

Project Snapshot

OPRE Report #2022-24

Measuring the Implementation and Cost of High Quality Early Care and Education

A growing body of research demonstrating the benefits of high quality early care and education (ECE) programs for young children, particularly those in families with low incomes, has inspired a strong commitment from both federal and state officials to improve the quality of ECE programs nationwide. Policymakers, administrators, and program and center directors have limited guidance about how to fulfill this goal and would benefit from actionable information about the cost of high-quality care and the use of center-level resources to guide decision-making.

The Office of Planning, Research, and Evaluation (OPRE) in the Administration for Children and Families contracted with Mathematica to carry out the **Assessing the Implementation and Costs of High Quality Early Care and Education (ICHQ)** project. Mathematica is gathering data and designing the ICHQ (pronounced I-check) measures for a broad range of users in the ECE field who are seeking insight into the relationship between a



center’s work, the cost of the services provided, and ECE quality. We created draft measures through a multi-case study from 2015 to 2018 and are further testing the validity of the measures through a field test conducted in 2021. Once validated, the measures can inform decisions about how best to use resources at the center level to deliver and support high quality ECE.

What are the ICHQ measures?

The ICHQ project is producing two sets of center-level measures that capture (1) implementation of activities that can support quality in ECE centers that serve children from birth to age 5 (not yet in kindergarten) and (2) the costs to provide care and services. **Implementation measures** summarize what a center does to support quality, including the combination of structural features (for example, teacher–child ratios, group size, and staff qualifications) and adopted practices, as well as how features and practices are supported. **Cost measures** estimate the amount and allocation of resources needed to support the ECE services a center provides, including how staff use their time. The ICHQ measures will help the ECE field better understand the relationship between implementation and costs.

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Key terms for the ICHQ project

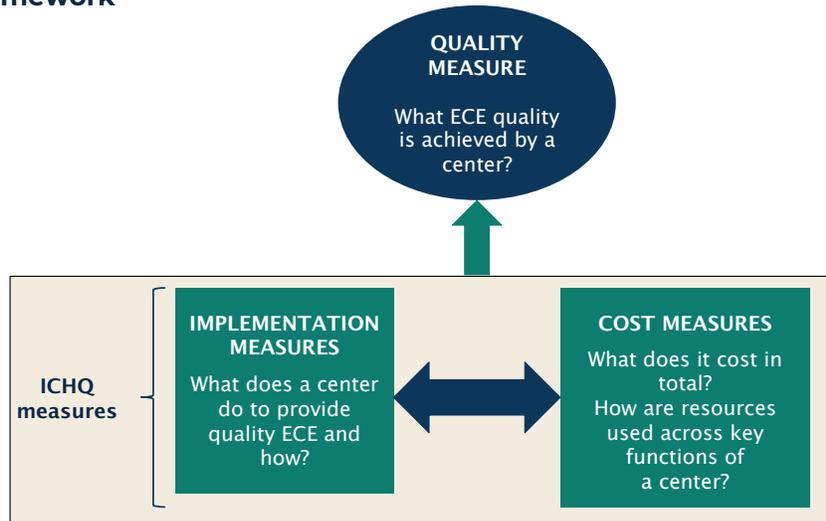
Data collection tools—interview protocol, cost workbook, and staff time-use survey—collect the information and data used to create the measures.

Measures are constructed from the collected data to summarize levels of implementation and estimate costs of center operations.

Key functions define ECE center operations in five areas. Each of the five key functions has a specific set of activities and practices that can support quality and each function has specific costs. All ECE centers carry out activities in each key function, but to varying degrees. ▾

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Measures Framework



The ICHQ measures can also be related to separate measures of quality at the center or classroom level to understand associations between implementation, cost, and quality.

The implementation and cost measures are framed around five key functions, or areas, of ECE center operations that contribute to high quality care:

Five key functions of center operations



Structural Supports for Instruction and Caregiving



Instructional Planning, Coordination, and Child Assessment



Center Administration and Planning



Workforce Development



Child and Family Support

Each of the five key functions are defined by a specific set of activities and practices that allow us to measure implementation and costs for each function distinctly. All ECE centers carry out the key functions to varying degrees to provide services to young children and their families. Constructing measures around each of the five key functions will help the ECE field better understand how implementation and costs in specific areas relate to quality. More information about these key functions can be found in the [ICHQ Conceptual Framework](#) snapshot.

Who can use the ICHQ measures?

With further use and testing, the ICHQ measures can support policy, funding, and practice decisions around center services and resource use to deliver high quality ECE. The ICHQ implementation and cost measures can help a broad range of users in the ECE field:

- / **Researchers** could use the measures to study a large sample of ECE centers to describe implementation and costs systematically and specify ways to improve quality, or as part of a cost-benefit analysis.
- / **Federal and state administrators** could use the measures to examine a group of ECE centers within a state or across states to inform decisions about funding for quality improvement initiatives or setting subsidy rates.

/ **Center directors and technical assistance providers** could use the measures to examine implementation and costs of quality within specific centers to understand and guide quality improvement or identify needs for technical assistance.

In addition, the ICHQ measures could help address questions about equity by providing more detailed information about implementation and costs that can be considered in efforts to ensure equal access to high quality ECE.

What are the ICHQ project activities and products?

The ICHQ measures are being developed through the following activities:

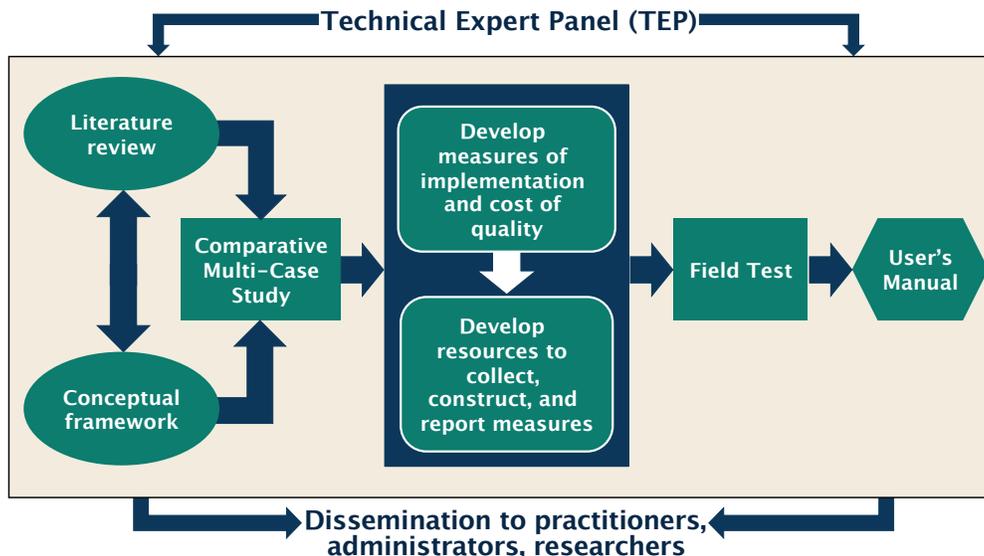
- / Ongoing consultations with a **Technical Expert Panel (TEP)** to guide the conceptual approach and analytic considerations in developing the measures.
- / A **literature review** that pointed to elements of implementation and cost that are important to measure to inform how centers achieve high quality.
- / A **conceptual framework**, informed by the literature review and TEP, that guided data collection in the multi-case study and development of the measures.

/ A **multi-case study of ECE centers** collected data for use in developing draft measures. A phased approach to data collection in the multi-case study that was conducted from 2015 to 2018 provided opportunities to refine the measures and data collection tools and processes. Using data collected in the fall of 2017 and spring of 2018 from 30 ECE centers, the team developed draft implementation and cost measures that are described in a [methods paper](#). A [series of research briefs](#) defines the measures and presents preliminary results about how well they are working to summarize implementation, estimate costs, and identify ways centers can achieve quality.

/ A **field test** in 2021 will further test and validate the draft measures using data collected from 80 ECE centers. Using field test data, the team will assess consistency and reliability in measurement across constructs and compare the performance of the implementation measures, in particular, to an existing, validated measure that assesses similar constructs.

/ The project will conclude with a set of final measures and a **User's Guide** that will include all the data collection tools, guidance for producing the measures from the collected data, and instructions for interpreting and using the measures.

Key tasks of the ICHQ project



For more information about ICHQ

Visit the project page: [Assessing the Implementation and Cost of High Quality Early Care and Education Project \(ECE-ICHQ\) | The Administration for Children and Families \(hhs.gov\)](#)

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