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The workforce challenges facing the child care and early education (CCEE) sector are well-known. CCEE educators typically have low levels of compensation; limited opportunities for education, training, and professional development; inconsistent working conditions; and high levels of stress and burnout. There are also high rates of job turnover, which can strain remaining educators and decrease the quality of care they offer.

Policymakers at the federal and state levels are taking steps to build and stabilize the CCEE workforce, but effectively addressing these challenges requires a better understanding of the issues.³ The Building and Sustaining the Child Care and Early Education Workforce (BASE) project aims to increase knowledge and understanding about the CCEE workforce by documenting factors that drive turnover and by building evidence on current initiatives

The Building and Sustaining the Child Care and Early Education Workforce (BASE) project aims to increase knowledge and understanding in child care and early education (CCEE) by documenting factors that drive workforce turnover and by building evidence on current initiatives to recruit, advance, and retain a stable and qualified CCEE workforce.

³See Whitebook, Phillips, and Howes (2014) for information about steps policymakers are taking to build and stabilize the workforce.









¹Whitebook, Phillips, Howes (2014); McLean, Austin, Whitebook, and Olson (2021).

²Whitebook, Phillips, and Howes (2014); Bassok, Fitzpatrick, Loeb, and Paglayan (2013); Phillips, Anderson, Datta, and Kisker (2019); Schaack and Le (2017); Totenhagen et al. (2016); Whitebook and Sakai (2003).

to recruit, advance, and retain a stable and qualified CCEE workforce.⁴ The project began with a literature review and a scan of existing strategies, which summarized the knowledge base to date but also identified key gaps in the research. The project also included a scan of existing data to identify available data sources that might be used to address these knowledge gaps.

A key gap identified by the BASE project is the lack of data sources that capture longitudinal data on the same educators over time, which is critical for answering questions about how teachers enter, stay in, and exit the field. This brief uses one promising source of longitudinal workforce data to address these questions of workforce dynamics—quarterly wage data reported to the Illinois Department of Employment Security (IDES) to support the Unemployment Insurance (UI) program (UI wage data). Specifically, this brief looks at which industries new CCEE workers come from, how long they stay in the field, and which industries they enter after leaving the field. The brief also examines the employment duration of first child care jobs and first spells of employment in the CCEE industry.

Throughout this brief the terms "child care" and "CCEE" are used interchangeably to refer to the child care field. (See Box 1 for a definition of terms.) In the context of the data and analysis described in the brief, this field is defined using a North American Industry Classification System (NAICS) industry code, which is not

Box 1. Definition of Terms

This box summarizes how two key terms are defined for this brief, highlighting where those definitions may differ from other project materials in the Building and Sustaining the Child Care and Early Education Workforce (BASE) project.

CHILD CARE AND EARLY EDUCATION (CCEE) WORKFORCE: This brief discusses the CCEE workforce as it may be identified in the Unemployment Insurance (UI) wage data: individuals whose employers have the industry code for "Child Day Care Services." This industry will not include individuals who work in CCEE in elementary school settings, or owners of family child care homes. Because the wage data do not indicate role or position, all workers in the industry, even those who do not directly care for children, are included in the workforce.

In contrast, the workforce as defined for the BASE project includes current and prospective educators who are paid to care for children from birth to 13 years of age in center- and home-based settings. This includes educators in different positions and roles. For example, center administrators, directors, lead and assistant teachers, and home-based educators are included in this definition. This definition also includes licensed and license-exempt home-based settings. While the CCEE workforce also includes support staff members in centers, such as coaches, education coordinators, and behavioral specialists, these individuals are not the primary focus of the project.

WORKFORCE DYNAMICS: The phrase "workforce dynamics" encompasses entry into and exit out of the CCEE field as an employed individual. For those in the field, it includes tenure and advancement, as well as entry into and exit from different roles, settings, and types of care. Workforce dynamics include multiple phases of employment: entry, retention, turnover, and advancement.

⁴For more information, see: https://www.acf.hhs.gov/opre/project/building-and-sustaining-early-care-and-education-workforce-base

⁵Wiegand, Goerge, Porcelli, and Miller (2023). For more detail about knowledge gaps identified by BASE project knowledge review activities (which included a comprehensive literature review and scan of existing strategies), see Maier and Roach (2023).

aligned with how CCEE is defined in other BASE project products.⁶ For this research, NAICS code 624410, "Child Day Care Services" defines CCEE employers. This industry code does not include employers whose primary business is in elementary education, family child care homes that do not have employees and operate as sole proprietorships, or private households employing nannies.

Understanding the CCEE workforce experience and employment pathways can inform the design of strategies to recruit new workers and retain existing workers. For example, policymakers considering efforts to improve wages or retention in the industry can use these metrics to inform the scale of interventions and how those interventions could be targeted. The ability to characterize workers' pathways across industries and to compare wages for those individuals over time are particular strengths of the UI wage data. By contextualizing the workforce within the broader labor market, data on wages and movement across industries highlight the competition CCEE employers face in retaining workers for challenging jobs with low pay.

Research Questions and Key Findings

- Research question 1: What wages are child care workers earning according to Illinois UI wage data?
 How do these reported amounts compare to other estimates of wages in this workforce?
 - Key Findings: After adjusting for inflation, child care workers in Illinois saw a 12 percent increase in wages between 2006 and 2019, followed by a 9 percent increase between 2019 and 2021.
- Research question 2: Which industries do individuals work in before they start in child care? What do
 they earn, and how do these wages compare to their initial child care wages?
 - Key Findings: In 2019, new Illinois child care workers had prior employment in industries such as Food Services, Education, and Administrative Services. Wages earned in past employment were similar to or lower than starting child care wages.
- Research question 3: How long do new workers stay in the child care industry after they start? How do
 wages change over time for workers who are continuously employed in child care?
 - Key Findings: More than half of Illinois child care workers left the industry after less than two years of employment in child care. For workers who remained employed in child care, inflation-adjusted wages increased over time at the median rate of 26 percent over 5 years and 50 percent over 10 years.
- Research question 4: What industries do former child care workers transition to after leaving the child care industry? How do their wages in these industries compare to their wages before leaving child care?

Key Findings: Nearly one out of every three workers who moved from child care to another industry in Illinois took a job in education. Child care workers who left child care for another industry generally earned higher wages in their first full quarter of employment in the other industry.

⁶The North American Industry Classification System (NAICS) is a standard business classification system used by federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

Data and Methods

These analyses use Illinois quarterly UI wage records, from the beginning of 2005 to the end of 2021. Employers are required to report total quarterly wages to the state UI system, which includes over 90 percent of all jobs.⁷

At the employer level, the data contain employer names, Employer Identification Numbers (EINs), total wages paid for each quarter, industry code, and number of employees. At the individual level, the data include the individual's Social Security Number (SSN) and total wages earned, by employer, for each quarter in which the person was working. These records allow for the tracking of individuals, employers, and the relationships between them over time.⁸

There are some limitations to which analyses can be conducted with UI wage data. The data show total earnings by an individual for each quarter, but not hours worked or weeks worked. There is no information on the individuals' occupations or titles. In the context of CCEE, this makes it difficult to distinguish teachers by level or to determine whether an individual is a teacher or an administrative/support staff member. Finally, not all the CCEE workers are included in the data. For example, the data do not capture the earnings of individuals who are independent contractors with no employees, such as some family child care home-based providers. See Table 1 for detailed information about which populations are included or excluded from the child care workforce in UI wage data.

Table 1. Populations Included in and Excluded from the "Child Care Workforce" as Defined by NAICS Code 624410

Population	Included	Excluded
Overall	Individuals working for day care centers, preschools, and family child care homes ^a	Individuals working outside the state providing the unemployment insurance wage data
By provider type	Public and privately funded child care centers, including centers funded through school districts	Employers classified as elementary or secondary schools
		Family child care homes operating as sole proprietors with no employees
By employment status	Part-time and full-time workers ^b	Individuals who are paid informally
By role	All employees, including teachers, administrators, and support staff members (such as kitchen staff members, bus drivers, and janitors); classroom staff members cannot be distinguished from administrators or support staff members	Nannies, babysitters, or other household employees

SOURCE: Authors' summarization.

NOTES: NAICS refers to the North American Industry Classification System.

^aEmployer type cannot be distinguished in more detail, although employer size can be used to roughly distinguish larger centers from smaller establishments and family child care homes.

^bEmployment level cannot be distinguished using quarterly wage data. Only the total wages earned in a quarter are available for each worker.

⁷Abowd et al. (2009). Technically, the federal government and military, small farms, and railroads are excluded from Illinois wage reporting. U.S. Department of Labor Employment and Training Administration (2022).

⁸For this analysis, the research team accessed data where names and identifiers (EIN and SSN) were masked and individual workers and employers were not easily identifiable.

Cohort Selection

To conduct analyses on the child care workforce, this brief defines child care providers as employers from the "Child Day Care Services" industry. Child care workers are individuals hired by these employers. According to a 2019 survey of Illinois child care centers, about 77 percent of employees at child care centers were classroom teaching staff members. The 2012 National Survey of Early Care and Education (NSECE) estimated that 86 percent of all center-based staff members were teachers or caregivers; the remaining employees "might be specialists, administrators, managers, receptionists, cooks, drivers, or custodial staff." 10

The first analysis in this brief includes all child care workers by year to demonstrate how wages in the industry have changed over time (research question 1). Data are presented on all workers, new hires (individuals working in child care in one quarter who were not working in child care in the prior quarter), and exiting employees (individuals working in child care in one quarter who were not working in child care in the next quarter).

The second set of analyses focuses on work experience prior to entering the child care industry (research question 2). These analyses use a cohort of new child care workers in 2019 who had not previously worked in child care during the time frame of data collection (2005–2019).

A final set of analyses describes the retention of child care workers entering the industry, including their tenure (research question 3), wage growth (research question 3), and post-child care work experience (that is, which industries they go to after leaving child care; research question 4). These analyses use an entry cohort from 2010 and 2011, including individuals who entered the industry in 2010 or in 2011 and had not worked in child care in the previous two years.

Stable Employment and Stable Wages

Entry cohorts are limited to those who had at least one quarter of "full quarter employment," or "stable employment." Individuals are considered to have had stable employment in a quarter if they were employed in that quarter as well as in the previous and the following quarters. This restriction allows for the comparison of full-quarter wages across individuals, employers, and jobs. Limiting entry cohorts to stable employment significantly reduced the number of individuals in the entry cohorts. ¹¹

Measurement

To understand retention, two measures of employment duration are considered:

- 1. Number of continuous quarters after entry that the individual worked in their first child care job
- 2. Number of continuous quarters after entry that the individual remained in the child care industry (this includes both individuals who remained in their first child care job and those who moved to other child care jobs)

⁹Norton and Whitehead (2019).

¹⁰See Appendix Table 6, National Survey of Early Care and Education Project Team (2013).

¹¹For more detail, see Wiegand, McQuown, and Goerge (2023).

Although the data are collected quarterly, these duration measures have been converted to approximate months or years in the results for interpretability. Industries where individuals worked before entering the child care industry and after leaving the child care industry are defined by NAICS code.

Inflation Adjustment

To support comparability across analyses and over time, all quarterly wage values reported in this brief have been annualized (multiplied by four to create an annual equivalent) and adjusted for inflation. Values are presented in January 2019 dollars, calculated using the U.S. Bureau of Labor Statistics' Consumer Price Index Inflation Calculator. 12

Additional Information

The BASE research team prepared a more detailed brief about UI wage data as a data source for understanding the CCEE workforce. This brief includes further information about the data and its limitations, cohort selection, stable employment, and various measurement strategies and is intended to inform researchers and agencies that wish to perform analyses like the ones described in this brief.¹³

Findings

Research question 1: What wages are child care workers earning according to Illinois UI wage data? How do these reported amounts compare to other estimates of wages in this workforce?

After adjusting for inflation, child care workers in Illinois saw small but consistent wage growth between 2006 and 2019, increasing by 12 percent over 13 years. Wages show a larger bump after the COVID-19 pandemic, increasing by 9 percent between 2019 and 2021. As shown in Figure 1, the median wage for all child care jobs in 2006 was \$20,412. This value increased to \$22,900 in 2019. Wages dropped dramatically in 2020 to a median of \$19,746 before climbing to \$24,984 in 2021. Since these analyses used the second quarter of the year to measure wages each year, the drop observed in 2020 exaggerates the effects on wages of COVID-19 closures.¹⁴

Wages earned by individuals in new jobs in their first full quarter of employment ("new child care hires" in Figure 1) and for individuals who leave jobs in their last full quarter of employment ("exiting child care employees" in Figure 1) in Illinois were consistently about 15 percent to 20 percent lower than wages for all child care workers in Illinois. New hires likely have less experience than existing staff members, and lower paid staff members may be more likely to seek other opportunities. These wage patterns provide important context for the other analyses described in this brief, which concentrate mostly on cohorts of new workers and workers leaving the field.

¹²U.S. Bureau of Labor Statistics (2023). Accessed on March 30, 2023.

¹³Wiegand, McQuown, and Goerge (2023).

¹⁴These analyses used second quarter wages because these were the latest data available for 2021. However, overall trends presented here were similar when other quarters of the year were used to measures wages.

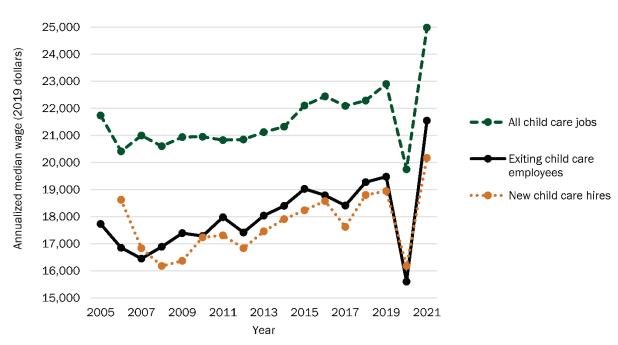


Figure 1. Annualized Median Wages for All Child Care Jobs, New Hires, and Exiting Employees in Stable Employment, 2005-2021

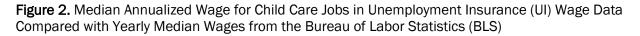
SOURCE: Authors' calculations from Illinois Unemployment Insurance wage data records.

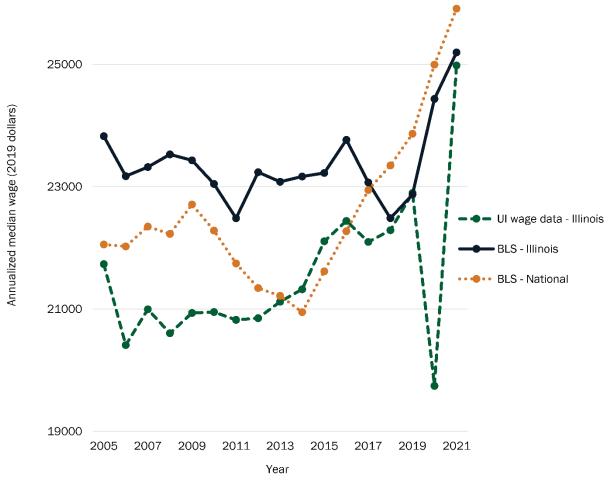
NOTES: "All child care jobs" includes all jobs (employee/employer combinations) in the child care industry that were stable (e.g., workers were employed for the full quarter) in the second quarter of the given calendar year. "Exiting child care employees" includes all jobs in the child care industry that existed in the first quarter of the calendar year and ended in the third quarter of the calendar year; median wages presented reflect the second quarter of the calendar year, which was the last quarter of full quarter employment for these individuals. "New child care hires" includes all jobs in the child care industry that started in the first quarter of the calendar year and persisted until at least the third quarter (stable employment); median wages presented reflect the second quarter of the calendar year, the first quarter of full quarter employment for these individuals. Median quarterly wages have been inflation-adjusted to 2019 dollar equivalents and annualized (multiplied by four) for interpretability.

Median wages derived from the Illinois UI wage data are consistently lower than values from other sources.

The 2019 NSECE reported a median hourly wage for teachers equivalent to \$27,227 per year (the UI wage data in Figure 1 show a median annualized wage of \$22,900 in the same year). Figure 2 shows the median annualized wage for all child care workers from Illinois UI wage data compared to (inflation-adjusted) BLS estimates of median child care wages, both nationally and for Illinois. From 2005 through 2016, the BLS-reported wage for child care workers in Illinois is 5 percent to 15 percent higher each year than the UI wage data, though the difference is less after 2016. These gaps may reflect that the child care workforce defined in the wage data is broader than the occupational or role-based definitions from these other sources, including support staff members as well as teachers. They may also reflect the gap between wage rate and actual wages paid; if individuals work fewer than 40 hours per week on some weeks (for example, unpaid time off) those gaps would be reflected in UI-reported wages but not in salary surveys.

¹⁵NSECE data is based on converting the median hourly wage of \$13.09 to an annual wage by assuming year-round, full-time hours. Note that because the survey was conducted in 2019 no inflation adjustment was performed. See Amadon, Maxfield, and McDonial (2023).





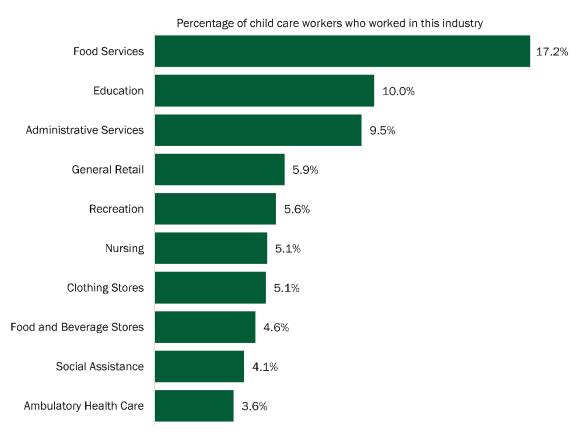
SOURCE: BLS wage data are from the Occupational Employment and Wage Statistics (OEWS) survey, which has information on cross-industry occupational wage estimates for the nation and by state. The OEWS survey is based on the Standard Occupational Classification system for occupational coding, and occupation code 39-9011 was used to calculate the wage data of child care workers. BLS wage data are inflation-adjusted to January 2019 dollars using annual median wages. UI wage data represent the authors' calculations from Illinois UI wage data records. NOTES: "UI wage data-Illinois" includes all median annualized wages for all child care jobs (employee/employer combinations) in the child care industry that were stable (e.g., employed for the full quarter) in the second quarter of the given calendar year. Median quarterly wages have been inflation-adjusted to 2019 dollar equivalents and annualized (multiplied by four) for interpretability.

Research question 2: Which industries do individuals work in before they start in child care? What do they earn, and how do these wages compare to their initial child care wages?

Four out of five new child care workers in 2019 in Illinois reported prior employment in other industries. One-fifth were either entering the workforce for the first time, moving into Illinois from another state, or returning to work in the industry after an absence of five or more years (not shown in the figures).

New child care workers in Illinois had prior work experiences in other industries, such as Food Services, Education, and Administrative Services. Figure 3 shows the top 10 industries where individuals who entered the child care industry in Illinois in 2019 had worked in the year before entering the industry. New child care workers previously worked in industries such as Food Services (17 percent), Education (10 percent), Administrative Services (10 percent), General Retail (6 percent), and Recreation (6 percent).

Figure 3. Most Common Industries of Employment for New Child Care Workers in the Year Before Starting in Child Care in 2019



SOURCE: Authors' calculations from Illinois Unemployment Insurance wage data records.

NOTES: Includes child care workers who started in the industry in 2019 and who had not worked in child care in Illinois since at least 2005. Includes all employment, including jobs held for less than one quarter. Individuals may be represented in more than one bar if they worked in more than one industry in the year before starting in child care. Industries are defined by NAICS code as follows: Food Services (722, Food Services and Drinking Places); Education (611, Educational services); Administrative Services (561, Administrative and Support Services); General Retail (452, General Merchandise Stores); Recreation (713, Amusement, Gambling, and Recreation Industries); Nursing (623, Nursing and Residential Care Facilities); Clothing Stores (448, Clothing and Clothing Accessories Stores); Food and Beverage Stores (445, Food and Beverage Stores); Social Assistance (624, Social Assistance); and Ambulatory Health Care (621, Ambulatory Health Care Services).

Most wages earned in past employment were similar to or lower than starting child care wages. The median annualized starting wages for these new child care workers was \$17,696 (Figure 4). Figure 4 displays median wages earned by the new child care workers who had stable employment in another industry a year before entering the child care industry. Regardless of their prior industry, entrants to the child care industry tended to earn lower quarterly wages in their previous jobs. Of the top 20 industries in which child care workers were previously employed, only four had higher median wages compared with the child care industry. The median annualized wage for the Administrative Services industry was \$20,388; for

the Ambulatory Health Care industry, the median annualized wage was \$19,052; for Social Assistance, the median annualized wage was \$18,468; and for Nursing the median annualized wage was \$18,432.

Median annualized wage (2019 dollars) Median Food Services \$12,352 starting child care wage: \$17,696 Education \$17,060 Administrative Services \$20,388 General Retail \$14,574 Recreation \$8,284 \$18,432 Nursing \$10,020 Clothing Stores Food and Beverage Stores \$12,780 Social Assistance \$18,468 Ambulatory Health Care \$19.052

Figure 4. Median Annualized Wage Earned by Industry in the Year Before Child Care Employment, Among Workers First Employed in Child Care and Early Education in 2019

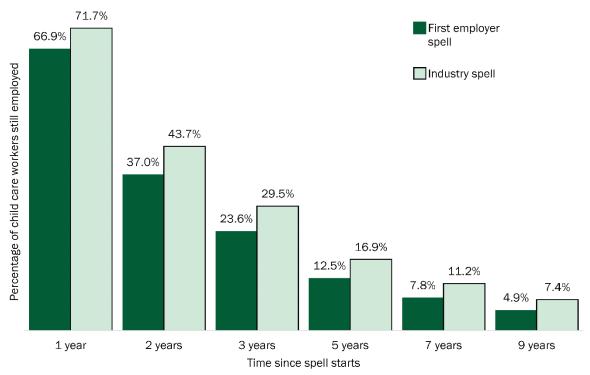
SOURCE: Authors' calculations from Illinois Unemployment Insurance wage data records.

NOTES: All wage values represent full quarter quarterly wages annualized (multiplied by four) for interpretability. Median starting wage in child care is the median wage in the first full quarter of employment for child care workers who started in the industry in 2019 and who had not worked in child care in Illinois since at least 2005. Median wages by industry reflect individuals who had at least one full quarter of employment in that industry in the year before starting in child care. Individuals may be represented in more than one bar if they had full quarter employment in more than one industry in the year before starting in child care. Dollar values have been inflation-adjusted to consistently reflect 2019 dollars. Industries are defined by NAICS codes as follows: Food Services (722, Food Services and Drinking Places); Education (611, Educational services); Administrative Services (561, Administrative and Support Services); General Retail (452, General Merchandise Stores); Recreation (713, Amusement, Gambling, and Recreation Industries); Nursing (623, Nursing and Residential Care Facilities); Clothing Stores (448, Clothing and Clothing Accessories Stores); Food and Beverage Stores (445, Food and Beverage Stores); Social Assistance (624, Social Assistance); and Ambulatory Health Care (621, Ambulatory Health Care Services).

Research question 3: How long do new workers stay in the child care industry after they start? How do wages change over time for workers who are continuously employed in child care?

More than half of the child care workers in Illinois left the child care industry after less than two years of employment in child care. Individuals who entered the child care industry in 2010 or 2011 were studied to determine retention in their first child care job and in the child care industry. Figure 5 illustrates the percentage of the 2010–2011 cohort who stayed in their first child care job and in the child care industry.

Figure 5. Percentage of New Child Care Workers in 2010-2011 Continuously Employed in the Child Care Industry or with the Same Child Care Employer over Time



SOURCE: Authors' calculations from Illinois Unemployment Insurance wage data records.

NOTES: Includes all child care workers who started in the industry in 2010–2011 and who had not been previously employed in child care in the two years before starting with this employer. First employer spell measures continuous employment (wages reported in every quarter) with first employer; industry spell measures continuous employment in the child care industry.

About 72 percent of the cohort stayed in the child care industry after one year, and 67 percent were still working in their first job, which also means that 5 percent of the cohort left their first child care job and moved to another child care job in the first year. After two years, 44 percent of the cohort remained in the child care industry and 37 percent remained in their first child care job. After three years, 30 percent of the cohort were still in the child care industry, and 24 percent were still working at their first child care job. Less than 20 percent persisted in the child care industry for more than five years, and 7 percent of the cohort were still working as child care workers after nine years.

At the median, a new employee remained in their first child care job for about 18 months, and only 15 percent of workers stayed in child care in the quarter after leaving their first job. Workers at larger child care employers had slightly longer tenures (21 months) in their first child care job than the overall sample of new entrants, and they were slightly more likely to transition to a second child care job (18 percent stayed in child care in the quarter after leaving their first employer). Workers with higher starting wages also stayed slightly longer in their first job (a median of 21 months) and were more likely to stay in the child care industry after leaving their first job: 19 percent of those in the top two starting wage quartiles stayed in child care after their first job, compared to 13 percent of those in the third wage quartile and just 7 percent of those in the fourth quartile.

For workers who remain employed in child care, inflation-adjusted wages increase over time: an increase at the median rate of 26 percent over 5 years and 50 percent over 10 years. As shown in Figure 6, the percentage change in wages at the ninetieth percentile is comparable after 5 years (28 percent), but larger over 10 years (60 percent). These patterns may reflect changes in either hourly wages, total hours worked, or both. Despite this wage growth, median wages are still objectively low for individuals with 10 years of experience (\$28,592/year). As a point of comparison, the median annual wage for workers in all occupations in Illinois in 2019 was about \$41,000.16 Of those who had 10 years of experience in child care, 10 percent made more than \$58,086 per year.

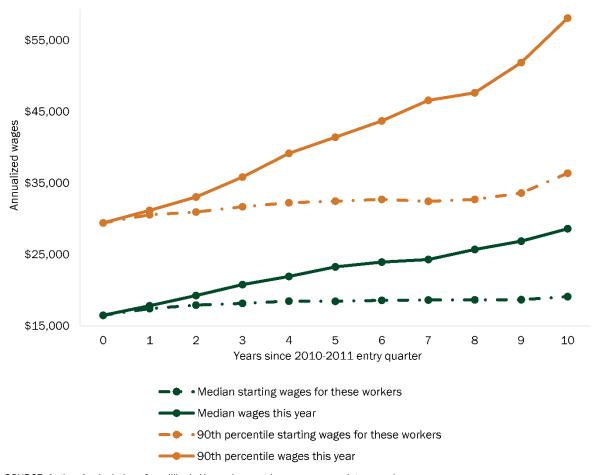


Figure 6. Wage Progression in the Child Care Industry for New Workers in Child Care in 2010-2011

SOURCE: Authors' calculations from Illinois Unemployment Insurance wage data records.

NOTES: Population includes workers who started new child care jobs in 2010 or 2011 after not working in child care for at least the two previous years. For each subsequent year, workers who have not remained continuously employed are dropped from the population.

All amounts reflect quarterly wages: in the first quarter of stable employment, in the four quarters after the first quarter of stable employment, in the eight quarters after the first quarter of stable employment, and so on. Wage amounts have been multiplied by four to create annualized amounts for interpretability and have been inflation-adjusted to 2019 dollars.

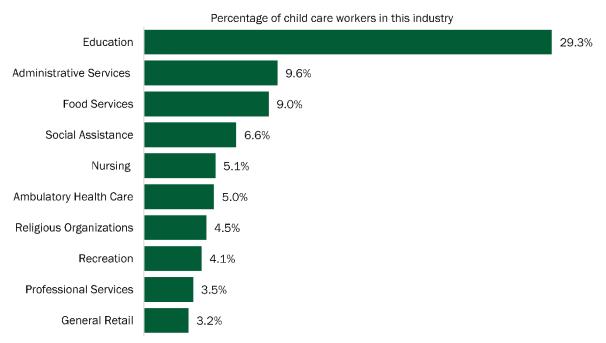
Wages are presented relative to the starting wage for the individuals who remain continuously employed through that number of years rather than the starting wage for the full cohort, since especially in the first years after their employment begins, the individuals who persist in child care have higher starting wages than those who do not.

¹⁶This figure is derived from the median hourly wage (\$19.74) published in U.S. Bureau of Labor Statistics (2020).

Research question 4: What industries do former child care workers transition to after leaving the child care industry? How do their wages in these industries compare to their wages before leaving child care?

Nearly one out of every three workers who moved from child care to another industry took a job in education. This analysis included those who left the child care industry for another industry to examine which industries they moved to and their wages in those industries. Figure 7 presents the most common industries in which these individuals worked after leaving child care. The top five industries were Education (29 percent), Administrative Services (10 percent), Food Services (9 percent), Social Assistance (7 percent), and Nursing (5 percent).

Figure 7. Most Common Industries of Employment for New Child Care Workers in 2010-2011 in Their First Quarter After Leaving Child Care



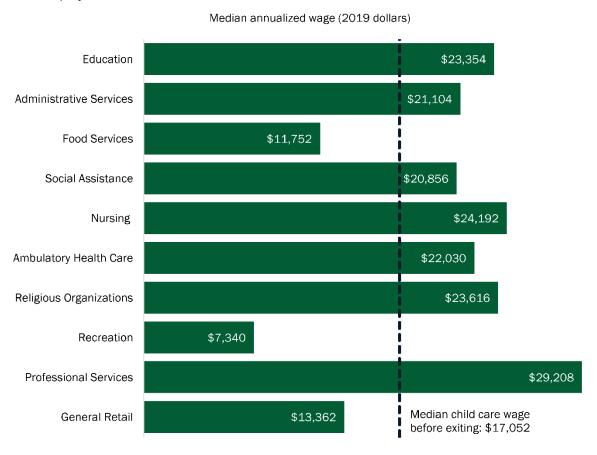
SOURCE: Authors' calculations from Illinois Unemployment Insurance wage data records.

NOTES: Includes child care workers who started in the industry in 2010-2011 and had not worked in child care in the prior two years; however, 57 percent of individuals in this group did not leave child care during the 10-year follow-up period or did not work in another industry in the quarter immediately after leaving child care and as a result are not represented in this figure. Includes both full quarter employment and more temporary employment. Individuals may be represented in more than one bar if they worked in more than one industry in the quarter after exiting child care. Industries are defined by NAICS code as follows: Education (611, Educational services); Administrative Services (561, Administrative and Support Services); Food Services (722, Food Services and Drinking Places); Social Assistance (624, Social Assistance); Nursing (623, Nursing and Residential Care Facilities); Ambulatory Health Care (621, Ambulatory Health Care Services); Religious Organizations (813, Religious, Grantmaking, Civic, Professional, and Similar Organizations); Recreation (713, Amusement, Gambling, and Recreation Industries); Professional Services (541, Professional, Scientific, and Technical Services); and General Retail (452, General Merchandise Stores).

Child care workers who left child care for another industry generally earned higher wages in their first full quarter of employment in the other industry. Figure 8 displays the median annualized wage for individuals who left the child care industry and the median wage they made in the child care industry before exiting

(\$17,052). At the twenty-fifth percentile these workers earned \$9,488 (annualized) in their last full quarter of child care employment, and at the seventy-fifth percentile they earned \$23,748 (not shown in figure). ¹⁷ In most of the other industries, the median wage was higher than the child care wage. Education is one of the highest paying industries to which individuals move (median starting wage of \$23,354), along with Religious Organizations (\$23,616), Nursing (\$24,192), and Professional Services (\$29,208). Except for Food Services (\$11,752), Recreation (\$7,340), and General Retail (\$13,362), median wages in workers' new industries were higher than the median wage for these individuals in their last full quarter in the child care industry.

Figure 8. Median Annualized Wage Earned by Industry in the Year After Leaving Child Care, Among Workers First Employed in Child Care in 2010-2011



SOURCE: Authors' calculations from Illinois Unemployment Insurance wage data records.

NOTES: All wage values represent full quarter quarterly wages annualized (multiplied by four) for interpretability. Median wage in child care is the median wage in the last full quarter of employment for new child care workers in 2010–2011 who worked in another industry in the quarter immediately after leaving child care. Median wages by industry reflect individuals who had at least one full quarter of employment in that industry. Individuals may be represented in more than one bar if they had full quarter employment in more than one industry, starting in the quarter after exiting child care. Industries are defined by NAICS code as follows: Education (611, Educational services); Administrative Services (561, Administrative and Support Services); Food Services (722, Food Services and Drinking Places); Social Assistance (624, Social Assistance); Nursing

¹⁷Note that this distribution is slightly lower than the starting wage distribution reported for the 2019 entry cohort in research question 2. This reflects both the wage increases occurring between 2010 and 2019 as described in the results for research question 1, as well as the fact that workers with lower starting wages had shorter tenures in child care and would thus be expected to be overrepresented in the group of individuals who exited child care for employment in other industries.

(623, Nursing and Residential Care Facilities); Ambulatory Health Care (621, Ambulatory Health Care Services); Religious Organizations (813, Religious, Grantmaking, Civic, Professional, and Similar Organizations); Recreation (713, Amusement, Gambling, and Recreation Industries); Professional Services (541, Professional, Scientific, and Technical Services); and General Retail (452, General Merchandise Stores).

Conclusions and Implications

This brief uses Illinois UI wage data to characterize the longitudinal employment pathways of individual workers, allowing for measurements that are not feasible with many other datasets. In particular, the brief analyzes employment trajectories across industries for child care workers, changes in wages for the same workers over time, and individual-level retention in child care and child care jobs. Ultimately, the findings reported in this brief affirm much of the established evidence on the CCEE workforce, extending common findings with longitudinal detail.

New CCEE workers in Illinois tend to come from other low wage industries. While about 20 percent of new child care workers did not have prior reported employment in Illinois, the remaining workers came into child care from other jobs where quarterly wages were also low. The most common sectors for prior employment were food services, education, administrative, and general retail. In most cases, the median starting wage in child care was equivalent to or higher than the wages earned by these workers in their last full quarter of employment outside of child care.

The challenge of retaining the CCEE workforce is especially stark considering the short time newly hired educators spend in the field, on average. More than half of CCEE workers in Illinois left the industry within two years of initial work as child care workers, and over 80 percent left the industry within five years.

Child care workers continue to be paid low wages even as they accumulate years of workforce experience. The analysis of wage growth for those who stay in the industry indicates an inflation-adjusted median wage increase of 26 percent over 5 years and 50 percent over 10 years. The wage growth rate for individuals with initial wages at the ninetieth percentile is similar to growth at the median over 5 years but larger over 10 years (60 percent), which implies that the actual wage gap widens over time between child care workers with low initial wages and those with high initial wages. In addition, the analysis finds that median wages for Illinois child care workers with 10 years of experience were still objectively low at under \$30,000 per year.

Workers tend to move from CCEE jobs to higher paying roles in education and other care industries, such as healthcare. Following these individuals who left the industry, about one third moved to education, a closely related industry. Median wages earned by those who moved to education were higher than the wages child care workers who left the industry were earning before their exit; median starting wages in education were equivalent to the seventy-fifth percentile of child care wages for those leaving the industry. Many child care workers in Illinois also moved to industries such as administrative services, food services, social assistance, and nursing; with the exception of food services, each of these industries had a higher median starting wage than the median wage of workers in their last full quarter in child care.

This brief is an initial attempt to describe child care workers' employment trajectories and wages using UI wage data. While there are limitations, the wage data offer unique information at the state level that can be replicated on a quarterly basis to provide policymakers with timely information. Additionally, these analyses can be replicated in every state using state UI wage data to provide detailed comparisons across

states and other sectors. The UI data can be linked to other data sources to create an even richer source of information to answer questions about the employment experiences of child care workers. 18

¹⁸For more information about UI wage data and how such data can be used for research on CCEE educators, see Wiegand, McQuown, and Goerge (2023).

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