



Shifting Child Care Subsidy Administration to a Private, Centralized System: Implications for Child Care Stability in Maryland

Research Brief

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Introduction to the Maryland Child Care Administrative Data Analysis Cooperative Agreement

This research brief was developed as part of the Maryland Child Care Administrative Data Analysis Cooperative Agreement (MD CCADA). The goal of the MD CCADA is to use research to refine policies and practices to facilitate greater continuity and stability in subsidized child care, thereby making services more family-friendly and supportive of positive child outcomes. To achieve its goal, the MD CCADA is using child care subsidy administrative data from 2007 onward to address three research objectives:

(1) describe longitudinal patterns in the continuity of subsidy spells and identify differences in these patterns by child, family, and community characteristics;

(2) examine the association between use of high-quality care and continuity in subsidized care arrangements; and

(3) examine whether Maryland's shift to a private, centralized subsidy case management system is associated with changes in the length of eligibility periods and voucher length. This brief presents findings related to the third research objective. Findings from the MD CCADA will have implications for children, parents, and child care providers, as well as policymakers at the state and federal level. In addition, the MD CCADA aims to contribute to the methodology for child care subsidy research by applying advanced statistical techniques to the analysis of child care subsidy data.

OVERVIEW

The state of Maryland recently made a major change in its administration of the federal child care subsidy program. Until late 2015, local departments of social services provided case management for families receiving child care subsidies. In late 2015, Maryland shifted case management to a private, centralized system known as Child Care Subsidy Central (CCS Central). Early childhood leaders in Maryland made this change, in part, to promote more stable child care arrangements for children receiving subsidies.

This brief explores whether the length of time that families were authorized to receive a child care subsidy (i.e., the eligibility period), or the length of the vouchers children received for each child care arrangement, were longer after the shift to CCS Central. Given that families in Maryland are more likely to leave the child care subsidy program at the end of their eligibility or voucher period, these two indicators offer an early look at how centralization may affect the stability of subsidized child care.^a

KEY FINDINGS

1. Subsidy eligibility periods were significantly longer after the transition to CCS Central; however, eligibility periods were already getting longer by 2015, when local departments of social services were still providing subsidy case management. This may be due to changes that Maryland made in late 2014 and early 2015 to prepare for anticipated revisions to federal policies related to child care subsidies. For example, Maryland assigned a default 12-month eligibility period for all families unless modified by a case manager.
2. Subsidy vouchers were significantly longer after the transition to CCS Central.
3. The difference between eligibility period and voucher lengths was smaller after the transition to CCS Central.
4. After the shift to CCS Central, there was more consistency across counties in the lengths of vouchers and eligibility periods.

^a Davis, E., Krafft, C., & Forry, N. (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.

RECOMMENDATIONS FOR CHILD CARE AND DEVELOPMENT FUND (CCDF) ADMINISTRATORS

- 1. Ensure that administrative procedures help case managers meet federal regulations for the subsidy program.** Administrators in Maryland recognized that the computer system used for subsidy case management could better facilitate the implementation of 12-month eligibility periods. With this recognition, they modified the computer system so that, rather than manually entering start and end dates for each eligibility period, case managers would encounter a default 12-month eligibility period that could be modified as needed.
- 2. Consider how a family's participation in other eligibility-based programs affects their experience with the subsidy program.** Vouchers and eligibility periods may have lengthened under CCS Central because caseworkers were not considering families' activities in other social programs when making decisions about voucher lengths and eligibility periods. For example, a case manager at CCS Central could not use the child care subsidy program as a "carrot" to encourage families to stay up-to-date with other eligibility-based programs like Medicaid.
- 3. Assess the variability in subsidy receipt at the county or local level.** In states with local administration of the subsidy program, CCDF administrators may conduct an internal care review audit to determine whether local offices are implementing policies differently. If so, administrators can speak with case managers, managers, and other relevant staff to identify potential explanations for disparities. CCDF administrators should then make changes based on the identified cause(s) of variation.



RECOMMENDATIONS FOR RESEARCHERS

- 1. At regular intervals throughout the project, include individuals who are involved with day-to-day management of the child care subsidy program.** Although researchers are often aware of major changes in a policy or program, they may never learn about changes to the implementation of those policies. Researchers, administrators, and case managers should meet throughout the project to ensure that the proper questions are asked and that the interpretations of findings are appropriate. For example, during an interim meeting with the Maryland State Department of Education, the research team learned that the case management computer system had been modified, which greatly impacted the team's interpretation of results.
- 2. Carefully define transition periods when studying program activities before and after policy changes.** Identification of appropriate "before" and "after" dates is essential to understanding the outcomes of a policy change. Through conversations with the Maryland State Department of Education, the research team in the present study identified "before" and "after" transition periods that excluded a period of flux (a "during transition" period).

KEY DEFINITIONS

Voucher: An agreement between the state of Maryland, the family, and the child care provider stating that Maryland's child care subsidy program will pay some, or all, of the costs of a child care arrangement for a specific child with a specific child care provider during a specific period of time. If multiple child care providers are used (e.g., center-based care in the morning followed by a family child care home in the afternoon), a child will have multiple vouchers.^a

Eligibility period length: The length of time, in days, that a family is authorized to participate in the child care subsidy program. When the eligibility period ends, a family must demonstrate that they still meet the subsidy eligibility requirements. This is also known as redetermination. Maryland allows eligibility periods up to 12 months. Families are required to prove their eligibility for the subsidy program at least once every 12 months.

Voucher length: The length of time, in days, that a specific child care provider is authorized to be paid for care for a specific child through the child care subsidy program. Each voucher has an effective start date (i.e., the date on which the voucher is authorized for service) and an effective end date. The voucher start and end dates must fall within the corresponding eligibility period. When the voucher end date is reached, or a change in child care needs or family situation occurs, the family must obtain a new voucher. For the purposes of this brief, it is not known how long a family actually used a voucher; it is only known how long a family was authorized to use a voucher.

Local department of social services: The state-funded offices in each Maryland county and Baltimore City that administer public assistance programs for low-income Marylanders and those suffering economic hardships. Programs overseen include the Supplemental Nutrition Assistance Program (SNAP), Medicaid eligibility, foster care, and Temporary Cash Assistance (TCA, Maryland's Temporary Assistance for Needy Families program).

Child Care Subsidy Central (CCS Central): The centralized vendor that implements Maryland's Child Care Subsidy program for families not receiving TCA. CCS Central handles all payments to child care providers and provides case management services for all CCS families except those receiving TCA. CCS Central began serving families on August 31, 2015.

^a In Maryland, a family that is eligible for subsidy first receives a *generic voucher*, which is not connected to a specific child care provider. Once the family selects a provider, the family receives a *receipted voucher*. The present study is limited to *receipted vouchers*.

BACKGROUND

The federal Child Care and Development Fund (CCDF) provides funding for child care subsidies to help low-income parents who are in an approved work, training, and/or education activity pay for child care. Because CCDF is a block grant, each state runs its subsidy program a bit differently. States may modify both their CCDF policies and the implementation of those policies over time to better serve families, address specific goals, and make the most of limited funds.

One goal of CCDF is to improve children's child care experiences. Stable child care arrangements are important for children and their families. Children who experience fewer changes in child care arrangements tend to develop more secure attachments with caregivers and have fewer internalizing problems (e.g., anxiety and withdrawal).^b When they stay in an arrangement longer, children also have greater cognitive growth.^c Having stable child care also allows parents to be more reliable employees.^d

^b Elicker, J., Fortner-Wood, C., & Noppe, I. C. (1999). The context of infant attachment in family child care. *Journal of Applied Developmental Psychology, 20*(3), 319–336. de Schipper, J. C., van IJzendoorn, M. H., and Tavecchio, L. W.C. (2004). Stability in center day care: Relations with children's well-being and problem behavior in day care. *Social Development, 13*: 531–550.

^c 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.

^d 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.

How does the child care subsidy program affect child care instability?

There has been growing concern in research and policy communities that certain administrative practices in the child care subsidy program might contribute to child care instability in low-income families.^e In 2009, for example, the typical length of a continuous spell of subsidized child care was just 6 months in a sample of 35 states.^f While some children are able to remain with the same child care provider when a subsidy ends, other children are moved to a more affordable provider or stop using child care altogether.^g

One way that the subsidy program might contribute to child care instability is by requiring frequent recertification of a family's subsidy eligibility. Every time a family must recertify their eligibility, the burden to correctly complete complex eligibility paperwork can lead to the administrative churning of children in and out of the subsidy program.^h Short vouchers may also contribute to instability. Previous research in Maryland found that families were more likely to leave the child care subsidy program at the end of their eligibility or voucher period.ⁱ

There is also evidence, however, that subsidies may enhance stability.^j A child care subsidy may provide an opportunity for an ongoing child care arrangement that low-income families who are working or participating in education or job training may not otherwise be able to access. Subsidies may also contribute to financial stability for child care providers, which indirectly supports the stability of children in their care by increasing the supply of child care available to families.^k

How has Maryland addressed administrative instability in subsidized child care?

The recent transition of subsidy case management services from local departments of social services to the privatized CCS Central reflects Maryland's commitment to promoting child care stability among low-income children. This transition, however, is only the most recent effort to support this type of stability.

Maryland's child care subsidy policy

Since the Maryland State Department of Education (MSDE) began managing the child care subsidy program, Maryland state law has required case managers to redetermine a family's subsidy eligibility "at least every 12 months."^l Once a family is found eligible for a subsidy, case managers set an eligibility period of up to 12 months. At the end of the eligibility (or redetermination) period, a family must demonstrate that they still meet the eligibility requirements before a new eligibility period can be assigned.

After a family has been assigned a subsidy eligibility period, they receive one or more vouchers for child care. Each voucher can only be used for a specific child, with a particular provider, for a certain length of time. Families with more than one child may receive multiple vouchers; a child in multiple arrangements at one time may also receive multiple vouchers.

At maximum, a voucher may be authorized for the entire length of an eligibility period. Shorter vouchers are assigned if the parents' work or education activity is expected to end before the end of eligibility. For example,

^e Davis, E., Krafft, C., & Forry, N. (2017). Understanding churn: Predictors of reentry among families who leave the child care subsidy program in Maryland. *Children and Youth Services Review, 77*, 24–45.

^f Swenson, K. (2014). Child care subsidy duration and caseload dynamics: A multi-state examination. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.

^g Henly, J. R., Sandstrom, H., Claessens, A., Pilarz, A. R., Gelatt, J., Kim, J., Healy, O. (2015). *Determinants of subsidy stability and child care continuity: Final research report for the Illinois/New York Child Care Research Partnership*. Washington, DC: Urban Institute.

^h Davis, E., Krafft, C., & Forry, N. (2017). Understanding churn: Predictors of reentry among families who leave the child care subsidy program in Maryland. *Children and Youth Services Review, 77*, 24–45. Sandstrom, H., Grazi, J., & Henly, J. R. (2015). *Clients' recommendations for improving the child care subsidy program*. Washington, DC: Urban Institute.

ⁱ Davis, E., Krafft, C., & Forry, N. (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.

^j Adams, G. & Rohacek, M. (2010). *Child Care Instability: Definitions, Context, and Policy Implications*. Washington, DC: The Urban Institute.

^k Ibid.

^l COMAR, Maryland Office of the Secretary of State. Retrieved from <http://www.dsd.state.md.us/comar/getfile.aspx?file=13a.14.06.06.htm>.

if a single mother is enrolled in college, her child's voucher may cover care from January to May (when the semester ends), even though the eligibility period may go through December. If child care is still needed after a voucher ends, a parent must provide documentation of enrollment in the subsequent semester, or in another approved activity, to obtain an additional voucher, despite still being eligible for a subsidy. A voucher may be shorter than its corresponding eligibility period for other reasons, as well; for example, a family's eligibility period may begin in January but the child may not need care until school is out in the summer. This could result in a 12-month eligibility period and a 3-month (i.e., summer) voucher.

Although Maryland's administrative data system does not track whether a child still needs child care when a voucher ends, many children obtain a new voucher within 5 years of their voucher ending; most of these children do so within a few months, suggesting that they still need care.^m

As of 2012, most children in Maryland did not receive 12-month eligibility periods or 12-month vouchers. Furthermore, the average length of eligibility periods and vouchers varied greatly across counties. Accounting for differences among counties in the characteristics of children and families using care, and the type of care typically used, does not explain these disparities.ⁿ This county-to-county variation suggests that case managers in local departments of social services were administering the subsidy program differently in each county.

Fall 2014: Stronger enforcement of 12-month eligibility periods

In the fall of 2014, the federal block grant funding CCDF was reauthorized for the first time since 1996.^o In revising the rules for CCDF, the federal government responded to research that linked short eligibility periods to subsidy instability. The Final Rule, which became law in 2016, required states to assign all families an initial subsidy eligibility period of at least 12 months.^p

In 2014, Maryland's subsidy program administrators recognized that a stronger push for 12-month eligibility periods would be a step closer to full compliance with federal legislation once the Final Rule was in place. To that end, on October 17, 2014, the Child Care Administration Tracking System (CCATS) was updated so that subsidy case managers assigning new eligibility periods would encounter a default 12-month eligibility period for all families.

Although case managers could override this default in CCATS, it reminded them to implement 12-month eligibility periods. During a quarterly meeting with case management supervisors on March 30, 2015, early childhood leaders announced that all counties would be required to issue 12-month eligibility periods; however, case managers could still assign shorter eligibility periods at their discretion.

Summer 2015: Transition to CCS Central

Prior to August 31, 2015, local departments of social services provided case management services for all families interacting with the child care subsidy program. These services include reviewing a family's subsidy application, requesting additional documentation from the family, determining eligibility, assigning eligibility periods and vouchers, and redetermining a family's eligibility. In many local departments of social services, the same case manager was responsible for determining a family's eligibility for a range of social programs, including the Supplemental Nutrition Assistance Program (SNAP), the Medical Assistance Program (Medicaid), child support enforcement, and Temporary Cash Assistance (TCA; Maryland's Temporary Assistance for Needy Families program).

^m Davis, E., Krafft, C., & Forry, N. (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.

ⁿ Davis, E. E., Krafft, C., Forry, N., & Tout, K. (2014). *Implementation of 12-Month Child Care Subsidy Eligibility Redetermination: A Case Study from Maryland*. Minneapolis, MN: University of Minnesota and Child Trends.

^o The Office of the Administration for Children & Families: Office of Child Care. "Announcement of CCDF Reauthorization." November 18, 2014. <https://www.acf.hhs.gov/occ/resource/announcement-of-ccdf-reauthorization>.

^p Child Care and Development Fund (CCDF) Program; Final Rule (2016). Federal Register. 81 (190), 67438–67595.

On August 31, 2015, Maryland shifted subsidy case management to a private, centralized system: CCS Central. Case managers in CCS Central only work with the child care subsidy program. CCS Central has a single administrative office in Baltimore County, MD, and families may only interact with CCS Central through telephone, fax, mail, and email; in-person interactions are not part of the CCS Central model. This centralization effectively “delinked” a case manager’s decisions about a family’s subsidy eligibility from any information about their participation in other eligibility-based programs. This delinking is critical to interpreting the findings described later in this brief.

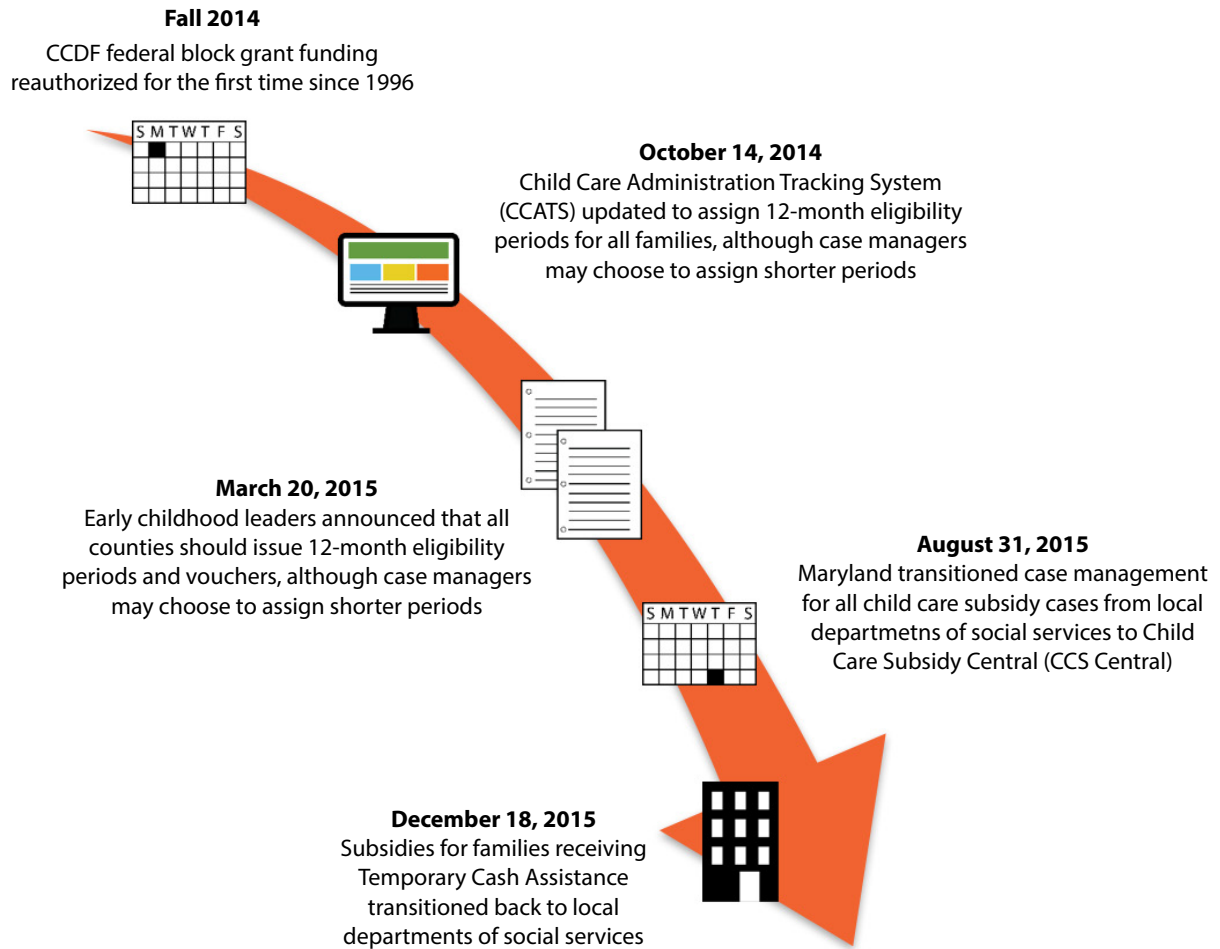
Prior to centralization, many case managers in local departments of social services had access to information about the family’s participation in other social programs—even in departments with dedicated subsidy case managers. Case managers were required to base their subsidy decisions exclusively on child care subsidy policies; however, they often used information about a family’s participation in other eligibility-based programs when assigning eligibility periods. For example, a case manager responsible for a family’s SNAP, Medicaid, and Child Care Subsidy benefits would be more inclined to link (align) the eligibility end dates of all three programs to enable case management without the threat of overdue cases. This might result in shortening a child care subsidy eligibility period to align with whichever eligibility-based program had the shortest eligibility period. A case manager at a local department of social services might also use the child care subsidy program as a “carrot” to encourage families to stay up-to-date with other eligibility-based programs, such as Medicaid.

December 2015: Transition of families receiving TCA back to local departments of social services for subsidy case management

On December 18, 2015, Maryland moved the subsidy case management for families receiving TCA back to local departments of social services to assist with the provision of seamless service to pending and approved TCA clients, and to enable these clients to participate in a work activity. Thirty-eight percent of vouchers over the 10-year period considered in this brief were administered to children receiving TCA. Since TCA cases were not permanently moved to CCS Central, they are not included in our analysis investigating the effect of the transition to the centralized system.



TIMELINE: MARYLAND'S CHILD CARE SUBSIDY PROGRAM



RESEARCH OBJECTIVES

This brief uses administrative data from Maryland to compare the lengths of subsidy eligibility periods and vouchers before and after the transition to CCS Central. It has two main research questions:

RQ1: Were subsidy eligibility periods and vouchers longer after the shift to a private, centralized subsidy case management system (for families not receiving TCA)?

RQ2: Was there greater consistency across counties in the length of eligibility periods and vouchers after the shift to a private, centralized subsidy case management system (for families not receiving TCA)?

DATA AND METHOD

Data

The data used in the brief were provided by MSDE and the Towson University Regional Economics Studies Institute under a data-sharing agreement. The dataset is structured so that each observation represents one voucher. Vouchers during the time period under review had start dates as early as January 1, 2007 and as late as October 3, 2016.⁹ Families receiving TCA were excluded from all analyses because these families were moved back to local departments of social services for subsidy case management in December 2015.[†]

Each voucher was assigned to either a “before transition,” “during transition,” or “after transition” category. Although the official transition to CCS Central happened on August 31, 2015, it was inappropriate to consider this date as a clean transition point. Ahead of the transition, local departments of social services may have changed their services to families in preparation of the changeover. After the transition, CCS Central had new staff and a backlog of subsidy applications, so their services may not represent standard operation once the program was running smoothly. After consulting with MSDE, the following dates were used:

- Before the transition: January 2007–May 2015
- During the transition: June 2015–February 2016
- After the transition: March 2016–October 2016

When the outcome of interest was eligibility period length, vouchers with eligibility period start dates that fell during the transition period were excluded from analysis. The eligibility period length analysis sample included 365,326 vouchers administered to 89,851 children before and after the transition to CCS Central.

When the outcome of interest was voucher length, vouchers with a voucher authorization start date that fell during the transition period were excluded from analysis. The voucher length analysis sample included 365,592 vouchers administered to 90,341 children before and after the transition to CCS Central.

Regardless of whether the sample was restricted to examine eligibility period or voucher length, each child in the dataset averaged 4.1 vouchers over the nearly 10-year period.[‡] Over half (59 percent) of vouchers for the same child had a unique eligibility period. The remaining 41 percent of vouchers were associated with an eligibility period that included at least one other voucher.[†]

Analysis Strategy

We used descriptive statistics to characterize eligibility period and voucher lengths before and after the transition to CCS Central. Although we analyzed data from 2007 to 2016, descriptive statistics focused on three recent, critical time periods, as shown in the light blue-shaded rows of Table 1.

⁹Although the administrative dataset contained a small number of vouchers from 2006, we removed them from these analyses because MSDE had just begun managing the child care subsidy system at that time.

[†]Over one-third (38 percent, or 236,131) of vouchers in the original dataset were administered to children in families receiving TCA. The implications of this are discussed in the recommendations at the end of this brief.

[‡]Eligibility periods (for eligibility period analyses) or vouchers (for voucher analyses) authorized between June 1, 2015–February 28, 2016 were not included in this count.

[†]We repeated the analyses looking only at the first voucher (or vouchers, if a child had simultaneous care arrangements) associated with each child's eligibility period. Conclusions from this reduced dataset are consistent with those from the full dataset.

Table 1. Critical Time Periods Used in Descriptive Analyses of Maryland’s Child Care Subsidy Program

Months included in descriptive analyses	Justification for selecting these months
March–October 2014 Before the transition to CCS Central	Using these 2014 dates facilitates comparisons with data from 2016, when only March–October data were available.
January–May 2015 Before the transition to CCS Central	These 2015 dates were before the transition to CCS Central, but after the default eligibility length was set at 12 months in CCATS.
June 2015–February 2016 During the transition to CCS Central	These data were excluded from analyses as the subsidy program was in flux.
March–October 2016 After the transition to CCS Central	These 2016 dates were after the transition to CCS Central.

We also used multiple regression to determine whether the transition to CCS Central was associated with significantly longer eligibility periods and vouchers, compared to previous years. To isolate the effect of the transition to CCS Central on eligibility period and voucher length, analyses controlled for numerous variables that may be associated with these outcomes. These variables included the month of eligibility period (or voucher) start, child age group (e.g., preschool), child race and gender, voucher type (standard vs. non-standard hours), reason for voucher (e.g., parent employment), provider formality (formal vs. informal), voucher care units, household size, parent’s marital status (single versus not single), the county of the head of household, and an interaction between county and year.

In addition, we used a series of multiple regressions to determine whether counties became more consistent in their assignment of eligibility periods and vouchers after the transition to CCS Central.

FINDINGS

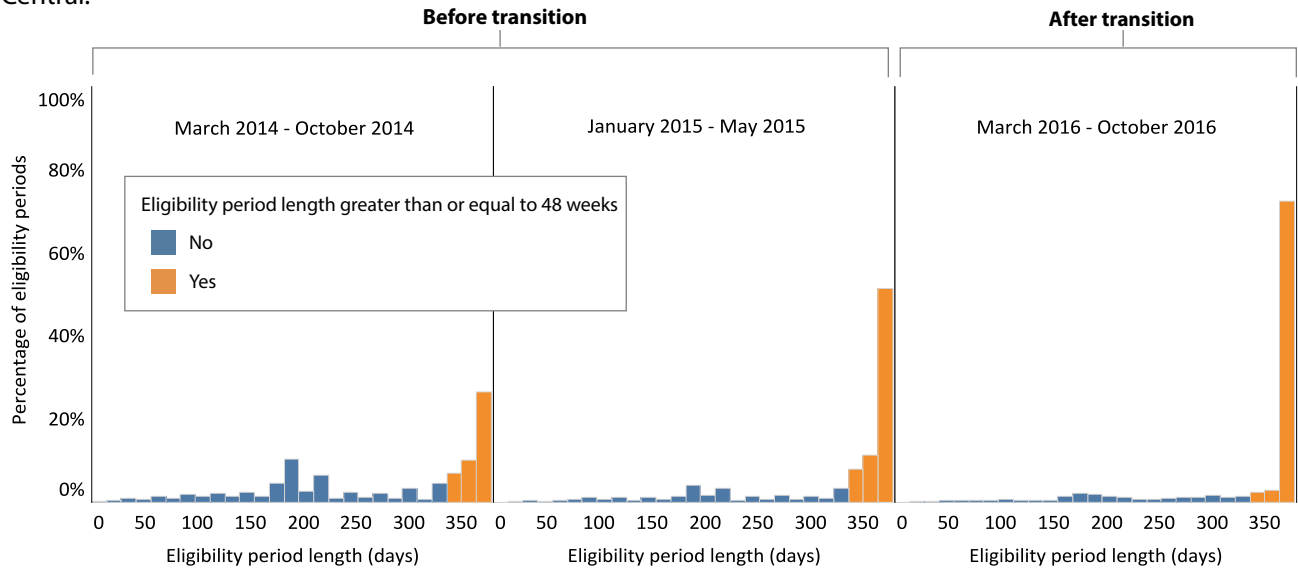
Research Question 1

Key finding 1: Subsidy eligibility periods were significantly longer after the transition to CCS Central, although they were already getting longer by 2015.

Figure 1 shows the percentage of eligibility periods at various lengths (in days) for eligibility periods beginning in 2014, 2015, and 2016. The orange bars represent eligibility periods that were long (greater than or equal to 48 weeks).

- Before the transition, from March to October 2014, eligibility periods averaged **268 days**, with **44 percent** greater than or equal to 48 weeks.
- Before the transition, from January to May 2015, eligibility periods averaged **317 days**, with **71 percent** greater than or equal to 48 weeks.
- After the transition, from March to October 2016, eligibility periods averaged **329 days**, with **78 percent** greater than or equal to 48 weeks.

Figure 1. Length of Child Care Subsidy Eligibility Periods in Maryland, Before and After the Transition to CCS Central.



Notes: The unit of analysis was the voucher. Data from 2014 were limited to March to October so that the figure for 2014 was directly comparable to the figure for 2016. Vouchers for children in families that receive Temporary Cash Assistance were excluded from analyses. Source: Authors' analysis of Maryland administrative data.

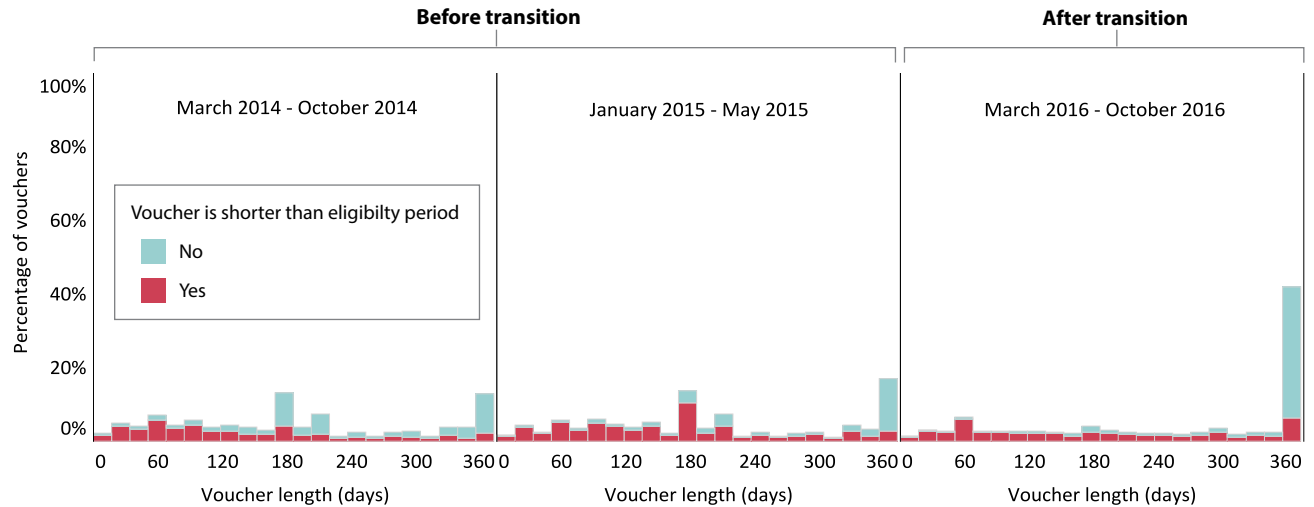
Significance tests showed that vouchers that began after the transition to CCS Central had significantly longer eligibility periods, compared to vouchers in each prior year. See Table A1 for average eligibility period lengths and the percentage of eligibility periods greater than or equal to 48 weeks during all years (2007–2016).

Key finding 2: Subsidy vouchers were significantly longer after the transition to CCS Central.

Figure 2 shows vouchers from the same three periods described above, determined by the voucher start date. In addition, the pink portions represent vouchers that were shorter than their corresponding eligibility period.

- From March to October 2014, vouchers averaged **187 days**, and **50 percent** were shorter than the corresponding eligibility period.
- From January to May 2015, vouchers averaged **200 days**, and **67 percent** were shorter than the corresponding eligibility period.
- From March to October 2016, vouchers averaged **250 days**, and **42 percent** were shorter than the corresponding eligibility period.

Figure 2. Length of Child Care Subsidy Vouchers in Maryland, Before and After the Transition to CCS Central



Note: The unit of analysis was the voucher. Data from 2014 were limited to March to October so that the figure for 2014 was directly comparable to the figure for 2016. Vouchers for children in families that receive Temporary Cash Assistance were excluded from analyses.
Source: Authors' analysis of Maryland administrative data.

See Table A3 for average voucher lengths and Table A4 for the percentage of vouchers with lengths shorter than the corresponding eligibility period during all years (2007–2016), as well as the average difference between voucher length and eligibility period length.

Significance tests using a multiple regression model showed that vouchers that began in 2016 were significantly longer than vouchers in each prior year.

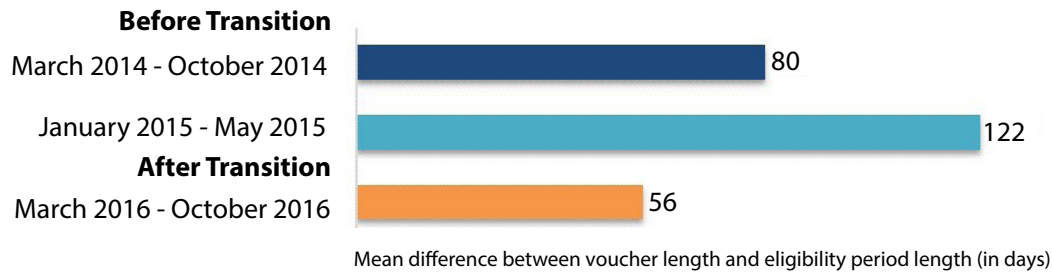
Key finding 3: The difference between eligibility period and voucher lengths was smaller after the transition to CCS Central.

Figure 3 shows the average number of days that vouchers were shorter than the corresponding eligibility period in each time period studied. The change over the three time periods is striking.

- Vouchers were, on average, **80 days** shorter than the corresponding eligibility periods in 2014.
- The difference between vouchers and their corresponding eligibility periods increased to an average of **122 days** in 2015. This spike in 2015 reflects the increased use of 12-month eligibility periods without corresponding 12-month vouchers.
- The difference in length between vouchers and the corresponding eligibility period shrank to **56 days** in 2016, below the difference in 2014.

See Table A4 for the average difference in length between eligibility periods and voucher lengths from 2007 to 2016.

Figure 3. Average Difference (in Days) Between the Length of a Child Care Subsidy Voucher and its Corresponding Eligibility Period in Maryland, Before and After the Transition to CCS Central



Note: The unit of analysis was the voucher. Data from 2014 were limited to March to October so that the figure for 2014 was directly comparable to the figure for 2016. Vouchers for children in families that receive Temporary Cash Assistance were excluded from analyses.
Source: Authors' analysis of Maryland administrative data.

Research Question 2

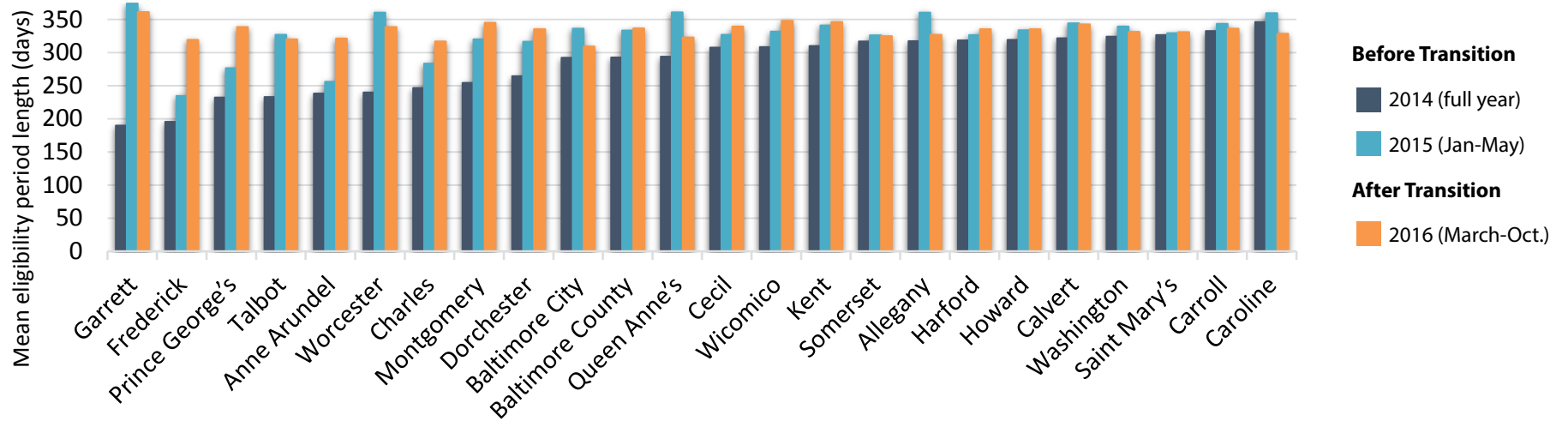
Key finding 4: After the shift to CCS Central, there was more consistency across counties in the lengths of vouchers and eligibility periods.

Figure 4 shows county-to-county **eligibility periods** from 2014, 2015, and 2016; Figure 5 shows county-to-county differences in **voucher lengths** in the same time periods. These analyses controlled for numerous family and child characteristics, as well as child care characteristics (e.g., formal or informal provider). Because analyses also controlled for the month that the eligibility period (or voucher) began, all 12 months of 2014 are presented while still permitting direct comparisons across the three years.

As shown in Figure 4, the average length of eligibility periods across counties was already beginning to converge in 2015, and there was slightly more similarity between counties in 2016 after the transition to CCS Central. As expected, the average eligibility period was approaching 12 months in every county in 2016.

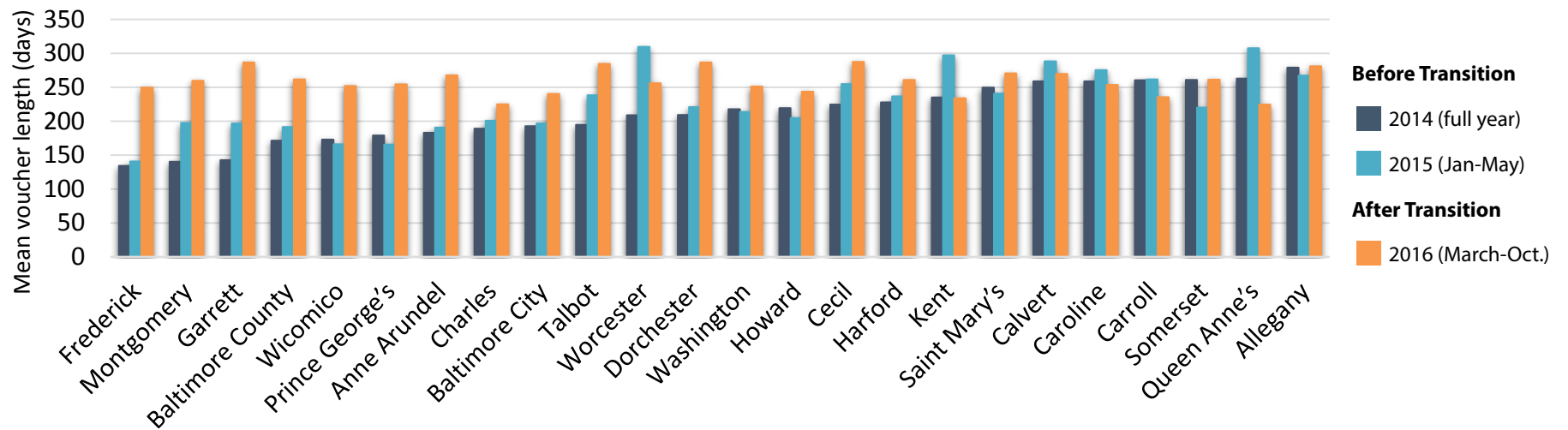
As shown in Figure 5, voucher lengths varied across counties in 2014 and 2015, but became more consistent after the transition to CCS Central in 2016.

Figure 4. Mean Child Care Subsidy Eligibility Period Lengths, by Maryland County, Before and After the Transition to CCS Central



Notes. The unit of analysis was the voucher. Analyses controlled for family and child characteristics, as well as the month of the eligibility period start date. Vouchers for children in families that receive Temporary Cash Assistance are excluded from analyses.
Source: Authors' analysis of Maryland administrative data

Figure 5. Mean Child Care Subsidy Voucher Lengths, by Maryland County, Before and After the Transition to CCS Central



Notes. The unit of analysis was the voucher. Analyses control for family and child characteristics, as well as the month of the eligibility period start date. Vouchers for children in families that receive Temporary Cash Assistance are excluded from analyses.
Source: Authors' analysis of Maryland administrative data

Two sets of analyses were used to better understand the extent to which counties became more consistent over time. These analyses built on the fact that when county-to-county variation is high, a child’s county of residence is a good indicator of how long their eligibility period and voucher are likely to be.

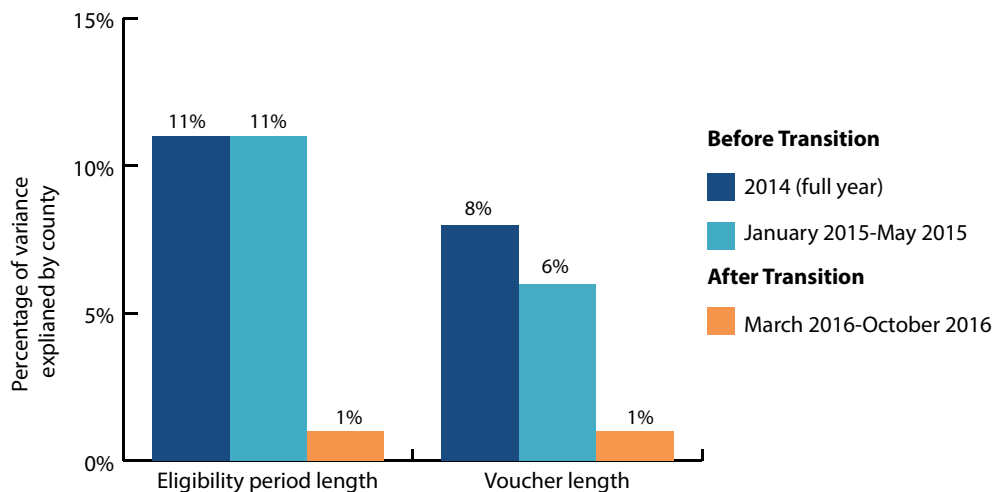
First, the regression analyses used to answer Research Question 1 showed a significant interaction between county of residence and the year that the eligibility period (or voucher) began. This significant interaction indicated that the association between county of residence and eligibility period (or voucher) length changed over time. Coefficients for the interaction terms—including the year 2016 (the period after the transition)—are shown on Table A5. Results indicate an increase in consistency between counties in 2016 for both eligibility period lengths and voucher lengths.⁴

Second, we asked how well a child’s county of residence predicted the length of their eligibility period and voucher length during each year in the dataset (2007–2016). If the transition to CCS Central resulted in similar subsidy procedures across counties (as expected based on the regression results and convergence shown in Figures 4 and 5), then a child’s county of residence should not strongly predict the length of an eligibility period or voucher after the transition to CCS Central.

As expected, during each year prior to the transition to CCS Central (i.e., 2007–2015), county of residence was an excellent predictor of eligibility period length. County of residence explained 11 percent to 30 percent of the variance in eligibility length for each year prior to the transition (see Table A6 for further detail). In 2016, however, knowing the child’s county of residence was not as good a predictor of the length of an eligibility period; county of residence explained only one percent of the variance in eligibility period length. Figure 6 shows the percentage of variance in eligibility period length explained by county in 2014, 2015, and 2016. A similar finding emerged for voucher lengths. Figure 6 also shows the percentage of variance in voucher length explained by county for the same three years.

For each year of data, we also conducted a likelihood ratio test to compare the model with county to the model without county. In each year of the “before transition” period (2007–2015), the percentage of variance predicted by the model with county was significantly higher than that of the model without county. This was also true for the after period (2016), but with a much smaller test statistic. These results confirm that, after the transition to CCS Central, eligibility periods and voucher lengths were more consistent across counties.

Figure 6. Variance in Child Care Subsidy Eligibility Period and Voucher Lengths Explained by County, Before and After the Transition to CCS Central



Notes. The unit of analysis was the voucher. Analyses controlled for family and child characteristics, as well as the month of the start date of the eligibility period or voucher. Vouchers for children in families that receive Temporary Cash Assistance were excluded from analyses. Source: Authors’ analysis of Maryland administrative data

⁴Table A5 shows that counties with a shorter eligibility period (or voucher) length in the years before the transition changed more than would be expected by the change predicted by the main effect of year or county. The counties with a longer eligibility period (or voucher) in the years before the transition changed less than would be expected by the effect of year or county alone.

CONCLUSION

Assigning a maximum 12-month eligibility period has been Maryland's policy throughout MSDE's management of the child care subsidy program. Previous analysis of administrative data showed that, prior to 2015, most families did not receive 12-month eligibility periods.

To understand whether transitioning to a private, centralized child care subsidy case management system helped Maryland achieve its goal of 12-month eligibility periods (and compliance with the 2016 Final Rule), this brief looked at vouchers before and after the transition to CCS Central. We found that eligibility periods were significantly longer after the transition, although the increase in length was already occurring in the previous year. Vouchers were also significantly longer after the transition to CCS Central. The difference between eligibility period and voucher length, on average, was smaller after the transition to CCS Central. Finally, as expected, eligibility periods and voucher lengths became much more consistent across counties after the transition to CCS Central.

RECOMMENDATIONS FOR CCDF ADMINISTRATORS

Several states have requested one-year waivers for the requirement to implement 12-month eligibility periods under the 2016 Final Rule.⁹ There are many reasons why implementing this requirement may be a challenge for states, including a concern that fewer families will be served if longer vouchers are required. Our findings suggest that the challenges to fully implementing a 12-month eligibility period are not simply financial.

Recommendation 1: Ensure that administrative procedures are aligned with federal regulations for the subsidy program.

Case managers carry out critical day-to-day processes that lead to the authorization or denial of child care subsidy services. States can ensure that the administrative activities required of case managers (e.g., filling out forms) help them accomplish the goals of the subsidy program. For example, Maryland modified its computer system so that, instead of manually entering the eligibility start and end dates, subsidy case managers assigning new eligibility periods encountered dates corresponding to a default 12-month length. Case managers could easily shorten the eligibility period for the small percentage of families for whom a shorter eligibility period was appropriate or required. In this way, case managers' administrative procedures were modified to promote Maryland's goal of meeting the upcoming federal requirement to establish 12-month eligibility periods.

Although Maryland saw an enormous increase in the use of long eligibility periods following this change in the computer system, it was just one of many strategies that the state adopted around this time to increase the use of 12-month eligibility periods. For example, Maryland also held meetings with case management supervisors to reiterate the importance of 12-month eligibility periods. Although we cannot know for sure that Maryland's change in the computer system was the main cause of the increased use of 12-month eligibility periods, the increased length of eligibility periods following the computer change suggests that automation may be an important factor in helping case managers authorize child care subsidies in accordance with federal and state regulations.

Ultimately, administrative procedures must allow a subsidy case manager to meet key program goals, including (1) meeting the unique needs of each family and (2) preventing improper subsidy authorizations. Any changes to administrative procedures should keep these priorities in mind, noting that certain administrative decisions require a high level of discretion from the case manager and should not be automated or set to default values.

⁹ Matthews, H., Schulman, K., Vogtman, J., Johnson-Staub, C., & Blank, H. (2017). *Implementing the Child Care and Development Block Grant Reauthorization: A Guide for States*. Washington, DC: National Women's Law Center and CLASP.

Recommendation 2: Consider how a family's participation in other eligibility-based programs affects their experience with the subsidy program.

Longer eligibility periods and voucher lengths emerged after Maryland transitioned to private, centralized case management at CCS Central. Prior to CCS Central, a case manager in a local department of social services might have aligned a family's eligibility end dates for multiple social programs to streamline case management. In contrast, case managers at CCS Central do not consider families' participation in other social programs when making child care subsidy decisions, which may explain why vouchers and eligibility periods lengthened under CCS Central.

The federal requirement to delink the child care subsidy program from all other eligibility-based programs is intended to increase child care stability, thereby promoting positive child development. Delinking the child care subsidy program from other eligibility-based programs has been Maryland's policy throughout MSDE's management of the subsidy program; however, local departments of social services were often unable to dedicate staff entirely to the child care subsidy program. States where case managers have difficulties delinking the child care subsidy program from other eligibility-based programs may consider reallocating work so that certain staff only work with the subsidy program. States may also consider centralizing the subsidy program, as Maryland has done.

At the same time, states should identify potential negative impacts of delinking, as well as strategies for reducing these impacts. Delinking the child care subsidy program from other eligibility-based programs may mean that families must complete frequent eligibility redeterminations for different social programs because their eligibility periods are not aligned. In addition, CCDF administrators should develop a clear process for delinking the subsidy program from other eligibility-based programs when the programs are closely intertwined. In Maryland, for example, families who receive TCA, or have received it in the past 6 months, are prioritized in the child care subsidy distribution process. If a family's TCA participation ends, however, any vouchers that the family has already received should not be shortened.

To the extent possible, states should develop administrative practices that are family-friendly, ensuring that families in need of low-cost child care can not only obtain subsidies, but also receive subsidies uninterrupted for the full length of time for which they meet eligibility requirements.

Recommendation 3: Assess the variability in subsidy receipt at the county or local level.

Prior to centralization of the child care subsidy program, the typical length of a subsidy eligibility period or voucher varied greatly across counties in Maryland. This variation suggested that local departments of social services were administering the subsidy program differently in different counties.

In states with local administration of the subsidy program, CCDF administrators may wish to conduct an internal care review audit to determine whether local offices are implementing policies differently. If so, administrators can speak with case managers, managers, and other relevant staff to identify potential explanations for disparities. For example, some counties may be linking families' eligibility periods for various social programs, whereas other counties keep case management for the subsidy program separate from other social programs. CCDF administrators should then make changes based on the identified cause(s) of variation.

RECOMMENDATIONS FOR RESEARCHERS

Recommendation 1: At regular intervals throughout the project, include individuals who are involved with day-to-day management of the child care subsidy program.

Researchers are often aware of major changes in a policy or program, yet may never learn about changes to the implementation of those policies. For example, the analysis team was surprised to find that eligibility periods were already getting longer by 2015, prior to the transition to CCS Central. After consulting with administrators, the team learned that the default setting for eligibility periods was changed in the computer system for case managers in late 2014. The conversations with MSDE were essential for proper interpretation of this brief's findings.

Recommendation 2: Carefully define transition periods when studying program activities before and after policy changes.

Identifying the appropriate "before" and "after" dates is essential to understanding the outcomes of a policy change. Through conversations with MSDE (see Recommendation #1), we identified "before" and "after" transition periods that excluded a period of flux (a "during transition" period).

ACKNOWLEDGMENTS

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Appendix: Supplemental Data Tables

Table A1. Describing Subsidy Eligibility Periods Before and After the Transition to CCS Central

	Year ^a	Number of Vouchers ^b	Subsidy Eligibility Period Length (in days)				
			Mean	Standard Deviation	25 th Percentile	Median	75 th Percentile
Before Transition	2007	53,014	223	91	178	200	312
	2008	59,593	220	98	164	192	333
	2009	52,225	241	102	175	221	351
	2010	51,559	244	102	179	234	351
	2011	37,881	251	106	178	272	363
	2012	26,645	253	103	180	272	363
	2013	30,701	256	101	181	273	358
	2014	30,477	279	98	184	336	364
	January 2015– May 2015	12,457	317	82	312	364	364
After	March 2016– October 2016	10,772	329	75	350	364	364

Notes. The unit of analysis is the voucher. Vouchers for children in families that receive Temporary Cash Assistance are excluded from analyses.

^a The year of the eligibility period start date.

^b Eligibility periods may be repeated if the eligibility period contained more than one voucher.

Source: Authors' analysis of Maryland administrative data

Table A2. Percentage of Subsidy Eligibility Periods that Were 48 Weeks or Longer, Before and After the Transition to CCS Central

	Year^a	Number of Vouchers^b	Percentage of Subsidy Eligibility Periods 48 Weeks or Longer
Before Transition	2007	53,014	21%
	2008	59,593	23%
	2009	52,225	31%
	2010	51,559	32%
	2011	37,881	35%
	2012	26,645	34%
	2013	30,701	37%
	2014	30,477	50%
	January 2015– May 2015	12,457	71%
After	March 2016– October 2016	10,772	78%

Notes. The unit of analysis is the voucher. Vouchers for children in families that receive Temporary Cash Assistance are excluded from analyses.

^a The year of the eligibility period start date.

^b Eligibility periods may be repeated if the eligibility period contained more than one voucher

Source: Authors' analysis of Maryland administrative data.

Table A3. Describing Subsidy Voucher Length Before and After the Transition to CCS Central

	Year ^a	Number of Vouchers	Subsidy Voucher Length (in days)				
			Mean	Standard Deviation	25 th Percentile	Median	75 th Percentile
Before	2007	51,672	185	97	112	182	239
	2008	59,321	168	101	87	173	213
	2009	52,112	181	110	89	179	272
	2010	51,196	179	111	88	173	272
	2011	38,992	177	114	79	160	273
	2012	26,986	181	115	84	175	285
	2013	30,437	180	111	85	179	271
	2014	30,280	188	110	92	181	277
	January 2015– May 2015	11,594	200	111	107	182	313
After	March 2016– October 2016	13,002	250	124	135	301	364

Notes. The unit of analysis was the voucher. Vouchers for children in families that receive Temporary Cash Assistance were excluded from analyses.

^aThe year of the voucher start date.

Source: Authors' analysis of Maryland administrative data.

Table A4. Describing the Difference Between Subsidy Eligibility Period and Voucher Length Before and After the Transition to CCS Central

	Year ^a	Number of Vouchers	Percentage of Subsidy Vouchers Shorter than the Corresponding Eligibility Period ^b	Mean Difference Between Subsidy Eligibility Period and Voucher Length (in days)
Before	2007	53,012	34%	40
	2008	59,592	40%	52
	2009	52,225	42%	60
	2010	51,559	43%	66
	2011	37,880	46%	72
	2012	26,645	47%	71
	2013	30,701	47%	77
	2014	30,477	55%	91
	January 2015–May 2015	12,457	67%	122
After	March 2016–October 2016	10,766	42%	56

Notes. The unit of analysis was the voucher. Vouchers for children in families that receive Temporary Cash Assistance were excluded from analyses.

^aThe year of the voucher start date.

^bVouchers sometimes begin a few days after the family is eligible to receive care because of scheduling or the need to find a program or provider. We also calculated the percentage of vouchers that are shorter (by at least 10 days) than the length of the corresponding eligibility period. The pattern between years was consistent with this approach.

Source: Authors' analysis of Maryland administrative data

In interpreting Table A5, the intercept is considered the estimated eligibility period (or voucher) length if all continuous variables in the regression are assumed to be zero and all categorical variables are assumed to be the reference category. For example, in Model 1 (predicting the length of subsidy eligibility periods), the intercept (238.4) represents the average length of a subsidy eligibility period when year = 2007, month = January, etc.

The coefficient can be interpreted as the increase or decrease in the estimated eligibility period (or voucher length) if the value of a variable changes. For example, in Model 1, eligibility periods in 2008 were 14.4 days longer than eligibility periods in 2009 (all other things being equal).

Asterisks indicate the level of statistical significance for each coefficient. The R-squared shows the total variance in the outcome (eligibility period length or voucher length) that is explained by all variables in the model.

Table A5. Regressions on Subsidy Eligibility Period and Voucher Length, Controlling for Various Factors

	Dependent Variable	
	Model 1: Length of Subsidy Eligibility Period (in days)	Model 2: Length of Subsidy Voucher (in days)
	Coefficient (beta)	Coefficient (beta)
Year (reference = 2007)^a		
2008	14.4***	-5.2***
2009	47.1***	6.7***
2010	36.8***	-8.7***
2011	35.5***	-16.8***
2012	45.0***	-9.2***
2013	59.8***	6.5***
2014	71.1***	2.3
January 2015–May 2015	115.1***	6.6**
March 2016–October 2016	88.3***	50.1***
Month (reference = January)^b		
February	-0.7	3.0***
March	-2.0**	2.2**
April	-2.6***	1.7*
May	-3.2***	-4.3***
June	-1.1	-19.6***
July	3.2***	-5.7***
August	2.5***	-9.9***
September	4.6***	-0.1
October	3.0***	-0.4
November	6.9***	-0.8
December	12.0***	3.5***
Child age group (reference = Infant/toddler)^c		
Preschool	3.8***	7.3***
School-aged	7.3***	11.5***
Child race/ethnicity (reference = White)		
Black	-2.8***	-2.8***
Other/Multiple races	0.2	-1.0
Hispanic	-3.1***	2.3**
Voucher type (reference = Standard hours)^d		
Nonstandard hours	-4.2***	1.8**
Voucher reason (reference = Employed)		
Employed and training/education	-14.3***	-37.9***
Training/education only	-16.3***	-47.1***
Protective services	-37.5***	-40.1***
Other	-20.1***	-37.7***

Table A5, cont. Regressions on Subsidy Eligibility Period and Voucher Length, Controlling for Various Factors

Provider is a formal provider (licensed, registered center or family care home), reference is informal provider (relative or nonrelative care in child's home < 20 hours per month)	-8.7***	-10.7***
Child is female (reference = Male)	0.3	0.5
Care units per week (reference = 15 or fewer hours/week)		
16-29 hours/week	-0.3	3.4***
30 hours or more/week	-4.0***	-0.9
County (reference = Baltimore City)		
Allegany	70.1***	79.5***
Anne Arundel	-28.1***	-12.3***
Baltimore County	57.9***	9.0***
Calvert	117.6***	76.3***
Caroline	-58.8***	-44.8***
Carroll	78.1***	27.0***
Cecil	77.4***	58.0***
Charles	-24.8***	-19.2***
Dorchester	-43.6***	-30.7***
Frederick	-54.1***	-46.1***
Garrett	-68.2***	-53.5***
Harford	-61.2***	-54.6***
Howard	68.4***	39.7***
Kent	77.0***	58.3***
Montgomery	-85.0***	-89.5***
Prince George's	-6.3***	1.2
Queen Anne's	43.7***	33.9***
Saint Mary's	-44.4***	-37.6***
Somerset	-33.6***	-34.2***
Talbot	-28.8***	-21.8***
Washington	72.3***	40.1***
Wicomico	-10.5***	-27.5***
Worcester	-53.0***	-40.1***
Household size	0.4***	0.5***
Income level (reference = no co-pay)		
Co-pay level 1 (lowest copay)	-22.9***	-12.2***
Co-pay level 2	-17.4***	2.2*
Co-pay level 3	-14.8***	8.6***
Co-pay level 4	-13.1***	9.1***
Co-pay level 5	-10.0***	11.7***
Co-pay level 6	-8.4***	13.1***
Co-pay level 7	-8.4***	12.9***

Table A5, cont. Regressions on Subsidy Eligibility Period and Voucher Length, Controlling for Various Factors

Income level (reference = no co-pay)		
Co-pay level 8	-3.2***	18.8***
Co-pay level 9	-2.1*	20.6***
Co-pay level 10 (highest copay)	-0.8	22.5***
Parent is a single parent (reference = married)	-0.1	4.8***
Interaction between transition and county (reference = 2007/Baltimore City)^e		
2016 x Allegany	-52.4***	-38.7***
2016 x Anne Arundel	39.9***	39.8***
2016 x Baltimore County	-30.6***	12.3***
2016 x Calvert	-84.3***	-47.0***
2016 x Caroline	77.9***	57.9***
2016 x Carroll	-51.1***	-31.8***
2016 x Cecil	-47.3***	-10.9
2016 x Charles	32.3***	4.0
2016 x Dorchester	69.5***	77.0***
2016 x Frederick	63.9***	55.2***
2016 x Garrett	120.0***	99.9***
2016 x Harford	87.3***	75.1***
2016 x Howard	-42.4***	-36.6***
2016 x Kent	-39.9	-64.7**
2016 x Montgomery	120.8***	108.6***
2016 x Prince George's	35.5***	12.8***
2016 x Queen Anne's	-30.2	-49.5**
2016 x Saint Mary's	65.8***	68.0***
2016 x Somerset	49.1***	55.2***
2016 x Talbot	39.6***	66.3***
2016 x Washington	-50.3***	-29.2***
2016 x Wicomico	48.8***	39.2***
2016 x Worcester	82.2***	56.0***
Intercept	238.4***	188.1***
Number of vouchers	365,324	365,592
R-squared	0.32	0.18
adj. R-squared	0.32	0.18

Note: * = $p < 0.05$, ** = $p < 0.01$, and *** = $p < 0.0001$. The unit of analysis was the voucher. Vouchers for children in families that receive Temporary Cash Assistance were excluded from analyses.

Source: Authors' analysis of Maryland administrative data

^a For the regression on eligibility period length, this refers to the year of the eligibility period start date. For the regression on voucher length, this refers to the year of the voucher start date.

^b For the regression on eligibility period length, this refers to the month of the eligibility period start date. For the regression on voucher length, this refers to the month of the voucher start date.

^c These categories include age group labels that record the age group the child transitioned to during the voucher, if applicable (e.g., Preschool to School-Aged). We collapsed these categories into the age group in which the voucher began (e.g., Preschool) to be consistent with prior research.

^d Standard hours include regular care, as well as 42/10 vouchers (before/after care during school year and full-time care in the summer) and 52-week vouchers (for year-round schools), which were collapsed to aid in the interpretation of the age group coefficients.

^e The full list of year-by-county interaction variables are not shown here. However, the interaction overall was significant, $p < 0.0001$.

Table A6. Percentage of Variance Explained by County Before and After the Transition to CCS Central

	Year ^b	Percentage of Variance Explained by County ^a	
		Outcome: Subsidy Eligibility Period Length	Outcome: Subsidy Voucher Length
Before	2007	27%	13%
	2008	30%	11%
	2009	28%	10%
	2010	30%	10%
	2011	18%	9%
	2012	20%	11%
	2013	24%	12%
	2014	11%	8%
	January 2015–May 2015	11%	6%
After	March 2016–October 2016	1%	1%

Notes. The unit of analysis was the voucher. Vouchers for children in families that receive Temporary Cash Assistance were excluded from analyses. Regressions controlled for family and child characteristics, as well as the eligibility start month (for the eligibility period analyses) or the voucher start month (for the voucher analyses).

^aPercentages represent the difference in the adjusted R2 between a regression model without county and the regression model with county, for a single year.

^bYear refers to the year of the eligibility period start for the eligibility period analysis and the year of the voucher start for the voucher analysis.

Source: Authors' analysis of Maryland administrative data