

Plenary Session 1: Understanding the Costs of Early Care Education: Key Developments and Next Steps for the Field

Wednesday, June 28, 2023

9:30 a.m. – 10:30 a.m. | *L'Enfant Ballroom ABCD (Livestreamed)*

1. Descriptive Information

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| <p>Plenary Session 1: Understanding the Costs of Early Care Education: Key Developments and Next Steps for the Field</p> <p>High-quality child care and early education is important for child development and for supporting working families. Ensuring the availability and accessibility of quality care requires public investment. To promote funding levels that support access to high-quality early care education (ECE), we must continue to improve the understanding of the true costs of quality in ECE. This understanding has grown considerably over the past decade due to better tools, more data collection efforts, and the increased use of cost models. Policy changes, including requirements to consider cost information when setting subsidy payment rates, have also spurred activity and innovation. In this session, we will provide an overview of key developments in understanding the costs of child care and early education. Presentations will describe (1) state efforts to conduct narrow cost analyses, what they have found, and some challenges; (2) a cost modeling tool (the Provider Cost of Quality Calculator) that has helped in understanding the potential costs of quality improvements and policy changes; and (3) new ways of measuring costs that can improve the understanding of how costs and the allocation of resources vary among providers. We will end with a discussion of next steps for the field.</p> | <p>Presenters</p> <p>Pia Caronongan, Mathematica Owen Schochet, Mathematica Nina Johnson, ICF Francesca Wolf, Office of Child Care</p> <p>Scribe Jeremy Long</p> <p>Number of Attendees: 270</p> |
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2. Documents/Presentations Shared (Please list any electronic documents, PowerPoint presentations, or web links used during the session.) **Collect presenter PowerPoints or other documents on the flash drive provided.**

- **Pia Caronongan:** State efforts to use narrow cost analysis to inform payment rates
- **Owen Schochet:** Measuring Costs of Early Care and Education to Understand Pathways to Quality
- **Nina Johnson:** Provider Cost of Quality Calculator
- **Francesca Wolf:** CCEEPRC Understanding Costs of ECE Plenary

3. Brief Summary of Presentations

- **Summary of Presentation #1: Pia Caronongan - State efforts to use narrow cost analysis to inform payment rates.**
- What is narrow cost analysis?
 - A study of what it costs providers to deliver child care in a state or territory at two or more levels of quality
 - A base level of quality that meets health, safety, staffing, and quality requirements.
 - One or more higher levels of quality as defined by CCDF Lead Agencies

- How did we learn about existing efforts?
 - Findings today are based on our review of 13 narrow cost studies/analyses conducted by states. Most were conducted between 2019-2021; one was an earlier cost analysis from 2013 (WA).
 - To find these states, we consulted with our expert advisors and reviewed lists of recent market rate survey reports and cost studies.
 - We reviewed key aspects of these studies including:
 - Approach used
 - Use of cost information
 - Key findings
 - Note we did not screen or review these reports for quality.
- What approaches did states use?
 - Summarize what we learned about how states conducted their analyses.
 - 2 of 13 studies conducted cost surveys
 - 11 of 13 studies used a cost model
 - All 11 studies that used a cost model supplemented with additional data
 - State administrative data
 - Focus groups and interviews with providers were conducted to vet assumptions
 - Survey data was from a small sample of providers
 - Next, we'll do a deeper dive into 3 states to examine how they used cost information, and what they found when they looked at variation in the gap between cost and payment rates.
- How have states used findings from their cost analyses?
 - Policy responses from states to try to narrow the gap between costs and payment rates.
 - Some states have found that broad changes to payment rates are needed. For example, DC found widespread gaps between costs and payment rates. Based on this, they increased payment rates for all provider types, ages of children served, and quality levels.
 - Some states' analyses show the need to adjust payment rates based on levels of quality or age group. For example, Vermont found that payment rates for centers covered costs only at base levels of quality. This suggests they need to raise rates at higher quality levels to encourage quality improvement. As another example, DC had different payment rates for infants and toddlers. But they changed their rates to have a single rate for infants and toddlers. This was due to similar child-staff ratio requirements and, therefore, similar costs for these two age groups.
 - Other states have provided short-term assistance to help providers cover costs. For example, Arkansas gave supplemental payments to help providers stay in business during the COVID-19 pandemic. These payments varied for certain provider types and locations. They were based on different gaps between rates and costs found in the state's cost analysis
- What makes for a "good" narrow cost analysis.
 - By a "good" narrow cost analysis, we mean one that:
 - Reflects conditions in your state or territory
 - Produces information that is useful for payment rate setting, including information on how costs vary by: levels of quality including meeting basic health and safety needs; type of setting; child age; location
 - Combining a cost model with a cost survey component - can bring together the advantages of surveys and the flexibility of cost modeling.
 - With this combined approach, CCDF Lead Agencies use information gathered from providers to inform cost model assumptions. This approach can ground your estimates in actual cost data collected from a sample of providers in your state or territory.
 - However, bringing these two approaches together can require a lot of time and resources. For example, CCDF Lead Agencies may need to:
 - Collect data from a small number of providers

- Only collect information on major cost drivers, such as personnel expenses
 - Focus on information that cannot be obtained from existing data, such as staff benefits and facilities costs
- Efforts to use narrow cost analysis to understand child care costs can:
 - Build knowledge about how to improve access and equity among families and providers
 - Improve financial stability for providers
 - Provide data to inform policy and funding decisions
- Full set of resources available at: <https://www.acf.hhs.gov/opre/report/narrow-cost-analysis-three-part-series-ccdf-lead-agencies>
- **Summary of Presentation #2: Nina Johnson - Provider Cost of Quality Calculator**
- The Provider Cost of Quality Calculator (PCQC) is an Office of Child Care tool that can help policymakers and providers estimate the annual cost and revenue for a child care home and a child care center.
- TA around the cost of quality – and use of the PCQC – contributed to a new line of questions that drove decision-making: questions about the **cost of providing** care. Lead Agencies began considering cost in addition to price.
- PCQC was developed in 2014 in response to an increased interest in understanding the cost – instead of just the price – of child care. The work of Anne Mitchell influenced the development of PCQC. The 2014 PCQC aligned closely with her spreadsheets and default values were informed by her work with states. CCDBG Act of 2014 required states to establish rates that take the cost of providing higher-quality services into account
- As PCQC and our thinking have evolved, each has influenced the other. We want PCQC to reflect current thinking about price and cost, and we also know that PCQC has driven and will continue to drive thinking about price and cost.
- Impacts
 - States used MRS alone to inform rates
 - Anne Mitchell and Louise Stoney used spreadsheets with states to estimate child care cost and revenue
 - OCC built web-based PCQC, based on the cost modeling spreadsheets
 - The CCDF Regulations required CCDF Lead Agencies to consider the cost of care as they set rates, informed by a narrow cost analysis
 - The covid pandemic caused a child care crisis, exacerbating the faults/dysfunction in the child care market
 - ARPA funding provided an opportunity for states to directly support child care providers
 - Updated PCQC was released
- Questions Driving Policy & Funding Decisions
 - What do families pay for child care?
 - How do we set rates at the 75th percentile of what parents pay?
 - What is the cost of quality child care?
 - (How does cost differ by type of care?)
 - How does cost differ by age group?
 - How can we set rates closer to the cost of care?
 - How do increased wages for center staff and FCC providers impact the cost of care?
 - How can cost modeling inform provider supports, within and outside of the subsidy system?
- To illustrate that cost modeling is just one part of the process. Ultimately, this information should be used to inform policy and funding decisions.
- **Preparing**
 - What are our goals and what do we want to learn?
 - Who are our partners?

- **Data gathering and cost modeling**
 - How do we gather data on cost?
 - How do we create a model that captures cost?
 - How do we model revenue and understand the gap between cost and revenue?
- **Policy and funding decisions**
 - What happens when we model *desired* supports?
 - How do supports fit into our budget and plan?
 - How do we communicate and continuously improve?
- There are other questions PCQC can help you answer, such as:
 - How do we articulate the need for increased investment in child care?
 - How to policy changes impact cost and revenue?
- Why do people use PCQC?
 - **Online and free**
 - There's no cost to use PCQC and it's immediately available online.
 - **Includes current default values**
 - PCQC's default values are up to date.
 - **A trusted source**
 - PCQC is an Office of Child Care tool.
 - **Availability of technical assistance**
 - Lead Agencies can receive technical assistance in using PCQC.
 - **Easy to use**
 - PCQC is relatively easy to use. The interface walks you through the steps of creating a scenario and additional guidance is accessible online.
 - **Supports rate setting requirements**
 - PCQC can be used to support Lead Agencies in meeting federal requirements for rate setting.
- Users need to make a series of assumptions when cost modeling. These assumptions fall into 5 categories in PCQC.
 - Classroom information
 - Personal costs
 - Non-personal costs
 - Revenue
 - Quality levels
- A series of scenario assumptions related to the *program and classrooms*.
 - Users need to decide what type of care they want to model, where the program is located. (Users can select the state, but there are likely differences in expenses and revenue within any given state – e.g., rural and urban.)
 - Users need to decide which age groups and how many classrooms for each age group, as well as enrollment efficiency. They can use the default for enrollment efficiency if they choose.
- Ratios, group size, and salaries have a major impact on cost
 - We encourage states to think carefully about the salaries they include in PCQC. They might model “as is” salaries and also higher salaries, so they can project what it would take to meet the goal of higher salaries.
 - Benefits include health insurance, additional benefits, PTO
- We encourage Lead Agencies to create an advisory group of providers who can share their experiences and validate assumptions. LAs can also gather data from providers using a survey – either limited (a smaller group of providers) or comprehensive (a large group of providers).
- Lead Agencies must consider the cost of higher quality levels. This slide shows the things that will likely change as quality improves.
- PCQC includes a baseline level and 5 quality levels
- You can also use the quality levels in PCQC to model an “as-is”/current scenario compared to a scenario showing *desired* costs and revenue. For example, higher salaries.

- The assumptions you make impact the expense and revenue statement for the program. This shows the annual expenses and revenue.
- The net revenue is the difference between expense and revenue and can inform decisions about rate increases.
- Lead Agencies should consider whether the net revenue includes an adequate cash reserve – for emergencies/unplanned expenses.

- **Summary of Presentation #3: Owen Schochet - Measuring Costs of Early Care and Education to Understand Pathways to Quality**

- The goal of Implementation and Costs of High Quality is to produce center-level measures of cost and implementation that work together in ways that help us look at pathways to quality. This figure shows the conceptual model for the project.
- We've developed cost and implementation measures of five key functions, or areas, of ECE center operations that contribute to high quality care and better outcomes for children. These key functions are depicted as green gears in the center of the model. They are structural supports for classroom instruction and caregiving; instructional planning, coordination, and child assessment, center administration and planning; workforce development; and child and family support.
- Our cost measures capture the total resources needed to support the package of services a center provides as well as how these resources are used across different key functions within a center.
- Our implementation measures capture *what* a center does to support quality and *how* these features and practices are supported and implemented within a center.
- As just noted, the ICHQ measures go beyond total costs to examine how centers allocate costs and what they do to support quality across these five key functions (which were depicted as gears in previous slide). Our cost measures capture important, finer-grained information about how much centers spend on these different types of resources and activities.
- Each of the key functions is defined by a specific set of activities and practices that allows us to measure implementation and costs for each function distinctly.
- The Structural Supports for Instruction and Caregiving function includes things like staff-child ratios and group sizes. This key function also includes the center's materials and equipment, staff qualifications, and the center's ability to maintain a highly qualified staff.
- Instructional Planning, Coordination, and Child Assessment includes elements that tend to support process quality. This function captures whether a center uses a curriculum, how they selected that curriculum and how long they have been using it, and how center leaders are trained on the curriculum. We also include information about how much paid planning time the center provides, the center's developmental screening and child assessment practices, and how centers communicate information to parents about their child's learning.
- The Center Administration and Planning function includes things like structural and procedural supports. This function captures different aspects of center planning and improvement, including whether the center engages in strategic planning and which staff are engaged in those planning efforts. We also collect information about how staff discuss quality assurance and quality improvement during staff meetings, as well as the goals centers set for their operations as a whole and the involvement of oversight boards.
- The Workforce Development function encompasses a center's activities to hire, train, and coach teaching staff. We also collect information on the center's priorities for training and professional development for teaching staff, the supports that exist for training and PD, whether the center's teaching staff visit other classrooms to observe practice, and whether and how individualized coaching is provided to teaching staff.
- Finally, the Child and Family Support function captures the center's provision of a variety of support services to children and families, including health screenings, therapeutic services, counseling and family support services, social services, and adult education programs. This function includes the number of services the center provides access to, how many of those services are explicitly provided

by center staff or other entities, and whether the center incurs costs related to those services. We also collect information on the processes associated with providing services, including who decides if services are needed and whether and how service receipt is tracked.

- Our ICHQ study has had multiple phases in order to develop and refine the measures used to collect this information over time.
- Today I'll be sharing findings from our field test sample which included 80 centers, 51 of which were able to provide cost data. (As data collection extended into fall 2021, some centers encountered challenges in completing data collection activities due to ongoing service disruptions related to the COVID-19 pandemic and staff turnover.)
- We selected a purposive sample of centers from 4 states to ensure we were able to test our measures in centers with a range of different characteristics.
- We collected data using three measures across the study phases:
 - First, we collected information to construct the implementation scores for each key function through a semi-structured interview with center directors. The implementation interview gathered information on the structural features and practices in place to carry out each key function, and the presence of specific activities needed to ensure they are carried out effectively
 - Second, we used an Excel cost workbook that was completed by the staff who knew the most about the center's finances. Respondents reported on costs separately by resource category, such as, staff salaries and fringe benefits, facilities, equipment, and contracted services. Respondents were also asked to select the most relevant key function for each specific cost. The workbook also collected information about the number and ages of children enrolled and hours of care provided.
 - Third, we collected data on how key center staff spent their time at work according to various activities in each of the key functions. One of the ways that we used these data was to categorize labor costs into the five key functions.
- Our cost data collection first allowed us to measure the cost to provide care for one child for one hour, which we calculated as the center's total costs divided by the number of hours of care provided. This is a typical measure you will see in cost studies.
- This shows how widely costs vary among the centers that provided cost data. The mean total cost per child care hour was \$7.51 (that's the red line on this figure). But you'll see that there is a wide distribution of costs – each blue bar represents a center in our sample and their costs range from \$1.89 to \$14.87.
- This is the same distribution but shows centers who we refer to as “high quality” – more specifically those with high QRIS ratings or who are accredited – in the green bars and centers who have lower QRIS ratings and are not accredited in the yellow bars. This is consistent with what we expected from the literature – higher quality centers tend to have higher costs, on average. Specifically, we see that higher quality centers spent \$8.84 per child care hour, while lower quality centers spent \$5.40, on average, and this difference is statistically significant at the 1 percent level.
- Higher quality centers also had higher costs for each key function as compared to lower quality centers. All of these differences were statistically significant at the 5 percent level or less, with the exception of workforce development which was statistically significant at the 10 percent level.
- We also found, however, that higher and lower quality centers allocated similar proportions of their total costs across key functions. On average, both groups of centers spent the largest portion of their total costs (so approximately half) on the Instruction and Caregiving function.
- Also consistent with what we expected, we found that higher quality centers in our sample also had higher implementation scores, on average, compared to lower quality centers across the key functions. All of these differences were statistically significant at the .05 level or below.
- As a reminder, our implementation scores capture what centers do to support quality (for instance, adopted practices, such as use of an evidenced-based curriculum) and how they do it (for instance, how centers use that curriculum and whether and how they train staff to use it).

- However, though higher quality centers had higher total costs and higher implementation scores, on average, we also found that different centers in our sample sometimes took different pathways to quality from their costs and levels of implementation.
- Here are some scatterplots of these relationships. We plot one figure for each implementation score by total cost and denote the four quadrants according to each median implementation score and the median cost score. Green points are centers that are high quality and yellow points are centers that are not high quality.
- The general tendency for all the key functions is that most green points are in the upper right, and that most yellow points are in the lower left. In other words, higher quality centers are more likely to have higher costs and higher implementation scores, as we've already discussed. However, this is not always the case...
- Using instruction and caregiving as an example, we can see how the ICHQ measures capture some alternative pathways to quality.
- Again, the most common scenario is high implementation and high cost .
- But we also see high quality centers with lower implementation and higher costs.
- As well as high quality centers with high implementation and lower costs (for instance, the two centers in the upper left quadrant that are circled in blue). We see very few higher quality centers with both lower costs and lower implementation (so green dots in the lower left quadrant), and all centers with the lowest costs – those in the bottom quartile, or that have costs below about \$4.60 per child care hour – are low quality.
- Collecting this detailed information from our larger field test sample of centers also allowed us to model these different pathways to quality more empirically.
- Though we also see similar patterns for all implementation scores, I'll again focus on just one as illustrative.
- We can first see that both higher costs and higher implementation scores tend to predict higher quality, on average. In other words, for centers with average implementation, the probability of being high quality increases as total costs increase, and for centers with average costs, those with higher implementation have a higher predicted probability of being high quality than those with lower implementation (here we can see that as the green line is on top of the red line at average costs).
- Of course, as a result of this, centers with high implementation scores and high total costs are very likely to be predicted to be high quality.
- However, we also find evidence for these different pathways to quality in that centers are more likely to be higher quality with lower costs when they also have higher implementation, and vice versa. So there is an important tradeoff here.
- One way to interpret this finding is that centers with the highest costs are predicted to be high quality even if they score lower on measures of what they do and how across key functions.
- Another way to interpret this finding is that centers with somewhat lower costs are still more likely than not to be predicted as high quality when they score higher on our measures of implementation by key center function. In our analysis, we were particularly interested in this group of centers who were able to achieve higher quality without having high costs.
- These findings and applications in mind, we think that the ICHQ measures have the potential to help a broad range of users better understand ways to achieve high quality in ECE centers.
- These insights can inform decisions about the level of resources needed and how best to use them across functions at the center level to, alongside what centers do to support quality and how, deliver high quality services.
- Some potential uses of the measures include to help centers or larger organizations better understand resource use and cost drivers, to inform decisions about levels of delivery of funding for quality improvement initiatives, to guide quality improvement efforts and identify needs for technical assistance, and to provide more detailed information about implementation and costs that can be considered in efforts to ensure access to high quality ECE.

- **Summary of Presentation #4: Discussant- CCEPRC Understanding Costs of ECE Plenary: Francesca Wolf**

- We are talking about cost data because CCDF requires agencies to address equal access. Specifically, the Equal Access requirement is that Lead Agencies need to ensure that families receiving CCDF have the opportunity to choose from the full range of eligible child care settings and families receiving CCDF need to have the same access to child care that is comparable to that of private pay families to ensure parent choice. In other words, equal access refers to the notion that families receiving subsidy have the same purchasing power to buy the same child care services as families who do not receive subsidy. Using cost information to set rates helps move the needle closer to ensuring this access.
- Why does ACR prioritize equal access?
 - Advances equity for children and families served with federal child care subsidies
 - Higher payment rates increase provider stability and supports increased wages for the workforce
 - Shared goal with lead agencies to ensure all families have access to high quality child care
- We know that the price of child care does not accurately reflect the actual cost of providing care. Therefore, continuing to use MRS data to drive rates necessarily keeps rates lower and may dissuade providers from participating in the subsidy program. Cost-based alternative methodologies, or even expanded narrow cost analyses can help lead agencies set rates closer to the cost of care and break the cycle of low wages and low compensation.
- Market rates are more reflective of what parents can afford to pay than what it costs to deliver high-quality care. As a result, the old approach of using market rates as the sole basis for subsidy payments reduces parent choice and access to care, undermines program quality important to child development, leads to an insufficient supply of care, produces an underpaid workforce, creates an unstable sector, and undercuts the employment of working parents
- OCC has prioritized using cost-based alternative methodologies, including narrow cost analysis to inform payment rate setting and to increase rates closer to the cost of care, rather than using a price-based MRS
- OCC will provide targeted TA for lead agencies who are considering a transition to a cost-based approach and place a stronger emphasis on understanding and using a narrow cost analysis for lead agencies who are not yet ready to move to an alternative methodology
- Increased payment rates help stabilize and support the child care workforce
- Lead agency use of alternative methodologies:
 - So far, only 2 states and DC use an alternative methodology that is based on cost of care to set subsidy rates.
- Today's studies- various ways to approach costs:
- Questions for each:
 - Did not screen or review reports for quality... but if you had, what would you look for? Are there any that stand out as meeting your "definition" of "good"?
 - How can policymakers use the PCQC to inform their rates? What is the best way to estimate a baseline cost for health, safety, staffing, and quality requirements, when real world assumptions are usually based on a flawed market?
 - Clarification – were all centers similar in terms of ages of children served and subsidy receipt/use?
 - Also, did you find one key function of center operations stood out as a larger factor in driving costs and/or quality or were they too intertwined to tease apart? In other words, where do you see the biggest bang for the buck, so to speak?
- **Audience discussion:**
- George Mason: To the extent that states across the board have different indicators of quality, good data understanding costs: How can we think about how we are assessing quality thoughts on gathering good data and costs: ICHQ project, think about data in context and how it was collected

and the program characteristics. Used it as a proxy. High quality had a similar meaning – looked at standards QRIS.

- The definition of quality is state specific, if you're looking at costs between states, adjustments need to be made to make them comparable.
- Francesca: OPRE is looking at the measures used to evaluate quality of childcare. Work still needs to be done to get more data.
- ICF: listen to states to make decisions.
- Gina Adams Urban Institute: Think about the gap in the other direction, they don't always get what the rate is. Equity, who doesn't get it. Gap in provider revenue. Most providers don't know what unused revenue is.
- Rebecca – Dept of Ed: led alternative methodology in Virginia. Providers need to know that it's going to work before they try it. Useful info: Data demonstrated that providers that were involved in the Department of Education were paid \$2 less on average. Twice as many vacancies. Compensation was often a factor in their ability to recruit new staff. Publicly funded providers – observed teacher quality, developmentally appropriate curriculum.
- Subsidy rates are based on their high-quality model.
- Providers wanted to know that expectations were set but that they were going to receive funding to meet those requirements. Virginia evaluating the extent of change they are hopeful to see. Survey data, use this data will have data on every publicly funded childcare provider in VA.
- Are there other factors that can be shared.

4. Brief Summary of Discussion

To best support child development and families, high-quality child care and early education is important. There is a greater need for public investment to ensure the availability and accessibility of quality care. Improving the understanding of the costs of high-quality early childhood education is necessary to promote funding levels that success access. During this presentation, policy changes that spurred increased data collection efforts, cost modeling tools that help estimate costs and their impact on policy, and improved understanding of how costs and allocation of resources vary were shared and discussed.