Issues in Quality-Driven Early Care and Education Financing and Cost Analysis –

Breakout Session

CCEEPRC 8 February, 2018

Co-Facilitators and Presenters:

Richard Brandon, RNB Consulting

Tools, Frameworks, and Issues in the Analysis of Center- and Home-based ECE Costs and Financing; Accessibility Considerations

Lynn Karoly, RAND Corporation

Financing High Quality ECE: Accounting for the Cost of Quality in ECE from Provider and System Perspectives and Implications for Financing

Andrew Burwick, Mathematica Policy Research

Developing Tools to Measure the Implementation and Cost of Center-Based Care: The ECE-ICHQ Approach

Tools, Frameworks, and Issues in the Analysis of Center- and Home-based ECE Costs and Financing

- Desirable characteristics of cost calculators
- Estimating changes in utilization – family and systems levels
- Estimating cost of high quality home-based
- Determining affordable family payments
- Costing services for special needs children

Desirable characteristics of cost calculators

- *No single best calculator* – varied purposes, audiences/users
- *Units & geographic flexibility* – provider vs. population
- *Easily compare* different policy specifications & outputs
- *Encompass entire ECE financing system* - provider costs, family contributions, public subsidies; system level support costs
- *Output by* age, income, type of ECE, components - $$, # staff
- *Dynamic* – changes in utilization patterns at family and system levels – update elasticity estimates; vary by family income, age of child

Estimating costs of high quality home-based ECE

Approaches – need clear conceptual basis;

- challenges of an ingredient cost approach vs. market-determined prices

- *Ingredients approach*: provider compensation plus non-comp costs (updated Helburne & Modigliani) –
  - provider comp. based on desired qualifications [cannot set for FFN] vs.
  - foregone wages - note regressive link to SES)

- *Market price approach* – need supply-demand analysis considering availability of centers, fee-free options, local labor market and family income

Determining affordable family payments

What is “affordability?”

Conceptual approaches:

- *Current payment shares* - revealed preferences tautology – problem of under-utilization related to income

  Federal standard (7%) – based on poorly specified data

- *Level where price not affect utilization decisions* (need new elasticity estimates, differentiated by age, income, location …)

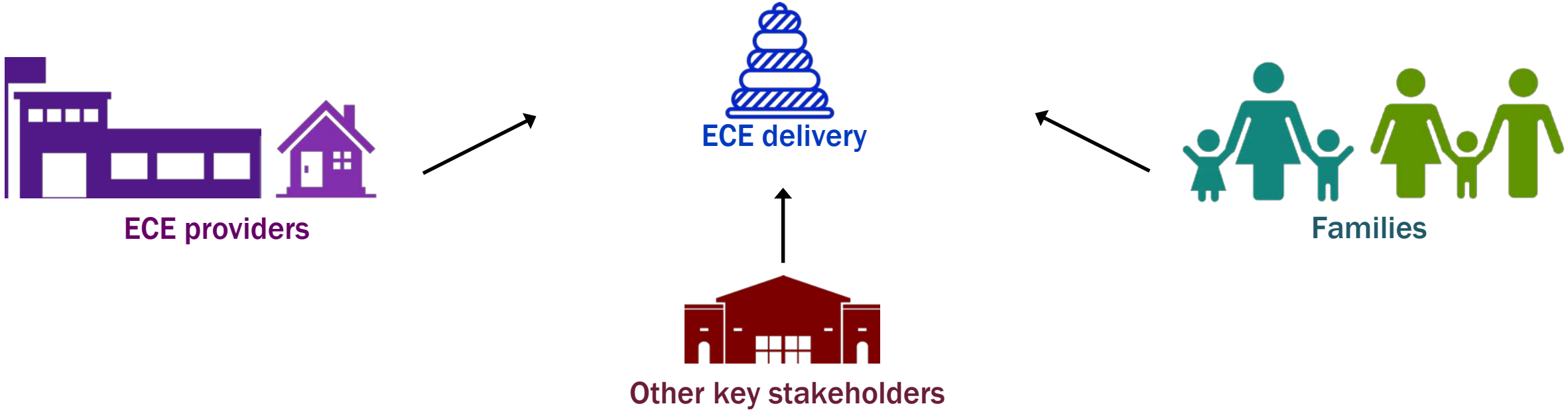
Wealth of data in NSECE will allow more differentiated analysis, both of current payment levels and updated and refined elasticity estimates.

Costing services for special needs children

- Significant percent of children 0-5 with special physical or emotional needs = 8-10%; 1 2 million, 1 million served
- Additional numbers with linguistic needs (DLL) ~ 25-33 %
- Lack of structural standards for quality
- Need to differentiate of many types of need, level of cost/intensity
- Mainstream vs. special classes.

Key issues for financing a high-quality ECE system

Federal, state, & local policy environment



? What are the provider- and system-level cost for high-quality ECE?

? Which stakeholders contribute to the cost of high-quality ECE?

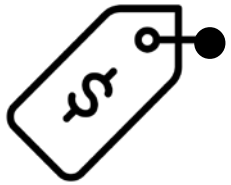
? **What mechanisms are used to pay for the cost of ECE?**

Images via The Noun Project: school by Mike Wirth; house by Hea Poh Lin; toy by Creaticca Creative Agency; families by Kid A; building by Brad Goodwin.

Issues to cover

- Accounting for cost of quality at provider level

- Accounting for cost of infrastructure to support high-quality at system level



- Implications

Issues to cover

- Accounting for cost of quality at provider level
  - CCDF child care subsidy program
  - State and local ECE programs
  - Interactions across systems
- Accounting for cost of infrastructure to support high-quality at system level
- Implications

Moving CCDF from price-based toward cost-of-quality-based reimbursement

CCDF Status Quo

- States reimburse providers primarily based on prices charged for care
- Regional Market Rate (RMR) Surveys used to capture prices and set rates
- RMRs capture prices ≠ cost
- Some markets are too small to capture reasonable price data

Alternatives to Account for Cost of Quality

- Conduct costs surveys (more expensive than price data collection)
- Use cost calculators to model costs
- Allow rates to vary by indicators of quality (e.g., QRIS ratings)
- Direct contracts with providers (potentially costly to negotiate)

States and cities with preschool programs use varied approaches

Location	Reimbursement mechanism
Boston	School sites: Per pupil district funding formula CBOs: Competitively bid subcontracts
Denver	Income-based sliding-scale tuition credit based on income, hours, and program quality
New York	Contracted providers receive reimbursement for allowable accrued costs
San Francisco	Per-child funding formula with adjustments for teacher education levels, other public subsidies, and other factors
Seattle	Per-child funding formula (using a cost model) with adjustments for teacher education levels, other public subsidies, and other factors
Washington, DC	Per-pupil school-district funding formula

SOURCE: Karoly et al., *Options for Investing in Access to High-Quality Preschool in Cincinnati*, RAND, 2016.

Two ECE funding streams in California use different reimbursement mechanisms

Title 5 Child Development Program

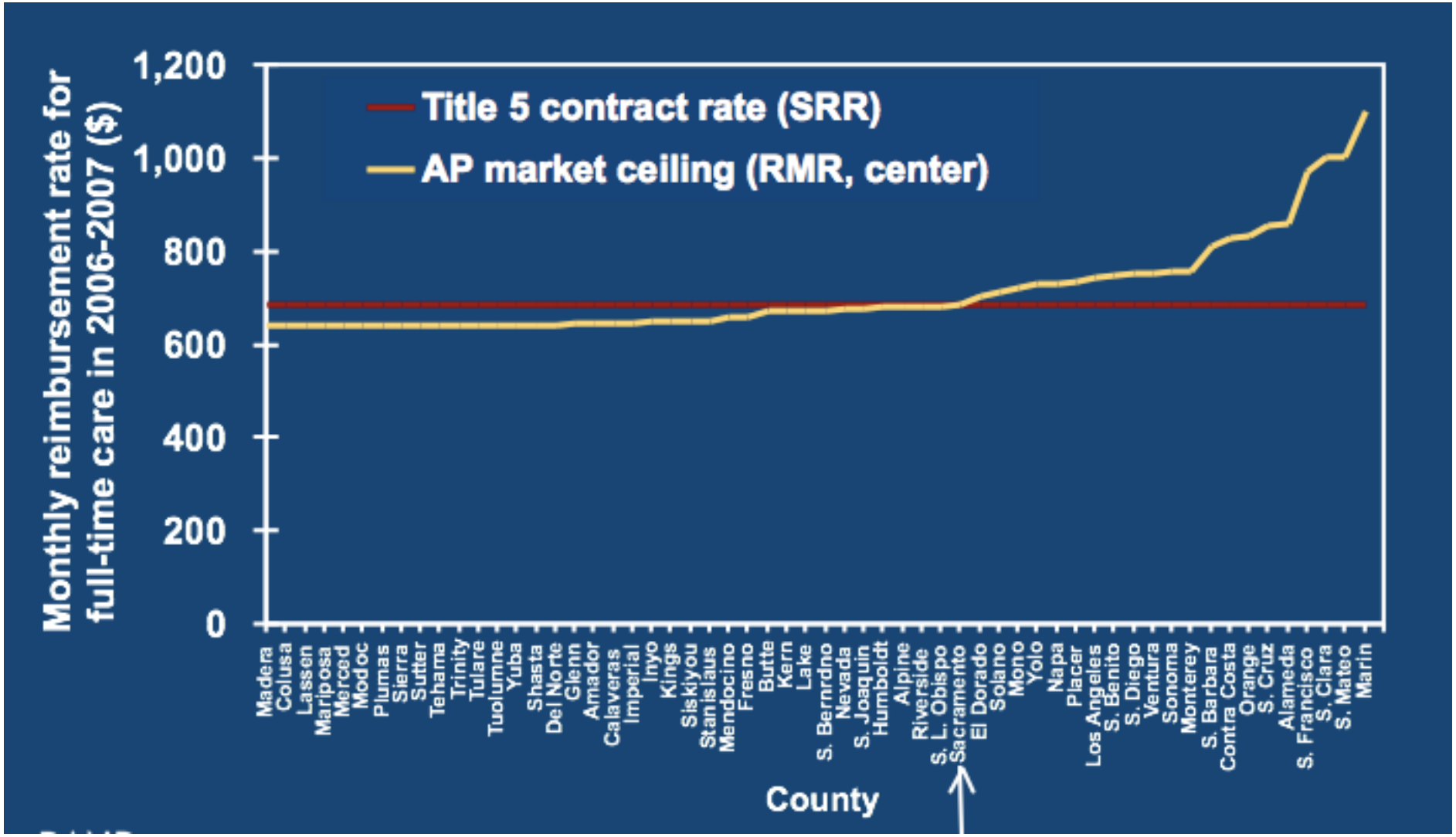
- Direct contracts with providers
- Standard Reimbursement Rate (SRR)
- Rate determined by statute and contract negotiation
- No regional variation
- Rate includes administrative costs

Alternative Payment (Subsidy) System

- Voucher based payments to providers via intermediaries
- Regional Market Rate (RMR)
- Ceilings based on market survey; provider gets usual fee
- Varies by county
- Separate allowance for administrative cost of intermediary

SOURCE: Karoly et al., *Early Care and Education in the Golden State*, RAND, 2007.

For 22 counties, market-determined reimbursement rate exceeded contract rate



SOURCE: Karoly et al., *Early Care and Education in the Golden State*, RAND, 2007.

Other issues for consideration

- How often should rates adjust?
- Should providers be paid if a child is absent?
- Is braiding/blending across funding streams feasible and allowable?

Issues to cover

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System-level costs

- Varied costs to account for in a sustainable system:
  - Quality assurance: licensing and inspections, regulatory systems, quality rating and improvement systems
  - Workforce professional development system
  - Higher education system
  - Workforce registry and other data systems
- Should costs be in budgets of government or providers?

Issues to cover

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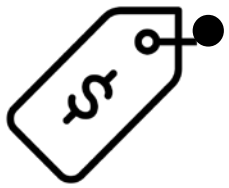
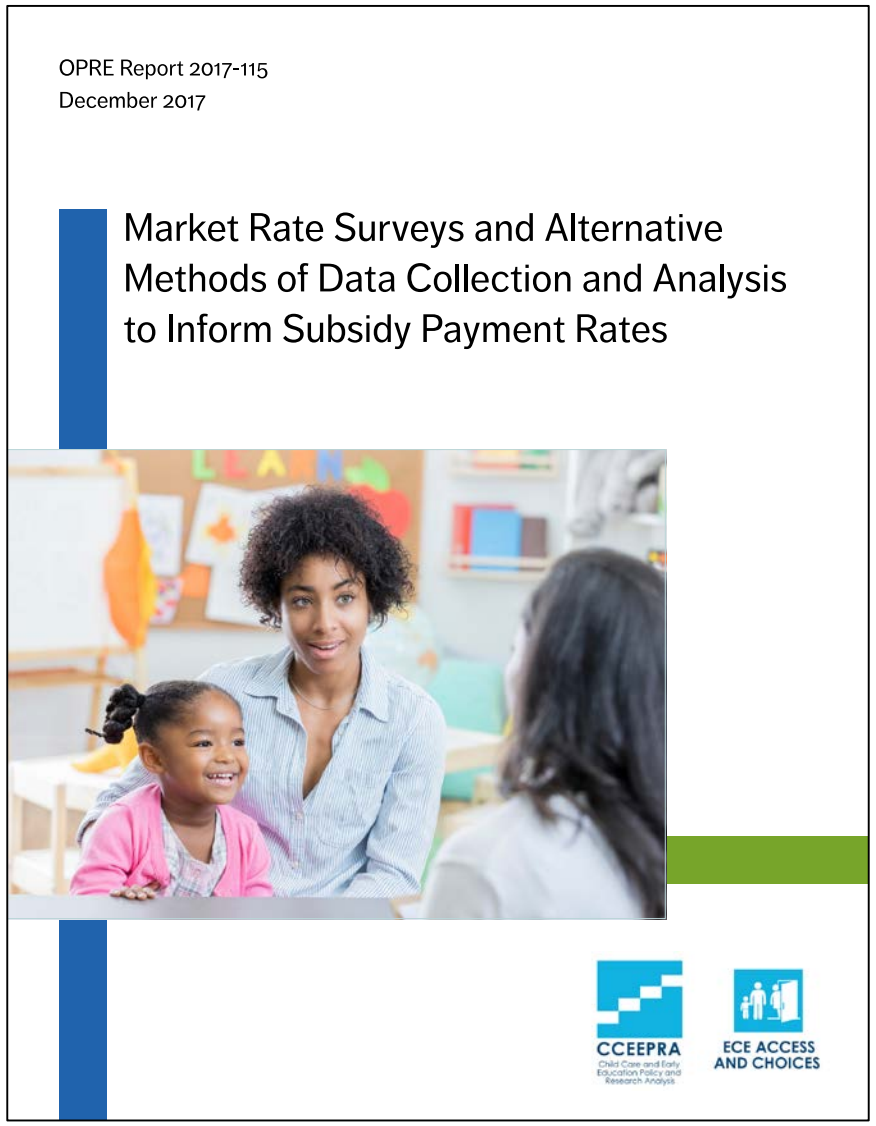


Implications

- Measuring provider cost of quality and reimbursing at cost of quality will likely require more resources than current systems
- System-level costs need to be accounted for
- Mechanisms employed have implications at provider and system level
  - Provider level: may affect providers willingness to be in system
  - System level: funding for system supports may not be funded to be sustainable

Forthcoming resource



MATHEMATICA Policy Research

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Developing Tools to Measure the Implementation and Costs of Early Care and Education: The ECE-ICHQ Approach

Presentation at the Child Care and Early Education Policy Research Consortium Meeting

Washington, DC

February 8, 2018

Andrew Burwick • Gretchen Kirby

Pia Caronongan • Kim Boller

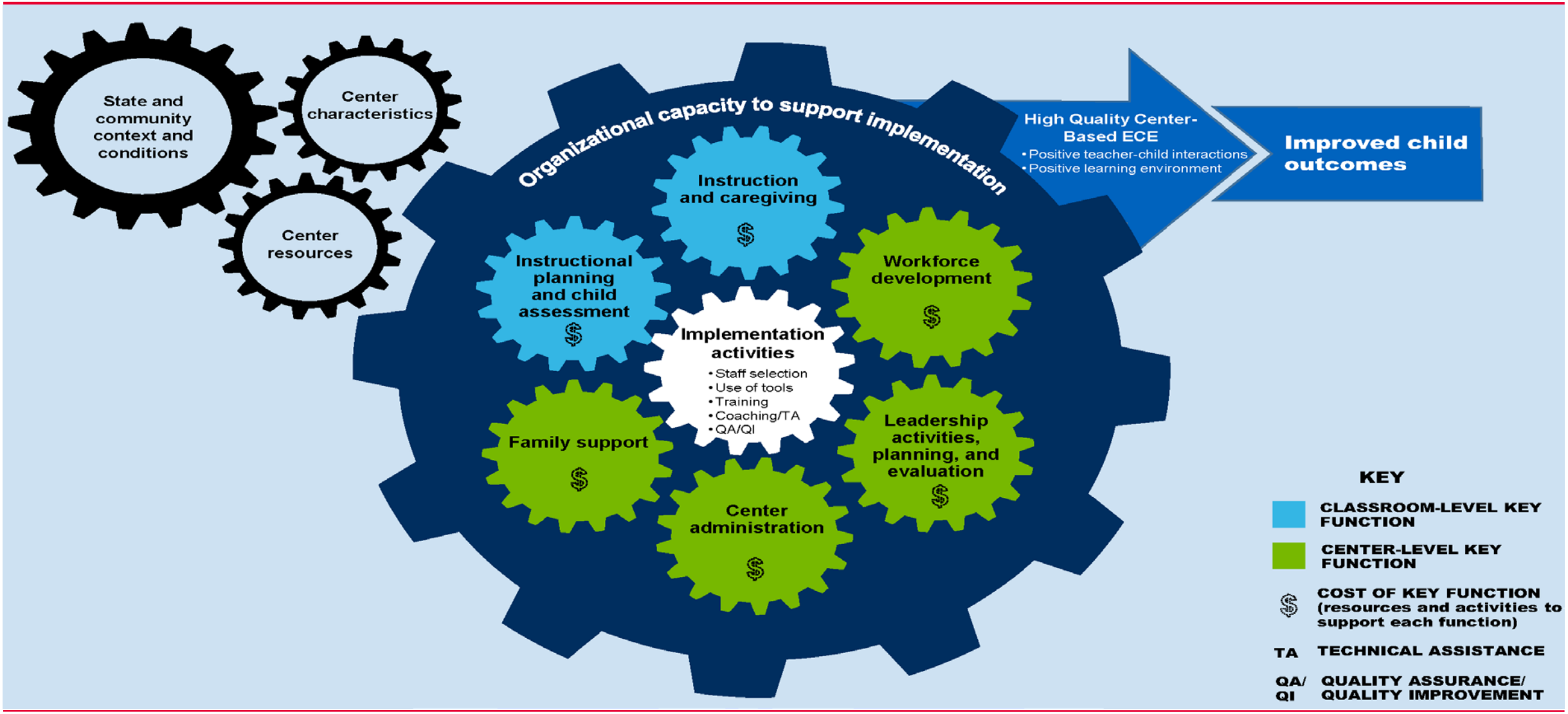
Overview

- **Recap of the Assessing the Implementation and Cost of High Quality Early Care and Education (ECE-ICHQ) project**
  - **Goals and conceptual framework**
- **Approach to measuring implementation and cost**
- **Approach to exploring relationships between implementation and cost**

ECE-ICHQ project goals

- **Develop technically sound instrument to measure implementation and cost of care in ECE centers**
- **Produce measures of implementation and costs that can be used with measures of quality to understand:**
  - **What a center does to promote quality**
  - **How resources are used**
  - **How these dimensions may be related**
  - **How centers vary along these dimensions**

ECE-ICHQ conceptual framework



Key functions link implementation and cost

- **Instruction and caregiving**
- **Instructional planning and child assessment**
- **Workforce development**
- **Leadership activities, planning, and evaluation**
- **Child and family support**
- **Center administration**

Measuring Implementation

General approach to measuring implementation (1)

- **Develop implementation rubrics**
  - **Specify critical elements/activities of each key function**
  - **Describe what centers do and how**
  - **Define conditions that align with higher or lower levels of implementation**
- **Example: Workforce development rubric**
  - **Recruiting and hiring**
  - **Training**
  - **Teacher/classroom observations**
  - **Individualized coaching**
  - **Monitoring and evaluating staff performance**

General approach to measuring implementation (2)

- **Create summary variables and conduct factor analysis to explore how well items fit together**
- **Reduce rubrics to salient items needed to create measures**

Implementation data collection

- **Telephone interviews with program directors**
- **Structured protocol that relies heavily on closed-ended responses and clear language**

Challenges and considerations

- **Moving from qualitative to quantitative data collection**
- **Understanding implications of state and local context**
- **Covering a wide range of implementation activities**
  - **Avoiding respondent fatigue**

Measuring Cost

General approach

- **Apply the "ingredients" method**
  - **Identify the type and quantity of resources used to deliver a program or service**
  - **Determine the monetary value of these resources**
  - **Sum values to estimate total costs**
- **Allocate costs to key functions based on staff time use and coding of resources/line items**
- **Calculate key measures**
  - **Total annual cost**
  - **Cost allocations by resource and key function**
  - **Cost per child care hour**

Cost data collection

- **Electronic cost workbook**
  - Excel-based spreadsheet with tabs covering different types of resources (e.g., personnel, facilities, supplies and materials)
  - Respondents are center directors and finance managers
  - Project staff support respondent and follow up
- **Web-based time-use survey**
  - Respondents include teaching staff and center leadership
  - Time spent on activities completed daily/weekly
  - Time spent on activities completed less frequently

Challenges and considerations

- **Varying levels of sophistication regarding financial management and recordkeeping**
- **Differences in program organization, services, and facilities**
- **Centers embedded in larger organizations**
  - **Multiple respondents**
  - **Some services provided at “no cost” to the center**
- **Balancing precision and burden**
- **Accounting for donated resources**

Exploring Relationships Between Implementation and Cost

Phase 2 analysis

- **30 centers**
- **Aim to assess the alignment between draft measures of implementation and costs**
- **Descriptive and correlational analyses to examine:**
  - **Variation in implementation and cost measures**
  - **Variation in implementation and cost measures, by center characteristics**
  - **Associations between implementation scores and cost per child care hour**
  - **Associations between implementation scores and cost allocations**

ECE-ICHQ contacts

- **Office of Planning, Research, and Evaluation**
  - Ivelisse Martinez-Beck: ivelisse.martinezbeck@acf.hhs.gov
  - Meryl Barofsky: meryl.barofsky@acf.hhs.gov
  - Tracy Carter Clopet: tracy.clopet@acf.hhs.gov
- **Mathematica Policy Research**
  - Gretchen Kirby, project director: gkirby@mathematica-mpr.com
  - Kimberly Boller, principal investigator: kboller@mathematica-mpr.com
  - Pia Caronongan, deputy project director: pcaronongan@mathematica-mpr.com
  - Andrew Burwick, cost analysis lead: aburwick@mathematica-mpr.com