

Child Care Subsidy Stability Literature Review

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Overview

Introduction

Stable, high-quality child care has numerous benefits for children and families, including providing support for child development and enabling parents to work. To make child care accessible to low-income families, the Child Care and Development Fund (CCDF) offers guidance and funds to states, territories, and tribes to administer child care subsidies, which are typically vouchers that eligible families can use to pay for care. Stability in the use of subsidies is important, as a break in subsidy receipt or end of a subsidy spell (due to factors such as parental job loss, change in income, or paperwork challenges) can disrupt child care arrangement stability, which has been linked with child well-being and parental employment. Recent policy changes to CCDF aim to improve subsidy stability. Research examining the effects of these policies is just beginning to emerge. A research review can provide an update on evidence about connections between policy and subsidy stability and methodological considerations for future research.

Purpose

The purpose of this review is to provide a synthesis of research on child care subsidy stability published in the last five years. The review builds on a previous summary completed in 2013. Additionally, this report highlights important methodological considerations for studying child care subsidy policy. The findings are meant to inform policymakers and other stakeholders on factors affecting the stability of child care subsidy use, as well as to provide direction for future studies researching the effects of the policies set forth by the CCDF Final Rule as they are implemented across states.

Key Findings and Highlights

The literature review highlights findings regarding subsidy stability, as well as important implications for future research.

- Implementation and administration of subsidy policy may be as important for subsidy stability as the policies themselves.
- Policies that lengthen subsidy eligibility periods tend to be associated with subsidy stability.
- Subsidy *stability,* or the duration of a subsidy, rather than simply subsidy *use,* may be important to ensuring child care arrangement stability.
- Further research is needed to examine the effects of policies set forth in the CCDF Final Rule.
 Researchers should acknowledge the context in which policies are implemented and design research that highlights the importance of studying combinations of policies.
- Future research should pay special attention to the methodologies used to study subsidy policy and be transparent and detailed in describing specific methodologies.

Methods

To search for literature on child care subsidy stability, we used targeted search terms related to child care subsidy stability on the following databases: PyscINFO, EBSCO Host, JSTOR, ERIC, and Research Connections. Relevant articles, including peer-reviewed research as well as pertinent research briefs and reports published since 2012 that were *not* included in the previous literature review on child care subsidies, were included in this review (Forry, Daneri, & Howarth, 2013). Articles were considered relevant if they included research on subsidy stability, duration of subsidy spells, continuity of care, or subsidy policies related to eligibility. A panel of external reviewers who are experts in the field of child care subsidy use reviewed and added to the list of articles. Finally, selected articles were reviewed for key findings, as well as methodological considerations and information on the article's relevant policy contexts.

Glossary

The terms used in the literature on subsidy have subtle but important distinctions. Throughout this review, the language in the Glossary will be used to provide consistency. However, the field continues to develop an operational definition of a subsidy spell and a break in subsidy receipt. Further discussion on the differences in definitions can be found in the section *Definitional Considerations in Reviewed Studies*.

Administrative data: Information collected primarily for programmatic (not research) purposes by federal or state governments or other agencies for the purpose of registration, transaction, and recordkeeping, usually during the delivery of a service; may be used to produce official statistics that can inform policy-making (e.g., health and education records, criminal records, and public program participation).

Child Care and Development Block Grant (CCDBG) Act of 2014: The bill that reauthorized the Child Care and Development Fund in 2014.

Child Care and Development Fund (CCDF): "A federal and state partnership program (over \$5 billion in federal funding) authorized under the Child Care and Development Block Grant Act (CCDBG) and administered by states, territories, and tribes with funding and support from the Administration for Children and Families' Office of Child Care. States use CCDF to provide financial assistance to low-income families to access child care so they can work or attend a job training or educational program" (Office of Child Care, 2016).

Child Care and Development Fund Final Rule: "This Final Rule was based on the Child Care and Development Block Grant Act of 2014. This reauthorization of the child care law made significant advancements by defining health and safety requirements for child care providers, outlining family-friendly eligibility policies, and ensuring parents and the general public have transparent information about the child care choices available to them" (Office of Child Care, 2017). The CCDF Final Rule referred to in this report is the 2016 CCDF Final Rule.

Child care arrangement instability: Often used interchangeably with discontinuity of care or changes in child care, child care instability refers to "one of three changes in child care that can occur simultaneously: the end of an arrangement, multiple arrangements used within a particular period (such as a child care center in the morning and grandparent in the afternoon), and the end of a relationship with a caregiver within a particular arrangement" (Adams & Rohacek, 2010). In this review, child care arrangement instability refers to the first change, the end of an arrangement. Child care arrangement instability can be related to changes in employment, a provider ceasing to offer care, parents deciding to switch care because they are unhappy with an arrangement (e.g., switching to family child care from center-based care), changes in families' ability to afford care, transportation issues, or schedule changes (Adams & Rohacek, 2010).

Child care subsidy voucher: "A certification issued for care for a specific child with a certain provider for the stated number of authorized hours per week" (Davis, Krafft, Forry, & Tout, 2014, p. 2).

Cohort design: A research design in which one or more samples, or cohorts, are followed over time. Researchers typically refer to an entry cohort (i.e. those who begin a subsidy spell in a given month). In this design, the researcher knows that the cohort includes all who enter (start a spell) at the same time and no one who entered at an earlier date. In a cohort design, the beginning of the spell is observed.

Continuity of care: Continuity of care refers to consistent engagement and use of a child care arrangement by a child and his or her family.

Duration of care: Refers to the amount of time that children and families are engaged in child care arrangements.

Longitudinal research design: In longitudinal research, data is collected on the same group of participants over time.

Parental co-payments: The payment that parents must pay to child care providers when using a child care subsidy. Most states use a sliding fee scale to determine co-payment amounts. The amounts are typically based on the number of children and household income.

Point-in-time design: A research design that uses data collected at one specific time point.

Provider reimbursement rates: The rate paid to child care providers serving a subsidy-receiving child. While the federal government recommends that states reimburse at the 75th percentile or higher of the current market rate for child care costs, this is not always done in practice. (The 75th percentile market rate is the price at or below which 75 percent of child care providers reported charging for service.)

Redetermination: The process through which subsidy-receiving families must prove their continued eligibility for child care subsidies. At regular intervals, families will be asked to update their information with their local subsidy office. Information may include employment status, income, and address. This information is used to determine whether a family is still eligible to receive child care subsidies.

Subsidy churn/subsidy instability: The process of exiting and quickly returning to subsidy, or the experience of abrupt and/or involuntary lapses in child care subsidy receipt. Subsidy churn and subsidy instability may be used interchangeably.

Subsidy eligibility period: The period of time from when a family is determined to be eligible for subsidy to when they need to be reassessed for their continued eligibility.

Subsidy spell: "A series of uninterrupted consecutive [weeks or] months receiving subsidy" (Davis, Krafft, & Tout, 2014, p. 1).

Subsidy stability: Subsidy stability refers to the duration of child care subsidies. Families may experience multiple subsidy spells and have either a relatively short or long lapse in subsidy receipt between spells.

Survival function: In the context of child care subsidies, the survival function describes the probability that an individual will survive (i.e., remain in the subsidy program). The number of months (or weeks) in which 50 percent of the sample survives (remains in the subsidy program) is described as the median spell length. That is, half of parents who entered at the same time remain in the program, (Singer & Willett, 2003, p. 334). It is important that the participation beginning is observed, but the statistical program considers unobserved endings when calculating median durations.

Introduction

Access to stable, high-quality child care is important for children and families. For children, high-quality child care can support their social-emotional development and school readiness. For parents, access to stable, high-quality child care is often a key factor in their ability to work. For low-income families, however, it can be difficult to find affordable, high-quality child care. Child care subsidies, which provide financial support to low-income families seeking child care, aim to reduce the cost burden on parents and allow them to work, attend school, or participate in job training.

The Child Care and Development Fund (CCDF) program provides federal funds to states, territories, and tribes to administer child care subsidies, primarily through vouchers that eligible families use to pay for child care. Approximately 8.6 million U.S. children are eligible for child care subsidies each month; however, just 1.5 million receive them (Government Accountability Office, 2016).

Factors impacting child care instability

Child care instability can be related to changes in family circumstances, including changes in employment or housing status, and a family's dissatisfaction with an arrangement (Henly et al., 2017). Additionally, there are system-related issues such as strict guidelines for subsidy eligibility and extensive paperwork for eligibility and reassessment, and the need to interact with multiple agencies. In fact, a new study by Henly, et al. (2017) finds evidence that parents who had more difficulty with subsidy applications were more likely to exit subsidies.

Because of the potential linkages between the receipt of subsidies and children's experiences in child care settings, the dynamics of child care subsidy use has been a topic of interest to researchers and policymakers for more than 20 years. In particular, the duration of subsidy spells and stability of subsidy receipt have been a focus of Child Care Research Partnerships first funded in the mid-1990s (Kreader & Weber, 2017). The interest in understanding subsidy dynamics is motivated in part by the potential negative consequences for children and families if the ability to pay for child care is disrupted and families experience corresponding job loss and loss of child care. A summary of developmental research has indeed demonstrated the negative cumulative effect of this instability for children (Adams & Rohacek, 2010).

Child care subsidy stability is important for both children and parents. An abrupt break in subsidy receipt may lead to child care instability, which has been associated with negative outcomes for children (Adams & Rohacek, 2010). In addition, there is a relationship between child care arrangement stability and positive cognitive (Loeb, Fuller, Kagan, & Carrol, 2003) and social emotional development (Morrissey, 2009; NICHD Early Child Care Research Network, 2004). Child care arrangement stability is also associated with overall child well-being (De Schipper, Tavecchio, Van IJzendoorn, & Linting, 2003). Subsidy stability is important for ensuring that parents of young children can continuously work or attend education or training programs without experiencing child care-related job interruptions that could affect their work (Forry & Hofferth, 2011; Ha & Meyer, 2010).²

The Child Care and Development Block Grant (CCDBG) Act of 2014 (42 U.S.C. 9801 et seq.) reauthorized CCDF and included a stronger emphasis on promoting subsidy stability, or the duration and consistency of families' use of child care subsidies. These provisions are outlined in the CCDF Final Rule³ and include the following:

¹ Child Care Research Partnerships are grants funded by the Office of Planning, Research & Evaluation in the Administration for Children and Families in the U.S. Department of Health and Human services to support partnerships of researchers and state agencies on child care policy research projects.

² Although robust literature on child care instability exists, this review will only focus on child care arrangement instability as it relates to subsidy stability.

³ Section 45 CFR 98.45(f)(1) was published Sept. 30, 2016, and took effect Nov. 29, 2016. States and territories are expected to be compliant by the end of the Fiscal Year 2016–2018 CCDF Plan period.

- Requirement of a minimum 12-month subsidy eligibility period and 12-week job search period.
- Ending the practice of linking subsidy eligibility to eligibility for other work support programs.
- A limit on the circumstances in which states can terminate assistance prior to the end of the eligibility period (job loss, cessation of job training/education program, excessive unexplained absences, moving out of state, fraud/program violations).
- Establishment of a graduated subsidy phase-out for families who exceed the income requirements at redetermination but still have modest incomes.
- Establishment of affordable co-payments and requirement for states to monitor if providers charge additional fees above the co-payment.

CCDBG reauthorization provides an important milestone for assessing what has been learned from research that examines subsidy use and stability. The purpose of this brief is to summarize recent literature on continuity/stability of subsidies, predictors of subsidy exits, correlates of instability, and outcomes related to instability or disruptions in subsidy. In addition to reviewing findings on child care subsidy stability, this brief will address methodological and definitional concerns for research on subsidy stability. It builds upon findings described in a comprehensive literature review on child care subsidies published in 2013 (Forry, Daneri, & Howarth; see text box). One important additional source of findings highlighted in the review is literature from a recent cohort of the Child Care Policy Research Partnerships research funded from 2010–2018. For more details on the methods used to inform the findings, see Appendix A.

Summary of 2013 literature review on child care subsidies

The Office of Planning, Research and Evaluation (OPRE) supported the publication in 2013 of a comprehensive review of research literature on child care subsidies. The review provided a summary of existing research on subsidy use, as well as associations between subsidy receipt and parents' choice of high-quality care, child care arrangement stability, subsidy stability, and family and child outcomes. The report described the process for developing, modifying, and testing subsidy policies and identified gaps in the existing research that could be addressed by new research efforts.

Key findings related to subsidy stability in the 2013 review include:

- Families cycle in and out of subsidy use (Ha, Magnuson, & Ybarra, 2012; Witte & Queralt, 2006). Although the median length of subsidy spells varied by state and across studies (as studies varied in sample, duration, methods, and definition of subsidy break), the most common median spell lengths were approximately six to seven months (Ha et al., 2012; Meyers, Peck, Davis, Collins, Kreader, Georges, & Olson, 2002; Ros et al., 2012; Forry, Welti, Davis, Krafft, & Daneri, 2012; Swenson, 2011).
- Subsidy spell length is associated with the length of subsidy redetermination periods (the length of time a family is eligible to receive a child care subsidy before re-confirming eligibility), with shorter redetermination periods associated with shorter spells (Michalopolous, Lundquiest, & Castells, 2010; Grobe, Weber, & Davis, 2008).
- Subsidy spells tended to end at the time of redetermination (Grobe et al., 2008; Meyers et al., 2002; Michalopolous, Lundquiest, & Castells, 2010; Witte & Queralt, 2006). The evidence on

whether more generous policies regarding parental co-payments and provider reimbursement rates were associated with longer subsidy spells was mixed (Grobe et al., 2008; Ha & Meyer, 2010; Meyers et al., 2002; Michalopolous, 2010; Schexnayder & Schroeder, 2008).

- No significant associations were found between subsidy stability and income eligibility limits (Holod, Johnson, Martin, Gardner, & Brooks-Gunn, 2012).
- Families' use of nonparental care is more stable for children receiving subsidized care than for their peers using unsubsidized care (Brooks, Risler, Hamilton, & Nackerud, 2002; Danziger, Ananat, & Browning, 2003).

Methods

To search for recent literature on child care subsidy stability, we used targeted search terms related to child care subsidy stability on the following databases: PyscINFO, EBSCO Host, JSTOR, ERIC, and Research Connections. Relevant articles, including peer-reviewed research as well pertinent research briefs and reports published since 2012 that were *not* included in the previous literature review on child care subsidies, were included in this review (Forry, Daneri, & Howarth, 2013). Articles were considered relevant if they included research on subsidy stability, duration of subsidy spells, continuity of care, or subsidy policies related to eligibility. The list of articles was then reviewed and added to by a panel of external reviewers who are experts in the field of child care subsidy use. Finally, selected articles were reviewed for key findings, as well as for methodological considerations and information on the article's relevant policy contexts.

A total of 22 articles were identified for inclusion in the current review of the literature. The literature represents a diverse array of methods, including secondary analysis of administrative data, policy analysis, interviews and focus groups, and survey data. These articles also include subsidy data from 40 states (see Appendix B for a full list of states). While the specific research questions varied across studies, the majority of the literature focused on the following:

- The relationship between child care subsidy receipt and child care arrangements
- Whether the characteristics of families, providers, or policies influence subsidy stability
- Which methods are most useful in the study of subsidy stability
- The relationship between subsidy eligibility periods and subsidy stability

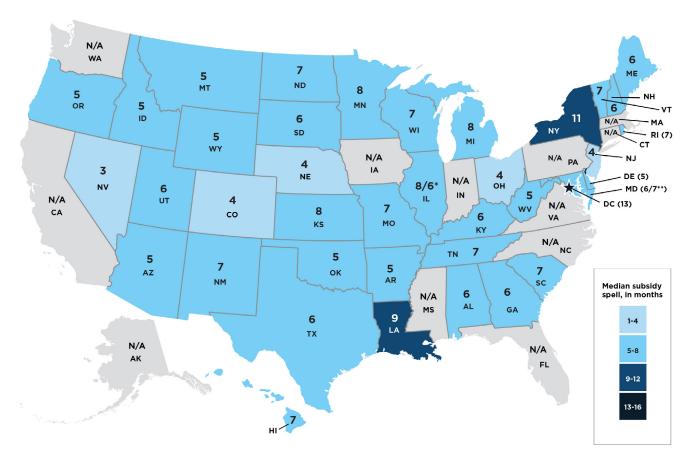
The following summarizes the themes from the recent review of the literature. Themes include the predictors of subsidy instability, the effects of subsidy policy on subsidy stability, parents' perceptions of subsidy systems, the relationship between subsidy use and stability of care, and how the research measures subsidy stability.

Subsidy Spells: Predictors of Subsidy Instability

To understand the stability of child care subsidies, many researchers have examined subsidy spell lengths and patterns of subsidy exits and returns. In general, many families return to subsidy use after exiting (Swenson & Burgess, 2018). Across studies with one-month or four-week definitions of subsidy breaks, median subsidy spells ranged from three to 13 months, including three months in Nevada (Swenson, 2014), approximately five months in Oregon (Weber, Grobe, & Davis, 2014), approximately six months in Maryland (Davis, Krafft, & Forry, 2017b), eight months in Minnesota (Davis, Krafft, & Tout, 2014), and 13 months in the District of Columbia (Swenson, 2014). In Swenson's (2014) study analyzing

child care subsidy data from all families (across multiple states) who received a subsidy from the Child Care and Development Fund (CCDF), the median spell length was approximately six months across all states (Figure 2). While studies include cross-state comparisons, caution should be used when interpreting these findings as differences could be attributed to variance in how states report and track child care subsidy data (Swenson, 2014). For a list of the median subsidy spell length by state, see Appendix B.





^{*}Data used to calculate median spell lengths was only gathered in a few counties.

However, more analyses must be done to confirm.

N/A indicates that data were not available in the existing literature.

Data sources for the map can be found in Appendix B.

Subsidy churn

Research on subsidy dynamics shows that children are very likely to experience a break in subsidy eligibility and cycle in and out of subsidy use (Raikes, Torquati, Wang, & Shjegstad, 2012; Swenson, 2014; Pilarz, Claessens, & Gelatt, 2016). These patterns of subsidy exits and returns are referred to as *subsidy churn* (Davis et al., 2017b). This section summarizes patterns of child care subsidy churn, focusing on factors influencing the likelihood of children and families exiting and returning to the subsidy program.

Subsidy exit. Reasons for subsidy exit are often multifaceted (Henly, Kim, Sandstrom, Ros, Pilarz & Clawssens, 2017; Joshi & Ha, 2017). Henly and colleagues in the Illinois-New York Child Care Research Partnership hypothesize that three factors may contribute to subsidy instability: program factors,

^{**}Differences in Maryland's median spell lengths across studies could be due to changes over time.

parental employment situations, and children's care arrangements. Similarly, in the Massachusetts Child Care Research Partnership's study on subsidy stability, the researchers categorized findings into three factors: work, family, and administrative/policy. Work includes factors related to employment stability or nonstandard work schedules; family factors include changes in care preferences or the availability of informal care; and administrative and policy factors included issues such as confusion around eligibility rules or accessibility issues (Joshi & Ha, 2017). To summarize the breadth of research on subsidy exit, this section will focus on provider, family, and community characteristics and employment instability.

Provider, family, and community characteristics. In Oregon, community characteristics found to increase the likelihood of subsidy exit include employment rates and employment growth rates, as well as child care supply (Grobe, Davis, Scott, & Weber, 2017; Weber et al., 2014). Families living in communities with higher employment rates or higher rates of employment growth were more likely to exit subsidy, perhaps because of the increased likelihood for parental employment and surpassing the maximum income to receive subsidy (Grobe et al., 2017; Weber et al., 2014). Additionally, families living in communities with more child care supply were less likely to exit the subsidy system (Weber et al., 2014). Research in Illinois and New York found that families were less likely to exit subsidy if they had an easier time finding a child care provider and greater perceptions of their child's safety while with the provider. These findings suggest that when parents have access to child care providers they are satisfied with, they are less likely to exit the subsidy system (Henly et al., 2017). Families on Temporary Assistance for Needy Families (TANF) have shorter spells than do those eligible for subsidies through employment (Meyers et al., 2002; Witte & Queralt, 2005; Grobe et al., 2008; Schexnayder & Schroeder, 2008; Holod et al., 2012; Ha et al., 2012). A study of child care spells in Massachusetts found that income-eligible children had longer median spell lengths (18 months) than TANF-eligible children (10 months) or children receiving subsidy through the child welfare system (13 months; Joshi & Ha, 2017).⁴

Employment instability. Employment instability affects subsidy exit because subsidy eligibility is typically tied to parental employment or enrollment in job readiness activities such as school. In two studies, administrative data analysis in Oregon revealed that loss of employment is often associated with subsidy exit (Weber et al., 2014; Grobe et al., 2017). These findings were further supported by telephone surveys and interviews, which found that 11 or 12 parents who exited the subsidy program during the study did so because of employment loss (Grobe et al., 2017). Another study of administrative and survey data in New York and Illinois found support for the association between nonstandard employment and subsidy exit; in particular, parents with nonstandard work schedules were at an increased risk for exiting the subsidy system (Henly et al., 2017). The authors noted that the data did not allow them to draw conclusions about whether subsidy ineligibility is the mediator between job loss and subsidy exit. For example, subsidy exit could be due to a lack of understanding around policies related to job search grace periods⁵ rather than ineligibility. In Illinois, parents have 30 days to search for a job after becoming unemployed before they lose subsidy eligibility (Henly, et al., 2015). Qualitative interviews revealed that many parents were unaware of this provision, assuming eligibility was lost immediately upon becoming unemployed. This finding supports the idea that the communication of eligibility policies may be nearly as important as the policies themselves (Henley et al., 2015).

Subsidy return. Despite the prevalence of subsidy exit, research indicates that families often return to subsidy after a break (Meyers et al., 2002; Pilarz et al., 2016; Swenson, 2014). In a five-state study, Meyers and colleagues (2002) found that between one third and slightly over one half of children who exited a spell of subsidy receipt began a subsequent spell of assistance within 12 months. In Swenson's (2014) multi-state study, 17 percent of families returned to subsidy within a month of exiting, and 57 percent of families returned to the subsidy program within 36 months of exiting. In a study of Illinois and New York, approximately 30 percent of children who exited the subsidy program in their first year of participation returned within three months of exiting. An additional 8 to 9 percent returned in the following three months (Pilarz et al., 2016).

⁴ In some states, families may be eligible for child care subsidy through enrollment in TANF or participation in the child welfare system.

⁵ A job search grace period is an amount of time (3 months in the case of CCDPG regulations) during which parents can search for a job

⁵ A job search grace period is an amount of time (3 months in the case of CCDBG regulations) during which parents can search for a job after job exit without losing their child care subsidy eligibility (Henley et al., 2017).

Analyses of administrative data in Maryland examined predictors of subsidy re-entry and found that children were less likely to return if they had been cared for by family or informal providers (Davis et al., 2017b). Families were more likely to return if they met subsidy eligibility requirements, received TANF benefits, were parents of infants, or were single parents (Davis et al., 2017b). Additionally, in studies of both Maryland and Minnesota administrative data, families were more likely to return if they had been receiving subsidy for training rather than employment; however, these families were also more likely to exit subsidy sooner, indicating more subsidy churn (Davis, Krafft, & Tout, 2014; Davis et al., 2017b).

Effects of Subsidy Policy and Implementation on Subsidy Stability

Previous research indicates that shorter redetermination periods are associated with shorter subsidy spells (Grobe et al., 2008; Meyers et al., 2002; Michalopolous et al., 2010; Witte & Queralt, 2006). With the policy changes in the CCDF Final Rule, questions emerge about the effects of the Final Rule on stability. For example, states and territories may require families to report interim changes in their eligibility for subsidy prior to redetermination. The frequency with which families are required to report these changes may affect their subsidy receipt (Minton, Stevens, and Blatt, 2016).

More recent research builds on previous research, including multiple studies that have found the length of the subsidy eligibility period is related to subsidy stability (Davis, Kraft, & Forry 2017; Henly et al., 2017; Pilarz et al., 2016; Weber et al., 2014). In Davis and colleagues' (2017) study of child care subsidy policy in Maryland, the likelihood of exiting the subsidy system was 30 times greater in the week before the subsidy eligibility expired than in weeks in which both subsidy eligibility and voucher authorization continued. Similarly, in a study based in Oregon, families were 1.2 times more likely to exit the subsidy system in the last month of their eligibility period (Weber et al., 2014). This study also found that after a 2007 policy change in Oregon that increased the generosity of the subsidy system, including raising the eligibility period length from three to six months, the likelihood of exiting the subsidy system during the study period was reduced by approximately 17 percent (Weber et al., 2014). See Table 3 for a description of the policy changes.

In a study of subsidy spells in Illinois and New York, researchers found that the risk of subsidy exit was higher when families were required to recertify their eligibility more frequently. Families who lived in New York counties with 12-month eligibility periods had a lower risk of exiting the subsidy system during the study period than families in Illinois, which had just a six-month eligibility period (Henly et al., 2017; Pilarz et al., 2016).

Administrative barriers, such as the potential for policy miscommunication mentioned in Henly and colleagues' (2017) study of Illinois and New York, are also associated with subsidy instability. Parents reported difficulty with the application process and long wait times for subsidy approval as barriers to subsidy receipt (Henly et al., 2017). These administrative barriers increased the risk of subsidy exit. A study in Illinois and New York analyzed in-depth interviews with child care subsidy recipients in which participants were asked for their recommendations for improving the subsidy system (Sandstrom, Grazi, & Henly, 2015). Parent recommendations include providing more flexible eligibility requirements, expanding income limits, clarifying definitions of approved activities for parents, and offering alternative methods for verifying employment. Additionally, participants recommended creating more efficient processes by shortening wait times, improving communication and family-friendliness of offices, and reducing paperwork burden (Sandstrom et al., 2015). Administrative changes can help with addressing these barriers, including making the process for reassessment easier for families. For example, a change to Massachusetts's reassessment process made it so families were reassessed at their child care provider site rather than having parents complete the reassessment in an offsite location, and findings showed that families reassessed by providers were less likely to exit the subsidy system in the month following reassessment (Joshi & Ha, 2017).

Davis and colleagues' (2017) study in Maryland found that voucher expiration was associated with subsidy exit (Davis, Krafft, & Forry, 2017). A previous study by these researchers also found that voucher lengths are often shorter than eligibility periods (Davis, Krafft, Forry, & Tout, 2014). In Maryland, a voucher is "issued for care for a specific child with a certain provider for the stated number of authorized hours per week" (Davis, Krafft, Forry, & Tout, 2014, p. 2). Each voucher has an expiration date which can be—and often is—earlier than the date by which the family's eligibility expires. For eligibility periods of 48–53 weeks (approximately 12 months), more than half (55 percent) of vouchers only lasted 35 weeks (approximately nine months) or less. Nearly a quarter of vouchers lasted just one to nine weeks (Davis, Krafft, Forry, & Tout, 2014).

Additional research on subsidy stability in Maryland found that the 12-month redetermination period was not always implemented among local agencies across the state, despite being a statewide policy. These findings indicate that administrative procedures, particularly at the local level, are important for the implementation of federal- or state-level subsidy policies (Davis et al., 2017; Davis, Krafft, Forry, & Tout, 2014). A recent study found that when Maryland switched from a localized to a centralized subsidy system, the differences between length of eligibility periods and length of voucher authorization were smaller, and the subsidy eligibility period lengths were more consistent across counties (Madill, Orfali, & Blasberg, 2017). After the transition to a centralized subsidy system, 78 percent of eligibility periods were greater than or equal to the required 48 weeks (approximately 12 months). Similarly, just 42 percent of vouchers were shorter than the corresponding eligibility period, compared to 67 percent before the transition (Madill et al., 2017).

Effects of Parent Perceptions of Subsidy Systems on Subsidy Stability

In a qualitative study of parents' experiences with subsidy systems in four states (Kansas, Iowa, Missouri, and Nebraska), parents reported generally positive experiences with state subsidy systems, including high benefits of the subsidy, few limitations, and moderate satisfaction with the accessibility and reliability of subsidies (Raikes et al., 2012). Notably, perceptions of subsidy system accessibility varied across the states, with Nebraska's system viewed as the least accessible. This finding points to the importance of considering the specific state policy context when interpreting findings on subsidy stability. However, the literature on subsidy stability is still limited to a small number of states, and methodological differences make it difficult to draw cross-state comparisons.

To illustrate the importance of methodological comparisons, a study of low-income parents in Missouri used the same questions as Raikes and colleagues' study (questions were originally developed for a 2005 study by Raikes) and found slightly more negative parental perceptions of the subsidy system than in Raikes and colleagues' research in Missouri (Moodie-Dyer & Galambos, 2014). One difference noted by Moodie-Dyer and Galambos (2014) was that they surveyed parents who had *ever* received child care subsidies, while Raikes and colleagues (2012) only surveyed parents *currently* receiving subsidies, indicating that perhaps individuals who had exited the subsidy system had a less positive view of it.

Subsidy Use and Stability of Care

One of the key reasons for researchers' and policymakers' interest in subsidy stability is its potential relationship to child care arrangement stability, which is associated with positive child outcomes, such as positive cognitive (Loeb, Fuller, Kagan, & Carrol, 2003) and social-emotional development (NICHD Early Child Care Research Network, 2003), and overall child well-being (De Schipper, Tavecchio, Van IJzendoorn, & Linting, 2003). In Forry and colleagues' (2013) literature review, the research on the relationship between subsidy use and stability of care focused on two key research questions:

- Do subsidy-receiving families experience child care arrangement stability?
- Is subsidized child care more stable than unsubsidized child care?

When comparing families who were and were not using subsidy, two studies found that subsidy use was predictive of more stable care arrangements (Brooks et al., 2002; Danziger et al., 2003). Yet, when looking longitudinally at families who received child care subsidies, most studies found some level of change in child care arrangements (Anderson et al., 2005; Lowe, Weisner, & Geis, 2003; Meyers et al., 2002; Ros, Claessens, & Henly, 2012; Weber, 2005). Additionally, two studies found that subsidy spell changes were associated with changes in care (Ha et al., 2012; Weber, 2005).

The more recent literature on whether subsidized care was more stable than unsubsidized care has mixed findings. Research from Minnesota found that subsidy use was associated with reduced likelihood of switching between types of child care (home-based vs. center-based; Davis, Carlin, Krafft, & Tout, 2014). However, a more recent study in Minnesota found that there was no difference in the stability of care arrangements while receiving subsidy compared to arrangements while not receiving subsidy. (Krafft, Davis, & Tout, 2017). Additionally, researchers continued to find evidence of child care instability among subsidy-receiving families in Missouri (Moodie-Dyer & Galambos, 2012).

Recent research has expanded understanding of the association between subsidy stability (rather than just subsidy usage) and child care arrangement stability (Davis et al., 2017b; Pilarz et al., 2016; Speirs, Vesely, & Roy, 2015). Pilarz and colleagues (2016) found that children who experience more subsidy churn (i.e., have less subsidy stability) are likely to also experience more changes in subsidized care arrangements (i.e, have less child care arrangement stability). In Illinois, where families had less subsidy stability and shorter eligibility periods, families experienced less care stability than in New York, where families had more subsidy stability and longer eligibility periods. Families in New York also experienced shorter subsidy spells than families in Illinois. Despite this fact, children in Illinois were more likely to change providers than children in New York. However, rates of changes in care providers between spells were similar in both New York and Illinois (Pilarz et al., 2016).

Additionally, recent research builds on the evidence that subsidy eligibility is associated with child care arrangement stability. A study in Maryland found that families who remained eligible were twice as likely to return to subsidy after an exit compared to those who were not still certified as eligible for subsidy, particularly to the same provider. Furthermore, after a family is deemed eligible in Maryland, they may be authorized to receive a voucher with a particular provider. If a child had an authorized voucher before their exit, the likelihood of returning to subsidy was even greater (Davis et al., 2017). In an ethnographic study of low-income mothers' experiences with the subsidy system in Illinois, Massachusetts, and Texas, mothers reported needing to leave a child care arrangement they were happy with due to the loss of a child care subsidy, as losing the subsidy made them no longer able to afford their particular child care arrangement (Speirs et al., 2015).

Similar to the benefits of subsidy stability on child care arrangement stability, a study of administrative data in Wisconsin found that child care subsidy use was associated with a greater chance of earnings increases and a greater chance of employment; however, this finding was only significant when families experienced subsidy stability (Ha & Miller, 2015). Therefore, research indicates that stability of subsidy receipt is important in order for subsidies to most benefit low-income families by providing access to child care and employment stabilization.

Measuring Subsidy Stability

In addition to discussing the key findings, it is important to understand the methods researchers are using to measure subsidy stability. Researchers most often measure subsidy stability by analyzing state administrative data to understand the length of time families participate in the child care subsidy program. However, the state administrative data present challenges to building a national

understanding of subsidy stability. CCDF administrative data vary by state, variables, such as household income, are defined differently, and time units differ (e.g., weekly or monthly).

Researchers face other challenges in drawing cross-state comparisons due not only to differences in data, but also in research methods used to measure subsidy stability. Common differences include use of a point-in-time versus an entry cohort in the study sample. Another is use of a one- or two-month break in defining a spell. Still another involves differences in the level of analysis, such as including all children in a program, a random child, family, or provider.⁶

Methodological challenges and recommendations for researchers

To address variation in subsidy stability research, Davis, Grobe, and Weber (2012) highlight common challenges researchers face. Some of the challenges include:

- The lack of a shared definition of subsidy spells and subsidy exits, especially the number of months used to define the end of a spell.
- The use of first observed spells or multiple spells in a given observation period.
- The use of a cohort (a group of subsidy recipients who started their subsidy receipt during a given observation period) vs. point-in-time (all subsidy recipients during a given observation period, regardless of when they started subsidy receipt) sample design.
- Accounting for unobserved events (e.g. participation before beginning or after study dates). This is also known as censoring.
- Level of analysis (i.e., child, random child, family, provider).
- The analytic method used to measure length of subsidy participation, such as the survival rate, or simple median.

Researchers make some methodological decisions that are dependent on the research goal, questions, and availability of data. However, as Davis and colleagues (2012) point out, when researchers do not use consistent methods to study subsidy stability, it is difficult to draw comparisons across studies. Therefore, Davis and colleagues make several recommendations to researchers interested in studying subsidy stability:

- For consistency and reliability, they recommend that researchers rely on a cohort design. This means that only spells that begin during a specific time frame are included in the sample for analysis. This method may exclude the longest subsidy spells, because they may have begun far in advance of the specified time frame. Studies that include sufficient years of subsidy data in the study (at least two but preferably three or more) are more likely to capture these longer spells. Inclusion of only completed spells will bias results.
- Additionally, they recommend that researchers utilize analytic methods specific to measuring continuity. To draw comparisons across studies, the authors also recommend that researchers report the median spell length and, when appropriate, the survival function (Grobe, Weber, & Davis, 2003). A survival analysis is useful in subsidy stability research as it considers censored observations that continue beyond the study time period and thus allows the researchers to accurately report the median spell lengths and the probability of subsidy exit. A standard method to calculate the median spell length will underestimate the median length because it does not

⁶ The Administration for Children and Families Office of Child Care requires states to report case-level data for all children and families receiving a child care subsidy (data are reported on the ACF-801 Case-Level Reporting Form). Researchers have access to child- and family-level variables from this data. Depending on how the researcher uses the data, there may be inconsistencies in what is reported. ⁷ Point-in-time designs oversample the longest subsidy spells by having more data on those spells that last the longest, which will bias results.

⁸ By only studying completed spells, researchers may oversample shorter subsidy spells, excluding those that last the longest.

account for spells that continue beyond the study period (we just do not observe them because of data limitations). The Kaplan-Meier method is a widely used method to estimate survival function (i.e., cumulative survival rate), and it calculates the probability that the event of interest (i.e., subsidy exit) has not occurred by a certain time.

The following section will explore the extent to which the research on subsidy stability reviewed in this brief has followed these recommendations, as well as any advancements in our understanding of these methodological considerations.

Methodology in recent research

Given the variation in CCDF administrative data across states, it is important that researchers provide sufficient detail on their sample and analyses. However, subsidy stability researchers are inconsistent with reporting the unit of analysis and analytic approach. State CCDF programs vary in the time unit used in their systems, with some states reporting data weekly and others monthly. Despite this fact, as Krafft, Davis, and Forry found in 2014, the unit of analysis is important when making cross-state comparisons. For example, if a child receives four weeks of subsidy starting in April and ending in May, a state that uses months as the unit of analysis may report that child as receiving two months of subsidy, while a state using weeks as the unit of analysis would report this as one month. This distinction largely depends on how often data were recorded in a given state and may not be something the researcher is able to change (Davis, Krafft, & Forry, 2017b).

The analytic methods varied across the studies reviewed in this brief, which is likely a reflection of the research questions. As Swenson (2014) demonstrated, different analyses are useful for answering different sets of questions, though the majority of the studies relied on survival models to report median spell length. However, it is important to note that caution should be used when relying on survey data on subsidy use. Findings highlight that misreporting is common in surveys of subsidy use as parents' knowledge of their subsidy receipt may be unreliable (Krafft, Davis, & Tout, 2015).

While much of the discussion concerning methodology involves the use of administrative data, three of the studies included in this review relied on qualitative methods such as interviews and focus groups (Speirs et al., 2015; Adams & Katz, 2015; Sandstrom et al., 2015, Grazi, & Henly, 2015). Of the studies that relied on administrative or survey data, the majority reported median spell length and the survival function where applicable.

Definitional considerations in reviewed studies

When it is reported, the definition of subsidy spell is consistent across the studies referenced in this report (although many studies do not include a definition). However, the definition of a *break in subsidy receipt*, or the end of a subsidy spell, is not always reported in the literature. Davis and colleagues (2017b) define a break (sometimes referred to as a *gap*) as "the number of consecutive weeks without any payments to providers for a child" (p. 37). In the current review of literature, almost two thirds (n= 14; 63 percent) of the published studies do not report a definition of a break in subsidy receipt. However, across the reviewed studies, those that do include a definition operationalize a break in subsidy receipt as not receiving subsidy for a period of at least one month, or four weeks (Davis et al., 2017; Davis et al., 2017b; Davis, Krafft, & Tout, 2014; Grobe et al., 2017, Davis, Scott, & Weber, 2017; Henly et al., 2017; Pilarz et al., 2016; Swenson, 2014).

Henly and colleagues (2017) analyzed administrative data with both four- and eight-week breaks, but the results were not substantively different. Davis and colleagues (2017b) examined breaks in subsidy spells using six different definitions of break ranging between one week and 12 weeks. When a break was defined as one week without subsidy receipt, results indicated that one third of children returned to subsidy within four weeks of subsidy exit. However, when a break was defined as four weeks without subsidy receipt, results indicated that just 7 percent of children returned within four weeks of subsidy

⁹ Survey data includes self-reported data from parents and families receiving child care subsidies.

exit. In these instances, participation gaps of less than four weeks were not considered breaks but part of the spell, thereby removing children who had brief breaks and quick returns from the sample of children who exited subsidy (Davis et al., 2017b).

In Swenson's (2014) multi-state study on child care subsidy duration, variations in methods for calculating a break in subsidy (one month vs. two months) resulted in different median spell lengths. Among all 35 states in the sample, the median subsidy spell length was six months when a break was defined as one month without subsidy receipt. However, when a break was defined as two months without subsidy receipt, the median spell length across states was seven months. In the two-month definition, any subsidy exits that returned to subsidy receipt immediately after a month since exit were not counted as an exit. As shown in Figure 1, the difference in the definition of subsidy break results in varying median spell lengths.

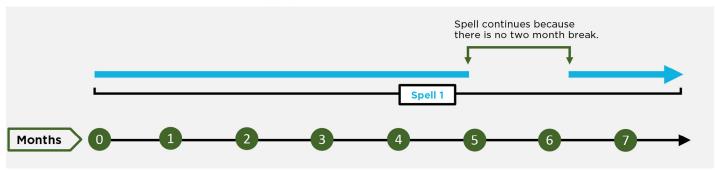
Figure 2. Effects of different definitions of subsidy break on one family's recorded spell length

The blue and yellow lines represent a family's monthly subsidy use. The gaps in the blue line indicate a disruption in subsidy use. In Exhibit A, with a break in subsidy spell defined as one month, the family is recorded as having two subsidy spells. In Exhibit B, when a break in subsidy spell is defined as two months of disrupted subsidy use, the same family is recorded as having one subsidy spell even though there was a disruption in subsidy receipt.

Exhibit A. Researcher defines a break in subsidy spell as one month.



Exhibit B. Researcher defines a break in subsidy spell as two months.



Krafft and colleagues (2017) found similar results when they examined the median spell lengths in Maryland, where data are reported weekly. When a break was defined as one week without subsidy, the median subsidy spell was 20 weeks (five months), whereas using a 12-week definition of a break was associated with a 32-week (eight-month) median subsidy spell. These findings highlight the importance of considering the definition of subsidy breaks when interpreting research findings. When a break is defined by a shorter period (e.g., one week), median subsidy lengths will typically be shorter.

Table 1. Subsidy spell lengths by break definitions

	Length of subsidy spell (in weeks)		
Number of weeks used to define a break in subsidy participation	25th percentile	50th percentile (median)	75th percentile
One	9	20	40
Two	10	21	43
Four	12	26	52
Six	14	30	64
Eight	14	30	64
Twelve	15	32	73

Source: Krafft. Davis. & Forry, 2014

Conclusion

Increasing subsidy stability and the stability of subsidized child care arrangements is a major component of the 2014 CCDBG Reauthorization Act. Thus, there is a high level of interest in determining the extent to which the new law has achieved its desired impact. This increased attention heightens the relevance of recent state and national research studies whose findings shed light on how policies affect subsidy dynamics. Since many of the studies reviewed in the current report were released just on the cusp of these policy changes, we will have to look to future research to understand the impact of the new CCDBG provisions related to subsidy stability. Understanding existing research is an essential foundation for research that will assess the impact of the new law. In addition, researchers will need to ask new questions. For example, none of the existing studies provided substantive evidence on the effect of (1) limiting the circumstances in which states can end assistance prior to the end of an eligibility period, (2) establishing a graduated subsidy phase-out for families who exceed income requirements at redetermination but still have modest incomes, or (3) providing affordable co-payments and requiring states to monitor if providers charge additional fees above the co-payment. Recent findings do, however, confirm that longer eligibility periods tend to be related to longer subsidy spells (Davis et al., 2017; Henly et al., 2017; Pilarz et al., 2016; Weber et al., 2014).

New research reviewed in this report highlights that policy implementation and its associated administrative factors are just as important for stability as policies themselves. Research on the implementation of a statewide 12-month eligibility period in Maryland provides an example of the importance of policy implementation and administration. In Maryland, short voucher lengths and inconsistencies in subsidy administration at local agencies presented issues for subsidy stability initially following the roll-out of the new policy (Davis, Krafft, Forry, & Tout, 2014). However, when Maryland transitioned to a centralized subsidy system, eligibility periods and voucher lengths were more consistent—and longer in length—across localities (Madill et al., 2017). To improve subsidy stability for families, research on subsidy stability should consider local implementation contexts.

While the studies reviewed in the current report contribute to our knowledge on subsidy stability, researchers would benefit from more consistency in their methodological approaches to provide comparability of findings. While guidance on studying and measuring subsidy exists (Davis et al., 2012; Grobe et al., 2003), much of the research on subsidy stability lacks transparency in its methodological decisions. For example, many of the studies cited in the current report do not include their definition of subsidy break or define their unit of analysis. This is important, as the methodological and analytic approach impacts the generalizability of studies and the ability to draw comparisons across states.

Next steps

The current review has several implications for future research. As the implementation of the CCDF Final Rule and provisions related to subsidy stability are underway, more research is needed on how the implementation of these new policy changes is affecting subsidy receipt. For example, more research is needed on how 12-month redetermination periods are being implemented across states and the impact they are having on stability. It will be important to examine state CCDF plans for indications of how individual states will implement new policies and identify key strategies and best practices aimed at promoting subsidy and child care arrangement stability. Researchers may wish to reference the CCDF Policies Database, which monitors and captures changes to caseworker manuals and other state policy documents related to child care subsidies (Minton, Giannarelli, & Stevens, 2017).

In addition, while there is limited research representing the parent perspective, future research may want to compare the perceptions of parents currently receiving child care subsidies to those of parents who have exited the subsidy system. This distinction is important when measuring subsidy stability because it allows researchers to understand the different perspectives of families who were able to maintain subsidy to those who either were unable to maintain subsidy or chose to exit the subsidy system. Research exploring the factors associated with subsidy exit continues to be important. This line of research will be particularly important as states implement their CCDF plans in order to explore whether changes in subsidy policies influence parent perceptions and child care subsidy use.

Overall, researchers should be sure to acknowledge that subsidy policies occur in context and are implemented in conjunction with other policies. Future research should strive to avoid studying subsidy policies in isolation and instead examine the interactions of different policies on stability. For example, researchers should continue to explore the role of eligibility criteria, such as job search requirements, and how this relates to subsidy stability (Stevens, Minton, and Blatt, 2016). Additionally, researchers should examine how certain policies work and for whom they work by studying the association between family characteristics and policy outcomes. With this approach, policymakers will better be able to take the research findings and understand how different combinations of policies can best support families, as well as how certain policies affect different populations.

Finally, as researchers continue to explore methods for studying subsidy stability, they should pay special attention to the generalizability of findings, methodological considerations, and best practices for drawing cross-state comparisons. To date there remains limited research comparing state subsidy systems and providing context for why differences across states may exist. To learn from the research on subsidy stability, future research should consider state-level policies and develop research methods to allow for cross-state comparisons, since the child care subsidy system operates as a block grant with considerable differences across the country.

References

- Adams, G., & Katz, M. (2015). Review of Massachusetts child care subsidy eligibility policies and practices: A report for the assessment of the Massachusetts subsidized child care system. Washington, DC: Urban Institute. Retrieved from https://files.eric.ed.gov/fulltext/ED559325.pdf
- Anderson, S., Ramsburg, D. M., & Scott, J. (2005). *Illinois study of license-exempt child care: Final report.* Urbana-Champaign, IL: University of Illinois at Urbana-Champaign.
- Adams, G., & Rohacek, M. (2010). *Child care instability: Definitions, context, and policy implications.* Washington, DC: Urban Institute.
- Brooks, F., Risler, E., Hamilton, C., & Nackerud, L. (2002). Impacts of child care subsidies on family and child well-being. *Early Childhood Research Quarterly, 17*, 498-511. https://doi.org/10.1016/s0885-2006(02)00186-2
- Danziger, S. K., Ananat, E. O., & Browning, K. G. (2003). *Childcare subsidies and the transition from welfare to work.* (Working paper series #03-11). Ann Arbor, MI: National Poverty Center.
- Davis, E. E., Carlin, C. S., Krafft, C., & Tout, K. (2014). Time for a change? Predictors of child care changes by low-income families. *Journal of Children and Poverty, 20*(1), 21-45. https://doi.org/10.1080/10796126.2014.894003
- Davis, E. E., Grobe, D., & Weber, R. B. (2012). Common challenges in the study of continuity of child care subsidy participation. Methodological Brief OPRE 2012-55. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Davis, E. E., Krafft, C., & Forry, N. D. (2017). The role of policy and practice in short spells of child care subsidy participation. *Journal of Public Administration Research and Theory, 27*(1), 1-19. https://doi.org/10.1093/jopart/muw039
- Davis, E. E., Krafft, C., & Forry, N. D. (2017b). Understanding churn: Predictors of reentry among families who leave the child care subsidy program in Maryland. *Children and Youth Services Review, 77*, 34-45. https://doi.org/10.1016/j.childyouth.2017.03.014
- Davis, E. E., Krafft, C., Forry, N. D., & Tout, K. (2014). *Implementation of 12-month child care subsidy eligibility redetermination: A case study from Maryland.* Bethesda, MD: Child Trends. Retrieved from http://www.childtrends.org/wp-content/uploads/2015/02/2014-56MDChildCareAssistance Brief.pdf
- Davis, E. E., Krafft, C., & Tout, K. (2014). Stability of subsidy participation and continuity of care in the Child Care

 Assistance Program in Minnesota. Bethesda, MD: Child Trends. Retrieved from http://www.childtrends.corg/?publications=stability-of-subsidy-participation-and-continuity-of-care-in-the-child-care-assistance-program-in-minnesota
- De Schipper, J. C., Tavecchio, L. W., Van IJzendoorn, M. H., & Linting, M. (2003). The relation of flexible child care to quality of center day care and children's socio-emotional functioning: A survey and observational study. *Infant Behavior and Development, 26*(3), 300-325. https://doi.org/10.1016/S0163-6383(03)00033-X
- Forry, N. D., Daneri, P., Howarth, G. (2013). *Child care subsidy literature review.* OPRE Brief 2013-60. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Forry, N. D., & Hofferth, S. L. (2011). Maintaining work: The influence of child care subsidies on child care-related work disruptions. *Journal of Family Issues, 32*(3), 346-368.
- Forry, N., Welti, K., Davis, E., Krafft, C., & Daneri, P. (2012). *Subsidy continuity in Maryland*. Washington, DC: Child Trends. Retrieved from https://www.childtrends.org/publications/subsidy-continuity-in-maryland/
- Government Accountability Office (2016). Child Care: Access to Subsidies and Strategies to Manage Demand Vary Across States. GAO-17-60. Washington DC: United States Government Accountability Office, U.S. Congress.
- Grobe, D., Davis, E. E., Scott, E. K., & Weber, R. B. (2017). Using Policy-Relevant Administrative Data in Mixed Methods: A Study of Employment Instability and Parents' Use of Child Care Subsidies. *Journal of Family and Economic Issues, 38*(1), 146-162. https://doi.org/10.1007/s10834-016-9501-8
- Grobe, D., Weber, R., & Davis, E. E. (2003). Guidebook for implementing a study on the dynamics of child care subsidy use. Corvallis: Oregon Child Care Research Partnership. Retrieved from http://health.oregonstate.edu/sites/default/files/sbhs/pdf/2003-Duration-Study-Guidebook.pdf

- Grobe, D., Weber, R. B., & Davis, E. E. (2008). Why do they leave? Child care subsidy use in Oregon. *Journal of Family and Economic Issues*, 29, 110-127. https://doi.org/10.1007/s10834-007-9094-3
- Ha, Y., Magnuson, K., & Ybarra, M. (2012). Patterns of child care subsidy receipt and the stability of child care. *Children and Youth Services Review, 34*, 1834-1844. https://doi.org/10.1016/j.childyouth.2012.05.016
- Ha, Y., & Meyer, D. R. (2010). Child care subsidy patterns: Are exits related to economic setbacks or economic successes? Children and Youth Services Review, 32, 346-355. https://doi.org/10.1016/j.childyouth.2009.10.004
- Ha, Y., & Miller, D. P. (2015). Child care subsidies and employment outcomes of low-income families. *Children and Youth Services Review, 59*, 139-148.
- Henly, J.R., Sandstrom, H., Claessens, A., Ros Pilarz, A., Gelatt, J., Kim, J., Healy, O. (2015). *Determinants of subsidy stability and child care continuity*. Washington, D.C.: Urban Institute. Retrieved from https://www.urban.org/research/publication/determinants-subsidy-stability-andchild-care-continuity
- Henly, J. R., Kim, J., Sandstrom, H., Pilarz, A. R., & Claessens, A. (2017). What explains short spells on child-care subsidies? *Social Service Review, 91*(3), 488-533. https://doi.org/10.1086/693751
- Holod, A., Johnson, A. D., Martin, A., Gardner, M., & Brooks-Gunn, J. (2012). Contracts, vouchers, and child care subsidy stability: A preliminary look at associations between subsidy payment mechanism and stability of subsidy receipt. *Child Care Youth Forum, 41*, 343-356. https://doi.org/10.1007/s10566-011-9160-8
- Joshi, P. & Ha, Y. (2017). MA Child Care Research Partnership: Generating research and evaluation infrastructure and evidence to inform child care subsidy policy and practice [PDF document]. Presented at the Child Care and Early Education Policy and Research Analysis: Instability in the ECE and Family Context webinar.
- Krafft, C., Davis, E. E., & Forry, N. D. (2014). Continuity of child care subsidy receipt: Why definitions of spells and gaps matter. Bethesda, MD: Child Trends. Retrieved from http://www.childtrends.org/wp-content/uploads/2015/02/2014-55MDTechnical_Brief.pdf
- Krafft, C., Davis, E. E., & Tout, K. (2015). The problem of measurement error in self-reported receipt of child-care subsidies: Evidence from two states. *Social Service Review*, 89(4), 686-726.
- 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
- Kreader, L. & Weber, R.B. (2017) *The first 20 years of the Child Care and Early Education Policy Research Consortium.*Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S.
 Department of Health and Human Services.
- Loeb, S., Fuller, B., Kagan, S. L., & Carrol, B. (2004). Child care in poor communities: Early learning effects of type, quality, and stability. *Child Development*, 75(1), 47-65. https://doi.org/10.1111/j.1467-8624.2004.00653.x
- Lowe, E. D., Weisner, T. S., & Geis, S. (2003). *Instability in child care: Ethnographic evidence from working poor families in the New Hope Intervention*. New York City: Manpower Demonstration Research Corporation.
- Madill, R., Orfali, N., & Blasberg, A. (2017). Shifting child care subsidy administration to a private, centralized system: Implications for child care stability in Maryland. Bethesda, MD: Child Trends. Retrieved from https://www.childtrends.org/wp-content/uploads/2017/09/2017-39MdSubsidyAdmin.pdf
- Meyers, M. K., Peck, L. R., Davis, E. E., Collins, A., Kreader, J. L., Georges, A., Olson, J. A. (2002). *The dynamics of child care subsidy use: A collaborative study of five states*. New York City: Columbia University's Mailman School of Public Health.
- Michalopolous, C. (2010). Effects of reducing child care subsidy copayments in Washington state. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. Retrieved from https://www.acf.hhs.gov/sites/default/files/opre/ccse_washington.pdf
- Michalopolous, C., Lundquiest, E., & Castells, N. (2010). *The effects of child care subsidies for moderate-income families in Cook County, Illinois.* Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Minton, S., Giannarelli, L., & Stevens, K. (2017). Child Care and Development Fund (CCDF) Policies Database, 2015 [Data file]. Retrieved from https://ccdf.urban.org/

- Minton, S., Stevens, K., & Blatt, L. (2016). *Implications of Child Care and Development Block Grant reauthorization for state policies: Changes to requirements for ongoing eligibility.* Washington, DC: Urban Institute. Retrieved from https://www.acf.hhs.gov/sites/default/files/opre/ccdbgreauthandeligibility_508compliance.pdf
- Moodie-Dyer, A., & Galambos, C. (2012). Child care subsidies: Parental perceptions and differences between recipients and non-recipients. *Families in Society: The Journal of Contemporary Social Services*, 93(3), 204-211.
- Morrissey, T. W. (2009). Multiple child-care arrangements and young children's behavioral outcomes. *Child Development*, 80(1), 59-76.
- National Institute of Child Health and Human Development (NICHD) Early Childhood Research Network (2003). Does amount of time spent in child care predict socioemotional adjustment during the transition to kindergarten? *Child Development*, 74(4), 976-1005. https://doi.org/10.1111/1467-8624.00582
- Office of Child Care. (2016). *CCDF final regulations*. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families. https://www.acf.hhs.gov/occ/resource/ccdf-final-regulations
- Pilarz, A. R., Claessens, A., & Gelatt, J. (2016). Patterns of child care subsidy use and stability of subsidized care arrangements: Evidence from Illinois and New York. *Children and Youth Services Review, 65*, 231-243. https://doi.org/10.1016/j.childyouth.2016.04.011
- Raikes, H., Torquati, J., Wang, C., & Shjegstad, B. (2012). Parent experiences with state child care subsidy systems and their perceptions of choice and quality in care selected. *Early Education and Development, 23*(4), 558-582. https://doi.org/10.1080/10409289.2011.574268
- Ros, A., Claessens, A., & Henly, J. (2012). (In)stability of child care subsidies and child care provider use: A preliminary analysis of Illinois administrative records. Manuscript in preparation
- Sandstrom, H., Grazi, J., & Henly, J. R. (2015). Clients' recommendations for improving the child care subsidy program: Illinois and New York Child Care Research Partnership research brief. Washington, DC: Urban Institute. Retrieved from http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000273-Clients-Recommendations-for-Improving-the-Child-Care-Subsidy-Program.pdf
- Schexnayder, D. & Schroeder, D. (2008). Child care devolution in Texas: The relationship of child care policies to subsidy, employment and market durations. Final Technical Report. Austin, TX: University of Texas, Ray Marshall Center for the Study of Human Resources. Retrieved from https://raymarshallcenter.org/files/2008/03/Final_ESI_Econometric_Report_5-21-2008.pdf
- Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. NY: Oxford University Press.
- Speirs, K. E., Vesely, C. K., & Roy, K. M. (2015). Is stability always a good thing?: Low-income mothers' experiences with child care transitions. *Children and Youth Services Review*, 53, 147-156. https://doi.org/10.1016/j.childyouth.2015.03.026
- Stevens, K., Minton, S., & Blatt, L. (2016). *Implications of Child Care and Development Block Grant reauthorization for state policies: Changes to job search policies.* Washington, DC: Urban Institute. Retrieved from https://www.acf.hhs.gov/sites/default/files/opre/ccdbgreauthandjobsearch 508compliance.pdf
- Swenson, K. (2011). Child care subsidy dynamics: Recent research findings from ongoing studies on subsidy stability and arrangement continuity. Paper presented at the Child Care Policy and Research Consortium/State and Research Consortium/State and Territory Administrator's Meeting. Retrieved from http://www.researchconnections.org/files/meetings/ccprc/2011/Workshop A2-7-1-12.pdf
- Swenson, K. (2014). Child care subsidy duration and caseload dynamics: A multi-state examination. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved from http://aspe.hhs.gov/hsp/14/ChildCareSubsidy/rpt_ChildCareSubsidy.pdf
- Swenson, K., and Burgess, K. (2018). *Child care subsidy duration and caseload dynamics: A multi-state examination from 2004-2014*. Washington, DC: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved from https://aspe.hhs.gov/system/files/pdf/259296/SubsidySpellsBrief.pdf
- Weber, R. B., Grobe, D., & Davis, E. E. (2014). Does policy matter? The effect of increasing child care subsidy policy generosity on program outcomes. *Children and Youth Services Review, 44*, 135-144. https://doi.org/10.1016/j.childyouth.2014.06.010
- Witte, A. & Queralt, M. (2006). *Understanding the duration of child care subsidy use in Rhode Island.* Wellesley, MA: Wellesley Child Care Research Partnership. Retrieved from http://www.rikidscount.org/matriarch/documents/Snapshot%204.pdf

Appendix A. Literature Review Methods

To search for literature on child care subsidy stability, researchers used targeted search terms on the following databases: PyscINFO, EBSCO Host, JSTOR, ERIC, and Research Connections. Searches included the following "root terms" with any combination of the prefix or suffix terms. For all search terms including *child care*, the terms *ECE*, *early care and education*, and *early care* was also searched in place of *child care*.

Table 5. Search terms

Prefix	Root Terms	Suffix
Barriers to	Child care subsidy	Stability
Challenges for	Child care subsidy spell	Length
Inhibitors of	Child care subsidy recipients	Redetermination
Cause of	CCDF	Eligibility
Effects of	CCDBG	Continuity
Effects on	Subsidized child care	Participation
Benefits of	Child care subsidy family	Access
Outcomes of	Child care subsidy policy	Drop off
	Subsidized child care arrangements	Usage
	Child care subsidy period	Utilization
	Child care subsidy receipt	Duration
		Change
		Instability

Relevant articles published since 2012 that were not included in the previous literature review on child care subsidies were included in this review. The list of articles was then reviewed and added to by a panel of external reviewers, who are experts in the field of child care subsidy use. Finally, selected articles were reviewed for key findings, as well as methodological considerations and information on the article's relevant policy contexts.

Appendix B. Median Subsidy Spell Lengths by State

State	Study	Median subsidy spell length
Alabama	Swenson, 2014	6 months
Alaska	N/A	N/A
Arizona	Swenson, 2014	5 months
Arkansas	N/A	N/A
California	N/A	N/A
Colorado	Swenson, 2014	4 months
Connecticut	N/A	N/A
Delaware	Swenson, 2014	5 months
District of Columbia	Swenson, 2014	13 months
Florida	N/A	N/A
Georgia	Swenson, 2014	6 months
Hawaii	Swenson, 2014	7 months
Idaho	Swenson, 2014	5 months
Illinois	Pilarz et al., 2016*	8 months
Illinois	Swenson, 2014	6 months
Indiana	N/A	N/A
Iowa	N/A	N/A
Kansas	Swenson, 2014	8 months
Kentucky	Swenson, 2014	6 months
Louisiana	Swenson, 2014	9 months
Maine	Swenson, 2014	6 months
Maryland**	Davis et al., 2017	6 months
	Swenson, 2014	7 months
Massachusetts	N/A	N/A
Michigan	Swenson, 2014	8 months
Minnesota	Davis, Krafft, & Tout, 2014	8 months
Mississippi	N/A	N/A
Missouri	Swenson, 2014	7 months
Montana	Swenson, 2014	5 months
Nebraska	Swenson, 2014	4 months
Nevada	Swenson, 2014	3 months
New Hampshire	Swenson, 2014	6 months
New Jersey	Swenson, 2014	4 months
New Mexico	Swenson, 2014	7 months
New York	Pilarz et al., 2016*	11 months

State	Study	Median subsidy spell length
North Carolina	N/A	N/A
North Dakota	Swenson, 2014	7 months
Ohio	Swenson, 2014	4 months
Oklahoma	Swenson, 2014	5 months
Oregon	Weber et al., 2014	5 months
Pennsylvania	N/A	N/A
Rhode Island	Swenson, 2014	7 months
South Carolina	Swenson, 2014	7 months
South Dakota	Swenson, 2014	6 months
Tennessee	Swenson, 2014	7 months
Texas	Swenson, 2014	6 months
Utah	Swenson, 2014	6 months
Vermont	Swenson, 2014	7 months
Virginia	N/A	N/A
Washington	N/A	N/A
West Virginia	Swenson, 2014	5 months
Wisconsin	Swenson, 2014	7 months
Wyoming	Swenson, 2014	5 months

Source: Davis, Kraft, & Tout, 2014; Davis et al., 2017; Pilarz et al., 2016; Swenson, 2014; Weber et al., 2014 *Data used to calculate median spell lengths was only gathered in a few counties.

N/A indicates that data were not available in the existing literature.

^{**}Differences in Maryland's median spell lengths across studies could be due to changes over time. However, more analyses must be done to confirm.

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