Modeling ECE Cost: Tools, Resources, Opportunities

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The Cost-Quality Conundrum

- Higher quality ECE costs more than most families can afford
- Market-based ECE encourages price competition – low tuition fees – and discourages investments in quality
- How much does quality really cost?
How much does quality cost?

- **Expense drivers:**
  - Ratios
  - Group size
  - Staff compensation

- **Revenue drivers:**
  - Parent tuition fees/other revenue
  - Revenue collection
  - Enrollment efficiency
Provider perspective: Iron Triangle

Full Enrollment

Full Fee Collection

Revenues Cover Per-Child Cost
Policymaker Perspective

- Quality Rating and Improvement Systems are market intervention.
- QRIS are means to deliver quality funds based on quality measured, independent of parent fees.
Modeling the cost of quality

- Mathematical models of ECE center operations
- Revenue & Expense budget for center at each level of state’s QRIS
- Illustrate ‘iron triangle’ principles
- Quantify the cost-quality gap
- Strategize to fill gap
Three States A B C: Regulations and QRIS
Mean Annual Wages, BLS 2010

<table>
<thead>
<tr>
<th>State</th>
<th>Child care worker</th>
<th>Kindergarten teacher</th>
<th>C&amp;F Social Worker</th>
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</thead>
<tbody>
<tr>
<td>State A</td>
<td>$19,970</td>
<td>$49,220</td>
<td>$41,360</td>
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<tr>
<td>State B</td>
<td>$21,780</td>
<td>$44,680</td>
<td>$40,200</td>
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<td>State C</td>
<td>$20,570</td>
<td>$51,220</td>
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</tbody>
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Key Revenue & Expense Features of the Cost Models

- QRIS expectations increase by tiers
- Primarily *better qualified staff* as quality increases (slightly higher wages)

*More staff time* for assessment, family activities and conferences, curriculum planning, staff meetings
Key Revenue & Expense Features of the Cost Models

○ Expense
  - Staff wages from BLS, 2-5% increase for top 3 tiers
  - Mandatory benefits, 5 paid holidays/5 days paid leave, no health insurance at lower tiers/20% employer contribution at upper tiers
  - 85% enrollment, minimal bad debts

○ Revenue
  - Subsidy at MR ceiling or parent tuition at same rate
  - All possible QRIS financial awards
  - Prekindergarten funding, if possible
Percent Net Income by Quality Level (large center, children ages 0-5)
Percent Net Income by Quality Level
(large center, children ages 2-5)
Impact of Increasing Enrollment on Percent Net Income (small center)
Impact of PreK Revenue on Star 5

-10.0%  -8.0%  -6.0%  -4.0%  -2.0%  0.0%  2.0%  4.0%  6.0%  8.0%  10.0%

85%  87.5%  90%  92.5%

Star 5  Star 5/PreK
Targeted Compensation Approaches

- **Pay employer**
  - *Direct award* (e.g., Pennsylvania Ed & Retention,)

- **Pay employee**
  - *Direct award* (WAGE$, Illinois Great START)
  - *Indirect award* (refundable tax credit, e.g., Louisiana School Readiness Tax Credits)
Quality awards via QRIS

- Half of QRIS offer quality awards related to levels/tiers
- Half of them are modest, one-time
- Half are modest annual
- Pennsylvania’s and Ohio’s are large, annual
How can policymakers and funders use QRIS to improve compensation?
For more info…

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