

# Evaluating CCDBG in Oregon: Impact of the 2014 Act on Children, Families, and Providers

## Final Report

### Phase II: Implementation Grant

November 2023

Megan Pratt  
Roberta B. Weber  
Michael Wohner

Oregon Child Care Research Partnership  
College of Health

Report Contact  
Megan Pratt  
Phone 541.737.5373  
Email [oregonccrp@oregonstate.edu](mailto:oregonccrp@oregonstate.edu)



**Oregon State  
University**

# Acknowledgements

This study was funded through grant number HHS-2018-ACF-OPREYE-1274 from the Office of Planning Research and Evaluation in the Administration for Children and Families, U.S. Department of Health and Human Services. The contents are solely the responsibility of the authors and do not represent the official views of the funding agency, nor does publication in any way constitute an endorsement by the funding agency. The authors thank members of the Evaluating CCDBG in Oregon Advisory Committee for their insights and review of this report.

# Executive Summary

The Evaluating CCDBG in Oregon Research Project examines the impact of implementation of the 2014 Child Care and Development Block Grant (CCDBG) Reauthorization Act (2016 Child Care and Development Fund (CCDF) Rule) on the children, families, and providers who participated in Oregon’s child care subsidy program for employed families (Employment Related Day Care-ERDC). Using a quasi-experimental research design and five years of merged administrative data, each of the three studies compares program participants in the two years prior to new policy implementation with those who participated two years after (referenced as PRE and POST). Distinct studies focus on families, children, and providers. The studies examine participant characteristics and the stability of their participation. We also examine factors that predict leaving the program, an examination that extends beyond the impact of Reauthorization and provides insights on why participants leave the subsidy program. In light of recent legislation toward improving the ERDC program, results are relevant to current and future decision-making.

## ***Subsidy stability continues to be a challenge for children and families.***

Prominent goals of Reauthorization include increasing the stability of family participation in the subsidy program and improving the health, safety, and quality of care provided to children receiving a subsidy. Subsidy policies that aim to increased stability include 12-month redetermination periods and 3-month job search. As early as 2009 Oregon began working toward 12-month redetermination periods by aligning subsidy and Supplemental Nutrition Assistance Program (SNAP) spells for some employed parents and, in line with implementation of the new law, put 12-month periods in place for all employed parents in 2015. In 2013, Oregon added one-month job search, and extended it to three months in 2015 as a part of Reauthorization alignment.

The study used a PRE-POST, quasi-experimental design approach that defined the comparison groups as families and their children who first entered the subsidy program during the PRE period (FFY 2015 and 2016—October 2014 to September 2016) and those who first entered the subsidy program during the POST period (FFY 2018 and 2019—October 2017 to September 2019). The descriptive measure of stability (Kaplan-Meier estimate of median spell length) shows subsidy spells in POST are about a month longer than those in PRE (8 vs 7 months, respectively). Yet, modeling shows that when other factors are controlled, being in POST actually predicts shorter spells. Families were 20% more likely to exit the subsidy program in POST than in PRE.

The policy changes by themselves are not sufficient to achieve 12-month spells of participation. In addressing why policy does not lead to longer participation spells, modeling provides insights. The strongest predictors of a family leaving the subsidy program are associated with employment: job change or gain or loss in earnings. Gains in earnings are the largest predictor of subsidy exit, but these gains are not high enough to cause ineligibility. It may be that families with increased earnings

may anticipate higher copays and leave the program. Another possibility relates to subsidy practice. Perhaps parents are not consistently informed about and encouraged to use the 3-month job search allowance in order to remain on the program for the full 12-months.

The length of time children are in subsidized child care arrangements is shorter than subsidy spells (6 months vs 8 months for family participation). Modeling what predicts short subsidized arrangements shows that, in addition to the factors that predict shorter spells of family subsidy receipt, being an infant predicts short subsidized arrangement spells. The role of child age could be associated with family and/or provider issues including the high cost of using or providing care for infants. Other predictors of shorter arrangements include having been removed from home by Child Welfare or identifying as Black/African American compared to White. It will be important to identify policies and practices that increase child care arrangement stability for infants, children with child welfare experience, and Black/African American children.

***Oregon experienced a notable decline in license-exempt friend and neighbor care.***

Findings from both the family and child studies show few changes in participant characteristics between PRE and POST. The most outstanding difference between PRE and POST is the decline in subsidy families using care provided by License-Exempt Nonrelatives and the related decline in participation of Exempt Nonrelative providers in the subsidy program. The decline in the number of home-based providers is almost entirely due to the decreased number of Exempt Nonrelative providers, which includes friends and neighbors. Exempt relatives did not experience a substantial change in level of participation. We see little change in the number of months providers participate in the program before and after policy implementation. For both licensed and exempt providers, caring for a higher number of subsidy children and providing more hours of care predict more months in the program.

***Policies do not function on their own.***

An important implication of study findings is that the improvement of subsidy program outcomes requires attention to more than a single policy or even the full set of subsidy policies. For families, employment related changes interfere with participation stability. For children, stability of subsidized arrangements is related not only to their parent's ability to stay on the program, but to child age, race, and involvement with child welfare. For providers, length of participation is related to higher numbers of subsidized children in care and hours of care provided. Policy, practice, and attention to the needs of specific populations all support achievement of subsidy program goals.

# Contents

- ACKNOWLEDGEMENTS..... 2
- EXECUTIVE SUMMARY ..... 3
- CONTENTS..... 5
- INTRODUCTION..... 6
- POLICIES AND PRACTICES..... 7
- RESEARCH QUESTIONS ..... 9
- RESEARCH DESIGN..... 11
- FAMILY STUDY.....13
  - Introduction*.....13
  - Key Findings*.....13
  - Methods* .....13
  - Results* .....13
- CHILD STUDY..... 18
  - Introduction*..... 18
  - Key Findings*..... 18
  - Methods* ..... 18
  - Results* .....19
- PROVIDER STUDY..... 22
  - Introduction*..... 22
  - Key Findings*..... 22
  - Methods* ..... 23
  - Results* ..... 23
- CONCLUSIONS AND IMPLICATIONS ..... 29
- REFERENCES .....31

# Introduction

The 2014 Reauthorization of Child Care and Development Block Grant (CCBDG) Act aims to increase stability for families participating in the subsidy program and ensure that children whose care is supported by Child Care and Development Fund (CCDF) programs are in stable and high-quality settings that are monitored for safety, including inspections and fingerprinting. The 2016 CCDF Rule guides implementation of the 2014 Act. This Act has potentially large impacts on the children, families, and providers that participate in the subsidy program. Years of research on Oregon's subsidy program have shown it to be characterized by short participation spells and even shorter subsidized arrangements, use of home-based care<sup>1</sup>, high participation of families with challenging work schedules, and high parental copayments (Weber, Grobe, & Scott, 2018; Weber, Pratt, & Houston, 2022). This research project focuses on impacts of Reauthorization on children, families, and providers participating in Oregon's subsidy program.

Of high policy interest is how implementation of the Reauthorization policies, such as 12-month eligibility periods, 3-month job search, increased provider requirements, and additional support for home-based child care providers, affect which children, families, and providers participate in the subsidy program. As early as 2009 Oregon began working toward 12-month redetermination periods by aligning subsidy and Supplemental Nutrition Assistance Program (SNAP) spells for some employed parents and, in line with implementation of the new law, put 12-month periods in place for all employed parents in 2015. In 2013, Oregon added one-month job search, and extended it to three months in 2015 as a part of Reauthorization alignment.

Research has shown that Oregon's CCDF program has traditionally served parents whose employment schedules constrain their child care choices (Weber, Grobe, & Scott, 2018). The same study shows that amongst low-income families, challenging work schedules and having a child with special needs is associated with use of less formal care and reliance on home-based arrangements. Further, facing work constraints (e.g., unpredictable and nontraditional work schedules) is negatively associated with use of center and formal family child care. For these families, home-based care, including that delivered by friends and neighbors, may be the only option. Parents of infants are another group that often sees home-based child care as best meeting their child's needs. Oregon legislators and Early Learning Council members have expressed a commitment that the CCDF program reach traditionally underserved families such as a) racial/ethnic minorities, b) those whose primary language is not English, and c) children with a special need such as those involved in Child Welfare or in Early Intervention/Early Childhood Special Education<sup>2</sup>. These leaders have expressed a commitment to high-quality home-

---

<sup>1</sup> We use the term home-based to describe both licensed and license-exempt providers of care in a home. The majority of home-based providers in the subsidy program are legally-exempt, but they care for small numbers of children. Prior to implementation, these providers were not monitored.

<sup>2</sup> Priorities and goals for the statewide early childhood system are outlined in the Raise Up Oregon Plan. [https://www.oregon.gov/delc/about-us/RUO\\_Documents/Master\\_RUO\\_2024-2028.pdf](https://www.oregon.gov/delc/about-us/RUO_Documents/Master_RUO_2024-2028.pdf)

based care options within the CCDF program to support access for these target populations.

Implications of Reauthorization are particularly salient for non-relative legally-exempt home-based providers and the children and families they serve. Prior to implementation of Reauthorization, a large percentage of children receiving subsidy have been in this type of care, yet in Oregon legally-exempt providers have not been inspected or monitored and there has been little to no support for the quality of care provided by the less formal home-based providers, often referred to as family, friend, and neighbor care. Oregon is uniquely positioned to study the impact of the 2014 CCDBG Act on children, families, and providers of home-based care given historically high proportions of children served by exempt home-based providers, new regulations and investments, and the State of Oregon's commitment to families' access to quality home-based care.

With support from the Office of Planning, Research and Evaluation (OPRE), Oregon has conducted multiple studies to assess the impact of the implementation of the Reauthorization Act. The research project aims to assess how implementation of Reauthorization policies affects participation in the CCDF program using statewide administrative data. Specifically, using a quasi-experimental approach, this research project examines the extent to which the characteristics of subsidy-participating children, parents, and providers changed from PRE to POST implementation periods. We also evaluate the impact of policy implementation and other influential factors on the stability of family subsidy participation and child arrangements, as well as on provider participation rates. Finally, we estimate the predictors of short spells for families and children, as well as the length of subsidy program participation of providers.

The research project covers five years, spanning federal fiscal years (FFYs) 2015-2019. This includes two years prior to CCDF Rule implementation (FFYs 2015-2016, PRE), the implementation year (FFY 2017), and two years after implementation (FFYs 2018-2019, POST).<sup>3</sup> The research project relies on analyses created by merging multiple administrative databases. Findings are relevant not only for Oregon policy making, but also for researchers, policy makers, and practitioners working in other states to understand and improve how subsidy program policies shape the experiences of the children, families, and providers who participate in the program.

## Policies and Practices

During the research project period (2015-2019) Oregon subsidy policy making involved the Legislature, the Oregon Early Learning Division (ELD, now known as the Department of Early Learning and Care, DELC), and the Oregon Department of Human Services (ODHS). Although this research project focuses on subsidy policy changes implemented to comply with Reauthorization, subsidy policies do not work

---

<sup>3</sup> 12-month eligibility policies started to be implemented before FFY 2017 in anticipation of the Reauthorization.

in isolation. Rather, subsidy policies interact and impacts are a result of the interaction of these policies (Weber, Pratt, & Houston, 2022). Policies also interact with practices, which affect parents' understanding of the program and their role as a participant. For example, in one Oregon study, parent concerns about possible repayment demands often led parents to exit the program as soon as a job ended, thus shortening their participation spell (Pratt, Chandler, Barrett-Rivera, Thogmartin, & Weber, 2020). The following table, Table 1, provides a brief description of the key child care subsidy policies, broken down by relevant time periods (PRE, Implementation Year, POST, and after 2019). Changes associated with implementation of the 2016 CCDF rule are bolded.

*Table 1. High Level Overview of ERDC Policy Changes During and After Study Period*

POLICY CHANGES FFYs	PRE PERIOD 2015-16	IMPLEMENTATION 2017	POST PERIOD 2018-19	AFTER STUDY <sup>4</sup> 2020+
Family Policies				
<b>Redetermination period</b>	<b>10/2015 12-month eligibility</b>			<b>7/2023 Protected 12-month eligibility<sup>5</sup></b>  <b>Part- &amp; full-time allocations, including family well-being hours</b>
<b>Job search<sup>2</sup></b>	<b>10/2015 3-month Authorized Work Search (AWS), Authorized Medical Leave (AML), self-employment, and authorized student hours<sup>6</sup></b>			<b>1/2023 No employment requirement for student hours</b>  <b>7/2023 AWS and AML expanded to up to 12 months</b>
Eligibility				Exit limits increased
Copayment		<b>9/2016 Copay reduced when use QRIS Spark-rated provider<sup>7</sup></b>	12/2019 AML copays waived to \$0	8/2021 Reduced copay to under 7% of family income

*Continued on next page*

<sup>4</sup> Excluding temporary COVID Emergency-related policies

<sup>5</sup> ERDC benefits will no longer close due to TANF, not being connected to provider within 3 months, job loss during certification period, or if copay is not met.

<sup>6</sup> Employed students may have child care hours related to school approved but at least 50% of all authorized hours must be from employment.

<sup>7</sup>When copay policy was revised in 10/2021, this policy ended for parent copay.



*Table 1. High Level Overview of ERDC Policy Changes During and After Study Period (continued)*

POLICY CHANGES FFYs	PRE PERIOD 2015-16	IMPLEMENTATION 2017	POST PERIOD 2018-19	AFTER STUDY <sup>8</sup> 2020+
<b>Provider Policies</b>				
<b>Health and safety monitoring</b>		<b>11/2016 Health &amp; safety monitoring of Exempt Nonrelatives Increased training requirements of all providers</b>	<b>02/2018 Lead testing requirement</b>	
Provider payment rates	1/2016 Rate increase for Centers and license-exempt (LE) providers  3/2016 Rate increase for Registered Family (RFM) & Certified Family (CFM), & provider incentive payment for star-rating	1/2017 Rate increase for LE providers  5/2017 Rate increase for licensed providers  9/2017 Rate increase for LE providers	12/2017 Rate increase for licensed family providers (RFM, CFM)  1/2019 Rate increase for all provider types	1/2022 Rate increase for all provider types  6/2022 Rate increase for all provider types in line with HB 4005 to 90% of 2020 Market Price Study.  7/2021 pre-payment allowance and expansion of absent days

## Research Questions

This research project is designed to evaluate the effects of the implementation of the 2014 CCDBG Reauthorization and involves three studies, each focusing on a key subsidy population: families, children, and providers. Three sets of research questions, tailored to each study, ask questions about the influence of the Reauthorization Implementation on demographic characteristics, participation stability, and the factors that predict level of stability. See Table 2 on the next page. More detail about the research questions and variables included can be found in an associated technical report (Pratt, Weber, & Wohner, 2023).

<sup>8</sup> Excluding temporary COVID Emergency-related policies

*Table 2. Administrative Study Research Question Overview*

Population	Characteristics	Participation Stability	Predictors of Exit
Families	Do the demographic and employment characteristics of families who participated in the subsidy program change from before to after Reauthorization?	Do family subsidy spells lengthen from before to after Reauthorization?	What factors predict an exit from the subsidy program?
Children	Do the characteristics of children served after Reauthorization differ from those of children served before?	Do child arrangement spells lengthen from before to after Reauthorization?	What factors predict an exit from a subsidized child care arrangement?
Providers	To what extent do provider types change from before to after Reauthorization?  Do providers change the average number of children served from before to after Reauthorization?  To what extent do licensed-provider characteristics (especially those indicating quality of care) change from before to after Reauthorization?	Do the total number of months of provider participation in the program change from PRE to POST period? Does this vary by provider type?	What factors affect the likelihood that a provider continues to participate in the subsidy program? Does this vary by licensing status?

# Research Design

The study used a PRE-POST, quasi-experimental design approach<sup>9</sup> that defined the comparison groups as families and their children who first entered the subsidy program during the PRE period (FFY 2015 and 2016—October 2014 to September 2016) and those who first entered the subsidy program during the POST period (FFY 2018 and 2019—October 2017 to September 2019). Constraining the sample to those who entered supported comparability of PRE and POST cohorts. The period between October 2016 and September 2017 was defined as the policy implementation year because this was when most of the Reauthorization Act policies were implemented or affected most program participants in Oregon. Those who first entered the program during this year were excluded from analyses because this was a transition year (i.e., not clear what policy family was entering under). Families with at least one child who received a subsidy were included in the family sample. The children from those families were used to define the child sample. In Oregon, Child Care and Development Fund (CCDF) rules did not apply to families receiving subsidy due to participation in the Temporary Assistance to Needy Families (TANF) program. Therefore, we excluded families for whom all months of subsidy receipt were due to participation in TANF.

The provider sample was defined by identifying all unique providers who cared for at least one child on subsidy in the PRE and POST timeframe; the same provider could be included in both PRE and POST periods.

The analysis relied on linking numerous administrative databases to create several longitudinal datasets, each was used to capture participation of a study population before and after implementation of Reauthorization. The primary source of data was the 801 data from the child care subsidy program, provided by the ELD. Although Oregon Department of Human Services (ODHS) managed the CCDF subsidy program, data used to manage the subsidy program was regularly exported from the ODHS systems to ELD where it was managed and used to complete 801 reports. These data included information on the parents (income, sources of income, marital status, TANF receipt, county) and the child (age, race, gender) as well as the type of care provider (center, family, relative, etc.). The subsidy data was linked with data from several other administrative data sources, listed below and described in more detail in a supplemental technical report (Pratt, Weber, & Wohner, 2023).

---

<sup>9</sup> The research team chose this PRE-POST approach to better isolate the influence of the policy changes on participant behavior and be a more true representation of policy impact than would be achieved with a cross-sectional or caseload approach. Individuals who participated in the PRE-period may still be participating the POST-period, and thus have bias in their understanding of the new policies. By restricting the POST period sample to those who are first entered the program after the policies were implemented in FFYs 2018 & 2019, the policy influence is more likely to be detected. Another way the study design works to isolate the influence of the 2014 Act policies on participant behavior is through the inclusion of covariates, which are other factors that may be shaping program participation, such as family employment, child age, and community characteristics.

## Family and Child Data Sources

- *Client Maintenance System (CMS) provided by ODHS.* Contains information on parents and families including parent education level and household size that is not captured in the 801 database.
- *Employment Department Unemployment Insurance (UI) Wage data.* Integrated Client Management System (ICS) contains Oregon Employment Department data for all the parents in the sample. These data include UI Wage data information on when parents are employed, the wages they earn, and the hours they are employed.
- *Child Welfare data from Oregon Department of Human Services.* Contains information at the child level about the number of removals a child has experienced (and date of first and last removal from home), and number of welfare placements.
- *Early Intervention/Early Childhood Special Education from Oregon Department of Education.* Early Intervention/Early Childhood Special Education (EI/ECSE) data was obtained from the Oregon Department of Education. Oregon policy makers are committed to getting every young child screened for developmental disabilities and delays, and if needed, receiving developmentally supportive services. By merging in EI/ECSE data, we know if these children are receiving child care subsidy services.

## Provider Data Sources

- *DPPM Provider Pay data from ODHS.* The Provider Pay system through ODHS is used to monitor and pay the subsidy providers. It includes data on provider demographic information, license number, exit reason code, relative status, whether they passed the listing process, and other training and quality codes. These data were linked by license number to various other datasets held by OSU that are described below.
- *Oregon State University (OSU).* Through various projects, OSU has access to data on a range of licensed provider data that are linked by license number. Since 2012 Oregon has collected data on Structural Indicators of Quality (e.g., director and teacher education and training, compensation, retention, and accreditation) on all licensed child care facilities. Partners send data to OSU where the facility-level quality measures are created. Analyses completed as part of the State's Quality Rating Improvement System (QRIS) Validation Study provided evidence of significant relationships of these measures with observed quality (CLASS) and QRIS (Spark) ratings (Lipscomb, Weber, Green, & Patterson, 2016). Merging the Structural Indicator data provides a measure of quality in this study's analyses. Information on a providers' star rating from the State's QRIS are also linked.

# Family Study

## Introduction

Measuring the effects of Reauthorization on families in the program was an important goal of the study. Specifically, the researchers were interested in three major questions:

1. Do the demographic and employment characteristics of families who participated in the subsidy program change from before to after Reauthorization?
2. Do family subsidy spells lengthen from before to after Reauthorization?
3. What factors predict a family's exit from the subsidy program?

## Key Findings

- Few changes in demographic or employment characteristics of families were observed.
- Parent employment was characterized by instability; frequent changes in jobs and earnings.
- Descriptive measures of stability of participation in the subsidy program indicated families were slightly more likely to remain in program in POST (about 1 month longer).
- Modeling indicated that when other factors were controlled, families were more likely to exit in the POST than in PRE. Employment-related factors were the strongest predictor of a subsidy exit. Other factors included having a higher income and having a higher monetary value of the subsidy, and community characteristics.

## Methods

### Study Sample

The initial dataset included 29,414 unique family units, representing all the children receiving subsidy benefits over fiscal years 2015-2019. After the data aggregation process and missing data treatment, which is described in detail in the associated technical report, the final analytic dataset contained 16,940 families (11,312 in PRE and 5,628 in POST).

### Analyses

Three sets of analyses were completed. To compare participant characteristics in PRE versus POST periods, we conducted descriptive analyses of demographic and employment characteristics of participating families. To compare participation stability in PRE and POST periods, we conducted survival analyses (Kaplan-Meier Estimate), measuring the median length of subsidy spell. To estimate what factors predicted subsidy exit, we conducted an Accelerated Time Failure (AFT) Regression. Entering during PRE or POST periods was included as one possible predictor. The variables and more about the analyses included in the study are described in detail in an associated technical report (Pratt, Weber, & Wohner, 2023.)

## Results

### Descriptives—Family and Parent Employment Characteristics

The final analytic sample included 16,940 families receiving child care subsidies during the five-year study period. Of those, 11,312 families were in PRE and 5,628 in POST. The description of the demographic characteristics of the families was based on responses in the first month of the family’s first observed subsidy spell. Table 3 shows that we found very little difference in the characteristics of the PRE and POST groups. Meaningful changes included a decrease in the mean age of oldest child (from 63 to 48 months) and youngest child (from 39 to 32 months), decrease in the percentage of families with a \$0 copay (from 45% to 35%) along with a decrease in the percentage of families whose first spell was on TANF (from 19% to 14%). The increase in household income, median copay, and subsidy value were greater than what could be explained by inflation.

*Table 3. Family Characteristics*

Characteristic	PRE N = 11,312	POST N = 5,628	PRE-POST change*
Number in household (mean)	3.51	3.33	
Number of adults in household (mean)	1.03	1.03	
Number of children in household (mean)	1.85	1.72	
Age of youngest child (in months)	38.8	31.5	↓
Age of oldest child (in months)	62.6	47.8	↓
Household Income (median) <sup>a</sup>	\$1638	\$1845	↑
Monthly household copay amount			
Families with 0 copay in first month	44.8%	34.6%	↓
Median copay of families with >0 copay	\$173	\$205	↑
Subsidy value (median)	\$527	\$621	↑
Non-metro	15.5%	16.6%	
Language spoken at home			
English	94.0%	93.6%	
Spanish	4.9%	5.2%	
Others	1.1%	1.2%	
Child care slots per county child pop (mean)	17.4	16.6	
Parent’s median education level (mean)	12 (12.3)	13 (12.5)	
Percent with 1+ month TANF child care	19.3%	14.0%	↓

<sup>a</sup>Non-zero monthly income reported. 15% of families reported no income in their first month.

\*Change was labeled as increased ↑ or decreased ↓ from PRE to POST if average change was greater than 5% or a count of five.

As shown in Table 4, there was little difference in the employment characteristics of parents across PRE and POST periods. In both periods, parents were employed, on average, 6 of the 8 quarters (the quarters were not necessarily continuous). On average, both sets of parents had earnings in 75% of the project quarters. We saw a slight decline in hours worked with parents working an average of 330 hours per quarter in PRE vs the 286 hours for those in POST. Considering that a quarter of full-time work sums to 520 hours (13 weeks at 40 hours per week), both sets of

subsidy parents worked more than half time. Of course, the quarter may have been a mix of full-time work along with periods out of the workforce or unemployed.

Parents commonly experienced job changes, averaging over one job change from one quarter to the next. Over the six quarters, parents on average experienced 3 to 4 employment gains, and 1 to 2 employment losses between quarters. Changes in earnings were also common. Over half of families saw earnings gains of 33% or greater. Examination of income numbers indicated that increased earnings were not likely to make a parent income ineligible.

*Table 4. Employment Characteristics of Subsidy Participants with Employment Data*

Median family characteristics	PRE N = 7,255	POST N = 3,598	PRE-POST Change*
# of employed quarters (out of 8)	6	6	
Quarterly hours worked	330	286	↓
# of changes in primary employer	1	1	
# of employment losses from previous quarter	1	1	
# of employment losses to next quarter	2	2	
# of employment gains from previous quarter	4	4	
# of employment gains to next quarter	3	3	
Change in quarterly earnings from previous qtr. to current qtr.			
Earnings loss of 33% or greater	10.9%	9.7%	
No change from previous quarter	37.6%	35.8%	
Earnings gain of 33% or greater	51.5%	54.4%	

\*Change was labeled as increased ↑ or decreased ↓ from PRE to POST if average change was greater than 5% or a count of 1.

### **Continuity—Median Subsidy Spell Duration**

Based on survival analysis we found a one-month longer median spell length in POST versus PRE. (See Table 5.)

*Table 5. Kaplan-Meier Survival Curves for Family spells, Stratified by Period*

Period	Median Months
PRE (N = 11,312)	7
POST (N = 3,628)	8

### **Predictors of Subsidy Exit**

The Accelerated Time Failure (AFT) Regression analysis allowed us to model which factors (family, parent employment, policy, and community characteristics) predicted that a family exited their participation in the subsidy program. (See Table 6.) Highly significant and notable findings are summarized below and complete

results are available in an associated technical report (Pratt, Weber, & Wohner, 2023).

Among factors evaluated, employment emerged as the strongest predictor of exit. Families that experienced a job change within a particular month were 6.8% more likely to exit the program than families without a job change, holding all other factors constant. Changes in quarterly earnings held the strongest effect on family exit in the model. Families with a gain in earnings were 38% more likely to exit the program than families not experiencing an earnings gain. Families who experienced a loss in earnings were 23% more likely to exit the program than families with no loss in earnings. Findings suggest that employment instability is related to leaving the program.

Additionally, subsidy value, or the payments made to providers for the family's children, strongly predicted subsidy exit, with higher subsidy values associated with longer stays in the subsidy program. Past research in Oregon has shown that the month a family is required to redetermine eligibility is a significant predictor of exit such that families are more likely to exit the program at the time of redetermination (Grobe, Weber, & Davis, 2008; Weber, Grobe, & Davis, 2014). We were unable to assess the role of redetermination in the present study due to data limitations.

Child age and parent education had a slight impact on family exits. Specifically, as the age of the oldest child increased, so did the likelihood of exiting; and, as the education level of the parent increased, the likelihood of exiting decreased. Additionally, families were 2% less likely to exit the program for every \$100 of additional reported income a month.

Three county level community characteristics also predicted subsidy exit. First, families living in metropolitan counties had a 17% lower likelihood of exit than families in non-metro areas. Second, as the county employment growth rate for a given family increased, the likelihood of subsidy exit also increased. And, third, families living in counties with less available child care (i.e., number of slots per child population), stayed longer on the subsidy program than families in counties with greater child care availability.

Although the Kaplan-Meier estimate of median duration found family subsidy spells to be one month longer in POST than in PRE, after controlling for the confounding factors in the model, families in POST were 20% more likely to leave the program than families were in PRE.

Around a fifth of families in the study experienced at least month of TANF-related child care subsidy. It is possible that families who have TANF billing months have shorter spells than those who only have ERDC billing months. To address this potential influence, we did a sensitivity analysis with a reduced dataset that excluded families TANF billing months, and the results did not change. This suggests there was not a measurable difference in duration results for those who moved between TANF and ERDC.



Table 6. Predictors of Family Exit from ERDC Subsidy Program<sup>10</sup>

Predictors of Exit	Relative Time
Study period	
PRE period (REF)	
POST period	0.80***
Job change	
No change (REF)	
Change from previous quarter's employer	0.93**
Change in quarterly earnings from previous qtr. to current qtr.	
No or minimal changes	
Earnings loss of 33% or greater	0.77***
Earnings gain of 33% or greater	0.62***
Age of oldest child (in years)	0.98***
Education	1.01**
Language spoken at home	
English (REF)	
Spanish	1.03
Others	0.95
Family Income (in hundreds of dollars)	1.02***
Subsidy value (in hundreds of dollars)	1.06***
County employment growth rate	0.93***
Child care slots per county child population	0.99***
County employment growth rate	0.93***
Metro or non-metro	
Metro (REF)	
Non-metro	0.83***

\*\*  $p < 0.01$ , \*\*\* $p < 0.001$ ; REF = reference group.

Note: Type of care was also included as a covariate to control for any confounding effects that this variable may have on family spell length. Full results, including estimates for all covariates, can be found in an associated technical report (Pratt, Weber, & Wohner, 2023).

<sup>10</sup> The AFT model estimates are in Relative Time (RT), which is the rate in which a particular characteristic influences the likelihood of exit. The results for groups are RT comparisons of a group member compared to the reference group, with results  $>1$  indicating a decreased exit likelihood compared to the reference group, and results  $<1$  indicating an increased likelihood of exit compared to the reference group. For continuous variables the RT of  $>1$  indicates a decreased likelihood of exit for each unit increase in the variable, and a RT of  $<1$  indicates an increased likelihood of exit for each unit increase in the variable.

# Child Study

## Introduction

Study objectives for child-level analyses focused on the impacts of implementation of Reauthorization on which children participated in the program, the stability of subsidized child arrangements (the continuous length of time a child stayed with the same child care provider), and what predicted the end of a subsidized arrangement. In studying the effects of the Reauthorization on children, we focused on the length of these arrangements as an indicator of the consistency of the relationship between the child care provider and the child. We addressed the following questions:

1. Do the characteristics of children served after Reauthorization differ from those of children served before?
2. Do child arrangement spells lengthen from before to after Reauthorization implementation?
3. What factors predict an exit from a subsidized child care arrangement?

## Key Findings

- Few changes in demographic characteristics of children were observed. The largest change was the decrease in the percentage of children in care provided by a License-Exempt Nonrelative.
- Descriptive measures of stability of participation indicated a child was slightly more likely to remain in a subsidized arrangement in POST (about 1 month longer).
- Modeling indicated that when other factors were controlled, a child was more likely to remain in an arrangement in PRE than in POST. Factors that predicted exit from an arrangement included being an infant, being in care of an Exempt Nonrelative, having been involved with Child Welfare, or being Black/African American.

## Methods

### Study Sample

The initial dataset included 53,401 unique children associated with an adult in the study over fiscal years 2015-2019. After the data aggregation process and missing data treatment, which is described in detail in an associated technical report, the final analytic dataset contained 33,531 children (22,676 in children in PRE and 10,855 in POST).

### Analyses

Three sets of analyses were completed. First, descriptive analyses compared program participant characteristics in PRE and POST. Then, survival analysis compared the median length of a subsidized child arrangement in PRE and POST. Third, Accelerated Time Failure (AFT) Regression modeling estimated predictors of

arrangement exit. Entering during PRE or POST was included as one possible predictor. The variables and more about the analyses included in the study are described in detail in an associated technical report (Pratt, Weber, & Wohner, 2023).

## Results

### Descriptives—Child Characteristics

As can be seen in Table 7, child characteristics were largely the same in PRE and POST. Children were slightly more likely to be White (71% in POST vs 63% in PRE) and slightly less likely to be served by Early Intervention/Early Childhood Special Education (3% in POST vs 5% in PRE). The biggest change was in the child’s type of care with increases in all types of licensed care and a large decline in License-Exempt Nonrelative care (30% in PRE to 13% in POST).

*Table 7. Characteristics of the Children in the First Observed Subsidy Month*

	PRE N = 22,676	POST N = 10,855	PRE-POST change*
Child's race, ever identified as <sup>11</sup>			
Asian	1.7%	2.2%	
Black/African American	14.5%	13.7%	
Native American or Alaska Native	3.3%	3.6%	
Pacific Islander	1.1%	1.5%	
White	62.7%	71.4%	↑
Hispanic or Latino, ever identified as	25.2%	24.9%	
Gender			
Male	52.2%	51.8%	
Female	47.8%	48.7%	
Type of primary care setting			
<i>Licensed care</i>			
Certified Center	28.4%	35.8%	
Certified Family	13.8%	20.3%	
Registered Family	18.4%	20.7%	
<i>License-Exempt care</i>			
Exempt Center	1.0%	1.6%	
Exempt Nonrelative	29.6%	12.9%	↓
Exempt Relative	8.7%	8.8%	
Child welfare involvement			
Child removal history during period	4.5%	5.8%	
Mean number of removals	1.18	1.15	
Early Intervention or Early Childhood Special Education (EI/ECSE)	5.2%	3.3%	↓

\*Change was labeled as increased ↑ or decreased ↓ from PRE to POST if average change was greater than 5%.

<sup>11</sup> Race categories are not mutually exclusive. That is, children could be counted as identifying with more than one race.

### **Continuity—Median Child Arrangement Spell Duration**

Based on survival analysis, a slight increase in the median duration of child care arrangements was observed, with half of children leaving an arrangement after 5 months in PRE and 6 months in POST. (See Table 8.)

*Table 8. Kaplan-Meier Survival Curves for Child Arrangement Spells, Stratified by Period*

Period	Median Months
PRE (N = 22,676)	5
POST (N = 10,855)	6

### **Predictors of Exit from a Child Care Arrangement**

The AFT Regression analysis allowed us to model which factors predicted that a child exited their primary subsidized arrangement. (See Table 9.) Highly significant and notable findings are summarized below and complete results are available in the associated technical report (Pratt, Weber, & Wohner, 2023).

The type of care children used appeared to have a substantial influence on a child’s likelihood of exiting their arrangement. Using Certified Centers as the reference group, all other provider types had statistically significant differences in program exit than Certified Centers, except for Exempt Nonrelative which had no difference in predicting exit. Compared to Certified Centers, children attending Registered Family providers were 20% more likely to stay in the program, those with Certified Family providers were 19% more likely to stay in the program, and those with Exempt Relatives were 46% more likely to stay in the program, controlling for all other modeled factors.

Characteristics of the child appeared associated with how long they were with their primary arrangement. The age of the child was found to be a significant determinant when predicting arrangement length in the program, with infants most likely to leave their primary provider compared to other age groups. Black/African American children were 16% more likely to exit the program, when compared to White children. Other racial and ethnicity comparisons did not detect differences in likelihood of exit.

In terms of vulnerable populations, children with at least one child welfare-related removal from their home during the study period had a 12% greater likelihood of exit. Moreover, we found no measurable difference in arrangement length between those receiving and not receiving Early Intervention or Early Childhood Special Education (EI/ESCE) services.

Although the Kaplan-Meier estimate of median duration found child care arrangement spells to be one month longer in POST than in PRE, when controlling for all other factors in the AFT regression analysis we found that a child in POST was 5% more likely to exit their arrangement than was a child in PRE.

*Table 9. Predictors of Exit from a Subsidized Child Care Arrangement<sup>12</sup>*

Predictors of Exit	Relative Time
Study period	
PRE period (REF)	
POST period	0.95***
Gender	
Female (REF)	
Male	1.01
Age group	
Infant (REF)	
Toddler	1.45*****
Three- and Four-year olds	1.38*****
Five-year-olds	1.27*****
School Age	1.21*****
Race of child	
White (REF)	
Black	0.84*****
All other races	1.02
Declined to answer	0.86*****
Hispanic or Latino	
Not Hispanic or Latino (REF)	
Hispanic or Latino	1.05
Provider type	
Certified Centers (REF)	
Registered Family	1.20*****
Certified Family	1.19*****
Exempt Nonrelative	0.92
Exempt Relative	1.46*****
Exempt Centers	0.65*****
Child welfare intervention	
No intervention (REF)	
At least one removal	0.89***
Early Intervention/Early Childhood Special Education	
No Early Intervention (REF)	
Early Intervention	0.98

\*\*\*  $p < 0.001$ , \*\*\*\*\*  $p < .0001$ , REF = reference group.

Note: Additional adult-and community-level covariates not tabled include change parent change primary employer and change in quarterly earnings. Results can be found in the associated technical report (Pratt, Weber, & Wohner, 2023).

<sup>12</sup> The AFT model estimates are in Relative Time (RT), which is the rate in which a particular characteristic influences the likelihood of exit. Results  $>1$  indicate a decreased exit likelihood compared to the reference group, and results  $<1$  indicating an increased likelihood of exit compared to the reference group. For continuous variables the RT of  $>1$  indicates a decreased likelihood of exit for each unit increase in the variable, and a RT of  $<1$  indicates an increased likelihood of exit for each unit increase in the variable.

# Provider Study

## Introduction

To evaluate the impact of the 2014 CCDBG Act on provider participation levels, and to study the changes on provider characteristics before and after implementation of the 2014 Act we asked:

- 1) To what extent do provider types change from before to after Reauthorization?
- 2) Did providers change the average number of children served from before to after Reauthorization?
- 3) To what extent did licensed-provider characteristics change from before to after Reauthorization?
- 4) Did the total number of months of provider participation in the program change from before to after Reauthorization? Did this vary by provider type?
- 5) What factors affect the likelihood that a provider continues to participate in the subsidy program?

## Key Findings

- When comparing providers in PRE and POST, the substantial decline in participation of Exempt Nonrelative providers in the subsidy program stands out. Due largely to the decline in Exempt Nonrelatives, there was also a substantial decline in the total number of home-based providers. In other respects, providers were generally similar in both time periods.
- Spark (QRIS) participation slightly increased among Certified Centers and Registered Family providers. About half of centers and a quarter to a third of licensed home-based providers participated in Spark.
- There were not meaningful differences in the number of months providers participated in PRE and POST, although it is worth noting that licensed providers had more months in the program than did license-exempt providers.
- Due to differences between licensed and license-exempt providers, we modeled factors which predicted length of time in the program separately.
  - For both licensed and exempt providers, having a larger average number of children in care and providing more hours of care predicted staying in the program more months.
  - For exempt providers, being in POST predicted fewer months in the program, but there was no difference for licensed providers

## Methods

### Study Sample

The initial dataset included 11,594 unique providers<sup>13</sup>. After the data aggregation process, which is described in detail in an associated technical report, the final analytic dataset contained 13,789 (8,386 in the PRE period, and 5,403 in the POST). Of these, 2,751 (25%) were providers that appeared in both the PRE and the POST datasets.

### Analyses

Three sets of analyses were completed. First, to compare provider characteristics, descriptive analyses compared program participant characteristics in PRE and POST. Second, descriptive analyses examined how many total months providers participated in PRE and POST. And third, a multivariate model was used to identify factors that predicted a provider's total months of participation, with entering during PRE or POST included as one possible predictor. A description of the variables in this study and more about the analyses are described in detail in an associated technical report (Pratt, Weber, & Wohner, 2023).

## Results

### Descriptives—Provider Characteristics

The first research question asked if provider types changed from before to after Reauthorization. Findings varied by provider type, with the overall number of licensed providers showing little change between PRE and POST periods. In contrast, the overall number of license-exempt providers decreased by greater than 50%. (See Table 10.) This decline was due the drop in Exempt Nonrelative providers, dropping from 4,765 providers to 983 from PRE to POST. Exempt Relative providers increased in number from 1,512 to 1,994. There was no evidence suggesting that the Exempt Nonrelative decline was explained by providers changing provider type over time<sup>14</sup>.

---

<sup>13</sup> Oregon Department of Human Services categories providers in the CCDF program into distinct types of care. The research team grouped providers into the following categories: 1) licensed providers included Certified Center, Certified Family, and Registered Family, and 2) license-exempt providers included Exempt Relatives, Exempt Nonrelatives, and Exempt Centers.

<sup>14</sup> Besides leaving the program, providers alternatively could have changed status from Exempt Nonrelative to Exempt Relative or obtained licensure and reclassified to a licensed provider category. This could explain the modest increase seen within the Exempt Relative category of 482 providers, and the small increase to the overall numbers of licensed provider category of 44 providers. It still falls far short of the decrease seen of 3,782 providers in the Exempt Nonrelative category. The average number of children served remained relatively stable in most provider categories except for Exempt Centers, which had a two-fold increase from 9.9 to 21.7 children per center, but this represents a small portion of the overall number of children served (0.8%).

*Table 10: Provider Characteristics Before and After Reauthorization Implementation*

Type of Provider	PRE N	POST N	Difference	PRE-POST change
<i>Licensed</i>				
Certified Center	688	577	111	↑
Certified Family	502	601	99	↑
Registered Family	1245	1079	-166	
<i>License-Exempt</i>				
Exempt Center (<2% of sample)	56	45	-11	
Exempt Nonrelative	4765	983	-3782	↓
Exempt Relative	1512	1994	482	↑

\*Change was labeled as increased ↑ or decreased ↓ from PRE to POST if average change was greater than 20 providers.

Given the reliance on home-based care by parents of infants and those with challenging employment schedules, we also examined PRE-POST change in center-based versus home-based providers. (See Table 11.) POST period saw an increase in the number of center-based providers and a large decrease in the number of home-based providers. The decline in home-based providers was largely due to the decline in Exempt Nonrelative providers. There were also increases in the numbers of Certified Family and Exempt Relatives.

*Table 11. Center-Based vs Home-Based Providers*

Type of Provider	PRE N	POST N	Difference	PRE-POST change
<i>Center-Based</i>				
Certified Center	688	799	111	↑
Exempt Center (< 2% of sample)	56	45	-11	
<i>Home-Based</i>				
Certified Family	502	601	99	↑
Registered Family	1245	1079	-166	↓
Exempt Nonrelative	4765	983	-3782	↓
Exempt Relative	1512	1994	482	↑

\*Change was labeled as increased ↑ or decreased ↓ from PRE to POST if average change was greater than 20 providers.

The average number of children served by each provider type did not differ from PRE to POST with providers in licensed programs serving an average of 12-13 children per month and license-exempt home-based providers serving an average of 3 children per month. (See Table 12.)



*Table 12. Average Number of Children on Subsidy Served During Study Period*

	PRE N	POST N	PRE- POST change*
<i>Licensed</i>	12	13	
Certified Family	14	14	
Certified Center	19	19	
Registered Family	7	8	
<i>License-Exempt</i>	3	3	
Exempt Center (< 2% of sample)	10	22	↑
Exempt Nonrelative	3	3	
Exempt Relative	2	3	

\*Change was labeled as increased ↑ or decreased ↓ from PRE to POST if average change was greater than 5 children.

### **Provider Quality Indicators of Licensed Providers**

Data were available for licensed providers to measure indicators of quality. Two of these indicators of quality were used to compare licensed provider participation in the subsidy program by type of care.

Table 13 illustrates an overall low engagement in the Spark program, Oregon’s Quality Rating Improvement System, among home-based providers in both PRE and POST. Specifically, a little over a third of Certified Family providers participated in the program, and less than a quarter of Registered Family providers. Fifty percent of Certified Centers participated in Spark during the PRE-period and 60% in POST.

*Table 13. Percent of Licensed Providers Participating in Spark*

<i>Spark Participation</i>	PRE % (N)	POST % (N)	PRE-POST change*
Certified Centers	51% (345)	60% (360)	↑
Certified Family	37% (184)	34% (269)	
Registered Family	18% (223)	24% (260)	↑

\*Change was labeled as increased ↑ or decreased ↓ from PRE to POST if change was greater than 5%.

Among the programs participating in Spark, there was variation in program rating levels, with the larger proportion of programs participating at the lowest, Commitment to Quality (C2Q), level. These followed similar patterns across PRE and POST periods. (See Table 14.) Around half of Certified Centers and Certified Family providers participated at the C2Q level, and the majority of Registered Family providers participated at the C2Q level.

Table 14. *Highest Spark Rating Achieved During Study Period Among Licensed Providers*

	PRE N	POST N
<b>Certified Centers</b>		
C2Q	211	207
3	56	63
4	15	20
5	63	70
<b>Certified Family</b>		
C2Q	103	133
3	47	75
4	15	25
5	19	36
<b>Registered Family</b>		
C2Q	189	187
3	31	63
4	2	5
5	1	5

The second indicator of quality is education and training level of program staff. (See Table 15.) In large part, education, as measured by Oregon Registry Online Steps or by degree, was similar in PRE and POST, with a slight decrease in the proportion of teachers at Step 7 or higher and directors at Step 8 or higher in Certified Centers.

Table 15. *Comparison of Education and Training Across Child Care Settings*

Structural Indicators	PRE % (N)	POST % (N)	PRE-POST change*
<b>Certified Family</b>			
Provider Step 7.5 or higher	43% (177)	43% (213)	
Provider has a degree (Associates or higher)	27% (110)	28% (137)	
100% with 18 or more hours of training	85% (351)	83% (412)	
<b>Registered Family</b>			
Provider Step 7.5 or higher	11% (137)	13% (130)	
Provider has a degree (Associates or higher)	11% (129)	11% (106)	
100% with 18 or more hours of training	34% (417)	33% (329)	
<b>Certified Centers</b>			
Director has a Step 8 or higher	51% (323)	43% (300)	↓
Director has a degree (Associates or higher)	53% (336)	47% (327)	↓
50% of teachers have Step 7 or higher	45% (285)	36% (251)	↓
50% of teachers have a degree	42% (268)	42% (293)	
75% with 18 or more hours of training	50% (317)	53% (370)	
Average (median) teacher wage	\$10.55-15.00	\$12.50-17.00	

\*Change was labeled as increased ↑ or decreased ↓ from PRE to POST if change was greater than 5%.

## Stability of Provider Participation—Cumulative Months

The total number of months providers participated in the program from PRE to POST was compared. Providers could have participated for 24 months in each period. We also asked if this measure of stability varied by type of provider. Three provider types, Certified Centers, Certified Family, and Registered Family, showed no measurable difference in participation either between provider type or between PRE and POST period, with estimated participation levels between 15 and 17 months (of 24 possible months). Exempt Relatives differed from the other provider types, with an estimated participation of 10 to 12 months per period. There was no significant difference in between participation levels in PRE and POST for Exempt Nonrelatives and they had the least number of participating months than any type of provider (9 months). (See Table 16.)

Table 16. Average Total Months a Provider Provided Care by Type of Care

	PRE N	POST N	PRE-POST Change*
<i>Licensed Care</i>			
Certified Center	16	16	
Certified Family	17	17	
Registered Family	15	15	
<i>License-Exempt Care</i>			
Exempt Center (< 2% sample)	11	16	↑
Exempt Nonrelative	9	9	
Exempt Relative	11	12	

\*Change was labeled as increased ↑ or decreased ↓ from PRE to POST if average change was greater than 1 month.

## Predictors of Provider Participation Over Time

To measure the total number of months a provider participated in the program, we evaluated a set of factors thought to predict a provider’s longevity in the program. The relationships between predictors of cumulative months of participation appeared to vary by license status. As such, the results reflect two distinct models, one of licensed providers and one of license-exempt providers. (See Table 17.) Highly significant and notable findings are summarized below and complete results are available in an associated technical report (Pratt, Weber, & Wohner, 2023).

License-exempt providers had a 5% decreased likelihood of subsidy participation in the POST period when compared to the PRE period, holding for all other terms in the model. There was no measurable difference between licensed providers in PRE or POST during this same period. For both licensed and license-exempt providers, as the average number of children served and number of hours billed increased, the total number of months of participation in the program also increased. Also, regardless of licensing status, providers who also served children on TANF child care tended to participate for more months than those who only serve those in the employment-related subsidy program. Among licensed providers, there was little if any difference in participation length by type of care. Registered Family providers had a marginally significant greater likelihood of participating for more months than

Certified Centers. Among license-exempt providers, the Exempt Nonrelatives tended to participate for fewer months than Exempt Centers. Monthly payment amount to providers was a significant predictor of cumulative participation among license-exempt providers, but not licensed providers.

Table 17. *Predictors of Provider Participation Over Time*<sup>15</sup>

	Licensed Care	License-Exempt Care
Study period		
PRE (REF)		
POST	1.00	0.95**
Average number of children	1.02***	1.09***
Hours (in units of 10 hours)	1.04***	1.02***
Provider type		
<i>Licensed</i>		
Certified Center (REF)		-
Certified Family	1.01	-
Registered Family	0.95*	-
<i>License-Exempt</i>		
Exempt Center (REF)		
Exempt Nonrelative	-	0.76**
Exempt Relative	-	0.99
Payment (in hundreds in dollars)	1.00	1.10***
TANF participation		
Only ERDC (REF)		
TANF & ERDC	1.36***	1.45***

\* $p < .05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , REF = reference group.

<sup>15</sup> Logistic regression using a Truncated Negative Binomial. Estimates <1 indicate a decreased likelihood of participation for more total months and those <1 an increased likelihood of doing so.

## Conclusions and Implications

A major goal of Congress' 2014 Reauthorization of the Child Care and Development Block Grant (CCDBG) is increasing the stability of family participation in the subsidy program and subsidized arrangements. Twelve-month redetermination periods and 3-month job search policies are not sufficient, by themselves, to provide the desired stability for family subsidy program participation or subsidized child care arrangements. Unstable employment, as evidenced by job changes and substantial earnings changes, are common amongst subsidy program participants and are associated with short spells of family subsidy use and subsidized child arrangements. Finding that increases in parent's earnings is the largest predictor of shorter spells may indicate that the prospect of higher copays might lead parents to exit the program. Observed earnings increases are not large enough to make a family ineligible for the program. Shorter subsidized child care arrangement spells are associated with shorter family subsidy spells, as well as, infancy, child welfare involvement, and being Black/African American.

Another Reauthorization Act goal is to increase the health, safety, and quality of care provided to children receiving a subsidy. Implementation of new provider requirements, including increased training and required health and safety visits for Exempt Nonrelatives, is associated with a substantial decline in program participation by Exempt Nonrelatives. Policy and changes between PRE and POST are also associated with slightly greater provider participation in Oregon's QRIS, Spark, a finding which may be associated with policy changes encouraging providers to participate in Spark and parents to use Spark-rated providers.

The finding that 12-month redetermination periods and 3-month job search policies are not enough to reach desired levels of stability calls for further research in Oregon and other states. Within Oregon, a study that examines subsidy program practice could determine the extent to which parents and providers are aware of these policies, and assess the level of concern parents hold about being charged for provider payments made for their child(ren) when unemployed. Studies in other states that includes examination of the role of employment-related changes in stability of participation and subsidized arrangements seems vital to increasing understanding of how to increase family and child stability across the nation. More research is also needed to understand why infancy and being Black/African American is associated with shorter subsidized arrangement spells. In previous studies, the end of a redetermination period was a significant predictor of subsidy exit. Data quality issues did not allow us to use redetermination month variable in this study. Replicating this study with an accurate recertification month variable would provide a more complete picture of subsidy exit that could be compared to Oregon's past studies.

The finding that implementation of the new provider requirements is associated with decline in participation by legally exempt providers raises questions about how their absence impacts family participation. Of special interest are those families whose nontraditional hour and unpredictable schedules constrain use of licensed

care. Replication of the Oregon study (Grobe, Weber, & Scott, 2018) would allow comparison of current participation levels of families with employment constraints with levels found earlier. Findings would support efforts to serve parents who work nontraditional and unpredictable schedules and their children.

An important implication of study findings is that improvement of subsidy program outcomes requires attention to more than a single policy or even the full set of subsidy policies. For families, employment related changes interfere with participation stability. For children, stability of subsidized arrangements is related to child age, race, and involvement with child welfare. For providers, length of participation is related to higher numbers of subsidized children in care and hours of care provided. To increase equity and to better support achievement of subsidy program goals, it will be important to address both policy and practice, including targeting specific populations experiencing less stable subsidy use

Finally, Oregon continues to revise its subsidy program and implement additional policies to increase the stability of program participation and subsidized arrangements. Replication of this study after full implementation of the policy, practice, and governance changes currently underway would increase understanding of how to stabilize family subsidy participation and children's subsidized child care arrangements as well as promote high-quality care.

# References

- Grobe, D., Weber, R. B., & Davis, E.E. (2008). Why do they leave? Child care subsidy use in Oregon. *Journal of Family and Economic Issues*, 29 (1), 110-127. <https://doi.org/10.1007/s10834-007-9094-3>
- Lipscomb, S. T., Weber, R. B., Green, B. L., & Patterson, L. B. (2016). *Oregon's Quality Rating Improvement System (QRIS) validation study one: Associations with observed program quality*. Retrieved from <https://health.oregonstate.edu/sites/health.oregonstate.edu/files/early-learners/pdf/research/qr-is-study-1-report-no-appendices.pdf>
- Pratt, M., Chandler, K. D., Barrett-Rivera, B., Thogmartin, A., & Weber, B. (2020). *Barriers to accessing child care subsidies in Oregon*. Retrieved from <https://health.oregonstate.edu/early-learners/research/barriers-accessing-child-care-subsidies-oregon>
- Pratt, M., Weber, R. B., & Wohner, M. (2023). Technical report for evaluating CCDBG in Oregon: Impact of the 2014 act on children, families, and providers final report. Retrieved from [https://health.oregonstate.edu/sites/health.oregonstate.edu/files/early-learners/pdf/research/ccdbg\\_in\\_oregon\\_final\\_technical\\_report.pdf](https://health.oregonstate.edu/sites/health.oregonstate.edu/files/early-learners/pdf/research/ccdbg_in_oregon_final_technical_report.pdf)
- Weber, R.B., Grobe, D., & Davis, E.E. (2014). Does Policy Matter? The effect of increasing child care subsidy policy generosity on program outcomes. *Child and Youth Services Review*, 44,.135-144  
<https://doi.org/10.1016/j.childyouth.2014.06.010>
- Weber, R. B., Grobe, D., & Scott, E. K. (2018). Predictors of Low-Income Parent Child Care Selections. *Children and Youth Services Review*, 88, 528-540.  
<https://doi.org/10.1016/j.childyouth.2018.04.001>
- Weber, R. B., Pratt M. E., & Houston, L. (2022). *Child care subsidy policies and outcomes: Oregon case study*. Retrieved from <https://health.oregonstate.edu/early-learners/research/child-care-subsidy-oregon-case-study>