

Child Care Subsidies

Evidence Review Findings: Effective / Roadmap Strategy

Both child care subsidy receipt and greater state per child subsidy spending increase enrollment in formal child care settings and increase maternal employment and education. States vary considerably in the level at which they set subsidy rates and the method they use to set subsidy rates. Current evidence does not provide clear guidance to states in setting the optimal subsidy level to ensure subsidies increase low-income families' access to high-quality child care.

Child care subsidy programs provide financial assistance to help make child care more affordable for low-income families. By providing access to child care, subsidy programs aim to assist parents in attaining employment, education, and training and improve access to quality child care for children. Subsidy programs are financed largely through federal funds, but are administered by states. To establish and maintain enrollment in a subsidy program, parents must meet both federal and state-specific eligibility requirements. States have considerable flexibility in setting rules on program policies and administration (e.g., eligibility requirements, application procedures, family copayment levels, and provider policies), resulting in substantial state variation in subsidy policy. Federal guidance suggests subsidy payment levels be set at the 75th percentile of the child care market rate in the state. State market rate must be calculated based on a child care market rate survey or other cost methodology that is no more than two years old. This guidance is meant to ensure families have equal access to the child care market, but evidence is not clear on whether this is the optimal level to promote equal access, particularly for high-quality child care. Further research is needed to provide states with guidance on the optimal level for child care subsidy payments that allow families to access high-quality child care.

Decades of research in the field of child development have made clear the conditions necessary for young children and their families to thrive.² These conditions are represented by our eight policy goals, shown in Table 1. The goals impacted by child care subsidies are indicated below.

Table 1: Impacts of Child Care Subsidies on Policy Goals

Positive Impact	Policy Goal	Overall Findings
	Access to Needed Services	Mostly positive impacts, especially enrollment in formal care settings
	Parents' Ability to Work	Mostly positive impacts, especially maternal employment
	Sufficient Household Resources	Mixed impacts, with beneficial impacts on monthly earnings
	Healthy and Equitable Births	No strong causal studies identified for this goal
	Parental Health and Emotional Wellbeing	Null impacts on depression and parenting stress
	Nurturing and Responsive Child-Parent Relationships	Trending null impacts on parenting skills
	Nurturing and Responsive Child Care in Safe Settings	Trending mixed impacts, especially on stability and perceived quality of care
	Optimal Child Health and Development	Null impacts, especially on health and behavior metrics

What Are Child Care Subsidies?

Child care subsidy programs are means-tested, state-run programs that help low-income families pay for child care in a variety of settings, including licensed centers and homes, as well as some unlicensed settings. Parents can access subsidies by submitting applications to state agencies, such as a workforce commission, along with required documents demonstrating eligibility. Federal eligibility requirements for child care subsidies mandate that adults in the household work or participate in education and training activities, that household income is less than 85 percent of the state median income, and that children are younger than age 13.^{1,i} However, states have flexibility in setting specific guidelines on these requirements: states may set requirements regarding the number of hours parents must participate in approved activities, set limits on the amount of income a family can earn for initial and ongoing eligibility at lower levels than federal requirements, and may also identify priority groups to receive subsidies. States can also mandate child support cooperation as a condition of eligibility, but this mandate is not a federal requirement.^{3,4} Mandated child support cooperation means that the custodial parent must provide information to the state regarding the noncustodial parent to establish and enforce child support obligations in order to be eligible for child care subsidies.

States also have their own requirements for how frequently parents must recertify their eligibility for a subsidy, but federal guidelines require that states allow children to remain eligible for at least one year, regardless of changes to a parent's employment situation during that time.⁵ States may also set different initial and continuing income eligibility requirements.³ Families participating in the subsidy program may also be required to make copaymentsⁱⁱ to providers for the care of their children. States have flexibility in how copayments are calculated, who is exempt from copayments, and how high copayments may be;³ these policies matter because high copayments may present a financial burden for families and reduce access to care,⁷ although federal guidelines stipulate that copayments may not be a "barrier to families receiving assistance."¹

Once families are determined to be eligible and receive a child care subsidy, families must find and select care for their children and enroll with providers who accept subsidies and have available slots to provide care. Different state provider policies may affect the options for care available to families. For example, states may offer eligible families a voucher to cover the cost of child care, allowing parents to select a provider of their choice among those who accept the subsidy voucher with an available space for the child; the state then reimburses the provider for providing care based on the age of child, number of hours in care, and the rate the provider qualifies for. States may also contract directly with providers and subsidize a portion of child care slots with a provider and families would be able to select one of these spots if it was available. Contracting may give providers more financial stability by ensuring payments for providing care to a certain number of children with subsidies (assuming these spots are filled) and allow states to more directly influence the type and quality of care funded through subsidies (e.g., by contracting with providers meeting standards high-quality care).⁸ As of federal Fiscal Year 2018, only 10 statesⁱⁱⁱ were using contracting to deliver subsidies for any portion of their caseload and 6 of these states used contracting for fewer than 5 percent of their caseload.^{9,iv}

An important aspect of the child care subsidy program is the value providers receive from the state (either through a voucher payment or contracting) to reimburse for the cost of caring for children with subsidies who enroll in their care. Base reimbursement levels in a state pay for care by providers who meet the minimum state standards to qualify to participate in the subsidy system and must be sufficient to cover federal health, safety, and staffing guidelines.¹ States may also reimburse at higher levels for providers meeting higher quality standards (e.g., higher rating levels in state quality rating and improvement systems) and may also require providers to participate in the quality rating and improvement system (QRIS) to serve families with subsidies.^{5,5} As described in this review, the current research base is not clear what the optimal level is for provider reimbursement rates, particularly that ensure access to quality care.

ⁱ States may allow children up to age 19 if they have special needs or are in the Child Protection System.

ⁱⁱ Parent copayments are sometimes referred to as fees. However, fees may include other types of payments, including if states allow providers to charge families the difference between the provider reimbursement rate and the rates charged by the provider to private-pay families.

ⁱⁱⁱ State counts include the District of Columbia

^{iv} States may also provide cash payments to families to cover a set amount of the cost of child care. This approach is uncommon: only three states take this approach.

The federal government uses percentiles to measure and compare states' provider reimbursement rates on how adequately their subsidies ensure equal access to the child care market among subsidy recipients. States conduct their own analyses of the cost of their child care slots through a market rate survey or alternative methodology, these slots are ranked by cost, and the base state reimbursement rate is then compared to that ranking.¹⁰ For example, if a state's base subsidy reimbursement rate is found to be at the 30th percentile of the child care market, then 70 percent of child care slots cost more than the state's reimbursement rate. Market rate surveys (or alternative methodologies) should be used by states to determine payment rates¹ and must be conducted every three years and no earlier than two years prior to states' submission of their Child Care Development Fund (CCDF) plans.^{11,12} However, not all states adhere to this guidance. As of July 2020, 30 states are using out-of-date market rate surveys (see Table 3a for details).

The federal government considers state base reimbursement rates at the 75th percentile or above (covering three-fourths of slots in the state based on a market rate no older than two years old) as providing low-income families with equal access to the child care market, but percentiles vary widely between states. The 75th percentile guideline was established as a benchmark and proxy for equal access in the 1998 final rule governing the CCDF after welfare reform; this benchmark was already recognized by states due to its inclusion in Title IV-A child care programs of the Social Security Act.^{12,13,14,15} It is important to understand that even if a state meets the 75th percentile benchmark, this does not necessarily ensure equitable access to high-quality care. A recent analysis by the Center for American Progress found that subsidy reimbursement rates were often insufficient to cover the estimated cost to providers of center-based infant care that met minimum licensing standards: only three states had no monthly gap between subsidy rates and the cost of infant care and only six states had monthly gaps below \$100.¹⁶ Given that the vast majority of states have reimbursement rates that do not adequately cover the cost of care at minimum licensing standards, state subsidy reimbursement rates may fall far short of providing access to high-quality care for infants and toddlers.^v

Who Is Affected by Child Care Subsidies?

According to the Office of Child Care, over 1.3 million children and 813,000 families benefited from child care subsidies in federal Fiscal Year 2018.¹⁷ Children under age 3 comprised 27 percent of the children whose care was funded by subsidies. Among families served by subsidies, 41 percent had family incomes below the federal poverty level.¹⁷ The Government Accountability Office estimates that approximately 25 percent of children eligible for subsidies under state rules receive them; this low participation rate may be attributed in part to insufficient funding, leaving many families on waitlists, and in part to the administrative burden families face when applying.^{23,24} Families may encounter difficulties acquiring and keeping their subsidies because of complex state eligibility requirements and recertification processes.²⁵

The federal government has set the threshold for child care affordability at 7 percent of family income, but families typically pay much higher percentages of their income for child care, especially for the youngest children.^{20,21} The high cost of child care may create financial burdens for families and child care subsidies may be useful to many families who meet eligibility rules. According to Child Care Aware of America, a national organization that tracks child care access and affordability, the average annual cost of center-based care is \$11,896 for infants and \$10,158 for toddlers, compared to \$9,254 for 4-year-olds in 2018, with variation between states.^{22,vi} The cost of center-based infant care ranges from 29.3 to 56.3 percent of median income for single parents and 7.6 to 17.5 percent of median income for married-couple families, depending on the state in which they reside. Although home-based child care is typically less expensive, cost figures remain high relative to income: the cost of infant care in home-based settings is 21.3 to 46.8 percent of median income for single-parent families and 5.5 to 14.0 percent for married couple families.^{22,vii}

^v For example, Workman and Jessen-Howard estimate that the US average monthly cost of licensed center-based infant child care is \$1,230 and the US average monthly cost of high-quality center-based infant child care is \$2,260. See Workman, S., & Jessen-Howard, S. (2018).

^{vi} Estimate uses average of program-weighted averages (method #3, see p. 44). Caution should be used comparing and interpreting price figures nationally; local context should be considered.

^{vii} See pp. 7-14 of appendices (Appendices III – VI). The cost of center-based toddler care ranges from 29.3 to 63.8 percent of median income for single parents and 7.6 to 15.2 percent of median income for married-couple families, depending on the state they reside in.

Of the children under age 3 benefiting from subsidies: 71 percent of infants and 73 percent of toddlers were cared for in centers and 23 percent of infants and 21 percent of toddlers were cared for in home-based settings (other than the child's own home).^{18,viii} The share of infants and toddlers in home-based care settings is slightly higher than among preschoolers benefiting from subsidies;¹⁸ consistent with other evidence suggesting home-based arrangements are common among infants and toddlers.¹⁹ Subsidy policies can affect families differently depending on the type of care setting a family prefers or has access to in the community. Between 2011 and 2017, the number of licensed home-based providers in the child care market decreased significantly (including for license-exempt home-based providers) and the number of home-based providers receiving subsidy payments through the Child Care and Development Block Grant (CCDBG) also decreased steeply during this time; although the number of children served through CCDBG decreased in this time as well, the decrease in the number of home-based providers and those that received subsidy payments was greater than the decline in children served.^{26,27} State regulations, the increased emphasis on quality rating and improvement systems, and changes to subsidy policies may affect the number of home-based providers in the market generally and who participates in the subsidy system.^{26,27} With fewer home-based providers participating in the subsidy system, families may be left with fewer child care options and choices meeting their preferences. Many families rely on home-based providers for benefits such as flexible hours, cultural fit, or proximity to home, and a decrease in these providers in recent years has exacerbated the problem of child care deserts,^{ix} especially in rural areas and for infants and toddlers.²⁸ Ensuring adequate reimbursement rates, particularly for home-based providers, may help preserve the supply of this option for families and retain quality providers who participate in the licensed market.

What Are the Funding Options for Child Care Subsidies?

Child care subsidies are funded largely through the Child Care and Development Fund (CCDF), which integrates mandatory funding from the federal Child Care Entitlement to States and discretionary funding from the Child Care and Development Block Grant (CCDBG), which requires states to provide a funding match. The CCDBG is currently funded at \$5.826 billion for federal Fiscal Year 2020, an increase of \$550 million from Fiscal Year 2019.^{29,x} States may also use up to 30 percent of the funding received for the Temporary Assistance for Needy Families (TANF) program to fund child care subsidies. Another source of funding is the federal Preschool Development Grant Birth Through Five (PDG B-5), a competitive grant program that provides states with money for early care and education.³⁰ Initial PDG B-5 grants were awarded to 45 states in December 2018;³¹ 20 of these states received renewal grants, and 3 states received new initial grants in December 2019;³² 3 additional states received renewal grants in April 2020.³³ The most recent renewal announcement for the PDG B-5 grants includes incentives for states that offer more generous subsidies for infant and toddler care.³⁴

Why Should Child Care Subsidies Be Expected to Impact the Prenatal-to-3 Period?

Greater access to child care may allow more parents to work or complete education and training programs and may support healthy child development when care settings are high-quality and stimulate children's early brain development.^{35,36,37} The cost of child care, however, can make it difficult for families, especially those with low incomes, to access affordable, reliable, high-quality care.^{22,xi} Public subsidies for child care seek to bridge this financial gap.^{38,39}

The cost of toddler care in home-based settings is 21.2 to 46.8 percent of median income for single-parent families and 5.5 to 14.0 percent for married couple families.

^{viii} Infants are defined as children from birth to less than one-year old. Toddlers are children one-year to less than 3-years old. Home-based settings include family homes and group homes (differentiated by number of children in care). The remaining share of infants and toddlers are either in care in the child's home or did not have valid care setting data.

^{ix} A child care desert is a community with insufficient child care capacity to meet demand; it is sometimes defined as a census tract with at least 50 children under age 5 with either no child care providers, or with child care slots available for less than one-third of children. Source: Malik, R., Hamm, K., Schochet, L., Novoa, C., Workman, S., Jessen-Howard, S. (2018). *America's child care deserts in 2018*. Center for American Progress. <https://www.americanprogress.org/issues/early-childhood/reports/2018/12/06/461643/americas-child-care-deserts-2018/>

^x In Fiscal Year 2018, the CCDBG received the single largest funding increase in the program's history.

^{xi} "Quality" is defined differently by various research sources and states, but it is often conceptualized into components of "structural" and "process" quality. Structural features of quality are the aspects of the child care environment that can be legislated or mandated,

Increased parental employment and access to stable and high-quality child care may result in improved long-term child outcomes, including social-emotional and cognitive development, through two main pathways: (a) indirectly, through higher family income from increased employment which may reduce family stress, boost access to needed resources, and limit adverse childhood experiences; and (b) directly, through access to high-quality child care that provides enriching and safe environments for children during the day that support positive brain development.^{40,41,42,43} A high-quality care environment may include a well-trained and compensated workforce, low child-to-staff ratios and group sizes, nurturing and responsive caregiver-child interactions, and other aspects of the care setting that support learning.

However, child care subsidies may not necessarily lead to improvements in cognitive or social-emotional outcomes for children if the child care settings that families choose, or the settings that are available to them, are not high-quality. Subsidies may allow more parents to work and increase family income, but without enough high-quality child care slots that serve recipients of subsidies, families may be unable to access high-quality care and children's outcomes may not improve. A lack of high-quality child care slots for children with subsidies may reflect implications of subsidy provider policies (e.g., low reimbursement rates that are insufficient to cover the cost of providing high-quality care) or may reflect issues with the quality of the overall child care market. For example, there may be few high-quality providers in the market that accept child care subsidies or the number of available spots with these providers may be limited and insufficient to meet demand, leaving families unable to access high-quality care. In addition, if parents do not have the other supports they need to adjust to employment, such as reliable transportation and positive working conditions, subsidy receipt may be associated with greater parental stress, resulting in poorer parent-child interactions. Finally, if families cannot access subsidies (e.g., due to waiting lists, application policies, or income eligibility limits), the impact of subsidies on lower-income families may be limited.

What Impact Do Child Care Subsidies Have, and for Whom?

The evidence meeting the standards of this review consistently links subsidy receipt and higher per child state subsidy spending to access to child care (enrollment in formal settings) and indicators critical to parents' ability to work; but not to child care quality, caregiver wellbeing, or developmental outcomes for infants and toddlers. Although the evidence base demonstrates the effectiveness of subsidies as a strategy to improve some aspects of family wellbeing during the birth-to-3 period, the evidence base does not provide clear guidance to states in setting an optimal subsidy level to ensure subsidies increase families' ability to access to high-quality child care.

The research discussed here meets our standards of evidence for being methodologically strong and allowing for causal inference, unless otherwise noted. Each strong causal study reviewed has been assigned a letter, and a complete list of causal studies can be found at the end of this review, along with more details about our standards of evidence and review method. The findings from each strong causal study reviewed align with one of our eight policy goals from Table 1. The Evidence of Effectiveness table displays the findings associated with child care subsidies (beneficial, null,^{xii} or detrimental) for each of the strong studies (A through I) in the causal studies reference list, as well as our conclusions about the overall impact on each studied policy goal. The assessment of the overall impact for each studied policy goal weighs the timing of publication and relative strength of each study, as well as the size and direction of all measured indicators.

such as child-to-staff ratios or caregiver education requirements, and that are intended to enhance caregiving. Process quality refers to the richness of interactions between children and caregivers, or children and their peers, and of the learning experiences and instruction. The most common broad components in states' frameworks for quality (formalized into quality rating and improvement systems or QRIS) include licensing compliance, ratio and group size, health and safety, curriculum, environment, staff qualifications, administration and management, child assessment, family partnerships, cultural and linguistic diversity, accreditation, provisions for special needs, and community involvement. Research often uses validated scales to measure quality during classroom observations, such as the Early Childhood Environment Rating Scale (ECERS) or the Infant and Toddler Environment Rating Scale (ITERS). Sources: Slot, P. (2011). *Structural characteristics and process quality in early childhood education and care: A literature review* (OECD Education Working Paper No. 176). Organisation for Economic Co-operation and Development.

[http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP\(2018\)12&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP(2018)12&docLanguage=En); Caronongan, P., Kirby, G., Malone, L., & Boller, K. (2011). *Defining and measuring quality: An in-depth study of five child care Quality Rating and Improvement Systems* (OPRE Report 2011-29). Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services. https://www.acf.hhs.gov/sites/default/files/opre/five_childcare.pdf

^{xii} An impact is considered statistically significant if $p < 0.05$.

Table 2: Evidence of Effectiveness for Child Care Subsidies by Policy Goal

Policy Goal	Indicator	Beneficial Impacts	Null Impacts	Detrimental Impacts	Overall Impact on Goal
Access to Needed Services	Enrollment in Formal Child Care Settings	B, G	D		Mostly Positive
Parents' Ability to Work	Employment	A, D, E, F, H	D		Mostly Positive
	Number of Hours Worked	F			
	Work Disruption		E		
	Maternal Educational Attainment	C	C		
Sufficient Household Resources	Household Income		D		Mixed
	Earnings	E			
Parental Health and Emotional Wellbeing	Maternal Depression		D		Null
	Maternal Parenting Stress		E		
Nurturing and Responsive Child-Parent Relationships	Maternal Parenting Skills		D		Trending Null*
Nurturing and Responsive Child Care in Safe Settings	Stability of Primary Care Arrangement		I		Trending Mixed*
	Number of Care Arrangements		I		
	Perceived Child Care Quality	I			
Optimal Child Health and Development	Breastfeeding		D		Null
	Well-Baby Visits		D		
	Behavioral Problems		D		
	Language, Literacy, and Mathematics Assessments		D, H		

* Trending indicates that the evidence is from fewer than two strong causal studies or multiple studies that include only one location, author, or data set.

Access to Needed Services

Evidence fairly consistently links subsidy receipt and subsidy policy to greater use of formal child care settings (particularly center-based child care) over parental care or other arrangements. A 2004 study of the impact of subsidy policy changes^{xiii} in Rhode Island on recipient families' child care choices found that families were about 2 to 3.8 times more likely to choose center-based care over informal care following the policy changes as compared to before, depending on the number of children receiving subsidized care in the family and whether the family was a current or former cash

^{xiii} Policy changes include expansions of income and age eligibility, increases in reimbursement rates to formal providers, establishment of a Comprehensive Child Care Services program, stricter enforcement of requirements for informal providers, change in eligibility determination (separate from enrollment with a given provider), web-based enrollment, and establishment of portable vouchers. For additional details, see Witte & Queralt (2004).

assistance (Temporary Assistance for Needy Families, TANF)^{xiv} recipient.^{G,xv} A similar trend was found among recipient families in selecting family child care^{xvi} over informal care options (about 3 to 7.5 times more likely to select family care over informal care following the policy changes as compared to before).^G This study is included in our analysis, but it was not limited to infants and toddlers.

A 2018 study using parental educational attainment as a proxy for subsidy eligibility found that a \$1,000 increase in state subsidy spending per low-income child^{xvii} was associated with 86 percent higher odds of enrollment in center-based care than in multiple care arrangements for infants and toddlers in households with lower parental educational attainment (in comparison to parents with higher educational attainment, treated as subsidy ineligible).^B Of the studies included in this review, one study found a null effect: a 2011 study did not find a statistically significant impact of greater state subsidy spending on the type of child care (parent, center-based, noncenter-based/nonparental care) selected by subsidy-eligible and ineligible parents.^D

Parents' Ability to Work

Most studies of the effects of subsidies examine children older than infants and toddlers and their parents, but studies that do focus on parents of children ages 0 to 3 find positive impacts on maternal employment. For example, a recent quasi-experimental study found that a 10 percent increase in CCDF subsidy expenditures per child ages 0 to 12 was associated with a 0.7 percent increase in employment for low-income mothers of children ages 0 to 3.^{A,xviii} The authors estimate that, if CCDF expenditures were tripled, this impact translates to approximately 376,000 newly employed mothers with children under age 3 who have incomes below 85 percent of state median income. Another study examining impacts over time as children aged found that a \$1,000 increase in state spending on child care subsidies (per low-income child under age 6) was associated with a 3 to 4 percentage point increase in the likelihood of maternal employment among subsidy-eligible mothers at 2 and 9 months post-birth (relative to ineligible mothers), although effects were null at 4 months and 4 years post-birth.^{D,xix}

Several other studies have also examined the impact of subsidy policy on employment indicators and found a number of positive effects. A study of changes to Massachusetts's subsidy policy found that an increase of \$77 in spending on child care vouchers per low-income^{xx} child between Fiscal Year 1996 and 1997 predicted an increase in the probability of working by 3.6 percent among subsidy recipients who were also current or former TANF recipients.^F A study in Michigan of single mothers with children under 14 found that subsidy receipt increased the proportion of months worked between interviews by an average of eight percentage points.^F One study simulating the effects of variation in subsidy policy design found that subsidy programs are associated with a 6.4 percentage point increase in maternal labor force participation (relative to the counterfactual without the program).^H The same study found that variation in copays, rate ceilings, income cutoffs, and reductions in rationing are also associated with increases in labor force participation (effect sizes vary depending on counterfactual design).

The study of changes to Massachusetts's subsidy policy was the only study included in this review that examined the impact of subsidies on hours worked per week. The study found that an increase of \$77 in spending on child care vouchers per low-income child between Fiscal Year 1996 and 1997 predicted an increase of 0.3 weekly hours worked among

^{xiv} The state cash assistance (Temporary Assistance for Needy Families) program in Rhode Island was called the Family Independence Program and is now called Rhode Island Works.

^{xv} Significant results were consistently found for families with one and two children and for current and former cash recipient families with three children. Results for families that never received cash assistance were not consistently statistically significant. This study includes subsidy-eligible children of all ages.

^{xvi} "Family child care" and "home-based child care" refer to formal in-home care by someone other than a child's relative.

^{xvii} In this definition, the authors include federal and state expenditures on CCDF subsidies from the CCDBG and TANF block grants.

^{xviii} Subsidy expenditures were calculated per child ages 0 to 12 in a state, not just subsidy recipients. This effect can be compared to that among eligible women with children ages 0 to 12, which was 0.5 percent.

^{xix} Educational attainment is used as a proxy for subsidy eligibility. The authors of this study describe the children as "poor," but do not provide a definition of poverty for their operationalization of subsidies. This summary refers to these children as "low-income."

^{xx} Low-income refers to children the authors label as "poor," which appears to mean children living in households with earnings lower than 185 percent of the federal poverty level. See footnote 10, page 12 of the study.

subsidy recipients who were also current or former TANF recipients.^F Although positive and statistically significant, this effect is very small and limited in generalizability.

Finally, one study of parents with children under age 14 found no consistent evidence of a link between subsidy receipt and a decrease in work disruptions.^F Although subsidy users were less likely to stop using care in the past year (20.5 percent of users vs. 35.8 percent of individuals without a subsidy), there was no statistically significant link between subsidy receipt and care-related work disruptions.

The link between subsidy receipt and subsequent maternal educational attainment has been less frequently studied than maternal employment indicators, but a 2019 study using a large, national, longitudinal dataset found that subsidy receipt positively predicted a 13 percentage point increase in the likelihood mothers would increase their education level by the time their child was 4 years old (from child age 9 months, effects were null between age 2 and kindergarten).^C

Sufficient Household Resources

Two studies included in this review assess the impact of state subsidy spending and subsidy receipt on household income and earnings and the findings are mixed. A 2011 study examining the link between increased spending on subsidies per low-income child under age 6 found no effect on household income when the child was 4 years old.^D Another study found positive effects: subsidy receipt was associated with an increase in monthly earnings of 105 percent; however, this study included parents of children under age 14 and the impacts are not limited to infants and toddlers.^E

Parental Health and Emotional Wellbeing

Two studies examined the effect of subsidies on indicators of maternal mental health, however, both found null effects. One study found no impact of an increase in spending on child care subsidies per low-income child under age 6 and self-reported maternal depression scale scores at 9 months and 4 years post-birth.^D A second study found that subsidy receipt was not associated with any difference in reported maternal parenting stress among mothers of children ages 0 to 14.^E

Nurturing and Responsive Child-Parent Relationships

Limited evidence exists on the impact of subsidies on caregiving skills, knowledge, and warmth for infants and toddlers. One study included in this review found that increased subsidy spending (per low-income child under age 6) was not associated with maternal parenting skills (e.g., intrusiveness, detachment, and positive regard) at 9 months post-birth, although there was a positive impact at 4 years post-birth.^D

Nurturing and Responsive Child Care in Safe Settings

Limited evidence also exists on the impact of subsidy usage on indicators of nurturing and responsive care in safe settings; results from one study including infants and toddlers is mixed. This longitudinal study explored the impact of child care subsidy usage among families with young children (ages 0-6) in Minnesota.^I Results for indicators of child care stability, including changes in the primary child care provider and the number of care arrangements used, were null. However, subsidy usage predicted a higher level of quality care as perceived by parents^{xxi} (by 0.5 standard deviations). This effect was explained by the selection of center-based care rather than other types of care, but provides evidence that subsidy usage may positively and directly impact quality. Two important limitations of this study include: (1) the study relied on parent report of child care quality, rather than a rating by an outside observer using a validated tool and (2) the study was not limited to infants and toddlers which may limit the generalization of these findings to the 0-to-3 population.

Optimal Child Health and Development

Few studies examine the impact of subsidy receipt or state subsidy policies on infant and toddler health and developmental outcomes and those that do find null effects. A 2011 study examined a number of child outcomes,

^{xxi} Perceived child care quality was measured by the parent's perception of both structural and process features of quality. Parents responded to 17 scale questions designed to "mirror elements of quality included in Minnesota's quality rating and improvement system." The 17 items were reduced to a single factor by the study authors using factor analysis. For additional details on this measure see page 18 of Krafft, Davis, & Tout (2017; Study I).

including two indicators related to child physical health.^D However, the study found no impact of increased state per child subsidy spending on breastfeeding duration or on the likelihood of having attended four well-baby visits at 9 months post-birth. The study also examined child social-emotional health outcomes, but found no impact of spending on indicators of child behavioral problems (overall, conduct, inattention), although these outcomes were assessed at age 4, not between ages 0 and 3.^D

Only two studies meeting standards of evidence for this review examine child cognitive outcomes, however, both assess outcomes when the child is older than age 3. The same 2011 study discussed above found that children's cognitive outcomes, as measured by literacy, language, and mathematics assessments^{xxii} in the year before kindergarten, were not significantly related to state subsidy expenditures.^D Another study simulating the effects of the subsidy program and variation in subsidy policy design found “essentially zero impact” of subsidies on changes in child cognitive achievement.^H Similarly, the relationship between subsidy receipt and child cognitive and developmental outcomes was found to be null or slightly negative in three additional studies examining impacts in children age 3 and older.^{45,46,47} More research on outcomes associated with subsidy receipt or state subsidy expenditures is needed for children ages 0 to 3.

Is There Evidence That Child Care Subsidies Reduce Disparities?^{xxiii}

Socioeconomic Status

No studies included in this review directly assess whether subsidy receipt or dimensions of subsidy policy reduce gaps in outcomes for children by socioeconomic status. However, current research suggests that children in low-income families are less likely to be enrolled in formal, center-based child care and in high-quality care than their higher-income counterparts.^B Some research suggests that subsidies facilitate greater access to formal settings (see above), but subsidies are not consistently associated with improvements in the quality of care that low-income children receive, likely in part because reimbursement rates are too low.^{D,48} Infant and toddler care is more expensive, on average, than care for older children, and fewer high-quality providers are available for this age group, so lower-income families with very young children face particularly acute barriers when seeking child care, even with access to subsidies.⁴⁹ Future causal research should assess how subsidies may help reduce disparities among infants and toddlers by socioeconomic status.

Race/Ethnicity

Insufficient evidence exists to establish whether child care subsidies contribute to closing race/ethnicity achievement gaps over time; no studies included in this review directly assess gaps by race or ethnicity. However, equal access to child care subsidies remains a concern. Recent research reveals a significant gap between the percentage of Hispanic families in the US who are eligible for child care subsidies and the families who receive them; Hispanic children account for 35 percent of eligible children but just 20 percent of the population served with CCDF subsidies.⁵⁰ Documentation requirements may be one factor limiting participation for this group—for example, many states ask for subsidy applicants' social security numbers but do not make it clear that providing them is optional.⁵⁰ This study is specific to Hispanic children and does not address barriers for Black children; no other research included in this review directly addressed gaps for Black children.

Has the Return on Investment for Child Care Subsidies Been Studied?

None of the strong causal studies included in this review directly assess the return on investment or cost savings as a result of subsidy receipt or subsidy policies. However, studies that find positive impacts of subsidy receipt and policies on maternal employment,^{A,D,E,F,H} weekly number of hours worked,^F and maternal education^C may suggest positive economic returns. A more comprehensive analysis of the return on investment is forthcoming.

^{xxii} Literacy assessments included “letter recognition, letter sounds, recognition of simple words, and phonological awareness.” Language assessments included verbal ability and spoken vocabulary. The mathematics assessment included “number sense, geometry, counting, operations, and patterns.” (p. 15).

^{xxiii} Disparities are defined here as differential outcomes by race, ethnicity, or socioeconomic status (SES).

What Do We Know, and What Do We Not Know?

To date, child care subsidies have not been studied extensively as a state-wide policy; existing evidence points to the effectiveness of child care subsidies as a strategy to improve outcomes in the birth-to-3 period, but does not provide guidance to states on optimal subsidy levels to promote access to quality care. Evidence fairly consistently links both subsidy receipt and higher state subsidy expenditures to positive outcomes for access to services (e.g., use of more formal care arrangements) and the ability of parents to work (e.g., higher maternal employment) in the birth-to-3 period. However, the limited evidence base on the link between subsidy receipt and spending policies and outcomes related to parental health and emotional wellbeing, nurturing and responsive child-parent relationships, nurturing and responsive care in safe settings, and optimal child health and development for the birth-to-3 period suggests mostly null findings. Additional research in these areas is needed to better understand the impacts of subsidies on caregiver and child outcomes, as well as impacts on quality of care settings.

Research is also needed on the potential for subsidies to reduce disparities for infants and toddlers by socioeconomic status, race, and ethnicity and on the specific components of subsidy policy (e.g., the optimal provider reimbursement rate). Research on the optimal subsidy level is particularly critical to provide guidance to states on the appropriate rate levels that improve families' access to high-quality care and subsequently, improve child outcomes.

Although few studies on child care subsidies address the link to type and quality of care received by infants and toddlers, research on children ages 3 to 5 years old may provide useful insight on these potential connections. For example, research on children ages 3 and older supports the positive findings included in this review on the link between subsidy receipt and use of formal care.⁴⁰ Only one study included in this review examined the link between subsidies and child care quality, however, research on the preschool-age population also provides some evidence on this link: a 2011 study found that subsidy receipt was linked to selection of higher-quality care overall (by one-third of a standard deviation on quality measure scores), although this effect was driven by the fact that subsidy recipients were more likely to select center-based care than nonsubsidy recipients.⁴⁰ The authors also found that subsidy recipients selected higher quality home-based care (by 0.6 standard deviations on quality scores), but lower quality center-based care (by less than 0.4 standard deviations on quality scores) than comparable nonsubsidy recipients using the same care arrangement type.^{xxiv} The authors hypothesized that the effects were driven by (a) the selection of more formal home-based providers, rather than informal providers such as relatives, and (b) potentially higher-quality center care used by nonrecipient families, such as Head Start or public pre-kindergarten. In addition, center-based care was generally of higher quality overall than home-based care in this study, likely due, at least in part, to the categorization of kin and kith care alongside formal providers in the home-based care category.^{xxv}

A 2012 study examining child care among children at age 4 similarly found that the type of care mattered for quality: 62 percent of the positive association found between subsidy receipt and quality was attributed to the type of care setting chosen (in particular, higher enrollment in center-based care).⁵¹ This evidence on children ages 3 to 5 corroborates the findings of the study included in this review suggesting subsidies may have a positive impact on quality, particularly through the increased use of center-based care among families receiving subsidies.

Two observational studies provide evidence suggesting that child care subsidy policies' may be able to positively affect the quality of care families receive. One study of a child care affordability program examined the implications of providing additional financial assistance to reduce copayments (to no more than 10 percent of monthly household income) for families receiving subsidies and providing financial assistance to access care for families whose incomes were too high to qualify for the subsidy program (between 185 and 200 percent of the federal poverty level); in each case, families needed to use the assistance to receive care at quality child care centers or homes.²¹ Results from mixed-methods analyses suggested that parents in the child care assistance program reported positive impacts from program

^{xxiv} Quality of center-based care was measured using the Early Childhood Environment Rating Scale- Revised (ECERS-R) and quality of home-based care was assessed using the Family Day Care Rating Scale (FDCRS).

^{xxv} The mean quality score for center-based care was 5.01 (standard deviation 1.39), as compared to 3.13 (standard deviation 1.28) for home-based care in this sample. Subsidy recipients were also more likely to choose formal home-based care, rather than kith or kin care, which affected quality averages.

participation, including that the assistance allowed families to continue using quality providers in the face of financial challenges and, for some families, allowed parents to “purchase quality care for the first time.” Although this study did not directly assess the impacts of subsidy policies, it suggests potential positive implications for family-friendly subsidy copayment and income eligibility policies.

A second observational study examined the association between higher subsidy payment rates and provider-friendly payment policies and child care quality.⁵³ For child care centers participating in the subsidy system, higher base reimbursement rates were associated with a higher likelihood of meeting the quality composite used in the study, an association driven by an increased likelihood of earning a quality rating. Although associations with quality measures were null for the use of tiered reimbursement rates, an additional \$100 difference between the lowest and highest tiered subsidy rates were associated with a higher likelihood of meeting the quality composite standard in the study, suggesting that the design of tiered reimbursement rates in subsidy systems may matter. Use of contracts, rather than vouchers were not found to be associated with quality ratings or the quality composite. Additionally, the provider-friendly policy index (based on family fee policies, payment for absences and closings, and 12-month redetermination periods) was not associated with any of the quality measures. For child care homes participating in the subsidy system, increases in base reimbursement rates, use of tiered reimbursement, use of contracts, and the provider-friendly policy index were not associated with quality rating or the quality composite measures. However, the difference between the lowest and highest payment tiers was associated with the quality composite measure, largely through quality ratings.^{xxvi} Additional research is needed to assess how aspects of subsidy policies may affect different types of providers in different ways.

Finally, other studies of state and local quality rating and improvement systems (QRIS) also provide some evidence that suggests potentially positive links between subsidy reimbursement rates and child care quality. For example, a study of the North Carolina QRIS found that lower quality ratings led to future quality improvements; the authors hypothesized that tiered subsidy reimbursement rates attached to quality ratings, along with market pressures, may be driving this impact.⁵⁴ Additionally, recent analyses of state QRIS have started to examine patterns of quality ratings among QRIS offering tiered reimbursement rates (and among states requiring QRIS participation and/or quality rating requirements to participate in the subsidy system);⁵⁵ research is needed that can assess casual effectiveness of these financial incentives.

Because a critical objective of the child care subsidy program is to increase low-income families' access to high-quality care, the findings of these studies are important. The field first needs to understand if subsidies can impact the quality of care a child receives and then understand the optimal reimbursement rate level that leads to an improvement in the quality of care families with subsidies can access and select. To date, little research exists on the optimal reimbursement rate levels needed to allow families to access high-quality care. Based on current evidence, there is not a clear understanding of whether the 75th percentile threshold is sufficient: market rates collected through surveys reflect the rates providers charge, but may not be reflective of the true cost of high-quality care, especially if they are not current. Given, many state reimbursement rates fall below recommended levels to allow equal access to the child care market⁵² and fall far short of covering the costs to providers of high-quality care,¹⁶ more research is needed to assess whether families can access quality care through the subsidy program, particularly among families with infants and toddlers.

Once the link between subsidy receipt and subsidy rate levels and child care quality is established and guidance on a state policy lever can be identified, additional research is needed on the other aspects of child care subsidy policy implementation. For example, states have flexibility in determining payment methods (e.g., contracts with providers or vouchers), income eligibility requirements, and family copayment levels, among others. Studies on the implementation of child care subsidies can provide a better understanding how each of these policy decisions have implications for the effectiveness of subsidies in improving outcomes during the birth-to-3 period and families' access to high-quality care.

^{xxvi} This study also looked at workforce qualifications, use of curriculum, and financial support for paid time off (PTO) or professional development (PD) as indicators of quality. For centers, increases in the base reimbursement rate was associated with financial support for PTO and PD and use of contracts was associated with the use of curriculum in models with covariates. For homes, the provider-friendly policy index was associated with the use of curriculum and financial support for PTO or PD in the full models with all control covariates.

In 2001, the Office of Child Care and the Office of Planning, Research, and Evaluation (OPRE) in the Administration for Children and Families launched several experiments on subsidy program strategies, including two experiments testing the effects of specific subsidy implementation and administration policies. One study in Washington State, tested the effect of standard versus an alternative (reduced) copayment schedules on subsidy receipt (total months, consecutive months), parental employment (including the number of hours worked), earnings, and receipt of public benefits.⁶ The study found that lower copayments increased the continuity of subsidy use, especially for those families who saw the greatest reduction in their copayments. For the overall study population, the reduced copayment schedule led to 0.7 more months of subsidy receipt and a greater percentage of families receiving subsidies for at least 13 consecutive months (39.9 percent in the treatment group versus 35.4 percent in the control group). Important limitations to this study include that study enrollment took place for one month, applied to one geographic area, and included families with children ages 11 and younger, so the results are not limited to impacts affecting the care of infants and toddlers.

Another OPRE study in Cook County, Illinois examining the impacts of expanded income eligibility and longer redetermination periods also found positive and significant impacts on subsidy receipt, although these results are intended, given the program design.⁵⁶ Compared to the control group, families in the program group received subsidies for 8 months longer and were more likely to receive subsidies for 7 and 13 consecutive months (64.2 percent and 36.1 percent of the treatment group received subsidies for 7 months and 13 months consecutively, respectively, compared to 21.6 percent and 11.4 percent for the control group). These effects were consistent, but varied in size of impacts, depending on the specific intervention in this study. Although both policy changes had positive impacts on families' receipt of subsidies, the largest effects were the result of expanded income eligibility, rather than the longer redetermination period. It is important to note that this study was limited to a small geographic area and was not limited to families with young children; the authors also noted recruitment difficulties, so results should be generalized cautiously. For both the Washington and Cook County studies, only null impacts were found for employment and household resource indicators.^{6,56}

These studies represent an important start to what needs to be known about the impacts of specific elements of subsidy policies, but more research is still needed to better understand how policy changes can help more families access child care subsidies. For example, states vary in the generosity of both initial and continuing income eligibility requirements and these policies affect how many low-income families have access to subsidized care. A recent report found that in 13 states, families with income above 150 percent of the federal poverty level were ineligible for child care subsidies⁷ and families just above this threshold may still struggle to pay for child care. However, setting higher income eligibility levels without funding increases may result in longer wait lists or reduced per child spending. State variation in copayment levels is also important: if copayment levels are high relative to family financial resources, this may have implications for families' ability to participate in the subsidy program even if they qualify for assistance. Future research is needed to address these and other implementation concerns.

Are Child Care Subsidies an Effective Policy for Improving Prenatal-to-3 Outcomes?

The current evidence base demonstrates the effectiveness of both child care subsidy receipt and greater state per child subsidy spending at increasing enrollment in formal child care settings and increasing maternal employment and education. Despite federal guidance to set base reimbursement rates at the 75th percentile of the market (based on a market rate survey or alternative cost assessment tool that is no older than 2 years old), states vary considerably in the level at which they set subsidy rates and the method they use to set these rates. Furthermore, these benchmarks have not been linked to child care quality based in existing research. Current evidence does not provide clear guidance to states in setting the optimal subsidy level to ensure subsidies increase low-income families' access to high-quality child care.

How Do Child Care Subsidies Vary Across the States?

States have significant flexibility within the federal guidelines to determine how and for whom child care subsidies funded by the CCDF are available. State variation in eligibility requirements center largely around income eligibility thresholds and activity requirements (work, education, and training). States cannot set income eligibility above 85 percent of state median income, but states may set income limits below this level, meaning fewer families are eligible to receive subsidies. States may also have different requirements regarding application procedures, including whether they maintain a wait list,

redetermination procedures, and if they serve any priority groups (e.g., families receiving TANF, children with special needs, very low-income families, children in child protective services, teen parents).

States also vary in copayment policies, such as exemptions from copayments, how copayment amounts are calculated, who collected copayments, and copayment amount (see Table 3b for details). As of February 2019, the monthly copayment amount for a family of three with an income at 150 percent of the federal poverty level (FPL) ranged from \$0 to \$592 across states (with a national median of \$195, or 7 percent of family income). Finally, states also vary in terms of provider policies, including the types of providers that can participate in the subsidy program, reimbursement rates (e.g., base levels, use of tiered rates attached to quality indicators, rate percentiles compared to federal benchmarks, the use and recency of market rate survey or alternative methodologies), and payment policies. Payment policies include how providers are paid (contracts, vouchers, or cash) and who pays providers (directly by the agency or by the family, who is paid by the agency).³

One example of state variation is how well states' reimbursement rates compare to the market for child care in their state. As of July 2020, 10 states reported having base reimbursement rates^{xxvii} that meet the federally recommended 75th percentile of child care market prices.⁵⁸ Of states that meet the 75th percentile rate recommendation, only one state, Maine, is using a market rates survey (MRS) from 2018 or newer^{xxviii} to calculate cost of care (see Table 3a for details). States that are working off of outdated MRS data may not be capturing the true cost of care when calculating market prices. Monthly base reimbursement rates for infant care in centers range widely across the states, from the \$418 in Oklahoma to \$1,777 in Virginia. If all states set their reimbursement rate to the 75th percentile, monthly base reimbursement rates for infant care in centers would be higher, ranging from the \$480 to \$2,008 (see Table 3a).

For licensed family child care, 16 states reimburse at or above the 75th percentile rate for infants, and 15 states meet the 75th percentile recommendation for toddler care in these settings.⁵⁸ Monthly base rates range from \$349 and \$348 in Mississippi (for infant and toddler care, respectively) to \$1,254 and \$1,140 in Oregon (for infant and toddler care, respectively) in family child care.⁵⁸ Low rates in some states mean that even with a subsidy, many child care settings can remain financially out of reach for lower-income families.

Increasing provider reimbursement rates represents a potential policy lever that states may use to promote greater access to high-quality child care, because quality improvements, such as adding more experienced staff, implementing staff trainings, or purchasing new curriculum materials, can be costly.¹⁶ States may set higher reimbursement rates for providers that implement quality initiatives; in 2019, 42 states offered higher payments for providers offering higher-quality care (called "tiered" reimbursement rates).⁷ Additionally, as of December 2019, of 40 states with statewide QRIS, 33 states tied subsidy reimbursement rates specifically to QRIS quality tiers (see Table 3b for details).

According to an October 2019 report by Child Trends, the Fiscal Year 2018 increase in funding for the CCDBG allowed states to further improve child care access and affordability.⁵ The report notes that 44 states planned to use the additional CCDBG funding to boost provider payment rates, 14 states planned to expand income eligibility, and 11 states planned to prioritize funds to reduce parental copayments for child care. Over half of states report that they planned to use the funds to implement various quality improvement initiatives. These policy changes provide an opportunity to better study the impact of child care subsidies on access to, and quality of, child care.

^{xxvii} Including base reimbursement rates for infants and toddlers in both center-based and family child care

^{xxviii} States that used surveys listed as being from 2017-18 were considered sufficiently recent, as typically these surveys took place over two years. As of July 2020, 21 states were using a "recent" survey to set rates.

Table 3a: State Variation in Child Care Subsidies

State	Generosity and Variation			
	Base Reimbursement Rate for Infants in Center-Based Care	Base Reimbursement Rate for Infants in Center-Based Care IF Rate Was Set to 75th Percentile	Year of Market Rate Survey Used to Establish Base Rates	Year of Most Recent Market Rate Survey
Alabama	\$650	\$836	2017	2017
Alaska	\$980	\$1,006	2017	2017
Arizona	\$853	\$1,050	2018	2018
Arkansas	\$597	\$594	2015	2019
California	\$1,594	\$1,594	2016	2018
Colorado	\$1,166	\$1,641	2017-18	2017-18
Connecticut	\$1,322	\$1,534	2018	2018
Delaware	\$816	\$1,255	2018	2018
District of Columbia	\$1,369	NR	2018	2018
Florida	\$719	\$693	2017	2017
Georgia	\$650	\$1,025	2016-17	2016-17
Hawaii	\$1,490	\$1,490	2016	2018
Idaho	\$790	\$840	2018	2018
Illinois	\$1,064	\$1,402	2018	2018
Indiana	\$1,070	NR	2017	2018
Iowa	\$711	\$858	2014	2017
Kansas	\$774	\$730	2017	2017
Kentucky	\$586	\$743	2017	2017
Louisiana	\$523	\$654	2017	2017
Maine	\$1,313	\$1,313	2018	2018
Maryland	\$958	\$1,191	2019	2019
Massachusetts	\$1,550	\$1,874	2018	2018
Michigan	\$809	\$1,130	2017	2017
Minnesota	\$1,161	\$1,465	2012	2018
Mississippi	\$480	\$480	2016	2016
Missouri	\$789	\$1,361	2018	2018
Montana	\$837	\$837	2016	2016
Nebraska	\$941	\$1,021	2019	2019
Nevada	\$879	\$1,004	2018	2018
New Hampshire	\$1,083	\$1,181	2018	2018
New Jersey	\$995	\$1,326	2017	2017
New Mexico	\$721	\$774	2018	2018
New York	\$1,759	\$1,759*	2018	2018
North Carolina	\$536	\$1,170	2015	2017
North Dakota	\$840	\$840	2017	2017
Ohio	\$910	\$1,235	2018	2018
Oklahoma	\$418	\$669	2017	2017
Oregon	\$1,415	\$1,455	2018	2018
Pennsylvania	\$893	NR	2016	2019
Rhode Island	\$860	\$1,075	2015	2018

Table 3a: State Variation in Child Care Subsidies (continued)

State	Generosity and Variation			
	Base Reimbursement Rate for Infants in Center-Based Care	Base Reimbursement Rate for Infants in Center-Based Care IF Rate Was Set to 75th Percentile	Year of Market Rate Survey Used to Establish Base Rates	Year of Most Recent Market Rate Survey
South Carolina	\$802	\$802	2017	2017
South Dakota	\$762	\$762	2017	2019
Tennessee	\$771	\$875	2017-18	2018-19
Texas	\$702	\$787	2017	2019
Utah	\$900	\$900	2017	2017
Vermont	\$867	\$1,127	2017	2017
Virginia	\$1,777	\$1,777*	2018	2018
Washington	\$1,501	\$2,008	2018	2018
West Virginia	\$669	\$669	2015	2018
Wisconsin	\$1,201	\$1,257*	2017	2018
Wyoming	\$628	\$732	2017	2017
Best State	\$1,777	\$2,008	2019	2019
Worst State	\$418	\$480	2012	2016
State Median	\$860	\$1,021	N/A	N/A
State Count	N/A	N/A	N/A	N/A

* State does not report at the 75th percentile

"NR" indicates that the state did not report.

Actual base reimbursement rate: data as of July 1, 2020. State children and families department websites.

Base reimbursement IF rate was at 75th percentile and year of market rate surveys: data as of July 1, 2020. State market rate surveys.

For additional source and calculation information, please refer to the Methods and Sources section of pn3policy.org.

Table 3b: State Variation in Child Care Subsidies

State	Generosity and Variation				
	Subsidy Reimbursement Rate Tied to QRIS Quality Tier	State Allows Provider to Charge Parents the Difference Between Reimbursement Rate and Provider Rate	Monthly Copayment Dollar Amount for a Family of 3 at 150% of FPL	Monthly Copayment as a % of Income for a Family of 3 at 150% of FPL	Income Eligibility as a % of the FPL
Alabama	NR	Yes	\$132	5%	130%
Alaska	No, and QRIS participation is voluntary.	Yes	\$156	6%	290%
Arizona	Yes, but QRIS participation is voluntary.	Yes	\$65	2%	165%
Arkansas	Yes, and QRIS participation is mandatory if a provider serves children receiving subsidies.	Yes, for 2- and 3-star	\$31	1%	205%
California	No, and QRIS participation is voluntary.	Yes	\$87	3%	253%
Colorado	Yes, and licensed programs are automatically enrolled at the first level of participation. Further participation is voluntary.	No	\$293	11%	185%
Connecticut	NR	Yes	\$160	6%	222%

Table 3b: State Variation in Child Care Subsidies (continued)

State	Generosity and Variation				
	Subsidy Reimbursement Rate Tied to QRIS Quality Tier	State Allows Provider to Charge Parents the Difference Between Reimbursement Rate and Provider Rate	Monthly Copayment Dollar Amount for a Family of 3 at 150% of FPL	Monthly Copayment as a % of Income for a Family of 3 at 150% of FPL	Income Eligibility as a % of the FPL
Delaware	Yes, but QRIS participation is voluntary.	Yes	\$240	9%	185%
District of Columbia	No, but QRIS participation is mandatory if a provider serves children receiving subsidies.	No	\$59	2%	239%
Florida	Yes, but QRIS participation is voluntary.	Yes	\$195	7%	150%
Georgia	Yes, but QRIS participation is voluntary.	Yes	\$186	7%	144%
Hawaii	No QRIS	Yes	\$592	22%	221%
Idaho	No, and QRIS participation is voluntary.	Yes	\$150	6%	130%
Illinois	Yes, and licensed programs are automatically enrolled at the first level of participation. Further participation is voluntary.	Yes	\$228	9%	185%
Indiana	Yes, but QRIS participation is voluntary.	Yes	\$241	9%	127%
Iowa	Yes, but QRIS participation is voluntary.	No	\$174	7%	145%
Kansas	NR	Yes	\$207	8%	185%
Kentucky	No, and QRIS participation is voluntary.	Yes	\$281	11%	156%
Louisiana	No, but QRIS participation is mandatory if a provider serves children receiving subsidies.	Yes	\$65	2%	162%
Maine	Yes, and QRIS participation is mandatory if a provider serves children receiving subsidies.	No	\$240	9%	272%
Maryland	Yes, and QRIS participation is mandatory if a provider serves children receiving subsidies.	Yes	\$92	3%	282%
Massachusetts	Yes, and QRIS participation is mandatory if a provider serves children receiving subsidies.	No	\$325	12%	224%
Michigan	Yes, but QRIS participation is voluntary.	Yes	\$65	2%	125%
Minnesota	Yes, but QRIS participation is voluntary.	Yes	\$87	3%	185%
Mississippi	No QRIS	Yes	\$160	6%	205%
Missouri	No QRIS	Yes	\$210	8%	138%
Montana	Yes, but QRIS participation is voluntary.	Yes	\$373	14%	150%
Nebraska	Yes, but QRIS participation is voluntary.	No	\$187	7%	130%
Nevada	Yes, and QRIS participation is mandatory if a provider serves children receiving subsidies.	Yes	\$152	6%	130%
New Hampshire	Yes, and licensed programs are automatically enrolled at the first level of participation. Further participation is voluntary.	Yes	\$333	12%	220%
New Jersey	Yes, but QRIS participation is voluntary.	Yes	\$106	4%	200%

Table 3b: State Variation in Child Care Subsidies (continued)

State	Generosity and Variation				
	Subsidy Reimbursement Rate Tied to QRIS Quality Tier	State Allows Provider to Charge Parents the Difference Between Reimbursement Rate and Provider Rate	Monthly Copayment Dollar Amount for a Family of 3 at 150% of FPL	Monthly Copayment as a % of Income for a Family of 3 at 150% of FPL	Income Eligibility as a % of the FPL
New Mexico	Yes, and licensed programs are automatically enrolled at the first level of participation. Further participation is voluntary.	No	\$186	7%	200%
New York	No, and QRIS participation is voluntary.	Yes	\$327	12%	200%
North Carolina	Yes, and licensed programs are automatically enrolled at the first level of participation. Further participation is voluntary.	Yes	\$267	10%	200%
North Dakota	No, and QRIS participation is voluntary.	Yes	\$227	9%	218%
Ohio	Yes, but QRIS participation is voluntary.	No	\$235	9%	130%
Oklahoma	Yes, and licensed programs are automatically enrolled at the first level of participation. Further participation is voluntary.	No	\$239	9%	165%
Oregon	Yes, and licensed programs are automatically enrolled at the first level of participation. Further participation is voluntary.	Yes	\$523	20%	185%
Pennsylvania	Yes, and licensed programs are automatically enrolled at the first level of participation. Further participation is voluntary.	Yes	\$230	9%	200%
Rhode Island	Yes, and QRIS participation is mandatory if a provider serves children receiving subsidies.	No	\$213	8%	180%
South Carolina	Yes, and QRIS participation is mandatory if a provider serves children receiving subsidies.	Yes	\$48	2%	152%
South Dakota	NR	Yes	\$0	0%	209%
Tennessee	Yes, and licensed programs are automatically enrolled at the first level of participation. Further participation is voluntary.	Yes	\$186	7%	173%
Texas	Yes, but QRIS participation is voluntary.	Yes	\$270	10%	185%-251%
Utah	Yes, and QRIS participation is mandatory if a provider serves children receiving subsidies.	Yes	\$175	7%	175%
Vermont	Yes, and licensed programs are automatically enrolled at the first level of participation. Further participation is voluntary.	Yes	\$260	10%	300%

Table 3b: State Variation in Child Care Subsidies (continued)

State	Subsidy Reimbursement Rate Tied to QRIS Quality Tier	Generosity and Variation			
		State Allows Provider to Charge Parents the Difference Between Reimbursement Rate and Provider Rate	Monthly Copayment Dollar Amount for a Family of 3 at 150% of FPL	Monthly Copayment as a % of Income for a Family of 3 at 150% of FPL	Income Eligibility as a % of the FPL
Virginia	No, and QRIS participation is voluntary.	Yes	\$213	8%	150%-250%
Washington	Yes, and QRIS participation is mandatory if a provider serves children receiving subsidies.	No	\$207	8%	200%
West Virginia	NR	No	\$124	5%	150%
Wisconsin	Yes, and QRIS participation is mandatory if a provider serves children receiving subsidies.	Yes	\$251	9%	185%
Wyoming	No QRIS	Yes	\$38	1%	175%
Best State	N/A	N/A	\$0	0%	300%
Worst State	N/A	N/A	\$592	22%	125%
State Median	N/A	N/A	\$195	7%	185%
State Count	33	39	N/A	N/A	N/A

"NR" indicates that the state did not report.

Subsidy rate tied to QRIS quality tier: data as of December 31, 2019. The Build Initiative & Child Trends' Quality Compendium data system.

All other data as of February 2019. National Women's Law Center.

For additional source and calculation information, please refer to the Methods and Sources section of pn3policy.org.

How Did We Reach Our Conclusions?

Method of Review

This evidence review began with a broad search of all literature related to the policy and its impacts on child and family wellbeing during the prenatal-to-3 period. First, we identified and collected relevant peer-reviewed academic studies as well as research briefs, government reports, and working papers, using predefined search parameters, keywords, and trusted search engines. From this large body of work, we then singled out for more careful review those studies that endeavored to identify causal links between the policy and our outcomes of interest, taking into consideration characteristics such as the research designs put in place, the analytic methods used, and the relevance of the populations and outcomes studied. We then subjected this literature to an in-depth critique and chose only the most methodologically rigorous research to inform our conclusions about policy effectiveness. All studies considered to date for this review were released on or before March 31, 2020.

Standards of Strong Causal Evidence

When conducting a policy review, we consider only the strongest studies to be part of the evidence base for accurately assessing policy effectiveness. A strong study has a sufficiently large, representative sample, has been subjected to methodologically rigorous analyses, and has a well-executed research design allowing for causal inference – in other words, it demonstrates that changes in the outcome of interest were likely caused by the policy being studied. The study design considered most reliable for establishing causality is a randomized control trial (RCT), an approach in which an intervention is applied to a randomly assigned subset of people. This approach is rare in policy evaluation because policies typically affect entire populations; application of a policy only to a subset of people is ethically and

logistically prohibitive under most circumstances. However, when available, randomized control trials are an integral part of a policy's evidence base and an invaluable resource for understanding policy effectiveness.

The strongest designs typically used for studying policy impacts are quasi-experimental designs (QEDs) and longitudinal studies with adequate controls for internal validity (for example, using statistical methods to ensure that the policy, rather than some other variable, is the most likely cause of any changes in the outcomes of interest). Our conclusions are informed largely by these types of studies, which employ sophisticated techniques to identify causal relationships between policies and outcomes. Rigorous meta-analyses with sufficient numbers of studies, when available, also inform our conclusions.

Studies That Meet Standards of Strong Causal Evidence

- A. Enchautegui, M. E., Chien, N., & Burgess, K. (2016). *Effects of the CCDF subsidy program on the employment outcomes of low income mothers*. US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. <https://aspe.hhs.gov/system/files/pdf/253961/EffectsCCSubsidiesMaternalLFPTtechnical.pdf>
- B. Ros Pilarz, A. (2018). Child care subsidy programs and child care choices: Effects on the number and type of arrangements. *Children and Youth Services Review*, 95, 160–173. <https://doi.org/10.1016/j.childyouth.2018.10.013>
- C. Schochet, O. N., & Johnson, A. D. (2019). The impact of child care subsidies on mothers' education outcomes. *Journal of Family and Economic Issues*, 40(3), 367–389. <https://doi.org/10.1007/s10834-019-09628-0>
- D. Washbrook, E., Ruhm, C. J., Waldfogel, J., & Han, W.-J. (2011). Public policies, women's employment after childbearing, and child well-being. *The B.E. Journal of Economic Analysis & Policy*, 11(1). <https://doi.org/10.2202/1935-1682.2938>
- E. Danziger, S., Ananat, E. O., Browning, K. (2004). Childcare subsidies and the transition from welfare to work. *Family Relations*, 53(2), 219–228. <https://www.jstor.org/stable/3700265>
- F. Lemke, R., Witte, A., Queralto, M., Witt, R. (2000). *Child care and the welfare to work transition*. National Bureau of Economic Research Working Papers (No. 7583). <http://www.nber.org/papers/w7583>
- G. Witte, A., Queralto, M. (2004). *An examination of the child care choices of low-income families receiving child care subsidies*. Wellesley College Department of Economics and National Bureau of Economic Research. http://academics.wellesley.edu/Economics/partner/Child%20Care%20Choices4_02.pdf
- H. Griffen, A. S. (2019). Evaluating the effects of childcare policies on children's cognitive development and maternal labor supply. *Journal of Human Resources*, 54(3), 604–655. <https://doi.org/10.3368/jhr.54.3.0315.6988r1>
- I. Krafft, C., Davis, E. E., & Tout, K. (2017). Child care subsidies and the stability and quality of child care arrangements. *Early Childhood Research Quarterly*, 39, 14–34. <https://doi.org/10.1016/j.ecresq.2016.12.002>

Other References

1. Child Care and Development Fund, 45 C.F.R. § 98.20 (2019). <https://www.govinfo.gov/app/details/CFR-2019-title45-vol1/CFR-2019-title45-vol1-part98/summary>
2. Shonkoff, J., & Phillips, D. (2000). *From neurons to neighborhoods: The science of early childhood development*. The National Academies Press. <https://doi.org/10.17226/9824>
3. Tran, V., Dwyer, K., & Minton, S. (2019). *Key cross-state variation in CCDF policies as of October 1, 2018: The CCDF policies database book of tables* (OPRE Report 2019-117). Office of Planning Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services. <https://ccdf.urban.org/resources>
4. Selekman, R., Holcomb, P. (2018). *Child support cooperation requirements in child care subsidy programs and SNAP: Key policy considerations*. Mathematica Policy Research. https://aspe.hhs.gov/system/files/pdf/260046/EMPOWERED_Child_Support_Cooperation_Issue_Brief.pdf
5. Banghart, P., King, C., Bedrick, E., Hirilall, A., Daily, S. (2019). *State priorities for Child Care and Development Block Grant Funding increase: 2019 national overview*. Child Trends. https://www.childtrends.org/wp-content/uploads/2019/09/CCDBGFunding_ChildTrends_October2019.pdf
6. Michalopoulos, C. (2010). *Effects of reducing child care subsidy copayments in Washington state, final report* (OPRE 2011-2). Office of Planning, Research & Evaluation, Administration for Children & Families, US Department of Health and Human Services. <https://www.acf.hhs.gov/opre/resource/effects-of-reducing-child-care-subsidy-copayments-in-washington-state>
7. Vandell, D. L., & Wolfe, B. (2000). *Child care quality: Does it matter and does it need to be improved?* US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. <https://aspe.hhs.gov/execsum/child-care-quality-does-it-matter-and-does-it-need-to-be-improved>. This study provides an example specific to the link between quality and child outcomes.
8. Isaacs, J., Greenberg, E., & Derrick-Mills, T. (2018). *Subsidy policies and the quality of child care centers serving subsidized children*. Urban Institute.

- https://www.urban.org/sites/default/files/publication/96361/subsidy_policies_and_the_quality_of_child_care_centers_serving_subsidized_children_2.pdf. See pp. 9-10.
9. Office of Child Care, Administration for Children and Families. (2019, December 3). *FY 2018 preliminary data table 2—Percent of children served by payment method*. Office of Child Care | ACF. <https://www.acf.hhs.gov/occ/resource/fy-2018-preliminary-data-table-2>.
 10. Office of Child Care, National Center on Child Care Subsidy Innovation and Accountability (2017). *CCDF Payment Rates – Understanding the 75th Percentile*. Early Childhood Training and Technical Assistance System. <https://childcareta.acf.hhs.gov/resource/ccdf-payment-rates-understanding-75th-percentile>
 11. National Center on Subsidy Innovation and Accountability (2018). *Planning your market rate survey*. Office of Child Care, Administration for Children and Families, US Department of Health and Human Services. https://childcareta.acf.hhs.gov/sites/default/files/public/planning_market_rate_surveys_brief_1.pdf
 12. Child Care and Development Fund, 45 C.F.R. § 98.45 (2019). <https://www.govinfo.gov/app/details/CFR-2019-title45-vol1/CFR-2019-title45-vol1-part98/summary>
 13. Child Care and Development Fund, 63 F.R. 39959 (final rule July 24, 1998) (codified at 45 C.F.R. §. 98-99). <https://www.govinfo.gov/content/pkg/FR-1998-07-24/pdf/98-19418.pdf>
 14. Child Care and Development Fund, 81 F.R. 67440, 67512-67513, 67561 (final rule September 30, 2016) (codified at 45 C.F.R. § 98). <https://www.govinfo.gov/content/pkg/FR-2016-09-30/pdf/2016-22986.pdf>. States are required to set their base reimbursement rates at levels that are at least “sufficient to cover the costs to providers of the health, safety, and quality, and staffing requirements included in the Act and final rule” (p. 67440).
 15. See also the program instruction (Log No. CCDF-ACF-PI-2016-08, issued December 12, 2016) from the Office of Child Care, Administration for Children and Families on “Timeline and requirements for market rate survey and alternative methodology.” https://www.acf.hhs.gov/sites/default/files/occ/ccdf_acf_pi_2016_08.pdf
 16. Workman, S., & Jessen-Howard, S. (2018). *Understanding the true cost of child care for infants and toddlers*. Center for American Progress. <https://www.americanprogress.org/issues/early-childhood/reports/2018/11/15/460970/understanding-true-cost-child-care-infants-toddlers/>
 17. Office of Child Care, Administration for Children and Families. (2019, February 6). *Characteristics of families served by the Child Care and Development Fund (CCDF) based on preliminary FY2018 data*. Office of Child Care | ACF. <https://www.acf.hhs.gov/occ/resource/characteristics-of-families-served-by-child-care-and-development-fund-ccdf>
 18. Office of Child Care, Administration for Children and Families. (2019, December 3). *FY 2018 final data table 13—Average monthly percentages of children in child care by age category and care type*. Office of Child Care | ACF. <https://www.acf.hhs.gov/occ/resource/fy-2018-preliminary-data-table-13>
 19. Paschall, K. (2019, September 3). Nearly 30 percent of infants and toddlers attend home-based child care as their primary arrangement. *Child Trends*. <https://www.childtrends.org/nearly-30-percent-of-infants-and-toddlers-attend-home-based-child-care-as-their-primary-arrangement>
 20. Child Care and Development Fund, 81 F.R. 67440 (final rule September 30, 2016) (codified at 45 C.F.R. § 98). <https://www.govinfo.gov/content/pkg/FR-2016-09-30/pdf/2016-22986.pdf>
 21. Lipscomb, S. T. (2013). Increasing access to quality child care for children from low-income families: Families' experiences. *Children and Youth Services Review*, 35(3), 411–419. <https://doi.org/10.1016/j.childyouth.2012.12.020>
 22. Child Care Aware of America. (2019). *The US and the high price of child care: 2019*. Child Care Aware of America. <https://usa.childcareaware.org/priceofcare>
 23. US Government Accountability Office. (Feb. 15, 2019). *Child Care and Development Fund: Subsidy receipt and plans for new funds*. <https://www.gao.gov/assets/700/696930.pdf>
 24. Shlay, A. B., Weinraub, M., Harmon, M., & Tran, H. (2004). Barriers to subsidies: Why low-income families do not use child care subsidies. *Social Science Research*, 33(1), 134–157. [https://doi.org/10.1016/S0049-089X\(03\)00042-5](https://doi.org/10.1016/S0049-089X(03)00042-5)
 25. Adams, G., Matthews, H. (2013). *Confronting the child care eligibility maze: Simplifying and aligning with other work supports*. Urban Institute and the Center for Law and Social Policy (CLASP). <https://www.clasp.org/sites/default/files/publications/2017/04/WSS-CC-Paper.pdf>
 26. National Center on Early Childhood Quality Assurance. (2019). *Addressing the decreasing number of family child care providers in the United States*. U.S Department of Health and Human Services, Administration for Children and Families, Office of Head Start, Office of Child Care, and Health Resources and Services Administration. https://childcareta.acf.hhs.gov/sites/default/files/public/addressing_decreasing_fcc_providers_final_508_compliant.pdf
 27. Mohan, A. (2017). *Fewer children, fewer providers: Trends in CCDBG participation*. Center for Law and Social Policy (CLASP). <https://www.clasp.org/sites/default/files/public/resources-and-publications/publication-1/CCDBG-Provider-Factsheet-2006-2015.pdf>
 28. Jessen-Howard, S., Malik, R., Workman, S., Hamm, K. (2018). *Understanding infant and toddler child care deserts*. Center for American Progress. <https://cdn.americanprogress.org/content/uploads/2018/10/31064929/IT-ChildCare-Deserts-13.pdf>
 29. First Five Years Fund. (n.d.). *Child Care & Development Block Grant (CCDBG)*. <https://www.ffyf.org/issues/ccdbg/>
 30. First Five Years Fund. (n.d.). *Preschool Development Grant Birth Through Five (PDG B-5)*. <https://www.ffyf.org/issues/pgd/>

31. *Preschool Development Grant Birth Through Five grant competition. (2018, August 23).* Office of Child Care | ACF. <https://www.acf.hhs.gov/occ/resource/pdg-b-5-initiative>. This source describes initial awards (December 2018). Several US territories also received PDG B-5 grants in 2018, including the Virgin Islands.
32. Danley, L. (2019, December 20). *Preschool Development Grant funding awarded to 26 states for 2020.* First Five Years Fund. <https://www.ffyf.org/preschool-development-grant-funding-awarded-to-26-states-for-2020/>. This source describes renewal and new initial awards (December 2019). Several US territories also received PDG B-5 grants in 2019, including Guam, the Northern Mariana Islands, and Puerto Rico.
33. Uhing, C. (2020, April, 29). *NEW: Three additional states receive Preschool Development Grant awards after Congress increases funding.* First Five Years Fund. <https://www.ffyf.org/new-three-additional-states-receive-preschool-development-grant-awards-after-congress-increases-funding/>
34. Administration for Children and Families, Office of Child Care. (2019). *Preschool Development Grant Birth Through Five (PDG B-5) Renewal Grant.* https://ami.grantsolutions.gov/files/HHS-2019-ACF-OCC-TP-1567_0.htm
35. American Academy of Pediatrics Committee on Early Childhood, Adoption, and Dependent Care. (2005). Quality early education and child care from birth to kindergarten. *Pediatrics, 115*(1), 187–191. Gale OneFile: Health and Medicine. <https://doi.org/10.1542/peds.2004-2213>
36. Bradley, R. H., & Vandell, D. (2007). Child care and the well-being of children. *Archives of Pediatrics & Adolescent Medicine, 161*(7), 669–676. <https://doi.org/10.1001/archpedi.161.7.669>
37. Schmit, S. (2019). *CCDBG: Helping working families afford child care.* CLASP. <https://www.clasp.org/publications/report/brief/ccdbg-helping-working-families-afford-child-care>.
38. *Overview of 2016 Child Care Development Fund final rule.* (n.d.) Office of Child Care, Administration for Children and Families, US Department of Health and Human Services. https://www.acf.hhs.gov/sites/default/files/occ/ccdf_final_rule_fact_sheet.pdf
39. Office of Child Care State Capacity Building Center. (2017). *CCDF fundamentals for state and territory administrators.* State Capacity Building Center, Office of Child Care, Administration for Children and Families, US Department of Health and Human Services. https://www.acf.hhs.gov/sites/default/files/occ/rg_ccdf_fundamentals.pdf.
40. Ryan, R. M., Johnson, A., Rigby, E., & Brooks-Gunn, J. (2011). The impact of child care subsidy use on child care quality. *Early Childhood Research Quarterly 26*(3), 320–331. <https://doi.org/10.1016/j.ecresq.2010.11.004>. This study provides an example specific to subsidies.
41. National Institute of Child Health and Human Development Early Child Care Research Network. (2002). Early child care and children's development prior to school entry: Results from the NICHD study of early child care. *American Educational Research Journal, 39*(1), 133–164. <https://www.jstor.org/stable/3202474>. This study provides an example specific to the link between quality and child outcomes.
42. National Institute of Child Health and Human Development Early Child Care Research Network, & Duncan, G. J. (2003). Modeling the impacts of child care quality on children's preschool cognitive development. *Child Development, 74*(5), 1454–1475. <https://doi.org/10.1111/1467-8624.00617>. This study provides an example specific to the link between quality and child outcomes.
43. Based on section 4.3.1 of approved state FFY 2019–2021 CCDF plans. See <https://www.acf.hhs.gov/occ/resource/state-plans> for links to individual state plans. Note that DC does not use a market rate survey and did not report percentiles, and New Jersey did not report percentiles in its CCDF plan. Rates used for market rate percentile comparison are for infants (6 months) and toddlers (18 months) in full-time licensed care in the state's most populous geographic region.
44. Schulman, K. (2019). *Early progress: State child care assistance policies 2019.* National Women's Law Center. <https://nwlc.org/resources/early-progress-state-child-care-assistance-policies-2019/>
45. Hawkinson, L. E., Griffen, A. S., Dong, N., & Maynard, R. A. (2013). The relationship between child care subsidies and children's cognitive development. *Early Childhood Research Quarterly, 28*(2), 388–404. <https://doi.org/10.1016/j.ecresq.2012.10.002>
46. Herbst, C. M., & Tekin, E. (2010). Child care subsidies and child development. *Economics of Education Review, 29*(4), 618–638. <https://doi.org/10.1016/j.econedurev.2010.01.002>
47. Johnson, A. D., & Ryan, R. M. (2015). The role of child-care subsidies in the lives of low-income children. *Child Development Perspectives, 9*(4), 227–232. <https://doi.org/10.1111/cdep.12139>
48. Weinraub, M., Shlay, A. B., Harmon, M., & Tran, H. (2005). Subsidizing child care: How child care subsidies affect the child care used by low-income African American families. *Early Childhood Research Quarterly, 20*(4), 373–392. <https://doi.org/10.1016/j.ecresq.2005.10.001>
49. Giannarelli, L., Adams, G., Minton, S., and Dwyer, K. (2019). *What if we expanded child care subsidies? A national and state perspective.* Urban Institute. https://www.urban.org/sites/default/files/publication/100284/what_if_we_expanded_child_care_subsidies_6.pdf
50. Hill, Z., Gennetian, L., & Mendez, J. (2019). *How state policies might affect Hispanic families' access to and use of Child Care and Development Fund subsidies* (Report 2019–04). National Research Center on Hispanic Children & Families. <https://www.hispanicresearchcenter.org/research-resources/how-state-policies-might-affect-hispanic-families-access-to-and-use-of-child-care-and-development-fund-subsidies>

51. Johnson, A. D., Ryan, R. M., & Brooks-Gunn, J. (2012). Child-care subsidies: Do they impact the quality of care children experience? *Child Development*, 83(4), 1444–1461. <https://doi.org/10.1111/j.1467-8624.2012.1780.x>
52. Schulman, K. (2019). *Still shortchanging our youngest children: State payment rates for infant care 2018*. National Women's Law Center. <https://nwlc.org/resources/still-shortchanging-our-youngest-children-state-payment-rates-for-infant-care-2018/>. See also Appendix B.
53. Greenberg, E., Isaacs, J. B., Derrick-Mills, T., Michie, M., & Stevens, K. (2018). *Are higher subsidy payment rates and provider-friendly payment policies associated with child care quality?* (p. 44). Urban Institute. <https://www.urban.org/research/publication/are-higher-subsidy-payment-rates-and-provider-friendly-payment-policies-associated-child-care-quality>
54. Bassok, D., Dee, T. S., & Latham, S. (2019). The effects of accountability incentives in early childhood education. *Journal of Policy Analysis and Management*, 38(4), 838–866. <https://doi.org/10.1002/pam.22149>
55. Herrmann, M., Kirby, G., Deutsch, J., Wolfendale, C., Esposito, A. M., Caronongan, P. C., & Dragoset, L. (2019). *Quality ratings and system characteristics: Patterns in the round 1 Race to the Top - Early Learning Challenge states* (NCEE 2019-4004). National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, US Department of Education. <https://eric.ed.gov/?id=ED594512>
56. Michalopoulos, C., Lundquist, E., & Castells, N. (2010). *The effects of child care subsidies for moderate-income families in Cook County, Illinois: Final report* (OPRE 2011-3). Office of Planning, Research & Evaluation, Administration for Children & Families, US Department of Health and Human Services. <https://www.acf.hhs.gov/opre/resource/the-effects-of-child-care-subsidies-for-moderate-income-families-in-cook>
57. Office of Inspector General, US Department of Health and Human Services. (2019). *States' payment rates under the Child Care and Development Fund program could limit access to child care providers* (OEI-03-15-00170; 08/19) (OEI-03-15-00170). Office of Inspector General, US Department of Health and Human Services. <https://oig.hhs.gov/oei/reports/oei-03-15-00170.pdf>
58. Prenatal-to-3 Policy Impact Center analysis of state children and families department websites and state market rate surveys. Data as of July 1, 2020.



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