



# Assessing the costs of center-based early care and education

**Child Care and Early Education Policy Research Consortium**

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# What is the relationship between quality and cost of center-based ECE?

- Higher-quality centers tend to have higher costs
- Magnitude of the relationship between cost and quality ranges considerably across studies
- Costs vary based on enrollment level, hours of operation, staffing structure, ages of children served



# Costs and quality in ECE: Missing pieces in the puzzle

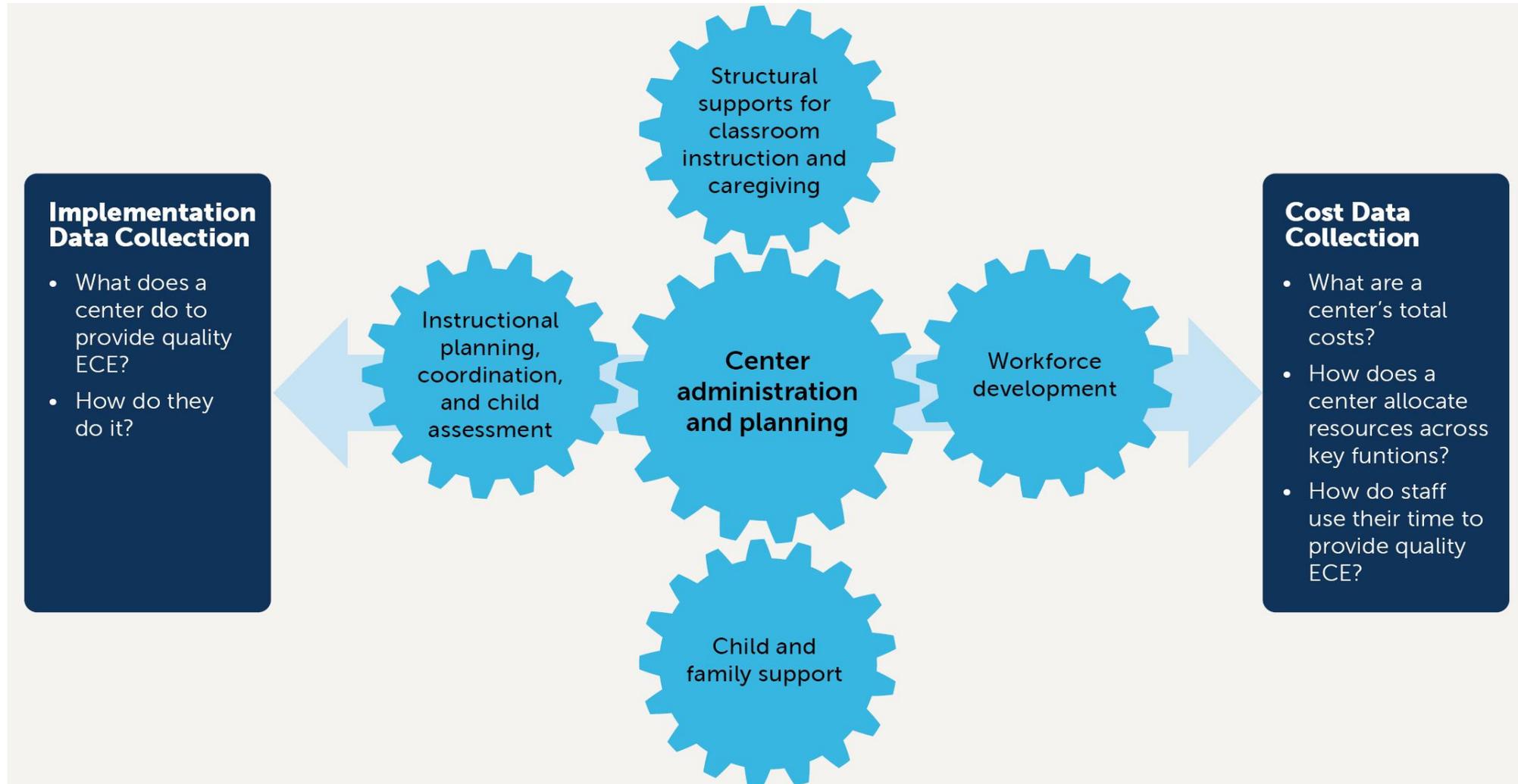
- Centers may be able to achieve quality through different paths
- Different paths to similar outcomes may come from differences in *what* program features are in place and *how* they are implemented and supported
- Field needs more specific measures of costs that can map to what a center does to implement features and practices that can support quality

# What ECE-ICHQ measures

- **What a center does to support quality**
  - Features (teacher–child ratios, group size, staff qualifications)
  - What practices are in place (curriculum use, child assessment)
- **How quality features and practices are supported and implemented within a center**
- **How much the ECE services cost and how resources are allocated within the center**



# Key functions link implementation and cost



# Cost measures



- **Cost per child care hour**

- Cost of providing one hour of child care to one child. It is the total annual cost (in dollars) for a center to provide services to children ages 0 to 5 divided by the total hours of care provided to children ages 0 to 5 during the year.

- **Cost per child care hour by function**

- Cost per child care hour allocated to each function (in dollars). That is, the total cost per child care hour multiplied by the proportion of annual costs allocated to each center function.

- **Cost per child care hour by age (adding in field test)**

- Cost of providing one hour of child care to children ages 0 to 12 months, 13 to 36 months, and 3 to 5 years old separately. It represents the cost of personnel who serve each age group plus a share of other center costs, based on the proportion of total child care hours provided to children in each age group.

# Three essential data elements to estimate costs

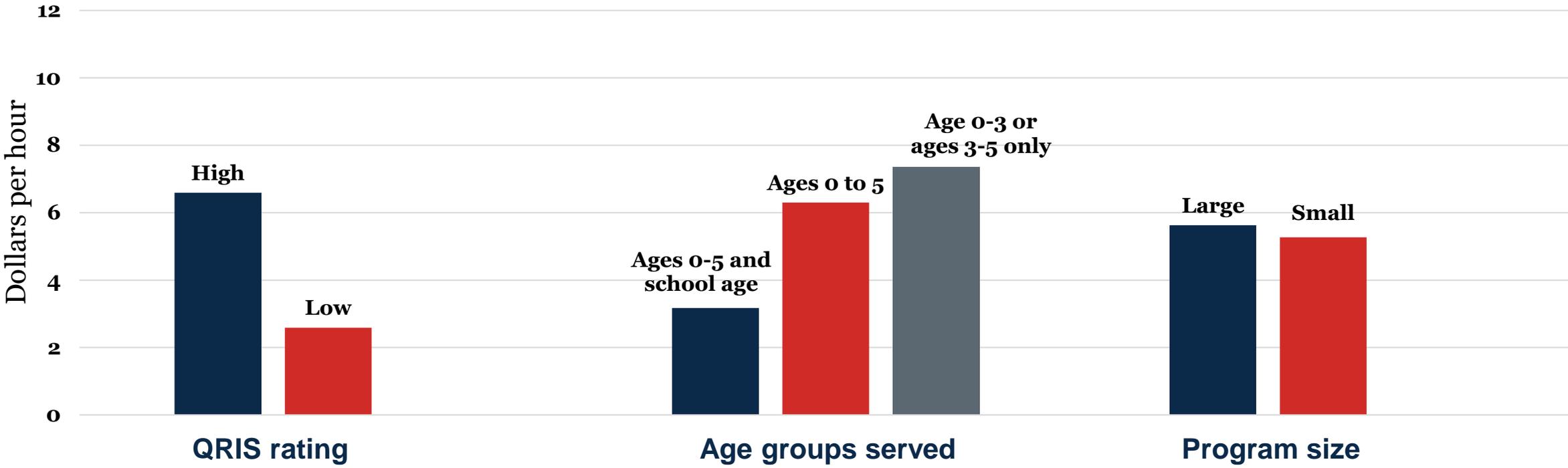
- **Cost data: All resources used to provide services to children 0 to 5 over a one-year period**
  - Collected in an electronic cost workbook, organized by resource category.
- **Enrollment data: Number of children served and number of hours of care provided during the one-year period.**
  - Collected in the cost workbook
- **Time-use data. How select administrators and all classroom teaching staff spent their time on activities related to each function**
  - Collected in a time use survey

# Estimating center-level costs

- **Calculate costs using the “ingredients” or resource cost 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 cost
- **Allocate costs to key functions based on staff time use and coding of resources/line items**

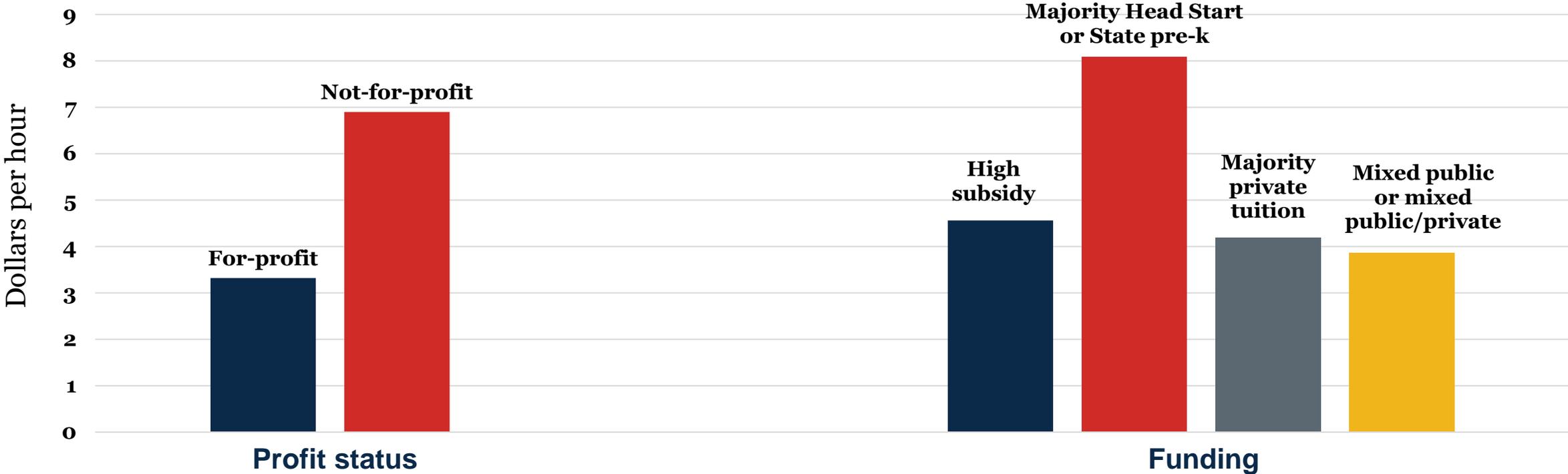


# Costs per child care hour vary by quality rating level and center characteristics



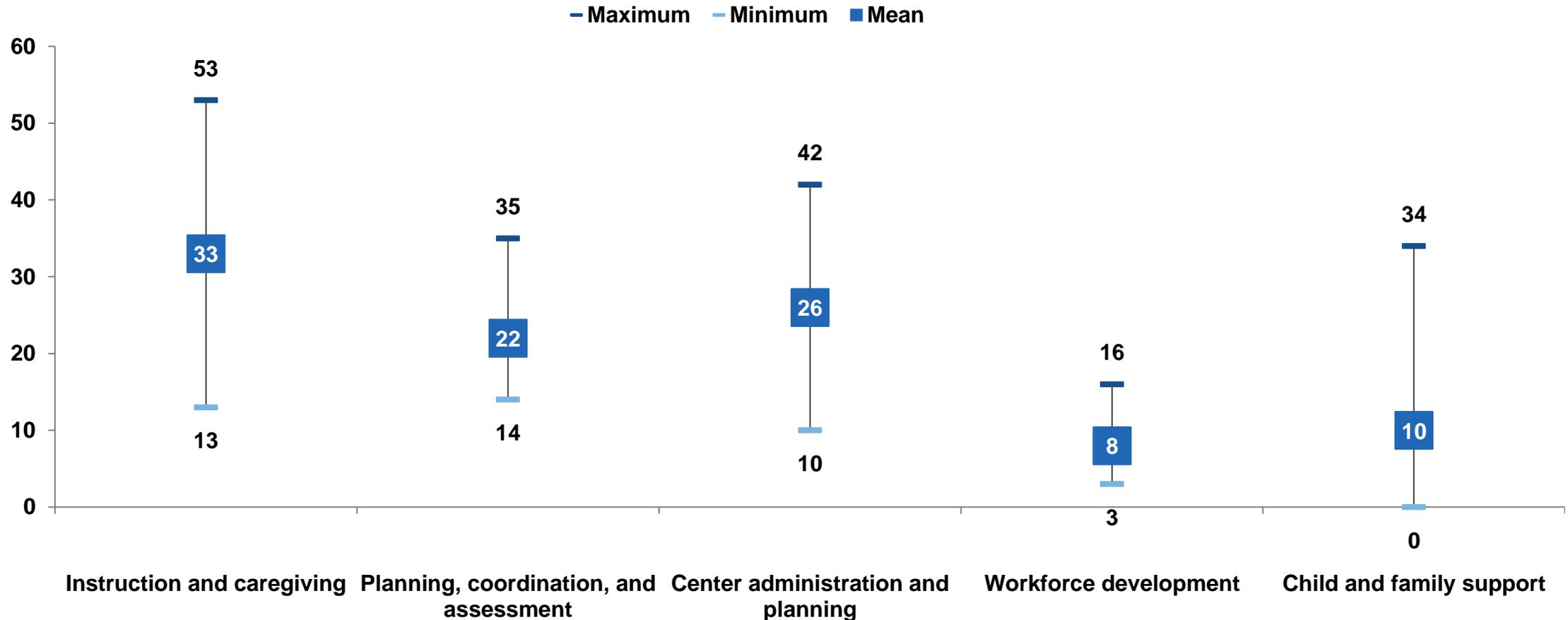
Source: Data collected for the Assessing Implementation and Cost of High-Quality Early Care and Education (ECE-ICHQ) Project, Phase 2.

# Costs per child care hour vary by profit status and funding



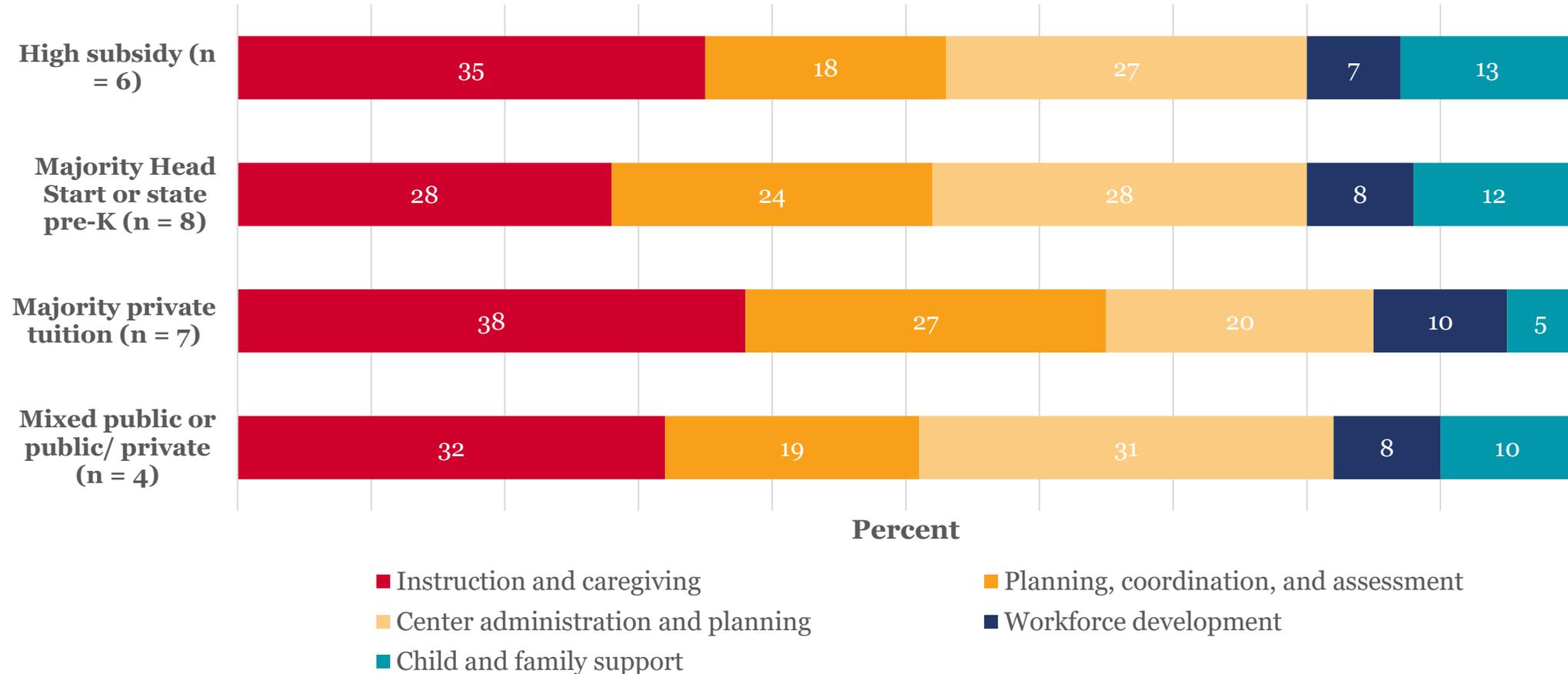
Source: Data collected for the Assessing Implementation and Cost of High-Quality Early Care and Education (ECE-ICHQ) Project, Phase 2.

# Allocations to functions show variation but align with expectations, on average



Source: Data collected for the Assessing Implementation and Cost of High-Quality Early Care and Education (ECE-ICHQ) Project, Phase 2.

# Allocations differ somewhat by funding source



# Implementation measures

- **Implementation score for each of the five center functions**
  - Structural supports for instruction and caregiving
  - Instructional planning, coordination, and child assessment
  - Center administration and planning
  - Workforce development
  - Child and family support



# ECE-ICHQ measurement scenario: quality is the same, costs differ

## ECE Center 1

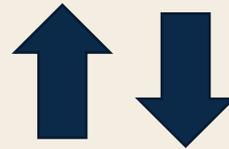
**QUALITY**

**Total costs per child care hour**

**Allocation of costs across key functions**

**What the center does and how**

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## ECE Center 2

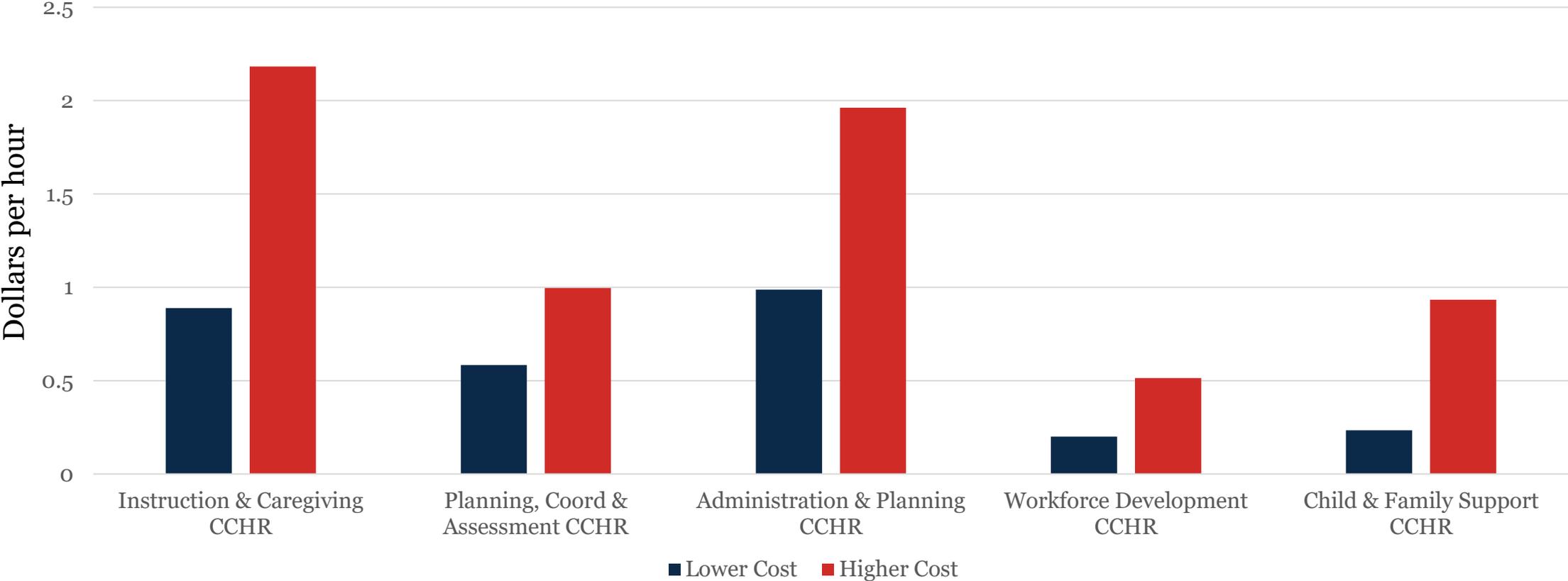
**QUALITY**

**Total costs per child care hour**

**Allocation of costs across key functions**

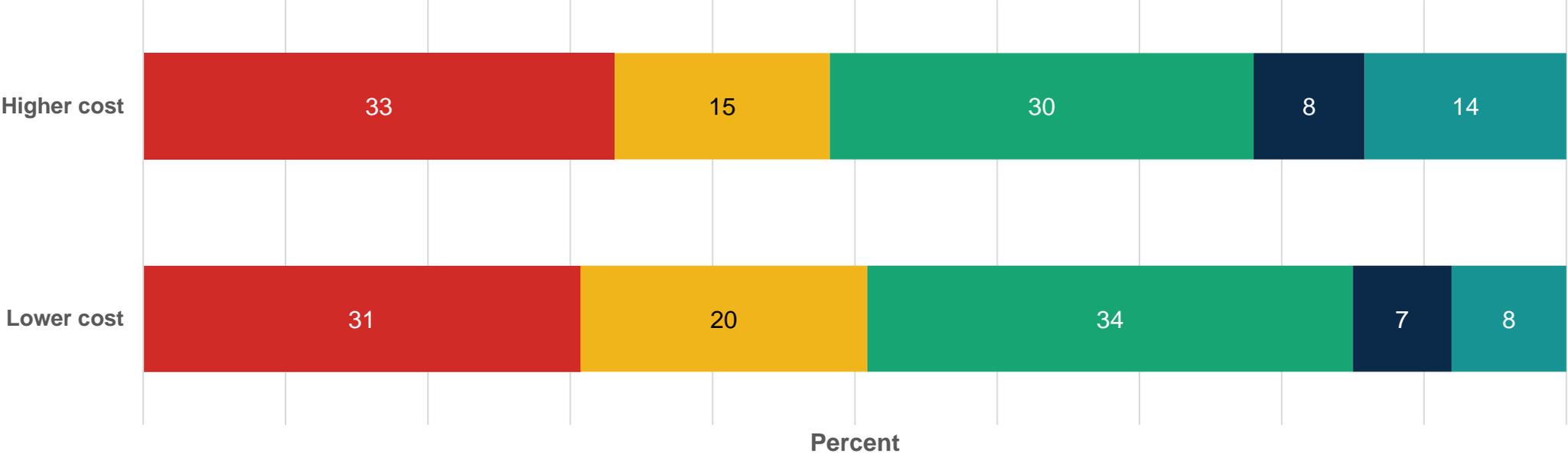
**What the center does and how**

# Cost per child care hour, by key function: Centers with high QRIS ratings, different total cost per child care hour



Source: Data collected for the ECE-ICHQ Project, Phase 2.  
 Note: Both centers have mixed funding and serve children 0-5 as well as school-age. Total cost per child care hour is \$2.89 for the lower cost center and \$6.59 for the higher cost center.

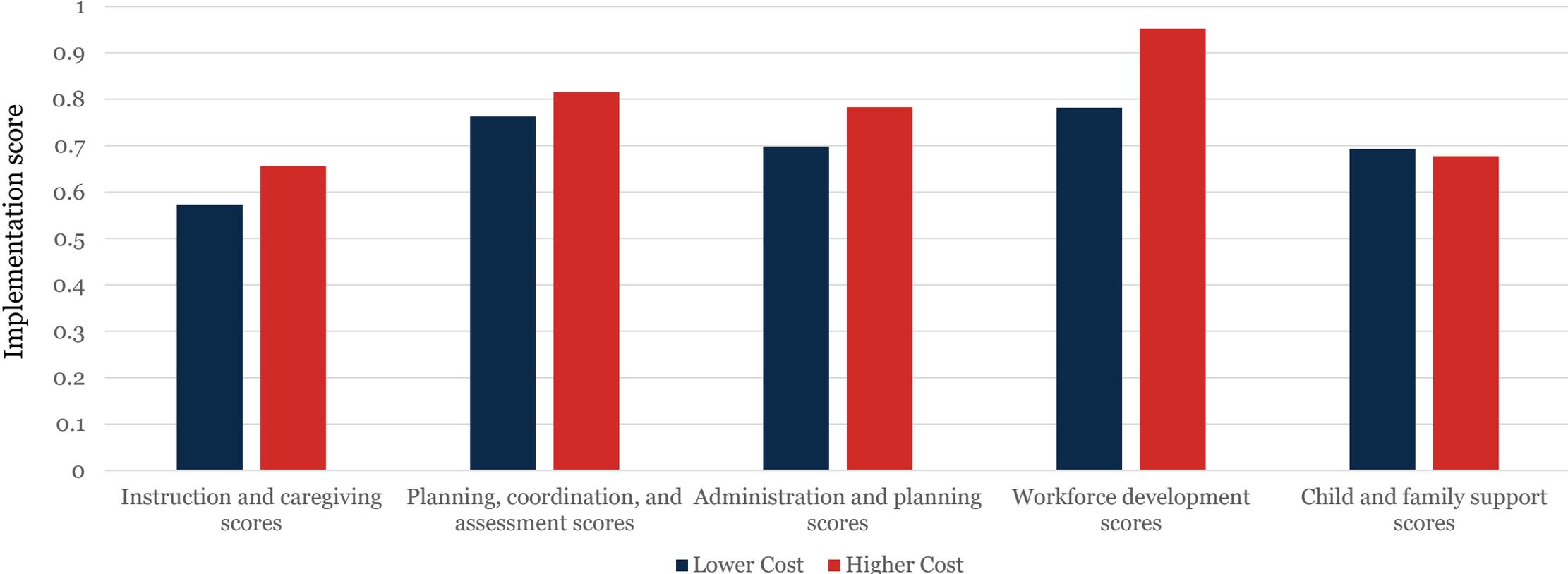
# Cost allocations: Centers with high QRIS ratings, different total cost per child care hour



■ Instruction and caregiving ■ Planning, coordination, and assessment ■ Center administration and planning ■ Workforce development ■ Child and family support

Source: Data collected for the ECE-ICHQ Project, Phase 2.  
 Note: Both centers have mixed funding and serve children 0-5 as well as school-age. Total cost per child care hour is \$2.89 for the lower cost center and \$6.59 for the higher cost center.

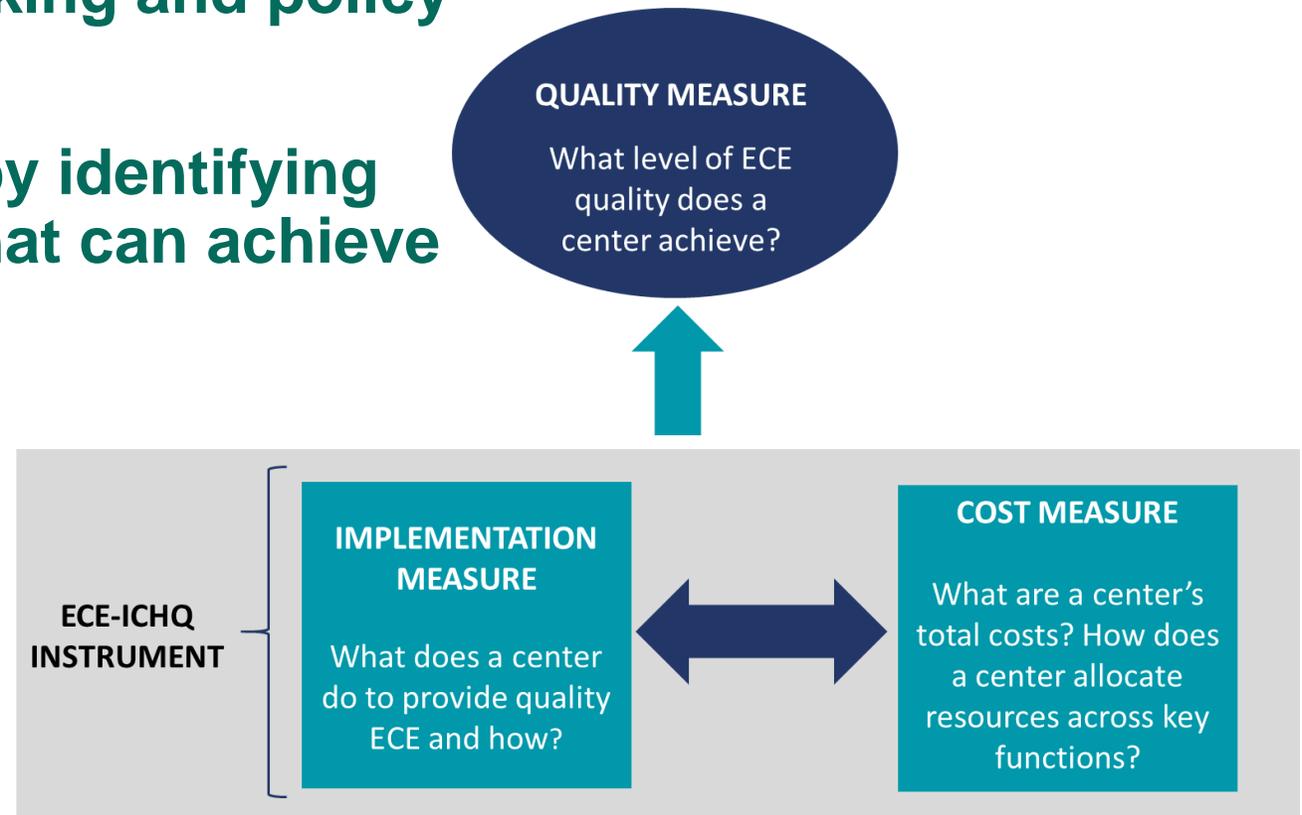
# Implementation scores: Centers with high QRIS ratings, different total cost per child care hour



Source: Data collected for the ECE-ICHQ Project, Phase 2.  
 Note: Both centers have mixed funding and serve children 0-5 as well as school-age. Cost per child care hour is \$2.89 for the lower cost center and \$6.59 for the higher cost center.

# Looking forward: Contribution of center-level measures

- Dig deeper than price, market rates, and aggregate labor costs to inform center decision making and policy
- Inform equity discussion by identifying costs of implementation that can achieve quality





# Thank you!

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