POLICY CHANGE EFFECTS ON SUBSIDY APPROVALS AND UTILIZATION

Michigan Child Care Policy Research Partnership

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Public Policy Associates Incorporated

Public Policy Associates, Incorporated is a public policy research, development, and evaluation firm headquartered in Lansing, Michigan. We serve clients in the public, private, and nonprofit sectors at the national, state, and local levels by conducting research, analysis, and evaluation that supports informed strategic decision-making.

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EXECUTIVE SUMMARY

Study Overview

Public Policy Associates, Inc. (PPA), the Michigan Department of Education (MDE), and the Michigan Department of Health and Human Services (MDHHS) are partnering to carry out a study of the effects of child care assistance program policy changes. This phase of the study focused on the effects of policy changes on child care subsidy application approvals and utilization.

The impact of a policy change was estimated based on differences in program outcomes before and after the policy was adopted, using an interrupted time series (ITS) analysis of data provided by the State and the U.S. Census. These findings are supplemented by qualitative data gathered through child care provider interviews, a survey of MDHHS caseworkers (or specialists), and a self-assessment of policy coordination completed by Child Care Policy Research Partnership (CCPRP) agency staff.

The five policy changes examined for this study included:

- ***12-month eligibility**, which extended the length of program eligibility to a continuous 12 months*
- ***Graduated exit**, to reduce the subsidy gradually as a family's income increases*
- ***Delinked provider assignment** to allow for subsidy approval without naming a child care provider*
- ***Provider rate increases** for all provider types*
- ***Income eligibility threshold increase** to 130% of Federal Poverty Level*

Key Findings

The findings from the ITS analyses strongly indicate that the 12-month eligibility policy had a positive effect on access to the child care subsidy and utilization. For the other policies, the evidence of impact was less clear-cut.

Table 1. Level of Evidence of Positive Policy Effect on Subsidy Approval and Utilization

Policy Intervention Clusters (by Implementation Dates)	Increase in Approval Rates[1]	Increase in Subsidy Participation[2]
Graduated exit and 12-month eligibility (2015)	Strong	Moderate
Delinked provider assignment (2016)	Strong	Weak
Provider rate increases and increased income eligibility limits (2017)	Moderate	Weak

[1] Approval rates are measured by the change in the percentage of potentially qualified children (as estimated with ACS data) who are approved for the subsidy by MDHHS.

[2] Subsidy participation is use of the subsidy by the family to obtain child care.

Caseworkers, providers, and CCPRP State partners perceived the 12-month eligibility policy favorably. Stakeholders varied in their perceptions of the effects of other policy changes, but overall qualitative results were fairly consistent across stakeholder groups and with the secondary data findings.

- The change to a graduated exit was less salient to providers and perceived as less impactful by MDHHS specialists than other policies.
- Delinking the provider assignment from approval was perceived as least impactful by the providers and also ranked low among specialists.
- Regarding income eligibility limits, although the policy change was viewed as a positive step by all, it was perceived as falling short of helping enough families with child care needs by caseworkers and providers. An increase in provider payment rates likewise did not reach the desired impact according to many survey respondents.

Beyond policies themselves, the majority of specialists noted that it was challenging to stay current with policy changes and that families had a hard time locating quality child care. State partners saw their policy implementation coordination as successful, but also noted opportunities to continue to make improvements in communication, technology, and program policies and processes. Here again, the stakeholder groups were consistent in their suggestions for improved communication and access to child care.

Conclusions and Policy Implications

- Increase communications to build awareness and understanding of program elements among caseworkers, families, and providers.
- Look for opportunities to smooth the application and renewal processes via technology, regulations, and a deepening of the caseworker-client relationship.
- At a regional level, seek to increase child care provider supply for subsidy families.
- For future policy enhancements, consider ways to retain children in the program and further increase applications, approvals, and utilization.

Additional research will build on the findings of this report. Upcoming activities include getting the perspectives of parents in the Child Development and Care program and examining program data for geographic and racial equity in approvals, utilization, and continuity.

GLOSSARY

ACF	Administration for Children and Families
ACS	U.S. Census Bureau's American Community Survey
Bridges	Management information system used by Michigan for its public benefit programs
BSC	Business Service Center
CCDBG	Child Care and Development Block Grant Act of 2014
CCDF	Child Care Development Fund
CCPRP	Child Care Policy Research Partnership
CDC	Child Development and Care Program
FPL	Federal poverty level
ITS	Interrupted time series
LARA	Michigan Department of Licensing and Regulatory Affairs
MDE	Michigan Department of Education
MDHHS	Michigan Department of Health and Human Services
MIS	Management information system
PATH	Partnership. Accountability. Training. Hope. PATH is the Michigan work participation program for qualified Family Independence Program (cash assistance) recipients.
PPA	Public Policy Associates, Inc.
PUMAs	Public Use Microdata Areas
QRIS	Quality Rating and Improvement System
Specialist	Eligibility or family independence specialist; caseworker

TABLE OF CONTENTS

Executive Summary ..... **i**
Study Overview ..... *i*
Key Findings ..... *i*

Glossary ..... **iii**

Introduction **1**
Context *1*
Study Overview *2*
Literature Review *4*

Analysis Using Secondary Data **8**
Data and Methods *8*
Findings *9*

Caseworker Perspectives **19**
Data and Methods *19*
Findings *20*

Provider Perspectives **25**
Data and Methods *25*
Findings *25*

State Agency Perspectives **29**
Data and Methods *29*
Findings *29*

Conclusion and Implications **33**
Policy Change Impact *33*
Opportunities for Improvements *34*
Implications for Policy *34*

Appendices
Michigan CCPRP Logic Model ..... *Appendix A*
Research Questions and Hypotheses ..... *Appendix B*
Detailed Data and Methods ..... *Appendix C*
Policy Coordination Self-Assessment ..... *Appendix D*
Regional Profiles ..... *Appendix E*

INTRODUCTION

Context

The Child Care and Development Block Grant Act of 2014 (CCDBG), which reauthorized the Child Care Development Fund (CCDF), required reforms to state child care assistance programs around the country. Among the aims of the CCDBG was to improve the ability of families to access high quality child care and ensure greater provider program quality. Michigan began to implement changes precipitated by the CCDBG in 2015, including:

- Extending eligibility to a continuous 12 months, up from the previous period of six months (July 2015).
- Providing for a graduated exit from the assistance program at redetermination (July 2015). This allowed for a decreased subsidy as the recipient family's income increased, rather than being immediately cut off from a subsidy once the income eligibility threshold was passed.
- Delinking of the provider assignment from the subsidy approval (October 2016). Prior to the change, an approval was contingent on the recipient naming a child care provider.
- Increasing payment rates for all provider types (August 2017).
- Increasing the income thresholds for qualifying for child care assistance, up from 125% of the federal poverty threshold to 130% (October 2017).

These policy changes fit into a larger, ongoing effort in Michigan to improve access to quality early childhood care and education across the state, which began in 2004 under Governor Jennifer Granholm. Recognizing the importance of early childhood care and education for lifelong achievement and well-being, the State established the Great Start brand; put into place a network of regional collaboratives of partners from diverse sectors to foster regional change and parent coalitions that support family engagement; instituted increased provider training; and established the Great Start to Quality[3] star rating system, which identifies the quality of providers.

The state's Child Development and Care (CDC) program is housed in the Office of Great Start at the Michigan Department of Education (MDE), which works closely with the Michigan Department of Health and Human Services (MDHHS) and the Michigan Department of Licensing and Regulatory Affairs (LARA) to implement CCDF provisions and MDE program policy. Michigan uses a management information system (MIS) called Bridges, which is under the purview of the MDHHS. The LARA oversees provider licensing. The MDE manages the CDC program overall and has policy-setting responsibility.

[3] See https://www.greatstarttoquality.org/ for further information about Michigan's quality rating and improvement system.

Under a grant from the Administration for Children and Families (ACF), Public Policy Associates, Inc. (PPA), the MDE, and the MDHHS are partnering to carry out a study of the effects of child care assistance program policy changes on families and children in terms of application for a subsidy, use of the subsidy, quality of selected provider, time period when the subsidy was used (sometimes referred to as the spell length), continuity of care at the same provider, and employment by PATH (Partnership. Accountability. Training. Hope.) participants who also receive child care assistance under the CDC program.[4]

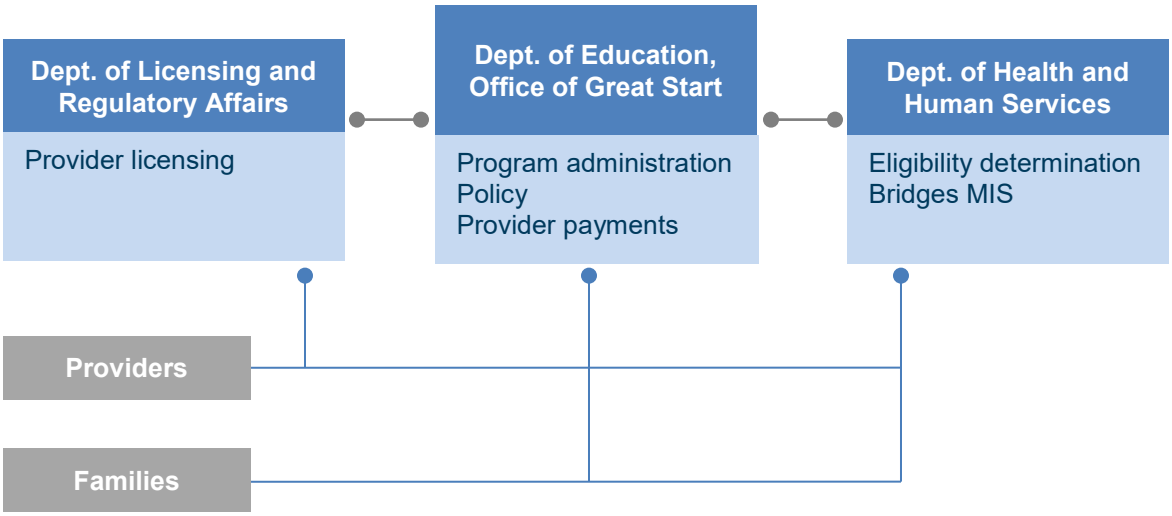

Figure 1. Michigan Child Care Assistance Program Structure

Study Overview

Over the course of the four-year grant, the Michigan team will examine the impact of policies on client behaviors and outcomes, perception of policy changes by key stakeholder groups (caseworkers, providers, and parents), and how the research informs the CDC policy coordination of the State partners.

CDC Program Cycle

In looking at policy outcomes, the cycle of the program informs the research focus. In order to understand who participates in the program, how the subsidy is used, and the results it generates, the Michigan research team is examining each step in the cycle (Figure 2).

[4] PATH is the Michigan work participation program for qualified Family Independence Program (cash assistance) recipients.

This cycle begins with the application process and eligibility determination, and is followed by the utilization of the subsidy, the redetermination of eligibility, and continuity in the program. Throughout this cycle, parents and providers exercise choices that factor into the program's performance. For instance, parents may elect not to use a subsidy even though they were approved, or providers may elect not to take a subsidy client.

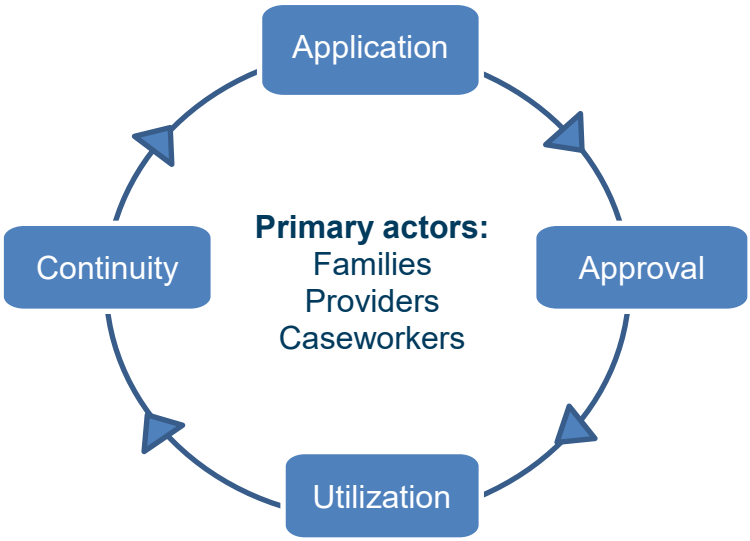

Figure 2. CDC Program Cycle

The five policies under examination fit within this cycle as potential forces for participation. As noted in the theory of change, the 12-month eligibility, delinked provider assignment, graduated exit, increased eligibility income threshold, and increased provider rates all should contribute to making it easier and more attractive for families and providers to take part in the CDC program. This should, in turn, position children to have more stable and higher quality care situations.[5] Central to this study is the effect of the policy changes for different demographic groups (income level, racial/ethnic) and geographic areas (counties).

For this phase of the research study, the focus was on the application and approval stages of the CDC program cycle, rather than the later steps. The arrival of the novel coronavirus pandemic during the data-collection period limited the data that could be collected and analyzed in the first year. As the study proceeds, additional data will be analyzed and reported.

Key terms in this study:[6]

Potentially qualified children: The estimated number of children in a given locale who might be eligible for the subsidy, based on ACS data.

Approved children: Children who are designated as eligible for the subsidy in the state benefits system, whether or not the subsidy is used

Participating children: Children who received the subsidy (i.e., subsidy recipients)

[5] For the study's logic model, please refer to Appendix A.

[6] MDHHS documentation refers to participants as "recipients" and those approved for the program as "eligible." To avoid confusion over the term "eligible" (which might be interpreted as those children who might be qualified to receive the subsidy), and because technically parents rather than children make use of the subsidy, alternative terms were adopted for this report.

Research Questions

This phase of the study was a first step in a larger project that will address five major research questions on: (1) the impact of policy changes on client outcomes, (2) the differential impact of changes across subgroups, (3) geographic variation in impact, (4) potential improvements to the CDC program offered by stakeholders, and (5) how effectively MDE and MDHHS have collaborated in administering the CDC program. (See Appendix B for a full list of research questions.)

This first annual report focuses on three research questions using a mixed-methods approach involving primary data and aggregated secondary data.

The research questions addressed in this report include:

- What is the impact of changes to child care subsidy policy by state agencies related to clients and providers on client outcomes?[7]
- What opportunities do families, providers, and caseworkers see for improvements in the application, approval, renewal, and utilization processes? (Focusing here on only approval and utilization.)
- How have the MDE and the MDHHS collaborated to improve the access of families to child care subsidies since passage of the CCDBG Act of 2014, retrospectively and through the course of the Michigan Child Care Policy Research Partnership grant period?

Future reports will examine the remaining research questions, which focus on geographic and demographic equity as well as additional program outcomes (e.g., continuity of quality care).

Literature Review

Child care assistance programs grew from a broad economic interest in supporting employment among low-income families. Along with giving parents the opportunity to work, quality child care also facilitates child safety, development, and school readiness. Policies targeting employment and affordability increase the use of child care assistance.[8] However, it is also known that a large proportion of families do not make use of child care assistance despite being eligible,[9] and that subsidy policies can affect income-based equity for choice of care setting.[10] Child care subsidies promote access to higher quality care, although there remains some

[7] Outcomes are understood as approvals for the program and utilization by eligible families.

[8] Lisa Gennetian, Danielle Crosby, and Aletha Huston, "Does Child Care Assistance Matter? The Effects of Welfare and Employment Programs on Child Care" (Washington, DC: MDRC, 2001).

[9] A. Johnson, A. Martin, and J. Brooks-Gunn, "Who Uses Child Care Subsidies? Comparing Recipients to Eligible Non-Recipients on Family Background Characteristics and Child Care Preferences," *Children and Youth Services Review* 33 (2011): 1072-1083.

[10] R. Madill, V.K. Lin, S. Friese, and K. Paschall, *Access to Early Care and Education for Disadvantaged Families: Do Levels of Access Reflect States' Child Care Subsidy Policies?* (Bethesda, MD: Child Trends: 2018-07).

variation in quality levels due to parental choice and provider type.[11] While child care assistance is an overall positive intervention for children and families, ongoing research provides deeper understanding of the effects of particular policies and approaches to child care assistance.

Income Thresholds for Program Entrance and Exit

At this point in the Michigan CCPRP study, the focus is on eligibility for child care assistance (application and enrollment stages). These are the points at which families demonstrate awareness of the program and choose to seek access to a subsidy, or not, and where the children are determined to be eligible, or not, by MDHHS staff.

A recent report by CLASP found that nationally only 8 to 12 percent of potentially qualified children actually receive subsidies.[12] In part, this may be explained by a propensity for rural families to seek out child care from their relatives.[13] Many families also struggle to afford quality child care and subsidies may not be enough to help them locate care, especially where supply is low,[14] and other explanations have also been reported, including lack of awareness of the assistance program and concerns about government interference as a result of program participation.[15]

Income eligibility for the subsidy is also a factor in program outcomes; the more income a family is allowed in order to qualify, the greater the numbers of children that could be served. Michigan has one of the lowest thresholds in the country, and in fiscal year 2016, it had a lower participation rate than the national average based on income eligibility parameters.[16] While not conclusive, this suggests that fewer children are benefiting from the program than elsewhere as a result of Michigan's low income threshold. Increases in the threshold are tied to benefits of access for children and families, such as greater employment, on-track child development, and middle school performance.[17]

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[11] Rebecca Ryan, Anna Johnson, Elizabeth Rigby, and Jeanne Brooks-Gunn, "The Impact of Child Care Subsidy on Child Care Quality," *Early Childhood Research Quarterly* 26, no. 3 (3rd Quarter 2011): 320-331.

[12] Rebecca Ullrich, Stephanie Schmit, and Ruth Cosse, *Inequitable Access to Child Care Subsidies* (Washington, D.C.: CLASP, April 2019), 2.

[13] Elizabeth E. Davis*, Deana Grobe, and Roberta B. Weber, "Rural–Urban Differences in Childcare Subsidy Use and Employment Stability," *Applied Economic Perspectives and Policy* 32, no. 1 (2010): 151.

[14] "The US and the High Cost of Child Care: An Examination of a Broken System," Child Care Aware of America, 2019, https://www.childcareaware.org/our-issues/research/the-us-and-the-high-price-of-child-care-2019/; Elise Gould and Tanyell Cooke, *High Quality Child Care Is Out of Reach for Working Families* (Washington, D.C.: Economic Policy Institute, 2015, Issue Brief #404).

[15] Mynti Hossain et al. , *Supporting High Quality Informal Child Care in Detroit* (Princeton, NJ: Mathematica Policy Research, October 2017), 3.

[16] Ullrich, Schmit, and Cosse, *Inequitable Access*, 19.

[17] Wladimir Zanoni and Anna D. Johnson, "Child Care Subsidy Use and Children's Outcomes in Middle School," *AERA Open* 5, no. 4, (October-December 2019): 1-19.

Ultimately, there are multiple reasons why families exit a child care assistance program,[18] but growing household income removes some from eligibility. Graduated exit, where families pay an increasing share of child care costs as their incomes rise, aims to remove the "benefit cliff" effect that can throw households back into poverty when assistance is removed quickly and completely once an income milestone is reached. However, research findings on the effects of graduated exit policies are not yet available.[19]

Provider Payment Rate Increases

Much like income eligibility thresholds, provider payment rates are a factor in access to quality child care for qualifying families. When subsidy payment rates do not fully cover the cost of care, families or providers must make up the difference if the children are to participate in care.[20] State policies have been revised to encourage providers to take the subsidy, but few states have set rates at the level recommended by the ACF, 75th percentile of market prices.[21] Nonetheless, having a subsidy to defray child care costs helps overall family economic stability.[22] As such, increases in provider payment rates can be assumed to benefit not just the provider, but a child's family, as the costs of care decrease for that family, or are at least kept at a consistent share of their income over time. When Rhode Island reformed its child care assistance program in 1999-2000—which included large increases in provider payments (up to 78% depending on child age category), among other changes—the state saw an increase in subsidy use and work (20 or more hours per week) among families who were receiving or had received cash assistance. The rate changes also increased the attractiveness of the program to providers, thus making care more accessible to eligible families.[23] Others have seen similarly positive association between more generous subsidies and usage and continuity.[24] Rates that align as closely as possible with market rates provide more access to quality child care.

Redetermination Period

One of the key policies of focus in this study is the 12-month eligibility window, which gives families a full year to utilize their subsidy before redetermination of eligibility is necessary. The

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[18] Sara Shaw, Anne Partika, and Kathryn Tout, *Child Care Subsidy Stability Literature Review*, OPRE Research Brief #2019-17 (Washington, D.C.: Child Trends, February 2019), 8-9.

[19] Ibid, 16.

[20] Families who select a provider with a quality star rating of 3, 4, or 5 have any co-payments (family contribution) due under the subsidy waived. Any cost of care beyond the amount covered by the subsidy are the responsibility of the family.

[21] Suzanne Murin, *States' Payment Rates Under the Child Care and Development Fund Program Could Limit Access to Child Care Providers* (Washington, D.C.: U.S. Department of Health and Human Services, Office of Inspector General, August 2019), 14.

[22] Nichole D. Forray, "The Impact of Child Care Subsidies on Low-Income Single Parents: An Examination of Child Care Expenditures and Family Finances," *Journal of Family and Economic Issues* 30 (2009): 43–54.

[23] The Rhode Island payment rate increases instituted met the 75th percentile target. Ann Dryden Witte and Magaly Queralt, "Impacts of Eligibility Expansions and Provider Reimbursement Rate Increases on Child Care Subsidy Take-Up Rates, Welfare Use, and Work," Working Paper 9693 (Cambridge, MA: National Bureau of Economic Research, May 2003), 4, 10-12, 17.

[24] Roberta B. Weber, Deana Grobe, and Elizabeth E. Davis, "Does policy matter? The effect of increasing child care subsidy policy generosity on program outcomes," *Children and Youth Services Review* 44 (2014): 135–144.

12-month eligibility period, required by the CCDBG Act of 2014, was one of several policy changes aimed at increasing stability of care. Longer subsidy "spells," or periods of use, have been associated with longer eligibility periods.[25] In addition, research has shown that families who exit the program often return within a year,[26] making the longer eligibility period efficient for families and states. An implementation study of Maryland's 6-month and 12-month eligibility period policies found that initially there were inconsistencies in administration that resulted in shorter subsidy spells, but these were corrected with a more centralized system.[27]

Delinked Provider Assignment

In Michigan, decoupling the selection of a provider from eligibility determination was viewed as a policy efficiency that would benefit families seeking child care and was based on feedback from the field.[28] By knowing whether or not they qualified for a subsidy before interviewing providers, families and providers could more easily make decisions about a care arrangement. To our knowledge, the extant research literature has yet to address this policy and its effects on access to care.

[25] Charles Michalopolous, Erika Lundquist, and Nina Castells (MDRC), *The Effects of Child Care Subsidies for Moderate-Income Families in Cook County, Illinois* (Washington, D.C.: Abt Associates, 2010).

[26] Shaw, Partika, and Tout, *Child Care Subsidy Stability*, 9.

[27] Ibid, 16.

[28] Public Policy Associates, Inc., "Michigan CCPRP - Policy Coordination Self-Assessment," as completed by the Michigan Department of Education Office of Great Start staff, May 2020.

ANALYSIS USING SECONDARY DATA

To date, the study has relied on extant secondary data to estimate changes in program trends before and after each set of policy changes. The results of this analysis are compared later in the report with the perspectives of stakeholders (eligibility specialists, providers, and agency administrators) to determine (a) whether the results' observable data matches the perceptions of those who operate the program, thereby providing confirming or disconfirming evidence for the quantitative analysis, and (b) the relative importance of policy changes that are clustered together in time.

Data and Methods

PPA researchers used public data from the State of Michigan and the U.S. Census Bureau's American Community Survey (ACS) to estimate the impact of the Child Care and Development Block Grant (CCDBG) re-authorization in Michigan (data from 2013-2018). Michigan's adoption of major policy changes in response to the law were clustered in three time points, which for the purposes of this section are termed "interventions" (Figure 3).

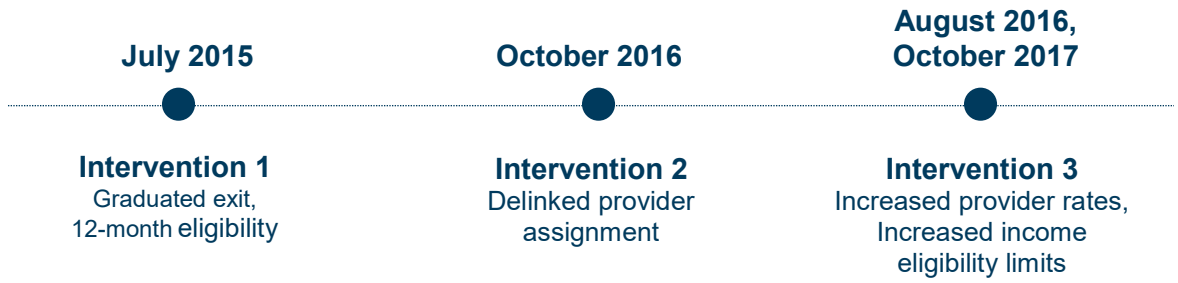

Figure 3. Policy Intervention Training

Because the policies were adopted at different points in time, it is possible to conduct three interrupted time series (ITS) analyses. ITS is a statistical procedure that estimates the impact of a policy change based on differences in program outcomes before and after the policy was adopted.[29] This makes it feasible to estimate the impact of different clusters of policy changes, rather than all of them being grouped together as one response to the CCDBG of 2014. However, the clustering also means that it is not possible to analyze the effect of a single policy—with the exception of the delinking of provider assignment from subsidy approval. Qualitative findings—shared in later sections of this report—provide insight on the relative importance of policies from different stakeholder perspectives.

[29] ITS uses regression analysis to assess whether there is a statistically significant difference in the outcomes at the time of the intervention compared with the pre-existing trend (a change in level) and more importantly for this study, differences in program trends, before and after the intervention (a change in slope). For details consult Appendix C.

The ITS analysis focused on four key program outcomes: [30]

1. Approvals as a share of potentially qualified children
2. The number of children participating in the program
3. Participants as a share of potentially qualified children
4. Participants as a share of children who were approved for the subsidy

These outcomes are examined using statewide totals. An alternative method using county-fixed effects is presented in Appendix C and yielded very similar results.

The ITS model was constructed by comparing the monthly outcomes in the period before the policy change to the outcomes in the months after the policy change. It should be noted that this method assumes that the only thing that changes are the policies under examination. Because the current model does not include a control group (such as another state that changed its policies at a different time), it is possible that events that took place at or near the same time could affect the results.

The number of children who were approved for and who participated in the CDC program was acquired from the Michigan Department of Health and Human Services (MDHHS) Green Book of Key Program Statistics, published monthly. The population of children who are potentially qualified for the program was estimated using ACS data, downloaded from IPUMS USA.[31] Potential qualification was determined by child's age, family income, and whether parents were working or in school. Some important limitations of this method are: (1) it does not include all eligibility criteria (e.g., children in foster care); (2) it uses five-year rolling averages because of sample size limitations; and (3) ACS data samples Public Use Microdata Areas (PUMAs), which frequently include multiple small-population counties. This means that all counties within the same PUMA are modeled to have the same eligibility rates.

In additional to the ITS analysis, trends in the number of potentially qualified children (as estimated with ACS data) and subsidy participants (with MDHHS data) were calculated for each of four regions in the state. These regions group together counties in Northern Michigan and the Upper Peninsula, Western Michigan, Southeast Michigan, and Central and Eastern Michigan. These regions are based on MDHHS Business Service Center regions. Estimates for each region and for the counties in each region are presented in Appendix C.

Findings

After presenting overall state trends in program activity over a six-year span (2013-2018), this section discusses the results of statistical analysis focused on the hypotheses about the impact of CDC policy changes. The effect of each cluster of policy changes on key program outcomes are

[30] For the definitions of "potentially eligible," "approved," and "participant," see page 3.

[31] Steven Ruggles et al., IPUMS USA: Version 10.0 [dataset], Minneapolis, MN: IPUMS, 2020, https://doi.org/10.18128/D010.V10.0.

analyzed sequentially. Overall, the analysis provides the strongest evidence for the impact of graduated exit and 12-month eligibility on increasing program approvals and program utilization.

CDC Case Trends, 2013-2018

Based on aggregate program data, the number of children participating in the CDC subsidy program in Michigan declined steadily over the first 30 months studied, from 45,948 in January 2013 to 28,149 in June 2015, a 39% decline. In July 2015 that trend suddenly shifted, and the total numbers of CDC participants began to increase, rising to 37,045 in August 2018, at which point the numbers plateaued. Meanwhile, the percentage of potentially qualified children (as estimated with ACS data) who received the subsidy displayed a similar pattern, declining from 21.7% in January 2013 to 13.9% in June 2015, after which it increased to 17.1% in September 2016. After that time, the trend in the percentage of potentially qualified children receiving the subsidy experienced a number of shifts, which may be partly due to changes in the number of potentially qualified children as a result of (a) policy changes, (b) economic trends, or (c) the fact that income limits do not always keep pace with inflation.

The percentage of potentially qualified children approved for the subsidy dropped from 29% in January 2013 to a low of 19% in June 2015, after which it has risen fairly steadily to 32% (with the exception of a drop in October 2017 due to an increase in the income limit, which expanded the potentially qualified population). The proportion of those approved for a subsidy that used one was fairly stable through June 2015 (averaging 73%), after which it has steadily declined, falling under 50% in late 2018.

Trends in Qualifying Children and Subsidy Utilization by Region

Differences in the proportion of potentially qualified children and the share of those qualified that received the subsidy were also examined by region of the state, as defined by MDHHS Business Service Center (BSC) areas (see the regional profiles in Appendix E).

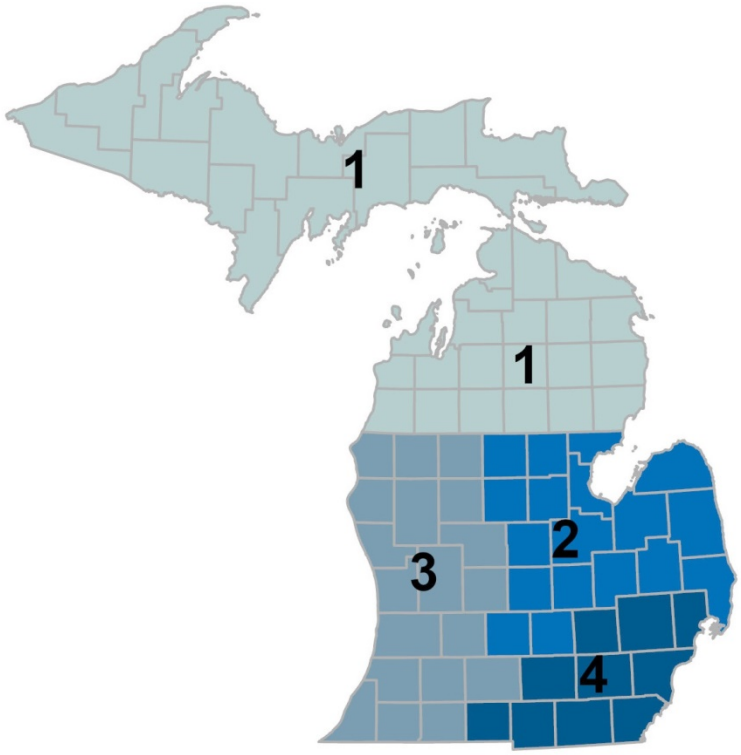

Figure 4. MDHHS Business Service Center Regions

The East-Central region of the state had higher qualification rates than the other regions of the state over the entire 2013-2018 period, a difference which grew after all children in Flint were designated as eligible for CDC subsidies in the wake of the Flint Water Crisis (January 2017 onward).[32]

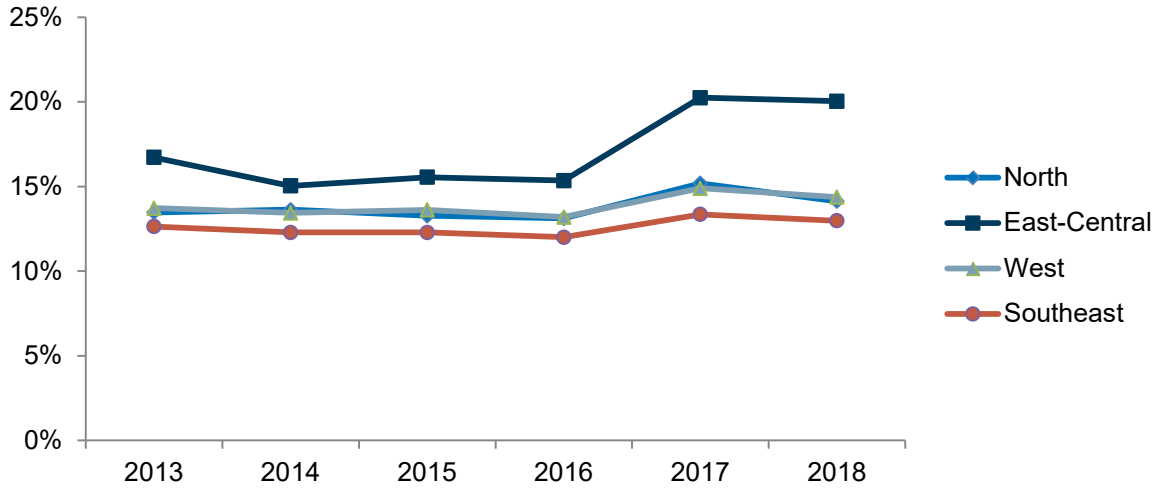

Figure 5. Percentage of Children Ages 0-13 Potentially Qualified for Assistance, 2013-2018 (Based on ACS Data)

[32] Eligibility levels include increases in the income limits in October 2017.

An examination of trends in subsidy utilization by qualified children suggests differences in trends across region, but these are primarily due to policy changes that altered the pool of qualified children (e.g., changes in income limits). The proportion of potentially eligible children using the subsidy declined in all four regions until summer 2015, after which there was an increase until the beginning of 2017.

During this period, the East-Central region registered a higher subsidy utilization rate relative to the qualified population. From this point the regions diverged. In the East-Central region there was a sharp drop in January 2017, largely due to the inclusion of all Flint-area children in the qualified population (i.e., there was a disproportionate increase in the number of potentially qualified children without an accompanying increase in subsidy use). In October 2017 there was a substantial drop due to the increase in the income limit expanding the qualified pool, followed by renewed growth. Since that time the four regions have moved in tandem (with correlations between .88 and .96), with more intense subsidy use in the East-Central and Southeast regions. Despite the similarity in trends, however, there are some regions of the state with much higher levels of subsidy participation, even accounting for differences in poverty levels.

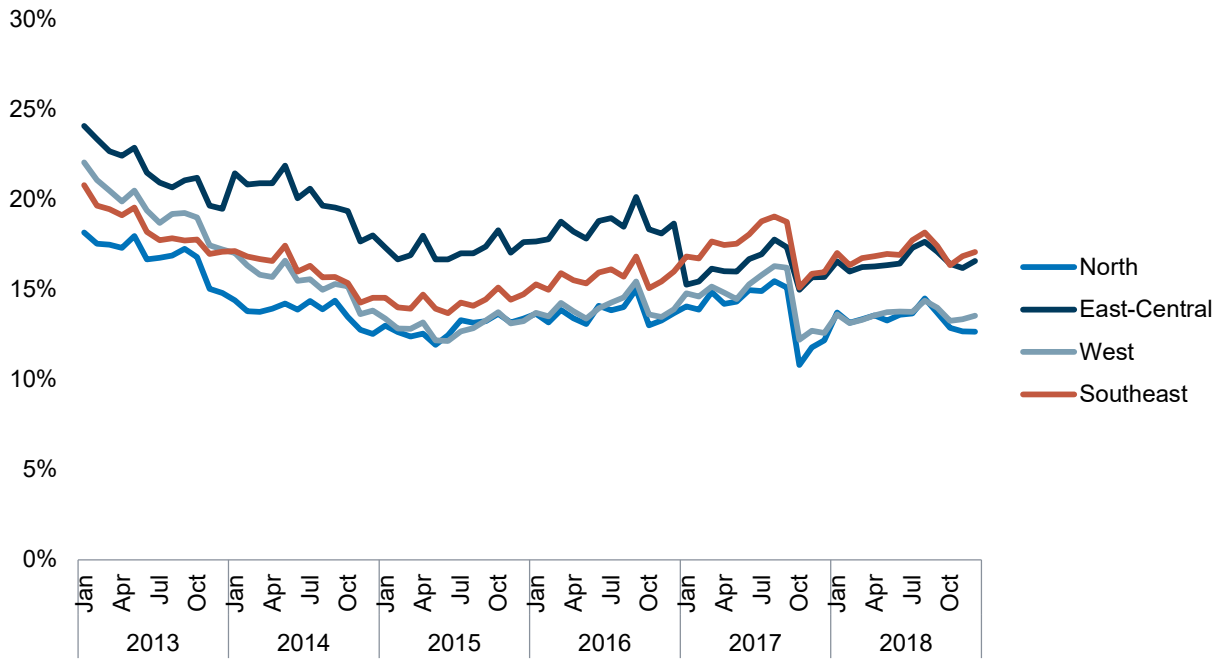

Figure 6. Percentage of Potentially Qualified Children Who Were Program Participants, by Month, 2013-2018

Hypothesis Testing

In examining the impact of changes to child care subsidy policy by state agencies on client outcomes, this section considers the following hypotheses:

- **Hypothesis 1a:** Changes in child care subsidy policy are associated with increased application rates by potentially qualified families.[33]
- **Hypothesis 1b:** Changes in child care subsidy policy are associated with increased subsidy approvals and utilization rates by applicants.[34]

For each hypothesis, ITS analysis was conducted to determine whether there was a statistically significant difference in client outcomes before and after CCDBG-related policy changes. The emphasis is on differences in long-term trends.

Intervention 1: Graduated Exit and 12-Month Eligibility

As the discussion of changes in trends at the beginning of this section makes clear, July 2015 was a significant inflection point in use of the subsidy. Statistical analysis provides strong support for Hypothesis 1a and substantial support for Hypothesis 1b.

- **Hypothesis 1a: Increase in the proportion of potentially qualified children who are approved.** According to the ITS analysis, prior to July 2015 the proportion of potentially qualified children approved for the subsidy declined by an average of 0.4% per month, but after the new policies this reversed to an average 0.3% gain each month. This represents a statistically significant change in the long-term trend.

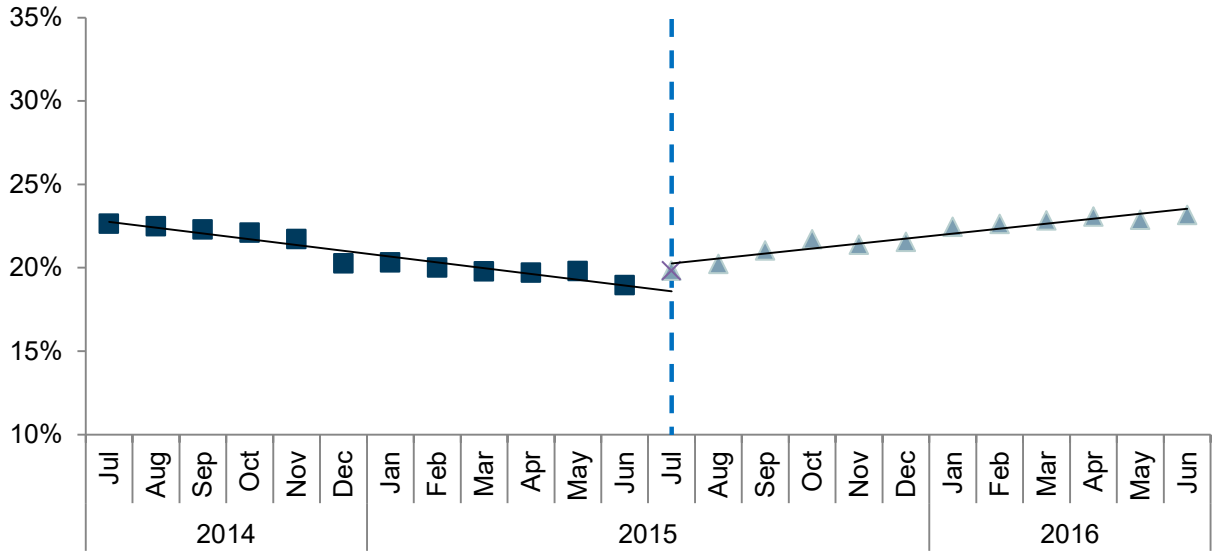

Figure 7. Share of Potentially Qualified Children that Were Approved (Intervention 1)

[33] Application rates are measured by the change in the percentage of potentially qualified children (as estimated with ACS data) who are approved for the subsidy by MDHHS.

[34] Three separate outcomes are used to test this hypothesis: (1) The raw number of children participating in the subsidy program; (2) the percentage of children approved for the subsidy who participate in the program; and (3) the percentage of children potentially qualified for the subsidy who are participants.

- **Hypothesis 1b: Increase in subsidy participation.** The adoption of graduated exit and 12-month eligibility resulted in the reversal of long-term trends, as measured by number of participants and the percentage of potentially qualified children who participated in the program.

The impact of this set of interventions was particularly stark for the statewide total number of participants. On average the number of participants declined by 535 a month during the 12 months prior to July 2015. Over the next 12 months, each month saw an average of 132 additional participants. This represents a net change in trend of 667 participants per month. In a subsidiary analysis of the entire 2013-2018 period, the importance of the July 2015 date remains quite powerful: before the policy change, there was an average of 582 fewer participants every month, compared with an increase of 152 per month afterwards.

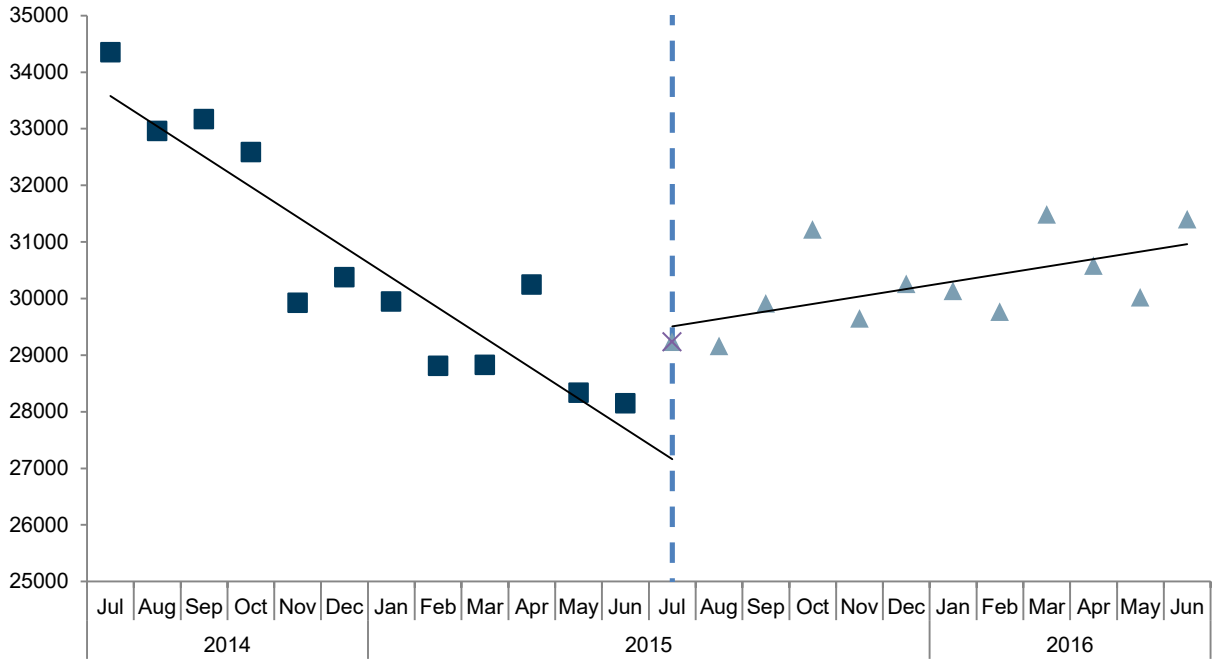

Figure 8. Number of Participants, 2014-2016 (Intervention 1)

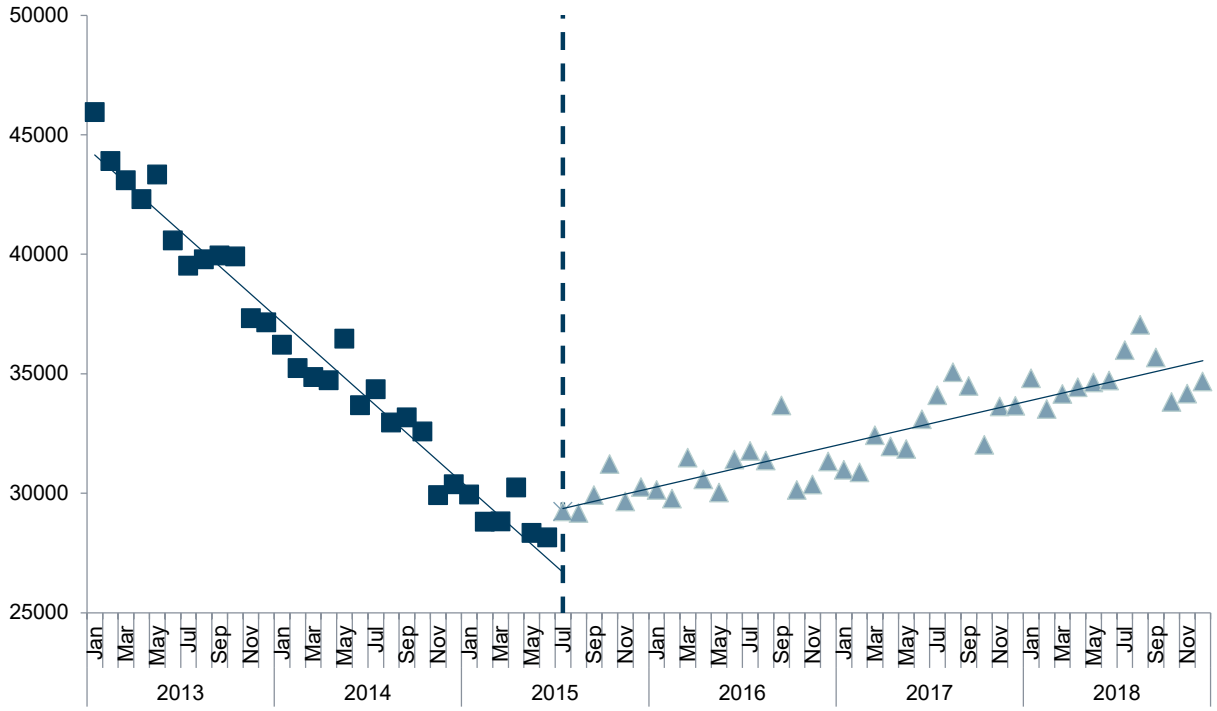

Figure 9. Number of Participants, 2013-2018 (Intervention 1)

Trends in the proportion of qualified children who were participants likewise reversed, from a 0.3% monthly decline to a 0.1% gain each month. This suggests that the increase was due to intensified subsidy usage, rather than a change in the size of the eligible population. By contrast, Intervention 1 was associated with a statistically significant decline in the percentage of children approved for the subsidy whose families ended up using it.

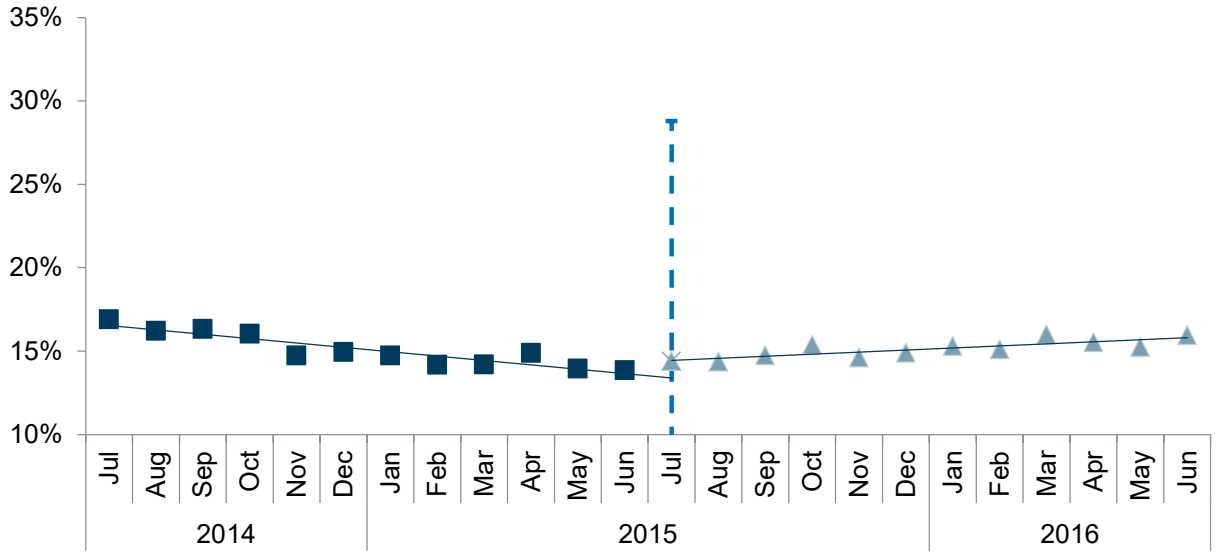

Figure 10. Share of Potentially Qualified Children that Were Participants (Intervention 1)

Intervention 2: Delinked Provider Assignment

Delinked provider assignment had a statistically significant impact on subsidy approvals but a weaker effect on subsidy participation rates.

- **Hypothesis 1a: Increase in the proportion of potentially qualified children who are approved.** There was a statistically significant increase in the trend of approvals for the subsidy as a result of the delinking of provider assignment from case approval. Prior to October 2016, the proportion of approvals rose by an average of 0.3% per month; afterwards, approvals rose by an average of 0.6% per month.

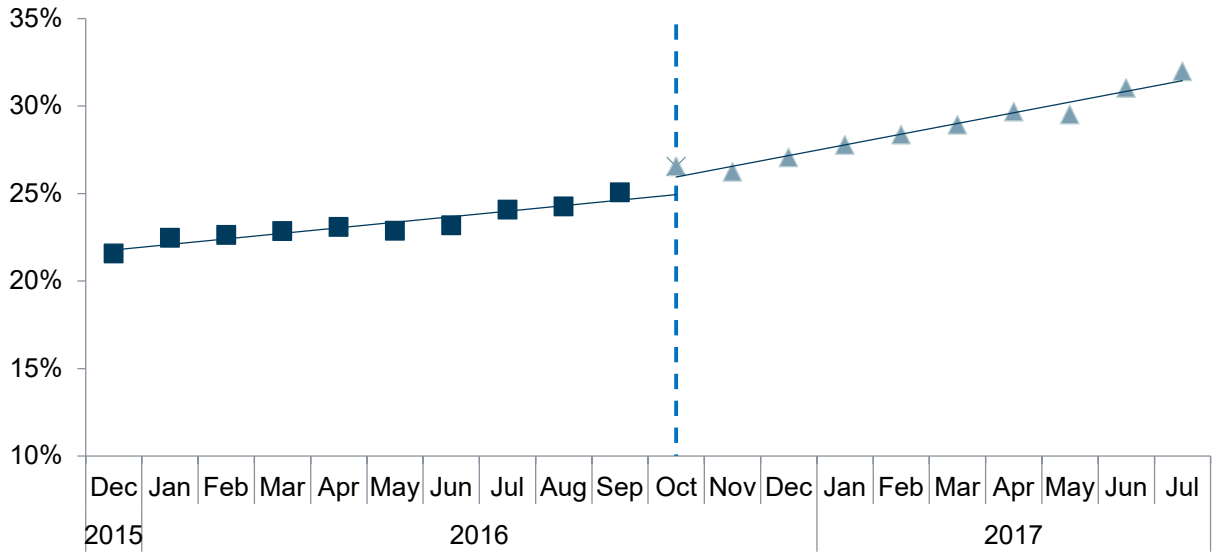

Figure 11. Share of Potentially Qualified Children that Were Approved, Dec. 2015 – July 2017 (Intervention 2)

- **Hypothesis 1b: Increase in subsidy participation.** As measured by the total number of participating children, adoption of delinked provider assignment was associated with a small improvement of the trend, from a gain of 293 children per month to 376 per month, but the difference was not statistically significant. Similarly, the share of potentially qualified children that participated did not change before and after the October 2016 policy change (0.2% increase per month). As with the results for Intervention 1, the trend in falling percentages of approved children who used the subsidy actually worsened after delinked assignments (-0.2% a month to -0.5% a month), a statistically significant change.

Intervention 3: Provider Rate Increases and Increased Income Eligibility Limit

Analysis of the third set of policies suggested that it had a mostly positive effect on subsidy utilization, although the results for the number of participants were weaker.

- **Hypothesis 1a: Increase in the proportion of potentially qualified children who are approved.** Prior to October 2017, the proportion of qualified children approved for the

subsidy was increasing at a rate of 0.6% per month. After the adoption of both increased provider rates and income eligibility limits, average monthly growth slowed to 0.1%—a statistically significant deterioration. This is unsurprising, given that the increase in the entry income limit increased the number of potentially qualified children.

- **Hypothesis 1b: Increase in subsidy participation.** Compared with the months prior to these policy changes being implemented, there was a lower (but not statistically significant) trend in the number of program participants and the proportion of qualified children who used the subsidy. However, the changes were also associated with an improved trend in the percentage of approved children that were participating. In the 10 months before the policies, there had been a -0.5% monthly decline, whereas subsidy utilization was flat after October 2017.

Table 2. Statewide Differences in Trends

Intervention	Outcome	Pre Trend	Post Trend	Difference
Intervention 1	% Potential Approved	-0.35%* (0.03%)	0.30%* (0.04%)	0.65%* (0.05%)
Intervention 1	Participants	-534.72* (61.97)	132.13* (45.51)	666.84* (75.44)
Intervention 1	% Potential Participants	-0.26%* (0.03%)	0.12%* (0.02%)	0.39%* (0.04%)
Intervention 1	% Approved Participants	-0.04% (0.12%)	-0.39%* (0.10%)	-0.34%* (0.16%)
Intervention 2	% Potential Approved	0.32%* (0.04%)	0.61%* (0.05%)	0.30%* (0.07%)
Intervention 2	Participants	293.41* (79.46)	375.68* (56.64)	82.27 (100.51)
Intervention 2	% Potential Participants	0.17%* (0.03%)	0.20%* (0.03%)	0.02% (0.4%)
Intervention 2	% Approved Participants	-0.17% (0.10%)	-0.51%* (0.08%)	-0.34%* (0.11%)
Intervention 3	% Potential Approved	0.57%* (0.04%)	0.12% (0.11%)	-0.44%* (0.14%)
Intervention 3	Participants	317.03* (37.38)	219.24* (61.99)	-97.80 (82.30)
Intervention 3	% Potential Participants	0.17%* (0.02%)	0.06% (0.10%)	-0.11% (0.11%)
Intervention 3	% Approved R Participants	-0.54%* (0.09%)	0.00% (0.17%)	0.54%* (0.19%)

*Statistically significant at the p<.05 level.

In sum, statistical analysis provided the most support for the role of 12-month eligibility and graduated exit in increasing program participation and approvals. Delinked provider assignment was associated with increases in approvals, but not participation, while rate increases and increased income limits had the weakest effect. However, the analysis also found that the trends in the share of approved children that participated functioned much differently

than trends in the share of potentially qualified children. This is an unexpected result with few obvious explanations, and will be addressed in future work.

CASEWORKER PERSPECTIVES

To assess the efficacy, challenges, and potential improvements related to child care policies, the research team surveyed the eligibility and family independence specialists (i.e., caseworkers) at the Michigan Department of Health and Human Services (MDHHS) who help families seeking the Child Development and Care (CDC) assistance or have a subsidy.[35] As a key intermediary, the specialists are exceptionally well situated to provide insights about the impact of policy changes and potential improvements. By asking questions about the effects of recent changes to the CDC program, their own role, the needs of clients, and specific suggestions about improving the program, the results of this survey acted as an additional data source regarding program impacts and ways to strengthen the program.

Data and Methods

Survey Development. The online survey was developed through a collaborative, iterative process among the Michigan partners. The survey was then pre-piloted by three eligibility specialists who reviewed the survey and provided feedback on the questions. A further 44 specialists responded to the survey during the pilot phase. Based on responses during the pilot, the open-ended questions were converted into closed-ended questions for the final version of the survey.

Fielding. The final survey was disseminated to all MDHHS specialists in March 2020 and remained open for two months.

Response. The survey received 1,044 responses out of the 3,238 specialists who work for MDHHS, for a response rate of 32 percent. Of the respondents, 897 (86%) worked with clients regarding the CDC program. The majority of respondents were engaged with CDC cases either monthly (26%) or daily (24%), with fewer reporting weekly (19%) or less than once-a-month (17%) contact with CDC-eligible clients.

Nearly 32 percent of respondents did not indicate their Business Service Center (BSC) region; this limits the ability to determine the representativeness of the respondents by BSC region. Of those who stated their region, BSCs 1 and 2 had representation about on target with what was expected; BSC 4 had lower response, and BSC 3 had higher response.

Respondents from northern Michigan had the fewest long-term workers (those with 10-plus years of experience), while southeastern Michigan had the fewest with six or more years of experience. The newest workers were most likely to work with CDC clients on a daily basis. Among the respondents, 41 percent reported having ten or more years of experience, with roughly equal numbers having one to five (26%) or six to ten (28%) years of experience. Only 5 percent of the eligible respondents reported having worked as a specialist for less than one year.

Analysis Approach and Limitations. PPA analyzed the survey data using descriptive statistics and significance testing of differences among specialists (by experience, frequency of working

[35] Hereafter referred to as "specialists."

with the program, and region). Although a significant percentage of specialists responded to the survey, it should be recognized that respondents could differ in important ways from non-respondents. For example, respondents could have more positive views about the program, leading them to complete the survey.

Findings

Questions from the eligibility and family independence specialist survey are divided into four main types: evaluation of the CDC program itself, perceived challenges, the role of specialists, and suggested improvements. Overall, specialists saw all the policy changes as having value, aligning with MDHHS goals, and increasing access to child care. Specialists also identified aspects of the program to improve, such as client completion of required paperwork in a timely manner.

In some instances there were differences among survey respondents by region, overall experience as a specialist, or frequency of interaction with the CDC program. These differences are mentioned in the text only when they are statistically significant.

Impact of CDC Program and Policy Changes

Specialists were asked about their opinions regarding both the CDC program as a whole and the impact of the recent policy changes. When asked about the effectiveness of the CDC program overall, only 22 percent said that the program was "very effective," although a majority stated that it had a mostly positive impact (64%).

With respect to the impact of recent changes to the CDC program, nearly all (89% to 97%) reported that each of the changes was either moderately or very important. Specialists had the most positive feelings about the income eligibility limit change, with 78% citing this as "very important." However, at least 60% of specialists thought the other changes were also "very important." The only exception was that specialists who dealt less often with CDC cases were more likely to note the importance of delinked provider assignment.

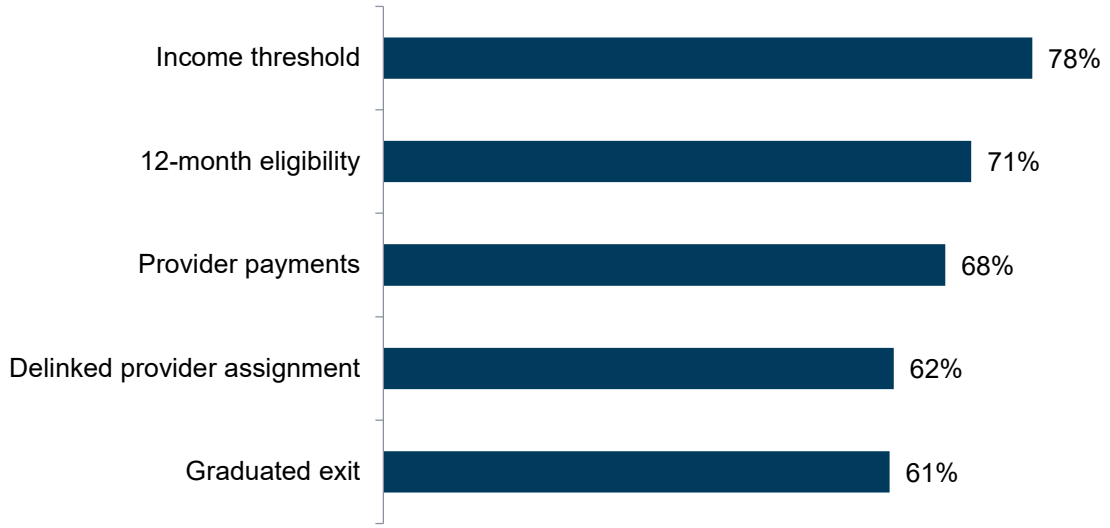

Figure 12. Policy Changes Cited as "Very Important" by Specialists

Specialists were asked about the impacts of these policy changes overall. Large majorities agreed or strongly agreed that the changes had increased their ability to improve the health and safety of children (79%) and helped clients achieve financial stability (80%) (goals of MDHHS). A majority also reported that the changes had improved client access to stable, high-quality child care (69%), although this perception declined with experience (93% for new specialists vs. 62% for veterans of 10+ years). A majority (55%) thought the changes had made it easier for families to find quality child care, compared with 36 percent who saw no difference and 9 percent who thought the changes had actually made it more difficult.

Specialist Perceptions of Challenges with Service Delivery

Specialists were also asked to identify what they saw as the key barriers for CDC clients. The purpose of these questions was to identify the most important supports needed by clients to participate in the program.

According to a majority of the specialists, CDC clients are able to complete enrollment paperwork (60%), know how to report changes in income (69%), and complete renewal forms easily (59%) and in a timely fashion (53%).

Many specialists said the biggest obstacle to delivering the subsidy was clients not turning in their program paperwork (37%). Fewer specialists (22%) pointed to the income eligibility limits, the availability of care (18%),[36] or clients not understanding the program (15%) as the most serious barrier.

[36] This question asks respondents to rank the issues by relative importance, rather than expressing their views about whether a given challenge was important in isolation.

Perceptions about the biggest challenges to clients varied widely by specialist background. Those with the least CDC case experience were significantly more likely to say that availability of care was the most serious obstacle. In addition, newer specialists had fewer concerns about client understanding of paperwork, while a much smaller share of the most experienced specialists thought income limits were a challenge.

Clients failing to report income changes and completely filling out forms appear to be challenges for specialists as they seek to initially approve cases and re-determine eligibility. Only 21 percent stated that their clients reported income changes in a timely manner (although 42% of new specialists thought clients reported on schedule). A majority (59%) indicated that clients had trouble completely filling out forms. This perception was higher among more experienced specialists (65%), as well as for specialists in western and southeastern Michigan.

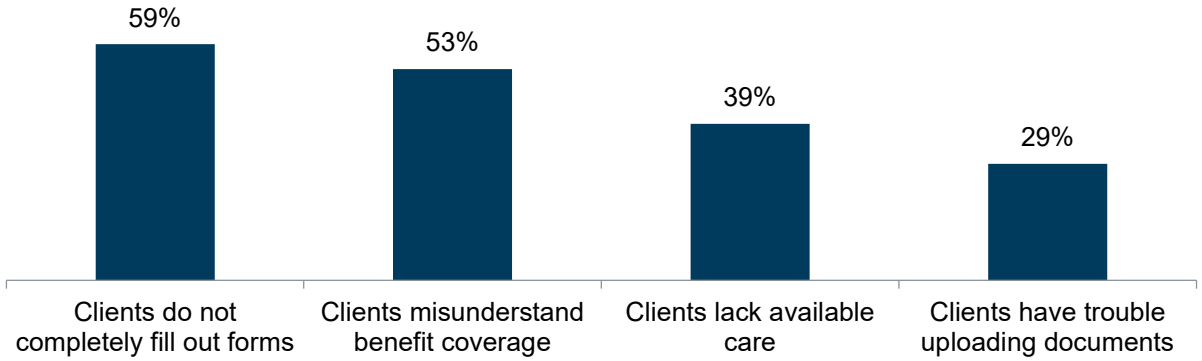

Figure 13. Challenges within the CDC Program According to Specialists

Nearly two-thirds (62%) of specialists thought that clients had a difficult time finding child care; with a greater proportion of specialists with six or more years of experience citing this as a problem.

Specialists also reported that the clients had trouble understanding their child care assistance benefit (53%), with newer specialists (79%) and those who dealt with CDC cases infrequently (67%) much more likely to say so. Lack of available care (39%) and difficulty uploading documents (29%) were less often reported as challenges for CDC clients (with respondents from Southeast Michigan representing an outlier).

Role Challenges for the Specialists

Because eligibility specialists serve an important function in successfully administering policy changes, the survey included questions about how well they felt they were able to work with CDC cases. Low levels of self-efficacy would point to the need for better training and supports in working with subsidy clients, and greater likelihood that it would be difficult for specialists to respond to policy changes.

In general the specialists had a high degree of confidence in their ability to administer the CDC program. Most felt that they were able to help clients complete an application (91% agreed or strongly agreed) and re-determine eligibility (84%).

A smaller proportion, but still the majority, expressed confidence in their ability to answer eligibility questions (65%), explain income threshold and eligibility scales (59%), provide resources to help find child care (58%), and answer how and where to use the subsidy (54%). Interestingly, the less often that specialists helped CDC clients, the more confident they were about their ability to assist those clients.

Respondents indicated that it was challenging to keep up with CDC policy changes (69%) (Figure 13). Specialists from East-Central Michigan were significantly less likely to report this as a challenge, although it was still a concern for the majority of respondents from that region.

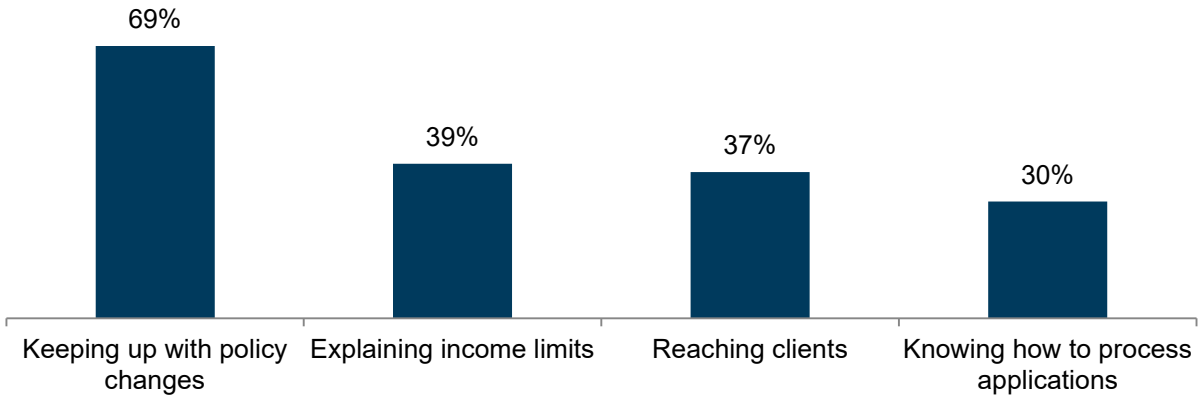

Figure 14: CDC Program Challenges for Specialists

Fewer specialists reported explaining income limits (39%), having difficulty reaching clients (37%), or knowing how to process applications (30%) as challenges. Not surprisingly, processing applications was a much greater challenge for newer specialists (56%).

Improving the CDC Program

Specialists were also asked how best to improve the CDC program as part of the research question about potential policy improvements.

Ease and clarity of communication were the greatest concerns for specialists. Roughly half of respondents said that better information for specialists (51%) and providers (49%) was vital for strengthening the program. A majority thought that more information explaining the CDC program, information specialists could share with clients, would be helpful (57%), as would specialists who concentrated on CDC cases (rather than assisting with multiple benefit programs) (56%)—an opinion that was strongest in Southeast Michigan.

Specialists identified better information for clients as the number one way for improving the program (66%). Specialists reported that it was particularly difficult to explain eligibility requirements and income limits (59%), especially for those who worked with CDC clients less often. Specialists asked for materials focused on explaining billing (62%), eligibility requirements and income limits (60%), and finding a provider (55%). Respondents in East-Central Michigan were especially in need of more information about helping clients find a provider.

Beyond communication, eligibility specialists cited the need for improving client access to providers (57%). Here there were stark regional differences, with 71% of respondents in East-Central Michigan citing this as a key factor, compared with only 46% in Southeast Michigan. Opinion in North (59%) and West (62%) Michigan was close to the state average. Specifically, specialists thought that more providers with non-traditional hours would be key to promoting access for CDC clients (66%). By comparison, increasing provider payments was viewed as less critical (36%).

PROVIDER PERSPECTIVES

Data and Methods

Purpose and Development. Public Policy Associates, Inc. (PPA) conducted telephone interviews with licensed child care providers in Michigan that had been working with at least one child receiving a subsidy in order to capture their perspectives on the program policy effects for providers and families.

Interview questions were developed with input from research partners in the Michigan Department of Education (MDE) and the Michigan Department of Health and Human Services (MDHHS). Topics covered included provider experience with Child Development and Care (CDC)-eligible clients, understanding and interpretation of the CDC program, challenges with CDC clients, suggested improvements, program effectiveness, and suggested policy changes.

Recruitment. PPA developed an outreach and recruitment protocol to ensure that each of the provider types (licensed centers, licensed family homes, and licensed group homes) were represented in each Business Service Center (BSC) region. PPA selected names at random within the defined parameters using MDE's Great Start to Quality publicly available dataset for contact information.

Conduct. The telephone interviews were conducted in April through June 2020. Consent to participate in the interview was obtained prior to conducting the interview. PPA completed a total of 21 interviews, with at least one provider of each type per BSC region. The three unfilled interview slots included two centers and one group home provider.

Analysis Approach and Limitations. PPA used specialized software to code the interview notes thematically by question and topic. Due to the limited overall number of interviews that were conducted, as well as the potential for non-respondent bias, the results may not fully reflect the views of all providers in the state. In addition, the interpretation of the qualitative data was dependent on the judgment of the researchers who conducted the study and could potentially have been interpreted differently by other researchers.

Findings

The small sample of child care providers from urban, suburban, rural, and tribal communities offered their experiences and opinions regarding the CDC program policy changes. While they did not always agree on the policy impacts, most saw the 12-month eligibility period as beneficial for families and thought the income eligibility threshold increase insufficient. Providers suggested multiple program modifications to aid families and children.

12-Month Eligibility

Most providers felt that the 12-month eligibility period was helpful for families. They noted that it allowed for a reduced burden of paperwork, which was important given that many CDC

subsidy recipients must also fulfill requirements for other social service programs. If a family member lost their job during the subsidy period, the extended eligibility helped to ensure consistent child care while they searched for a new job.

Providers thought the longer eligibility offered an increased sense of stability and peace of mind for families. Most providers also felt the eligibility period was helpful for them. Several noted that it reduced the burden on staff working with parents and the State to verify eligibility or tracking down parents who were late in submitting paperwork. In addition, it helped providers plan ahead to ensure they had the right staffing levels for the number of children in their care. They felt the 12-month eligibility also increased the likelihood that a family would stay with a particular provider for a longer period.

Graduated Exit

The graduated-exit policy was not a salient feature for providers. When they were asked to reflect on the income-eligibility guidelines for the CDC subsidy, only one provider focused directly on the graduated exit. The others primarily focused on the increased eligibility threshold, which is discussed below. The provider that did mention graduated exit stated that it was the correct approach for exiting participants as their income increased. That provider felt that by gradually reducing the amount of care costs covered as family income increases, the graduated exit helps parents avoid a "benefits cliff" that could prevent them from reaching financial independence.

Delinked Provider Assignment

The providers were also asked whether allowing eligibility without a provider assignment had had an effect for them. Most providers had a neutral viewpoint and/or had not heard of the change before the interview was conducted. Eight of the providers reported that they had seen no effect from this change or were neutral in their opinion, and one indicated that the policy did not make a difference because providers still needed to wait to be authorized as a family's provider in order to receive payment from the program.

Four providers found the change to be beneficial because it resulted in a simpler sign-up process for providers. One provider recommended that all parties be involved from the beginning of eligibility—a return to the previous policy.

Provider Rate Increases

Reimbursement rates are a well-known ongoing concern for Michigan providers. Providers were not explicitly asked about the effect of provider rate increases during the interviews because it was expected that all providers would want a higher reimbursement rate and it would have been difficult to differentiate among the multiple rate increases that have occurred in Michigan since 2017. Nevertheless, several providers mentioned that the reimbursement rate did not match the value of the work they were providing or that their rates were higher than the CDC

reimbursement rate, forcing cash-strapped families to pay the difference. One provider noted that if rates were higher, more providers might accept CDC-subsidized families.

Increased Income Eligibility Threshold

When they were asked how the increased income threshold for eligibility had affected families, only one provider suggested that the change had increased the number of low-income families using their centers. Seven providers indicated that the change, while beneficial, was not rising at the pace of inflation and was insufficient to meet the level of need among families. As a result, parents could find themselves ineligible for assistance but still unable to afford child care. One provider had seen parents decline promotions at their jobs for fear that increased income would reduce or eliminate their CDC subsidies, and also increase their rent if they lived in subsidized housing. Two providers indicated that the CDC subsidy did not cover that provider's base rate for child care and financially stressed families had to pay the difference. One provider even offered deeply discounted rates to such families, but the cost was still prohibitive.

Suggested Improvements

The providers offered an array of suggestions for improving the CDC program; they include:

- Recommendations for more (and more user-friendly) information sources on the CDC subsidy, targeted specifically to low-income families and small providers—including user-friendly online resources as well as the use of community organizations or ambassadors that interface directly with low-income communities. Providers noted that many families they worked with did not fully understand the eligibility requirements, the workings of the program, the child care options available in their communities, or the changes that the program has undergone. Other suggested good go-betweens could be employers, pediatricians, and college counselors.
- Several providers indicated that the CDC program should assign specialists to specific families, have more program staff in general, or have closer coordination among state agency staff and between state staff and providers. They felt this would make it easier to resolve issues, speed up the application and renewal process, and build trust in the program.
- Several providers suggested technological improvements. For example, some expressed a desire to move more application and renewal functions online to reduce paperwork and speed up the application and renewal processes. Others suggested that the state enact a swipe-card system, similar to the Michigan Bridge Card for SNAP benefits or what Ohio uses for its child care assistance program, suggesting that approach would allow for instant verification of the number of hours a family has expended and available for child care as well as determining the amount of money to reimburse to providers each time a child is picked up and dropped off.
- One provider stated that many of the tribal families they worked with were hesitant to apply for child care assistance due to distrust of State institutions that have historically mistreated

indigenous communities, indicating a need for specific outreach to build trust in these communities. The same provider felt that the program should cover unlicensed kinship care, as many tribal children are cared for by family members who would benefit greatly from the added financial support.

STATE AGENCY PERSPECTIVES

Data and Methods

Purpose and Development. To conduct policy coordination self-assessments with the two State agency partners involved in the Child Care Policy Research Partnership (CCPRP) who work jointly to carry out the Child Development and Care (CDC) program for Michigan, Public Policy Associates, Inc.(PPA) designed a new instrument based on available literature and past experience conducting implementation evaluations of state and local programs. In addition to providing understanding of how the policies came to be, the self-assessment offered an opportunity to clarify the interrupted time series (ITS) break points for each policy under study.

The policy coordination self-assessment instrument contained six sections: one with partner roles and purpose statement, and five parallel sets of questions about the policy coordination for each of the five focus policies. The instrument asked partners to rate the degree of alignment between the policy and the agency's mission, the state of policy implementation, the quality of interagency communication, the degree of implementation cooperation, how well the change met the intended purpose, and potential for further improvement on the policy.

Conduct. After Michigan Department of Education (MDE), Michigan Department of Health and Human Services (MDHHS), and PPA leads determined that the instrument was ready, the partners each formed small teams to respond to the self-assessment for their agency. Respondents rated aspects of coordination on a 4.0 scale, with 4.0 being the best result, and provided written comments to explain scores. Within the instrument, partners noted any unintended consequences of the policy change and any supports to the policy implementation.

Analysis Approach and Limitations. PPA reviewed the responses across agencies, calculated average scores by item in Excel, and met separately with the partners to gather further explanation where needed. To close out the process, the Michigan CCPRP partner leads (from PPA, MDE, and MDHHS) met to review the results and discussion implications.

The policy coordination self-assessment achieved its intended purpose—to help partners reflect on past policy-change coordination and prepare for future policy changes—but it had limitations because the agencies completed the assessments long after the policy implementations occurred and no objective measure of coordination accompanied the self-assessments.

Findings

A change in CDC program policy requires numerous steps among the MDE and the MDHHS. Typically, the preparation for a policy change occurs over a three-month period. The technology aspect of significant policy changes (like the delinked provider assignment and 12-month eligibility period policy changes) involve multiple units and staff to plan, develop, test, and communicate. The MDE notifies providers and other early childhood partners through memos and training webinars as well as making updates to reference tools, such as the CDC handbook

and the Income Eligibility Scale and Family Contribution chart. The MDHHS also sends out various notices to their staff about the policy change, including through e-mails, Bridges release notes, and Bridges Policy Bulletins. MDHHS also supports implementation through trainings and desk aids for specialists. Any challenges in implementation are flagged through Bridges work requests, reports, or via managers.

The policy coordination self-assessments found that the State partners were satisfied overall with the degree of cooperation between them, but that they both saw opportunities to enhance the communication around technology; increasing the amount and clarity of information given to staff, clients, and providers; and to continue to try to increase the eligibility threshold and payment rates.

12-Month Eligibility Period

Overall, the two agencies positively perceived their alignment on this policy change, giving it a combined average score of 3.3 out of 4.0. There was a brief challenge with a technology-related issue, which meant that the policy was not fully implemented until September 2015 rather than July 2015 when the policy was officially enacted. Multiple forms of communication with specialists and families were necessary to clarify how the policy affected case closures and provider approvals, so the partner gave their interagency communication and cooperation ratings of 3.0. Growing out of this policy change and other inputs, the agencies worked on a pilot to simplify the redetermination process. As was the perception of the eligibility specialists and child care providers, the 12-month eligibility policy was viewed favorably by the MDE and MDHHS staff who completed the policy coordination self-assessments.

Graduated Exit

The partners gave their coordination on this policy change an overall rating of 3.2 out of 4.0. Similar to the 12-month eligibility policy, there was some confusion around implementation of the policy. In this case, the confusion lay in specialists misinterpreting the income chart for entry and exit amounts. The partners also saw the release of this policy at the same time as the 12-month eligibility policy as adding to case errors by creating confusion among specialists about exit rules. They believed they could have had better interagency communication (averaged score of 2.5) and cooperation (averaged score of 3.0) for this policy change.

Delinked Provider Assignment

This change was a major shift for staff and recipients alike. Without the MDHHS having to "enroll" the provider in the system, time to complete the eligibility process was reduced, which was beneficial for the subsidy recipients and providers. The policy alignment with agency mission, goals, and the success of implementation was a 4.0. However, the interagency communication and cooperation ratings were 2.5 and 3.0, respectively. Both agencies reported seeing opportunities to improve the process once a provider is identified and noted some other

technical issues with the data system (e.g., letter generation). The MDE and the MDHHS gave their coordination around this change a rating of 3.3 overall.

Increased Income Eligibility Threshold

This policy change received an averaged rating of 3.1 from the partners. The lower rating for agency coordination around this policy centered on weaker scores for alignment with agency mission/goals, cooperation, and satisfaction with the change achieving the intended purpose (i.e., increasing the number of families that qualified for a subsidy). This policy needed to be prepared over two phases over several months: the first increased the entry limit to 130% of the federal poverty level (FPL) (from a previous level of 125% of FPL) and the second increased the family contribution amounts based on income.

Increased Provider Payment Rates

Across the five policies, the partners gave themselves the highest score for their coordination on the 2017 change in provider rates, at a combined average of 3.6 out of 4.0. Both agencies saw the increase as well aligned with their respective missions and goals and saw it as increasing the appeal of the program for providers, which helped families seeking care. The partners were most pleased with their cooperation and communication on this policy change, giving an averaged rating of 3.5 to both.

Table 3. 2015-2017 CDC Program Policy Coordination Self-Assessment by the MDE and the MDHHS, Averaged Ratings

Category	12-Mo Eligibility	Graduated Exit	Delinked Provider Assignment	Income Eligibility Threshold	Provider Payments
Alignment with agency mission, goals	3.5	3.75	4.0	3.0*	3.75
Quality of interagency communication	3.0	2.5	2.5	3.0	3.5
Degree of interagency cooperation	3.0	3.0	3.0	3.0	3.5

*The MDHHS respondents saw the new higher eligibility threshold as still falling short of agency goals for greater family economic stability given the level of increase.

Partner Policy Coordination Lessons

As part of this process, the partners reflected on the lessons from their experiences with the five policies of focus. Opportunities to improve on coordination on future policy changes noted by the partners included:

- Involving policy and technical staff in implementation discussions so technical issues could be avoided.

- Increasing and clarifying communication with the MDHHS field staff, child care providers, and subsidy families.
- Removing hurdles in the subsidy process, such as weighing the pros and cons of multiple sign-offs for forms (e.g., for provider assignment).
- Considering how bundling changes may affect implementation and communication.

The results of the policy coordination self-assessments provided a baseline understanding of how these partners saw themselves working together to define and execute policy changes for the CDC program. Over the next three years, the Michigan CCPRP will continue to examine coordination efforts, with the goal of ongoing improvement.

CONCLUSION AND IMPLICATIONS

Policy Change Impact

Michigan's child care assistance program implemented five key policy changes in response to the Child Care and Development Block Grant (CCDBG) Act of 2014. Although they all had the potential to increase approvals and participation in the program by easing program processes or removing access barriers to quality care, one intervention set stood out as the most influential according to the secondary and primary data available: the 2015 set that included 12-month eligibility and graduated program exit.

The quantitative analysis found strong evidence that the adoption of graduated exit and 12-month eligibility periods increased applications for subsidies (Hypothesis 1a) and utilization of subsidies (Hypothesis 1b). Providers supported this in interviews, where the majority perceived a stronger effect of 12-month eligibility than increased income limits or delinked assignments. However, graduated exits did not appear particularly salient for providers. Specialists from the Michigan Department of Health and Human Services (MDHHS) also saw the 12-month eligibility policy as beneficial for children and families and ranked it the second most helpful change. From a state partner perspective, coordination of these changes occurred to the same degree.

The evidence for the other policy changes' impact—delinked provider assignments, increased provider rates, and increased income eligibility threshold—was much more limited. Delinked assignments were associated with an increase in approvals as a share of the potentially qualified child population, but had no statistically significant effect on the share of participants. The third set of policy changes (the increases in 2017) expanded the pool of potentially qualified children, but this was not matched by an upsurge in approvals or participants; instead, the share of potentially qualified children approved for the subsidy went down. This difference is puzzling, and requires further study to determine whether it represents administrative "slippage" (unlikely given partner ratings of implementation coordination), an inability by those approved for the subsidy to find child care, a disinterest by some of those approved in using the subsidy, or factors that may be unrelated to the policy changes in question.

Providers either did not see much benefit to the other changes (as in the case of the delinked provider assignment) or felt the increased limits and rates were inadequate and thus not terribly impactful overall. The MDHHS specialists viewed all of the policy changes as important, but saw income limits and provider rate increases as among the more important changes, with delinked assignments the least essential.

On balance, therefore, the combination of quantitative and qualitative data underlines the importance of 12-month eligibility, with less clear-cut evidence on the impact of the other policies. This is by no means the last word on the effects of these policies. Future research to address this research question will include analyzing case-level data (e.g., whether aggregates

are driven by renewals or new clients), as well as attempt to distinguish the relative influence of policies adopted at the same time.

Opportunities for Improvements

In beginning to answer other research questions, opportunities to strengthen the Child Development and Care (CDC) program through process implementation were noted by providers, State partners, and MDHHS specialists.

The need for better communication about program policies was a persistent theme, whether that communication was directed towards providers, specialists, families, or between State partner agencies. Providers and specialists both stated that clients needed better materials that clearly explained the program, with targeted information for parents from disadvantaged backgrounds. State partners noted that communication was especially important when multiple policy changes occurred together, both internally and externally.

In addition, process enhancements were seen by many of the stakeholders as potentially useful to helping families and children access the subsidy and continue care. Specialists and providers noted that parents may need more supports in understanding the program and a more streamlined process, but also relationship-building with specialists.

More far-reaching than the program itself, the supply of providers who worked with families receiving assistance was also of concern. The MDHHS specialists indicated that many clients struggled with access to providers, pointing towards a continued focus on supporting the supply of child care providers (particularly in the wake of COVID-19).

Although there is mixed empirical evidence on the impact of some policies, this may have less to do with the intrinsic features of those policies than the structural conditions in which they operate. For example, lack of awareness of the adoption of these policies, or misunderstandings about their meaning in practice, could have hindered enrollment, or caused stakeholders to undervalue their importance. It is notable that the two policies that were focused on currently participating children (graduated exit and 12-month eligibility) had the most clear-cut effects in empirical analysis. The other policies affected both current and potential participants. This suggests that policies focused on retention rather than recruiting new participants may be easier to implement (and disseminate information about)—a possibility that will be explored in future research.

Implications for Policy

This study has a number of implications for the CDC program in Michigan and the subsidy program as a whole. First, 12-month eligibility appeared to have the strongest effect on increasing aggregate approvals and participation by children in the program. Should this result hold up under detailed case-level analysis, policymakers should investigate some combination of further extensions and easing the process of redetermination for all involved.

Second, increases in income limits and provider payments did not have as strong an effect as might be expected (in light of results in other states). This suggests that the changes in income limits and payments may have been too small to have more than a marginal effect, especially given Michigan's relatively low levels compared with other states. It is possible that income eligibility and provider payments require relatively dramatic changes to alter program utilization.

Third, institutional context likely plays a powerful role in policy outcomes. Communication infrastructure enhancements could improve policy initiatives, particularly in states like Michigan where responsibility for the program is shared by multiple agencies. In addition, changes to subsidy policy (even provider payments) could have their impact blunted in light of other market conditions, such as the existence of child care deserts. Strengthening the subsidy program will require attention to both demand and supply.

APPENDIX A: MICHIGAN CCPRP LOGIC MODEL

Table A-1. Logic Model – Michigan Child Care Subsidy Improvement Through Research, Michigan Child Care Policy Research Partnership, June 6, 2019

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	IMPACTS
Legislation: CCDBG Act of 2014 People/Partners: Public Policy Associates, Inc. Michigan Department of Education/Office of Great Start Michigan Department of Health & Human Services Early childhood system stakeholders at state and local levels Data Sets: Bridges CDC program records American Community Survey data (Census) Equality of Opportunity Project (Harvard) Kids Count Other: Child care and social services research literature ACF guidance and technical assistance	1. Retrospective examination of administrative data sets pertaining to subsidy application, approval, renewal, and retention beginning July 2014, around key policy changes for families and providers Subsidy applicant, recipient demographics 12-month eligibility period Graduated exit Increased income thresholds Delinked provider assignment from approval Provider payment increases	1a. Annual refinement of research plan 1b. Data pulled and analyzed 1c. Interim findings reporting	1a. Identification of any differences among families applying for, receiving, and utilizing the subsidy since policy changes 1b. Identification of provider continuity trends by family demographics since policy changes 1c. Increased employment rate for PATH enrollees with child care subsidies post policy changes 1d. New policy/procedure decisions informed by findings	Child care subsidy accessed by population in need Continuity of care with high-quality providers among subsidy-assisted families Improved employment and employment retention among PATH participants High degree of satisfaction of providers and families with the subsidy program Close alignment of MDE/OGS and MDHHS policies involving shared customers and programming Strong tie between research, data, and
	2. Partner team meets regularly for: Grant management Data-collection planning Research findings review Administrative document review Policy-alignment progress Discussion/semi-structured interviews of key State staff	2a. Up-to-date project work plan 2c. Map of policy intersection/alignment analysis 2c. Documentation of policy change decision-making (self-assessments completed)	2a. Coordinated grant activity, in keeping with the project timeline and work plan 2b. Identification of opportunities to better align policies between MDE/OGS and MDHHS 2c. Application of research findings to policy decision-making	
	3. Institute MDE-MDHHS policy alignment linked with child care subsidy and family economic stability, including: Areas of commonality Areas of misalignment Policy changes to improve alignment	3a. Documentation of areas of commonality 3b. Documentation of areas of misalignment 3c. Documentation of policy changes and improved alignment	3a. Increased understanding of areas of policy alignment and misalignment within MDE/OGS and MDHHS programs 3b. Identification of new policy changes to enhance child care access	

INPUTS	ACTIVITIES	OUTPUTS	OUTCOMES	IMPACTS
	4. Collect stakeholder input on policy changes and opportunities to increase subsidy application and uptake, support parent employment, improve provider consistency, and access to quality care Subsidy recipient focus groups Provider telephone interviews Caseworker surveys	4a. Representative stakeholder sampling conducted 4b. Partnerships leveraged to maximize target stakeholder participation 4b. Data collected and analyzed 4c. Interim findings reporting	4a. Subsidy families' feedback applied to improve policies and outcomes 4b. Providers' feedback applied to improve policies and outcomes 4c. Applications increase over time 4d. Uptake of subsidy increases over time 4e. Increased continuity of care with high-quality providers	policymaking about child care subsidy
	5. Participate in CCPRP and other relevant meetings and conferences to share and capture new learning CCPRP meeting Child Care and Early Education Policy Research Conference (CCEEPRC) State and Territories CCDF Administrators Meeting (STAM) National Research Conference on Early Childhood (NRCEC)	5a. Attendance at grantee meetings 5b. Attendance at conferences 5c. Presentations of findings/learning to others	5a. Michigan research informs other CCDF lead agencies and ACF 5b. New ideas brought to Michigan from other CCPRPs	
	6. Disseminate results of the research to diverse stakeholder audiences within Michigan and beyond Reports Presentations/webinars Briefs and other short summaries Social media Partner e-newsletters Other as needed for target audience	6a. Stakeholder audiences and formats identified 6b. Partner networks leveraged 6c. Research findings and implications communicated to key stakeholder groups in Michigan and elsewhere via various means over course of the grant	6a. Michigan stakeholders better understand the effects of policy changes over time for families and providers 6b. ACF, state and regional agencies, and research organizations are positioned to apply Michigan research findings to broader policy discussions 6c. Identification of future research opportunities on policy changes to enhance child care access	
	Mediating Factors: External policy levers, economic conditions, annual budget allocations, local and state partner key staffing changes, technology enhancements, new literature/other CCPRP findings			

APPENDIX B: RESEARCH QUESTIONS AND HYPOTHESES

1. What is the impact of changes to child care subsidy policy by state agencies related to clients and providers on client outcomes? Outcomes are understood as application for subsidies, enrollment and uptake of services, retention and re-enrollment, continuity of care, quality of provider, and labor market outcomes.
2. What is the differential impact of policy change on highly disadvantaged subgroups? Particular attention will be paid to racial and ethnic minorities, families in deep poverty, and those with less education.
3. To what extent do local child care market conditions mediate the impacts of changes to subsidy policy?
4. What opportunities do families, providers, and caseworkers see for improvements in the application, award, renewal, and utilization processes?
5. How have the Michigan Department of Education and the Michigan Department of Health and Human Services collaborated to improve the access of families to child care subsidies since passage of the CCDBG Act of 2014, retrospectively and through the course of the Michigan Child Care Policy Research Partnership (CCPRP) grant period?

Hypothesis 1a: Changes in child care subsidy policy are associated with increased application rates by eligible families.

Hypothesis 1b: Changes in child care subsidy policy are associated with increased subsidy enrollment and utilization rates by applicants.

Hypothesis 1c: Changes in child care subsidy policy are associated with greater rates of re-enrollment, longer mean spell lengths, and lower exit rates.

Hypothesis 1d: Changes in child care subsidy policy are associated with longer mean lengths at the same child care provider, lower exit rates from particular providers, and a lower percentage change in providers by families.

Hypothesis 1e: Changes in child care subsidy policy are associated with higher Quality Rating and Improvement System (QRIS) ratings of providers selected by consumers of the child care subsidy.

Hypothesis 1f: Changes in child care subsidy policy are associated with increased subsidy use by PATH clients and higher labor force participation for those that utilize the subsidy.

Hypothesis 2: Child care subsidy policy changes are associated with reduced inequalities in applications, utilization, stability, continuity of care, quality of care, and labor market outcomes by education, poverty, and race and ethnicity.

Hypothesis 3: Local child care market and economic conditions will have a statistically significant moderating impact on the associations examined in Hypothesis 1 and Hypothesis 2.

Hypothesis 4: Changes in child care subsidy policy will be associated in more positive evaluations of the CDC program by clients, providers, and caseworkers.

Hypothesis 5: The alignment of child care subsidy policies and collaboration by MDE and MDHHS will improve as a result of CCPRP activities.

APPENDIX C: DETAILED DATA AND METHODS

Secondary Data

Development of Measures

A combination of public secondary data sources was used to estimate the impact of Child Care and Development Block Grant (CCDBG)—reauthorization-related policy changes between 2015 and 2017—using interrupted time series (ITS) statistical techniques. Public Policy Associates, Inc.(PPA) included a pre-policy change period of 2013-2014 and post-change period going out through 2018 as part of the ITS.

Program utilization was drawn from state reporting. The Michigan Department of Health and Human Services (MDHHS) Green Book of Key Program Statistics is a monthly publication that includes total number of subsidy recipients, families, and all children designated as eligible to receive the subsidy who participate in the state's online social services system, MI Bridges. These data are available for each of Michigan's 83 counties.

The number of children and proportion likely qualified to participate in the CDC program in each county and for the state as a whole were estimated using American Community Survey (ACS) data. The ACS is a large-scale survey of households and families conducted annually by the U.S. Census Bureau. It has many of the components of the historic "long form" census. The ACS survey samples by state, but also by Public Use Microdata Areas (PUMAs), which are groups of census tracts totaling at least 100,000 persons. Whenever possible, PUMAs are drawn to match county boundaries. However, when counties have substantially less than 100,000 persons they are grouped together and sampled jointly, while high-population counties are divided into multiple PUMAs.

As with all surveys, the precision and reliability of estimates are partly dependent on the size of the sample. Because the ACS samples in many counties (or even groups of counties) can be quite small, we used ACS's five-year estimates. These are rolling averages that include years of data, which increases sample sizes and improves confidence in the estimates for smaller sub-populations. Because PUMAs are modified after every decennial census, we used the PUMA boundaries that were consistent across census categories, as developed by the ipums.org website.

The following variables were used to estimate the number of children in Michigan potentially qualified for the Child Development and Care (CDC) program: the presence in the household of a child under the age of 13, family income at or below program entry eligibility limits, and all parents in the household being either employed or in school. This is a simplification of Michigan's CDC eligibility rules (for example, foster children are not considered for the estimation) but does capture the most important criteria for program eligibility. It is important

to note that the income threshold for eligibility in this analysis is program entry, not retention in the program. This is partly because Michigan changed its policy during the study period (through the graduated exit), so the entry level was used to create a more stable longitudinal measure. Further, income threshold levels for families were based on that calendar year's CDC handbook and income eligibility tables, with the exception of the October 2017 change in the income limit, where thresholds are increased to the new limit for the last three months of the year. Children in group facilities (e.g., correctional facilities, shelters, group homes) were excluded from the study sample.

To generate county-level estimates of the number of children who might qualify for the CDC program, PUMAs in multi-PUMA counties (i.e., high-population counties) were merged to establish pooled county totals. For multi-county PUMAs (i.e., low-population counties), the proportion of children who could qualify was estimated as the same for all counties in the PUMA. The total number of under-13 children in each county was obtained from five-year ACS county-level estimates of number of children 11 and under (from Table B17024). To create an estimate of the number of all children under 13, this figure was multiplied by 9.09%. This method assumes that the number of 12 and under children in a given county is perfectly correlated with the number of 11 and under children.

An additional adjustment was made for the PUMA that represents the City of Flint. In response to the Flint Water Crisis, all children living in Flint since 2017 are eligible for CDC subsidies. The estimated total population of children ages 12 and under living in Flint was substituted as the population that would potentially be qualified for the subsidy.

Analysis of Program Impact

The ITS analysis was conducted for three different periods in which there were changes in CDC policy of interest to this study:

- Intervention 1: Graduated exit and 12-month eligibility (July 2015)
- Intervention 2: Delinked provider assignment (October 2016)
- Intervention 3: Provider rate increases and increased income eligibility limit (August 2017 and October 2017).

The number of months before and after the policy change was constrained by the advent of the next policy change. For example, the two-policy cluster (intervention 1) compares trends over 12 months prior to the new policy (July 2014 to June 2015) to trends in the 12 months afterwards (July 2015 to June 2016), for a total of 24 time points. The number of months for policy intervention 2 is only 20 months, however, because any additional time would overlap with the cluster of policies within intervention 3. The analysis of intervention 3 also includes 20 months so as not to begin before the adoption of intervention 2. Finally, because provider rate increases and increases in the income limits occurred closely in time (August and October 2017), they are treated as a single policy intervention for purposes of the ITS, which requires excluding the August and September 2017 data from the analysis.

ITS analyses were conducted using STATA statistical software. Two different models were employed: (a) an aggregated model that pooled all outcomes in the state and (b) a fixed-effects regression model that used changes within each county to generate an overall estimate. The fixed-effects analysis has the advantage of controlling for all time-invariant factors and producing estimates that take county-level differences into account. This model also exploits the fact that the data is a fully balanced longitudinal panel. The aggregate model was tested using STATA's ITSA package using Newey-West standard errors. The county fixed-effects model used the XTREG command with standard errors clustered by county to account for potential heteroscedasticity and autocorrelation.[37] These are simple models that estimate differences in mean outcomes and trends before and after the policy change, without additional covariates. Differences in means are measured using a dummy variable (1/0 before and after the policy change). Differences in trends are measured with pre-change and post-change trend variables.

Auxiliary Analysis

The results of the statewide aggregate ITS are presented in the main narrative. The results of the county fixed-effects model are presented in Table C-1. In most instances the coefficients and significance levels are very similar to those found in the statewide aggregate model, which suggests that overall results are not primarily driven by a few large or outlier counties. The coefficients for number of recipients are much smaller, but this is to be expected given that the county-level model estimates averages changes within individual counties (many of which are quite small), rather than state totals. There are several incidents in which the county fixed effects differ somewhat from the statewide aggregate model, however. For intervention 1, the county fixed-effects model found that differences in the proportion of potentially qualified children pre and post change were statistically significant, while the aggregate model (although also positive), did not show statistically significant results. The results are reversed with respect to change in the percentage of approved children that were participants, where the declines were statistically significant in the aggregate model but not the county-level model. For intervention 3, increases in the share of potentially qualified children that were approved and became participants were statistically significant in the county-level model but not in the state-level model. In short, the county fixed-effects model found slightly stronger results than the aggregate model.

[37] Other aggregate and panel models (including both fixed and random effects) were explored and produced similar estimates.

Table C-1. County Fixed-Effects Model – Difference in Trends

Intervention	Outcome	Pre Trend	Post Trend	Difference
Intervention 1	% Potential Approved	-0.30%* (0.04%)	0.25%* (0.04%)	0.55%* (0.06%)
Intervention 1	Participants	-6.42* (1.72)	1.62* (0.74)	8.04* (2.40)
Intervention 1	% Potential Participants	-0.23%* (0.04%)	0.07%* (0.03%)	0.30%* (0.05%)
Intervention 1	% Approved Participants	0.01% (0.11%)	-0.56%* (0.09%)	-0.56%* (0.15%)
Intervention 2	% Potential Approved	0.27%* (0.04%)	0.64%* (0.06%)	0.37%* (0.08%)
Intervention 2	Participants	3.52* (1.13)	4.57* (1.76)	1.05 (0.85)
Intervention 2	% Potential Participants	0.14%* (0.04%)	0.26%* (0.04%)	0.12%* (0.06%)
Intervention 2	% Approved Participants	-0.26% (0.15%)	-0.37%* (0.12%)	-0.11% (0.20%)
Intervention 3	% Potential Approved	0.64%* (0.06%)	0.36%* (0.05%)	-0.28%* (0.08%)
Intervention 3	Participants	4.57* (1.76)	3.53* (1.33)	-1.05 (0.62)
Intervention 3	% Potential Participants	0.26%* (0.04%)	0.23%* (0.03%)	-0.02% (0.05%)
Intervention 3	% Approved Participants	-0.37%* (0.12%)	0.12% (0.09%)	0.49%* (0.14%)

*p<.05

In addition to changes in longer-term trends, the ITS analysis also estimated short-term differences in outcomes, that is, whether there was an immediate departure from the previous trend. The differences in level (as opposed to differences in trend) for the statewide and county fixed-effects models are presented in Tables C-2 and C-3.

Table C-2. Statewide Aggregate Model – Difference in Level

Intervention	% Potential Approved	Participants	% Potential Participants	% Approved Participants
Intervention 1	1.67%* (0.33%)	2344.22* (610.81)	1.06%* (0.28%)	-0.84% (0.90%)
Intervention 2	1.01%* (0.27%)	-2640.05* (571.51)	-1.43%* (0.26%)	-8.19%* (0.97%)
Intervention 3	-1.34%* (0.68%)	24.64 (382.59)	-1.55%* (0.70%)	-2.71%* (1.27%)

*p<.05

Table C-3. County Fixed-Effects Model – Difference in Level

Intervention	% Potential Approved	Participants	% Potential Participants	% Approved Participants
Intervention 1	1.53% (0.27%)	26.24 (7.54)	1.33% (0.26%)	0.53% (0.92%)
Intervention 2	0.01% (0.26%)	-36.58 (10.57)	-1.50% (0.24%)	-7.97% (1.23%)
Intervention 3	-4.70% (0.46%)	-15.02 (5.96)	-3.59% (0.34%)	-3.63% (0.96%)

Lastly, the policy coordination analysis revealed some ambiguity in the implementation of the 12-month redetermination period—one of the two policies in intervention 1. Although the policy was officially instituted in July 2015 (at the same time as graduated exit), state agency staff reported in the policy coordination self-assessments that the change in the redetermination period was not fully adopted until September 2015. Unfortunately there were no available measures of fidelity of implementation that would make it possible to directly estimate the impact of a phased-in policy. As an alternative, we re-ran the ITS with a two-month break in the trend lines, comparing the trends before July 2015 to the trends beginning in September 2015. We then compared the results with the original analysis, which modeled the intervention as taking place fully beginning in July 2015. The coefficients for all four outcomes for clients, estimated using the county fixed-effects and statewide aggregate models, are presented in Table C-4. Pre-intervention trends are excluded from the table because these were identical for both sets of analysis.

As is evident from Table C-4, there were very few major differences in the estimated impact of intervention 1 whether the intervention was modeled as beginning in July 2015 or September 2015. There was only one instance in which the difference in coefficients was statistically significant, and only a handful where there was a change in level of statistical significance (i.e., in one model the estimate was statistically significant but not the other). The implications of these similar findings are unclear without individual-level administrative data which would make it possible to determine whether the graduated exit or change in redetermination had a stronger impact on remaining in the program. This analysis will be conducted in forthcoming work.

Table C-4. Comparing Original to Revised ITS for Intervention 1

Outcome	Model	Variable	Original	Revised	Difference
Participants	Aggregate	Post Trend	132.13* (45.51)	122.17* (46.01)	9.95
		Difference	666.84* (75.44)	656.89* (76.95)	9.95
		Mean	2344.22* (610.81)	2792.88* (591.80)	448.67
	County FE	Post Trend	1.62* (0.74)	1.00 (0.59)	0.62†
		Difference	8.04* (2.40)	7.42* (2.23)	.62
		Mean	26.24* (7.54)	31.75* (9.26)	5.51
% Potential Participants	Aggregate	Post Trend	0.12%* (0.02%)	0.11%* (0.02%)	0.01%
		Difference	0.39%* (0.04%)	0.38%* (0.04%)	0.01%
		Mean	1.06%* (0.28%)	1.39%* (0.29%)	0.33%
	County FE	Post Trend	0.07%* (0.03%)	0.05% (0.03%)	0.02%†
		Difference	0.30%* (0.05%)	0.28%* (0.05%)	0.02%
		Mean	1.33%* (0.26%)	1.48%* (0.31%)	0.15%
% Approved Participants	Aggregate	Post Trend	-0.39%* (0.10%)	-0.32%* (0.07%)	0.07%
		Difference	-0.34%* (0.16%)	-0.28%* (0.14%)	0.07%
		Mean	-0.84% (0.90%)	-2.12%* (0.90%)	1.29%†
	County FE	Post Trend	-0.56%* (0.09%)	-0.46%* (0.10%)	0.09%
		Difference	-0.56%* (0.15%)	-0.47%* (0.14%)	0.09%
		Mean	0.53% (0.92%)	-0.26% (1.21%)	0.26%*
% Potential Approved	Aggregate	Post Trend	0.30%* (0.04%)	0.27%* (0.02%)	0.03%
		Difference	0.65%* (0.05%)	0.62%* (0.03%)	0.03%
		Mean	1.67%* (0.33%)	2.50%* (0.25%)	0.83%*
	County FE	Post Trend	0.25%* (0.04%)	0.21%* (0.04%)	0.04%
		Difference	0.55%* (0.06%)	0.51%* (0.06%)	0.04%
		Mean	1.53%* (0.27%)	1.90%* (0.31%)	0.37%

*p<.05. † Difference in statistical significance between analyses.

Limitations

The ITS analysis presented above has three major limitations. First, the model assumes that the only factors that changed before and after the intervention was the policy. The approach used does not explicitly model other policy changes or differences in context that might also contribute to the movement in the outcome variables.

Second, the model does not include a comparison or control group. Because this study is focused on a single state, and policy changes were adopted for every county in the state, it was not feasible to compare the results to another group—which might have helped address the first limitation mentioned above. One potential strategy for addressing this limitation that should be considered in future research would be to gather implementation data at various points in the state. Although this approach would carry the risk of endogeneity (delays in implementation could themselves be due to factors affecting the outcomes), it would improve causal identification.

Third, the analysis relies on aggregate data. Although the statewide and county fixed-effects results provide reasonable evidence that the policy changes (especially the first set of policy changes) were associated with increases in subsidy utilization, the aggregate character of the data may mask important differences in utilization or control for individual-level covariates that could also account for outcomes. An individual-level model using case-level administrative data would likely produce stronger results.

Primary Data

Survey of Eligibility Specialists

In coordination with MDHHS, PPA disseminated an online survey targeted to their eligibility and family independence specialists (specialists) who support families seeking or receiving child care assistance through the CDC program. The purpose of the survey was to assess the efficacy, challenges, and potential improvements related to child-care policies, especially with respect to application and eligibility.

The survey was designed to help answer the research question: "What opportunities do families, providers, and caseworkers see for improvements in the application, award, renewal, and utilization process?" The topics covered in the survey included specialists' experience assisting clients, subsidy challenges, suggestions for improvement, program understanding, perceived impacts of policy changes, overall effectiveness of subsidy program, as well as information about the specialists' backgrounds.

Survey Development Process

The survey was developed using an iterative process that included three stages:

- *Drafting*. PPA drafted survey questions with input from the State agency partners. The survey draft, as part of the larger study package, was sent to the Institutional Review Board for review and was determined exempt from review.
- *Pre-piloting*. The survey was reviewed by and feedback received from three MDHHS eligibility specialists that were selected for participation by MDHHS. The survey was reworded slightly based on feedback.
- *Piloting*. The survey was piloted with a sample of 44 specialists from MDHHS across the state's four Business Service Center (BSC) regions. The specialists were identified for participation by BSC supervisors. Responses were received from 41 eligibility specialists (a 93% response rate).
  - The responses to open-ended questions were coded thematically and converted into close-ended questions based on prevailing themes identified in the responses as well as input from MDHHS and Michigan Department of Education (MDE) partners.
  - PPA also conducted a reliability analysis and tests of dispersion and bias on the results of the survey pilot. No revisions were made based on the results of this analysis, as the items demonstrated good statistical properties.

Timeline and Outreach Procedures

The survey was disseminated to all MDHHS eligibility specialists on March 15, 2020 and remained open until May 17, 2020. The survey was initially scheduled to close on an earlier date, but at the request of the MDHHS, the deadline was extended. A low initial response rate may have been due to the onset and early weeks of the COVID-19 pandemic during the survey period.

The survey was disseminated to 3,238 eligibility and family independence specialists via an email from the MDHHS central office that contained a link to the survey. Responses were collected using SurveyMonkey. All specialists, regardless of whether they had already responded to the survey, received 5 reminder emails. No incentives were provided for participation in the survey. The first page of the survey contained language about the voluntary nature of the survey, confidentiality, and consent to participate in the research.

Response Rate

Out of 3,238 specialists, 1,044 took the survey (a response rate of 32%). Of the respondents, 897 (86%) had worked with CDC clients and their responses could be used for analysis. Survey completion took an average of 9 to 10 minutes.

PPA analyzed response rates within each BSC using two different methods, the percentage of specialists in each BSC that responded to the survey (Table C-5) and by comparing the share of

survey respondents in each BSC to the share of specialists in each BSC. Findings indicate that there was a higher response rate in BSC 3 and a lower response rate in BSC 4. As indicated in Table C-6, responses were within the targeted range for BSCs 1 and 2, as the share of total respondents with a known BSC was similar to the share of specialists in each BSC. Nearly 32% of respondents did not indicate their BSC region; this limits the ability to determine the representativeness of the respondents by BSC region.

Table C-5. Percentage of Eligibility Workers in Each BSC that Responded to the Survey

BSC	Total Respondents	Total ES	Respondents as % of ES
BSC 1	55	260	21%
BSC 2	151	673	22%
BSC 3	206	698	30%
BSC 4	302	1,607	19%
Unknown[38]	330	-	-
Total	**1,044**	**3,238**	**32%**

Table C-6. Share of Eligible Survey Respondents in Each BSC Compared to Share of Eligibility Specialists in Each BSC

BSC	Total Respondents	Share of Respondents	Number of ES	Share of total ES
BSC 1	55	8%	260	8%
BSC 2	151	21%	673	21%
BSC 3	206	29%	698	22%
BSC 4	302	42%	1,607	50%
Total (known BSC)	**714**	**100%**	**3,238**	**100%**

Analysis

As part of data cleaning, write-in responses were reviewed and if appropriate, re-coded into the existing answer options. For example, a respondent may have written in "all of the above" to the "other" answer choice instead of selecting each answer choice.

Frequency distributions were calculated for all survey respondents using STATA. The results presented in the main narrative are unweighted counts, which exclude missing responses. Frequencies were also estimated with weighting by BSC to accommodate the higher share of

[38] The BSC was unknown for 183 eligible survey respondents as well as the 147 respondents that were screened out as ineligible (the survey screened out ineligible participants before asking them to identify their BSC).

respondents in BSC 3 and the lower share of respondents in BSC 4. However, the weighted frequencies were virtually indistinguishable from the unweighted results. Differences in responses by caseworker experience, BSC, and frequency of working with subsidy clients were estimated using a chi-square test.

Limitations

The most important limitation of the eligibility specialist survey is the potential for non-response bias. Although robustness tests weighting by BSC suggest that differential response rates by region are unlikely to affect the outcomes, as with all surveys there is a risk that non-respondents would register different opinions than those who chose to respond. Unfortunately it was not feasible to conduct additional analysis on survey responses (such as multiple imputations) because specialist background information had higher rates of missing data.

In addition, there was limited information on the characteristics of the entire universe of eligibility specialists (other than by BSC); for instance, there was no available information on the average rates of experience or frequency of interaction with CDC clients for the universe of eligibility specialists, which means that it was difficult to determine the representativeness of the respondent population on these characteristics. As noted above, almost a third of specialists did not record their BSC. However, we were able to manually match some respondents to their BSC through data on the county in which they work.

In addition, as previously mentioned, the survey was disseminated at the same time that Michigan was shutting down due to the COVID-19 pandemic. This may have affected the response rate to the survey as specialists were dealing with unusual demands and other changes within their environments.

Provider Interviews

PPA conducted telephone interviews with child care providers in Michigan for the purpose of assessing the efficacy, challenges, and potential improvements related to child care assistance (also called subsidies or vouchers) policies with respect to application and eligibility. The interviews were intended to help answer the research question: "What opportunities do families, providers, and caseworkers see for improvements in the application, award, renewal, and utilization process?"

To be eligible to participate in the interviews, child care providers needed to have been working with or had worked in the past three months[39] with at least one child who had received CDC assistance. The interviews were limited to one person per provider. Only licensed child care centers and homes were interviewed.

[39] The intent at the outset was to only interview child care providers who were currently serving CDC assistance clients; however, this was expanded to providers who had very recently had CDC subsidy clients due to the onset of the COVID-19 pandemic and the closure of businesses, which reduced the number of children enrolled with child care providers.

Timeline and Pandemic Context

The interviews were originally anticipated to be completed by the end of April but the data collection period was extended into June, like the survey due to concerns about the pandemic and garnering participation.

Interview Content and Development Process

The development of interview questions began with a review of the research literature. PPA developed a list of constructs (topics for inquiry) from the research literature and developed questions based on those constructs. Topics covered included experience with CDC-eligible clients, understanding and interpretation of the CDC program, challenges, suggested improvements, program effectiveness, and suggested policy changes.

Once the constructs and questions had been developed, the questions were shared with State agency partners. Each partner provided detailed feedback on the instruments. During the feedback process, each partner shared the instruments with internal teams who vetted the questions. The feedback was especially helpful in terms of the terminology used in the field.

Outreach and Recruitment Process

The selection process was designed so that interviews could be conducted with providers that represented each provider type (licensed centers, licensed family homes, and licensed group homes) within each of the four BSCs. Child care providers were randomly selected to be invited to interview from publicly available contact information obtained from the MDE's Great Start to Quality dataset.

To ensure representativeness of interviewees, PPA divided the dataset into 12 strata (one of the three provider types within the four BSCs). Using an Excel® function, random numbers were assigned to providers, which in turn were used to establish a contact order within each stratum. PPA then reached out to 48 providers (4 in each of the 12 strata). Outreach was conducted through email or phone if an email address was not listed or inaccurate in the dataset.

For providers with known emails, PPA sent out up to two email invitations via SurveyMonkey to schedule phone interviews. The messages were from an MDE email address. The email invitation directed providers to a short SurveyMonkey registration form. If no response was received, a second email was sent out three business days later. If an email bounced, contact was attempted by phone.

The majority of providers did not have a publicly available email address, however, and PPA staff called providers to schedule phone interviews using a call script. If no response was received with the initial call and interview slots remained available for that BSC and provider type, another call was placed for a maximum of two attempts.

Once outreach was completed for the first batch of 48 randomly selected providers, further contacts for providers were randomly drawn for outreach (based on the randomized draw used for the initial outreach). Additional outreach was only conducted for providers in strata where interview slots were still available or unfilled. A reminder email was sent or phone call attempt made to each provider who had agreed to an interview within days of the interview date.

Interviews and Analysis

The average interview lasted about 20-25 minutes. Interview notes were taken in real time and interviews were recorded for the purpose of verifying the notes. The notes and recordings were kept confidential.

During the interview, the interviewer asked for the consent of the provider to be recorded at the start of the phone call, prior to asking any interview questions. Interviewees were given an incentive of $50 for completing the interview.

PPA initially planned to complete 24 interviews with six from each BSC (two per provider type: licensed centers, licensed family homes, and licensed group homes). PPA ended up completing a total of 21 interviews with only 5 of the 6 desired interviews completed in BSCs 1, 2, and 3. For each of BSC 1 and 2, only one of the two planned interviews of licensed centers could be completed. For BSC 3, only one of the two planned interviews of group home providers was completed. All planned interviews were completed for BSC 4.

Table C-7. Number of Interviews Conducted with Eligible Providers by Provider Type and BSC

Strata	BSC	Provider Type	Number of IWs Completed
1	1	Licensed Center	1
2	1	Licensed Family Home	2
3	1	Licensed Group Home	2
4	2	Licensed Center	1
5	2	Licensed Family Home	2
6	2	Licensed Group Home	2
7	3	Licensed Center	2
8	3	Licensed Family Home	2
9	3	Licensed Group Home	1
10	4	Licensed Center	2
11	4	Licensed Family Home	2
12	4	Licensed Group Home	2
Total	**-**	**-**	**21**

Interview responses were analyzed and coded thematically using NVivo software. The coding scheme was designed in accordance with the research questions and the interview questions. Responses were further categorized in thematic areas based on the opinions expressed.

Limitations

The small number of interviews is a key limitation on the interview findings. Although every region and provider type is represented, the interviews do not represent every provider type within every region and are not necessarily representative of the collective views of all provider types.

Non-response bias is another important limitation. Although some providers were more available as a result of the ongoing COVID-19 pandemic, others did not respond to repeated requests for interviews, had to cut interviews short, or did not respond to the interviewer's phone call at the appointed time, and non-respondents may have had different characteristics or opinions from those who did respond.

A key limitation on the interview data analysis is that the interpretation of the data was based on the judgment of the researchers who read, coded, and drew interpretations from the qualitative results from the interviews. Although multiple researchers were involved in the analysis and reporting process, which may have helped reduce the potential for bias, other researchers could potentially interpret these qualitative data differently.

Policy Coordination Self-Assessment

The assessment sought to understand how effectively the State agency partners felt they had coordinated to implement these changes for the CDC program. This activity was conducted in pursuit of the research question: How have the MDE and the MDHHS collaborated to improve the access of families to child-care subsidies since passage of the CCDBG Act of 2014, retrospectively and through the course of the Michigan Child Care Policy Research Partnership grant period?

Development Process

To develop the instrument, PPA conducted review of the existing research literature in order to identify indicators of successful policy coordination,[40] in addition to drawing on its team's experience conducting implementation evaluations of state and local programs.

The instrument and protocol was developed first by PPA, then the partners reviewed it for refinements in February 2020. PPA pre-populated the instrument with the purpose statement and description of agency roles (for reference). MDE pre-populated the date of policy adoption, description of pre-existing policy, how the policy was determined, and the intent of the policy change.

[40] Jenny Stonemeier, Barb Trader, Laura Kaloi, and Gabrielle Williams, "Indicators of Effective Policy Development and Implementation" (SWIFT Center Issue Brief 8, March 2016); V. Weyrauch, "How Can We Monitor and Evaluate Policy Influence? Toolkit No. 4" (Buenos Aires, Argentina: CIPPEC, 2012); Julia B. Issacs, Michael Katz, and David Kassabian, *Changing Policies to Streamline Access to Medicaid, SNAP, and Child Care Assistance: Findings from the Work Support Strategies Evaluation* (Washington, D.C.: Urban Institute, March 2016).

In addition to basic facts about the policy changes, the instrument asked the partners (from their own perspectives) to rate the degree of alignment between the policy and the agency's mission, the state of policy implementation, the quality of interagency communication, the degree of implementation cooperation, how well the change met the intended purpose, and potential for further improvement on the policy. The instrument asked partners to note any unintended consequences of the policy change and supports to the policy implementation.

Assessment Fielding

Between March and May 2020, MDE and MDHHS each formed a small team of staff to complete the self-assessment for their agency. The team for MDE included the CCPRP project lead from MDE, who is also the director for the CDC program, as well as four other staff of the Office of Great Start who work with the CDC program. The team for MDHHS included the CCPRP project lead from MDHHS in addition to a Business Resource Center staff person, a first-line manager of eligibility specialists, and a Business Service Center Assistance Payment Specialist.

Analysis

Once each agency had completed the self-assessment, PPA staff reviewed the results and met separately with each agency to gather additional explanation where needed. To analyze the results of the self-assessments, PPA staff combined the assessment scores and notes into an Excel worksheet, then calculated averaged ratings for each item. In May 2020, the CCPRP partners met to review the results jointly and discuss implications for future policy enhancements and coordination efforts.

Limitations

As this was a self-assessment, the ratings resulting from the instrument have limitations for objective measure of policy coordination across the two State agencies. In addition, there was a three- to five-year gap between the policy implementation dates and the self-assessment completion.

Appendix D: Policy Coordination Self-Assessment

Child Care Policy Research Partnership
Policy Coordination Self-Assessment, 2020

Purpose:

To reflect on the policy coordination that occurred around select policy changes across agencies involved with the Child Development and Care program, as well as to clarify the timelines for these changes and their implementation for forthcoming analysis of secondary program data.

Description of Agency Roles:

MDE: The Office of Great Start within the Department of Education is charged with ensuring that all children from birth to age 8 have access to high-quality early learning and development programs and enter kindergarten prepared for success. MDE/OGS is the lead agency for the CDC program in Michigan. MDE/OGS prioritizes and coordinates technology changes affecting CDC with MDHHS. For the CCPRP project, MDE/OGS provides CDC program data, contributes to the research plan, assists in collaboration with early childhood statewide partners, facilitates and contributes to dissemination of findings, participates in discussion about the application of findings, and otherwise uses the research to support ongoing CDC program improvement.

MDHHS: The Department of Health and Human Services oversees funding and programming involving foster care and adoption, child support, abuse and neglect, infant health, vital records, crime victim services, aging and adult services, and other critical human services and related roles. It performs eligibility screening and case management for TANF, SNAP, Medicaid, and the CDC program. MDHHS operates the systems utilized by the CDC program, parents, and providers for eligibility and payments, including Bridges and I-Billing applications. For the CCPRP project, MDHHS provides Bridges data, contributes to research planning, engages with early childhood state partners to foster stakeholder input-gathering, facilitates and contributes to dissemination of the research findings, and participates in discussions about the application of the findings to policymaking and alignment with MDE/OGS.

Respondent:

Completed for: (agency)		MDE		MDHHS
Completed by: (names and titles)				

This Year's Focus:

Five key Michigan policies that were driven by the CCDBG Act of 2014 and instituted in 2015–2017:

I. Eligibility Policies:	**II. Rate Policy:**
• Initial eligibility gross monthly income limit is 130% of Federal Poverty Level	• Increased provider payments
• Delinked provider assignment from approval	
• 12-month eligibility period	
• Graduated exit	

Policy 1: Eligibility Income Limit						
1.1	**Date of Policy Adoption:** (regulation)			October 1, 2017		
1.2	**Description of Pre-Existing Policy:**			Income entrance 125% FPL		
1.3	**How New Policy Was Determined:**			Income entrance increased to 130% FPL. (Legislative action)		
1.4	**Intended Purpose of Policy Change:**			Expand child care assistance to high quality child care to support eligible families by increasing the entrance eligibility limit.		
1.5	**Degree of Alignment with Agency Mission and Goals:** (answer for own agency)					
	MDE:	1-poor	2-acceptable	3-good	4-excellent	
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent	
	Notes on 1.5:					
1.6	**Status of the Policy Implementation:** (answer for own agency)					
	MDE:	1-not implemented	2-somewhat implemented	3-mostly implemented	4-fully implemented	
	MDHHS:	1-not implemented	2-somewhat implemented	3-mostly implemented	4-fully implemented	
	Notes on 1.6:					
1.7	**Date of Full Policy Implementation:** (in the field)					
1.8	**Tools that Support(ed) Implementation:** (e.g., technology, resources)					
1.9	**Quality of Interagency Communication About Policy Change:** (answer for own agency)					
	MDE:	1-poor	2-acceptable	3-good	4-excellent	
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent	
	Notes on 1.9:					
1.10	**Degree of Interagency Cooperation in Implementing Change:** (answer for own agency)					
	MDE:	1-poor	2-acceptable	3-good	4-excellent	
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent	
	Notes on 1.10:					
1.11	**Extent to Which Policy Change Achieved Intended Purpose:** (answer for own agency)					
	MDE:	0-unknown at this time	1-did not fulfill purpose	2-somewhat met purpose	3-mostly met purpose	4-fulfilled purpose
	MDHHS:	0-unknown at this time	1-did not fulfill purpose	2-somewhat met purpose	3-mostly met purpose	4-fulfilled purpose
	Notes on 1.11:					
1.12	**Unintended Consequences of This Policy Change:**					
1.13	**Other Policies That Complicated This Policy Change:**					
1.14	**Other Policies That Facilitated This Policy Change:**					
1.15	**Potential for Further Improvement of This Policy:** (answer for own agency)					

	MDE:	1-none	2-unlikely	3-good	4-excellent
	Suggestions:				
	MDHHS:	1-none	2-unlikely	3-good	4-excellent
	Suggestions:				
	Notes on 1.15:				

Policy 2: Delinked Provider Assignment

2.1	**Date of Policy Adoption:** (regulation)	October 1, 2016				
2.2	**Description of Pre-Existing Policy:**	A provider assignment was required to approve a CDC application, and once open, for CDC to remain open.				
2.3	**How New Policy Was Determined:**	Requiring a provider to approve a CDC application was creating a barrier for families at application if they hadn't already identified/chosen a provider. (Feedback from the field)				
2.4	**Intended Purpose of Policy Change:**	To allow parents time to find a high quality provider at application, and when there is a gap in provider in assignments.				
2.5	**Degree of Alignment with Agency Mission and Goals:** (answer for own agency)					
	MDE:	1-poor	2-acceptable	3-good	4-excellent	
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent	
	Notes on 2.5:					
2.6	**Status of the Policy Implementation:** (answer for own agency)					
	MDE:	1-not implemented	2-somewhat implemented	3-mostly implemented	4-fully implemented	
	MDHHS:	1-not implemented	2-somewhat implemented	3-mostly implemented	4-fully implemented	
	Notes on 2.6:					
2.7	**Date of Full Policy Implementation:** (in the field)					
2.8	**Tools that Support(ed) Implementation:** (e.g., technology, resources)					
2.9	**Quality of Interagency Communication About Policy Change:** (answer for own agency)					
	MDE:	1-poor	2-acceptable	3-good	4-excellent	
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent	
	Notes on 2.9:					
2.10	**Degree of Interagency Cooperation in Implementing Change:** (answer for own agency)					
	MDE:	1-poor	2-acceptable	3-good	4-excellent	
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent	
	Notes on 2.10:					
2.11	**Extent to Which Policy Change Achieved Intended Purpose:** (answer for own agency)					
	MDE:	0-unknown at this time	1-did not fulfill purpose	2-somewhat met purpose	3-mostly met purpose	4-fulfilled purpose
	MDHHS:	0-unknown at	1-did not fulfill	2-somewhat	3-mostly met	4-fulfilled

		this time	purpose	met purpose	purpose	purpose
	Notes on 2.11:					
2.12	**Unintended Consequences of This Policy Change:**					
2.13	**Other Policies That Complicated This Policy Change:**					
2.14	**Other Policies That Facilitated This Policy Change:**					
2.15	**Potential for Further Improvement of This Policy:** (answer for own agency)					
	MDE:	1-none	2-unlikely	3-good	4-excellent	
	Suggestions:					
	MDHHS:	1-none	2-unlikely	3-good	4-excellent	
	Suggestions:					
	Notes on 2.15:					

Policy 3: 12-Month Eligibility

3.1	**Date of Policy Adoption:** (regulation)	July 1, 2015			
3.2	**Description of Pre-Existing Policy:**	CDC closure could occur at any time for many reasons, including loss of need reason or loss of provider assignment.			
3.3	**How New Policy Was Determined:**	In addition to federal rules requiring that CDC to remain open for 12 months, feedback from the field indicated eligibility uncertainty was a barrier. (Federal requirement and stakeholder feedback)			
3.4	**Intended Purpose of Policy Change:**	To comply with federal rules, and to provide children, parents and providers with the advantages that come with continuity of care.			
3.5	**Degree of Alignment with Agency Mission and Goals:** (answer for own agency)				
	MDE:	1-poor	2-acceptable	3-good	4-excellent
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent
	Notes on 3.5:				
3.6	**Status of the Policy Implementation:** (answer for own agency)				
	MDE:	1-not implemented	2-somewhat implemented	3-mostly implemented	4-fully implemented
	MDHHS:	1-not implemented	2-somewhat implemented	3-mostly implemented	4-fully implemented
	Notes on 3.6:				
3.7	**Date of Full Policy Implementation:** (in the field)				
3.8	**Tools that Support(ed) Implementation:** (e.g., technology, resources)				
3.9	**Quality of Interagency Communication about Policy Change:** (answer for own agency)				
	MDE:	1-poor	2-acceptable	3-good	4-excellent

	MDHHS:	1-poor	2-acceptable	3-good	4-excellent
	Notes on 3.9:				
3.10	**Degree of Interagency Cooperation in Implementing Change:** (answer for own agency)				
	MDE:	1-poor	2-acceptable	3-good	4-excellent
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent
	Notes on 3.10:				
3.11	**Extent to Which Policy Change Achieved Intended Purpose:** (answer for own agency)				
	MDE:	0-unknown at this time	1-did not fulfill purpose	2-somewhat met purpose	3-mostly met purpose	4-fulfilled purpose
	MDHHS:	0-unknown at this time	1-did not fulfill purpose	2-somewhat met purpose	3-mostly met purpose	4-fulfilled purpose
	Notes on 3.11:				
3.12	**Unintended Consequences of This Policy Change:**				
3.13	**Other Policies That Complicated This Policy Change:**				
3.14	**Other Policies That Facilitated This Policy Change:**				
3.15	**Potential for Further Improvement of This Policy:** (answer for own agency)				
	MDE:	1-none	2-unlikely	3-good	4-excellent
	Suggestions:				
	MDHHS:	1-none	2-unlikely	3-good	4-excellent
	Suggestions:				
	Notes on 3.15:				

Policy 4: Graduated Exit

4.1	**Date of Policy Adoption:** (regulation)	July 1, 2015
4.2	**Description of Pre-Existing Policy:**	Entrance eligibility and exit for eligibility were set at the same amount.
4.3	**How New Policy Was Determined:**	Federal rules require at least two tiers of income eligibility between entrance and exit, removing the cliff effect. (Federal requirement and stakeholder feedback)
4.4	**Intended Purpose of Policy Change:**	The additional tiers to make exit even more gradual, providing support to families as their income increases towards self-sufficiency.

4.5	**Degree of Alignment with Agency Mission and Goals:** (answer for own agency)				
	MDE:	1-poor	2-acceptable	3-good	4-excellent
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent
	Notes on 4.5:				
4.6	**Status of the Policy Implementation:** (answer for own agency)				
	MDE:	1-not implemented	2-somewhat implemented	3-mostly implemented	4-fully implemented

	MDHHS:	1-not implemented	2-somewhat implemented	3-mostly implemented	4-fully implemented
	Notes on 4.6:				
4.7	**Date of Full Policy Implementation:** (in the field)				
4.8	**Tools that Support(ed) Implementation:** (e.g., technology, resources)				
4.9	**Quality of Interagency Communication About Policy Change:** (answer for own agency)				
	MDE:	1-poor	2-acceptable	3-good	4-excellent
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent
	Notes on 4.9:				
4.10	**Degree of Interagency Cooperation in Implementing Change:** (answer for own agency)				
	MDE:	1-poor	2-acceptable	3-good	4-excellent
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent
	Notes on 4.10:				
4.11	**Extent to Which Policy Change Achieved Intended Purpose:** (answer for own agency)				
	MDE:	0-unknown at this time	1-did not fulfill purpose	2-somewhat met purpose	3-mostly met purpose	4-fulfilled purpose
	MDHHS:	0-unknown at this time	1-did not fulfill purpose	2-somewhat met purpose	3-mostly met purpose	4-fulfilled purpose
	Notes on 4.11:				
4.12	**Unintended Consequences of This Policy Change:**				
4.13	**Other Policies That Complicated This Policy Change:**				
4.14	**Other Policies That Facilitated This Policy Change:**				
4.15	**Potential for Further Improvement of This Policy:** (answer for own agency)				
	MDE:	1-none	2-unlikely	3-good	4-excellent
	Suggestions:				
	MDHHS:	1-none	2-unlikely	3-good	4-excellent
	Suggestions:				
	Notes on 4.15:				

Policy 5: Provider Payment Rate Increases

5.1	**Date of Policy Adoption:** (regulation)	August 1, 2017
5.2	**Description of Pre-Existing Policy:**	Hourly rates increases from 7/1/15 were for licensed/registered provider types.
5.3	**How New Policy Was Determined:**	8/1/17 provider rate increases (hourly rates) were for all provider types. (Legislative action)
5.4	**Intended Purpose of Policy Change:**	To reimburse providers at a rate more aligned with both the Market Rate Survey and what the general public pays. This rate increase also recognizes differences in

		the cost of care based on quality.			
5.5	**Degree of Alignment with Agency Mission and Goals:** (answer for own agency)				
	MDE:	1-poor	2-acceptable	3-good	4-excellent
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent
	Notes on 5.5:				
5.6	**Status of the Policy Implementation:** (answer for own agency)				
	MDE:	1-not implemented	2-somewhat implemented	3-mostly implemented	4-fully implemented
	MDHHS:	1-not implemented	2-somewhat implemented	3-mostly implemented	4-fully implemented
	Notes on 5.6:				
5.7	**Date of Full Policy Implementation:** (in the field)				
5.8	**Tools that Support(ed) Implementation:** (e.g., technology, resources)				
5.9	**Quality of Interagency Communication About Policy Change:** (answer for own agency)				
	MDE:	1-poor	2-acceptable	3-good	4-excellent
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent
	Notes on 5.9:				
5.10	**Degree of Interagency Cooperation in Implementing Change:** (answer for own agency)				
	MDE:	1-poor	2-acceptable	3-good	4-excellent
	MDHHS:	1-poor	2-acceptable	3-good	4-excellent
	Notes on 5.10:				

5.11	**Extent to Which Policy Change Achieved Intended Purpose:** (answer for own agency)					
	MDE:	0-unknown at this time	1-did not fulfill purpose	2-somewhat met purpose	3-mostly met purpose	4-fulfilled purpose
	MDHHS:	0-unknown at this time	1-did not fulfill purpose	2-somewhat met purpose	3-mostly met purpose	4-fulfilled purpose
	Notes on 5.11:					
5.12	**Unintended Consequences of This Policy Change:**					
5.13	**Other Policies That Complicated This Policy Change:**					
5.14	**Other Policies That Facilitated This Policy Change:**					

5.15	**Potential for Further Improvement of This Policy:** (answer for own agency)				
	MDE:	1-none	2-unlikely	3-good	4-excellent
	Suggestions:				
	MDHHS:	1-none	2-unlikely	3-good	4-excellent
	Suggestions:				
	Notes on 5.15:				

Appendix E: Regional Profiles

BUSINESS SERVICE CENTER 1

Michigan Child Care Subsidy Profile

Business Service Center (BSC) 1 covers 36 counties in northern Michigan and the Upper Peninsula. This brief draws from American Community Survey (ACS) microdata to estimate the number of children potentially qualified for a Child Development and Care (CDC) subsidy in all 83 Michigan counties between 2013 and 2018 (the last year ACS data is available) and the Green Book Reports of Key Program Statistics published by the Michigan Department of Health and Human Services, which provides the number of CDC participants (i.e., children with subsidies in use) in each county every month.

Eligibility Estimates

Eligibility for CDC subsidies is based on three key factors: whether a child is under 13 years of age, whether both parents living in the home were working or in school, and whether family income was at or below maximum income limits for entry into the CDC program as defined by the Michigan Department of Education.[1] Children that meet these criteria are referred to in this brief as "potentially qualified" for the child care subsidy.

In 2018, approximately 14% of children in BSC 1 under the age of 13 were potentially qualified for a child care subsidy. This number has remained quite stable over time, varying between 13% and 15% from 2013 to 2018, despite changes in income limits.

This BSC's proportion of potentially qualified children is quite similar to Michigan as a whole, which was 15% in 2018. There were only minor differences in the proportion of potentially qualified children across the region (13%-15% across the four sub-regions of BSC 1). The largest numbers of potentially qualified children were in Grand Traverse and Marquette counties (13% and 9%, respectively).

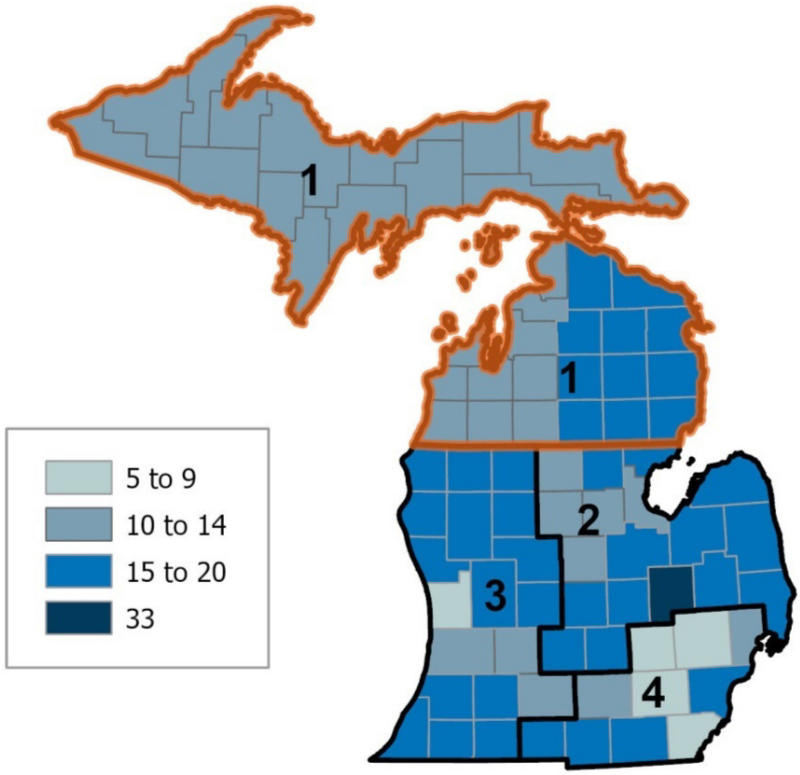

Figure 1. Percentage of Children that Potentially Qualify for Child Care Subsidies by County, 2018

1 Other eligibility criteria (e.g., children in foster care or children's protective services, migrant, and homeless) were excluded from this analysis. In addition, statewide estimates treat all children in Flint as eligible for a subsidy in 2017 and 2018.

Subsidy Utilization

Approximately 13% of potentially qualified children in BSC 1 participated in the program in 2018. That proportion has ranged from 12% to 14% since 2014, somewhat of a decline from 2013, when it was 17%. The 2018 participation rate is slightly lower than the statewide average (16%).

The share of potentially qualified children who participated in the CDC program varied quite dramatically across the region, from 30% in Iosco County to 3% in Benzie County (although because of the small number of cases, these estimates should be treated with caution). A handful of counties (Marquette, Grand Traverse, and Otsego) contained over a quarter of the BSC's participants. The low uptake of the subsidy in this area of the state warrants exploration of why this condition exists (e.g., lack of parent awareness, provider supply, provider willingness to accept subsidies) in order to attempt to increase subsidy application and use.

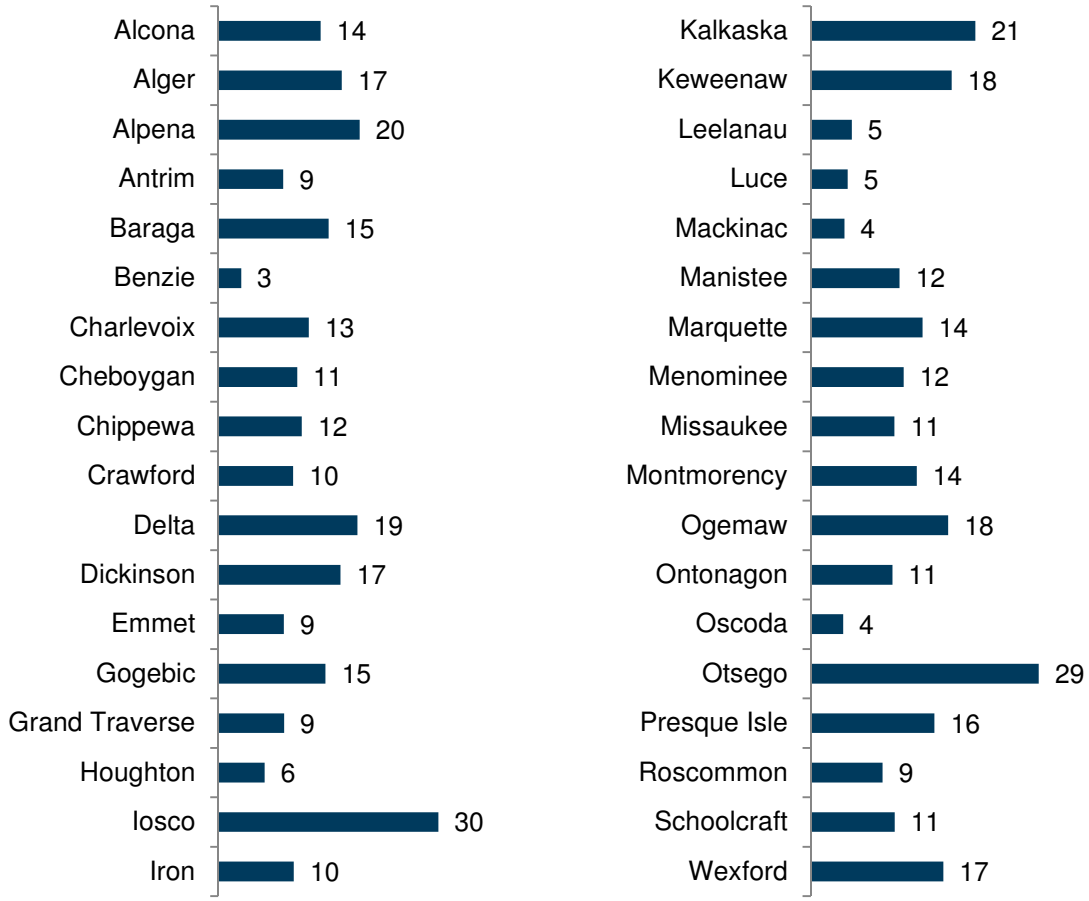

Figure 2. Percentage of Potentially Qualified Children in BSC 1 Who Participated in the CDC Program, 2018

BUSINESS SERVICE CENTER 2

Michigan Child Care Subsidy Profile

Business Service Center (BSC) 2 covers 18 counties in Central Michigan and the state's "thumb". This brief draws from American Community Survey (ACS) microdata to estimate the number of children potentially qualified for a Child Development and Care (CDC) subsidy in all 83 Michigan counties between 2013 and 2018 (the last year ACS data is available) and the Green Book Reports of Key Program Statistics published by the Michigan Department of Health and Human Services, which provides the number of CDC participants (i.e., children with subsidies in use) in each county every month.

Eligibility Estimates

In this brief, eligibility for CDC subsidies is based on three key factors: whether a child is under 13 years of age, whether both parents living in the home were working or in school, and whether family income was at or below maximum income limits for entry into the CDC program as defined by the Michigan Department of Education.[1] Children that meet these criteria are referred to in this brief as "potentially qualified" for the child care subsidy. In addition, all children in Flint were eligible in 2017 and 2018 as part of the state's response to the Flint Water Crisis.

In 2018 approximately 20% of children in BSC 2 under the age of 13 were potentially qualified for a child care subsidy. Before the Flint water crisis (2013-2016), the share of qualified children varied between 15% and 17%, but has remained at one-fifth of children since 2017.

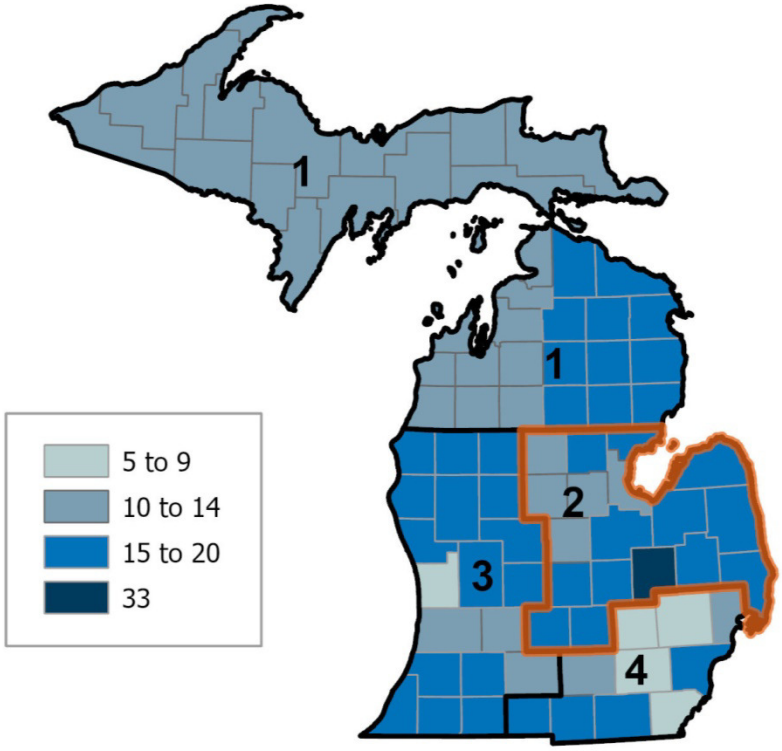

Figure 1. Percentage of Children that Potentially Qualify for Child Care Subsidies by County, 2018

This BSC's proportion of potentially qualified children is higher than Michigan as a whole, which was 15% in 2018. For most of the region, there were only minor differences in the proportion of potentially qualified children: between 14% and 16% across the four sub-regions of BSC 2. Saginaw (20%) and Genesee (33%) counties had much higher shares of potentially qualified children.

1 Other eligibility criteria (e.g., children in foster care or children's protective services, migrant, and homeless) were excluded from this analysis.

Subsidy Utilization

Approximately 17% of potentially qualified children in BSC 2 participated in the CDC program in 2018. That proportion has declined since 2013, when 22% of qualified children participated in the CDC program. The 2018 participation rate is slightly higher than the statewide average (16%).

The share of potentially qualified children who participated in the CDC program varied quite dramatically across the region, from 31% in Saginaw County to 7% in Clinton County (although because of the small number of cases, these estimates should be treated with caution). A handful of counties (Genesee, Ingham, and Saginaw) contain almost two-thirds of the BSC's participants. The low uptake of the subsidy warrants exploration of the reasons why this condition exists (e.g., lack of parent awareness, provider supply, provider willingness to accept subsidies) in order to attempt to increase subsidy application and use.

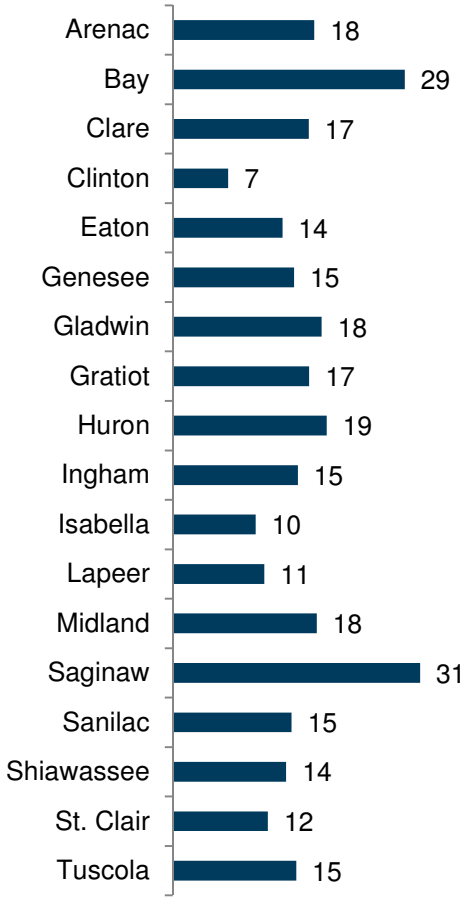

Figure 2. Percentage of Potentially Qualified Children in BSC 2 Who Participated in the CDC Program, 2018

BUSINESS SERVICE CENTER 3

Michigan Child Care Subsidy Profile

Business Service Center (BSC) 3 covers 19 counties in Western Michigan. This brief draws from American Community Survey (ACS) microdata to estimate the number of children potentially qualified for a Child Development and Care (CDC) subsidy in all 83 Michigan counties between 2013 and 2018 (the last year ACS data is available), and the Green Book Reports of Key Program Statistics published by the Michigan Department of Health and Human Services, which provides the number of CDC participants (i.e., children with subsidies in use) in each county every month.

Eligibility Estimates

In this brief, eligibility for CDC subsidies is based on three key factors: whether a child is under 13 years of age, whether both parents living in the home were working or in school, and whether family income was at or below maximum income limits for entry into the CDC program as defined by the Michigan Department of Education (MDE).[1] Children that meet these criteria are referred to in this brief as "potentially qualified" for the child care subsidy.

In 2018 approximately 14% of children in BSC 3 under the age of 13 were potentially qualified for child care subsidies. This number has remained quite stable, varying between 13% and 15% from 2013 to 2018, despite changes in income limits. This BSC's proportion of potentially qualified children is quite similar to Michigan as a whole, which was 15% in 2018. There were notable differences in the proportion of potentially qualified children across the region: between 12% and 17% across the four sub-regions of BSC 3.[2] The largest numbers of potentially qualified children were in Kent and Kalamazoo counties (31% and 13%, respectively).

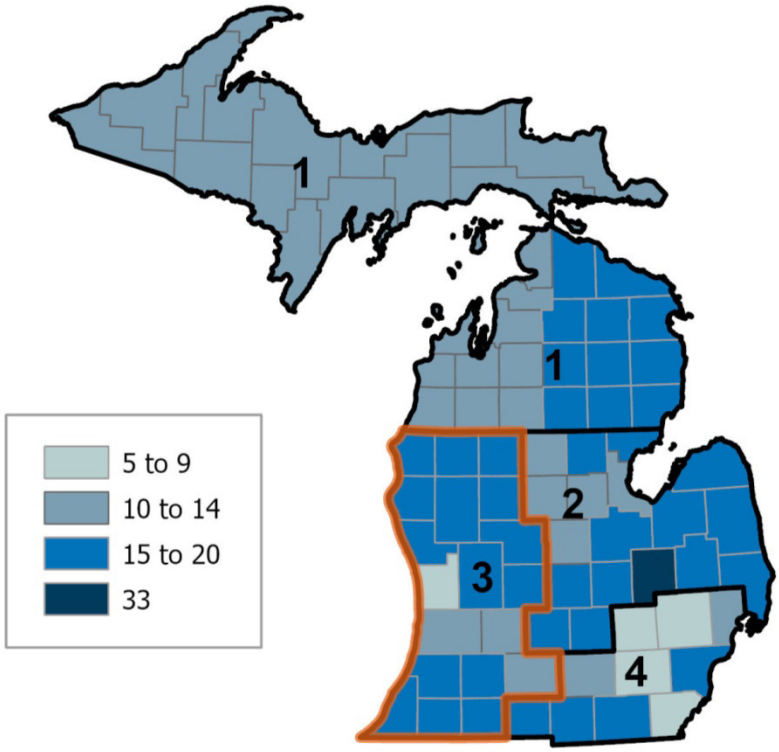

Figure 1. Percentage of Children that Potentially Qualify for Child Care Subsidies by County, 2018

1 Other eligibility criteria (e.g., children in foster care or children's protective services, migrant, and homeless) were excluded from this analysis. In addition, statewide estimates treat all children in Flint as eligible in 2017 and 2018.

2 Ottawa was an outlier at 7%, which may due in part because it was classified in a different sub-region of the state in the ACS microdata than the other western counties.

Subsidy Utilization

Approximately 14% of potentially qualified children in BSC 3 participated in the CDC program in 2018. That proportion has ranged from 12% to 15% since 2014, but was higher (20%) in 2013. The BSC's 2018 participation rate is slightly lower than the statewide average (16%).

The share of potentially qualified children who use the subsidy varied across the region, from 26% in Lake County to 8% in Ionia County (although because of the small number of cases, these estimates should be treated with caution). A handful of counties (Kent, Kalamazoo, and Muskegon) contain over half of the BSC's CDC recipients. The low uptake of the subsidy in this area warrants exploration of the reasons why this condition exists (e.g., lack of parent awareness, provider supply, provider willingness to accept subsidies) in order to attempt to increase subsidy application and use.

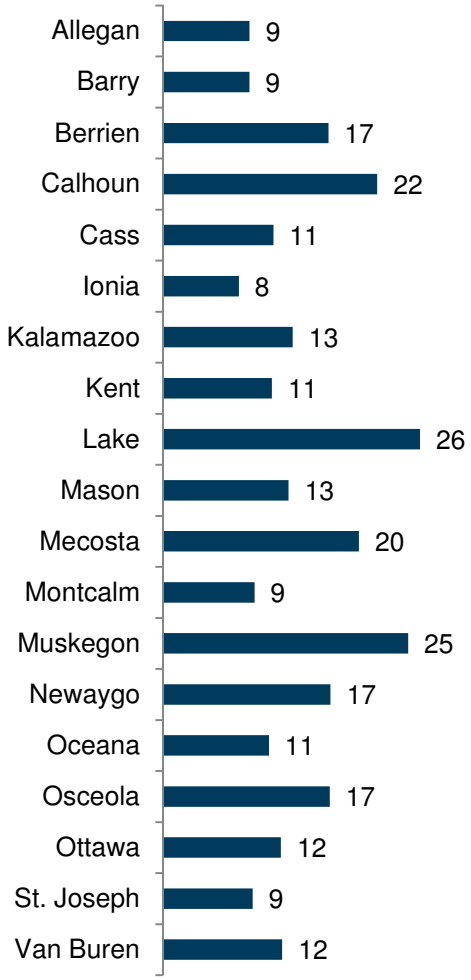

Figure 2. Percentage of Potentially Qualified Children in BSC 3 Who Participated in the CDC Program

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BUSINESS SERVICE CENTER 4

Michigan Child Care Subsidy Profile

Business Service Center (BSC) 4, which covers ten counties in Southeast Michigan. This brief draws from American Community Survey (ACS) microdata to estimate the number of children potentially qualified for a Child Development and Care (CDC) subsidy in all 83 Michigan counties between 2013 and 2018 (the last year ACS data is available) and the Green Book Reports of Key Program Statistics published by the Michigan Department of Health and Human Services, which provides the number of CDC participants (i.e., children with subsidies in use) in each county every month.

Eligibility Estimates

In this brief, eligibility for CDC subsidies is based on three key factors: whether a child is under 13 years of age, whether both parents living in the home were working or in school, and whether family income was at or below maximum income limits for entry into the CDC program as defined by the Michigan Department of Education (MDE).[1] Children that meet these criteria are referred to in this brief as "potentially qualified" for the child care subsidy.

In 2018 approximately 13% of children in BSC 4 under the age of 13 were potentially qualified for a child care subsidy. This number has remained quite stable over time, varying between 12% and 13% from 2013 to 2018, despite changes in income limits.

This BSC's proportion of qualified children is lower than Michigan as a whole, which was 15% in 2018. There were large differences in the proportion of potentially qualified children across the region: between 5% and 19% across the region. The majority of potentially qualified children in BSC 4 lived in Wayne County (57%).

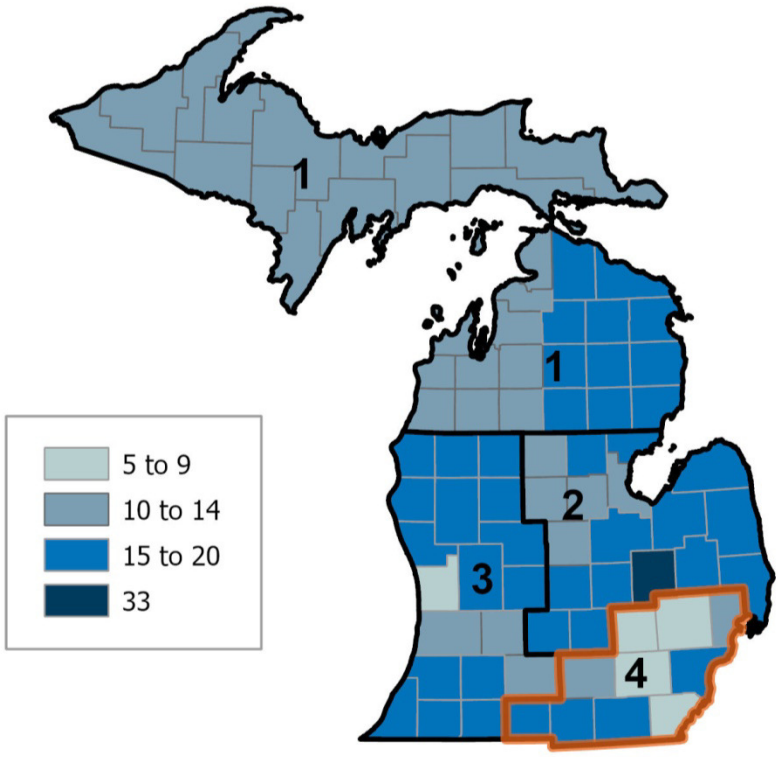

Figure 1. Percentage of Children that Potentially Qualify for Child Care Subsidies by County, 2018

1 Other eligibility criteria (e.g., children in foster care or children's protective services, migrant, and homeless) were excluded from this analysis. In addition, statewide estimates treat all children in Flint as eligible in 2017 and 2018.

Subsidy Utilization

Approximately 17% of potentially qualified children in BSC 4 participated in the CDC program in 2018. That proportion has ranged from 14% to 18% since 2013. This participation rate is slightly higher than the statewide average (16%).

The share of potentially qualified children who participated in the program varied across the region, from 20% in Jackson County to 9% in Branch County (although because of the small number of cases, these estimates should be treated with caution). As might be expected due to the population size, Wayne County represents the majority (61%) of all CDC participants in BSC 4, with Macomb (11%) and Oakland (12%) counties making up large portions of the overall total as well. It may be worthwhile to explore the reasons for regional differences in subsidy application and use.

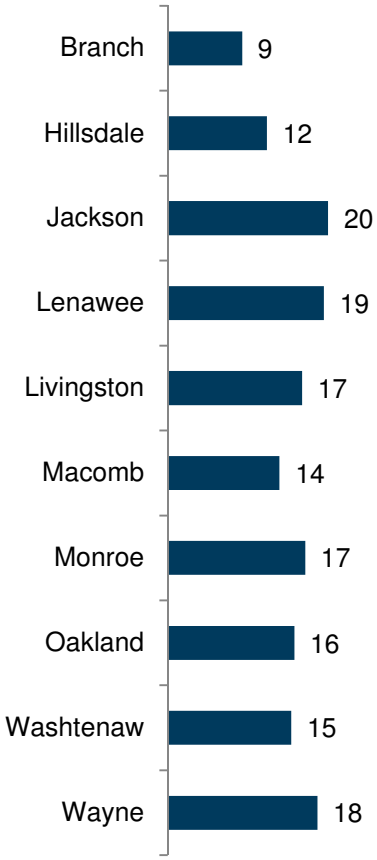

Figure 2. Percentage of Potentially Qualified Children in BSC 4 Who Participated in the CDC Program

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