

Executive Summary: A Review of the Literature on Access to High-Quality Care for Infants and Toddlers

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Introduction

Children develop most rapidly during the first three years of life. While we know that high-quality early learning experiences that begin early in life can promote young children's development and help reduce achievement gaps, much of the literature has focused on child outcomes related to attendance in early care and education programs for preschool-age children; less is known about how quality child care contributes to the development of infants and toddlers.

In addition, less is known about families' ability to access high-quality child care for infants and toddlers. Recent federal policy and program initiatives have provided states with opportunities to expand high-quality care for infants and toddlers. As federal and state initiatives begin to address the needs for access to high-quality infant and toddler care, it is important to understand what the research suggests will facilitate families' access to care and what practices strengthen the quality of care for infants and toddlers.

The literature review summarized below aims to better understand the research on supporting access to high-quality child care for infants and toddlers. The review was supported by funding from the W.K. Kellogg Foundation.

Purpose

The literature review examines research between 2008 and 2018 on supporting access to high-quality infant and toddler care and the effectiveness of approaches to improving access to and quality of infant and toddler early care and education (ECE). The literature review addresses the following questions:

1. What facilitates or hinders families' access to high-quality care for infants and toddlers?
2. What do we know about the factors that contribute to strengthening quality in ECE for infants and toddlers and that are associated with positive outcomes for children under age three?

We assume that access to and quality of infant and toddler care are inherently related. It is difficult to conceptualize how to support access to high-quality care without also examining supports for strengthening the quality of care. The more the field understands how to improve the quality of infant and toddler care and implements effective approaches for improving quality, the more accessible that care will be for the families that need it.

Approach

The literature review involved identifying and then carefully summarizing and integrating research published between 2008 and 2018 related to access to and quality of ECE for infants and toddlers in the United States.

First, we identified candidate articles and reports using a set of search terms¹ based on two guiding frameworks, which focused on (1) access to high-quality care for infants and toddlers and (2) quality care for infants and toddlers. Initial searches yielded a total of 455,466 hits for the access search and 40,537 hits for the quality search.

Titles and abstracts were then reviewed to ensure that they met inclusion criteria (i.e., that they were published between 2008 and 2018 within the United States and focused on child care that included infants and toddlers). Articles and reports that met the initial review criteria were then accessed in full to confirm that they fit the focus of the review. At this step, 41 articles and reports related to access and 43 articles and reports related to the quality of infant and toddler care were summarized in detail in table format (see Appendix of literature review for a list of included literature). Key findings from these articles and reports, their implications for programs and policy, and the highest priority next steps for research, are summarized in the literature review.

Throughout this executive summary we summarize key findings from the review, highlighting a limited selection of studies. For the full set of relevant references, please access the [literature review](#).

Infants' and Toddlers' Access to High-Quality Care

Guiding Framework

The literature review is guided by a definition and framework of access provided in *Defining and Measuring Access to High Quality Early Care and Education (ECE): A Guidebook for Policymakers and Researchers*¹. The Guidebook states, "Access to early care and education means that parents, with reasonable effort and affordability, can enroll their child in an arrangement that supports the child's development and meets the parents' needs" (p. 5). The literature related to access in the review is organized around the four dimensions of access highlighted in this definition:

1. Reasonable effort
2. Affordability
3. Meets parents' needs
4. Supports child development

Key Findings

Overall, the literature on infants' and toddlers' access to high-quality care is limited. Most of the studies identified focused on the access dimensions of reasonable effort (i.e., the interaction between number of available ECE slots in a geographical area, the use of ECE programs by families in this area, and the extent to which information about ECE programs is readily available to parents) and the cost/affordability of care for infants and toddlers.

¹ For a list of search terms, see Tables 1 and 2 of the full [literature review](#).

Fewer studies addressed the access dimensions of “meets parents’ needs” and “supports child development.” Because of the limited research on these dimensions, the review of the evidence on “meets parents’ needs” and “supports child development” encompasses studies in which the sample includes but is not limited to infants and toddlers.

Reasonable Effort

The reasonable effort dimension of access captures the availability of ECE programs for infants and toddlers, the licensed capacity of center-based programs for infants and toddlers, the estimated vacancy for infants and toddlers in a given area, and the availability of information to families about ECE programs for infants and toddlers.

The literature review highlights an overall shortage of licensed or regulated infant and toddler care both nationallyⁱⁱ and across states and localities.ⁱⁱⁱ In addition, the studies reviewed also identify the presence of child care deserts, defined as the presence of three or more children for each licensed slot.^{iv}

Given the limited supply of licensed or regulated infant and toddler care, as well as the phenomenon of child care deserts, it appears that many families with infants and toddlers are either relying heavily on non-regulated care or are providing care for their infants and toddlers themselves, through coordination of work schedules.

Affordability

The affordability of a program reflects the cost to parents and to ECE programs or providers. Key indicators for affordability include parents’ financial contributions (including tuition, copayments, or subsidy differentials); the portion of parents’ income that pays for ECE; subsidy or scholarship contributions; program fundraising; advertised program prices; and the full cost to the program of providing care.

Affordability can be seen from the perspective of both families and providers. From the perspective of families, the cost of care, especially center-based care, is a large financial burden for parents of infants and toddlers, particularly single parents.^v Nationwide, the average cost of center-based care for infants is greater than for any other age group or program type.^{vi} In addition, family income affects how much families can spend on ECE and what care is available to them, with low-income families spending a disproportionate amount of their income on ECE. When families pay for care and don’t have subsidy or a public program available to them, families below the federal poverty level spend approximately 33% of family income on ECE and school-age care, in contrast with approximately 11% spent by higher income families (i.e., with incomes equal to or greater than 300% of the federal poverty level).^{vii} Child care subsidies help expand the options available to low-income families, particularly the regulated options available to them. However, research suggests that child care subsidies currently serve only about 15% of eligible children under age 13.^{viii} Further, the monetary value of the subsidy and the length of the eligibility period² are related to family’s subsidy use and stability in care.

From the perspective of providers, those caring for infants and toddlers experience a gap between total program costs and revenues.^{ix} They may offset this gap by serving additional preschool- or school-age children^x or by providing low compensation for teachers.^{xi}

² As discussed in the full literature review, the Child Care Development Block Grant (CCDBG) reauthorization in 2014 increased the time period that families remain eligible for child care subsidies before they need recertification to 12 months.

Meeting Parents' Needs

This dimension of access captures the extent to which parents have access to ECE options that align with their family's needs for child care arrangements. Indicators of "meets parents' needs" encompass a range of elements, including parents' preference for program type, the location of the program/availability of transportation, program hours of operation, and other ECE features that align with a family's needs.

The literature review found that families, especially low-income families, may not always be able to select the care arrangement they prefer for their infants and toddlers.^{xii} While not specific to parents of infants and toddlers, transportation and hours of ECE program operation emerge from the literature as particular challenges to selecting care that meets parents' needs.^{xiii}

Supporting Children's Development

This dimension of access involves assessing the availability of ECE options that support a child's development according to the following six indicators: a program's designation of quality (e.g. a rating on a state quality rating and improvement system [QRIS]), coordination of services, practices that support stability in ECE arrangements, and practices that meet the unique needs of children including children with disabilities, children who are experiencing homelessness, and children who speak a language other than English.

Fewer articles and reports focused on this dimension compared to other aspects of access. For example, little information is available about the number of infants and toddlers enrolled in an ECE program participating in QRIS. Some locally-based research indicates that providers of ECE for infants and toddlers participate in QRIS at lower rates than providers of preschool-aged children.^{xiv}

The few studies on families with children who have special needs, including infants and toddlers, suggest that these families have more limited ECE options for their children and face higher costs for care.^{xv}

The limited research with a focus on families with infants and toddlers who speak a language other than English indicates that these families may have a difficult time finding a provider who speaks their home language, even in communities where there is a sizable population of families who speak a language other than English.^{xvi}

Quality of Infant and Toddler Care

Guiding Framework

There is consensus that the definition of quality care for infants and toddlers has some features that are distinct from those established for older children, including preschoolers, and that these features are related to the unique developmental needs and characteristics of infants and toddlers. The literature review expands on the "supports child development" dimension of access summarized above by reviewing research according to the conceptual framework developed for the Quality in Caregiver-Child Interactions for Infants and Toddlers (Q-CCIIT) measure.^{xvii, xviii}

The Q-CCIIT framework highlights several components of quality:

1. Structural features of care (including group size and ratio, caregiver qualifications and professional development, physical environment, schedules and routines, health safety and nutrition)

2. Caregiver-child interactions (including sensitivity and responsiveness, language and cognitive stimulation, positive regard/ warmth, behavior guidance, support for peer interactions and observed negative behaviors of detachment, intrusiveness and negative regard)
3. Other aspects of quality (including caregiver-parent communication, child-peer relationships, and contextual factors, such as auspice, program performance standards, and community resources)
4. All of these components aim to support children's competence in multiple developmental domains

Key Findings

The literature on the quality of care for infants and toddlers is limited. Most of the studies identified for this literature review focused on structural features of care and caregiver-child interactions. Fewer studies addressed the other aspects of quality (i.e., caregiver-parent communication, child-peer relationships, and contextual factors) or considered child outcomes.

Structural Features of Care

The structural features of care include aspects of quality that provide broad parameters for early care and education programs, such as group size, ratio, and caregiver qualifications and professional development. These parameters are more readily articulated as requirements or regulations for programs than the quality features related to processes such as caregiver and teacher interactions and relationships with children (discussed below).

Studies on structural features of care found that centers serving infants and toddlers tend to have higher staff-to-child ratios and larger group sizes than home-based settings.^{xix} A study that included but was not limited to toddlers found that classrooms with higher ratings of observed quality had lower staff-to-child ratios and smaller group sizes.^{xx} Similar to previous research,^{xxi} studies in this review were mixed on the association between both the educational level and the professional development of infant and toddler teachers and caregivers and the quality of infant and toddler care.^{xxii}

Relationships and Interactions between Teachers and Caregivers and Children

Previous research has established that relationships and interactions between teachers and caregivers and children provide the base for learning and development in infancy and toddlerhood.^{xviii} Studies summarized in this review shed light on the characteristics of teachers and caregivers and of their work environments that are related to more positive relationships and interactions, and training that can foster more positive interactions. For example, one study found positive associations between job satisfaction and the responsiveness of teachers and caregivers, but negative associations with burnout.^{xxiii} Research indicates that professional development focusing on teachers' and caregivers' emotional regulation and toddlers' self-regulation can foster better behavior guidance practices.^{xxiv}

Other Aspects of Care that Support Child Development

Research indicates that teachers and caregivers can encourage positive peer interactions for infants and toddlers by creating a supportive environment for children to connect.^{xxiv, xxv} However, when teacher and caregivers interrupt peer play frequently, intervening to direct interactions, they can actually discourage peer interaction.^{xxvi}

Research on caregiver-parent communication indicates that programs such as the *Getting Ready Intervention*^{xxvii} can support increased caregiver-parent communication and improve relationships. State

child care administrators have also identified contextual factors in states and local communities, such as increasing the availability of coursework and specialized degrees in infant and toddler development at institutes of higher education, as promising approaches to boost the quality of infant and toddler care in their states.^{xxxviii} However, coursework and practicum opportunities specifically focused on infants and toddlers are still not as readily available as are opportunities focused on older preschoolers in multiple states.^{xxxix}

Key state stakeholders have also identified the availability of staffed networks that connect child care providers to resources, information and specialists as a potentially valuable contextual factor.^{xxx} There is promising evidence that participation in staffed networks is associated with higher observed quality in family child care settings.^{xxxi} This finding is especially noteworthy given that infants and toddlers are less likely than children three through five years to be enrolled in center-based care, but more likely than children ages three through five to be enrolled in home-based care (particularly, both paid and unpaid home-based care arrangements involving unlisted providers who do not appear on state or local administrative ECE provider lists).^{xxxii}

Supporting Children's Competence

Studies of the association between the quality of care in infancy and toddlerhood and children's competence indicate that warm and responsive caregiving is linked with children's positive social-emotional development,^{xxxiii} and that higher quality care may also be related to stronger early cognitive development^{xxxiv} as well as language and communication skills.^{xxxv} However, few studies have directly examined the effects of interventions to strengthen interactions or the overall quality of care on infant and toddler competence.

The review of the research in this area indicates some promising findings. For example, an evaluation of an intervention focused on teachers' and caregivers' social-emotional availability found the intervention to be associated with improvement in infants' and toddlers' emotional attachment and emotional security.^{xxxvi}

Studies contrasting the development of infants and toddlers who have or have not experienced "continuity of care" practices (structuring of the care environment to maintain relationships with specific teachers and caregivers over time) vary in their results. There is some indication that such practices are associated with better caregiver-reported self-control, initiative, and attachment, and fewer caregiver-reported behavior concerns.^{xxxvii, xxxviii} Further, professional development to encourage teachers and caregivers to share joint attention with infants and toddlers in their care was found to be associated with stronger language acquisition among children.^{xxxix}

Implications for Policy and Practice

Important recent early childhood policy initiatives emphasize improving access to and quality of infant and toddler care. For example, the 2014 reauthorization of the Child Care and Development Block Grant (CCDBG) set new goals around access to high-quality care, identified infants and toddlers as a prioritized group of children (through increased funding to improve infant and toddler care quality), and increased the time period that families remain eligible for child care subsidies before they need recertification, thereby focusing on continuity of care. In addition, the Early Head Start-Child Care Partnerships, established in 2014, were created to increase access to high-quality care for infants and toddlers.

It is therefore an important time to be able to inform these initiatives with guidance on how best to improve access to and the quality of early care and education for infants and toddlers. The following steps would build on the present literature review and help to inform policy and practice:

- **Track infant and toddler participation in quality care.** States should track participation in quality-rated programs by age and/or the number of programs serving infants and toddlers by quality level to better understand infants' and toddlers' participation in and access to high-quality child care. While some states currently link their licensing data (which has information about ages of children served) with their QRIS data, more states could take steps to link data in this way. Public reporting and sharing of such state data would help progress towards a national understanding of infant and toddler participation in quality care. While there has been increasing program participation in QRIS over time,^{xi} continued growth in program participation particularly by programs serving infants and toddlers is an important foundational step to tracking infant and toddler participation in quality care.
- **Explore the range of factors that influence parents' decisions about care.** Policymakers can better address how to make higher quality care more accessible by acknowledging the range of factors that influence parents' decisions about care and establishing a better understanding of how parents balance the access dimensions of reasonable effort, affordability, meeting parents' needs and supporting children's development.
- **Increase reimbursement rates for providers caring for infants and toddlers receiving a subsidy.** While the present review of the literature found little evidence of strategies that facilitate access to high-quality care for infants and toddlers, increasing reimbursement rates for infants and toddlers was one exception. Given the evidence in the literature and the CCDBG reauthorization law's encouragement to prioritize infants and toddlers, states should consider raising reimbursement rates for providers caring for infants and toddlers receiving subsidies to help expand access.
- **Build professional development supports for the infant and toddler workforce.** The literature points to several areas of professional development for teachers and caregivers of infants and toddlers that are associated with improved child outcomes, including supporting caregiver practice in the areas of social-emotional development, joint attention, and the role of teachers' and caregivers' own emotional regulation in toddler's self-regulation. The present review also found positive associations between parent engagement curricula and improved caregiver-parent relationships and communication. States could use their CCDBG infant and toddler funds or their other quality set-aside funds to help expand evidence-based professional development supports.
- **Improve higher education for infant and toddler teachers and caregivers.** The literature reviewed points to the importance of higher education programs increasing content and field work specific to infant and toddler care.
- **Expand networks that support family child care providers.** The small body of research on family child care networks suggests that family child care providers participating in family child care networks have higher overall observed quality. States could use their CCDBG infant and toddler set-aside and other quality set-aside funds to help expand networks as a support for family child care providers serving infants and toddlers.

Next Steps for Research

The literature review finds that infants' and toddlers' access to high-quality care is understudied. Few access studies have focused exclusively on infants and toddlers; most studies are descriptive and do not use causal or even correlational research methods to explore what facilitates or hinders access to high-quality infant and toddler care; and research is limited on the extent to which the characteristics of children, families, and communities are associated with infants' and toddlers' access to high-quality care. Available studies highlight the challenge involved in examining child care slot vacancies as a method of measuring access to care, and the need to study how policy changes can affect access.

The literature review also underscores the need for additional studies examining the effects of quality supports on infants' and toddlers' longitudinal outcomes, outcomes in multiple developmental domains, and the role of dosage of participation in quality care.

Finally, research is needed that would broaden the lens on the quality of infant and toddler care to also include also child-peer interactions, caregiver-parent communication, and the implications of contextual factors such as the availability in communities of degree-granting programs in institutions of higher education that have fieldwork focusing on infants and toddlers, and the availability of staffed networks particularly for family child care programs serving infants and toddlers.

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