Issues to Consider in Examining Quality Indicators in QRIS

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**OCTOBER, 2012
CCPRC**

Context and Purpose

Context

- Individual states and their research teams are taking a careful look at the quality indicators included in their QRIS
- In addition, the members of the INQUIRE consortium (the Quality Initiatives Research and Evaluation Consortium) are raising a really critical question: *Is it possible to work towards a common core of quality indicators across QRIS?*

Purpose

- This presentation will briefly discuss four issues related to what quality indicators are included in QRIS and what criteria for these indicators might be considered in working towards a common core
- In addition to briefly discussing each issue, the presentation will pose a series of questions for further consideration
  - by our discussant,
  - in the question and answer period for this session
  - in the further sessions at this meeting

Overview

I. A broader look at indicators

II. Clarifying the conceptual model

III. Investing in building the evidence base

IV. Taking into account measurement characteristics and appropriate analytic approaches

I. What are Good Indicators?

- The indicators of quality included in QRIS can be seen in the context of a body of work on what makes a good indicator:
  - Indicators are measures with certain further characteristics that make them appropriate for tracking information of particular importance to the public, and that can be conveyed clearly to the public

- The markers of a good indicator have been articulated in the closely related body of work on child indicators.

- A longstanding "touchstone" piece on the characteristics of a strong indicator of child wellbeing is a 1997 paper by Kris Moore in the book *Indicators of Children's Well-being*.

- While some of the criteria identified are specific to child well-being indicators, others describe strong indicators in general.

- Will briefly review all 13 criteria given by Moore and then give my summary of the criteria that seem most relevant to indicators of quality in QRIS

Criteria for Indicators of Child Well-being

13 criteria for child-wellbeing indicators

1. Comprehensive coverage
2. Appropriate for children of all ages
3. Clear and comprehensible
4. Positive outcomes
5. Depth, breadth and duration
6. Common interpretation
7. Consistency over time
8. Forward-looking

Criteria for Child Well-being Indicators

9. Rigorous methods.
10. Geographically detailed.
11. Cost-efficient.
12. Reflective of social goals.
13. Accounting for demographic trends.

Relevance to Quality Indicators

The criteria that seem most applicable to quality indicators in QRIS

- Appropriately comprehensive:
  - Quality indicators need to be a balanced set: one that does not unintentionally omit key areas of quality or emphasize one too much.
- Measures appropriate across age groups:
  - But for QRIS, indicators also need to be appropriate across settings.
- Comprehensible to public:
  - For QRIS, the indicators need to be comprehensible to parents as well as to policymakers. There is a central challenge involved in measuring complex constructs while also communicating them well.

Relevance to Quality Indicators

- Capture dispersion:
  - We need to be certain that the indicators we choose to include in QRIS do not show limited range; they capture variation.

- Capture positive goals:
  - QRIS provide a perspective on what individual early care and education setting and also what early care and education systems are working towards

- Data can be collected using rigorous and consistent methods
  - Yet this is balanced with thought and planning as to efficiency

For Discussion

- Are there any criteria for strong indicators that you think are currently being well-considered or adhered to in structuring QRIS and in QRIS research? Any that are being overlooked?

- Do others from the list of criteria for child indicators seem particularly relevant to QRIS?

- Do you think that there are any criteria missing from this list that seem particularly important to quality indicators?

II. Clarifying the Conceptual Model

- The typical logic model for a QRIS includes activities on the left and child outcomes (as the only outcomes) on the right.

  - Though administrators and QRIS developers may have designed a QRIS with further goals in mind (including goals for the workforce, families and the system) these have not been articulated fully in QRIS documents to date (including evaluations)

  - If anything, over time, our focus on child outcomes as the primary goal of QRIS has intensified – in particular by its inclusion in RTT-ELC.

Should All QRIS Indicators be Seen as Predicting Strengthened Child Outcomes?

- In working towards strong indicators of quality in QRIS, and possibly towards a common core of quality indicators, a key question is whether the underlying conceptual model views all indicators as predicting strengthened child outcomes.

- If there are other key outcomes, either implicitly or explicitly, in the underlying conceptual model, then studies of predictive validity predicting to child outcomes will not find strong relationships and in fact will not be appropriate.

- It is helpful to think in terms of one of the criteria for child indicators articulated by Moore: Indicators help to measure progress towards positive goals.
    - Are there other important positive goals?

What Might Other Key Outcomes Be?

- In addition to child outcomes such as school readiness, other possible goals for quality improvement might be:
  - **Increasing the professionalization of the early childhood workforce** (as articulated in the NAS workshop on the early childhood workforce)
  - **Improving ECCE as a system**, for example through alignment of quality standards across different types of ECCE; decreasing the likelihood of ECCE settings going out of business; encouraging reliance on accredited trainers and training
  - **Enhancing family outcomes**, such as subjective sense of stress or confidence in leaving one's child in child care, and employment continuity

A Categorization of Quality Indicators in QRIS

- In your materials for this meeting, you have a document called

  Background on QRIS Quality Categories and Indicators

- This is an analysis of the quality indicators in the QRIS profiled in the QRIS Compendium

  Tout, K., Starr, R., Soli, M., Moodie, S., Kirby, G., & Boller, K. (April, 2010). *Compendium of Quality Rating Systems and evaluations.* Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

- It identifies major categories of quality indicators that recur across QRIS

Quality Categories Widely Included In QRIS That Might be Seen as Predictors of these Other Outcomes

- Professionalization of the ECCE Workforce
  - Staff qualifications

- Improving ECCE as a System
  - Licensing compliance
  - Administration and management

- Enhancing Family Outcomes
  - Family partnerships
  - Community involvement

Quality Categories Widely Included in QRIS Most Clearly Related to Child Outcomes in the Literature

- **Child Outcomes**

  The categories of QRIS indicators that are most clearly related to child outcomes can be divided into those conceptualized in the research literature as indirectly vs. directly related to child outcomes:

  - Indirect
    - Group size and ratio
    - Curriculum
  - Direct
    - Observations of caregiver-child interaction

  Variation in the strength of prediction to child outcomes should clearly be taken into account in identifying a core set of quality indicators.

  However this variation in the strength of the relationships should be seen in light of whether a quality indicator is understood to predict to child outcomes directly or indirectly.

For Discussion

- Do you think that there are either implicit or explicit conceptualizations linking key QRIS indicators to outcomes other than children's developmental outcomes and school readiness?

- If so, which indicators? Which outcomes?

- Do you think this possibility is explicitly acknowledged?

- If not, do you think it should be?

III. Investing in Building the Evidence Base

- The possibility exists that evidence is as yet limited for the validity of key components of QRIS.

- Yet they may be considered by key stakeholders as quite important.

- An important question is whether QRIS should be explicit about these areas, and intentionally allocate resources for measures development and assessments of reliability.

- Acknowledging that some areas of QRIS are at an early stage of development, if well agreed upon, could prevent discarding key indicators when it is too early in the development of the research base.

Examples from Other Areas of Research

- Home visitation provides an interesting example of investing in building the evidence base and acknowledging the limitations of the existing evidence, while still requiring reliance on evidence-based practices.

- 75% of funding must go towards programs for which evidence meet the criteria in the HomVee review. But 25% of funding is allocated to evaluation of further models.

Caution

- It is possible to confuse a set of indicators that are promising but for which the evidence is limited, and a set of indicators that is weak and should not be considered further.

- There should be some evidence that an area is promising; worthy of investment in building the evidence.

- Possible candidates where there is some evidence but the literature is "young":
  - Cultural and linguistic diversity

For Discussion

- In identifying strong indicators of quality for QRIS, or in developing a common core of quality indicators, do you think that researchers could reach agreement on areas where the evidence is promising but limited?

- Do you feel that resources should be set aside for the development of measures and studies of predictive validity for some sets of quality indicators?

- If so, which ones?

IV. Measurement Characteristics and Appropriate Analytic Approaches

- Looking across QRIS, some of the most frequently occurring categories of quality indicators rely heavily on indicators that are important but document infrequently occurring events or conditions.

    ○ For example, some serious health and safety concerns are rare but very serious if they do occur.

    ○ It is not clear that the same analytic approaches are appropriate for studies of predictive validity with such indicators as when using continuous measures or dichotomous measures that have a better distribution. Sample sizes may not be adequate to detect relationships with infrequently occurring events.

    ○ Caution: It is important not to confuse limited distribution because of weak measurement and limited distribution because of important but rare events.

Measurement Characteristics and Analytic Approaches

- In contrast, some categories of quality indicators may show a lack of dispersion of scores because dichotomous questions nearly always receive positive responses or ratings are nearly always high:

  - Family Partnerships may be one quality category that shows this pattern
  - Careful consideration is needed in these instances of how better measures could be developed detecting important variation

Measurement Characteristics and Analytic Approaches

- QRIS may give little weight within the total score to the components that have the strongest relationship with child outcomes
  - Direct observations of interaction and of the early care and education environment may be included only for self-study
  - Observations of interaction and of the environment may be allocated few points in the summary rating
  - Components that show no or very weak prediction may be given greater weight in the overall rating
  - This will affect predictive validity results

Measurement Characteristics and Analytic Approaches

- Studies of predictive validity may be built on the assumption of a linear relationship between quality and child outcomes (or other key outcomes).
  - Yet an emerging body of work is asking whether there are thresholds, such that increases in quality are more strongly related to strengthened child outcome in higher quality ranges.
  - Research on this issue is at an early stage. But it may be important to consider this possibility in examining relationships of quality indicators and child outcomes.

For Discussion

- Are any of the issues noted here re measurement characteristics and analytic approaches facing you in your work on QRIS?

- What further issues of these kinds are you confronting?

Summary and Conclusions

- It may be helpful to view quality indicators in the context of other work on indicators, such as the criteria for strong indicators of child well-being.

- It may also be helpful to make conceptual models explicit and consider including key outcomes other than child outcomes that reflect state goals for the QRIS.

- Other policy-related areas, such as home visiting, are intentionally reserving resources to build the evidence base. It is important to ask if such an approach is needed for quality indicators, in which some categories of quality might be considered to have "young" literatures.

- Studies of the predictive validity of quality indicators need to take into account measurement characteristics and to review assumptions of linear relationships between quality and child outcomes.