goals
- Joint training sessions for staff
- A plan for ongoing communication
- Formal partnership agreements
- Strong relationships and trust among teaching and service delivery staff
- Assigning specific staff to oversee the partnership
- A structured planning process
- A funding plan
- Maintaining stability among partners
- A process for exploring alignment issues related to regulations, standards, and policies

GAPS IN THE KNOWLEDGE BASE

We identified four gaps in the knowledge base related to Early Head Start-child care partnerships:

1. **Research on the characteristics and components of Early Head Start-child care partnerships.** Of the 78 studies in the review, only 23 included information about partnerships serving infants and toddlers and their families; only 10 studies focused specifically on Early Head Start-child care partnerships. Research is needed on models

implemented in the field, resources required, and organizational and contextual factors that facilitate the partnerships.

2. **Research on ECE partnerships with home-based child care providers.** Thirty of the 78 studies included information about partnerships with home-based child care providers; 9 studies of Early Head Start-child care partnerships included information about partnerships with family child care providers. Given that home-based care is a highly prevalent form of care for infants and toddlers, more research is needed on strategies for implementing partnerships in home-based settings, the strengths and needs of providers, and the quality improvement supports available to them.
3. **Child care providers' perspectives on the ECE partnerships.** Most studies reported findings from the perspective of the lead partner (Head Start, Early Head Start, or state preschool program). More research is needed on child care providers' perspectives about their motivations to partner, experiences with partnerships, factors that facilitate partnerships, and partnership successes and challenges.
4. **Effectiveness of ECE partnerships in improving outcomes for children, families, providers, and communities.** Little rigorous research has been done to assess whether ECE partnerships improve the quality of care or child outcomes. Descriptive outcome studies are needed to assess whether partnerships are “on track” to meet short- and long-term outcomes for partners, families, and communities. Large-scale rigorous evaluation research is needed to test the effectiveness of Early Head Start-child care partnerships.

This literature review lays the groundwork for future efforts to study Early Head Start-child care partnerships. The findings from the review informed a theory of change for Early Head Start-child care partnerships developed as part of this study. The theory of change visually depicts how Early Head Start programs, child care providers, families, and systems partners work together in a coordinated manner to provide high quality, comprehensive services to low-income infants and toddlers and their families. Together, these groups invest inputs and carry out activities designed to lead to five long-term outcomes: (1) sustained, mutually respectful, and collaborative, Early Head Start-child care partnerships; (2) increased community supply of high quality infant-toddler care; (3) improved family well-being; (4) improved child well-being and school readiness; and (5) well-aligned infant-toddler policies, regulations, and quality improvement supports at the national, state, and local levels. Together, the literature review findings and theory of change will also inform the development of a measurement framework to identify the measures that exist or require development to study Early Head Start-child care partnerships, as well as an evaluation design for a study of the partnerships.

I. INTRODUCTION

To meet both children’s developmental needs and parents’ workforce needs, government leaders and policymakers have expressed support for early care and education (ECE) partnerships at the point of service delivery to build more seamless care systems and promote quality across settings. These partnerships involve two or more organizations working together to jointly provide ECE services to young children and their families. Organizations can work together by combining funding, resources, materials, and staff to serve additional children, provide comprehensive services, enhance service quality, or provide full-day, full-year ECE. Recently, Congress further highlighted this approach by funding an expansion of early learning opportunities for children from birth to age 3 through Early Head Start–child care partnerships. The \$500 million in new grants will allow new or existing Early Head Start programs to partner with local child care centers and family child care homes serving low-income families with infants and toddlers. Yet the research base for how these partnerships support quality and meet low-income families’ needs is not well developed (Bryson, Crosby, and Stone, 2006; Chien et al., 2013).

This literature review, conducted as part of the Study of Early Head Start–Child Care Partnerships, was designed to assess the current knowledge base, highlight promising models or components of models of these partnerships, and identify gaps in the research. In the remainder of this report, we discuss the purpose of the literature review, the methods used to conduct the review, and describe the literature review findings in detail.

A. The Study of Early Head Start–Child Care Partnerships

In fall 2013, the Office of Planning, Research and Evaluation (OPRE) in the Administration for Children and Families (ACF), U. S. Department of Health and Human Services, awarded a contract to Mathematica Policy Research to carry out the Study of Early Head Start–Child Care Partnerships. The project team also includes Dr. Margaret Burchinal of the University of North Carolina at Chapel Hill as a subcontractor as well as Dr. Diane Horn of the University of Oklahoma at Tulsa and Dr. Jessica Sowa of the University of Colorado Denver as consultants. The study is intended to fill a knowledge gap about the state of the field of Early Head Start–child care partnerships and identify models or features of partnerships for infants and toddlers. ACF’s goals for the study are to understand whether these partnerships provide continuity of care; meet working families’ needs for child care; and improve outcomes for providers, families, and children. The study includes the following key activities:

- A review of the literature to summarize the current knowledge base about Early Head Start–child care partnerships
- The development of a theory-of-change model to articulate relationships among key features, characteristics, and expected outcomes of partnerships
- The development of a measurement framework to identify and develop descriptive measures and research methods to better understand Early Head Start-child care partnerships in existing and/or new data collection efforts
- The design of an evaluation of Early Head Start-child care partnerships

- An evaluation of Early Head Start-child care partnerships (pending available funding)

An important component of the study is the engagement of an expert panel, including researchers and practitioners, to provide input on the current state of the knowledge base (Table I.1). Specifically, the expert panel provided input on (1) the literature review, including recommending studies to include in the review and providing feedback on the key findings; and (2) the theory of change, including providing guidance on the inputs, activities, short- and long-term outcomes, and organizational and contextual factors that are important to include in the model to guide future research.¹

Table I.1. Assessing the knowledge base: Expert work group members

Name	Affiliation
Juliet Bromer	Erikson Institute
Bill Castellanos	Child, Family, and Youth Services, Community Action Partnership of San Luis Obispo County, Inc.
Betsi Closter	Office for Children, Fairfax County, Virginia Department of Family Services
James Elicker	College of Health and Human Sciences, Purdue University
Helen Raikes	Child, Youth and Family Studies, University of Nebraska-Lincoln
Martha Staker	Project EAGLE at the University of Kansas Medical Center
Kathy Thornburg	Center for Family Policy and Research, University of Missouri
Marty Zaslow	Office for Policy and Communications, Society for Research in Child Development

B. Literature review purpose and overview

The literature review was designed to guide the development of a theory of change and a measurement framework for the Study of Early Head Start–Child Care Partnerships and to inform future research, including the evaluation design for this study. Findings from the literature review may also inform policy and practice decisions regarding the Early Head Start–child care partnerships initiative.

The literature review examined the following five research questions:

1. What are the characteristics or components of ECE partnerships?
2. What are the potential benefits of ECE partnerships to programs, providers, and families?
3. What are common barriers to forming and sustaining ECE partnerships?
4. What factors may facilitate ECE partnerships (such as funding supports, policies and procedures, technical assistance, or other infrastructure supports)? What are promising models or features of partnerships that the research literature suggests have the potential to improve quality and support child development and family well-being?
5. What are the gaps in the existing literature?

¹ While we appreciated the input from the expert work group, this report does not necessarily reflect their views.

To answer these questions, we reviewed research on ECE partnerships, including partnerships among Head Start and Early Head Start programs, child care providers, and school districts delivering state preschool programs. The review included studies that examined two or more entities partnering to plan and implement direct ECE services. Literature review methods are discussed in Chapter II.

We reviewed 78 studies of ECE partnerships (Table I.2). There were three primary categories of partnership studies:

1. Studies on partnerships between Head Start and Early Head Start grantees and child care providers, including both center- and home-based providers (19 studies)
2. Studies on partnerships between school districts and child care providers or Head Start agencies to deliver state preschool programs (43 studies)²
3. Studies that examined other types of partnerships, including partnerships with home-based caregivers (including family, friend, and neighbor caregivers and family child care providers) to enhance quality and partnerships between early intervention and other ECE programs to serve children with disabilities in inclusive environments (16 studies)

Table I.2. Characteristics of studies of ECE partnerships

	Total	HS or EHS— child care	State preschool— child care or HS	Other ECE partnerships
Study design				
Implementation study	55	14	31	10
Descriptive outcomes study	12	3	4	5
MCGD	5	2	2	1
Other	6	0	6	0
Data collection method^a				
Interview	44	11	23	10
Survey	30	8	15	7
Administrative records	14	4	8	2
Observation data	17	5	5	7
Site visit	8	1	6	1
Child assessment data	7	2	4	1
Other	13	4	5	4
Study respondents^a				
Families/parents	18	5	7	6
Teachers/providers ^a	34	9	16	9
Child care	27	10	11	6
HS or EHS	12	3	3	6
Public preschool	7	0	7	0
Other	5	1	0	4

² Throughout this report, we used the term state preschool to refer to publicly-funded prekindergarten programs.

	Total	HS or EHS— child care	State preschool— child care or HS	Other ECE partnerships
Program administrators ^a	39	10	22	7
Child care	29	10	15	4
HS or EHS	15	8	3	4
Public preschool	15	0	15	0
Other	5	1	0	4
State-level administrators ^a	15	4	8	3
Child care	9	4	3	2
HS or EHS	9	4	3	2
Public preschool	8	0	7	1
Other	3	1	0	2
Other	17	4	11	2
Total number of studies	78	19	43	16

Note: For some studies, information on the study sample, sample size, and/or data collection methods was not reported.

^a Columns in this section do not sum to the total number of studies because some studies included respondents from multiple categories and/or multiple data collection methods.

EHS = Early Head Start; HS = Head Start; MCGD = matched comparison group design.

More than 70 percent of the studies (55) reviewed were implementation studies. We identified 12 descriptive outcome studies and 5 matched comparison group design (MCGD) studies. We did not identify any randomized controlled trials. We also reviewed a small number of other studies (6), usually policy briefs that included case studies of particular states or partnerships. For purposes of this review, we defined implementation studies as research that describes the design, implementation, administration, and operation of services; descriptive outcome studies as observation studies that describe participants' outcomes but did not include a comparison group or that included an unmatched comparison group; and MCGDs as studies of program effectiveness with comparison groups constructed by matching participants and non-participants on relevant characteristics. As most descriptive outcome and MCGD studies also provide information about implementation, information about implementation from all studies is included in this review.

The studies most commonly collected data through qualitative interviews (44 studies) and surveys (30 studies). Seventeen studies included observations of child care settings and seven collected child assessment data. Across studies, data were collected from a range of respondents and most commonly included program administrators (39 studies), including Head Start and Early Head Start directors, child care center directors, and state preschool leadership (such as superintendents). Thirty-four studies collected data from teachers or family child care providers; in most of these studies, teachers were employed at child care centers. Eighteen studies included data collected from families.

Nearly all studies were conducted in the United States; one study was conducted in the United Kingdom. Studies often focused on ECE partnerships serving low-income children with two primary exceptions: state preschool partnerships designed to provide universal services to all families and some early intervention partnerships targeted to children with special needs regardless of family income.

C. Limitations

The literature review has several limitations that are important for readers to understand as they interpret the findings. First, the review did not include an assessment of the quality of the study designs or their execution. Throughout the report, we distinguished between findings from MCGDs, descriptive outcome studies, and implementation studies. In Chapter IV we describe some general limitations of the MCGDs and descriptive outcome studies. Second, many of the findings were based on a small number of studies, and some were based on only one or two studies. Throughout the report, we list the number of studies upon which conclusions are based. Third, only 13 percent of studies included partnerships serving infants and toddlers and only 12 percent included partnerships with family child care programs serving infants and toddlers. This limitation is significant considering that infants and toddlers are the focus of Early Head Start–child care partnerships and, given the number of infants and toddlers in home-based child care settings, we anticipate that family child care providers will be key partners in many partnerships. As feasible, we discuss implications of the findings for family child care providers throughout the report. Finally, while many studies collected data from child care administrators and teachers (see Table I.2), the findings in the studies were primarily reported from the perspective of a lead partner (most often state preschool, Head Start, or Early Head Start).

D. Organization of the report

The purpose of this report is to present the key findings from the literature review. Chapter II describes our methodology for conducting the review. In Chapter III, we describe key findings about ECE partnerships’ characteristics and components, including the inputs to partnerships and partnership activities. Chapter IV describes the benefits of ECE partnerships, including the outcomes they achieve and/or are perceived as achieving. Next, in Chapter V, we describe findings from the literature on the factors that facilitate ECE partnerships. Chapter VI describes barriers to ECE partnerships. We conclude in Chapter VII by discussing gaps that exist in the literature, identifying key questions for future research, and describing the theory of change we developed for Early Head Start–child care partnerships based on the literature review findings. Appendix A presents the theory of change. Appendix B includes a template to extract descriptive information from studies that passed the review’s screening process. Appendix C provides supplementary details about the studies highlighted in each chapter of the report.

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II. LITERATURE REVIEW METHODS

We used four primary sources for the literature review: (1) a library search through EBSCOhost of Education Resource Information Center (ERIC) and Education Resource Complete; (2) a search of Child Care and Early Education Research Connections (Research Connections); (3) searches of a limited number of key websites; and (4) recommendations from our project consultants and the experts. We included journal articles and unpublished and non-peer-reviewed materials (such as project reports and white papers) published from January 1, 1998, through December 31, 2013. We chose this timeframe to capture studies conducted since the Temporary Assistance for Needy Families (TANF) program replaced the Aid to Families with Dependent Children (AFDC) program in 1996, which included new work and workforce development requirements for participants. These new requirements meant that many more low-income families needed child care for infants, toddlers, and preschool-aged children while they worked or participated in education and training programs. This increased need spurred initiatives among ECE programs to serve additional families and to make full-time care more accessible, such as partnerships.

A. Developing search parameters

To achieve a targeted library search, we worked with Mathematica librarians to develop search terms and strategies. Table II.1 lists the combination of search terms we used to search EBSCOhost. Table II.2 describes the approach we used to search Research Connections.

Our initial searches identified 1,931 citations. Of these, 1,287 were from EBSCOhost and 644 were from Research Connections. In addition, we received 19 recommendations from our project consultants and the expert work group. Our website searches did not yield any new studies.

Table II.1. EBSCOhost search strategy

Search number	Query
S7	S5 AND S6
S6	S3 OR S4
S5	S1 OR S2
S4	TI (public or state funded) and (preschool or pre-school or prekindergarten or prekindergarten) OR AB (public or state-funded) and (preschool or preschool Or prekindergarten or prekindergarten) OR SU (public or state-funded) and (preschool or preschool or prekindergarten or prekindergarten)
S3	TI ("Child Care and Development Fund" or CCDF or "child care subsid*" or "Temporary Assistance to Needy Families" or TANF or "Head Start" or "child care resource and referral" or CCR&R) OR AB ("Child Care and Development Fund" or CCDF or "child care subsid*" or "Temporary Assistance to Needy Families" or TANF or "Head Start" or "child care resource and referral" or CCR&R) OR SU ("Child Care and Development Fund" or CCDF or "child care subsid*" or "Temporary Assistance to Needy Families" or TANF or "Head Start" or "child care resource and referral" or CCR&R)

Search number	Query
S2	TI (seamless or joint delivery or “joint delivery” or dual eligibil* or “dual eligibil*”) OR AB (seamless or joint delivery or “joint delivery” or dual eligibil* or “dual eligibil*”) OR SU (seamless or joint delivery or “joint delivery” or dual eligibil* or “dual eligibil*”)
S1	TI (partner* or collaborat* or integrat* or coordinat* or contract* or full-day or “full day” or full-year or “full year” or wraparound or “wrap around” or wraparound) OR AB (partner* or collaborat* or integrat* or coordinat* or contract* or full-day or “full day” or full-year or “full year” or wraparound or “wrap around” or wraparound) OR SU (partner* or collaborat* or integrat* or coordinat* or contract* or full-day or “full day” or full-year or “full year” or wraparound or “wrap around” or wraparound)

Table II.2. Research Connections search strategy

Categories	Limiters
Relevant document types searched	Reports and papers, fact sheets and briefs, executive summaries, literature reviews, ACF/OPRE projects, and other
Subtopics searched	Coordination and integration (subtopic number 7.2); coordination and integration of child care and early education services (subtopic number 8.2); coordination and integration (subtopic number 9.2.1)

B. Screening for relevance

Our next step was to review the citations for relevance. During this step, we eliminated studies that were off topic, not about an eligible target population, not a relevant document type, or not published in English (Table II.3). Some off-topic studies were not about partnerships. Other off-topic studies were about partnerships but did not focus on two or more entities collaborating to facilitate the provision of ECE (such as partnerships between Head Start and families, health care providers, welfare, housing departments, or research organizations). Studies focused on transitions from preschool into kindergarten and about curricular alignment across preschool, kindergarten, and beyond were screened out as off-topic. We also screened out studies focused solely on universities providing training and technical assistance to ECE programs. Eligible target populations included children from birth through prekindergarten and children making the transition into kindergarten, including those who are from foreign countries, are members of a tribal population (either in the United States or elsewhere), or have disabilities. Ineligible target populations included children in the first grade or higher, adolescents, adults, and the elderly. Irrelevant document types included executive summaries, guides, standards, compilations of best practices, and interim versions of reports for which we had a final version. In those cases, we reviewed the final versions of the reports, but referred back to the interim versions if we needed to fill gaps on information referenced but not included in the final reports. After screening, our sample included 78 studies.

Table II.3. Screening results

	Total
Total number of unduplicated studies	1,950
EBSCOhost	1,287
Research Connections	644
Recommendations	19
Screened in	78
Screened out	
Off topic	1,468
Not a relevant document type	239
Not an eligible target population	102
Not the most recent or complete version	22
Not in English	2
Unable to access full text	13

C. Summarizing information across studies

Next, we used a template to extract descriptive information from studies that passed the screening process (Appendix B). We collected information on the study setting; child characteristics (such as age, race/ethnicity, and other characteristics of interest); and partnership information (such as the type, size, and name of entities involved in the partnership; the primary services provided; the partnership's goals and supports; and characteristics of the partnership model). In addition, we noted outcome measures used in the studies and findings related to barriers to partnerships and the features of partnerships that appear to improve quality and support child development and family well-being. If applicable, we noted any findings by subgroup. Finally, we collected certain data to inform other project tasks, such as whether the study included a theory of change or logic model that could inform the project's theory of change or whether the study included a measure or set of items relevant for the project's measurement framework.

Although we did not conduct a formal review of the quality of each study's methodology, we did differentiate studies by their design (including implementation, descriptive outcomes, or MCGDs). We noted the sample size (overall and by treatment condition, if applicable); timing of data collection (baseline, during the intervention, or post-intervention); and whether the evaluator was independent of the organization(s) being studied.

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III. CHARACTERISTICS AND COMPONENTS OF ECE PARTNERSHIPS

For the purposes of this literature review, we defined ECE partnerships as involving two or more organizations working together to jointly provide ECE services to young children and their families. Organizations can work together by combining funding, resources, materials, and staff to serve additional children, provide comprehensive services, enhance service quality, and/or provide full-day, full-year ECE. For example, partnerships may support quality of care by offering opportunities to increase providers' credentials, enhancing the environment through the provision of materials and supplies, and providing technical assistance, mentoring, professional development, or training to staff.

The study of ECE partnerships is an emerging area of research, but the research base is still fairly sparse. The current literature did not provide guidance on any one model of ECE partnerships that is likely to be the most successful. This developing body of literature did, however, provide information about the range of inputs and activities involved in developing and operating partnerships. (See key findings box.) Models of ECE partnerships varied on a number of features and inputs including the funding arrangements, roles of the partners, and systems for supporting high quality service. Partnerships operated in states and local communities that varied in their available supports for and potential barriers to partnerships. Partnerships were also affected by the motivations, experiences, and attitudes that the partners brought to them.

Our review of the literature also produced a comprehensive list of activities that partners engaged in to develop and operate ECE partnerships. This information might help inform policymakers and practitioners engaged in planning partnerships about the range of activities involved in implementation. However, none of the studies reported that an ECE partnership undertook all of these activities. Partners engaged in different activities to develop and operate partnerships based on their unique set of inputs such as community context and partnership type. In addition, the number of times an activity was mentioned across studies varied. We do not believe that this necessarily reflects the importance of the activity, but may be the result of the sparse research base and the mix of single case studies with large, national surveys. We begin this chapter by describing the inputs to partnerships. We then describe the activities that partners engage in to develop and operate ECE partnerships.

Key Findings	
We identified six steps involved in developing ECE partnerships:	Studies reported seven primary activities involved in implementing ECE partnerships:
<ol style="list-style-type: none">1. Surveying community needs and resources2. Identifying partners3. Recruiting partners4. Clarifying partner expectations5. Establishing agreements6. Funding partnerships	<ol style="list-style-type: none">1. Building relationships and maintaining ongoing communication among partners2. Assessing partner needs3. Supporting quality improvement4. Supporting staff development5. Implementing comprehensive services6. Monitoring services7. Implementing systems to promote both continuity of care across home and care settings and communication with families

A. Inputs to ECE partnerships included motivations, prior experience, attitudes, staff, children and families, and other national, state, and local stakeholders

In this section, we describe the literature on inputs to partnerships, including partners' goals or motivations for forming a partnership; the types of experiences and attitudes partners bring to the partnership; the level of the staff members involved in the partnership; the characteristics of the families served through the partnership; families' motivations for enrolling; and the national, state, and local inputs to partnerships, including funding streams and policies and regulations associated with funding. We also describe the inputs available for supporting the provision of high quality services.

1. What motivated ECE partners to form partnerships?

Understanding what motivates partners to form partnerships can provide useful insight into the reasons why partnerships are initiated and what partners hope to achieve through them.

- **The primary motivation for forming ECE partnerships was to expand services to more families and/or add more hours per day and days per year (20 studies).**

Fourteen studies reported that the motivation for partnerships between Head Start and Early Head Start programs and child care providers was to increase families' access to high quality, full-day, full-year care to meet both children's developmental needs and parents' needs for workforce development and participation (Buell, Hallam, and Beck, 2000; Buell, Hallam, and Beck, 2001; Buell, Pfister, and Gamel-McCormick, 2002; Ceglowski, 2006; Colvard and Schmit, 2012; Del Grosso, Akers, and Heinkel, 2011; Kiron, 2003; Paulsell et al., 2002; Paulsell, Nogales, and Cohen, 2003; Pregibon, Akers, Heinkel, and Del Grosso, 2011; Rohacek, 2001; Schilder, Kiron, and Elliott, 2003; Schilder et al., 2005; Schilder et al., 2009).

- **Among state preschool programs, the motivation to form partnerships was in some cases prompted by a need to meet legal or regulatory requirements (8 studies).**

For example, preschool expansion was court-ordered in the case of New Jersey's Abbott districts and legislatively mandated in states such as New York, Oklahoma, and Georgia (Barnett, Jung, Youn, and Frede, 2013; Schidler et al., 2003; Schulman, Blank, and Ewen, 1999; Schumacher, Ewen, Hart, and Lombardi, 2005; United States Government Accountability Office [U.S. GAO], 2004). As of 2005, 29 states had legislation or regulations that specified that prekindergarten could be delivered by child care providers (Schumacher et al. 2005). In some states, a provision required that a minimum percentage of services be delivered through partnerships with community-based agencies (including child care providers and Head Start agencies). Four studies reported that by partnering with existing child care providers, public schools were able to build on existing infrastructure, including physical space (classrooms) and human capital (child care teaching staff), to meet enrollment goals or demands, in addition to meeting legal or regulatory requirements (Barnett et al., 2013; Kolben and Paprocki, 2001; Marietta and Marietta, 2013a; U.S. GAO, 2004). Two studies reported that through partnerships preschool programs were able to

meet working parents' needs by extending the day and year beyond the typical full- or part-day school day and nine-month school year (Perez, 2006; Schulman et al., 1999).

- **Child care providers' motivations for partnering included a desire to increase children's access to preschool services, improve staff training and compensation, improve the overall quality of their centers, gain access to new resources, and maximize funding and secure financial stability (5 studies).**

Five studies reported on child care providers' motivations for partnering (Campbell, 2002; Ceglowski, 2006; Schilder et al., 2003; U.S. GAO, 2004; Whitebook, Ryan, Kipnis, and Sakai, 2008). For example, a study of ECE partnerships in all 50 states and Washington, DC, included surveys with 200 providers (representing 65 partnerships) in 36 states, Puerto Rico, and a tribal nation. The study reported on reasons child care providers reported for partnering, including to extend service hours; expand services into new communities; provide continuity of care; enhance health and family services; and link early education systems in the community (Schilder et al., 2003).

- **Other motivations for partnerships included a desire to enhance child care providers' capacity to provide high quality care, learn from child care providers' expertise and experience, and better meet families' needs (4 studies).**

Although stated less frequently, another motivation for partnering included a desire to enhance child care providers' capacity to provide high quality care (Buell et al., 2000; Colvard and Schmit, 2012; Smith et al., 2004). Motivations also included the opportunity "to learn from child care partners about how to effectively serve parents who work" and "to capitalize on the trust already established by the child care partners with the families Early Head Start wanted to serve" (Buell et al., 2000). In a study of 18 Head Start family child care demonstration projects in 10 states, Head Start agencies reported that they viewed the family child care home option as an opportunity to better serve families needing full-time care, children in outlying rural areas, and children with special needs (Faddis, Ahrens-Gray, and Klein, 2000).

2. What types of experiences and attitudes did partners bring to ECE partnerships?

Partners bring a variety of experiences and attitudes to partnerships that are often influenced by prior experiences with partnering, both positive and negative. These experiences and attitudes are likely to influence partners' expectations for the success of new partnerships. We only identified one study that reported on the experiences and attitudes that ECE partners bring to partnerships. The study reported that prior to legislation mandating universal preschool in the state, few school districts had experience working with child care providers, Head Start, or preschool special education providers (Kolben and Paprocki, 2001). We did not identify any studies that reported on the experiences or attitudes of child care providers.

3. What staff were involved in forming and sustaining ECE partnerships?

In the studies we reviewed, staff at all levels were involved in the partnerships.

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- **Across studies, ECE partnerships involved staff from multiple organizational levels, including program administrators, supervisors, and teaching staff.**

Administratively, state preschool–child care and Head Start partnerships were formed between school boards or school districts (usually represented by a superintendent) or state departments of education and the owners or directors of child care centers and Head Start agencies. Head Start and Early Head Start–child care partnerships involved program directors and other organizational leaders (when the program was part of a larger organization) and the owners or directors of child care centers (for example, Buell et al., 2001; Marietta and Marietta, 2013a; Paulsell et al., 2002; Raden, 1999; Paulsell et al., 2002; Whitebook et al., 2008).

Partnerships were also formed between teaching staff (typically employed by the child care providers) and/or family child care providers and staff from the state preschool programs and Head Start or Early Head Start programs (Buell et al., 2001; Marietta and Marietta, 2013a; Paulsell et al., 2002; Raden, 1999; Whitebook et al., 2008). Together, these staff members provided quality improvement support, monitored services, and, as applicable, provided comprehensive services.

4. Who was served through ECE partnerships?

The characteristics of the children and families served through partnerships (including their demographics and family composition) are a core factor in determining the components and characteristics of the partnership that need to be in place to meet their needs.

- **Across studies, ECE partnerships served a variety of participants, with some open to all 3- or 4-year olds in a school district and others targeting a specific demographic group, such as low-income children and families.**

State preschool programs differed in their populations: some were universal (meaning all 3- or 4-year-olds were eligible to attend state-funded preschool), while others were targeted to specific families, such as children from low-income families, children with disabilities, or children who were dual-language learners, or geographic locations, such as high poverty areas (for example, Schulman, Blank, and Ewen, 1999; Schumacher et al., 2005; U.S. GAO, 2004). Families served through Head Start or Early Head Start–child care partnerships were those families eligible for Head Start or Early Head Start (for example, Buell et al., 2001; Paulsell et al., 2002; Schilder et al., 2005; Schilder et al., 2009). To be Head Start or Early Head Start eligible, families must be at or below the federal poverty line or meet requirements for having a child with an identified disability that needs full-time, year-round care in order for parents to meet their workforce development and participation needs. One study of 18 Head Start family child care demonstration projects in 10 states reported that eligibility for Head Start slots in family child care homes was limited to parents who were either working, attending school, or in a job training program (Faddis et al., 2000).

5. Why did parents choose to enroll in ECE partnerships?

Understanding why parents choose to enroll in partnerships is critical to understanding how and if the partnerships meet their needs. For example, parents may choose to enroll because they need access to full-day, full-year care; want to enroll their children in higher quality care than is otherwise available in the community; or prefer to enroll their children in settings with caregivers who have similar cultural or ethnic backgrounds to their own.

We did not identify any studies that included information about why parents chose to enroll in ECE partnerships. We did identify one study that asked parents of infants and toddlers about their child care preferences, which may guide parents' decisions about partnership enrollment. That study reported that parents looked for providers who had a welcoming environment, offered learning experiences that were developmentally appropriate, followed rigorous procedures for health and safety, offered continuity of care over time, provided high quality interactions with children, and maintained strong communication with parents (Paulsell et al., 2003).

6. What were the national, state, and local inputs to ECE partnerships?

ECE partnerships are initiated and exist within multilayered systems that create opportunities and constraints and include (1) policies, regulations, and standards governing various programs; (2) funding streams, including the rules governing the funding; and (3) quality improvement supports.

- **Across studies, stakeholders at the all levels—national, state, and local—played a role in ECE partnership formation and maintenance.**

Local partnerships were supported at the state level by state agencies and other stakeholders, including state departments of education and state departments of social or human services or the state agency responsible for administering Child Care and Development Fund (CCDF) child care subsidies, setting child care regulations, and overseeing child care licensing; Head Start State Collaboration directors; early childhood advisory councils; and representatives from governors' offices. Other stakeholders involved in partnerships included child care resource and referral (CCR&R) agencies, community colleges, and four-year colleges and universities (Lekies, Heitzman, and Cochran, 2001; Mead, 2009; Perez, 2006; Whitebook et al., 2008). One study of universal prekindergarten in Georgia reported that programs were supported by local coordinating councils that engaged parents, public and private providers, health officials, educators, and members of the business community in sharing resources and information to support the local prekindergarten programs (The Child Care Partnership Project, 1998).

- **Across studies, ECE partnerships were required to meet the policies, regulations, and standards that governed both partners' operations and funding streams.**

ECE partnerships were operated in the context of the policies, regulations, and standards that governed both partners' operations and funding streams (for example, Buell et al., 2000; Colvard and Schmit, 2012; Paulsell et al., 2002; Schidler et al., 2003; Schumacher et al., 2005; Stebbins and Scott, 2007). Head Start and Early Head Start programs were required to adhere to the Head Start Program Performance Standards (HSPPS). Child care

providers were required to meet child care licensing rules and regulations. State preschool programs were required to meet state and local requirements regarding staff credentialing and training and program standards.

- **Across studies, ECE partnerships relied on a variety of funding streams including Head Start and Early Head Start grant funds, CCDF child care subsidies, and state and local preschool funds.**

ECE partnerships relied on a number of funding streams to support service delivery, but most frequently relied on (1) Head Start and Early Head Start grant funds; (2) CCDF child care subsidies; and (3) state and local preschool funds (for example, Buell et al., 2000; Colvard and Schmit, 2012; Paulsell et al., 2002; Schilder et al., 2003; Schumacher et al., 2005; Schilder et al., 2003; Stebbins and Scott, 2007). Other sources of funding reported in these studies included Title I funding (federal funds distributed to states and school districts to support programs and services for educationally disadvantaged children); Temporary Assistance for Needy Families (TANF) funding (funds primarily for welfare that some states used to support child care); and Individuals with Disabilities Education Act (IDEA) funding (federal funds distributed to states and school districts to create a system of early intervention services for children from birth through age 3 with disabilities and provide funding for special education and related services for preschool-age children). Other states supported ECE partnerships through state revenue and other sources, including tobacco settlements and gaming revenue (Colvard and Schmit, 2012; The Child Care Partnership Project, 1998).

- **ECE partnerships accessed quality improvement supports from national, state, and local initiatives such as training and technical assistance available through the Office of Head Start and the Office of Child Care, state child care quality rating and improvement systems, and local foundation-funded initiatives (3 studies).**

ECE partnerships had access to quality improvement supports provided nationally (including training and technical assistance available through the Office of Head Start and the Office of Child Care); through state initiatives (such as child care quality rating and improvement systems [QRIS] and initiatives funded through CCDF quality-set asides and other state funds); and through local initiatives and private- and foundation-funded initiatives (Colvard and Schmit, 2012; Schidler et al., 2003; Schumacher et al., 2005). One study that surveyed representatives from all 50 states and Washington, DC, and over 200 providers (representing 65 partnerships) in 36 states, Puerto Rico, and a tribal nation, reported that states used various funding streams to create incentives for providers to partner. These funding streams included CCDF quality expansion grants; TANF; general revenue funds; state departments of education; tobacco taxes; lottery proceeds; and local and regional foundations, national foundations, and United Way organizations (Schilder et al., 2003).

B. ECE partners engaged in a range of activities to develop and implement partnerships

In this section, we first summarize the activities reported in the literature that partners engaged in to develop and implement ECE partnerships. The literature primarily reflects the activities of the lead partner (most often state preschool programs or Early Head or Head Start programs). We found limited information on the partnership activities of child care providers. We then highlight the activities states have taken to support ECE partnerships.

1. What activities were involved in developing ECE partnerships?

We identified six steps involved in developing partnerships: (1) surveying community needs and resources, (2) identifying partners, (3) recruiting partners, (4) clarifying partner expectations, (5) establishing agreements, and (6) identifying funding sources. We present the steps in the order in which we would expect these activities to take place, not according to the number of studies that reported on each activity. In the description of each activity, we present information on the number of studies reporting each; many of these activities were reported in only a small number of the studies included in our review.

- **State preschool, Head Start, and Early Head programs surveyed community needs and resources prior to forming partnerships (3 studies).**

Three studies discussed partners' efforts to assess their community's early care and education needs and existing child care options as part of their partnership planning process. Specifically, Donovan (2008) reported that in response to the state's preschool expansion initiatives, a New Jersey school district identified how many children were eligible for state preschool services, what school facilities were available for preschool programs, and what early care and education infrastructure existed in the community to help determine partnership needs and opportunities. The two other studies reported that Head Start and Early Head Start programs obtained information from other state and local stakeholders to inform their partnership planning efforts (California Head Start-State Collaboration Office, 2000; Del Grosso et al., 2011). In particular, one study reported that Early Head Start programs worked with organizations such as CCR&R agencies to determine their community's existing ECE infrastructure, including the number and types of providers and the existing quality improvement supports for child care providers, during an initial planning process for forming partnerships (Del Grosso et al., 2011). The other study of Head Start grantees that were awarded expansion funds to provide full-day, full-year services also worked with local stakeholders. The grantees solicited information on families' child care needs from local welfare departments and CCR&R agencies as well as from parent groups such as their own program's Head Start Parent Policy Council (California Head Start-State Collaboration Office, 2000).

- **State preschool, Head Start, and Early Head programs identified child care partners based on program quality and capacity (5 studies).**

Five studies described the types of characteristics that both state preschool programs and Head Start and Early Head Start programs looked for in partners (Buell et al., 2001; Ceglowski, 2006; Lekies, Heitzman, and Cochran, 2001; Ontai, Hinrichs, Beard, and

Wilcox, 2002; Smith, 2002). Programs in four of these studies specified levels of program quality required of partners (Buell et al., 2001; Lekies et al., 2001; Ontai et al., 2002; Smith, 2002), while the programs in the fifth study focused on capacity (Ceglowski, 2006). Two studies reported that child care providers had to be licensed by the state to be eligible to deliver state preschool programs. In addition, the studies reported that the public schools required or preferred child care providers that had qualified staff (meaning that staff members had a bachelor degree and training in ECE), experience implementing an evidence-based curriculum, and met certain levels of program quality (Lekies et al., 2001; Smith, 2002). One study described an Early Head Start program in Delaware that required child care providers to meet a minimum level of quality. To determine quality, they conducted a baseline environmental assessment of each potential partner using either the Infant and Toddler Environmental Rating Scale (ITERS; see Harms, Clifford, and Cryer, 1990) or the Family Day Care Rating Scale (FDCRS; see Harms and Clifford, 1989) as well as the state child care licensing checklist for health and safety and the classroom checklist from Head Start's Program Review Instrument for Systems Monitoring (PRISM) tool (Buell et al., 2001). Another study described an Early Head Start program in a Midwestern state that sought child care center partners who provided quality ECE, shared Early Head Start's philosophy on how to work with children and families, and could serve children with special needs (Ontai et al., 2002). The study did not provide details about what information the Early Head Start program used to assess the providers. In the final study focused on capacity, Head Start programs reported seeking family child care providers who would serve only Head Start children in order to help ensure the program had sufficient slots for families needing full-day care (Ceglowski, 2006).

- **State preschool, Head Start, and Early Head programs recruited child care partners through RFPs, applications, open invitations, and recommendations from local planning councils (6 studies).**

Six studies discussed strategies partners used to recruit partners (Boressoff, 2012; California Head Start-State Collaboration Office, 2000; Lekies et al., 2001; Paulsell et al., 2002; Smith, 2002; The Child Care Partnership Project, 1998). Three studies of state preschool programs reported that public schools issued requests for proposals (RFPs) (Boressoff, 2012; Lekies et al., 2001; Smith, 2002). Similarly, one study reported that providers interested in participating in Georgia's state prekindergarten program were required to submit an application (The Child Care Partnership Project, 1998).

Two studies described how Head Start and Early Head Start programs recruited partners. A study of Early Head Start partnerships reported that programs typically extended an open invitation to all licensed child care settings in their community via mailings, newspaper advertisements, fliers, invitations to orientation settings, and CCR&R recommendations (Paulsell et al., 2002). A more informal approach to recruiting partners was described in a study of Head Start partnerships. Survey respondents reported that local planning councils recommended many of the child care providers for partnerships (California Head Start-State Collaboration Office, 2000).

- **ECE partners engaged in formal planning processes to clarify expectations and develop partnership goals (4 studies).**

Three studies described how partners, after being identified, worked together to clarify expectations and develop common goals (California Head-Start State Collaboration Office, 2000; Corso, 2000; Paulsell et al., 2002). Another study described the average length of the planning process before partners formalized an agreement (Schilder et al., 2009).

A study of Early Head Start–child care partnerships in 26 states and Washington, DC, found that formal partnership agreements typically arose from a comprehensive decision-making process about whether to proceed with the partnership and a negotiation process determining the partnership’s terms, including each partner’s role, responsibilities, and obligations (Paulsell et al., 2002). Similarly, a survey of 32 Head Start administrators in California found that establishing a common vision and goals for the partnership was a frequent planning activity. One respondent reported that these discussions laid the foundation for the development of memoranda of understanding (California Head-Start State Collaboration Office, 2000). In a study of Early Head Start-early intervention partnerships in 14 states, about half the respondents reported participating in a cross-agency process to develop goals (Corso, 2000).

Related to planning time, in a study of Head Start–child care partnerships in Ohio, center directors reported an average of approximately six months for planning prior to formalizing a partnership. However, planning time varied substantially across centers, with 79 percent of directors providing services within a year of first speaking with Head Start and 18 percent of directors reporting providing services the same day that they first spoke. Before formalizing a partnership, center directors reported meeting an average of 2.6 times with Head Start administrators (Schilder et al., 2009).

- **ECE partners established partnerships through formal agreements including memoranda of understanding or contracts (16 studies).**

Sixteen studies reported that partnerships were formalized through agreements (most often memoranda of understanding or contracts) (Academy for Educational Development, 2009; Barnett et al., 2013; Boressoff, 2012; Bromer, 1999; Buell et al., 2001; California Head-Start State Collaboration Office, 2000; Corso, 2000; Del Grosso et al., 2011; Donovan, 2008; Mead, 2009; Ontai et al., 2002; Paulsell et al., 2002; Pregibon et al., 2011; Schilder et al., 2005; Schilder et al., 2009; The Child Care Partnership Project, 1998).

According to three studies, the agreements described the (1) roles and responsibilities of the partners involved in the partnerships, (2) financial agreements and enrollment capacity, (3) requirements for reporting and monitoring, and (4) requirements for meeting standards and regulations (California Head-Start State Collaboration Office, 2000; Ontai et al., 2002; Schilder et al., 2005). Two related studies about partnerships between Head Start and child care providers in Ohio reported that 48 percent of family child care providers and 70 percent of child care center directors reported working with their Head Start partner to jointly develop a partnership agreement (Schilder et al., 2005; Schilder et al., 2009).

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- **ECE partners used multiple funding streams to finance services. Partners combined or coordinated federal, state, and local funding sources in a variety of ways to support partnerships (14 studies).**

Fourteen studies discussed using multiple federal, state, and local funding streams to finance partnership services, reporting a variety of approaches to combining or coordinating these funds. Among studies of state preschool–child care partnerships, four studies reported that state funds for preschool programs paid for part- or full-day programs (ranging from 2.5 to 6.5 hours per day, depending on the state) during the school year (Fagnoni, 1999; Kolben and Paprocki, 2001; Schumacher et al., 2005; U.S. GAO, 2004). To extend the hours of the day and number of days that services were available, four studies reported that partnerships drew on child care subsidies and parent fees or copayments (Fagnoni, 1999; Miller, 2008; Schumacher et al., 2005; U.S. GAO, 2004). One study of state preschool programs in 29 states reported that some child care providers were eligible, through partnerships, for state funds for classroom startup, professional development for teachers, and curriculum and other materials (Schumacher et al., 2005).

Among studies of Head Start and Early Head Start–child care partnerships, the literature discussed four primary approaches to combining funds (reported in nine studies; Buell et al., 2001; Ceglowski, 2006; Del Grosso et al., 2011; Ontai et al., 2002; Paulsell et al., 2002; Pregibon et al., 2011; Rohacek, 2001; Schilder et al., 2005; Schilder et al., 2009):

1. Child care subsidies paid for the cost of care, and the Head Start program provided comprehensive services.
2. Child care subsidies paid for the cost of care, and the Head Start or Early Head Start program provided additional funds for program quality enhancements, such as materials, equipment, professional development, onsite coaching, higher compensation for child care providers, and higher reimbursement rates.
3. Early Head Start funds supplemented child care subsidy dollars to enable continuity of care, allowing children to remain in care settings if families became ineligible for child care subsidies.
4. Similar to the state preschool partnership model discussed above, Head Start funds paid for the cost of part-day care, while; child care subsidies, copayments, or parent fees covered the extra cost of extended day services.

Alternatively, only two studies described partnerships that did not rely on multiple funding streams. A study of universal preschool in New York reported that one service model included child care providers operating part-day programs funded entirely by state preschool dollars (Kolben and Paprocki, 2001). Similarly, a study of Early Head Start–child care partnerships reported that some partnerships relied on Early Head Start funds exclusively to pay for care and comprehensive services (Paulsell et al., 2002).

2. What activities were involved in implementing ECE partnerships?

From the studies reviewed, we identified seven primary activities involved in implementing partnerships: (1) building relationships and maintaining ongoing communication among partners, (2) assessing partner needs, (3) supporting quality improvement, (4) supporting staff development, (5) implementing systems to promote both continuity of care across home and care settings and communication with families, (6) providing comprehensive services, and (7) monitoring services.

Partnerships may serve as an effective vehicle to enhance family child care providers' capacity to provide high quality care, but the studies identified in our review provided minimal detail on strategies to support these providers. However, the literature on training and technical assistance partnerships did provide some insight into promising activities to support family child care. Many of the approaches discussed are similar to those used by both state preschool programs and Head Start and Early Head Start programs to support child care partners, but these activities are focused specifically on the unique needs of family child care providers. We highlight these strategies in the section on supporting quality improvement.

- **ECE partners built relationships and maintained ongoing communication through regular management meetings or a partnership point person (11 studies).**

Eleven studies discussed two strategies for building relationships and maintaining ongoing communication among partners. One strategy involved regular (such as monthly or bimonthly) management meetings involving school district staff and leadership from child care providers. These meetings served as an avenue for discussing funding and regulatory issues and addressing emerging challenges (Donovan, 2008; Marietta and Marietta, 2013a; Marietta and Marietta, 2013b). Frequent meetings were also an approach used by Head Start and Early Head Start partnerships (Bromer, 1999; California Head Start-State Collaboration Office, 2000; Corso, 2000). For example, a California Head Start-State Collaboration Office (2000) survey of 32 grantee administrators found that meeting regularly with partners was the most frequently reported partnership implementation strategy. Respondents explained that these meetings provided the opportunity for relationship building and thus facilitated joint problem solving. Another strategy employed by some partnerships involved identifying a partnership point person to initiate the partnership and facilitate communication between partners (Del Grosso et al., 2011; Mead, 2009; Ontai et al., 2002; Paulsell et al., 2002; Pregibon et al., 2011). In some cases, this point person also provided quality improvement support and monitoring.

- **State preschool, Head Start, and Early Head programs assessed child care partners' quality to guide program improvement efforts (4 studies).**

Four studies reported assessing quality to identify partners' program improvement needs. In New Jersey, Abbott districts were required to use a reliable observation tool—typically the Early Childhood Environmental Rating Scale-Revised Edition (ECERS-R; see Harms et al., 1998)—to measure quality in pre-K classrooms. Trained staff conducted the observations and used the results to support teachers' professional development. If quality fell below a minimum acceptable level, the district and the provider developed and implemented an action plan to improve quality (Mead, 2009). Three studies of Head Start

and Early Head Start–child care partnerships reported that the programs conducted an initial quality assessment of child care partners and used that information to develop plans (such as quality improvement plans or goals) to guide delivery of technical assistance, materials, and supplies (Buell et al., 2001; Ontai et al., 2002; Paulsell et al., 2002).

- **ECE partners supported quality improvement by providing on-site assistance or coaching, training and technical assistance, and resources for materials and equipment (19 studies).**

In the 19 studies that discussed quality improvement efforts, we identified three main approaches: (1) providing on-site assistance or coaching, (2) offering training, and (3) providing resources for materials and equipment. Seven studies reported that programs supported program quality by offering on-site technical assistance and coaching (Academy for Educational Development, 2009; Bromer, 1999; Marietta and Marietta, 2013a; Mead, 2009; Paulsell et al., 2002; Sacramento County Office of Education, 2010; Whitebook et al., 2008). For example, in New Jersey’s Abbott districts, master teachers provided individualized coaching to every preschool teacher, both within the district schools and at community providers (Mead, 2009; Whitebook et al., 2008). In a study of Early Head Start programs, Early Head Start program liaisons used regular technical assistance visits to help providers plan lessons (Paulsell et al., 2002). In a Head Start–preschool special education partnership, the early intervention staff modeled for Head Start staff how to adapt practices for children with special needs (Bromer, 1999).

To support curriculum implementation and teaching quality in partner programs, eight studies reported that state preschool and Early Head Start programs provided direct training to child care providers (Academy for Educational Development, 2009; Buell et al., 2001; Del Grosso et al., 2011; Ontai et al., 2002; Paulsell et al., 2002; Pregibon et al., 2011; Schumacher et al., 2005; U.S. GAO, 2004). In some cases, partnering agencies offered joint trainings for staff across both partners (Mead, 2009; The Child Care Partnership Project, 1998; Whitebook et al., 2008). For example, to help ensure a consistent level of quality and to foster a sense of community, New Jersey’s Abbott districts provided the same training to prekindergarten teachers in both school and community-based settings (Mead, 2009). A study of Georgia’s state prekindergarten program reported that the state office responsible for administering the program contracted with Georgia State University to train all its prekindergarten teachers. The two-day workshops were largely based on the university-developed Best Practices Portfolio, which provides lesson plans and teaching strategies (The Child Care Partnership Project, 1998). In two studies of Head Start and Early Head Start–early intervention partnerships, the early intervention agencies provided Head Start teachers with specialized training in working with children with special needs (Bromer, 1999; Corso, 2000).

Partnerships also support quality improvement by providing resources to child care providers for materials and equipment. Two studies reported that state preschool programs offered child care providers classroom start-up funds and ongoing funds for supplies and curriculum materials (Raden, 1999; Schumacher et al., 2005). Similarly, three studies of Head Start and Early Head Start–child care partnerships reported that programs provided funds (such as a monthly stipend for each Head Start or Early Head Start child in their

care) that child care providers used to pay for equipment and materials (Buell et al., 2001; Schilder et al., 2005; Schilder et al., 2009). Five studies reported that Head Start and Early Head Start programs offered loans or provided materials and equipment directly to child care providers (Buell et al., 2001; Ceglowski, 2006; Paulsell et al., 2002; Schilder et al., 2005; Schilder et al., 2009). One study of a partnership between a special education preschool and a Head Start program reported that the preschool provided Head Start with materials, such as adaptive toys, to aid in the inclusion of children with special needs (Bromer, 1999).

The literature on training and technical assistance partnerships provided some insight into promising activities to support quality improvement in family child care. The first activity in some of these partnerships involved assessing providers' quality support needs (Bryant et al., 2009; Collins, Goodson, Luallen, Rulf Fountain, and Checkoway, 2010). One study reported that in Massachusetts, family child care networks were required to assess providers' needs annually and then to draft professional development plans based on the findings (Collins et al., 2010). To help meet provider's professional development needs, family child care networks often provided on-site coaching to participating providers (Bromer, 2011; Bromer, Van Haitzma, Daley, and Modigliani, 2009; Collins et al., 2010). In Massachusetts, family child care networks were required by law to visit providers' homes at least monthly to support the provider's professional growth (Collins et al., 2010). In addition to individual coaching, family child care networks also offered trainings, referred providers to outside training, and offered tuition reimbursement (Bromer, 2011; Bromer et al., 2009). A study of family child care networks in Chicago reported that coordinators developed training based on the HSPPS (Bromer, 2011). Networks also supported quality by purchasing materials for providers or offering lending libraries (Bromer, 2011; Bromer et al., 2009; Bryant et al., 2009).

In addition to quality improvement efforts, the literature on approaches to supporting family child care also discussed strategies to help retain providers, such as creating support systems and assisting with business services. To help reduce providers' sense of isolation, some family child care networks offered a variety of provider meetings and events, including support groups, social events, and recognition ceremonies (Bromer, 2011; Bromer et al., 2009). Networks also assisted with or assumed responsibility for business tasks such as recruitment of families and administration of subsidies and reimbursement (Bromer, 2011; Bromer et al., 2009; Collins et al., 2010).

- **State preschool, Head Start, and Early Head Start programs supported staff development for child care partners to help meet higher levels of requirements and regulations (9 studies).**

Both state preschool and Head Start and Early Head Start programs required higher levels of staff education than child care licensing regulations mandated (Schumacher, Greenberg, and Lombardi, 2001). Nine studies reported that, to support teachers in meeting these requirements, public schools and Head Start and Early Head Start programs (1) provided funds for education; (2) worked with child care resource and referral agencies, community colleges, and four-year colleges and universities to offer training, coursework, and certification or degree programs; or (3) helped teachers draft professional development

plans and provided academic counseling (Buell et al., 2000; Ceglowski, 2006; Del Grosso et al., 2011; Paulsell et al., 2002; Perez, 2006; Pregibon et al., 2011; Perez, 2006; Schilder et al., 2005; Schulman et al., 1999; Schumacher et al., 2005). For example, Preschool for All San Mateo County collaborated with the local resource and referral agency, the community college system, and San Francisco State University to develop a career pipeline for early care and education teachers. The pipeline was designed to support teachers to reach the next level of professional development based on their current education status (Perez, 2006). In another study, a Head Start program partnering with family child care providers provided tuition for college courses to help the providers obtain their child development associate (CDA) credential (Ceglowski, 2006).

- **ECE partners used a variety of approaches to provide comprehensive services. Commonly identified approaches included (1) Head Start and Early Head staff provided the comprehensive services directly; (2) Head Start and Early Head Start programs provided funds for child care programs to provide comprehensive services; or (3) the responsibility was shared by both partners (12 studies).**

We identified three approaches to providing comprehensive services in the literature: (1) Head Start and Early Head staff provided the comprehensive services directly; (2) Head Start and Early Head Start programs provided funds for child care programs to provide comprehensive services; or (3) the responsibility was shared by both partners.

Eleven studies of Head Start and Early Head Start–child care partnerships reported that most often Head Start and Early Head Start staff were responsible for implementing comprehensive services, including the delivery of developmental, physical health, and mental health screenings and assessments; access or referrals to physical and dental health services; support for families through parenting and adult education or referrals to address such needs as food insecurity, housing, and family counseling; and partnerships with families in planning child development goals for children (Buell et al., 2001; Campbell, 2002; Ceglowski, 2006; Colvard and Schmit, 2012; Kiron, 2003; Paprocki and Kolben, 2002; Paulsell et al., 2003; Paulsell et al., 2002; Rohacek, 2001; Schilder et al., 2003; Schilder et al., 2009). For example, two studies reported that Early Head Start staff conducted weekly visits to child care programs to conduct developmental screenings and provide other comprehensive services to the Early Head Start–enrolled children in the settings (Buell et al., 2001; Paulsell et al., 2003). To implement comprehensive services, one study described two staffing models: (1) an Early Head Start child care specialist provided comprehensive services to children, and an Early Head Start family advocate conducted home visits to Early Head Start families enrolled in partnership settings or (2) a single Early Head Start staff person provided comprehensive services to children and support to families (Paulsell et al., 2003).

A second approach to providing comprehensive services was reported by two studies and included the provision of Early Head Start or Head Start funds through the partnerships to child care providers to pay for those services (Kiron, 2003; Paulsell et al., 2002). For example, a study of Head Start–child care partnerships reported that some partnerships allocated funding to child care providers based on the number of children enrolled in Head

Start. The provider used the funds to pay for enhanced services, such as social and medical services and teacher home visits (Kiron, 2003).

A third approach, reported by a study of Early Head Start–child care partnerships, involved child care providers in some partnerships assuming responsibility for nutrition services, including meeting meal provision standards (Paulsell et al., 2003). The Early Head Start programs were responsible for implementing all other comprehensive services.

While the provision of comprehensive services was discussed primarily in the context of Head Start and Early Head Start, one study profiled a state preschool program that employed resource coordinators to provide comprehensive services to families at both school- and community-based prekindergarten sites (The Child Care Partnership Project, 1998).

- **ECE partners monitored service provision through an on-site technical assistance provider or coach or through visits by external monitors or consultants (5 studies).**

Four studies reported that monitoring services and adherence to standards was accomplished through an on-site technical assistance provider or coach (Mead, 2009; Ontai et al., 2002; Paulsell et al., 2002; Schumacher et al., 2005). A survey of states that have partnered with community child care providers to offer state prekindergarten programs reported that in Georgia, staff from the state’s prekindergarten program made both announced and unannounced visits to partnering child care programs to monitor compliance with state preschool standards. The monitors were available throughout the year to provide technical assistance to help the providers achieve compliance (Schumacher et al., 2005). Another state preschool program hired consultants to conduct three to four site visits annually to child care providers (Raden, 1999).

- **Other findings**

Two studies described the processes partnerships implemented to promote continuity of care across home and care settings and ongoing communication with families, such as holding regular and joint meetings and visits. For example, in a study of an Early Head Start–child care partnership in a Midwestern state, teachers from child care centers met monthly with Early Head Start family service workers to discuss each family’s goals and progress. Early Head Start family advocates also visited classrooms twice a month to review children’s developmental goals and progress as well as to address any family issues. The two agencies encouraged family advocates and teachers to hold joint meetings with families and other partners as needed (Ontai et al., 2002). A study that discussed partnerships between Early Head Start and kith and kin caregivers reported that Early Head Start sought to enhance the continuity of care between parents and caregivers through (1) one-on-one meetings between the home visitors working with the family and the caregiver, (2) coordination during Early Head Start staff meetings, and (3) joint home visits (Paulsell et al., 2006).

3. What national, state, and local activities were involved in developing and implementing partnerships?

While we anticipate that partnerships are supported by a range of national, state, and local activities, the studies we reviewed primarily described state-level activities. Across four studies, we identified two strategies states used to support partnerships: (1) incentives and (2) interagency policy coordination (Colvard and Schmit, 2012; National Infant & Toddler Child Care Initiative & Early Head Start for Family Child Care Project, 2011; Schilder et al., 2003; Schumacher et al., 2005). These initiatives were intended to help partnerships meet required standards. Three studies reported that all partners involved in state preschool–child care partnerships had to meet the same standards in order to participate (Allen and Smith, 2008; Donovan, 2008; Schumacher et al., 2005). The standards ranged from requiring accreditation to following the HSPPS to mandating teacher qualifications, ratios, group size, and curriculum. Studies of Head Start and Early Head Start–child care partnerships reported that all partners were required to meet the HSPPS and child care licensing regulations; when differences existed between standards, providers were required to meet the more stringent ones (Buell et al., 2000; Colvard and Schmit, 2012; Del Grosso et al., 2011; Paulsell et al., 2002).

- **State incentives to support ECE partnerships included grants, training and technical assistance, and regulations (3 studies).**

Three studies discussed incentives states used to encourage partnerships (Colvard and Schmit, 2012; National Infant & Toddler Child Care Initiative & Early Head Start for Family Child Care Project, 2011; Schilder et al., 2003). One study reported that Nebraska Department of Health and Human Services provided grants to five Early Head Start programs to establish partnerships with center- or home-based child care providers. The programs could use grant funds to provide books and equipment for providers and to hire substitutes so full-time child care staff could have release time to attend training (Colvard and Schmit, 2012). Another national study involving interviews with state ECE administrators found that states provided a variety of inducements to promote partnerships including providing training and technical assistance and offering both monetary and regulatory incentives (Schilder et al., 2003). For example, some states provided direct funding to providers to help cover the costs involved in addressing differing regulations between partners, such as the costs of helping providers meet HSPPS. Others provided increased reimbursement rates to providers participating in partnerships. States also reported offering regulatory incentives to partnerships including waiving selected state regulations. States also provided incentives through their program funding approaches, such as giving extra preference to partnerships in requests for proposals. Some states with public preschool programs have promoted partnerships by making them a requirement.

- **Interagency coordination at the state level was needed to overcome regulatory and funding barriers to ECE partnerships (5 studies).**

Five studies discussed efforts states made to coordinate policies to address regulatory differences and ease the way for programs to combine multiple funding streams (Colvard and Schmit, 2012; Del Grosso et al., 2011; National Infant & Toddler Child Care Initiative & Early Head Start for Family Child Care Project, 2011; Schilder et al., 2003; Schumacher

et al., 2005). One study found that in many states, the agencies responsible for administering ECE programs took steps to identify regulatory differences across programs and developed interagency agreements to formalize coordination efforts and delineate partnership roles and responsibilities (Schilder et al., 2003). For example, a policy assessment process led Alabama to strengthen its child care licensing standards to better align them with the HSPPS.

Efforts by Head Start and Early Head Start programs to extend services by using child care subsidy dollars were complicated by differences between the federal and state funding eligibility periods. Many states reassessed a family's eligibility for child care subsidies every three to six months, which had the potential to result in a child losing eligibility for subsidies and, hence, no longer being able to participate in a partnership program's extended services. To help prevent such care disruptions, some states have extended the child care subsidy redetermination period for families participating in Head Start–child care partnerships (Colvard and Schmit, 2012; Del Grosso et al., 2011; Schilder et al., 2003). For example, one study reported that the Illinois Child Care Collaboration Program allowed annual child care subsidy eligibility redeterminations, provided a 90-day job loss grace period, and provided open-ended eligibility for families whose TANF Responsibility and Service Plan specified participating in a partnership program (Colvard and Schmit, 2012).

Another study reported that Early Head Start programs and community partners (including representatives from CCR&R agencies, family child care networks, and local government agencies responsible for administering CCDF subsidies) engaged in activities to determine misalignment among eligibility requirements and identify possible rule accommodations that could facilitate blending funding (Colvard and Schmit 2012; Del Grosso et al., 2011; Schumacher et al. 2005). For example, the New Hampshire Division for Children, Youth and Families signed a memorandum of agreement (MOA) with the Head Start Directors Association to promote full-day, full-year Head Start and Early Head Start services for children receiving child care subsidies. Early Head Start–child care partnerships interested in participating were required to sign an MOA that outlined how billing requirements would be met and described how other areas of collaboration would occur, such as joint staff training or shared transportation (Colvard and Schmit, 2012). Maryland provided supplemental funds to Early Head Start programs to extend the day or year for children through partnerships with child care centers. The initiative provided an average of four additional hours of care a day for children enrolled in the partnership. In New Jersey, the state departments of education and human services created a formal process that allowed providers participating in the state preschool program to support a 10-hour, 245-day, full-day, full-year, program, with some costs shared between the two agencies (Schumacher et al., 2005).

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IV. BENEFITS OF ECE PARTNERSHIPS

In this chapter, we describe the benefits of ECE partnerships as described in two types of studies: those that reported on partnership outcomes and those that reported on perceived benefits of partnerships described by study participants in interviews, focus groups, and surveys.³ Studies discussed a range of potential benefits, including benefits for child care providers, Head Start and preschool teaching staff, children, and families. (See key findings box below.) The current literature includes implementation studies, descriptive outcomes studies, and a few MCGD studies, none of which can definitively attribute the cause of any observed outcomes to partnership.⁴ However, given that they provide more rigorous evidence, we report findings from MCGDs and descriptive outcomes studies separately from perceived benefits reported by study participants in all three types of studies.⁵ Ultimately, although the literature provides only suggestive evidence related to these benefits, the findings can be useful for informing future research by identifying outcomes that might be affected by ECE partnerships and merit further exploration.

Key Findings

Based on the 11 studies that reported on outcomes, we found suggestive evidence of ECE partnerships' potential to improve the following:

- Quality of care
- Availability of comprehensive services for families
- Staff knowledge and skills
- Staff access to professional development supports

Other potential benefits reported by key informants in studies included improving the quality of ECE services; increasing staff credentials, knowledge, and access to professional development; increasing access to ECE services that meets families' child care needs and preferences; and benefiting partners by sharing expertise and ideas among partners and setting the stage for future collaboration.

³ There is some overlap between studies reporting outcomes and studies where respondents described perceived benefits, as studies often contained multiple data sources, including outcome data and interview or survey data.

⁴ We define implementation studies as research that described the design, implementation, administration, and operation of services; descriptive outcome studies as observation studies that described participants' outcomes but did not include a comparison group or that included an unmatched comparison group; and MCGDs as studies of program effectiveness with comparison groups constructed by matching participants and non-participants on relevant characteristics.

⁵ As some descriptive outcome and MCGD studies also provided information about perceived benefits of partnerships, information about perceived benefits from all studies was included in this review.

We identified 11 studies that examined outcomes of ECE partnerships, including 8 descriptive outcome studies and 3 MCGDs.⁶ Table C.1 in Appendix C provides descriptions of each study. Of these 11 studies, 10 examined program quality outcomes, and 4 examined outcomes for staff (including staff knowledge and skills as well as access to training and professional development). One MCGD and one descriptive study examined access to comprehensive services, and one MCGD and one descriptive outcomes study examined child outcomes. These studies used a range of standardized instruments to measure these outcomes. Table C.3 in Appendix C summarizes the instruments. Although we did not systematically review the quality of the outcome studies presented in this section, we note several limitations that are important for readers to consider when reviewing the findings presented in this chapter. As a result of these limitations, the current literature can only provide suggestive evidence related to the benefits of partnerships.

- **None of the studies used a random assignment design.** Across the 11 studies that examined outcomes of partnerships, no studies randomly assigned the partnership and comparison groups; without random assignment the studies cannot definitively attribute the cause of these differences to partnership.
- **Most studies lack a comparison group.** The eight descriptive outcome studies are further limited in their ability to attribute findings to the partnerships because they lack either a matched comparison group or any sort of comparison group. Of the three studies with comparison groups, two had uneven allocation of participants in the treatment and comparison groups and so may not generalize to other settings (Edwards et al., 2002; Schilder et al., 2009).
- **Other limitations included small sample sizes and lack of baseline measures.** A common limitation of the studies was a small sample size, which may hinder the study's ability to detect an impact estimate and limit the generalizability of the findings to other settings (Bromer, 1999; Edwards et al., 2002; Ontai et al., 2002; Paulsell et al., 2006; Schilder et al., 2009; Selden et al., 2006). Five studies lacked a baseline measure of outcomes (Paulsell et al., 2006; Schilder et al., 2005; Schilder et al., 2009; Smith et al., 2004; Whitebook et al., 2007), preventing the study from attributing outcomes to the partnership because the two groups may have not have been equivalent at baseline on the outcomes of interest.

In addition, we identified 35 studies that reported on the potential or perceived benefits of forming and implementing partnerships as reported by study participants during interviews, focus groups, and surveys. Table C.2 in Appendix C provides details about these 35 studies. These studies provide information about study participant's perceptions of how partnerships might improve services but lack evidence to assess whether improvements were actually achieved.

⁶The literature review included five MCGDs; however, two of these studies that examined the effect of state preschool partnership initiatives on child outcomes were excluded in this section because they did not present findings separately for children enrolled in state preschool classrooms at public schools and children enrolled in partner classrooms (classrooms in community-based child care settings or Head Start programs).

Based on the 11 studies that reported on outcomes, we found some suggestive evidence of partnerships' potential to improve the quality of care, the availability of comprehensive services for families, staff knowledge and skills and access to professional development supports, and children's language and literacy outcomes. In addition, the 35 studies that reported potential or perceived benefits cited the following benefits: (1) improving the quality of ECE services; (2) improving the quality of ECE services for all children in care (including children in slots not funded by the partnership); (3) increasing staff credentials, knowledge, and access to professional development; (4) increasing access to ECE services; (5) increasing access to comprehensive services; (6) meeting families' child care needs and preferences; (7) sharing expertise and ideas among partners; (8) setting the stage for future collaboration; and (9) reducing the number of transitions in care settings for children.

A. Partnerships might have improved the observed quality of ECE settings

Partnerships can provide a variety of mechanisms to enhance the quality of ECE services, such as shared resources, materials, supervision, and knowledge. Nine studies provided suggestive evidence that ECE partnerships improved service quality for center-based child care providers. In 24 studies, respondents also reported increased quality of ECE services as a perceived benefit of partnerships.

Across the nine studies that reported on observed quality, there was some evidence that structural features of care, including furnishings, activities, and program structure, were more likely to be improved through partnerships than other features of care, such as caregiver-child interactions, though the findings are mixed. The evidence on whether these partnerships were beneficial for family child care homes was more limited, and findings of the two studies reporting on family child care quality were mixed.

- **For center-based child care, partnering with Head Start or Early Head Start improved classroom quality on the Environment Rating Scales (3 studies).**

Three studies, including one MCGD and two descriptive outcome studies, reported improved quality on the Environment Rating Scales among child care providers in partnership with Head Start and Early Head Start programs. An MCGD study of Head Start-child care partnerships in Ohio found that for center-based child care classrooms, those that partnered with Head Start exhibited significantly higher quality on ECERS-R classroom observations than those that did not (Schilder et al., 2009). Partnering centers were approximately one point on each of the following subscales: activities, interaction, language reasoning, and program structure.

One of the descriptive outcomes studies compared the quality of child care centers in partnership with Early Head Start to other infant-toddler child care providers in Nebraska (Edwards et al., 2002). The study found that nine child care centers that partnered with Early Head Start programs had higher observed quality as measured by the ITERS, compared with other infant-toddler child care centers in the state. The second descriptive study, which examined quality among 11 classrooms in a child care center that contracted with an Early Head Start program in a mid-sized Midwestern community at the beginning of the partnership and again nine months later, had similar findings (Ontai et al., 2002).

The study found that mean ITERS classroom scores increased about half a point over the partnership period. ITERS scores on furnishings and personal care routines showed significant increases that placed them in the good-quality range; scores on learning activities, social interaction, and adult needs significantly improved but remained below the good-quality range at posttest. Scores on listening/talking and adult needs did not improve significantly.

Two studies found that child care providers in partnerships were able to achieve the same levels of classroom quality, as measured by the ECERS-R, as other settings. One study reported comparable levels of quality among child care centers in partnership with New Jersey's state preschool programs and district-run classrooms (Frede et al., 2007). Similarly, a study in the United Kingdom found that a partnership to provide wraparound care for a part-day universal early education program was able to provide such care either on a par with or exceeding the quality of a national sample of full-day programs (Smith, 2004).

- **For family child care, evidence was inconclusive about whether partnering with Early Head Start or Head Start improves the quality of the environment and caregiver-child interactions (2 studies).**

Findings were limited and mixed regarding whether partnerships with Early Head Start or Head Start could improve the quality of family child care. Schilder et al. (2009) found no significant differences for family child care providers between the treatment and comparison groups on the overall FDCRS and Arnett scales. Family child care providers partnering with Head Start were more likely to offer an enriched curriculum but performed significantly less favorably on the punitive subscale of the Arnett. Another study described the quality of care among family child care providers and family, friend, and neighbor caregiver settings after receiving quality improvement support through Early Head Start (Paulsell et al., 2006). The study found that the quality of child-caregiver interaction as measured by the CCAT-R and the Arnett was comparable to national studies that examined child-caregiver interaction among in-home child care providers (Administration for Children and Families, 2004; Fuller and Kagan, 2000).

One important question not addressed in the partnership literature was how best to support quality service provision among family child care providers given their unique needs, such as caring for mixed age groups of children, providing services outside of regular business hours including evenings and weekends, and facing potential isolation from other caregivers. Although no research about family child care partnering with either Head Start or public prekindergarten programs to deliver ECE services reported evidence on this issue, research on family child care networks provided some insight into the types of supports that might best support quality in family child care homes. Specifically, an MCGD study of 150 licensed family child care providers in Chicago compared 80 providers affiliated with a professional network to 40 providers unaffiliated with a professional network and 30 providers affiliated with a provider-led association (Bromer et al., 2009). The study found that providers affiliated with a staffed professional network had significantly higher global quality scores as measured by the FDCRS, even when controlling for characteristics associated with quality including provider education, age of youngest child in care, and

household income. The study found significantly higher scores among providers (1) affiliated with a professional network that had a trained coordinator, (2) in networks that formally assessed the quality of family child care homes during visits, (3) in networks that conducted visits to family child care homes at least ten times during a six-month period, and (4) in networks that offered provider training or education at the network site.

- **Respondents believed that partnerships increased the quality of ECE services for children (24 studies).**

The finding was reported by 24 studies (Boressoff, 2012; Bromer, Weaver, and Korfmacher, 2013; Buell et al., 2002; Corso, 2000; Fagnoni, 1999; Forry et al., 2011; Gilliam, 2008; Jacobson, 1999; Johnson-Staub and Schmit, 2012; Kolben and Paprocki, 2001; Mead, 2009; Paulsell et al., 2002; Paulsell et al., 2006; Rodgers-Rhyme and Wright, 2003; Rohacek, 2001; Schilder et al., 2009; Schulman, Blank, and Ewen, 1999; Schumacher et al., 2003a; U.S. GAO, 2004; Whitebook et al., 2008). Nine studies reported that partnerships led to enriched learning environments because partners had more access to equipment (such as learning centers), materials (such as developmentally appropriate learning activities), and supplies (such as toys and books) (Bromer et al., 2013; Buell et al., 2002; Ceglowski, 2006; Johnson-Staub and Schmit, 2012; Paulsell et al., 2002; Paulsell et al., 2006; Schilder et al., 2003; Schilder et al., 2009; U.S. GAO, 2004). Providers also had access to new ideas for activities and ways to structure the day and learned new information about child development (Bromer et al., 2013; Paulsell et al., 2006). Six studies also reported that through partnerships, child care providers had access to curriculum materials and support for implementing curricula (Boressoff, 2012; Mead, 2009; Rohacek, 2001; Schilder et al., 2003; Schilder et al., 2009; The Child Care Partnership Project, 1998).

- **Respondents reported that ECE partnerships enhanced the quality of care for *all* children in the settings, including children not eligible for and enrolled in partnership-funded slots (11 studies).**

This finding was reported in 11 studies (Boressoff, 2012; Buell et al. 2001; Ceglowski, 2006; Del Grosso et al., 2011; Ontai et al., 2002; Paulsell et al., 2002; Pregibon et al., 2011; Rohacek, 2001; Rosenkoetter, 1999; Schilder et al., 2003; Schilder et al., 2009; The Child Care Partnership Project, 1998). In a study of ECE partnerships across the nation, one center noted that this happened through several avenues: (1) extending training funded by the partnership to all teaching staff, not just teachers in partnership classrooms; (2) offering comprehensive services funded through the partnership to all children, not just those in partnership slots; and (3) using existing resources to enhance non-partnership classrooms as they are freed up by the use of partnership funds to enhance partnership classrooms (Schilder et al., 2003). Other studies echoed these themes. For example, a study of an Early Head Start program partnering with child care centers and family child care providers attributed the extension of training to all providers as a means to enhancing the quality of care for all children. The study described how monthly trainings offered to partnering providers also were open to other community providers free of charge, thus expanding the network of quality child care in the community (Buell et al., 2001). Likewise, a study of Georgia's universal prekindergarten program partnering with child care providers noted a

similar shifting of resources made possible by partnership funds. In particular, one child care center reported that prekindergarten funding made available through the partnership enabled the center to shift resources to the classrooms serving infants and toddlers (The Child Care Partnership Project, 1998).

- **Other findings**

One MCGD study of Head Start–child care partnerships in Ohio found that child care centers in partnership with Head Start were more likely to use a structured classroom curriculum, to provide screening and referrals to children and families, and to use standardized classroom and child assessment tools. In the study, partner centers were more likely to receive guidance from the center director and speak with an administrator about literacy-rich curriculum strategies and the relationship between children’s developmental needs and the curriculum and to discuss child progress with families (Schilder et al., 2005).

Another study found differences in classroom quality associated with variations in types of interagency collaborations. The interagency collaborations included partnerships between Head Start and child care providers, state preschool programs and child care providers, and state preschool programs with Head Start programs and child care providers in New York State and the Commonwealth of Virginia (Selden et al., 2006). The study found that classroom quality, as measured by the ECERS, was significantly higher in settings supported by collaborative relationships among state preschool, Head Start, and child care providers, compared with settings supported by collaborative relationships between state preschool and child care and settings supported by Head Start and child care.

In addition, one study reported on the potential of a partnership between Head Start and a special education preschool program to more fully integrate children with disabilities into the Head Start program. Specifically, the study found that the use of inclusion practices in two classrooms (observations of both the lead teacher and assistant teacher) as measured by the Head Start Best Practice Observation Checklist improved from baseline to the end of the year (Bromer, 1999).

B. Staff working in ECE partnerships might have had increased staff credentials, knowledge, and access to professional development

By creating opportunities for joint training, shared expertise, and accreditation support, partnerships have the potential to better equip the staff who serve children and families.

- **Child care providers partnering with Head Start, Early Head Start, or a state prekindergarten program were more likely to participate in professional development, have higher levels of education or credentialing, and receive specialized training (4 studies).**

The four studies that measured staff credentials, knowledge, and development found that providers partnering with a Head Start, Early Head Start, or state prekindergarten program were more likely to participate in professional development and specialized training. Specifically, Schilder et al. (2009) surveyed 135 family child care providers (50 partnership, 85 comparison) to measure family child care quality and found that family

child care providers partnering with Head Start were more likely to participate in professional development. In an earlier study, Schilder et al. (2005) found that partnership was a strong, statistically significant predictor of additional training and professional development opportunities. A study of a representative sample of licensed child care centers in California found that teachers in centers that partnered with Head Start or the state department of education had higher levels of education and were more likely to be trained to work with dual-language learners and/or special-needs children (Whitebook et al., 2007). A descriptive study of child care quality and characteristics of the child care work force in Nebraska surveyed 508 regulated providers receiving subsidies and found that staff at child care centers that partnered with Early Head Start programs completed more training than their Nebraska counterparts (Edwards et al., 2002). They also participated in more training for college credit, training for credit towards a child development associate (CDA) credential, and curriculum training than their Nebraska child care counterparts.

- **Respondents reported improved teaching staff credentials, access to professional development, and knowledge of child development as perceived ECE partnership benefits (13 studies).**

Seven studies (including two that reported this information from the child care provider perspective) reported that through partnerships, child care centers had teachers with higher credentials because the providers hired new teachers with higher credentials or the partnerships provided support for existing teachers to increase their credentials (Buell et al., 2002; Ceglowski, 2006; Fagnoni, 1999; Marietta and Marietta, 2013a; Marietta and Marietta, 2013b; U.S. GAO, 2004; Whitebook et al., 2008). In addition, seven studies (including two that reported this information from the child care provider perspective) cited the benefit of enhanced access to professional development for teaching staff (Marietta and Marietta, 2013a; Marietta and Marietta, 2013b; Ontai et al., 2002; Paulsell et al., 2002; Rohacek, 2001; Rosenkoetter, 1999; Schilder et al., 2003). In one study, family child care providers partnering with Early Head Start said the partnership increased their expertise in infant and toddler care and enhanced their knowledge of working with low-income families (Buell et al., 2002). Two studies of state preschool programs reported that through partnerships, child care providers were able to offer higher pay to teaching staff (Marietta and Marietta, 2013b; Whitebook et al., 2008).

C. Families served in partnerships might have had increased access to services that met their child care needs and preferences

According to respondents, partnerships created more access to services and the potential for providers who did not offer services beyond direct ECE to access comprehensive services provided by a partner.

- **Respondents cited increased access to ECE services as a benefit of partnerships (16 studies).**

Of the 16 studies reporting this finding, 10 described how public schools were able to more quickly scale-up services to more families and in more locations through state preschool

programs' partnerships with child care providers and Head Start programs (Barnett et al., 2013; Boressoff, 2012; Jacobson, 1999; Marietta and Marietta, 2013b; Mead, 2009; Schulman et al., 1999; The Child Care Partnership Project, 1998; U.S. GAO, 2004; Whitebook et al., 2008; Winning Beginning NY, 2007). This expansion would have been more difficult or slower if the public schools had to rely on school-based classrooms alone because schools lacked space. Rather, they were able to build on the communities' existing infrastructure. Similarly, three studies reported that partnerships afforded Head Start and Early Head Start programs the ability to serve more families in center-based programs (Paulsell et al., 2002; Paulsell et al., 2003; Rohacek, 2001). In addition, by combining resources, six studies reported that partnerships enabled programs to serve more families or children for more hours and more days per year than they could if they kept funding streams separate (Boressoff, 2012; Colvard and Schmit, 2012; Fagnoni, 1999; Jacobson, 1999; U.S. GAO, 2004; Winning Beginning NY, 2007).

- **Partnerships enhanced providers' ability to provide comprehensive services (2 studies). Respondents reported the same as a perceived benefit (9 studies).**

The two studies that measured comprehensive service provision—one of family child care partnering with Head Start and another of child care centers partnering with state prekindergarten programs or Head Start—suggested that partnerships enhance providers' ability to provide comprehensive services. Schilder et al. (2009) found that family child care providers partnering with Head Start were more likely to provide comprehensive services. Another study that surveyed 20 ECE providers in New York State and the Commonwealth of Virginia found that for child care centers, engaging in a collaboration that brings in preschool and/or Head Start funding provided centers with additional services, such as an on-site nurse; a full-time family worker to provide parent education and conduct home visits; and additional medical, social, and mental health services for participating children and families (Selden et al., 2006).

In nine studies, respondents reported that partnerships increased families' access to other services, such as home visits, family support, developmental assessments, health and mental health screening services, and nutrition services (California Head Start-State Collaboration Office, 2000; Ceglowski, 2006; Corso, 2000; Johnson-Staub and Schmit, 2012; Rosenkoetter, 1999; Schilder et al., 2003; Schulman et al., 1999; The Child Care Partnership Project, 1998; Weiner, 2006).

- **Respondents felt that partnerships improved programs' ability to meet families' child care needs and preferences (15 studies).**

In 15 studies, respondents—including program staff or administrators in most studies and parents in two studies—felt that partnerships improved programs' ability to meet families' child care needs and preferences. By offering full-day, full-year care, 12 studies described partnerships as a way to meet low-income families' child care needs (Boressoff, 2012; California Head Start-State Collaboration Office, 2000; Ceglowski, 2006; Del Grosso et al., 2011; Fagnoni, 1999; Jacobson, 1999; Ontai et al., 2002; Pregibon et al., 2011; Rohacek, 2001; Smith et al., 2004; U.S. GAO, 2004; Winning Beginning NY, 2007). Four studies—two about pilot partnerships between Early Head Start and family child care and

two about prekindergarten partnerships with child care in New Jersey—reported that child care providers also tended to reflect the ethnic and linguistic diversity of the families that partners were seeking to serve (Del Grosso et al., 2011; Marietta and Marietta, 2013a; Mead, 2009; Pregibon et al., 2011). Two studies of a demonstration project of partnerships between Early Head Start and family child care described the benefit of meeting families’ desires for children to be in mixed-age groups or the same settings as siblings (Del Grosso et al., 2011; Pregibon et al., 2011).

D. Partnerships might have facilitated the exchange of ideas and expertise across organizations and led to more likely involvement in future collaboration efforts

Involvement in partnerships was described by key informants as having benefits for the partners involved, including an exchange of ideas and expertise across partners and encouraging partners to get involved in future collaborative efforts.

- **Respondents reported ECE partnerships afforded partners an opportunity to share expertise and ideas across programs (9 studies).**

This finding was reported by respondents in nine studies (Barnett et al., 2013; Buell et al., 2002; California Head-Start-State Collaboration Office, 2000; Kolben and Paprocki, 2001; Mead, 2009; Ontai et al., 2002; Rodgers-Rhyme and Wright, 2003; Rosenkoetter, 1999; Schilder et al., 2003; The Child Care Partnership Project, 1998). For example, in a study of family child care providers partnering with Early Head Start, family child care providers described how the Early Head Start colleagues and mentors provided through the partnership helped them navigate difficult situations, better work with low-income families, and reduce their feelings of isolation (Buell et al., 2002). Four of these nine studies specifically reported that partnerships afforded communities an opportunity to build on child care providers’ early childhood expertise, their positive reputations in the community, and their access to eligible families (Barnett et al., 2013; California Head-Start-State Collaboration Office, 2000; Mead, 2009; Ontai et al., 2002). For example, one Early Head Start program cited the benefit of partnering with child care providers who had more experience serving infants and toddlers (Ontai et al., 2002).

- **Respondents perceived that partnerships enabled each party to better understand the services and programs offered by the other, thus facilitating future collaborations (6 studies).**

Six studies reported this finding (California Head Start-State Collaboration Office, 2000; Del Grosso et al., 2011; Paulsell et al., 2002; Pregibon et al., 2011; Rodgers-Rhyme and Wright, 2003; Sullivan, 2012). For example, Early Head Start programs in one study conducted across 26 states and DC reported that partnering with child care led them to develop new relationships with community service providers such as community colleges, training agencies, and child care resource and referral agencies; after establishing the partnership with child care, the Early Head Start programs continued to find ways to work more closely with these community service providers (Paulsell et al., 2002).

E. Limited evidence existed on whether partnerships were able to improve child outcomes

The potential benefits cited in this chapter could ultimately lead to improved outcomes for children. The current body of research, however, provides limited and inconclusive evidence of this potential outcome.

- **Respondents reported that partnerships reduced the number of transitions a child would need to make in a day.**

In four studies, respondents reported that part-day state preschool and Head Start programs co-located with child care providers made it unnecessary for children to transition between part-day preschool programs and wraparound care in a separate setting (Ceglowski, 2006; Jacobson, 1999; Rodgers-Rhyme and Wright, 2003; Smith et al., 2004). However, depending on the model adopted, some children who were enrolled in these programs still experienced transitions. For example, in some partnerships, one teacher taught the preschool or Head Start part of the day, and a separate teacher led the class the other part of the day (Kolben and Paprocki, 2001; Schulman et al., 1999).

- **Other findings**

The two studies that measured child outcomes in the context of partnerships found that partnerships enhanced child outcomes. First, the MCGD of Head Start–child care partnerships in Ohio measured child outcomes using the Peabody Picture Vocabulary Test IV (receptive vocabulary), the Phonological Awareness Literacy Screening for Preschool (phonological awareness), and the PLS-4 Auditory Comprehension Subtest (auditory comprehension) (Schilder et al., 2009). The study found that, on average, children at centers partnering with Head Start were more likely than children at comparison centers to make significant improvements on the language and literacy subscales for phonological awareness and make improvements at a trend level ($p>0.10$) on uppercase letter recognition and rhyming awareness subscales. However, children at partnering centers were no more likely to improve on other language and literacy assessments. Second, the descriptive outcomes study of a partnership between Head Start and a special education preschool program to integrate children with disabilities more fully into the Head Start program found that by the end of the eight-month project, all 13 of the children with disabilities had been enabled to participate in classroom activities through specialized equipment or adaptations, and 10 of them attended Head Start full-time (Bromer, 1999).

Respondents in two other studies reported on their perceptions that child outcomes improved through partnerships. Specifically, teachers in a study describing blended Head Start and early intervention services reported that children accomplished social objectives more quickly in blended classrooms despite receiving less one-on-one therapy (Rosenkoetter, 1999). Parents and providers participating in a UK pilot program to provide extended hours of care to a part-time universal early education program reported several benefits to children’s development, including improved social skills and greater stimulation for children whose home environments would offer little (Smith et al., 2004).

V. BARRIERS TO FORMING AND SUSTAINING ECE PARTNERSHIPS

Although studies reported on a range of potential benefits of ECE partnerships (as described in Chapter IV), it is clear from the literature that developing and operating ECE partnerships is difficult work and requires careful planning to overcome challenges. The types of challenges states, communities, and organizations undertaking this work can anticipate range from regulatory issues across funding streams and programs to issues related to the functioning of the collaborative partnership. (See key findings box.) Awareness of the potential challenges allows policymakers and practitioners an opportunity to plan for and address issues before they threaten the success and sustainability of the partnerships.

Studies described challenges to ECE partnerships related to (1) poor collaboration quality, (2) regulatory differences across funding streams, (3) discrepancies in standards, (4) insufficient funding, (5) discrepancies in teacher pay and issues with teacher turnover, and (6) uncertain funding. The 41 studies reporting on barriers included 12 focused primarily on partnerships between Head Start and Early Head Start programs and child care providers; 24 focused on partnerships between state preschool programs and child care providers and Head Start programs; and 5 focused on other types of ECE partnerships (Table C.4 in Appendix C).

Key Findings

Common barriers to ECE partnerships described in the literature included:

- Poor collaboration quality
- Regulatory differences across funding streams
- Discrepancies in standards (Head Start Program Performance Standards, state preschool standards, and child care licensing regulations) across settings
- Insufficient funding
- Discrepancies in teacher pay and issues with teacher turnover across settings
- Uncertain funding

A. Poor collaboration quality resulted from differences among partners' philosophies and missions, competition and turf issues, misunderstandings among partners' about roles and responsibilities, and a lack of trust and respect among partners

Poor collaboration quality resulted from differences among partners' philosophies and missions, competition and turf issues, misunderstandings among partners' about roles and responsibilities, and a lack of trust and respect among partners. Twenty-three studies discussed issues related to poor quality of collaboration among partners. Eleven studies attributed these issues to differences in the partners' culture, philosophies, or missions (Bromer, 1999; Buell et al., 2000; Buell et al., 2001; California Head Start-State Collaboration Office, 2000; Campbell, 2002; Ceglowski, 2006; Corso, 2000; Donovan, 2008; Paulsell et al., 2002; Rohacek, 2001; Stebbins and Scott, 2007). For example, in a study of an Early Head Start program in Delaware partnering with center-based and family child care providers, a cultural difference as simple as professional jargon posed barriers to communication, requiring partners to establish a shared understanding of phrases such as "program standards" and "policy council" (Buell et al., 2001). A study of Early

Head Start partnerships with child care across 26 states and DC found that philosophical differences between partners sometimes inhibited partnerships' efforts to improve quality and comply with performance standards. Specifically, some for-profit child care partners hesitated to implement changes that would increase costs. When relationship building and dialogue could not resolve differences, some Early Head Start programs chose to terminate partnerships with for-profit child care providers who did not share their goals and sought new partners with similar philosophies, such as nonprofit agencies (Paulsell et al., 2002). In another study of three Head Start programs in Minnesota that partnered with child care providers to offer full-day services, family child care providers participating in focus groups indicated their difficulty adapting to certain aspects of Head Start practices. Talking about changes made to her curriculum and daily routine in order to partner with Head Start, one family child care provider said, "I had to change everything; it was hard for me to change" (Ceglowski, 2006).

Respondents from seven studies attributed poor collaboration quality to competition and turf issues (Del Grosso et al., 2011; Fagnoni, 1999; Jacobson, 1999; Lekies et al., 2001; Marietta and Marietta, 2013b; Pregibon et al., 2011; Smith et al., 2004). For example, in a study of pilot partnerships between Early Head Start grantees and family child care agencies, staff at some organizations saw their partners as competition and hesitated to share information that might give them a competitive advantage. Specifically, some Early Head Start grantees feared that child care providers could compete as Early Head Start grantees if they went up for recompetition. Meanwhile, some family child care providers saw Early Head Start grantees as a potential competitor that might recruit families and children, especially if the grantee also operated child care or Head Start centers in addition to partnering with family child care (Del Grosso et al., 2011). In a study of collaboration between public schools and child care providers in New Jersey, some providers saw the school districts as a business threat competing for families' enrollment (Jacobson, 1999).

Five studies attributed collaboration issues to a misunderstanding about the services offered by the partner (Campbell, 2002; Ceglowski, 2006; Corso, 2000; Fagnoni, 1999; Paprocki and Kolben, 2002). Fewer studies (four) cited a perceived lack of respect, trust, or understanding among partners as affecting collaboration quality (Bromer, 1999; Jacobson, 1999; Paprocki and Kolben, 2002; Whitebook et al., 2008). For example, a study of a partnership between Head Start and a special education preschool program to more fully integrate children with disabilities into the Head Start program reported that the collaboration may have been hindered by special education staff undervaluing the Head Start teachers' opinions about the children (Bromer, 1999).

Four studies attributed these issues to inadequate avenues for ongoing communication across partnering organizations and across staff (Corso, 2000; Forry et al., 2011; Paprocki and Kolben, 2002; Rosenkoetter, 1999). For example, in a study of 20 early intervention providers from 17 states collaborating with Early Head Start, respondents reported that a lack of communication posed a barrier to their collaborative efforts, specifically through a failure to clearly understand the services provided by each partner and clearly designate roles and responsibilities (Corso, 2000). Another study examined the Community Connections preschool program in Illinois, in which state prekindergarten (Illinois "Preschool for All") classrooms provided half-day sessions four days per week for 3- and 4-year-old children coming from home-based child care. That study found that some prekindergarten teachers reported difficulties maintaining communication

with parents because the home-based providers were the parents' primary point of contact (Forry et al., 2011).

B. Regulatory differences across funding streams required ECE partners to navigate sometimes contradictory rules and policies

Twenty studies described regulatory differences among ECE partners involved in partnerships as a challenge (Boressoff, 2012; Buell et al., 2000; Buell et al., 2001; California Head Start-State Collaboration Office, 2000; Campbell, 2002; Ceglowski, 2006; Del Grosso et al., 2011; Fagnoni, 1999; Kiron, 2003; Kolben and Paprocki, 2001; Paulsell et al., 2002; Pregibon et al., 2011; Rohacek, 2001; Schilder et al., 2009; Schumacher et al., 2001; Stebbins and Scott, 2007; Summers et al., 2001; Wat and Gayl, 2009; Whitebook et al., 2008).

- **ECE partners cited regulatory issues such as child care subsidy eligibility and redetermination rules and co-payments (5 studies).**

Five studies discussed specific regulatory issues. For example, four studies described child care subsidy eligibility and redetermination rules as a challenge to maintaining consistent funding and enrollment (Buell et al., 2000; California Head Start-State Collaboration Office, 2000; Campbell, 2002; Fagnoni, 1999). Two studies discussed an issue related to charging families copayments (Campbell, 2002; Kiron, 2003). Head Start services must be provided at no charge to families; publicly funded child care may be required to collect family copayments.

- **Meeting different reporting requirements across ECE partners and funding streams led to administrative burdens (6 studies).**

Six studies described the administrative burdens—such as paperwork and budgeting—associated with meeting different reporting requirements across programs and funding streams (Bromer, 2011; California Head Start-State Collaboration Office, 2000; Ceglowski, 2006; Rohacek, 2001; U.S. GAO, 2004; Whitebook et al., 2008). For example, family child care network coordinators in one study reported that when working with family child care providers who partner with Early Head Start, their greatest challenge was the assistance providers needed to meet the HSPPS paperwork and administrative requirements. Coordinators reported that their home visits with providers often focused on helping providers navigate these challenges rather than helping them work with children and families (Bromer, 2011). A study of Head Start grantees in California partnering with state preschool programs and child care to provide full-day/full-year services cited the difficulty of tracking different funding streams and correctly allocating costs (California Head Start-State Collaboration Office, 2000).

C. Discrepancies in standards required that ECE partnerships invest significant resources to make sure all partners met the most stringent standards

Differences in the HSPPS, state preschool standards, and child care licensing regulations were identified as a barrier to partnerships by 15 studies (Buell et al., 2001; California Head Start-State Collaboration Office, 2000; Del Grosso et al., 2011; Hustedt and Barnett, 2011; Kiron,

2003; Paulsell et al., 2002; Pregibon et al., 2011; Rohacek, 2001; Sandfort and Selden, 2001; Schumacher et al., 2001; Schumacher et al., 2003b; Smith, 2002; Stebbins and Scott, 2007; Winning Beginning NY, 2007). Meeting the more stringent HSPPS required partnerships to devote significant resources to improvements to the child care settings and investments in training and education for child care teachers and family child care providers (Del Grosso et al., 2011; Kiron, 2003; Pregibon et al., 2011; Rohacek, 2001).

- **Differences in child-adult ratio requirements and group size limits between HSPPS and child care licensing regulations challenged partnership formation (6 studies).**

Six studies described differences in child-adult ratio requirements and group size limits between the HSPPS and child care licensing regulations as a challenge to forming partnerships (Buell et al., 2001; California Head Start-State Collaboration Office, 2000; Del Grosso et al., 2011; Pregibon et al., 2011; Sandfort and Selden, 2001; Schumacher et al., 2003b).

- **Differences in teacher credential requirements posed a significant barrier to forming and sustaining ECE partnerships (7 studies).**

State preschool regulations tended to impose more stringent requirements for teacher credentials than the HSPPS, and the HSPPS imposed more stringent requirements than state child care licensing regulations. Six studies reported that these differences made it challenging for partnerships to find qualified staff and expensive to support existing staff in earning credentials (California Head Start-State Collaboration Office, 2000; Hustedt and Barnett, 2011; Schumacher et al., 2003b; Smith, 2002; Stebbins and Scott, 2007; Winning Beginning NY, 2007). This issue was complicated when staff turnover required centers to hire new staff that needed support to earn credentials (Paulsell et al., 2002).

D. Issues related to insufficient funding, including discrepancies in funding levels across partners, and inconsistent funding made sustainability of ECE partnerships difficult

Fifteen studies described issues related to funding that made implementation and sustainability of the partnerships difficult. The issues included insufficient funding levels to support implementation of services that met required standards, discrepancies in teacher pay across partners, and uncertain funding levels.

- **Insufficient funding—resulting from child care subsidies set at below-market rates, underfunded state preschool programs, the added costs of managing programs across partners and, in some cases, providing comprehensive services—challenged partnerships (11 studies).**

This finding was reported by 11 studies (California Head Start-State Collaboration Office, 2000; Corso, 2000; Fagnoni, 1999; Jacobson, 1999; Kiron, 2003; Kolben and Paprocki, 2001; Mead, 2009; Paulsell et al., 2002; Schumacher et al., 2001; U.S. GAO, 2004; Winning Beginning NY, 2007). In a study of Early Head Start partnerships with child care

across 26 states and DC, focus groups and interviews with Early Head Start staff and child care providers found that providers were unable to meet HSPPS child-adult ratio and group size requirements without funding from the Early Head Start program to cover the associated costs (Paulsell et al., 2002). In another study, 20 early intervention providers from 17 states interviewed about their collaboration with Early Head Start reported that the lack of reimbursement for collaborative planning posed a barrier to their efforts.

- **State preschool–child care partnerships were challenged by discrepancies in teacher pay between child care providers and district-run state preschool classrooms (9 studies).**

Five studies of state preschool–child care partnerships cited differences in pay between teachers in public schools versus those in child care settings as leading to teacher turnover (Jacobson, 1999; Kolben and Paprocki, 2001; Rodgers-Rhyme and Wright, 2003; The Child Care Partnership Project, 1998; Winning Beginning NY, 2007). Teaching staff in child care settings were required to have the same credentials and deliver the same services as public school staff, but for lower pay (Hustedt and Barnett, 2011). Two studies reported that this disparity led to another challenge: once staff earned credentials, they left child care settings for public schools or Head Start programs (Buell et al., 2000; The Child Care Partnership Project, 1998; Winning Beginning NY, 2007). To address this issue, state preschool programs partnering with child care or Head Start in some states (11 as of 2009–2010) required that all lead teachers (if they met credential requirements) be paid on the public school salary scale (Hustedt and Barnett, 2011; Marietta and Marietta, 2013b; Whitebook et al., 2008).

- **Uncertain funding, most often resulting from CCDF eligibility and absentee policies, posed a challenge for ECE partnerships (4 studies).**

Four studies cited uncertain funding as a challenge (Donovan, 2008; Hicks et al., 1999; Kiron, 2003; Rodgers-Rhyme and Wright, 2003). These studies discussed how state CCDF absentee policies caused budget challenges when providers were salaried, since providers only received payments for children in attendance. Likewise, losses in families' eligibility for child care subsidies caused funding fluctuations for partnerships. Specifically, when families dropped out of care because they were no longer eligible for child care subsidies, providers could be left with an unfilled opening. Alternatively, providers could decide to allow the family to continue to enroll without guaranteed payment. Funding uncertainties also occurred when partners had difficulty determining an accurate per-child cost that accounted for all the resources necessary to meet standards.

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VI. FACTORS THAT FACILITATE ECE PARTNERSHIPS

Through the literature review, we sought to gain information on the promising models or features of ECE partnerships that improve quality and support child development and family well-being. As presented in Chapter IV, the existing literature lacked causal evidence to address this topic sufficiently. However, 36 studies reported on important operational lessons about how to implement partnerships. (See key finding box). These lessons reflect what study respondents reported as being important features or factors to consider when planning and implementing ECE partnerships. Although the efficacy of these factors to produce successful outcomes has not been tested, the lessons provide some guidance for policymakers and practitioners on the features they might want to consider when designing and implementing ECE partnerships. These factors may help ECE partnerships address the range of barriers discussed in Chapter V. They also serve as factors that future research should target to better understand their role in the success of ECE partnerships.

According to respondents, the following 12 factors helped facilitate ECE partnerships: (1) committed leadership, (2) strong relationships and trust among program administrators, (3) a common vision and goals, (4) joint trainings sessions for staff, (5) a plan for ongoing communication, (6) formal partnership agreements, (7) strong relationships and trust among teaching and service delivery staff, (8) assigned staff to oversee the partnership, (9) a structured planning process, (10) a funding plan, (11) maintaining stability among partners, and (12) a process for exploring alignment issues related to regulations, standards, and policies. Although more research is needed to determine whether these factors are associated with program outcomes, the existing research suggests that they might be important for policymakers and practitioners to consider when designing and operating partnerships. The studies included 12 focused primarily on partnerships between Head Start and Early Head Start programs and child care providers; 13 focused on state preschool programs partnering with child care providers and/or Head Start programs; and 11 focused on other types of partnerships (Table C.5 in Appendix C).

Key Findings

Studies reported that the following factors helped facilitate ECE partnerships:

- Committed leadership
- Strong relationships and trust among program administrators
- Common vision and goals
- Joint training sessions for staff
- A plan for ongoing communication
- Formal partnership agreements
- Strong relationships and trust among teaching and service delivery staff
- Assigned staff to oversee the partnership
- A structured planning process
- A funding plan
- Maintaining stability among partners
- A process for exploring alignment issues related to regulations, standards, and policies

A. Committed leadership was essential for establishing and maintaining strong ECE partnerships (15 studies)

Fifteen studies described strong leadership as essential for establishing and maintaining strong partnerships (Brekken, 2011; Campbell, 2002; Child Care Partnership Project, 1998; Corso, 2000; Donovan, 2008; Gasko and Guthrow, n.d.; Paprocki and Kolben, 2002; Rodgers-Rhyme and Wright, 2003; Rosenkoetter, 1999; Schumacher et al., 2001; Smith et al., 2004; Stebbins and Scott, 2007; Wat and Gayl, 2009; Whitebook et al., 2008; Winning Beginning NY, 2007). Studies described the importance of having strong and committed leadership at the state level (such as leadership from state departments of education and social services, Head Start Collaboration directors, state advisory councils, and the governor's office), local level (such as superintendents, local government officials, CCR&Rs, and local advisory councils and steering committees), as well as the partnership level (such as program administrators and staff). In one study, state-level child care administrators and Head Start Collaboration directors in eight states advised local partnerships not to depend on a single champion but rather on collaborative partners backed by an authority, such as the governor's office (Campbell, 2002).

B. Strong relationships and trust among program administrators were critical at all stages of implementation (13 studies)

The importance of building relationships and trust among program administrators to navigate the design, implementation, and maintenance of partnerships was discussed by 13 studies (California Head-Start State Collaboration Office, 2000; Campbell, 2002; Corso, 2000; Del Grosso et al., 2011; Donovan, 2008; Gasko and Guthrow, n.d.; Paprocki and Kolben, 2002; Perez, 2006; Pregibon et al., 2011; Schilder et al., 2003; Schilder et al., 2009; Summers et al., 2001; Winning Beginning NY, 2007). One study of partnerships between Early Head Start and family child care providers emphasized the importance of establishing these relationships during the planning phase (Del Grosso et al., 2011). Two studies—one about partnerships between preschool and child care and another of partnerships between Early Head Start and family child care—reported that establishing mutual respect was particularly important (Del Grosso et al., 2011; Donovan, 2008). A study of ECE partnerships across the nation noted that strong relationships between partners, including a shared philosophy and vision for the partnership, can foster “a culture of mutual respect and benefits among partners characterized by bilateral decision making, tolerance, flexibility, respect, and equity” (Schilder et al., 2003). A study of partnerships between Head Start and family child care homes in Ohio surveyed family child care providers to examine predictors of partnership benefits and found that “good communication and relationships” predicted benefits to families and family child care providers and was related to literacy-rich classroom environments and quality supervision (Schilder et al., 2009).

C. Establishing a common vision and goals in the early planning phases helped facilitate strong ECE partnerships (9 studies)

Respondents from nine studies reported that establishing a common vision and goals in the early planning phases facilitated strong partnerships (Brekken, 2011; California Head-Start State Collaboration Office, 2000; Corso, 2000; Del Grosso et al., 2011; Gasko and Guthrow, n.d.; Paprocki and Kolben, 2002; Schilder et al., 2005; Schilder et al., 2009; Schumacher et al., 2001). Studies discussed the need to develop a vision that encompasses both the goals of school readiness for children and support for parents' work and training/education needs; however,

these two goals were typically articulated separately, which resulted in programs and funding streams with a principal emphasis on one or the other. One study of pilot partnerships between Early Head Start and family child care recommended using a structured planning process with a neutral consultant to facilitate development and implementation of a joint vision and goals (Del Grosso et al., 2011). A study of 78 child care centers partnering with Head Start in Ohio found that partnerships with well-defined goals and agreements were more likely to report improvements and benefits of the partnership (Schilder et al., 2005). In a later study, the same authors surveyed family child care providers partnering with Head Start to examine predictors of partnership benefits and found that “well-defined agreement and goals” was a significant predictor of composite items of partnership benefits, including both benefits to the families and to the provider (Schilder et al., 2009).

D. Joint training for staff served as an opportunity for partners to leverage each others’ funds and expertise and promote relationships among staff (9 studies)

Nine studies recommended offering joint training for staff across programs (Brekken, 2011; California Head-Start State Collaboration Office, 2000; Corso, 2000; Gasko and Guthrow, n.d.; Rosenkoetter, 1999; Smith et al., 2004; Stebbins and Scott, 2007; Summers et al., 2001; Winning Beginning NY, 2007). Studies indicated that joint training was a way for partners to leverage each other’s funds and expertise and promote relationships between staff. For example, one descriptive outcomes study examined partnerships between 500 Early Head Start programs and their Part C early intervention providers receiving consulting support to foster collaborative and coordinated services. That study highlighted the critical importance of joint training and job-shadowing to foster a common understanding of each partner’s services, systems, and requirements. The study also described how the training could be reinforced by job shadowing where staff spent a day working with staff from another agency to deepen their understanding of their partner’s roles and responsibilities (Brekken, 2011).

E. A plan for ongoing communication among ECE partners served as an avenue for decision-making and addressing collaboration issues (9 studies)

Developing and implementing a plan for ongoing communication among state-, local-, and partnership-level stakeholders was reported to facilitate partnerships in nine studies (Brekken, 2011; California Head Start-State Collaboration Office, 2000; Corso, 2000; Gasko and Guthrow, n.d.; Schilder et al., 2003; Schilder et al., 2005; Schilder et al., 2009; Smith et al., 2004; Winning Beginning NY, 2007). One study explained that the communication plan should include a plan for making decisions that affect the partnership and a process for addressing conflicts (Gasko and Guthrow, n.d).

F. Formal agreements were critical for defining roles, responsibilities, and funding arrangements (8 studies)

Eight studies described the importance of establishing formal agreements (such as memoranda of understanding, interagency agreements, or contracts) between partners that clearly define the roles and responsibilities of each partner, financial arrangements, implementation guidelines, and monitoring and reporting requirements (Amirkhanyan et al., 2012; Corso, 2000; Gasko and

Guthrow, n.d.; Schilder et al., 2003; Schilder et al., 2005; Summers et al., 2001; The Child Care Partnership Project, 1998; Wat and Gayl, 2009). Recognizing that partnerships evolve over time, one study recommended reviewing written agreements annually to identify and make necessary changes (Gasko and Guthrow, n.d.).

G. Building rapport among teaching and service delivery staff paved the way for quality improvements (8 studies)

Studies emphasized the need to build trust and strong relationships among the staff that would be regularly collaborating to deliver services to children and families and ensuring that services met quality standards (reported by eight studies: Bromer, 1999; Bromer and Korfmacher, 2012; Bromer et al., 2009; Bromer et al., 2013; Corso, 2000; Paulsell et al., 2006; Rosenkoetter, 1999; Schilder et al., 2009). One study, emphasizing the importance of the relationships among staff, reported that family child care providers felt differently about their partnership with Head Start depending on their perceived quality of the relationship with the Head Start worker who visited their homes (Schilder et al., 2009). Another study stressed the importance of building rapport and trust between Early Head Start staff delivering on-site coaching and support and the family, friend, and neighbor caregivers before Early Head Start staff made suggestions about changes to caregiving practices (Paulsell et al., 2006).

H. Investing in staff to oversee the ECE partnership helped facilitate implementation and communication among partners (8 studies)

Eight studies recommended investing in personnel to oversee the partnership or establishing a core implementation team. This person or team was responsible for guiding implementation, addressing conflicts and issues, and facilitating communication among partners (Del Grosso et al., 2011; Donovan, 2008; Faddis et al., 2000; Gasko and Guthrow, n.d.; Ontai et al., 2002; Paulsell et al., 2002; Smith et al., 2004; Stebbins and Scott, 2007). In the case of a pilot program to establish partnerships between Early Head Start and family child care, the pilot required the partnership teams to contract with a neutral, third-party child care partnership coordinator who facilitated the partnership by helping partners develop and implement work plans, manage pilot stipends for partnership activities, and monitor progress toward work plan goals (Del Grosso et al., 2011). A study of 18 Head Start family child care demonstration projects across 10 states interviewed caregivers and agency staff and found that the more successful projects hired a family child care coordinator during the planning phase and maintained that position full-time during implementation (Faddis et al., 2000). In two studies, the person designated to serve as a primary contact for the child care providers partnering with Early Head Start also provided on-site coaching and quality improvement support (Paulsell et al., 2002; Ontai et al., 2002).

I. A structured planning process helped facilitate successful collaboration (7 studies)

Respondents from seven studies described the planning phase as a critical step in forming partnerships (Brekken, 2011; Del Grosso et al., 2011; Faddis et al., 2000; Schilder et al., 2003; Smith et al., 2004; Summers et al., 2001; Winning Beginning NY, 2007). A study of ECE partnerships across the nation described several planning activities as critical to laying a partnership's foundation, including establishing a shared understanding of each partner's operations, practices, and regulations; creating a plan to coordinate practices and systems;

clarifying the roles and responsibility of each partner; and preparing and supporting partners' staff to fill their new roles and meet new expectations (Schilder et al., 2003). A study of Head Start family child care demonstration projects in 10 states recommended that Head Start agencies carefully assess the demand for family child care before initiating a partnership; in some cases, agencies that did not do so overestimated the community's need and were unable to fill vacancies in partnering family child care homes (Faddis et al., 2000).

J. A clear plan helped partnerships identify appropriate levels of funding and address funding issues (5 studies)

Five studies emphasized that partnerships required resources and that careful planning was needed to understand existing funding streams, identify new funding sources, establish funding arrangements, and develop contingency plans for when funding sources were lost (such as when families lose child care subsidy eligibility; Kiron, 2003; Paulsell et al., 2003; Rosenkoetter, 1999; Schilder et al., 2003; Schilder et al., 2009).

K. The longer partnerships were in place, the more successful they were (4 studies)

Four studies described partnership duration as an important factor in successful service provision (Ceglowski, 2006; Del Grosso et al., 2011; Pregibon et al., 2011; Schilder et al., 2009). For example, an MCGD study of partnerships between Head Start and child care in Ohio found positive associations between the duration of partnerships and observed quality in child care centers as measured by their ECERS-R total score and ELLCO general environment score, with longer partnerships being associated with higher quality. Duration for these partnerships ranged from 0 to 7 years. It also found positive associations between the duration of the partnership and child outcomes (including improvements in receptive vocabulary, receptive language, and many of the aspects of phonological awareness) (Schilder et al., 2009). The study compared quality of care and child outcomes for center-based and family child care providers that partnered with Head Start to others that did not. Another study of three Head Start programs in Minnesota that partnered with child care centers and family child care providers to offer full-day services conducted focus groups with Head Start administrators and staff as well as parents and partnering child care programs (Ceglowski, 2006). This study found long-established partnerships to be a key feature of successful full-day service provision.

L. A process was needed for exploring alignment issues related to regulations, standards, and policies (3 studies)

Three studies recommended using the planning phase to explore alignment issues in regulations, standards, and policies with stakeholders at the local, state, regional, and national levels (Del Grosso et al., 2011; Schilder et al., 2003; Schilder et al., 2009). One study of pilot partnerships between Early Head Start and family child care providers also recommended taking advantage of states' existing flexibility to rework child care subsidy and redetermination policies to facilitate partnerships with Head Start (Del Grosso et al., 2011).

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VII. GAPS IN THE KNOWLEDGE BASE AND KEY QUESTIONS FOR FUTURE RESEARCH

In this final chapter, we describe the primary gaps in the literature on Early Head Start-child care partnerships identified by our review. We also suggest a set of future directions for future research of Early Head Start-child care partnerships. The chapter concludes with a discussion of next steps for the Study of Early Head Start-Child Care Partnerships, including steps for drawing on the literature review to inform a measurement framework and the study design.

Our review of the literature indicates that there are significant gaps in the research on Early Head Start-child care partnerships. We identified four key research questions, detailed in this chapter, that are inadequately answered by the existing literature. (See key findings box below.) These questions relate to partnership models specific to ECE services for infants, toddlers, and their families; partnership models implemented with home-based child care providers; child care providers' perspectives on the partnerships; and the effectiveness of partnerships in improving outcomes for children, families, providers, and communities.

Key Findings

We identified four gaps in the knowledge base related to Early Head Start-child care partnerships.

1. Research on the characteristics and components of Early Head Start-child care partnerships
2. Research on partnerships with home-based child care providers
3. Child care providers' perspectives on the partnerships
4. Effectiveness of partnerships in improving outcomes for children, families, providers, and communities

1. What Early Head Start-child care partnership models exist? What are the components and characteristics of partnerships serving infants, toddlers, and their families?

Of the 78 studies included in the review, fewer than one-quarter (23 studies) included information about partnerships serving infants and toddlers and their families. Only 13 percent (10 studies) focused specifically on Early Head Start-child care partnerships. The studies of Early Head Start-child care partnerships included studies of partnerships conducted in multiple states, such as the Early Head Start for Family Child Care Project, as well as partnerships existing in specific states (for example, in Delaware and Nebraska). These studies provide important information for the field about the unique characteristics and components of partnerships between Early Head Start programs and child care providers. What is evident from the literature is that existing partnership models can vary on many elements. They can include various combinations of elements, such as approaches to partnership development; the types and level of specification of partnership agreements; and approaches to meeting the HSPPS, including approaches to supporting quality in ECE settings, preparing staff to support infant and toddler development, and delivering comprehensive services to families. In addition, these models exist in the context of states and communities with varying systems and resources for supporting partnerships and the infant-toddler workforce.

More research is needed on Early Head Start-child care partnerships to better understand the models commonly implemented in the field and the models or components of models that show promise for supporting positive outcomes. In addition, more information is needed about the

resources required to implement these models, including staff time among program administrators and infant-toddler service providers, funding, and other supports from systems-level partners. Future studies might explore the organizational and contextual factors that help facilitate partnerships. These studies might also explore state and local systems and regulations that affect the development and implementation of Early Head Start-child care partnerships. For example, states vary in the training and credentials available to infant-toddler service providers and in the availability and design of QRIS and quality improvement supports. States and localities also vary in the licensing standards for child-adult ratios and group size in infant and toddler classrooms. As a result, the alignment between Early Head Start and child care licensing standards and, in some states, QRIS varies, making partnerships more challenging to develop and sustain.

2. How are ECE partnerships implemented with home-based child care providers? What are the characteristics and components of these partnerships?

Almost 40 percent of studies (30 studies) included information about partnerships with home-based child care providers (including family child care providers and family, friend, and neighbor caregivers). All but one of the studies of Early Head Start-child care partnerships included information about partnerships with family child care providers (9 studies). A small number of the studies of state preschool-child care partnerships included information about partnerships with family child care providers (9 studies). Another group of studies focused on supporting quality improvement among family child care providers through family child care networks (4 studies). The other studies in this category included a range of initiatives supporting partnerships with family, friend, and neighbor caregivers and Early Head Start and family child care providers and early intervention services.

An estimated 40 percent of all children under age 5 receive care in home-based child care settings (Johnson, 2005), and it is the most common form of child care for infants and toddlers serving an estimated 72 percent of all children ages birth to 2 years who are cared for by someone other than a parent (Johnson, 2005; Brandon, 2005; Paulsell, Porter, and Kirby, 2010). Home-based child care also represents 20 to 25 percent of the child care arrangements of families of infants and toddlers who use child care subsidies (Office of Child Care, 2014). Given the prevalence of infants and toddlers from low-income households cared for in home-based settings, one might expect partnerships between Early Head Start and family child care homes to be prevalent under the Early Head Start-child care partnerships initiative. As a result, more research is needed on the ways partnerships are implemented in these settings, including the strengths and needs of these providers, the quality improvement supports available to them, and the most promising strategies for ensuring these settings meet the HSPPS.

3. How do child care providers involved in ECE partnerships perceive them? From their perspective, what activities are involved in forming and operating partnerships? What do they describe as the benefits and barriers of partnerships?

Although many studies included child care teaching staff (27 studies) and program administrators (29 studies) among the respondents, studies primarily reported findings from the perspective of a lead partner—in most cases, state preschool programs or Head Start and Early Head Start programs. For example, studies described how lead partners recruited child care partners and supported quality in these settings to ensure they met standards. Very few studies

described in detail child care providers' motivations for forming partnerships or their perceptions of the quality and usefulness of the supports they received.

Despite this knowledge gap, the literature suggests that it is crucial to understand the perspective of child care providers, including their motivations for establishing partnerships, their experiences with the partnerships, their perspectives on factors that facilitate partnerships, and partnerships' successes and challenges. The child care provider perspective can help clarify how to make partnerships more attractive to providers, how to structure the partnerships to better address their needs, ultimately, and why partnerships succeed or not. Future research should systematically collect information from child care providers through surveys and interviews to help inform this topic.

4. Are Early Head Start-child care partnerships effective in improving outcomes for children, families, Early Head Start programs, and child care providers?

Little is known about the effectiveness of ECE partnerships. Insufficient rigorous research has been done to assess whether ECE partnerships actually improve program quality or child outcomes. The review included 12 descriptive outcomes studies and 5 matched comparison group design studies. We found some suggestive evidence that partnerships might improve the quality of care, the availability of comprehensive services for families, staff access to professional development supports, and potentially children's language and literacy outcomes, but none of the impact studies examined Early Head Start-child care partnerships.

There is a need for further evaluation, including descriptive outcome studies designed to assess whether partnerships are on track to meet short- and long-term outcomes for partners, families, and communities. These studies might build on the existing research on program quality and use observational measures to track changes in specific caregiver practices or improvements in the quality of the care environment. They could track changes over time in the skills, knowledge, and credentials of infant and toddler service providers to provide insight into the potential of partnerships to improve staff competencies and credentials.

Ultimately, large-scale, rigorous research is needed to test the effectiveness of Early Head Start-child care partnerships on both short- and long-term outcomes. These studies could examine the effectiveness of partnerships to achieve outcomes for families and children. In addition, they can examine outcomes for communities, including whether partnerships lead to an increased supply of high quality infant-toddler care.

Next steps

This literature review lays the groundwork for future efforts to study Early Head Start-child care partnerships. The findings from the review informed the theory of change developed for the Study of Early Head Start-Child Care Partnerships (Appendix A). The theory of change visually depicts how Early Head Start programs, child care providers, families, and systems partners work together in a coordinated manner to provide high quality, comprehensive services to low-income infants and toddlers and their families. Together, these groups invest inputs and carry out activities designed to lead to five long-term outcomes: (1) sustained, mutually respectful, and collaborative, Early Head Start-child care partnerships; (2) increased community supply of high quality infant-toddler care; (3) improved family well-being; (4) improved child well-being and

school readiness; and (5) well-aligned infant-toddler policies, regulations, and quality improvement supports at the national, state, and local levels. Given the gaps in the literature, more research is needed on the constructs in the theory of change. However, the theory of change can serve as a useful framework to inform future research on Early Head Start-child care partnerships, including the development of research questions, measurement plans, and study designs to fill knowledge gaps in the literature. The theory of change is a living document that may continue to evolve as more is learned about Early Head Start-child care partnership inputs, implementation, and outcomes.

Alongside the theory of change, findings from this literature review will inform the development of a measurement framework to identify the measures that exist or require development to study Early Head Start-child care partnerships. They will also inform the design of an evaluation of these partnerships. Although the literature provides minimal guidance on the most promising models and features of partnerships, the information we obtained on the development and operation of partnerships and the potential benefits, common challenges, and factors important to the success of partnerships could be useful to inform communities and states as they undertake efforts to implement Early Head Start-child care partnerships.

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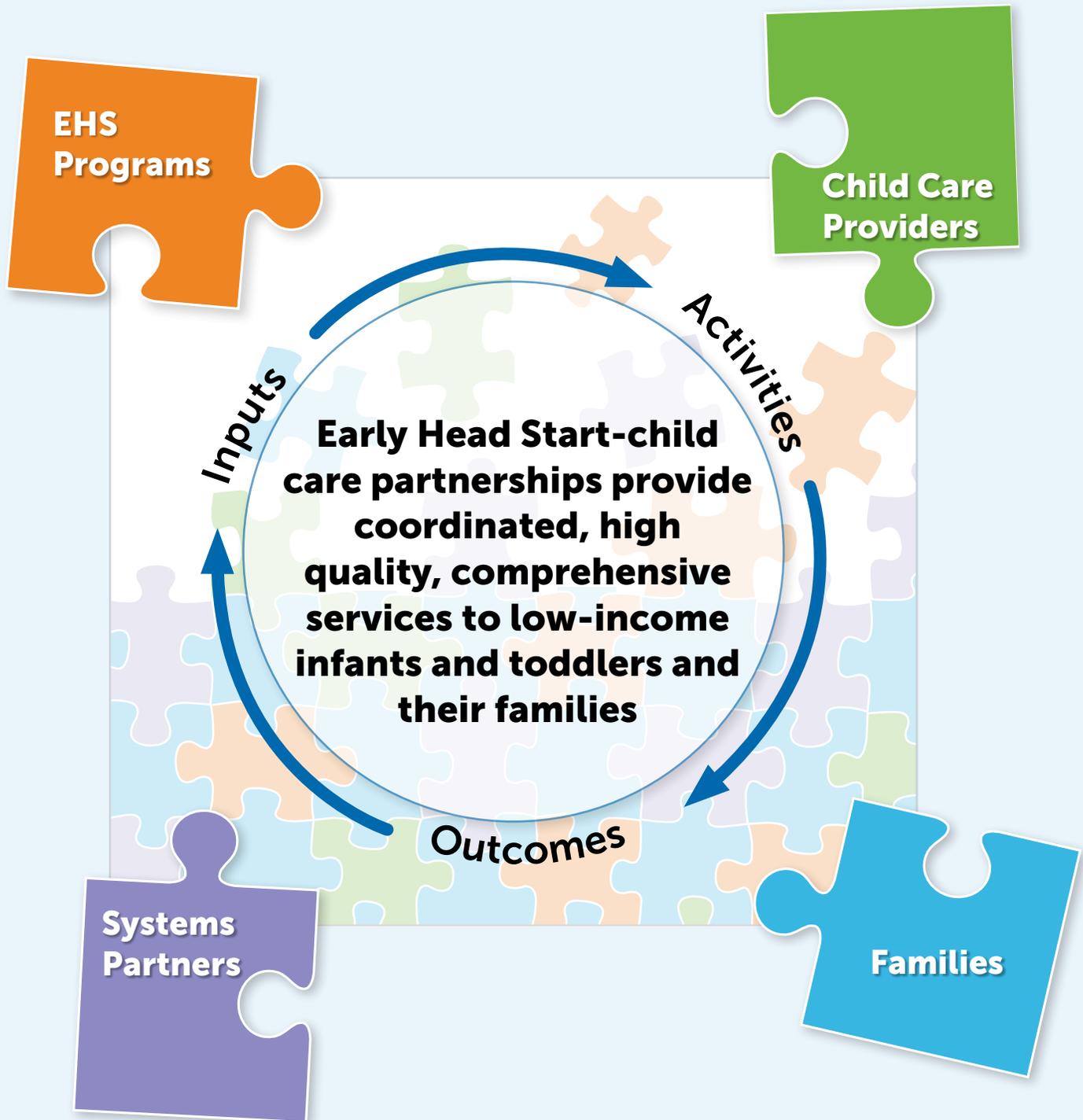
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APPENDIX A
THEORY OF CHANGE

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Theory of Change for the **Study of EHS-Child Care Partnerships**

*Presented at the Technical Work Group Meeting for the
Study of EHS-Child Care Partnerships on May 6, 2014*



INPUTS

EHS Programs

- EHS grantee type and prior service delivery experience
- Program size
- Motivation to partner and readiness to change
- Attitudes toward and experience with collaboration
- Knowledge and linkages to community child care providers
- Qualified staff to provide QI support to child care providers

Child Care Providers

- Provider type (family child care or center), size, and regulatory status
- Hours of operation
- Age range of children served; ability to care for sibling groups
- Provider experience and staff credentials
- Motivation to partner and readiness to change
- Attitudes toward and experience with collaboration
- Openness to complying with the HSPPS
- Participation in QRIS or other QI initiatives

Families

- Socioeconomic and demographic characteristics
- Child care needs and preferences (family configuration, work schedules, transportation, culture, language)
- Motivation to participate in partnership programs
- Eligibility for EHS and CCDF subsidies

Systems Partners (National, State, Local)

- Policies, regulations, and standards (HSPPS, child care licensing, QRIS, other state initiatives)
- Funding (EHS grant funds, CCDF subsidies, other sources)
- QI supports (Head Start and OCC T/TA, QRIS, CCDF quality set aside, accreditation, other initiatives)
- Professional development (community colleges and other institutions of higher education)

ACTIVITIES

Partnership Programs: Partnership Development

- EHS programs actively recruit partners and child care providers express interest in partnering
- Partners jointly:**
- Discuss and clarify partnership expectations
 - Develop partnership agreements (contract, MOU), including funding arrangements

Partnership Programs: Partnership Operation

- Partners jointly:**
- Assess strengths and needs of each partner
 - Develop QI plans to achieve HSPPS compliance
 - Seek other QI opportunities
 - Monitor implementation of QI plans and HSPPS compliance
 - Facilitate networking among infant-toddler service providers
 - Assess partnership quality
 - Regular communication to ensure continuity of care and smooth transitions for children
 - Recruit and enroll families
 - Implement family partnership agreements; provide families with comprehensive services and referrals
 - Provide flexible, high-quality child care that meets families' needs
 - Facilitate continuity of care and transitions between settings
 - Provide direct QI support and supplemental materials
 - Provide training and support to staff working in the partnership

Families

- Enroll in EHS and child care subsidy program
- Communicate child care needs and preferences and select child care arrangements
- Develop and implement family partnership agreements
- Maintain communication with partnership programs for continuity of care and smooth transitions for children

Systems Partners (National, State, Local)

- Identify rule misalignment challenges and consider rule accommodations to support partnerships
- Coordinate with partners to provide QI and professional development

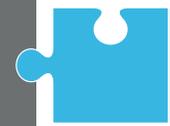
OUTCOMES



Partnership Programs

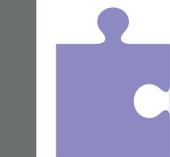
Short-Term Outcomes (within two years)

- Enhanced capacity to offer high quality service options that meet families' needs
- Organizational leadership that values and supports EHS-child care partnerships
- Staff attitudes that value each partner's contribution to the partnership
- Improved staff competencies to develop mutually respectful and collaborative partnerships, provide effective QI support, and provide developmentally appropriate infant-toddler care
- Improved quality of infant-toddler care and compliance with HSPPS
- Reduced isolation; increased membership in professional networks of infant-toddler service providers
- Increased professionalism and staff credentials
- Increased financial stability for partners



Families

- Stable access to high quality care and comprehensive services that meet families' needs
- Continuity of caregiving across settings where children receive care
- Parents more likely to be employed or in school
- Parents more involved in children's early learning



Systems Partners
(National, State, Local)

- Rule accommodations are implemented as needed to align requirements and stabilize funding
- QI and professional development supports are aligned to address needs of the partnerships

Long-Term Outcomes (two years or longer)

- **Sustained, mutually respectful, and collaborative EHS-child care partnerships in place**
- **Increased community supply of high-quality infant-toddler care**
- **Improved family well-being**
- **Improved child well-being and school readiness**
- **Well-aligned infant-toddler policies, regulations, and QI supports at the national, state, and local levels**

Organizational Factors (partnership programs)

- Years of operation and staff stability
- Organizational culture and leadership promoting the partnerships
- Shared goals, relationship quality, and mutual respect between partners
- Systems to support continuous QI

Contextual Factors

- Local: Type and supply of infant-toddler child care for low-income families
- State: Supports for QI (QRIS, CCDF quality dollars, etc.); policy environment
- National: Initiatives such as Head Start Designation Renewal System, President's Early Learning Initiative, Race to the Top-Early Learning Challenge

OVERVIEW OF THE THEORY OF CHANGE FOR THE STUDY OF EARLY HEAD START-CHILD CARE PARTNERSHIPS

The Study of Early Head Start-Child Care Partnerships defines partnerships as formal arrangements between Early Head Start programs and community child care providers to provide services to eligible families with infants and toddlers. Services provided in child care settings should comply with the Head Start Program Performance Standards (HSPPS). Partnership services are usually funded through a combination of Early Head Start grant funds and child care subsidies.

The purpose of Early Head Start-child care partnerships is to provide coordinated, high quality, comprehensive services to low-income infants and toddlers and their families. Achieving this goal requires contributions from Early Head Start programs; child care providers (including family child care homes and child care centers); families; and systems partners operating at the national, state, and local levels, such as child care subsidy systems, quality rating and improvement systems (QRISs), and federal technical assistance systems. The draft theory of change visually represents these four types of partners as puzzle pieces to acknowledge that all partners need to work together in a coordinated manner to achieve results. Together, these groups invest inputs and carry out activities designed to lead to five long-term outcomes: (1) sustained, mutually respectful, and collaborative, Early Head Start-child care partnerships; (2) increased community supply of high quality infant-toddler care; (3) improved family well-being; (4) improved child well-being and school readiness; and (5) well-aligned infant-toddler policies, regulations, and quality improvement supports at the national, state, and local levels. The theory of change also notes a range of organizational and contextual factors that are likely to influence partnerships. In the theory of change and throughout this document we use the term partnership programs to refer to programs (including Early Head Start programs and child care providers) funded under the new Early Head Start-child care partnerships initiative.

The theory of change represents a comprehensive and broad range of inputs, activities, short- and long-term outcomes, and organizational and contextual factors that could be associated with Early Head Start-child care partnerships. However, not all partnerships will include all inputs, perform all activities, aim to achieve all outcomes, or involve all of the organizational and contextual factors included in the theory of change.

Inputs

As depicted on the second page of the theory of change model, each type of partner invests resources and contributes its experiences, knowledge, and skills to the partnerships.

Early Head Start programs. Inputs from Early Head Start programs include grantee type, prior service delivery experience, program size, and other resources and supports from the agency that operates the program. Early Head Start programs may be well-established grantees with experience providing services that comply with HSPPS, but little experience providing center-based child care or providing quality improvement support to family child care providers. Other Early Head Start programs may be new grantees that have extensive experience providing quality improvement support to child care providers, but little experience providing comprehensive services or monitoring compliance with HSPPS. For example, a new grantee

might be an agency that operates a family child care network or a child care resource and referral agency (CCR&R). Other types of grantees, such as community action agencies, might operate other programs, such as adult education courses, that can contribute resources or staff expertise to the partnership.

Early Head Start programs also bring the motivation of program leaders and staff to form partnerships with community child care providers, as well as differing levels of readiness to change program activities and procedures to accommodate the needs of new partners and new ways of serving children and families through partnerships. Motivation and readiness to change may be influenced by their attitudes toward and prior experience with collaboration. Programs are likely to vary in staff knowledge of and linkages to child care providers in the community. For example, some programs might already partner with community child care programs to carry out professional development activities, whereas other programs have less experience working with child care providers. In addition, Early Head Start programs contribute staff to work directly with child care partners and provide quality improvement support. Existing Early Head Start staff are likely to have extensive knowledge about how to support infant-toddler health and development, for example, but they might need other skills and expertise to provide quality improvement support to child care center administrators and teachers or family child care providers.

Child care providers. Contributions of child care providers will vary based on whether they operate child care centers or family child care homes, their size, and the number of infant-toddler slots available in the setting. Child care providers that partner with Early Head Start programs should be regulated providers. For family child care homes, regulatory status will vary by state. Child care providers offer flexibility to meet families' child care needs along several dimensions, including their hours of operation, the age range of children served, and their capacity to care for sibling groups. Child care providers will come to partnerships with a range of experience; likewise, levels of experience and credentials are likely to vary across staff within child care centers. Like Early Head Start programs, child care providers bring their motivation to form partnerships as well as differing levels of readiness to change activities and procedures to comply with the HSPPS and incorporate new ways of serving children and families through partnerships. Motivation and readiness to change may also be influenced by their attitudes toward and prior experience with collaboration. For example, child care providers may need to be open to regular quality improvement and monitoring visits from Early Head Start staff and to achieving compliance with the HSPPS. Depending on the availability of resources in the child care provider's state and community, some providers might already participate in a QRIS or another quality improvement initiative.

Families. Families also play an important role in the partnerships. Families have a range of characteristics, child care needs, and preferences. For example, depending on their employment or training/education schedules and availability of transportation, families may need care in specific geographic areas and during specific hours of operation. Some families might need child care providers that can accommodate older siblings in addition to the Early Head Start child, or providers that can accommodate children's special needs. In addition, some families might seek child care arrangements that foster their home language and culture. Families may need to be motivated to participate in both Early Head Start and child care services. In most cases they may also need to meet income and other eligibility requirements for both Early Head Start and child care subsidies.

Systems partners. Although they are not direct participants, other systems at the national, state, and local levels play a crucial role in the partnerships. For example the federal Office of Head Start (OHS) establishes policies and standards to which Early Head Start programs and the child care providers that they partner with may need to comply, such as the HSPPS. The federal Office of Child Care (OCC) establishes and oversees the implementation of child care policies and provides guidance to states, tribes, and territories that administer child care and development funds (CCDF). Similarly, states establish rules about child care licensing and subsidies. Systems partners also contribute crucial resources for partnerships, including Head Start grant funds, CCDF, and other public and private funds. In addition, systems partners offer supports for quality improvement, including training and technical assistance networks through OHS and OCC, QRIS implemented at the state and local levels, supports from CCR&Rs, accreditation from professional organizations like the National Association for the Education of Young Children (NAEYC) and the National Association for Family Child Care (NAFCC), and other initiatives. Other key partners include community colleges and other institutions of high education that provide relevant courses and degree programs to prepare infant-toddler service providers to meet requirements for specific credentials in the HSPPS, local or state QRIS, or other child care regulations.

Activities

The next section of the theory of change, also on the second page of the model, depicts activities that need to occur to develop and implement the partnerships. Many of these activities are conducted jointly by partnership programs, but families and systems partners also play important roles.

Partnership programs: partnership development. The first crucial step in developing the partnerships is identifying potential partners. Early Head Start programs may advertise the partnership initiative and actively recruit child care providers in the community. Child care providers, in turn, may express interest in the partnership. Child care providers may also initiate the process of exploring a partnership by contacting Early Head Start programs. Jointly, the partners need to discuss and clarify partnership expectations, including issues such as numbers of children served, funding arrangements, expectations for compliance with HSPPS, and supports available to the child care provider from the Early Head Start program. When expectations are clarified, partnership programs need to develop partnership agreements, such as contracts or memorandums of understanding (MOUs), which clearly document the agreements reached to ensure a common understanding about the terms of the partnership and financial arrangements.

Partnership programs: partnership operation. When partnership agreements are in place, Early Head Start programs and child care providers need to work together to implement the agreements. Jointly, they may assess each partner's strengths and needs and develop quality improvement plans tailored to the role of each partner to support compliance with the HSPPS. The partners may also work together to identify other quality improvement opportunities in the state and community (such as through a QRIS, community college, or CCR&R) and monitor implementation of quality improvement plans and compliance with the HSPPS. Infant-toddler service providers, especially family child care providers, can be isolated in their work. To address this problem, partnerships may also facilitate opportunities for provider and Early Head Start program staff to network with one another through periodic joint training sessions and meetings.

Partners may also periodically assess the quality of their partnership. Are both partners meeting the terms of the partnership agreement? Do both partners feel respected for their contributions? Are communication systems functioning as intended? In addition to communicating about the partnership, Early Head Start programs and child care providers also need to facilitate regular communication with parents and one another about the children in care to ensure continuity of caregiving and smooth transitions across home and out-of-home care settings.

Partners may also work together to recruit and enroll families, who may express interest in partnership services either by applying to the Early Head Start program or the child care provider. Child care providers with a track record of serving low-income infants and toddlers may be especially strong sources of referrals. Partners work together to provide comprehensive services to families and children—health, nutrition, social, and other services, as well as referrals to other community services such as employment training—determined to be necessary by family needs assessments, in addition to early care and education services. The division of responsibility for providing specific services may be determined as part of the partnership agreement. For example, Early Head Start staff may visit the child care settings to conduct periodic assessments of children’s development, or they may train and support child care staff to conduct these assessments directly. In addition, Early Head Start may supply a family support worker to coordinate with families and child care partners to implement the family partnership agreement. Partners also work together to provide high-quality child care that is flexible and meets families’ needs; child care providers play a central role in this regard. Partners may also need to facilitate continuity of care across settings and transitions between settings throughout the day. For example, child care staff may exchange important information with parents and other caregivers about the child’s health status, activities, and schedule during drop off and pick up. Child care providers or Early Head Start programs may provide or arrange for transportation between settings.

In addition, Early Head Start programs and child care providers may engage in joint quality improvement activities to support the partnership in achieving HSPPS compliance. For example, Early Head Start staff may visit child care classrooms or family child care homes regularly to observe and provide mentoring/coaching to child care staff. The partners may convene joint training sessions and other staff development activities. Child care providers may also need additional supplies, curricula, and developmentally appropriate toys to comply with HSPPS. Early Head Start programs may provide these supplemental materials directly or through grants, or partners may jointly seek out supplemental materials or grants available in the community for this purpose. Staff responsible for ensuring that partnerships meet the HSPPS may need training and support on how to conduct observations, assess classroom quality, provide mentoring/coaching, and develop supportive relationships with child care staff.

Families. To participate in partnerships, families enroll in both Early Head Start and the child care subsidy program. They also need to communicate their child care needs and preferences to the partnership programs and select a child care arrangement. During their participation in services, parents need to maintain regular and open communication with staff from the partnership programs to facilitate continuity of care and smooth transitions across settings for children. For example, families might collaborate with both Early Head Start staff and child care providers to develop an individualized family partnership agreement.

Systems partners. Misalignment of rules for Early Head Start and child care systems can create challenges for partnerships. For example, differences in eligibility requirements and eligibility redetermination schedules between Early Head Start and child care subsidy programs can create gaps in funding and jeopardize continuity of care if families lose eligibility for one source of funding. Systems partners, such as subsidy systems, can consider rule accommodations to better align rules across systems, such as changes to the subsidy redetermination schedule to address these challenges. Requirements for staff training and credentials may also differ across the HSPPS, child care regulations, and local or state QRIS. Community colleges and other institutions of higher education can play an important role in supporting all staff involved in the partnerships to obtain the credentials needed to comply with these requirements.

Short-term outcomes

As depicted on the third page of the theory of change model, well-implemented partnerships lead to short-term outcomes for partnership programs, families, and communities. In the short term, approximately two years, partnerships should be able to achieve the following:

- **Partnership programs.** Once established, Early Head Start-child care partnerships are able to offer a wide range of high quality service options to families, with more flexibility to meet their needs for full-day, full-year early care and education and comprehensive services than either partner could on its own. Based on experience implementing the partnerships, organizational leadership values and supports Early Head Start-child care partnerships, and staff value the contributions of their respective partners. In addition, staff demonstrate enhanced competencies to develop mutually respectful and collaborative partnerships, provide effective quality improvement support, and provide developmentally appropriate infant-toddler care. The partnerships also improve the quality of infant-toddler care they offer and provide services that comply with the HSPPS. In some locations, quality improvement supports might result in added benefits, such as a higher QRIS rating or access to additional training and education. Partnerships also reduce the isolation of infant-toddler service providers and offer them expanded professional support. Partners may have an increased sense of professionalism and possibly higher credentials, and financial arrangements of the partnership agreement may strengthen the financial stability of the partners.
- **Families.** Through the partnerships, families gain access to high quality care and comprehensive Early Head Start services that meet their needs. Regular communication among all partners and caregivers can ensure greater continuity of caregiving and smoother transitions across home and out-of-home care settings. With stable child care arrangements, parents are more able to obtain employment or attend school or training. With support from partnership programs, parents are also able to be more involved in their children's early learning.
- **Systems partners.** Partnerships provide an opportunity for key players in the various systems that contribute to early care and education services for infants and toddlers to examine misalignment of policies, standards, and regulations and move toward increased alignment. Professional development and quality improvement supports are aligned to help staff involved in the partnership obtain needed training and credentials.

Long-term outcomes

Ultimately (two years or more after they are initiated), the partnerships lead to five long-term outcomes:

1. Sustained, mutually respectful, and collaborative Early Head Start-child care partnerships
2. An increased community supply of high quality infant-toddler care
3. Improved family well-being
4. Improved child well-being and school readiness
5. Well-aligned infant-toddler policies, regulations, and quality improvement supports at national, state, and local levels

Organizational and contextual factors

A range of organizational and contextual factors can facilitate or pose barriers to establishing and sustaining Early Head Start-child care partnerships (included on the third page of the theory of change model). These include the length of time the Early Head Start programs and child care providers have been in operation, the degree to which they are established in the communities they serve, and the degree of stability among their staff. Programs and providers with high turnover might have more difficulty developing strong relationships with partners. The organizational culture and leadership support for the partnerships (among both Early Head Start programs and child care providers) will influence the amount of support they receive. The extent to which the partnering organizations have shared goals and mutual respect and the quality of their relationships can also influence partnerships. The organizational infrastructure and systems in place to support continuous quality improvement within each organization also influence partnerships. Organizations that already have a culture and systems in place that support regular self-assessment and development of improvement plans will be better prepared than those without these systems in place to involve an outside partner in this work.

Also influencing the partnerships are contextual factors at the national, state, and local levels. National initiatives can influence partnerships and affect the resources available to support them. For example, Early Head Start programs might view partnerships as potentially putting their grants at risk if these settings are reviewed as part of the Head Start Designation Renewal System. States with Race to the Top-Early Learning Challenge grants might have more quality improvement resources available than other states. At the state level, quality improvement supports through a QRIS or other initiatives might be available. State subsidy policies, such as eligibility and redetermination rules, may affect how partnerships are financed. The supply of infant-toddler child care in the community might influence the number of partnerships that can be formed and the pace of partnership development. In some communities, most infant-toddler care providers could be family child care homes. In other communities with very few providers of infant-toddler care, Early Head Start programs may need to develop new providers. They may also need to recruit other types of partners to engage with them in this effort. For example, they may collaborate with a CCR&R to recruit unregulated child care providers to become regulated providers.

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APPENDIX B

STUDY REVIEW TEMPLATE

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Table B.1. Study Review Template

Study information					
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Citation: <i>Enter text</i>					
Abstract: <i>Enter text</i>					
Source: <ul style="list-style-type: none"><input type="checkbox"/> Library search<input type="checkbox"/> Research Connections<input type="checkbox"/> Expert recommendation<input type="checkbox"/> Website	Document type: <ul style="list-style-type: none"><input type="checkbox"/> Empirical study<input type="checkbox"/> Literature review/ meta-analyses<input type="checkbox"/> Conceptual	If empirical study, study design: <ul style="list-style-type: none"><input type="checkbox"/> Descriptive outcome study<input type="checkbox"/> Implementation study<input type="checkbox"/> RCT<input type="checkbox"/> QED<input type="checkbox"/> Other:			
Evaluator: <ul style="list-style-type: none"><input type="checkbox"/> Independent evaluator<input type="checkbox"/> Developer or organization staff					
Setting, target population, and sample characteristics					
Geographic setting: <ul style="list-style-type: none"><input type="checkbox"/> Rural<input type="checkbox"/> Urban<input type="checkbox"/> Suburban	Sample size: <ul style="list-style-type: none"><input type="checkbox"/> Overall: <i>Enter text</i><input type="checkbox"/> Treatment (if applicable): <i>Enter text</i><input type="checkbox"/> Comparison/control (if applicable): <i>Enter text</i>	Race/ethnicity of sample: <ul style="list-style-type: none"><input type="checkbox"/> African American: ___%<input type="checkbox"/> White: ___%<input type="checkbox"/> Latino: ___%<input type="checkbox"/> Other (describe): <i>Enter text</i>			
City/Cities: <i>Enter text</i>					
State(s): <i>Enter text</i>	Average age of sample: ____	Sample characteristics of interest: <ul style="list-style-type: none"><input type="checkbox"/> low SES: ___% <i>(SES indicators can include receipt of benefits such as Medicaid and TANF.)</i><input type="checkbox"/> Dual Language Learners: ___%<input type="checkbox"/> Children with disabilities: ___%<input type="checkbox"/> Other <i>Describe: Enter text ___%</i>			
Study sample: <ul style="list-style-type: none"><input type="checkbox"/> Infant/toddler<input type="checkbox"/> Preschool (ages 3 or 4)<input type="checkbox"/> Family/parent(s)<input type="checkbox"/> Teachers/providers<input type="checkbox"/> Local program administrators<input type="checkbox"/> State-level program administrators<input type="checkbox"/> Other (describe): <i>Enter text</i>					
Partnership information					
Type of partnership: <ul style="list-style-type: none"><input type="checkbox"/> Early Head Start-child care partnerships<input type="checkbox"/> Head Start-child care partnerships<input type="checkbox"/> Head Start-state preschool partnerships<input type="checkbox"/> Child care-state preschool partnerships<input type="checkbox"/> Other public-private partnerships: <i>Describe</i><input type="checkbox"/> Other partnerships: <i>Describe</i>					
Characteristics of the primary service delivery agencies in partnership: <ul style="list-style-type: none"><input type="checkbox"/> Early Head Start<input type="checkbox"/> Head Start<input type="checkbox"/> Center-based child care<input type="checkbox"/> Home-based care (family child care)<input type="checkbox"/> Home visiting (family home)<input type="checkbox"/> State preschool program<input type="checkbox"/> Other (describe): <i>Enter text</i>					
For each applicable agency, number of children served: <i>Enter text</i>					
For each applicable agency, ages of children served: <i>Enter text</i>					

Types of other partners involved:

- State child care licensing agency
- State CCDF administrator
- State department of education or early education
- QRIS lead agency
- Head Start State Collaboration Office
- CCR&R
- TA provider (describe): *Enter text*
- Family child care association or network
- Colleges or universities
- Other (describe): *Enter text*

Partnership goals: *Enter text*

Partnership characteristics and/or components, such as:

- *Type of partnership agreement (contract, MOU, etc.)*
- *Funding arrangement (blended or braided funding, etc.)*
- *Role of partners in provision of comprehensive services*
- *Supports offered to providers (training, resources, etc.)*

Enter text about partnership characteristics and/or components

Partnership supports (funding supports, policies/procedures, technical assistance, infrastructure): *Enter text*

Study purpose and findings

Study purpose: *Enter text*

Outcomes measured (topic only, not quality of measure): *Enter text*

Data collection method:

- Telephone interview
- Site visit
- Administrative records
- Child assessment data
- Observation data
- Survey (parent, provider, administrator, etc.)
- Other (describe): *Enter text*

Timing of data collection:

- Baseline
- During intervention: *Enter timing of follow-up*
- Post-intervention: *Enter timing of follow-up*

Findings, such as:

- *Perceived benefits of partnerships*
- *Challenges or barriers to partnerships*
- *Findings related to program quality (including implementation of the HSPPS)*
- *Findings related to professional development or credentialing for staff*
- *Findings related to child development*
- *Findings related to family well-being*

Enter text about findings

Subgroup findings: *Enter text*

Indicate if study includes *detailed information* on any of the following:

- Measure or partnership or collaboration: *Enter page #*
 - Measure of partnership program quality: *Enter page #; name of measure, if available*
 - Theory of change: *Enter page #*
-

APPENDIX C

SUPPLEMENTARY TABLES

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Table C.1. Characteristics of studies that reported on outcomes

Partnership type (study citation)	Study design	Outcome domains measured	Data sources	Unit of analysis (sample size)	Sample characteristics	Location
HS-child care (Schilder et al., 2009)	MCGD	Program quality; staff knowledge and skills and access to training and professional development; access to comprehensive services; child outcomes	Interview, child assessment, observation, survey, focus group	Center-based CC and FCC providers (n=198) CC program administrators (n=94) State-level CC or HS administrators (n=117) Center-based preschoolers (n=667)	<u>Center-based CC providers and children</u> : not reported <u>FCC providers</u> : average 10 years experience in FCCs <u>FCC homes</u> : 59% receive CCDF subsidy, 69% participate in USDA food program ^a	Ohio
HS-child care (Schilder et al., 2005)	MCGD	Program quality; staff knowledge and skills and access to training and professional development	Survey	CC providers (n=155) CC program administrators (n=141) Families (n=738)	<u>Families</u> : 83% White, 12% African American; 47% with monthly incomes >\$2,500; 29% received child care subsidies <u>CC providers</u> : average 7.5 years of experience in child care; >40% with at least high school diploma, >25% with at least associate's	Ohio
HS-child care (Ontai, Hinrichs, Beard, and Wilcox, 2002)	Descriptive outcomes study	Program quality	Observation, survey	CC providers (n=18) ^b	<u>CC providers</u> : 88% with some college education, 29% with 4-year degree	Midwestern community
EHS-child care (Edwards et al., 2002)	Descriptive outcomes study	Program quality; staff knowledge and skills and access to training and professional development	Observation, survey	CC providers (n=2022, 508 in Nebraska)	<u>CC providers</u> : 27% completed high school, 31% with some education beyond high school, 7% with 1-year degree, 15% with 2-year degree, 15% with bachelor's; 72% with >5 years experience in child care	Nebraska
Preschool-child care-HS (Selden, Sowa, and Sandfort, 2006)	Descriptive outcomes study	Program quality; access to comprehensive services	Interview, administrative records, observation, survey	CC providers (n=not reported) CC program administrators (n=20) Families (n=294) ^c	Not reported	Virginia, New York
Preschool-child care (Frede, Jung, Barnett, Lamy,	Descriptive outcomes study	Program quality	Child assessment,	CC providers (n=104) HS providers (n=25)	<u>CC providers and preschool teachers</u> : mean 6.5 years of experience; 78% with bachelor's,	New Jersey

Partnership type (study citation)	Study design	Outcome domains measured	Data sources	Unit of analysis (sample size)	Sample characteristics	Location
and Figueras, 2007)			observation	Preschool teachers (n=104) Preschoolers (n=1,071)	18% with master's <u>Preschoolers</u> : 40% African American, 51% Hispanic	
Preschool-child care (Whitebook, Kipnis, and Belm, 2007)	Descriptive outcomes study	Staff knowledge and skills and access to training and professional development	Interview, administrative records	CC providers (n=1,921)	<u>CC providers</u> : 53% white, 27% Latina; 28% with associate's, 25% with bachelor's or higher; 39% at job for more than 5 years	California
Preschool-child care (Smith, Sylva, Mathers, Dearden, Goodman, Kaplan, et al., 2004)	Descriptive outcomes study	Program quality	Interview, observation, other (focus group)	Parents (n=339) Preschool agency administrators (n=12) Providers (n=37)	339 parent interviews 50-60 parents participated in focus groups 12 interviews with lead agencies 37 interviews with providers 19 observations	United Kingdom
Other: EHS-FFN (Paulsell, Mekos, Del Grosso, Rowand, and Banghart, 2006)	Descriptive outcomes study	Program (FFN setting) quality	Interview, site visit, administrative records, observations	FFNs (n=78) EHS providers (n=28) CC and EHS program administrators (n=34) Families (n=51)	Not reported	20 states
Other: HS-Early Intervention (Bromer, 1999)	Descriptive outcomes study	Program quality; child outcomes	Interview, observation	Children (n=12) HS teachers (n=4)	<u>Children</u> : 100% with identified disabilities <u>HS teachers</u> : NA	Georgia
Other: FCC provider networks (Bromer, Van Haitsma, Daley, and Modigliani, 2009)	MCGD	Program quality	Interview observation, survey	FCC providers (n=150) FCC network coordinators (n=34) FCC association leaders (n=12)	<u>FCC providers</u> : for network-associated providers, 13% completed high school, 43% with some education beyond high school, 19% with associate's degree, 10% with bachelor's or higher; 5.6 mean years of experience in child care; 65% black, 31% Latina or Hispanic <u>Network coordinators</u> : 3% completed high school, 5% with some education beyond high school, 21% with associate's degree, 41% with bachelor's, 29%	Chicago

Partnership type (study citation)	Study design	Outcome domains measured	Data sources	Unit of analysis (sample size)	Sample characteristics	Location
					with master's; 34% with <1 year experience, 41% with 1-5 years experience <u>Association leaders:</u> 8% completed high school, 8% with some education beyond high school, 33% with associate's degree, 42% with bachelor's, 8% with master's; 0% with <1 year experience, 58% with 1-5 years experience	

CC = child care; EHS = Early Head Start; FFN = family, friend, and neighbor caregivers; HS = Head Start; MCGD = matched comparison group design.

- ^aSchilder et al. (2009) reports socioeconomic status in terms of the percentage of FCC homes that receive CCDF subsidies or participate in a USDA food program; the study does not report socioeconomic status for children in the homes.
- ^bNumber calculated by Mathematica based on information provided. Ontai et al. (2002) does not report sample sizes directly. True sample size may be n=17 or n=18.

^cNumber calculated by Mathematica based on information provided. Actual sample size may be n=294 or n=293. Selden et al. (2006) reports surveying 367 parents with an 80 percent response rate.

Table C.2. Characteristics of studies that discussed perceived benefits

	Total	HS or EHS— child care	State preschool— child care or HS	Other partnerships
Study Design				
Implementation study	28	9	14	5
Descriptive outcomes study	3	1	0	2
MCGD	2	1	1	0
Case study	1	0	1	0
Study Respondents^a				
Families/parents	5	1	2	2
Teachers/providers ^a	14	5	5	4
<i>Child care</i>	12	5	4	3
<i>HS or EHS</i>	6	2	1	3
<i>Public preschool</i>	2	0	2	0
<i>Other</i>	1	0	0	1
Program administrators ^a	20	6	9	5
<i>Child care</i>	15	6	6	3
<i>HS or EHS</i>	11	6	2	3
<i>Public preschool</i>	7	0	7	0
<i>Other</i>	2	0	0	2
State-level administrators ^a	7	2	3	2
<i>Child care</i>	6	2	2	2
<i>HS or EHS</i>	5	3	1	1
<i>Public preschool</i>	5	0	4	1
<i>Other</i>	1	0	0	1
Other	10	3	5	2
Total Number of Studies	35	11	17	7

Note: For some studies, information on the study sample, sample size, and/or data collection methods was not reported.

^aBecause some studies included samples from multiple categories, numbers do not add up to the total number of studies.

EHS = Early Head Start; HS = Head Start; MCGD = matched comparison group design.

Table C.3. Standardized outcome instruments used in studies

Child Care Quality Measures

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

Child Care Assessment Tool for Relatives (CCAT-R; Porter, Rice, and Rivera, 2006). The CCAT-R was developed specifically to assess quality of care provided by relatives, but it has been used to measure quality of care provided by friends and neighbors as well. It measures the frequency of interactions between the caregiver and the focal child with time sampling. These interactions include talk within the caregiver-child dyad, as well as among the child, the caregiver, and other children and adults; the caregiver's engagement with the child; and the child's engagement with materials and other children or adults in the setting. In addition, the CCAT-R includes items related to the affects of the caregiver and the child; the types of caregiver and child activities that occur; and disciplinary practices. Caregivers are rated on four factors—nurturing, engagement, and two factors that relate to language—that are based on the percentage of time that the related interactions occur. Ratings include poor, acceptable, and good and are based on the percentage of time that the related interactions occur.

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

Early Language and Literacy Classroom Observation Toolkit (ELLCO; Smith, Dickinson, Sangeorge, and Anastasopoulos, 2002).^a The ELLCO measures literacy and language instruction in prekindergarten through grade 3 classrooms and includes three scales: (1) Classroom Observation Scale, (2) Literacy Environment Checklist, and (3) Literacy Activities Rating Scale, each scored on a different metric. The Classroom Observation Scale consists of 14 items across two subscales: (1) General Classroom Environment, and (2) Language, Literacy, and Curriculum. Each item is scored on a scale of 1 (deficient) to 5 (exemplary). The Literacy Environment Checklist has a total score ranging from 0 to 41, based on five subscales: (1) Book Area (0–3), (2) Book Selection (0–8), (3) Book Use (0–9), (4) Writing Materials (0–8), and (5) Writing Around the Room (0–13). The Literacy Activities Rating Scale has a total score ranging from 0 to 13 and contains two subscales: (1) Reading (0–8) and (2) Writing (0–5).

Early Childhood Environmental Rating Scale-Revised Edition (ECERS-R; Harms, Clifford, and Cryer, 1998). The ECERS-R is a classroom assessment tool designed to measure the quality of group programs for students (2.5 through 5 years) in preschool, kindergarten, and child care classrooms. It is a 43-item rating scale organized into seven environmental subscales: (1) Space and Furnishings, (2) Personal Care Routines, (3) Language-Reasoning, (4) Activities, (5) Interaction, (6) Program Structure, and (7) Parents and Staff. Each item has a number of quality indicators, with 470 yes/no indicators in total. The observer must set aside time to speak with staff regarding unobserved indicators. Items are scored on a scale of 1 to 7.

Family Day Care Rating Scale (FDCRS; Harms and Clifford, 1989).^b The FDCRS was designed to measure global quality of child care in regulated family child care settings. It includes seven scales to assess characteristics of the child care environment: (1) Opportunities to Develop Language and Reasoning Skills, (2) Learning Activities, (3) Social Interactions, (4) Space and Furnishings, (5) Care Routines, (6) Program Structure, and (7) Adult Needs. Items are coded on a seven-point scale from inadequate (1) and minimal (3) to good (5) and excellent (7). A global quality score can be calculated by averaging across all items and can range from 1 to 7.

Infant/Toddler Environment Rating Scale (ITERS; Harms, Clifford, and Cryer, 1990).^c ITERS is a classroom assessment tool designed to measure the quality of group programs for infants and toddlers (birth to 30 months) by collecting data through classroom observation and a staff interview. The assessment is a 35-item rating scale organized into seven environmental subscales: (1) Furnishings and Display for Children, (2) Personal Care Routines, (3) Listening and Talking, (4) Learning Activities, (5) Interaction, (6) Program Structure, and (7) Adult Needs. A global quality score can be calculated by averaging across all items and can range from 1 to 7.

Preschool Classroom Mathematics Inventory (PCMI; Frede, Weber, Hornbeck, Stevenson-Boyd, and Colon, 2005). The PCMI measures classroom support for children's early mathematical development, including counting, comparing, estimating, recognizing number symbols, classifying, seriating, geometric shapes, and spatial relations. It consists of 11 items across two subscales: Materials and Numeracy and Other Mathematical Concepts. Items are coded on a scale of 1 (low quality) to 5 (high quality).

Supports for Early Literacy Assessment (SELA; Smith, Davidson, and Weisenfeld, 2001). The SELA measures classroom support for children's literacy development. The measure was revised for Frede et al., 2007; four items that overlapped with the ECERS-R were removed. The revised measure consists of 16 items across six subscales: (1) Literate Environment, (2) Language Development, (3) Knowledge of Print/Book Concepts, (4) Phonological Awareness, (5) Letters and Words, and (6) Parent Involvement. Items are rated on a scale from 1 (low quality) to 5 (high quality).

Child Outcomes Measures

Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4; Dunn and Dunn, 2007). The PPVT-4, an individually administered adaptive assessment designed to measure a student's receptive (auditory) vocabulary level for standard English, is appropriate for people between the ages of 2 years, 6 months and 90 years and above. It has 228 test items grouped into 19 sets of 12 items, with the sets arranged in order of increasing difficulty. During the assessment, the assessor orally presents a stimulus word with a set of four color pictures on an easel and asks the student to identify the picture that best represents the word's meaning. The assessor administers the item sets beginning at a predetermined age-appropriate start item until the basal and ceiling sets are found. On average, students respond to 5 item sets. The basal set is set 1 or the first item set in which the student makes one or no errors. The ceiling set is the first item set in which the student makes eight or more errors or the end of the assessment.

Phonological Awareness Literacy Screening for Preschool (PALS-PreK; Invernizzi, Meier, and Swank, 2004^d). The PALS-PreK measures early phonological and print awareness in 4-year-olds and consists of a total 99 items across six subtests: (1) Name Writing, (2) Alphabet Knowledge, (3) Beginning Sound Awareness, (4) Print and Word Awareness, (5) Rhyme Awareness, and (6) Knowledge of Nursery Rhymes. The Alphabet Knowledge subtest consists of three components: (1) Upper Case Alphabet Recognition, (2) Lower Case Alphabet Recognition, and (3) Letter Sounds. The latter two components are adaptive (that is, the student must score at a predetermined level or above on the previous component before administration of subsequent components).

Preschool Language Scale, Fourth Edition (PLS-4; Zimmerman, Steiner, and Pond, 2002).^e The (PLS-4 is a diagnostic instrument for evaluating language development and identifying language disorders or delays among children from birth to 6 years. It is an individually administered assessment used to measure receptive and expressive skills that are considered to be language precursors. The PLS-4 includes two clusters—Auditory Comprehension and Expressive Communication. The former measures a child's ability to be attentive and respond to stimuli in the environment and to comprehend basic vocabulary or gestures. The Expressive Communication cluster focuses on social communication, expressive language skills, and vocal development. Both clusters include subtests (called tasks), with 4 subtests for each three-month interval for age birth through 11 months and 12 receptive/expressive subtests for each six-month interval for age 1 through 6 years. In total, the PLS-4 contains 68 items, with 2 to 8 items in each subtest. The PLS-4 includes the use of manipulatives (such as a ball, rattle, cups, and crackers) and easel administration (a Picture Manual); the assessor uses the objects or pictures as prescribed to observe the student's reaction or response.

^aIn 2008, the ELLCO Pre-K (Smith, Brady, and Anastasopoulos, 2008) and the ELLCO K-3 (Smith, Brady, and Clark-Chiarelli, 2008) were published as separate instruments.

^bA revised version of this measure, the Family Child Care Environment Rating Scale, Revised Edition (FCCERS-R; Harms, Cryer, and Clifford, 2007) is now available.

^cA revised version of this measure, the Infant/Toddler Environment Rating Scale, Revised Edition (ITERS-R; Harms, Cryer, and Clifford, 2006) is now available.

^dThis information pertains to the 2004 version, but the study in this review used the 2001 version. No information was available on the 2001 version.

^eA revised version of this measure, the Preschool Language Scales, Fifth Edition (PLS-5; Zimmerman, Steiner, and Pond, 2011) is now available.

Table C.4. Characteristics of studies that discussed barriers to implementation

	Total	HS or EHS— child care	State preschool— child care or HS	Other partnerships
Study Design				
Implementation study	31	10	18	3
Descriptive outcomes study	3	0	1	2
MCGD	2	2	0	0
Other	5	0	5	0
Study Respondents^a				
Families/parents	9	2	5	2
Teachers/providers ^a	17	5	8	4
<i>Child care</i>	12	5	6	1
<i>HS or EHS</i>	6	2	1	3
<i>Public preschool</i>	3	0	3	0
<i>Other</i>	2	0	0	2
Program administrators ^a	25	8	14	3
<i>Child care</i>	18	8	9	1
<i>HS or EHS</i>	10	6	2	2
<i>Public preschool</i>	11	0	11	0
<i>Other</i>	1	0	0	1
State-level administrators ^a	7	2	4	1
<i>Child care</i>	5	3	2	0
<i>HS or EHS</i>	6	3	2	1
<i>Public preschool</i>	5	0	5	0
<i>Other</i>	1	0	0	1
Other	13	3	9	1
Total Number of Studies	41	12	24	5

Note: For some studies, information on the study sample, sample size, and/or data collection methods was not reported.

^a Because some studies included samples from multiple categories, numbers do not add up to the total number of studies.

EHS = Early Head Start; HS = Head Start; MCGD = matched comparison group design.

Table C.5. Characteristics of studies that discussed factors that facilitate partnerships

	Total	HS or EHS— child care	State preschool— HS or child care	Other partnerships
Study Design				
Implementation study	23	8	9	6
Descriptive outcomes study	7	2	1	4
MCGD	3	2	0	1
Other	2	0	2	0
Conceptual	1	0	1	0
Study Respondents^a				
Families/parents	12	5	2	5
Teachers/providers ^a	19	6	5	8
<i>Child care</i>	15	7	3	5
<i>HS or EHS</i>	11	3	2	6
<i>Public preschool</i>	3	0	3	0
<i>Other</i>	4	1	0	3
Program administrators ^a	20	8	6	6
<i>Child care</i>	16	8	4	4
<i>HS or EHS</i>	11	7	1	3
<i>Public preschool</i>	6	0	6	0
<i>Other</i>	5	1	0	4
State-level administrators ^a	7	3	2	2
<i>Child care</i>	5	4	0	1
<i>HS or EHS</i>	6	3	1	2
<i>Public preschool</i>	3	0	2	1
<i>Other</i>	3	1	0	2
Other	10	4	4	2
Total Number of Studies	36	12	13	11

Note: For some studies, information on the study sample, sample size, and/or data collection methods was not reported.

^a Because some studies included samples from multiple categories, counts in this section do not sum to the total number of studies.

EHS = Early Head Start; HS = Head Start; MCGD = matched comparison group design.

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