Infant and Toddler Care and Education: Access and Quality

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Early Childhood
Quality and Accountability

Introduction

In early childhood, the period before a child turns 3 is particularly important for development. During these first years of life, the brain forms critical connections that are foundational for later cognitive, language, behavioral, and social-emotional growth. Accordingly, the quality of children's early environments and interactions plays a vital role in shaping children's future outcomes.[1]

As of 2024, there are 3.5 million infants (children under a year old) and 7.5 million toddlers (1- to 2-year-olds) in the United States.[2] About 70% of children under age 3 live in families with both parents working or in school.[3] Thus, it is common for children to be cared for by adults other than their parents during this time. In the United States, 40% of infants and 60% of toddlers have at least one weekly nonparental early care and education (ECE) arrangement.[4] Nonparental ECE arrangements may be based in a private home (the child's or a provider's home) or in a center.[5]

Home-based arrangements are the most common type of nonparental arrangement for infants and toddlers and where they tend to spend most of their time.[6] This type of arrangement includes both listed and unlisted home-based providers. The former appear on public lists and are typically subject to some form of state-level oversight. Most listed home-based providers (82%) meet the typical definition of family childcare (FCC)—paid care of 4 or more children in a nonrelative provider's own home.[7] Only 2.5% of children under 3 are cared for in such settings.[8]

Many more children are cared for in unlisted home-based arrangements, which are not typically included on publicly searchable lists of ECE providers. These arrangements include paid but license-exempt or otherwise unregulated home-based care, as well as care provided by grandparents or other relatives, friends and neighbors, or nannies.[9] About 25% of children under 3 are in unlisted home-based arrangements for at least 5 hours per week.[10]

Center-based care arrangements are less common for infants and toddlers. Many center-based ECE settings do not serve children under 3 (focusing instead on only preschool-aged children). Less than half of center-based providers serve children age 1 or younger, and 60% of such providers serve 2-year-olds.[11] As of 2023, 35% of infants and 54% of toddlers were cared for in a weekly center-based arrangement.[12]

Recent findings from the National Survey of Children's Health show that one in three 3-year-olds lacks the foundational skills needed to be on track for kindergarten readiness.[13] Because children under 3 experience heightened developmental plasticity, the availability and quality of ECE for infants and toddlers warrant careful attention and substantial public investment.[14] This need is especially important given the widespread use of nonparental care among families with children under 3. In the United States, however, children under 3 receive the smallest share of an already limited pool of public ECE funding.[15]

This chapter reviews the evidence on ECE access and quality for children under 3. Access to ECE has been conceptualized by researchers as encompassing whether arrangements are reasonably easy to find, affordable, supportive of child development, and responsive to families' needs.[16] Some dimensions of access to infant and toddler ECE have been more extensively researched than others. In some cases, the current evidence pertains more to center-based than to listed home-based—much less unlisted home-based—settings. To the extent possible, we include evidence about the full range of home- and center-based arrangements that cater to this age group, although the research base for some arrangement types is still developing.

Key findings

Key finding #1: *Supply of ECE for infants and toddlers falls short of demand.*

Families with children under 3 report challenges in finding care that meets their needs and are more likely to do so than parents of preschool-aged children. Based on licensed capacity, the supply of infant and toddler slots is insufficient to serve all eligible children. Supply varies by ECE setting, with fewer centers serving infants and toddlers than older children. Participation rates in different types of settings also vary substantially by family income.

Key finding #2: *Infant and toddler ECE is more expensive to provide and less affordable for families than ECE for older children.*

Infant and toddler ECE costs are largely driven by the need for low staff–child ratios. It is challenging for families with infants and toddlers to cover the costs of care out of pocket.

Key finding #3: *Public investment in infant and toddler ECE is limited and insufficient to meet demand.*

Public funding can help bridge the gap between the costs of ECE and what families can afford, but the funding dedicated to infant and toddler ECE is limited. The largest federal funding sources for infant and toddler ECE are the Child Care and Development Fund and Early Head Start, but neither is funded at the levels needed to meet demand.

Key finding #4: *The structural characteristics of infant and toddler ECE vary widely across settings, and many settings do not meet quality benchmarks recommended by national professional organizations.*

Structural characteristics of ECE settings include child–caregiver ratios, group sizes, caregiver education, and compensation. In many settings, child–caregiver ratios and group sizes do not meet recommended benchmarks. Infant and toddler educators also tend to have lower levels of education and lower wages than preschool teachers.

Key finding #5: *Evidence suggests that the quality of caregiver–child interactions and learning environments in infant and toddler ECE is generally moderate, although substantial gaps remain in national data on the experiences of young children in nonparental care.*

Studies rely on different quality measures, populations, and time periods, and most assess caregiver–child interactions and learning environments using observational rating scales instead of examining child outcomes directly. Consistently across studies and settings, the quality of infant and toddler ECE is generally found to fall in the midrange.

Key finding #6: *Most strategies to improve infant and toddler ECE access and quality have not yet been rigorously evaluated, and evidence on their effectiveness remains limited.*

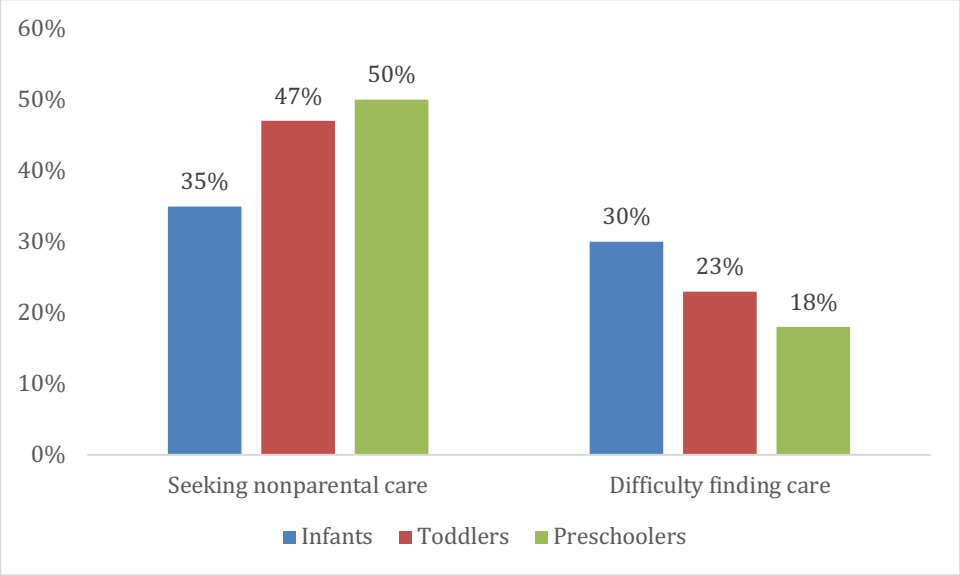
The most rigorous studies of quality improvement strategies for infant and toddler ECE have focused on professional development interventions. Other strategies that have been implemented to incentivize the supply of high-quality infant and toddler ECE include increasing subsidy reimbursement rates for infants and toddlers, offering grants and contracts to expand infant and toddler slots, and providing wage supplements for infant and toddler educators. However, there is limited evidence about the effectiveness of these approaches, particularly with respect to infant and toddler ECE supply and quality.

Evidence

Key finding #1: *Supply of ECE for infants and toddlers falls short of demand.*

Families with children under 3 report challenges in finding care that meets their needs. Parents of infants and toddlers are more likely than parents of preschool children to report "a lot of difficulty" finding care and that they did not find the care they wanted (Figure 1).[17]

Figure 1. Demand for and difficulty of finding care by child age

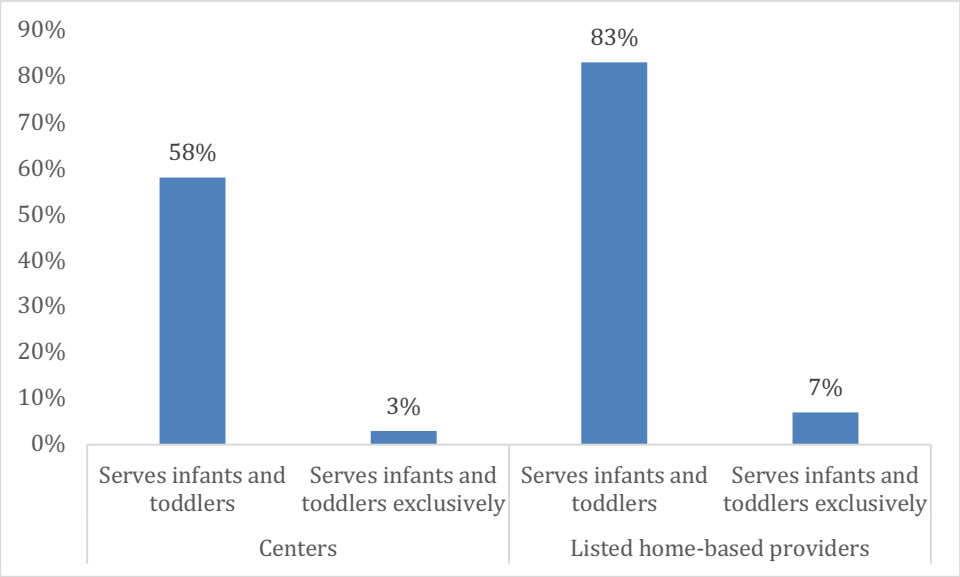


Source: R. Hanson and J. Bobrowski. 2024. Early Childhood Program Participation: 2023, NCES 2024-112. National Center for Education Statistics, Institute of Education Sciences, US Department of Education.

The available licensed infant and toddler capacity is insufficient to serve families' needs. Estimates from 18 states and the District of Columbia from 2020 suggest that the available slots can cover less than a quarter of infants and toddlers nationwide, ranging from 15% to 43% across locations. The scarcity is widespread: Most of the counties in the study constitute childcare deserts, characterized by 3 or more children for every available licensed slot.[18] Estimates of supply based on licensed capacity likely overstates current availability. A study from one state found that current capacity among licensed providers serving infants and toddlers was about 73% of their licensed capacity.[19]

The supply of infant and toddler care varies by ECE setting (Figure 2). There are fewer center-based providers serving infants and toddlers than centers serving older children.[20] Home-based providers are more likely to serve infants and toddlers.[21]

Figure 2. Supply of infant and toddler care by type of setting



Source: National Survey of Early Care and Education (NSECE) Project Team. 2014. Fact Sheet: Characteristics of Center-Based Early Care and Education Programs. OPRE Report No. 2014-73b. Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services; A. R. Datta, C. Milesi, S. Srivastava, and C. Zapata-Gietl. 2021. NSECE Chartbook: Home-Based Early Care and Education Providers in 2012 and 2019: Counts and Characteristics. Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services.

Participation rates for different types of settings vary substantially by family income. In 2012, infants or toddlers in families with higher incomes were more likely to have a center-based provider as a primary arrangement (43% vs. 31%). Infants or toddlers in families with lower incomes were more likely to rely on relatives, friends, or neighbors for their primary arrangement (52% vs. 37%).[22]

Key finding #2: *Infant and toddler ECE is more expensive to provide and less affordable for families than ECE for older children.*

The higher costs of infant and toddler ECE are largely driven by staff compensation. Because younger children need more focused attention, licensing regulations typically require lower child–staff ratios and maximum group sizes for infants and toddlers. For centers, the typical child–staff ratios are 4:1 for infants, 6:1 for younger toddlers (18 months), and 8:1 for older toddlers (35 months). These figures contrast with the ratio of 10:1 for preschool-aged children. Likewise, the maximum allowable group size for infants and toddlers is typically 8–12, whereas it is 20 for preschoolers.[23] For FCC providers serving mixed-age groups, states typically set a limit on the number of infants and toddlers who can be in care that depends on the number of older children in the group. Most states require an FCC provider to have an assistant if more than two infants are in care at a time, which also adds labor costs.[24]

The rise in maternal employment has led to an increase in demand for infant and toddler care. It remains challenging, however, for most working families with infants and toddlers to cover care costs out of pocket. Parents of infants or toddlers tend to have lower earnings and savings and work less than parents of older children.[25] In 2021, 18% of infants and toddlers lived in households under the federal poverty threshold, and 39% lived in households with incomes below 200% of the federal poverty threshold.[26] Estimates of providers' cost of supplying care suggest that infant and toddler ECE is substantially more expensive to provide than care for preschool-aged children. According to cost models estimating what providers would need to meet minimum licensing standards, the estimated average monthly cost of center-based care is $1,324 per infant and $1,096 per toddler. The estimated provider costs are 49% higher for infants and 23% higher for toddlers than for preschool-aged children. For FCC providers, the average monthly cost is $1,141 per child.[27] Given the steep costs, many families struggle to afford care. Over a quarter of households with an ECE arrangement spend 10% or more of their income on childcare expenses.[28]

Key finding #3: *Public investment in infant and toddler ECE is limited and insufficient to meet demand.*

Public funding can help bridge the gap between the costs of ECE and what families can afford, but the funding dedicated to infant and toddler ECE is limited.[29] Public investment in ECE for infants and toddlers is about 4% of what is spent for school-aged children and 18% of what is spent for preschool-aged children. In 2019, per-child spending across federal, state, and local funding sources for ECE (including Early Head Start and childcare subsidies) totaled less than $500 annually for infants and toddlers, $2,800 for preschoolers, and $12,800 for school-aged children. Annual public spending on ECE for children in families with incomes below 200% of the federal poverty line was still well below average per-child spending in K–12 education, with investments estimated at less than $1,000 per child during the first three years of life and less than $5,500 per child at ages 3 and 4.[30]

The largest federal funding sources for infant and toddler ECE are the Child Care and Development Fund (CCDF) and Early Head Start, but neither is funded at the levels needed to meet demand. CCDF helps low-income families pay for childcare through subsidies administered by states. However, subsidy reimbursement rates often fall below the true costs of care, particularly for infants and toddlers, whose care requires lower child–staff ratios and smaller group sizes.[31] For example, a study conducted in Oklahoma showed that subsidy rates covered only 40–50% of costs for infants but 79–99% of costs for 4-year-olds.[32]

In New York, subsidy rates for infants were found to be 13– 40% higher than the rates for 4-year-olds, but the costs for infants were 80% higher than those for 4-year-olds.[33]

Early Head Start provides comprehensive early childhood services (including center- and home-based ECE) for infants, toddlers, and pregnant women living in poverty, but the program reaches only a small share of eligible children. Nationally, Early Head Start serves only 9% of the infants and toddlers living in poverty, although participation rates vary widely across the country—from 5% in Indiana to 38% in Washington, DC.[34]

The growth in dedicated funding for preschoolers over the last decade may also have unintentionally reduced infant and toddler supply in some communities. A study of New York state's universal pre-K expansion found that each public pre-K site reduced the capacity for children younger than 2 years old at private childcare centers by about 1 to 2 slots. The reduction in capacity was concentrated in areas with more families living below the federal poverty line.[35]

Key finding #4: *The structural characteristics of infant and toddler ECE vary widely across settings, and many settings do not meet quality benchmarks recommended by national professional organizations.*

Structural characteristics of ECE settings, such as child–educator ratios, group sizes, caregiver training and education, and caregiver compensation, can help ensure safety and enable high-quality environments and interactions.[36] As summarized in Table 1, these characteristics vary widely by type of setting.

Child–educator ratios and group sizes do not match quality benchmarks in many settings. Professional organizations such as the American Academy of Pediatrics (AAP) and the National Association for the Education of Young Children (NAEYC) recommend relatively small group sizes and low child–caregiver ratios for infants and toddlers in center-based settings.[37] Typical classrooms in Early Head Start centers generally adhere to these benchmarks, and national data suggest that median ratios and group sizes in center-based infant and toddler classrooms are often close to the recommended levels.[38] However, state licensing standards are frequently less stringent than these quality benchmarks, which suggests that a substantial number of providers (particularly non–Early Head Start Centers) likely do not meet them. As of 2014, 35 states had licensing standards aligned with or more rigorous than the NAEYC standards, and only 3 states met the more rigorous AAP benchmark of 3 infants per adult. Fewer state licensing standards met the benchmarks for toddlers.[39]

For FCC settings, the National Association for Family Child Care (NAFCC) accreditation standards provide quality benchmarks related to group size.[40] As of 2014, 44 states had licensing standards for FCC. However, these state licensing policies vary substantially. As of 2020, six states did not license FCC settings. Among the states with licensing standards, many did not meet the NAFCC benchmarks for group size. Twenty-four states had standards aligned with the NAFCC recommendations, while twenty states allowed larger group sizes.[41] Nationally, listed home-based providers cared for an average of 8.6 children, nearly 40% of whom were under 3, exceeding the NAFCC benchmark of no more than six children under age 5 per adult.[42] Unlisted paid and unpaid providers cared for substantially fewer children on average.[43]

Infant and toddler educators generally have lower levels of formal education than preschool teachers across both center-based and home-based settings. In 2019, center-based

infant/toddler classrooms were substantially less likely than preschool classrooms to include a teacher with a 4-year degree.[44] Similar patterns were observed in Early Head Start settings, where many infant and toddler teachers lacked a college degree, despite degree attainment rates being somewhat higher in these than in other infant/toddler care settings.[45] Educational attainment was also limited among home-based providers, many of whom did not have a college degree.[46]

Table 1. Structural characteristics of infant/toddler ECE, by type of setting

	Infants	Toddlers
A- Center-based settings		
A.I- Child–caregiver ratios		
National median ratio (NSECE, 2012)	2.6	4.0
Modal licensing standard (number of states)	4 (32)	8 (14)
Number of states aligned with AAP standard[1]	3	7
Number of states aligned with NAEYC standard[2]	35	16
A.II- Group size		
National median group size (NSECE, 2012)	5.8	9.0
Modal licensing standard (number of states)	8 (19)	16 (9)
Number of states aligned with AAP standard[3]	1	2
Number of states aligned with NAEYC standard[4]	21	13
Classrooms with at least one teacher with a 4-year degree	45%	
Estimated annual salary of a full-time infant/toddler teacher	$27,700	
B- Home-based settings		
B.I- Average group size and percentage of children under age 3 in group		
Listed	8.6 (38.7%)	
Unlisted, paid	2.8 (33.9%)	
Unlisted, unpaid	1.8 (24.1%)	
C- Standards for family childcare settings		
Number of states that license family childcare settings	44	
Number of states aligned with NAFCC standard for group size[5]	24	
D- Providers with a 4-year degree		
Listed	19%	
Unlisted, paid	20%	
Unlisted, unpaid	27%	

Notes:

1 The American Academy of Pediatrics (AAP) standard is 3 for infants (children up to 12 months) and 4 or 5 for toddlers (12–36 months), depending on the size of the group. This table shows the number of states whose licensing regulations aligned with or were more rigorous than these standards as of 2014.

2 The National Association for the Education of Young Children (NAEYC) standard is 4 for infants (children up to 12 months) and 6 for toddlers (12–36 months), depending on the size of the group. This table shows the number of states whose licensing regulations aligned with or were more rigorous than these standards as of 2014.

3 The AAP standard is 6 for infants (children up to 12 months) and 8 for toddlers (12–36 months). This table shows the number of states whose licensing regulations aligned with or were more rigorous than these standards as of 2014.

4 The NAEYC standard is 8 for infants (children up to 12 months) and 12 for toddlers (12–36 months). This table shows the number of states whose licensing regulations aligned with or were more rigorous than these standards as of 2014.

5 The National Association for Family Child Care (NAFCC) requires a maximum of 6 children per adult. This table shows the number of states whose licensing regulations matched or were more rigorous than these standards as of 2014.

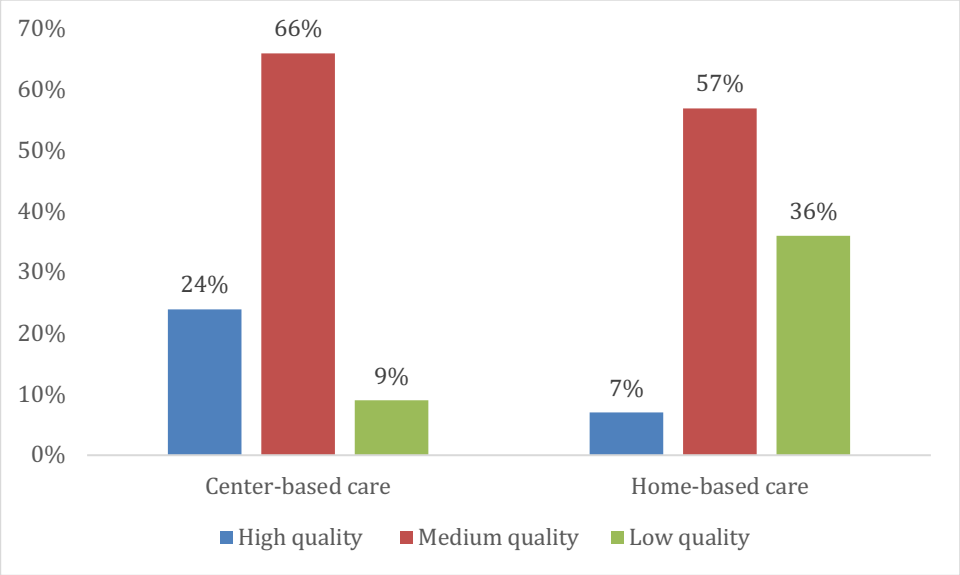
Infant and toddler educators have low wages and are paid less than preschool teachers. The Center for the Study of Child Care Employment estimates that full-time center-based teachers who work only with infants and toddlers make $27,700 per year while teachers who work with children of both age groups make $32,200 and teachers who work only with 3- to 5-year-olds make $35,600.[47] Comprehensive data on compensation for home-based educators are not available.

Key finding #5: *Evidence suggests that the quality of caregiver–child interactions and learning environments in infant and toddler ECE is generally moderate, although substantial gaps remain in national data on the experiences of young children in nonparental care.*

The evidence on the quality of caregiver–child interactions and learning environments in infant and toddler ECE is fragmented and limited. Most studies assess the quality of caregiver–child interactions and learning environments using observational rating scales instead of examining the causal effects of different care settings on later child outcomes. Such studies are difficult to conduct in infant and toddler ECE because care arrangements vary widely and longitudinal national data on children's experiences remain limited. Existing studies also rely on different quality measures, populations, and time periods, and there is little recent, nationally representative information on the experiences of infants and toddlers in nonparental care.

Consistently across the studies, the quality of infant and toddler ECE is generally found to fall in the midrange. The Early Childhood Longitudinal Study-Birth Cohort (ECLS-B), which followed a nationally representative sample of children born in 2001, found that most 2-year-olds were in settings with learning environments of medium or adequate quality (Figure 3).[48] Additional analysis of the ECLS-B data revealed that average quality was significantly higher in center-based than in home-based settings. Activities such as daily book reading and outdoor activities or play were more common in center-based settings.[49]

Figure 3. Distribution of environment quality ratings for 2-year-olds in ECE settings

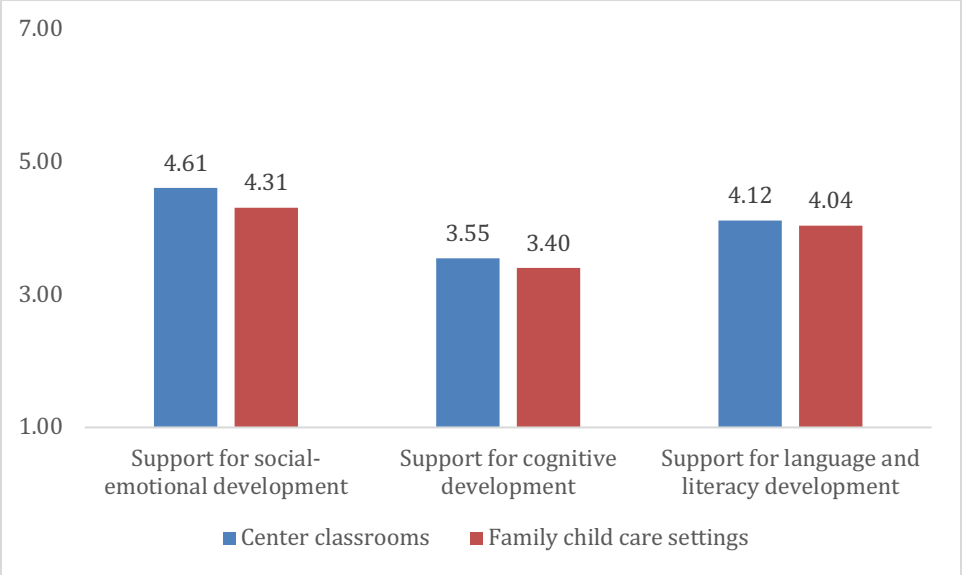


Note: Quality is measured by the Infant/Toddler Environment Rating Scale (ITERS) in center-based care and the Family Day Care Rating Scale in home-based care.

Source: G. M. Mulligan and K. D. Flanagan. 2006. Age 2: Findings from the 2-Year-Old Follow-Up of the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B), NCES 2006-043. National Center for Education Statistics, US Department of Education.

Other studies using measures more focused on caregiver–child interactions have reached similar conclusions. A multistate study of 400 classrooms in 2012 used the Quality of Care for Infants and Toddlers (QCIT) measure, designed for use across both center-based and FCC settings. Because they use the same items across settings and regardless of age group combinations, QCIT scores are more readily comparable across different settings than Infant/Toddler Environment Rating Scale (ITERS) or Family Day Care Rating Scale (FDCRS) scores. The scores varied slightly by setting type and developmental domain, with center-based classrooms scoring somewhat higher on support for social-emotional development and FCC settings scoring somewhat higher on support for cognitive development and language and literacy development. Across both settings, support for cognitive development tended to receive the lowest scores (Figure 4).[50]

Figure 4. Quality of child–caregiver interactions in ECE settings



Note: Data are from the field test conducted in 2012 of the Quality of Care for Infants and Toddlers (QCIT) measure. QCIT scores range from 1 to 7. Scores between 3 and 5 are considered midrange quality. The study sample was not nationally representative but included 400 classrooms from 14 states across the country, purposively selected to vary in geography and population served.

Source: Sally Atkins-Burnett, Shannon Monahan, Louisa Tarullo, Yange Xue, Elizabeth Cavadel, Lizabeth Malone, and Lauren Akers. 2015. Measuring the Quality of Caregiver–Child Interactions for Infants and Toddlers (Q-CCIIT). OPRE Report 2015-13. Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services.

Observational studies of Early Head Start classrooms have also found that most infant and toddler classrooms were in the midrange of quality on measures of caregiver–child interactions and learning supports. Scores tended to be stronger in areas related to emotional and relational support than in domains related to engaged support for learning and cognitive development.[51]

Key finding #6: *Most strategies to improve infant and toddler ECE access and quality have not yet been rigorously evaluated, and evidence on their effectiveness remains limited.*

The most rigorous studies of quality improvement strategies for infant and toddler ECE have focused on professional development interventions for infant and toddler educators. Consistent with the broader limitations in the infant and toddler ECE evidence base described earlier, relatively few strategies to improve infant and toddler ECE have been evaluated with rigorous causal designs or been linked to child outcomes. Studies have primarily focused on changes in classroom quality, caregiver practices, and educator interactions.

Two randomized controlled trials (RCTs) examined training and coaching interventions with center and FCC educators in 3 different states and found mixed results. A caregiver training and on-site coaching program based on the Program for Infant/Toddler Care (PITC) was tested in 92 centers and 159 FCCs in California and Arizona. The RCT results showed that the 13- to 14-month intervention did not have significant effects on quality as measured by

ITERS-Revised, the Family Child Care Environment Rating Scale, or a study-developed measure of staff–child interactions.[52] The Expanding Quality for Infants and Toddlers (EQ) Intervention was tested with an RCT that included 183 infant and toddler educators in centers and FCC settings in Colorado. Educators were randomly assigned to participate in a 48-hour course on infant/toddler theory and practice plus one-on-one coaching of durations ranging from 0 to 15 hours. The group receiving the highest dosage of coaching had the highest scores and largest gains on the Classroom Assessment Scoring System (CLASS) emotional and behavioral support and support for language and learning.[53]

Two studies focused on center-based educators only. One RCT tested training and coaching for center-based educators from 65 classrooms with 2- and 3-year-olds in Texas and Florida. The RCT tested the Responsive Early Childhood Curriculum (RECC), an intervention that aimed to improve responsive teacher–child interactions, by randomizing classrooms into a control group and two intervention groups: (1) RECC and (2) RECC plus explicit social–emotional classroom activities (RECC+). The RECC groups participated in a 6-week training followed by 9 months of weekly, on-site, in-class coaching sessions. At the end of the intervention, both intervention groups had higher scores on teacher–child closeness and lower scores on teacher–child conflict; however, results were not presented separately for toddler classrooms.[54] Another study evaluated the Center for Improving the Readiness of Children for Learning and Education (CIRCLE) Infant-Toddler Teacher Training program, a program that provided online courses, child progress monitoring measures, and remote coaching to toddler educators. This RCT included 38 toddler educators in Texas and found improved interactions between educators and children but did not find significant effects on child outcomes.[55]

Importantly, overall, much less research has been conducted on interventions for infants and toddlers than on those for preschool-aged children, and there is a pronounced paucity of evidence on home-based care for infants and toddlers. The only study in this area was the Partners for Inclusion (PFI) study, which randomly assigned 258 FCC providers serving infants and toddlers in 5 states to receive individualized on-site consultation through the PFI consultation model. The PFI group had higher scores on the FDCRS teaching and interactions scale at the end of the intervention period and showed greater gains than the control group.[56]

Other initiatives have focused on providing more professional development resources and supports for infant and toddler educators. For example, many states and some national organizations have developed competency frameworks for infant and toddler educators, and some of those frameworks have been explicitly tied to state credentialing and professional development systems.[57] However, states' data collection efforts related to these frameworks have thus far focused on tracking educator participation, experiences, and satisfaction. There is minimal evidence about the extent to which such efforts improve the quality of infant and toddler ECE.[58]

States have also tried to incentivize the supply of high-quality infant and toddler ECE by leveraging their CCDF funds to increase reimbursement rates for infant and toddler care or to provide grants and contracts to increase slots. Since federal fiscal year 2017, under the CCDF Final Rule, states have been required to set aside 3% of their CCDF funds for infant and toddler care. Some states have responded by increasing reimbursement rates for infants and toddlers. In 2024, 22 states increased reimbursement rates for infants in center-based care.[59] No studies have examined the effects of increased reimbursement rates on infant and toddler ECE supply specifically; however, some positive effects have been documented

more broadly, though these depend on the size of the subsidy increase and type of provider.[60] Some states have planned to increase infant and toddler ECE supply by providing grants or establishing contracts with providers to directly fund infant and toddler slots. As of 2024, 28 states had indicated they intended to use grants or contracts to increase the supply of infant and toddler care.[61] These strategies have not been evaluated to date.

A final set of strategies focuses on increasing compensation for infant and toddler educators. Examples include the Infant-Toddler Educator AWARD$ program in North Carolina and the New Mexico Infant Toddler Pay Parity Program.[62] However, evidence about the effectiveness of compensation strategies and other strategies to support the financial well-being of ECE educators is limited, and the related studies do not typically focus on infant and toddler educators as an explicit subgroup of interest.[63]

Next steps for research

Research has yielded several key findings about infant and toddler ECE in the United States. The supply of care falls short of families' needs, and access varies across settings and by family income. At the same time, the high cost of infant and toddler care is not matched by sufficient public investment, limiting the availability of high-quality care and placing it out of reach for many families. Evidence also suggests that the structural characteristics of infant and toddler ECE often fall below recommended benchmarks while most children appear to experience care of only moderate quality. Although a range of strategies have been implemented to improve infant and toddler ECE access and quality, there is still limited rigorous evidence about which approaches are most effective.

There are important limitations in the available evidence, however. Estimates of supply often rely on licensed capacity, which likely underestimates what is actually available to families. Data are also limited on the availability of care across different levels of quality and the extent to which families rely on multiple arrangements. In addition, little is known about how access and supply are affected by broader changes in public investment in ECE, including dedicated funding for specific age groups. Rigorous evaluations of recent efforts to dedicate funding for infant and toddler ECE are scarce.

The evidence about quality is similarly limited. Much of the literature on environment and interaction quality relies on outdated data and/or noncomparable measures across settings. This research has primarily focused on center-based settings and FCC providers, which receive the bulk of public funding and are more heavily regulated than other providers. Knowledge about home-based care remains limited even if it is by far the most common type of arrangement for children under 3.

There are also important gaps in our understanding of how best to support infant and toddler educators, particularly which strategies work at scale and across different settings. Finally, relatively little is known about how infant and toddler educators' career trajectories and needs differ from those of the broader ECE workforce or the extent to which policies designed for the ECE workforce generally benefit infant and toddler educators specifically.

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[8] Listed home-based providers served 291,000 children under age 3 in 2019, according to the National Survey of Early Care and Education (NSECE; Datta et al., 2021b). According to Kids Count, in 2019, there were 11.5 million children under 3.
[9] For additional information about the structure of the ECE sector, see https://livehandbook.org/early-education/introduction/fragmented-early-care/.
[10] Unlisted home-based providers served 2.84 million children under 3 in 2019, according to the NSECE (Datta et al., 2021b). According to Kids Count, in 2019, there were 11.5 million children under 3.
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