Child Care Quality and Child Outcomes in Indiana’s Child Care Quality Rating System

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Symposium: Challenges and Options for Studying Child Outcomes in the Context of Quality Improvement Initiatives/QRIS

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Indiana’s QRIS: Paths to QUALITY™

- Community-designed model
- Adopted, modified for statewide implementation
- Voluntary participation
- Building block design:
  1) Licensed → 4) National Accreditation
- Launched 2008 in 4 regional waves
- Current participation rates:
  87% LCC; 59% FCC; 11% RCCM
- Implementation evaluation completed 2008-2011
Overall Objectives
PTQ Implementation Evaluation, 2008-2011

Child Care Providers

• Does attaining higher PTQ levels result in higher quality care? (Is the rating system valid?)
• Are providers of all types enrolling? What are the benefits, challenges?
• Do providers advance to higher PTQ levels?

Children

• Are children from low income families gaining access to child care at the highest PTQ levels?
• Are children in higher PTQ levels developing more optimally?

Parents

• Are parents aware of PTQ? Does if affect their child care decisions?
Assessing Child Outcomes: Issues

• What is purpose of measuring child outcomes at this phase of the QRIS?
  – Are children at-risk gaining access to high quality care?
  – Gather descriptive data about characteristics of children with QRIS child care providers

• Do you have specific, theory-based hypotheses about the impact of QRIS on children’s development and learning? (QRIS logic model)

• Is the QRIS ready for an impact evaluation that includes child outcomes, using a rigorous research design?

Indiana PTQ: Specific Questions about Children’s Outcomes

• Are children using CCDF vouchers gaining access to highest-rated care?
• What level of quality is the system producing?
• Are measures of children’s developmental status associated with:
  – PTQ quality ratings?
  – Other quality measures (ERS; CIS)?
Indiana Evaluation Research Design

Child Care Providers \((n=274)\): interviews/surveys, provider characteristics; attitudes about QRIS; child assessments
- 95 licensed child care center providers
- 167 family child care providers
- 12 unlicensed registered child care ministry center providers

Classrooms/Homes \((n=314)\): quality observations (ERS; CIS)
- 147 classrooms in licensed child care centers, registered ministries
- 167 family child care homes

Children \((n=582)\): brief developmental assessments
- Two children randomly assessed in each classroom/home

Parents \((n=1,851)\): interviews, use of child care; awareness; attitudes
- 450 interviews with parents whose children were assessed in PTQ programs
- 1,451 interviews with randomly selected parents in the state
  (750 in 2010; 701 in 2011)
Child Development Measures

**Infants/Toddlers (n= 249)**
- Brief Infant Toddler Social Emotional Assessment (BITSEA)
- Mullen Scales: Early Learning Composite Score

**Preschoolers (n= 308)**
- Social Competence and Behavioral Evaluation (SCBE)
- Peabody Picture Vocabulary Test-IV;
- Woodcock Johnson (Letter Word Identification; Applied Problems)
Children from Low Income Families Are Getting Access to Top-Rated Care

Distribution of Children Receiving Child Care Vouchers \((n=99)\) By PTQ Quality Level & Type of Care

- Vouchers
- No Vouchers
- Licensed Child Care Centers
- Licensed Family Child Care Homes

PTQ Levels:
- Level 1
- Level 2
- Level 3
- Level 4
Validation of the QRIS Rating System:
ERS Global Scores
Below the "quality threshold?"

<table>
<thead>
<tr>
<th>Level</th>
<th>Licensed Child Care Center Classrooms (n=133)</th>
<th>Licensed Family Child Care Homes (n=167)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>4</td>
<td>2.9</td>
</tr>
<tr>
<td>Level 2</td>
<td>4</td>
<td>3.4</td>
</tr>
<tr>
<td>Level 3</td>
<td>4.3</td>
<td>3.6</td>
</tr>
<tr>
<td>Level 4</td>
<td>4.5</td>
<td>4</td>
</tr>
</tbody>
</table>
Further Analysis of ERS Data:
Lowest Scoring ERS Items for Level 4

Infant Toddler Classrooms (# items with $M < 4$)
- Room Arrangement/Interest Areas (1)
- Personal Care Routines (6)
- Activities (active play; music; blocks; science; 4)

Preschool Classrooms (# items with $M < 4$)
- Space for privacy, gross motor play (2)
- Personal Care Routines (4)
- Language and Reasoning (2)
- Activities (nature/science; math/number; 2)
Quality & Children’s Developmental Competence

No significant correlations between QRIS-rated levels and Infant/Toddler or Preschooler developmental status.

Some researcher-observed quality measures were mildly but significantly correlated with child functioning:

**Preschoolers:**
- **CIS positive interactions** associated with:
  - social competence ($r = .17**)
  - receptive language ability ($r = .17**)

**Infants/toddlers:**
- **ERS Global Quality** associated with:
  - toddler social competence ($r = .15**)
- **CIS positive interactions** associated with:
  - cognitive/language competence ($r = .17**
Quality & Children’s Developmental Competence

No significant correlations between QRIS-rated levels and Infant/Toddler or Preschooler developmental status.

Some researcher-observed quality measures were mildly but significantly correlated with child functioning:

Regressions-- controlling for parent education & family income--

Preschoolers:
- CIS positive interactions associated with:
  - Receptive language ability ($b = .12^*$)

Infants/toddlers:
- ERS Global Quality
  - No significant associations
- CIS positive interactions associated with:
  - Cognitive/language competence ($b = .14^*$)
Implications

• To improve chances QRIS will improve child development outcomes:
  – Raise quality standards for Level 3 and Level 4
  – Focus standards more on adult-child interactions, teaching quality
  – Be sure QRIS is ready for an impact evaluation

• Evaluating impact on children using rigorous designs:
  – Longitudinal/Experimental designs
  – Domain-specific hypotheses
  – Measure quality levels & dosage
  – Control for family factors
  – Include process quality mediators (adult-child interaction)
  – Focus on children with highest risk
Planned Indiana Phase 2
Evaluation Questions: 2012-2016

• Is PTQ effective at providing T/TA that helps diverse child care providers advance to higher rated levels?

• Does participation in higher-rated child care improve developmental, early learning, and/or school readiness outcomes for children from CCDF voucher using families?

• Are parents of prekindergarten children in the general public aware of PTQ? Do they use it to inform their child care decisions?
Indiana Paths to QUALITY Evaluation Documents


Purdue Center for Families Web site: (http://www.cfs.purdue.edu/cff/publications/publications.html)

- **PTQ Evaluation Briefs (2012):**
  - #1: PTQ: Key Findings
  - #2: PTQ, Quality Care and Education for Indiana’s Young Children?
  - #3: PTQ, Benefits for Indiana Child Care Providers?
  - #4: PTQ, Does It Help Indiana Parents Find Quality Child Care?

- **PTQ Technical Reports:**
  - #2: Paths to QUALITY Evaluation: Methods and Measures (2009)

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