

THE EFFECTS OF COVID-19 ON MICHIGAN CHILD DEVELOPMENT AND CARE PROGRAM USAGE

Family Experiences Compared with Program Data

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Public Policy Associates 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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INTRODUCTION

Parents with young children faced a litany of challenges over the last several years: stay-at-home orders, economic dislocation, heightened health and safety concerns, and child care provider closures, just to name a few. The main purpose of the Michigan Child Development and Care (CDC) program is to promote access to quality child care for low-income families. The pandemic quickly exerted a powerful force on the child care market, necessitating a response by the State, particularly for families and providers participating in the CDC program.

The State invested considerable resources in helping children to remain enrolled with their providers. One key initiative was to allow providers to bill for child *enrollment* rather than child *attendance*. The purpose of this policy was to provide financial assistance to providers accepting subsidy clients during a period when children were often being kept at home, and to make it easier for parents to keep their connection with their child care provider.

“It was a little bit of a struggle at certain points with the whole COVID situation.... It was just a very hard time. I was out of work quite a bit.... There were sometimes when they [the child care provider] were [closed] 3 weeks at a time, then they would call me and she [daughter] would go back for 2 days, and then boom, there was another close contact, and she was out again for 2 weeks. I was employed, so there was not really any help during those times.”

– Parent Interviewee, 2022

In this report, the research team from Public Policy Associates (PPA):

- Explores how well parents were able to remain active with the CDC program during the 2019-2021 period.
- Investigates whether billing based on enrollment makes it more difficult to assess continuity of care for CDC families.

Using state administrative data, the research team compared the first 24 months of program participation for first-time families who entered in 2019 (from here referred to as the “Pandemic group”) to the subsidy recipients who first received CDC funds in 2013-2017 (the “Pre-Pandemic group”). To establish a causal relationship, the analysts used propensity score matching. This technique creates equal matches based on various criteria for each case in the Pandemic group, allowing a one-to-one comparison to the Pre-Pandemic group.

FAMILY PARTICIPATION IN THE CDC PROGRAM

Evidence from Administrative Data

The Pandemic Group was billed for more hours than Pre-Pandemic families.

On average, families that started using the subsidy in 2019 had 10 more hours in care paid for with a child care subsidy per pay period compared to the Pre-Pandemic families.¹ Examining patterns further, there was a distinct difference in the distribution of paid hours between the two groups (Figure 1).

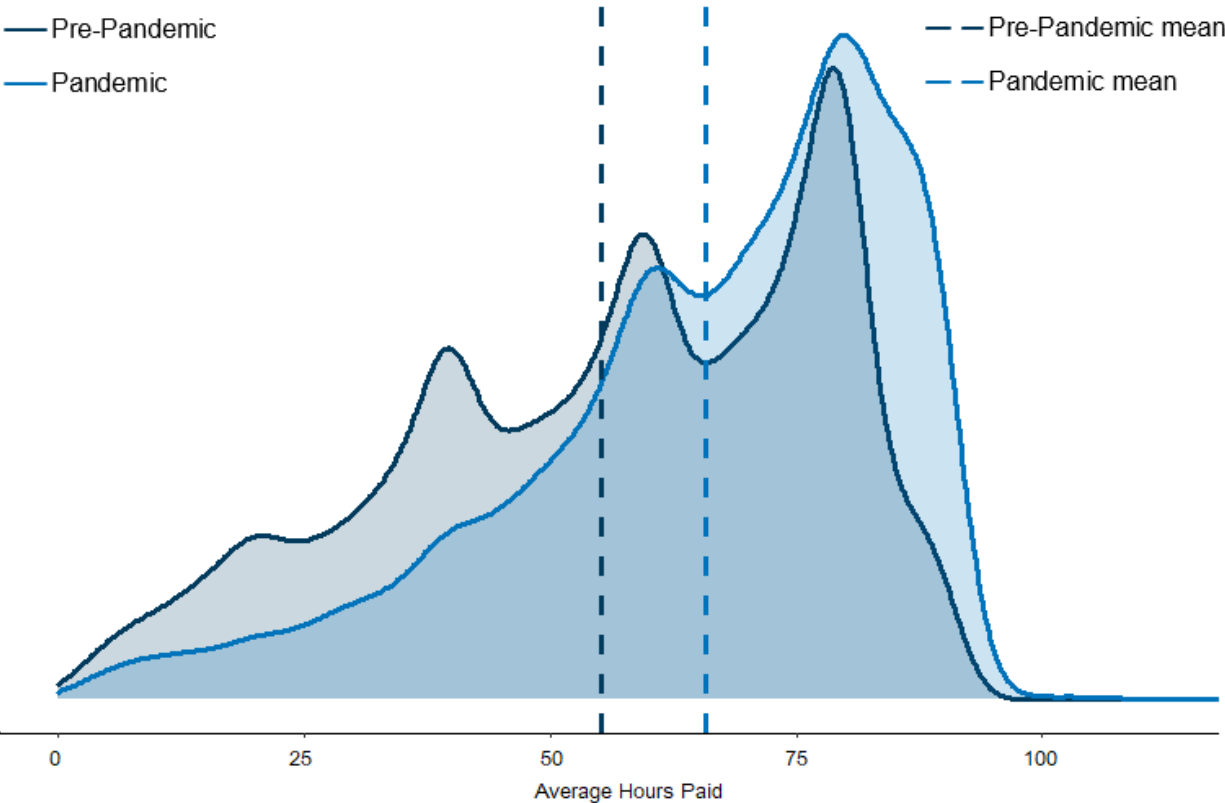


Figure 1. Population Density of Average Hours Paid

When submitting for hours, parents can be authorized for 20, 40, 60, 80, or 90 hours of paid care by the program. Looking at the density of hours paid per pay period in the Pre-Pandemic group, distinct peaks can be observed at each of the most common blocks. For the Pandemic group, there is a higher concentration of children with 90 hours of child care paid, and a much more dramatic peak at 60 hours. A far higher proportion of children had the maximum hours paid in the Pandemic group than in the Pre-Pandemic group. The lower blocks are far less

¹ A CDC program pay period is two weeks.

utilized. Cumulatively, this results in a difference of about 315 more hours per child paid during the pandemic period studied. Figure 2 shows the combined paid hours over time for the Pandemic and Pre-Pandemic groups.

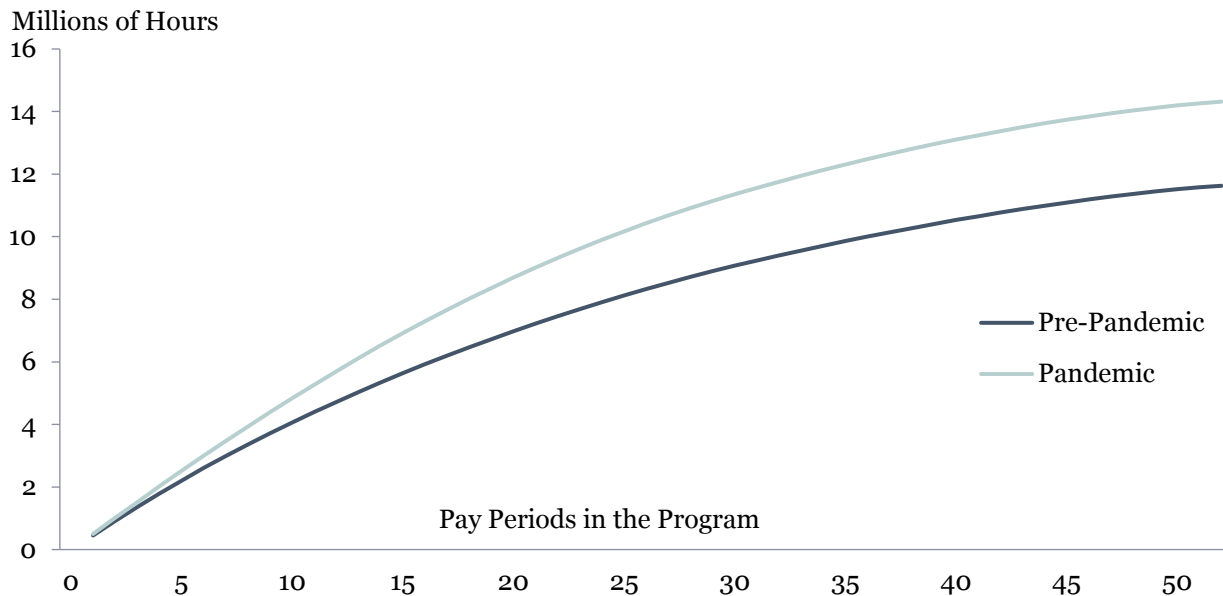


Figure 2. Total Paid Hours and Pay Periods for Each Cohort

The Pandemic group also received payments for a larger proportion of their authorized hours. Figure 3 shows the percentage of authorized hours that participants used.

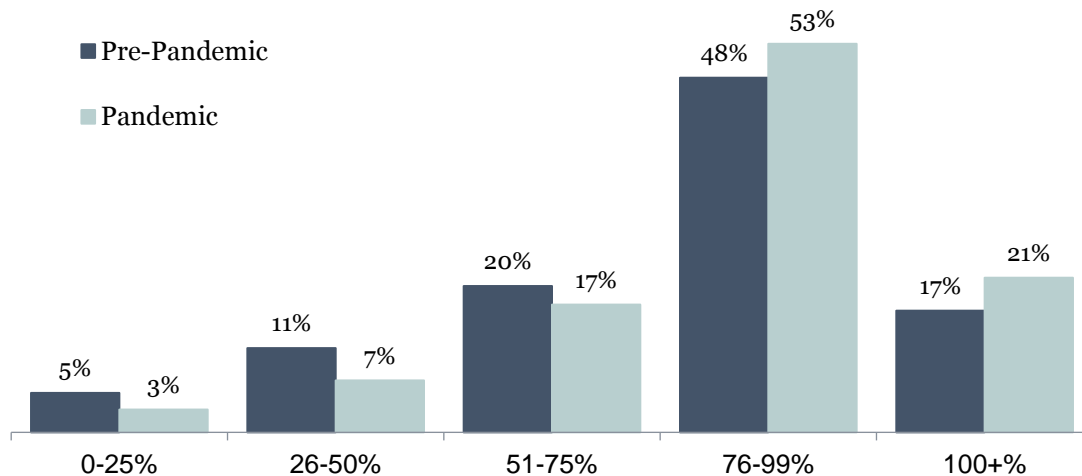


Figure 3. Utilization of Authorized Hours by Pandemic and Pre-Pandemic Groups

These results suggest that, as measured by enrollment, CDC families were making more intensive use of the child care subsidy program than previously. However, because providers were able to bill by enrollment (opposed to attendance), it does not necessarily mean that

children receiving the subsidy were actually receiving more hours of care, a possibility that is investigated in the second section of this report.

Pandemic-related policies aiming to maintain CDC family enrollment had some success

The Pandemic group had slightly higher rates in continued usage of the CDC subsidy. In other words, families were less likely to stop using the subsidy than before the pandemic. The Pandemic group was about 10% less likely to have a temporary break in participation and 7% less likely to leave the program altogether during their first 24 months of usage. A graph of participation in the CDC program over the 52 pay periods indicates that the Pre-Pandemic group was somewhat more likely to experience a break in subsidy use or discontinue use entirely (Figures 4 and 5).

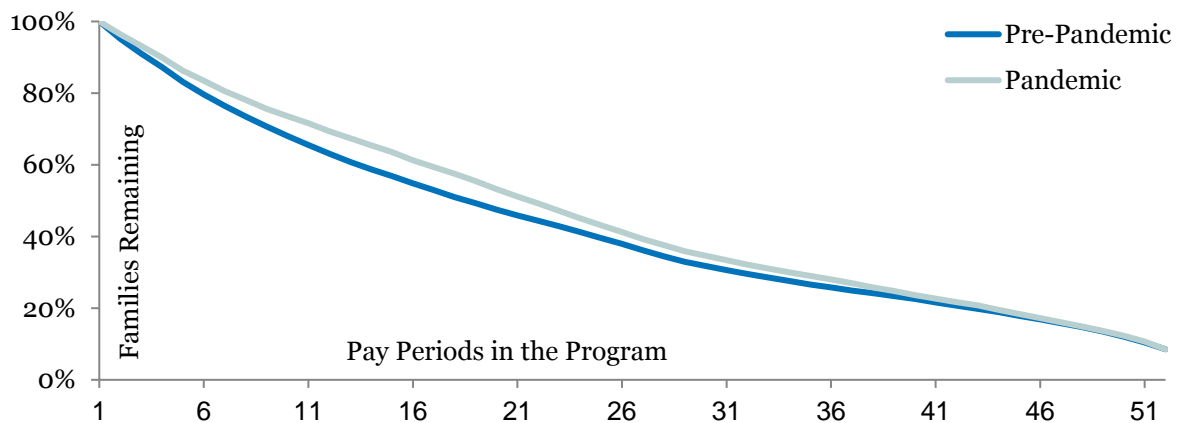


Figure 4. Family Participation Over the Course of 24 Months

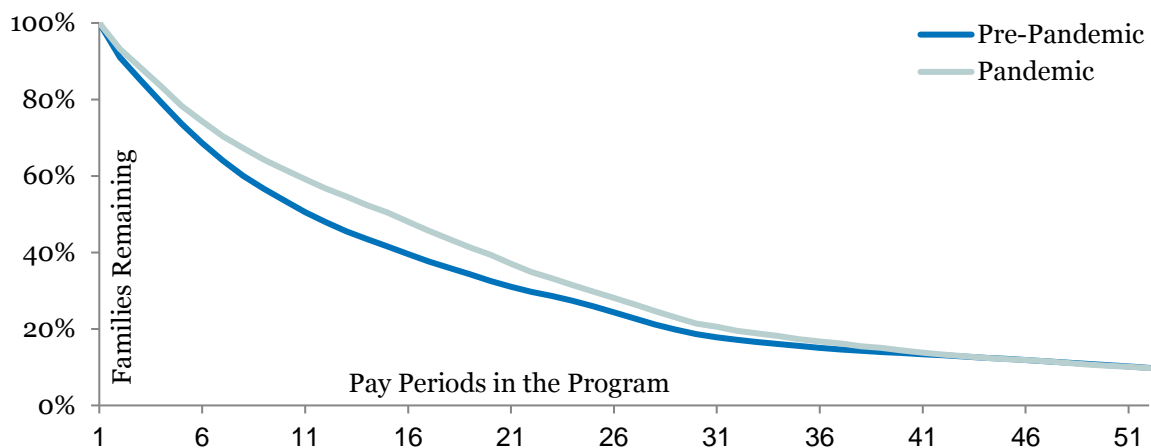


Figure 5. Family Participation Over the Course of the First Spell

The results (as shown in the above figures) indicate that fewer families in the Pandemic group dropped out in the early and middle months of the program.² with similar attrition rates towards the end of the 24-month period. As a result, the Pandemic group tended to stay for one pay period longer than the Pre-Pandemic group. This could indicate more robust usage of the subsidy over time or potentially an administrative lag caused by the removal of the attendance requirement.

Consistent with other analysis, the number of spells (or periods of subsidy usage) between the two groups are nearly identical. This means that those who left the program during the pandemic period were approximately as likely to come back after a break as those who left it earlier.

Evidence from Parent Interviews

Administrative records measured the extent to which CDC parents remained enrolled with providers based on the time periods over which the state paid provider billings without breaks of at least two weeks. While this quantitative approach presents evidence about parental enrollment with providers, the research team also conducted 36 parent/guardian interviews to collect their “on the ground” experiences with child care and the CDC program during the pandemic period. This more granular approach painted its own picture of subsidy use and child care provision, one where the meaning and significance of “child care usage” was richer than provider enrollment and state payment statistics alone.³

The parents who completed an interview were recruited based on their CDC payment patterns as identified in 2021 administrative data, which were similar to those in 2019. A child care “change” was defined as one lasting at least two weeks.

Table 1. CDC Subsidy Payment Patterns Based on Administrative Data (All Families)⁴

Parents’ Subsidy Payment Usage Pattern	2019	2021
No change in hours paid	39%	40%
Significant change in hours paid	5%	6%
Termination of all hours paid (left program altogether)	43%	41%
Break in hours paid	12%	13%

² There are a higher percentage of families remaining in the program for the Pandemic group in about the first 4-13 months (or 8-26 pay periods) that a child receives the CDC subsidy for over the 24-month period.

³ The interviews were also designed to help validate certain results of the secondary data analysis. See the separate Researcher Note “Contrasting Data Sources Lead to Divergent Renderings of Parental Child Care Experience” by Nathan Burroughs, Ph.D., and Dirk Zuschlag, Ph.D. (Public Policy Associates, September 2022).

⁴ Refer to the methods section for details on how families were assigned to each category.

The interviews asked about actual usage of care and child attendance in child care, as well as their current satisfaction with total subsidized hours, provider availability, and provider quality. They were also asked to share their overall satisfaction with the CDC program and any challenges for 2021.

During 2021, most families experienced significant changes in child care circumstances, primarily due to the pandemic.

In contrast to the administrative data, three-quarters of the parents interviewed reported significant changes in child care arrangements during 2021.⁵ Thirteen parents experienced two or more types of changes during the calendar year. About half of the parents who experienced some kind of child care change experienced a provider closure, and four had to adjust their usage when providers modified their available hours or days. Five parents had children involuntarily, if temporarily, excluded from their provider's child care due to contagious illness concerns (three pandemic-related). Four parents had to change child care use due to one or more changes in employment status, such as job losses, switching employers, or changes to work hours or work schedule.

Though disruptive and stressful, most changes were temporary, which is perhaps related to the fact that three-quarters of these family-reported changes were directly or indirectly related to the pandemic.

Parental choices also affected the subsidy usage, some of which were related to the pandemic but others would likely have occurred anyway. Among those affected by the pandemic, five parents chose to reduce their usage of child care hours by voluntarily keep their children home or because in-person school resumed, whether after a closure or at the end of the summer. Conversely, three upped their hours of child care use to match increases in work hours, to have their children participate in remote learning while in care, or to resume using after-school programs.

Parents also reported varied reasons for usage changes unrelated to the pandemic.

Other changes in child care were unrelated to COVID-19. Seven interviewed parents completely ceased subsidized child care during 2021, principally because their children entered or went back to school, and the parents decided that before- or after-school care was unnecessary. Two of these seven could not find suitable child care; one became unable to work; and one did not pursue continued participation because of dissatisfaction with the CDC program. It appears that only one interviewee completely stopped using subsidized child care during 2021, only to restart it later in the year when a COVID surge had abated. Finally, eight parents' subsidy usage was affected when they switched child care providers.

⁵ A change was defined as one lasting more than two weeks.

Despite disruptions in the ability to use child care in 2021, parents continued to rely on the child care subsidy to meet their child care needs.

As the analysis of administrative data measuring patterns in parents' child care enrollments and provider payments revealed, most parents maintained CDC program participation in 2021. Parents who, when interviewed in 2022, had remained subsidy program participants were first asked separate questions about their current satisfaction with (a) the total number of subsidized child care hours allowed each week (total hours), (b) the days and hours child care was usually available at their provider (provider availability), and (c) the quality of their provider (provider quality).

Figure 6 (below) shows the results for each feature by grouping satisfied and very satisfied rating together, and similarly unsatisfied with very unsatisfied ratings. Parental ratings for all program elements asked about were extremely high.

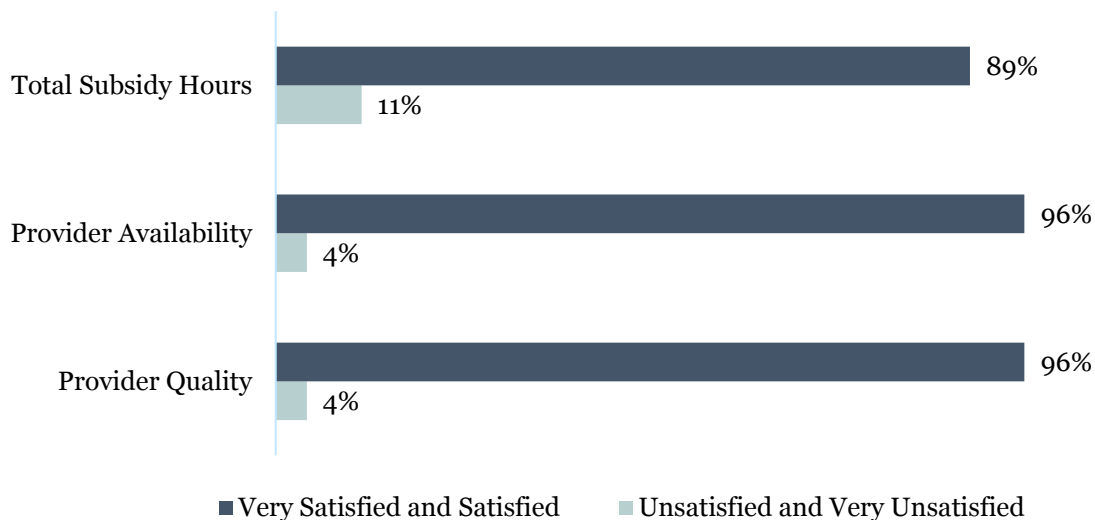


Figure 6. Parent Satisfaction Ratings for Access to Care through the CDC Program, 2022

Parents also had very positive attitudes toward the subsidy program as a whole: 97% were “satisfied” or “very satisfied.” Only one parent was “Unsatisfied,” and none were “Very Unsatisfied.” Parent satisfaction with the CDC program, therefore, was not affected by the pandemic or the disruptions in care experienced with their providers.

“I really feel like it’s [the CDC program] been great. I’ve been extremely grateful to be able to use it.” – Parent Interviewee, 2022

Parents' overall satisfaction with child care is often tied to authorized (subsidized) hours, provider availability, and communication.

Parent satisfaction questions during the interviews yielded information about how parents perceive child care overall. This information is not contained within the administrative records, so the interviews offer important insights into what was driving parent program participation more broadly. As noted above, most parents are highly satisfied with the CDC program and their providers. Factors that appear to influence satisfaction at the time of the interviews were how many hours they are authorized for the child care subsidy on a biweekly basis, providers' open hours, and the communication they receive.

When it came to their satisfaction with providers, parents cared the most about the number of authorized hours they receive from the program and the times their providers were open to care for their children. Seven parents said they were authorized for a sufficient number of hours, including work-to-provider travel time. For another seven, their providers' open hours were favorable to their schedules. For others, the same issues influenced their dissatisfaction: six parents found their providers' hours either unfavorable or insufficient due to their travel times, and some were less than fully satisfied because their providers did not open for non-traditional hours (6), were open at hours difficult for the family (3) or had inconsistent hours (2).

Satisfaction with provider quality was similarly influenced by provider availability and communication, in addition to the services provided. Eight parents felt their children's hours were spent in a positive way or in a positive environment, and a further three said the experience with their provider was generally positive for their children. Ten parents cited provider staff and communications as positive factors. Parents also associated quality with provider facilities, programs, or services (6 high satisfaction vs. 2 low satisfaction).

Expanding provider hours is a primary way to increase parent satisfaction.

When asked what would raise the rating of any individual element to the highest level of satisfaction, 14 parents (61%) suggested increasing or extending provider days or hours. Other suggestions included improved provider educational programs, communications, staff education, or staffing stability, as well as increased subsidy program benefits such as more approved hours.

"I'm glad I have it [the CDC program], and I'm glad I haven't had to pay anything. And that [it] is there because I wouldn't be able to work if I didn't have it." – Parent Interviewee, 2022

Parents would appreciate simplified CDC program processes and greater communication.

With respect to their experiences during 2021, roughly one-third of parents (12) explained that the CDC program helped them meet core needs—work, appropriate and available child care, or stability in child care. Nine others, however, focused on adverse process experiences including excessive paperwork, inadequate communication, and lengthy response times.

“The biggest challenge ... [in maintaining CDC program eligibility is] needing to provide my part and the state part and the child care [provider] part; it’s getting [all] that filled out and done in a timely manner.” – Parent Interviewee, 2022

In further responses about 2021, interviewees suggested that simplifying and otherwise improving eligibility processes and interactions with caseworkers, as well as lower child care costs or higher benefits, would have been helpful. While eleven parents had no *current* concerns with the CDC program, others cited various shortcomings in communications, processes, and responsiveness, such as the lack of timely or sufficient information or contacts (9 parents), excessive paperwork and processing time (4), and the assignment of multiple caseworkers (3).

CONCLUSIONS

The results of the analysis of administrative data and parent interviews indicate that parents remained enrolled with providers, but experienced considerable volatility in actual care provided during 2021. Families remained engaged with the program at rates comparable to pre-pandemic levels, as measured by spell length and permanent program exits. In fact, the total number of hours paid to providers and proportion of authorized hours consumed was greater than for 2013-2017. In addition, despite some difficulties with provider availability, authorized hours, communications, and—to a lesser extent, quality—parents remain quite satisfied with the CDC program and with their providers.

Arguably the most important takeaway from this report is the finding that program enrollment stability, as seen from the administrative records, masks considerable disruptions in care for families. The administrative data, which focused on continuing subsidy usage (based on payments to providers), suggests that policies to maintain family participation in the CDC program was largely successful. However, the interviews found that most families experienced breaks in child care, either due to provider closures or to their own circumstances. This suggests that the last two years have seen considerable breaks in continuity of care. Should the policy of billing based on child enrollment rather than attendance in care continue, policymakers should consider alternative methods for collecting data about actual care hours provided to children under the CDC program. As it stands, the current policy makes it quite difficult to measure improvements in continuity of care, although that has been a major goal of state and federal child care initiatives.



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APPENDIX A: METHODOLOGY

Administrative Data

Quantitative data used 2013-2021 case-level child care subsidy data from Michigan's Bridges system recorded on a pay period level. Each pay period covers two weeks of activity for each recipient. To avoid biasing the results in favor of families with multiple children, one child was randomly selected to represent family participation.

Propensity scores and matches utilize a user generated module for STATA. The team explored Multiple matching methods, with a standard variance ratio of .1 as a cut off to assess the accuracy and viability of matching algorithms and variables. Final propensity scores match each CDC participant in the pandemic group (First time utilizers of the CDC subsidy in 2019) to CDC users in the control, or pre pandemic group (first time use in 2013-2017). Variables for propensity scores include: MDHHS Business Service Center Region, child age, child racial information (Black, white and/or Hispanic),⁶ and guardian income status (whether they have a reported income). Matches were conducted using a k=5 nearest neighbor algorithm and appropriately weighted as such. All numbers reported are the average treatment effects on the treated.

PPA conducted T-tests at a .05 significance level on the average effects on the treated to determine the differences in the number of hours paid, hours authorized, number of pay periods in program and reported income between the control (pre-pandemic) and treatment (pandemic) group.

To produce survivorship analysis propensity score matches were carried over and used in a cox procedure to determine the treatment effects. A TOST procedure on these with a .20 standard deviation threshold determined substantive significance.

A Poisson regression as well negative binomial at a significance level of .05 measure the differences in the number of spells. Additionally, the number of pay periods were analyzed using these procedures, to see if there was a significant difference compared to the standard t-test as well as cox regression.

Parent Interviews

In April and May of 2022, PPA conducted individual telephone interviews with 36 parents/guardians of children who received subsidized child care from licensed providers during 2021 through Michigan's CDC program. PPA developed, piloted, and implemented the final interview instrument and protocol in collaboration with the MDE/OGS and the MDHHS, the state agencies in the research partnership.

⁶ These are the labels recorded in the dataset.

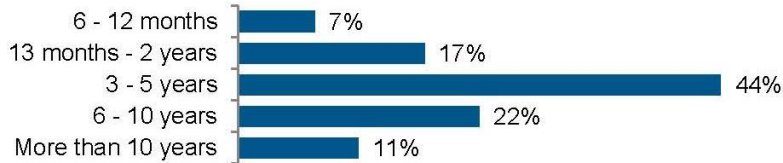
The generation of the parent interview sample began with the stratification of case data by state region and by four child care subsidy use patterns, which an analysis of the that data had identified. Parents were assigned to one of four categories: no statistically significant change in number of hours paid between the first and second half of the 2021, a statistically significant change in hours paid, a break of more than one 2-week pay period in CDC payments to any provider, or a stop in payments for the remainder of the year. Prospective interviewees were then randomly selected from each stratum. Email invitations to register online for a pilot of the interview instrument were sent to a group of prospective interviewees; three invite respondents participated in cognitive interviews. The piloting process resulted in only minor modifications to the interview instrument. Following this, PPA next made up to two attempts to contact the rest of the prospective interviewees from the random sample. As they responded, they were scheduled for interviews on a first-come, first-served basis. Nine interviews were arranged for each of the four use patterns, as defined by the administrative data.

The interviews, on average, lasted about 30 minutes. All interviews were conducted by telephone and recorded. The 36 parents who completed an interview each received an incentive of \$50, issued by mail. The interview recordings were transcribed and coded by topic using NVivo® software. Parent codes were determined *a priori* from the interview instrument, with child codes developed and revised iteratively through an open coding process.

Due to the emergent mismatch between subsidy use patterns determined at sampling and parents' reported use experience, the limited number of interviews conducted overall, and the potential for interview invitee non-response bias, the results may not fully reflect the views of all parents using CDC subsidies for child care in 2021 in the state.

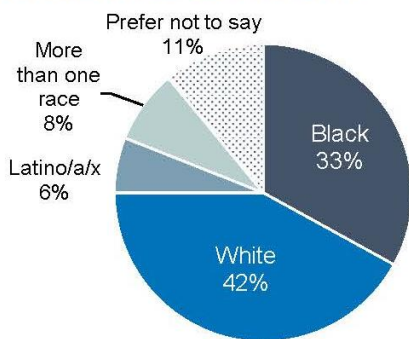
APPENDIX B: PARENT CHARACTERISTICS

LENGTH OF SUBSIDY ENROLLMENT

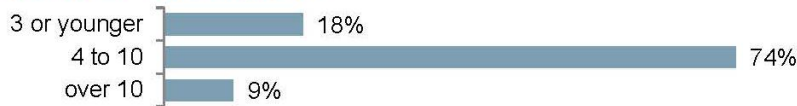


FOSTER PARENTS

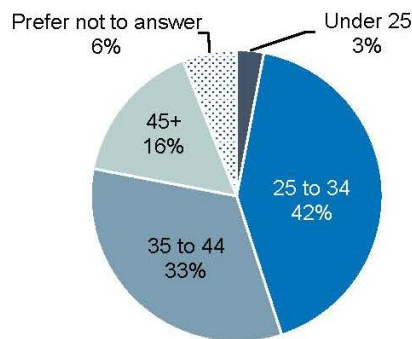
RACE AND ETHNICITY



AGES OF CHILDREN



PARENT AGE



COUNTIES OF RESIDENCE

- Ingham
- Jackson
- Kent
- Lenawee
- Macomb
- Montcalm
- Muskegon
- Oakland
- Ottawa
- Saginaw
- Wayne



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