Analysis of Iowa’s Child Care Assistance Database

Executive Summary

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Background

The Child Care and Development Block Grant (CCDBG) Act was established in 1990 to improve access, affordability, and quality within child care for working families in the United States. (Omnibus Budget Reconciliation Act, 1990). This authorizing legislation and associated federal rules effectively set the federal funding and policy direction for child care issues across the country. Implementation of the federal child care program is managed by the Office of Child Care, part of the United States Department of Health and Human Services, through administration of the Child Care Development Fund (CCDF). The CCDF provides block grants to states, territories, and tribal governments to provide financial assistance to eligible low-income working families to assist in paying for child care, and for efforts that improve the quality of child care available for all. (Office of Child Care, 2020).

The CCDBG Act was last reauthorized in 2014. The federal policy goals of the reauthorized act are as follows:

1. To allow each state maximum flexibility in developing child care programs and policies that best suit the needs of children and parents within that state.

2. To promote parental choice to empower working parents to make their own decisions regarding the child care services that best suits their family’s needs.
3. To encourage states to provide consumer education information to help parents make informed choices about child care services and to promote involvement by parents and family members in the development of their children in child care settings.

4. To assist states in delivering high-quality, coordinated early childhood care and education services to maximize parents’ options and support parents trying to achieve independence from public assistance.

5. To assist states in improving the overall quality of child care services and programs by implementing the health, safety, licensing, training, and oversight standards established in this subchapter [Subchapter II-B - Child Care and Development Block Grant (Sections 9857 - 9858r)] and in state law (including state regulations);

6. To improve child care and development of participating children; and

7. To increase the number and percentage of low-income children in high-quality child care settings.(Child Care and Development Block Grant Act, 2014).

State CCA programs are aligned with the purposes of the policy. Key focus areas are ensuring high quality child care and supporting parents to work and continue their education. However, a major criticism is the struggle of many state CCA programs to successfully transition families into financial self-sufficiency when
leaving the program. The cliff effect is a phenomenon that occurs when families lose their child care benefits due to an increase an income that exceeds the criteria for the program, while that increase in income is not enough to cover the cost of child care that had been funded through the CCA program. Many families in this situation turn away from raises and opportunities for advancement to avoid the loss of assistance: $5,000 to $9,000 per year (a figure between 13 and 15 percent of a basic needs budget for single and two parent families with one child) in states like Iowa (Fisher & French, 2014). In this scenario, parents must choose between continuing to receive financial assistance and moving toward financial independence.

**APPROACH**

Inspired by the cliff effect as well as the positive effects state CCA programs can have on children, families, and their communities, this project engaged in an examination of federal child care policy and related state child care assistance programs. The research included reviews of state programs across the United States and analysis of best practices found in early childhood literature. This culminated in an evaluation of the associations between the goals of the federal policy and the outcomes of state programs, as highlighted by available state level data sources.

A major component of this project was realized through a partnership with the Iowa Department of Human Services Child Care Assistance program. An analysis of the
state’s child care assistance program tracking database was completed in 2019. The purpose of the analysis was to assess Iowa’s implementation of the program against the goals of the federal policy. Reviewing the data also allowed for a greater understanding of the impact of the program’s implementation on families served. This type of analysis can also be an avenue toward informing enhancements to the policies that shape the program. This format for investigation incites the development of innovative dialogue based on facts and the need for heightened collaboration among public and private stakeholders to resolve issues impacting Iowa’s children and families. A brief overview of Iowa’s Child Care Assistance program establishes the context for reviewing the results of the analysis and supports the aim of this research. It should be noted that this analysis is based on information and policies that were in place prior to the COVID-19 public health emergency.

IOWA’S CHILD CARE ASSISTANCE PROGRAM AND KINDERTRACK
The Child Care and Development Block Grant (CCDBG) is the primary federal grant program that provides child care assistance for families in need. CCDBG is administered to states in block grants through the Child Care Development Fund (CCDF) (Iowa Association for the Education of Young Children, 2019). Iowa’s Department of Human Services is the lead agency who administers the state’s Child Care Assistance program with CCDF funds received from the US Department of Health and Human Services. The program subsidizes child care for working families with low incomes, enabling parents to select the high-quality provider or
program that works best for their family. This project explored Iowa’s Child Care Assistance program through an analysis of its associated database, KinderTrack.

Iowa’s Child Care Assistance program serves families who are “absent for a portion of the day due to employment or participation in academic or vocational training or PROMISE JOBS activities” (Iowa Department of Human Services, 2020). PROMISE JOBS is an employment & training program for participants in the Temporary Assistance to Needy Families (TANF) program designed to assist cash assistance recipients to become self-sufficient through participation in work ready activities (Iowa Workforce Development, 2020). Applicants to the CCA program must be living in Iowa with a child under the age of 13 (age 19 for children with special needs) who needs care. Those who earn below 145% of the federal poverty level, $30,929 for a family of three in 2019 (Office of the Assistant Secretary for Planning and Evaluation, 2019) must be one of the following: 1) employed at least 28 hours per week (on average); 2) enrolled in training/education full time; or 3) employed & working for a total of 28 hours per week (on average). Children with protective needs or who have families participating in the PROMISE JOBS program because the family is receiving Family Investment Program benefits also receive child care services through additional requirements and arrangements. In SFY2019, the number of unduplicated children served by Iowa’s CCA program was 38,434 children with the average annual benefit per child at $3,147 (DHS, 2021).
Currently, families are approved for participation in 12-month increments and families can continue receiving child care services for up to 3 months when a temporary lapse in employment or education occurs. There is a 24-month lifetime limit on participation in the program for those who are participating in education or training. The CCA-Plus program is an exit eligibility program providing CCA to families who have incomes over 145% of the FPL but under 85% of the State Median Income (SMI) (Iowa Department of Human Services 2017). The program was implemented in 2016 to assist families to obtain a 12-month extension for receiving child care benefits when their incomes move beyond the eligibility threshold.

Eligible families may choose a participating child care provider of their choice. Providers may be licensed child care centers such as before and after school programs, registered child development homes, non-registered child care homes, and individuals who care for the child in the parent’s own home. The Iowa Department of Human Services must approve all providers who receive child care assistance payments from the program. All providers must complete 1st Aid training, CPR training, and Mandatory Reporter training along with additional required health and safety training to be eligible. Additional participation requirements and monitoring apply based on the provider type and care arrangement.
The state’s data tracking system, called KinderTrack, is used by the Iowa Department of Human Services to monitor and track services offered under the Child Care Assistance program. Information is captured by DHS staff within the system through direct data entry. Users include DHS income maintenance workers, social workers, PROMISE JOBS staff, clerical staff, payment specialists, registration staff, licensing staff, childcare providers, and families seeking Child Care Assistance. Families and providers interact with KinderTrack via access to a web portal where applications and attendance can be submitted. The database includes details about eligibility, enrollment, utilization, and payment captured from families, children, and providers. This information is used to meet federal reporting requirements and for program management.

**USING THIS REPORT**

The Harkin Institute, The Iowa Department of Human Services Bureau of Child Care Services, and The University of Iowa’s Center for Public Health Statistics partnered to complete this analysis of major categories of data captured within KinderTrack. The results are meant to be used by stakeholders to gain an understanding of the program. They should not be used to gauge program performance and, on their own, do not represent a full analysis of the program or the policy. A description of the methods for analysis, including limitations, follows.
Methods

Only one data source was utilized for this study. The KinderTrack data provides demographic information on children and parents that use Child Care Services, as well as licensed, registered, and paid providers. The data also includes scheduling, attendance, and payment records for each child accompanied by their provider. Children and parents are linked in the data by unique family identifiers.

Nine data queries were developed using the goals of the CCDBG policy, the literature, and the suggestions of subject matter experts. Consideration was also given to the tables held by the database. The data was pulled on November 8, 2018 and the analysis only includes records submitted after July 1, 2010. The topics investigated were typical family structure, household size, annual income, reasons families are using the program, children’s attendance, payments for care, family copays, provider characteristics, and proximity of families to their providers.

It is important to bear in mind that the KinderTrack database was not created with the intent of analysis. The overall data quality in KinderTrack is quite high, however this type of data is prone to data entry errors, missing data (data that is not entered), and inaccurate self-reports. The summaries provided quantify what we observed in the data and may not necessarily reflect the families enrolled in Iowa’s CCA program with 100% accuracy. That said, due to the sheer number of families involved in the program, it is reasonable to assume that our summaries do describe the typical CCA families very well.
FAMILY STRUCTURE
Family structures were pulled from the database using self-reported parent relationships and genders for parents that are currently active in the CCA program. Family types were designated using parents from the same family. Classifications used were single-parent family, two-parent family, and relative family. Single parents were further classified by gender, to break out single mothers and single fathers. Relative family types include grandparent and aunt/uncle guardians.

HOUSEHOLD SIZE
The analysis on household size uses the linking between parents and children to count the number of currently active family members. We report both the overall household size, as well as the breakdown of which members of the household are parents or children.

ANNUAL INCOME
Household income was calculated by summing reported wages for all parents within the same family. Reported wages yield a monthly income estimate for each parent, so annual income was calculated by multiplying each parent’s average reported monthly wages in each year by 12. For years 2016-2018, families could be enrolled in CCA or CCA+, so each household’s income was categorized by their enrolled program. We report median household income by household size and enrolled program classification and give the yearly percentage change in median income. Household sizes of two to four people make up 87% of the data, so we only report annual income for those household sizes.
NEED FOR THE PROGRAM
To understand why people are enrolled in Iowa’s CCA program, we analyzed the needs reported by parents when applying for assistance. There are six primary need classifications: medical incapacity or lapse in need, employment, education, PROMISE JOBS, protective services, and seeking employment. To account for parents that may be using the program for more than one reason (e.g. working and going to school simultaneously), a multiple needs category was created for parents with overlapping periods with different reported needs. It was of interest to examine individuals that were doing part-time employment and part-time school, so this was further broken out of the multiple needs category. Needs were classified by month and year, and we have reported the proportion of all parents reporting each need category over time. This analysis was also performed specifically on mothers, with single/not-single mothers analyzed separately. Data is reported for January 2012 – December 2018. The data prior to January 2012 was deemed unreliable for analysis of this data point.

ATTENDANCE
Data on children’s attendance was used to investigate how long children were using the program, as well as how many children were going in and out of care. Children's length of attendance was analyzed using the difference between their earliest and latest attendance dates reported. Attendance lengths are summarized for all children, as well as stratified by the child’s age at their first attendance. Breaks in attendance were quantified as a period of 30 days or 1 month in which a
child did not have any attendance dates. We report the proportion of children taking 0 to 6 breaks in each fiscal year covered by our data.

**PAYMENTS FOR CARE**

The payment records in the data are biweekly payments to providers and include both the payment amount and market rate. To understand how much providers were getting paid, we have looked at the distribution of the biweekly payment amounts by child and by family. We also analyzed biweekly payment amounts by the child’s age, both in years and categorized. Age categories that were used are infant (0 – 2 years old), preschool (2 – kindergarten), and school age (kindergarten and older).

Iowa supports four types of child care. Licensed centers are businesses that care for many children at one time. Child development homes are persons who provide regulated care for up to 6 or more children in their homes. They may choose to register with the state if less than 6 children are served. Child care homes are the designation for persons who care for 5 or fewer children in the family home. Within this provider type, some providers receive CCA payments, while those who are fully unregulated and private pay only do not. Within KinderTrack these types are designated as: in-home, licensed center, non-registered child care home, and registered child development home. To investigate differences in payment amounts between provider types, we have reported the total amount paid to providers in each classification over time. It was also of interest to examine how much the
program was paying per child/family, so all recorded payments for a child in each year were added together, and then annual payments for all children in the same family were aggregated. We display the distribution of annual payments by child and by family.

**COPAYS**

Payment records also include biweekly copays paid by families enrolled in CCA and CCA+. To examine how many families had a copay, the percentage of all families with children getting care in each year in which the family had a copay was calculated. Separate percentages were analyzed for children in different programs, splitting the review of the data between families enrolled in CCA and families enrolled in CCA+. Finally, for families with copays we investigated the copay amounts by program and number of children over time.

**NUMBER OF PROVIDERS**

To summarize the number of providers involved in Iowa’s CCA program over time, we counted the providers by their classification type in July of each year from 2010 to 2018. The choice of month was arbitrary, but due to shifts in providers involved in CCA throughout the year, it is most accurate to analyze one month to get an idea of the distribution of providers at that point in time. We report a table of counts and yearly percentages of providers in each classification.
PROVIDER PROXIMITY

To estimate how far families had to travel for child care, the county of their provider was compared with the county of the family’s residence. As families move and children switch providers, we analyzed July of each year from 2010 to 2018 and determined the percentage of children that were scheduled with a provider in a different county than their residence out of all active children with a schedule in each month.

Results

The results of the analysis depict the utilization of Iowa’s CCA program, characterize the goals of the CCDBG policy, and illustrate the program’s significance related to outcomes for families and children. Results in each data category are organized by first describing the background, then the limitations and findings. The data is primarily presented using figures to concisely display a large amount of information. Boxplots are often used to display distributions of data, as it is easy to glean a lot of information about the typical values and the spread of the data values. We primarily use the median to characterize what values are “typical,” as the data elements we analyzed were often skewed or containing extreme outliers.

FAMILY STRUCTURE

Family is the most important influence in the life of a child. There are many types of families who utilize Iowa’s CCA program. Understanding the types of families who
are enrolled enables the provision of the most relevant types of resources and supports under the policy’s goal of delivering parental consumer education.

Family structure relies on self-reported parent relationships and gender, which can lead to some missing data as well as potentially incorrect entries. Missing data was a relatively small problem, as there were 113 parents missing a relationship characterization and 239 with no gender listed.

We found that almost 80% of families using CCA in Iowa are single-parent families, and most single-parents are single mothers, who account for 64% of all families enrolled in Iowa’s CCA program (Table 1).

Table 1: Summaries for various family types of active CCA families

<table>
<thead>
<tr>
<th>Family Structure</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-parent family</td>
<td>102,018</td>
<td>76.69%</td>
</tr>
<tr>
<td>Single mothers</td>
<td>85,691</td>
<td>64.43%</td>
</tr>
<tr>
<td>Single fathers</td>
<td>10,429</td>
<td>7.84%</td>
</tr>
<tr>
<td>Two parent family</td>
<td>26,406</td>
<td>19.86%</td>
</tr>
<tr>
<td>Relative family</td>
<td>4,535</td>
<td>3.41%</td>
</tr>
</tbody>
</table>

HOUSEHOLD SIZE

Much like family structure, household size can be an indicator of the types of resources and supports needed by parents to ensure the healthy development of their children. This information can also be used to inform child care needs and program expenditures. Household size impacts eligibility for the program as well as the assessment of a copay for child care.
Due to data entry errors, there were 286 cases in which a child did not have an associated parent in the data, or vice versa, however this is a small percentage of the total number of families in the data.

The average family types captured within KinderTrack were single-parent families with one or two children.

*Table 2: Summaries of household sizes for active CCA families*

<table>
<thead>
<tr>
<th>Household Size</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>47,839</td>
<td>36.04%</td>
</tr>
<tr>
<td>3</td>
<td>41,997</td>
<td>31.64%</td>
</tr>
<tr>
<td>4</td>
<td>25,709</td>
<td>19.37%</td>
</tr>
<tr>
<td>5</td>
<td>11,406</td>
<td>8.59%</td>
</tr>
<tr>
<td>6</td>
<td>4,032</td>
<td>3.04%</td>
</tr>
<tr>
<td>7 - 12</td>
<td>1,767</td>
<td>1.33%</td>
</tr>
</tbody>
</table>

*Table 3: Summaries of household structure for active CCA families*

<table>
<thead>
<tr>
<th>Number of Children</th>
<th>Number of Parents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>47,839</td>
<td>11,429</td>
</tr>
<tr>
<td>36.04%</td>
<td>8.61%</td>
<td>44.65%</td>
</tr>
<tr>
<td>2</td>
<td>30,568</td>
<td>9,893</td>
</tr>
<tr>
<td>23.03%</td>
<td>7.45%</td>
<td>30.48%</td>
</tr>
<tr>
<td>3</td>
<td>15,810</td>
<td>5,835</td>
</tr>
<tr>
<td>11.91%</td>
<td>4.40%</td>
<td>16.31%</td>
</tr>
<tr>
<td>4</td>
<td>5,564</td>
<td>2,522</td>
</tr>
<tr>
<td>4.19%</td>
<td>1.90%</td>
<td>6.10%</td>
</tr>
<tr>
<td>5</td>
<td>1,500</td>
<td>837</td>
</tr>
<tr>
<td>1.13%</td>
<td>0.63%</td>
<td>1.76%</td>
</tr>
</tbody>
</table>
ANNUAL INCOME

Annual income is collected by the program to assess eligibility. In addition, income can play a role in the work and child care related decisions made by parents. The proportion of the cost of child care to income is an important metric to monitor related to economic stability and achievement of financial independence for families. Knowing the range of incomes for participating families also provides insight into the audiences served, and not served, by the program.

Some data entry errors resulted in 62 payments listed in years outside the possible range from the data pull. It is important to note that in some cases families had one or more children enrolled in CCA and CCA+ in the same year, so their income is double counted. This can happen when a family has a child with special needs in the home, as that child remains CCA eligible while the other children are CCA+ eligible.

In general, median income is increasing over time for families in both the CCA and CCA+ programs, regardless of household size (Figure 1 and Table 4). The yearly

<table>
<thead>
<tr>
<th>Number of</th>
<th>Number of Parents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>376</td>
<td>262</td>
</tr>
<tr>
<td></td>
<td>0.28%</td>
<td>0.20%</td>
</tr>
<tr>
<td>7 - 12</td>
<td>152</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>0.11%</td>
<td>0.09%</td>
</tr>
<tr>
<td>Total</td>
<td>101,809</td>
<td>30,905</td>
</tr>
<tr>
<td></td>
<td>76.69%</td>
<td>23.28%</td>
</tr>
</tbody>
</table>
percentage change in median income varies but is generally between 1% and 5%. We also found that larger households have higher median income, with three-person households with children in CCA having median income 7 – 15% higher than two-person households with children in CCA, and four-person households having median income 3 – 9% higher than three-person households with children in CCA. There is a much larger disparity in median income across household size for families with children enrolled in CCA+. For households in CCA+, a three-person household had between 17% and 20% increase in median income, compared to a two-person household. Additionally, a four-person household in CCA+ had a 7%, 20%, and 24% increase in median income compared to a three-person household in 2016, 2017, and 2018, respectively.

Figure 1: Distribution of annual household income by household size and CCA status
Table 4: Median annual income for CCA families (yearly percentage change)

<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
<th>Household Size</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CCA</td>
<td>CCA+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CCA</td>
<td>$15,387.06 (-)</td>
<td>$17,164.68 (-)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NEED FOR THE PROGRAM

Families report their need for Iowa’s CCA program during the eligibility process.

Many families have multiple reasons for needing financial assistance for child care.

Knowing what the needs are provides insight into the importance of the program in
overcoming barriers to financial independence. Needs are self-reported but verified by staff.

Across the time analyzed (2012 – 2018), employment was the most common reason that families report as their reason for needing child care assistance, with employment reported by just under 75% of parents at the beginning of 2012 and just over 85% of parents by the end of 2018 (Figure 2). We observed spikes in employment during the summer months with corresponding dips in education as the need reported, but these leveled out in 2017 and 2018. Due to the large difference in proportions for all the other possible needs, we created a zoomed-in plot which excludes working to see trends in the other needs over time (Figure 2.1). We observe that after mid-2012, the second most common reason reported for needing child care assistance was protective services, which is steadily increasing to just over 5% of parents by the end of 2018. Parents reporting education as the reason for needing assistance decreased significantly over time. Education was listed as the reason for needing child care for 12% of parents at the beginning of 2012, but only by 1% of parents by the end of 2018. There was also a decrease in the proportion of parents needing child care for PROMISE JOBS activities over the time reported, with 6.5% of parents reporting this need at the beginning of 2012 and just under 2% reporting PROMISE JOBS at the end of 2018.

Mothers showed similar patterns in needs as all parents combined, although mothers with a partner were working at a slightly lower percentage (69%) and
instead were pursuing education (16%) in 2012 (Figure 3). Over time, more partnered mothers chose working over education, and by January 2016 about 85% of mothers were working and only 2% were reporting a need due to education, which was nearly equivalent to the proportions for single mothers. Single mothers were also more likely to need child care due to protective services, although the gap between single mothers and other mothers decreased over time.

Figure 2: Need proportions over time for all parents
Figure 2.1: Need proportions over time for all parents excluding working

Figure 3: Need proportions over time for mothers only
ATTENDANCE

The attendance patterns of children served by Iowa’s CCA program are an important indicator of stability and continuity in care arrangements. Higher levels of stability and continuity are associated with increased outcomes for children’s emotional, social, and educational outcomes. Trends in attendance signify the ability of the program and the policy to support the care and development of enrolled children.

Data entry errors resulted in 10 children having their first attendance period start before their birthday, so these children could not be included in the calculations by age at start.

Figure 3.1: Need proportions over time for mothers only excluding working
The median length of attendance for all children was 13 months, and attendance lengths ranged from 0 to 100 months (Figure 4). Additionally, the median number of months attended decreases the older children are when they enroll until age four, at which point it remains relatively constant at 9-10 months. We found that most children (>90%) do not have breaks in attendance longer than one month, and if a break happened it was typically a one-time occurrence (Figure 5).

Figure 4: Distribution of length of attendance in months by child’s age at first attendance
Figure 5: Percentage distribution of breaks in attendance by fiscal year

PAYMENTS FOR CARE

Payments made by the program represent the costs associated with care for enrolled children. The CCDBG requires states to conduct a child care market rate survey every three years to set the rates paid to providers through their CCA program. Many factors are involved in the development of the market rate. It is the usual price charged for care, not the actual rate charged by providers. The KinderTrack analysis highlights the market rate and the actual amount paid to providers by year. Payment rates are set by programs to ensure the same access to child care experienced by families and children who are not enrolled in the CCA program, supporting the policy’s goal of parental choice.
Part of this analysis looked at payment amounts by children’s age using categories defined by when the child started kindergarten. However, some children did not have a kindergarten start date in the data, despite attendance throughout ages five and six. Children older than six or younger than five with missing kindergarten start dates were classified as school age and preschool, respectively, but children between ages five and six with no kindergarten date had to be excluded from that part of the analysis.

The biweekly payment amount per child has a wide range, from $0 to just over $1,500, however half of all payments are between $110 and $235 (Figure 6). For families, biweekly payment amounts range from $0 to $5,660, with 50% of payments between $136 and $351. The actual amount paid in the biweekly payments are slightly below market rate, with the median amount paid per child at $166 and median market rate at $184. For families, the median amount paid was $230, and the median market rate was $245.

Biweekly payment amounts vary by the age of the child, with younger children (under age 2) being more expensive, median amounts decreasing until age six, remaining constant through age eight, and then increasing until age 19 (Figure 7). The payment amount for teenagers is higher because those children who are eligible due to having special needs and require more intensive care. When we categorize age as infant, preschool, and school age, we see the median biweekly payment amounts decreasing as children get older (Figure 8). This might seem
contradictory to the distribution by age in years, but because there are so few children with special needs, the typical school age child still has lower biweekly payment amounts than infants or preschool aged children.

The total amount paid to licensed centers has been increasing over time, whereas the total amount paid to registered child development homes and in home care has remained relatively constant and total amount paid to non-registered child care homes has decreased (Figure 9). Payments to all types of providers have been less than the market rate, however the difference between market rate and amount paid is most pronounced for licensed centers and registered child development homes.

School-aged children use fewer units of care per week since they attend school when they would otherwise need child care services.

There is wide range of values for the annual amount paid for each child and for each family, with annual amounts ranging from about $5 to about $30,000 per child and to over $100,000 per family (Figure 10). The median amount paid per child per year increases over time from $1,300 in 2010 to about $2,500 in 2018. The median amount paid per family per year is also increasing from about $1,900 in 2010 to $4,300 in 2018. We would expect the median amount paid per family to be slightly under double the amount paid per child, as about 45% of families have only one child and another 30% have two children. Median annual payment amounts per child and per family are slightly less than the market rate, and this difference has become more pronounced over time, with the median annual payments per child
(family) about $90 ($160) lower than market rate in 2010 and $220 ($480) lower in 2018.

Figure 6: Distribution of biweekly payments per child and per family

Figure 7: Distribution of biweekly payment amount by child’s age at time of payment
Figure 8: Distribution of biweekly payment amounts categorized by children's age at time of payment.

Figure 9: Total amount paid per fiscal year by type of provider.
Many, but not all, families enrolled in Iowa’s CCA program are required to pay a portion of their child care fees through a copay based on their family size and income. Copayments have been cited as an opportunity for state programs to extend their resources. They may augment the provision of higher benefits through low copayments or they may serve more families through lower benefits and higher copayments. Cost-sharing between enrolled families and state funding establishes an important value for the program and a partnership among stakeholders.

We found that for families enrolled in Iowa’s CCA program, about half of families had a copay in each year and for families enrolled in CCA+ between 96-97% had a copay (Table 5). The typical copay amount increased slightly over time for families in CCA, with the median copay in 2010 being $204 and the median copay in 2018 at $334. For families enrolled in CCA+, the median copay increased from $343 to

Figure 10: Distribution of annual payment amounts per child and per family

COPAYS
$590 between 2016 and 2017 and increased to $714 in 2018 (Figure 11). Typical copay amounts increased as the number of children in the family increased for families enrolled in CCA, with the second child increasing the copay $59 and three or more children increasing the copay by an additional $16 in 2018 (Figure 12). Families enrolled in CCA+ did not see the same effect with increased children in the family with the median copay in 2018 being reduced by $1 with a second child and increased by $57 for three or more children.

Table 5: Percentage of families with copays over time by program

<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
<th>Families with Copays</th>
<th>Total Families</th>
<th>Percent of Families with Copays</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>CCA</td>
<td>7,351</td>
<td>16,133</td>
<td>45.56%</td>
</tr>
<tr>
<td>2011</td>
<td>CCA</td>
<td>9,994</td>
<td>20,003</td>
<td>49.96%</td>
</tr>
<tr>
<td>2012</td>
<td>CCA</td>
<td>10,424</td>
<td>20,388</td>
<td>51.13%</td>
</tr>
<tr>
<td>2013</td>
<td>CCA</td>
<td>10,283</td>
<td>19,890</td>
<td>51.70%</td>
</tr>
<tr>
<td>2014</td>
<td>CCA</td>
<td>10,004</td>
<td>18,958</td>
<td>52.77%</td>
</tr>
<tr>
<td>2015</td>
<td>CCA</td>
<td>10,043</td>
<td>18,470</td>
<td>54.37%</td>
</tr>
<tr>
<td>2016</td>
<td>CCA</td>
<td>10,399</td>
<td>18,581</td>
<td>55.97%</td>
</tr>
<tr>
<td></td>
<td>CCA+</td>
<td>506</td>
<td>522</td>
<td>96.93%</td>
</tr>
<tr>
<td>2017</td>
<td>CCA</td>
<td>9,573</td>
<td>18,405</td>
<td>52.01%</td>
</tr>
<tr>
<td></td>
<td>CCA+</td>
<td>1,356</td>
<td>1,397</td>
<td>97.07%</td>
</tr>
<tr>
<td>2018</td>
<td>CCA</td>
<td>8,981</td>
<td>18,178</td>
<td>49.41%</td>
</tr>
<tr>
<td></td>
<td>CCA+</td>
<td>1,775</td>
<td>1,848</td>
<td>96.05%</td>
</tr>
</tbody>
</table>
Figure 11: Copay amounts by program for families with copay

Figure 12: Copay amounts by number of children and program for families with copay
NUMBER OF PROVIDERS

An adequate network of providers and a variety of provider types is needed to ensure families have a choice in making care arrangements. These indicators of the program’s ability to serve enrolled families and children are linked to the intended outcomes for families, their children, and communities. Trends over time can be utilized to assess the expansion or reductions within the network and their potential impacts to participating families.

There are three categories of child development homes in Iowa. They are denoted as A, B, and C.

For category A, the total number of children allowed at any one time in an emergency school closing is 8 children: No more than six children who are not attending kindergarten or higher grade level at any one time are included in this number. Four of those may be 24 months or younger (with no more than three who are 18 months or younger) and up to two school aged children for up to 2 hours at a time.

For category B, the total number of children allowed at any one time in an emergency school closing is 12 children who are not attending kindergarten or higher grade level at any one time, with 6 of those who are not attending school. Four of those may be 24 months or younger (with no more than three who are 18 months or younger). Four may be attending school, and two may be receiving care on a part-time basis.
For category C, up to 16 children may be present at any one time with an additional approved staff member needed for numbers of children over 8 in an emergency school closing. No more than 12 children not attending kindergarten or higher shall be present at any one time. Of these children no more than 4 who are 24 months of age or younger shall be present at any one time and if four are 18 months or younger both providers shall be present. No more than two children who attend school may be present for a period less than 2 hours and no more than 2 children who are receiving care on a part-time basis may be present.

Through 2014, the most common type of provider was child care homes, however after 2014 Category B became the most prevalent type of provider (Table 6).

Licensed centers also grew in prevalence in 2017 and 2018, being the second most common provider type in those years. Category A accounted for 18-19% of all providers through 2016, and then the percentage dropped slightly to about 16%.

Table 6: Summary of types of providers utilized by CCA families over time

<table>
<thead>
<tr>
<th></th>
<th>Licensed Center</th>
<th>Category A</th>
<th>Category B</th>
<th>Category C</th>
<th>Non-Registered Child Care Home</th>
<th>In-Home</th>
<th>Exempt from Licensing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2010</td>
<td>Count</td>
<td>1,312</td>
<td>1,711</td>
<td>2,402</td>
<td>478</td>
<td>2,947</td>
<td>183</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>14.4%</td>
<td>18.7%</td>
<td>26.3%</td>
<td>5.3%</td>
<td>32.3%</td>
<td>2%</td>
<td>1.1%</td>
</tr>
<tr>
<td>July 2011</td>
<td>Count</td>
<td>1,349</td>
<td>1,916</td>
<td>2,531</td>
<td>572</td>
<td>3,314</td>
<td>286</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>13.4%</td>
<td>19%</td>
<td>25.1%</td>
<td>5.7%</td>
<td>32.9%</td>
<td>2.8%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>1,374</td>
<td>1,948</td>
<td>2,538</td>
<td>611</td>
<td>3,220</td>
<td>374</td>
<td>164</td>
</tr>
</tbody>
</table>
PROVIDER PROXIMITY

Low-income families can be subject to variable work schedules. Child care that is near the family’s home or work place eases drop-offs, pick-ups, sick days, and supports a reasonable commute. When care is located nearby, families are more likely to maintain enrollment in the program and adhere to stable care arrangements for the benefit of the child.

One limitation of this analysis is that it does not control for actual distance between a family’s home and their providers location. There are some cities which are right on the border between two counties, e.g. West Des Moines, so while the child may be getting care in a different county, it may only be 10-15 min away from their house.

Most children are going to a provider in their same county and the percentage says roughly constant over time around 93 - 94%.
Summary

The analysis answered key questions about the relationship between the goals articulated by the CCDBG policy and the implementation of Iowa’s Child Care Assistance program. While direct measures are not incorporated into KinderTrack, the data highlights who is using the program, how and why they are using the program, the availability of quality child care, and the financial impact of the program on providers and families. The data also reflects the impact of policy changes aimed at addressing the Cliff Effect such as the implementation of the CCA+ program.

Many single parents (27%) live below the poverty line and one-third of single mothers (30%) earn incomes in this range (Livingston, 2018). Most families using CCA in Iowa are single-parent families, and the majority of those are single mothers. The average family consists of 2 to 3 members, a parent and one or two children.
The median incomes for families enrolled in CCA and CCA+ are increasing over time, but at a minimal rate. Families enrolled in CCA+ see much larger income increases than those enrolled in CCA, highlighting the intention of the program.

Challenges in finding and affording child care can often serve as a barrier for parents who are working toward completing additional education or job training (Adams et al., 2014). Adults with 2- or 4-year degrees have higher incomes than those with a high school diploma (Haskins et al., 2009). Iowa’s CCA and CCA+ programs serve parents who are working with just over 85% reporting working as the primary reason for needing assistance in the most recent data. There was a decrease over time in utilization of the program for educational needs across family types. Engagement of the program with PROMISE JOBS and protective services appears to impact a significant number of Iowa families.

Stable care arrangements are associated with increased social, emotional, and academic outcomes for children (Adams et al., 2010). A median attendance rate of 13 months across all ages, with a minimal number of breaks greater than 30 days was identified in Iowa’s program. Children enrolling in care before age one participated longer with decreases in length of participation until age four where attendance length levels out. This is where most preschool enrollment begins, and what we would expect to see. The number of one-time breaks in attendance (over 30 days) by fiscal year has decreased since 2015. Children with special needs are enrolled in the program longer than children without special needs.
Child Care Assistance program reimbursement rates for providers are associated with quality in three ways (Greenberg et al., 2018). First, higher rates can attract providers to the program. Second, the increased revenue can be used to invest in quality improvement initiatives. Third, increases can be associated with quality tiers where states pay providers more for achieving higher standards of quality. Reimbursement to providers can have an impact on their participation in the program and can limit choices parents have for care.

In Iowa’s program, biweekly payment amounts vary by the age of the child, with younger children (under age 2) being more expensive, median amounts decreasing until age six, remaining constant through age eight, and then increasing until age 19. The total amount paid to licensed centers has been increasing over time, whereas the total amount paid to registered child development homes and in-home care has remained relatively constant, and the total amount paid to non-registered child care homes has decreased. Payments to all types of providers have been less than the market rate, however the difference between market rate and amount paid is most pronounced for licensed centers and registered child development homes.

Biweekly amounts paid to providers are slightly below market rate, with the median amount paid per child at $166 and median market rate at $184. The median amount paid per family was $230, and the median market rate was $245. The median amount paid annually per child increases over time from $1,300 in 2010 to about $2,500 in 2018. The median amount paid annually per family is also
increasing from about $1,900 in 2010 to $4,300 in 2018. Median annual payment amounts per child and per family are slightly less than the market rate, and this difference has become more pronounced over time, with the median annual payments per child (family) about $90 ($160) lower than market rate in 2010 and $220 ($480) lower in 2018.

The CCDBG Reauthorization in 2014 emphasized quality and continuity of care, supporting the dual purposes of augmenting healthy child development, and enabling families to work (Hahn, et al., 2018). The Reauthorization included a provision for copayments, stating they must be affordable and not be a barrier to accessing quality care arrangements. Many families enrolled in the program pay a portion of the cost of care for their children. As the family income increases, the copays increase.

In Iowa’s CCA program, about half of families had a copay in each year and for families enrolled in CCA+ between 96-97% had a copay. The typical copay amount increased slightly over time for families in CCA, with the median annual copay in 2010 being $204 and the median annual copay in 2018 at $334. For families enrolled in CCA+, the median annual copay increased from $343 to $590 between 2016 and 2017 and increased to $714 in 2018. Typical copay amounts increased as the number of children in the family increased for families enrolled in CCA, with the second child increasing the copay $59 and three or more children increasing the copay by an additional $16 in 2018. Families enrolled in CCA+ did not see the
same effect with increased children in the family with the median copay in 2018 being reduced by $1 with a second child and increased by $57 for three or more children.

The types of child care providers available to families have changed over time. Through 2014, the most common type of provider was non-registered child development homes, however after 2014 Category B became the most prevalent type of provider. Licensed centers also grew in prevalence in 2017 and 2018, being the second most common provider type in those years. Category A accounted for 18-19% of all providers through 2016, and then the percentage dropped slightly to about 16%. While licensing and registration are not sole indicators of provider quality, they guarantee minimum requirements are achieved and assessed through the provision of continued monitoring (Childcare.gov, 2020). The trend toward licensed providers in Iowa is indicative of the state’s dedication to quality.

Distance, cost, availability, schedule, and quality of care are key factors weighed by parents as they choose a child care provider (Administration for Children and Families, 2016). Long distances traveled to a provider from home or work can limit participation in the program. This analysis found 93-94% of children have a provider in the same county as their family home and this percentage has remained constant over the time studied.
Recommendations

A key benefit of this analysis was the ability to measure the link between the CCDBG policy goals, the literature on poverty and early childhood, and the state’s program implementation. The program has many positive effects and capitalizing on the sources of those effects, replicating them where possible, is recommended. In addition, the limitations experienced by nearly all child care assistance programs were highlighted by the KinderTrack analysis. These limitations should be explored using a collaborative process across the child care system aimed at the identification of solutions. The recommendations associated with the results of the analysis are:

- Explore the decrease in utilization of the program for educational needs, particularly for single mothers. This may reveal an opportunity for increasing the potential for the program to meet the policy’s goal of increasing family independence.
- Continue to capitalize on practices between state agencies like PROMISE JOBS and protective services and identify additional opportunities to partner in innovative practices to support goal achievement among stakeholders.
- Develop a full understanding of the impact of the differences between reimbursement rates and market rates and the cost of providing care, particularly for child care centers, to highlight issues related to access to high quality care for families, stable care arrangements for children, and augment the contribution of child care providers to economic prosperity.
The measures relative to the CCA+ program reveal its positive impacts on families and the child care system. Explore possibilities for further enhancements and replication where possible. Continued measurement is recommended.

Institute a process to explore the utilization of the program by families of children with special needs. The demand for and ability of care, cost of care, and provider readiness to provide care should be investigated and understood (Henley & Adams, 2018). The goal of the process should be to develop strategies to address disparities in access, cost, and quality.

There are also a few key recommendations that are aligned with, but not a result of, the KinderTrack analysis. This analysis utilized just one source of data; a source not constructed for this purpose. There is a critical need for additional data to support innovations in program implementation that benefit stakeholders across the child care system. A data-driven approach deepens the understanding of the issues and the policy, encourages the identification of interventions, and increases the capacity of stakeholders to implement changes (Bowen and Zwi, 2005).

Recommendations aligned with this approach are:

- Establish procedures to collect qualitative data to validate and further describe the stories told by the quantitative data. Questions should be aligned with the policy, the program’s implementation activities, and the literature.
• Select a core set of quantitative measures that are in addition to those reported Federally. These measures should be selected to meet the needs of key stakeholders and assist in the development and maintenance of a robust outcomes-based analysis. Choose measures that assist in quality improvement and trend identification and encourage the replacement of a reactive approach with a proactive approach to program improvement.

• Improve analytic capabilities designed to encourage further inquiry and dialogue among stakeholders. Connect the program’s data with relevant data from other state programs, providers, communities, businesses, and advocacy organizations. The objective should be to outline the realities associated with the program and reveal opportunities for collaborative system-wide improvements.

Further analysis can underscore the strengths of the program, identify areas in need of improvement, and interventions that are likely to have a positive impact. At the center of this inquiry should be a systems approach, collaborative decision-making, and improved outcomes for families and children.
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