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ISSUES FOR THE NEXT DECADE OF QUALITY RATING AND IMPROVEMENT SYSTEMS

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INTRODUCTION

Since the first child care Quality Rating System (QRS) was implemented in Oklahoma 11 years ago (in 1998), 16 additional statewide systems have been launched and numerous states are piloting or developing a QRS (Zaslow, Tout, & Martinez-Beck, forthcoming). As QRS stakeholders across the nation look ahead to the next decade, it is important to take stock of what has been learned and identify priorities for generating new research and information about QRSs. The purpose of this Issue Brief is to address this need by responding to four broad questions:

1. What are the new challenges faced by QRSs?

2. What is the status of research and evaluation on QRSs?

3. What new information is needed to design and implement effective QRSs?

4. What available tools can be used as a framework to guide QRS evaluation?

This Issue Brief draws on a review of the literature on QRSs,[1] as well as the proceedings of three meetings convened by the Office of Planning, Research, and Evaluation (OPRE) in collaboration with other federal partners in the U.S. Department of Health and Human Services. The meetings brought together researchers, federal agency staff, representatives from state QRS and other quality initiatives, and a variety of stakeholders from national organizations to discuss issues related to the measurement of quality and evaluation of quality initiatives.[2] This brief describes key themes from the meetings, then concludes with a description of follow-up steps OPRE is taking in collaboration with partners to address the issues raised.

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[1] See the compilation of QRS resources by Child Care & Early Education Research Connections in July 2008 and available online at **http://www.researchconnections.org/location/14365**.

[2] Meeting summaries are available online at the Child Care & Early Education Research Connections and Child Trends websites.

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NEW CHALLENGES FOR QRSs

QRSs across the nation are at different stages of development. Some statewide systems have been in place for 10 to 11 years (Colorado, North Carolina, and Oklahoma), while others have been launched within the past year (Maine). Some QRSs are still in the planning stages (Michigan), while others are operating pilot programs (Minnesota and Virginia). Yet regardless of the degree to which a QRS has matured, state QRS representatives and other QRS stakeholders in recent federal meetings on quality measurement concur that a second decade of QRSs brings new challenges for programs young and old. In this section, we provide an overview of four of the most salient challenges that QRSs are addressing collectively as a national community of learners and individually within their own systems.

CHALLENGE 1

Small but meaningful differences in the structure and design of QRSs and the lack of research on the implications of these differences make it difficult to synthesize lessons learned across programs.

Looking across QRSs, there are many similarities in the administrative structures, quality indicators, rating processes, and incentive structures. The program elements that are common across QRSs have been described in various publications (including Child Care Bureau, 2007; Mitchell, 2005; Zellman & Perlman, 2008). Briefly, these common elements include:

- Quality standards that provide the basis for a program's rating: QRSs typically include standards for professional development or training, the learning environment, and involvement of parents and family members.

- A process for monitoring the quality standards: QRSs use a variety of tools to monitor quality (including observation, document review, and self report). They also set guidelines for the frequency of program assessments and use methods to ensure integrity of the assessment process.

- A process for supporting programs in quality improvement: QRSs either provide staff and other resources to assist with improvement efforts or provide a connection to quality improvement services provided by another organization.

- Financial incentives to promote participation in QRSs: These incentives include tiered reimbursement, grants, scholarships, and awards for programs meeting certain requirements.

- Dissemination of ratings to parents and other consumers: QRSs use websites and other materials to inform parents about quality levels and provide information about the quality of individual programs.

Within each of these common elements, however, the specific provisions can vary widely. Following are three examples of program variations and the implications of these variations for synthesizing lessons learned and assessing program effectiveness.

Variations in the use of observational tools in QRSs. A majority of statewide and pilot QRSs include indicators that assess the quality of the learning environment in center-based and home-based settings. The tools used most frequently are the environmental rating scales (ERS) developed at the University of North Carolina to assess the global quality of the environment. These scales include the Early Childhood Environment Rating Scale Revised (ECERS-R; Harms, Clifford, & Cryer, 2005); the Infant and Toddler Environment Rating Scale Revised (ITERS-R; Harms, Cryer, & Clifford, 1990); the Family Day Care Rating Scale (FDCRS; Harms & Clifford, 1989) or the Family Child Care Environment Rating Scale Revised (FCCERS-R; Harms, Cryer, & Clifford, 2007); and the School Age Care Rating Scale (SACERS; Harms, Jacobs, & White, 1996).

Of the 17 statewide QRSs, 13 use the ERS as a tool for assessing the quality of the learning environment (National Child Care Information Center, 2005). Looking across the 13 sites using the ERS, there are important variations to consider. For example, QRSs have different guidelines for selecting the number of classrooms assessed in a child care center. Some select a third of the classrooms in each age group, while others select half of the classrooms for each age group. Recent evidence from Missouri (Thornburg, 2008) and Illinois (McCormick Tribune Center for Early Childhood Leadership, 2008) shows that sampling half of the classrooms results in a more accurate indicator of a center's overall quality (obtained by conducting ERS in 100% of the classrooms). However, questions remain about whether the savings that come from sampling fewer classrooms outweigh the benefits of achieving a slightly better prediction of quality.

Another variation in the use of ERS is the procedure used to develop a summary score for center-based sites in which multiple classrooms are selected and different rating scales are used (for classrooms serving different ages). QRSs set rules about how to combine or average scores across the ITERS-R, ECERS-R, and SACERS. A "no classroom score lower than" rule may or may not be used to set a lower

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threshold for the ERS scores that can be included in the average score for a site. Research describing the implications of these scoring procedures for variations in final scores (for example, how often is the "no score lower than" rule invoked and how does this affect ratings) would be helpful.

A final ERS variation to note across QRSs is the way in which scores are assigned as thresholds for the quality levels in a QRS. The low and high ERS scores used in different QRS vary widely: For example, an average score of 2.0 is accepted for a Bronze rating in Washington DC's Going for the Gold Program, while Pennsylvania's QRS requires an average score of 4.25 (with no classroom/age group lower than a 3.0) for a three-star rating in Keystone Stars. To date, the research base that can be tapped to help QRSs set the ERS score thresholds at each quality level is small and inconclusive. Validation studies are needed to look at findings from individual QRSs and synthesize findings across the diverse thresholds and quality levels used in QRSs.

In addition to the variation in ERS use across QRSs, a number of QRS pilots have included additional observation tools to supplement or replace the ERS. For example, the Classroom Assessment Scoring System–CLASS (used in the Minnesota and Virginia pilot QRSs) and the Early Childhood Environment Rating Scale Extended (ECERS-E; Sylva, Sirai-Blatchford, & Taggart, 2006, used in the Missouri pilot) are being used in QRSs to tap dimensions of quality that go beyond the global quality assessed by the ERS. Minnesota (Swenson-Klatt, 2008) and Virginia (*A quality rating and improvement system*, n.d.) use the CLASS in addition to the ERS as a way to assess the quality of adult-child interactions expected to promote children's school readiness. In Missouri, the ECERS-E is used to assess the intentional or purposeful teaching in its QRS (University of Missouri, 2007). These strategies reflect a growing discussion among QRS stakeholders about the need for new measurement tools to capture the features of children's experiences and environments that are related to positive outcomes. As more QRSs move toward expanded strategies for quality measurement, it will be critical to conduct research on the effectiveness of various approaches.

Variations in the use of financial incentives. A second common component of QRSs in which system provisions vary widely is the use of financial incentives to improve program quality, accessibility, and affordability of programs for low-income families. Nearly all QRSs distribute grants, bonuses, awards, or scholarships to participating programs. Examples of these incentives include:

- Tiered reimbursement that provides higher maximum reimbursement rates for each subsidized child in the program as long as the rate is not higher than the rate the program charges for nonsubsidized children receiving the same services; the rate differential (ranging from 5% to 25%, depending on the QRS) is typically higher at higher quality levels

- Bonuses or awards that are given based on the quality level achieved, the number of subsidized children served, and other factors depending on the QRS

- Bonuses, awards, grants, or other incentives that are given to recognize the quality level achieved and/or promote quality improvement

While a number of QRSs use one or more of these general strategies, the criteria used to determine eligibility for the incentive, the total amount of the award or bonus, and a range of other contextual factors (including features of the child care subsidy system such as reimbursement rates and co-payment amounts) influence the impact of the financial incentive. It is difficult to separate the many factors of different QRSs to determine the effectiveness of different strategies and establish guidelines or recommendations for incentive structures or amounts. It is important to know the extent to which incentives are targeting programs that serve low-income children or, more specifically, children who receive child care subsidies.

Variations in the inclusion of different program types. A final source of variation in QRSs is the composition of participating programs. Eligibility for QRSs is typically open to all licensed programs including center-based and home-based licensed providers. Head Start programs and state pre-kindergartens may or may not be included in the QRS. License-exempt providers usually are not included in QRSs, though Illinois is one notable exception in which license-exempt providers can participate at different tiers (with corresponding tiered reimbursement) depending on the statewide training they have received. Another variation is whether or not programs focus on including programs serving infants and toddlers or school-age children. While some of these differences in QRS program composition may be meaningful for overall effectiveness of the QRS, there is no evidence summarizing findings across QRSs or identifying the major groupings that can be taken into account in analyses.

CHALLENGE II

QRSs recognize and address the needs of diverse subgroups (such as home-based providers, culturally and linguistically diverse providers and parents) targeted by their programs, but their scope is limited by available resources.

A critical issue QRSs face in the design or implementation phase is addressing the diversity of potential targets for their programs. For example, among the programs that QRSs target for participation, a key distinction is whether the programs are home-based or center-based. Some pilot QRSs (for example, Virginia) have begun with center-based programs (with the intent to phase in home-based providers at a later time). Decisions must be made about alignment of quality standards across these different program types, which is complicated by the fact that the availability and use of quality measures in home-based settings is not as established as it is in center-based settings (Halle et al., 2007). Similarly, the inclusion of programs serving children of different ages as well as programs serving culturally and linguistically diverse children creates a need for further decisions about how to measure and support quality in programs that vary along these dimensions. For example, starting from the perspective of the needs of infants and toddlers underscores the importance of continuity of relationships over time. Yet continuity may not be captured by observational measures of quality that are carried out at one point in time (National Infant and Toddler Child Care Initiative, n.d.).

Parents are also a target of QRSs and important decisions must be made about how to package and disseminate the information on quality that QRSs have gathered. Zellman and Perlman (2008) report that none of the five pioneer states they studied (Colorado, North Carolina, Ohio, Oklahoma, and Pennsylvania) included parents in the QRS design and planning phases, even when consumer education was a stated goal of the program. Newer QRSs (for example, Minnesota) have attempted to incorporate parent input by conducting focus groups and asking parents to review sample dissemination materials (Minnesota Department of Human Services, 2007). Yet parents are a diverse stakeholder group and discussion about outreach and engagement of parents must include strategies for addressing parents who come from different cultural groups and speak languages other than English. The design and implementation of a QRS also should address the specific needs of parents who receive subsidies and other low-income families.

Working across diverse needs, interests, and ability to access QRSs (on the part of providers or parents) is a challenge that requires supplemental resources. As described by participants in the OPRE meetings, specific initiatives may be launched to deal with one or more of these issues (for example, providing outreach to culturally and linguistically diverse providers) (Child Trends, 2009b). A sustained effort to address the full range of subgroup issues is difficult when resources already are stretched very thinly.

CHALLENGE III

QRSs are recognized for their potential to serve as a hub for quality improvement, but this goal requires extensive coordination across agencies, services, and data systems.

The concept of a QRS as a "system-builder" is an exciting development in the field. Mitchell (2005) described the potential of QRSs to play this role in the following words: "The QRS is a systemic approach that provides the structure for connecting previously disparate strategies and initiatives and aligning them toward system goals" (p. 55). She described efforts such as consumer education, quality improvement, and investments in services and supports as potential system players that could be brought together with QRS activities. The notion of combining resources to have a greater impact is appealing to policy makers and practitioners alike. Yet for many state and local agencies receiving targeted funding for specific purposes, collaborative work is difficult to achieve. Innovative approaches to funding, oversight, and data systems are needed to help QRSs achieve the reality of serving as a central system. In some cases, work on one central element–databases–may emerge to be a significant driver of system change (Child Trends, 2009b).

It may be necessary to begin coordinating services and activities funded by one agency or through one funding stream (for example, the Child Care and Development Fund, or CCDF) before attempting interagency collaboration. Leadership is also a critical element in fostering successful system building (*Systems building elements, local evidence of sustainability,* n.d.). Case studies explaining successful collaborative or system-building efforts in QRSs would make a useful contribution to the field. For example, Zellman and Perlman (2008) describe the experience of five QRS pioneer states and highlight significant differences in the initial partners, sources of support, and processes used for system implementation. Many of these factors will play a role in attempts to build the QRS as a quality hub or system center.

CHALLENGE IV

With an increasing focus on accountability of public programs, QRSs must manage goals, time frames, and expectations for change.

Mitchell (2005) identified 14 goals that underlie the development of QRSs. These include improving quality, increasing consumer awareness, and aligning funding with standards. Likewise, Zellman and Perlman (2008) noted that quality improvement was the primary motivator for a QRS among a set of five pioneer state QRSs. Yet participants in the recent OPRE meetings on quality described improving children's outcomes as an explicit, additional goal emerging from statewide and pilot QRSs, particularly in the very new systems (Child Trends, 2009b). Changes or improvements in children's outcomes are expected to come about from QRS impacts on markets (by increasing the availability of higher quality care in a community or geographic area), individual programs and caregivers (by providing incentives and technical assistance to increase the quality), and families (by improving decision making and, in some cases, the affordability of high quality). As with the discussion of QRS as a quality hub, there is a lot of anticipation about the potential of QRSs to achieve these important outcomes. QRSs thus are challenged to build on the excitement about their potential while simultaneously managing stakeholders' expectations for change. Doing so may involve setting realistic targets and an expected time frame for change at each of the levels (market, program, family, and child). It will also be important to focus on research to provide evidence of such change.

STATUS OF RESEARCH AND EVALUATION ON QRSS

Research and evaluation are important tools to help QRSs address the challenges before them. As a relatively new strategy for leveraging services and resources to improve the quality of care and education programs, the research base on QRSs is quite small. The studies that have been conducted are primarily descriptive and have focused on issues related to implementation and validation of the quality measures used in the QRS (Zellman & Perlman, 2008). This section provides a brief overview of QRS evaluation in statewide and pilot systems.

QRSs are at different stages in developing evaluation strategies. The most common research questions in QRS evaluation have been related to validation of quality indicators, patterns of improvement over time, and analysis of implementation features.

Evaluation has played a role in current statewide QRSs, primarily as a tool for assessing how foundational elements of the program are functioning, and not yet as a tool for examining impacts of the program. For example, studies in Oklahoma and North Carolina were conducted to examine whether the star rating a program achieved was related in a predictable way to other similar measures (for example, other quality measures and structural features). In these studies, the evaluators found that the QRS rating levels were designating differences in quality (Bryant, 2001; Norris, Dunn, & Eckert, 2003). A validation study was also conducted in Colorado's QRS (Zellman, Perlman, Le, & Setodji, 2008) to examine links between the ratings and measures of process quality, but no consistent patterns were observed over the three years of the study.

In Oklahoma (Norris et al., 2003), Pennsylvania (Barnard, Smith, Fiene, & Swanson, 2006), Colorado (Zellman et al., 2008), and Tennessee (Cheatam, Pope, & Myers, 2005; Pope, Denny, Magda, Homer, & Cunningham, 2007), evaluations have also examined quality improvement over time. In all of these states, quality in participating programs improved over time (though the changes were not always statistically significant). However, it should be noted that because of the designs, causal statements cannot be made about the QRS and its role in quality improvement. While these studies document change over time among participating programs, they do not provide a broader lens through which to consider change in the overall availability of higher quality care and education across these states.

In Tennessee, researchers have examined implementation of their Child Care Evaluation and Report Card System, which includes visits to every licensed provider and program to assess quality using the environmental rating scales. Using qualitative methods, Pope and colleagues (Pope, Denny, Homer, & Ricci, 2006) found that providers felt the program was important for improving quality and the knowledge of providers. However, they had concerns about the fairness of the assessment and said it was a very stressful and upsetting experience.

The evaluation of Colorado's QRS, conducted by Zellman and colleagues (2008), is the only QRS study to date to include a focus on children's outcomes. The researchers examined outcomes of children participating in rated programs over three years and did not find evidence that the QRS rating levels were linked to children's development in a clear and consistent way. However, due to

significant difficulties maintaining the sample over the three years of the study, they were able to maintain less than 10% of the children across the waves, which, they report, significantly limited their conclusions. It is important to build the research evidence in this area.

CURRENT QRS EVALUATIONS FOCUS ON A RANGE OF OUTCOMES FOR PROGRAMS, PARENTS, AND CHILDREN.

New evaluations of QRSs focus on a range of research questions related to providers' participation (who chooses to enroll?), quality improvement (which providers and programs improve over time and what QRS resources do they use?), and parent use and understanding of the QRS (do parents know about the QRS and use it to make decisions?). Similar to the existing QRS literature, which focuses heavily on validation and examination of implementation, the next generation of QRS evaluations also includes questions about these important issues.

At least three QRSs are including an examination of child outcomes in their current evaluations. Indiana, Minnesota, and Missouri each include an examination of fall-to-spring change in levels on particular child outcomes participating in QRS programs. In each evaluation, including measures of children's development offers an opportunity to validate the quality indicators and rating levels of the QRS. The strategy is similar to the one used in the evaluation of Colorado's QRS, which assessed children in rated programs on an annual basis and examined links with QRS rating level (Zellman et al., 2008). These designs allow the evaluators to determine if higher rating levels are associated with more positive child development, not to assess the impact of QRSs on children. One difference in the current evaluations from the Colorado evaluation (where child attrition was extremely high across the three years of the study) is that children's development will be tested at two points in one year, perhaps decreasing the possibility of widespread turnover across multiple years. This approach also helps focus on change in children's development over time in light of the level of quality. By looking at change rather than level at any one point in time, these studies also help account for differences in children's initial socio-demographic characteristics.

RESEARCH QUESTIONS RELATED TO EFFECTIVE QRS DESIGN AND IMPLEMENTATION

As new QRSs are launched, pilot QRSs go statewide, and existing statewide QRSs refine their systems, new research and evaluation studies will provide critical information. This section highlights a set of research issues and questions identified in the literature and in the OPRE meetings with QRS stakeholders. QRS research–particularly studies evaluating the full range of QRS outcomes–is "complex and costly" and may require consolidation and pooling of research funding across states (Zellman & Perlman, 2008, p. 80). Thus, it will be important for QRS stakeholders to review and prioritize these questions and issues so that evaluation resources can be targeted to those questions that are most pressing.

As noted earlier, a number of statewide QRSs have begun the process of examining the measures used in their QRSs and validating the QRSs with other measures of quality. Work on these components, however, is far from complete. QRS stakeholders are looking for further information about how to measure critical components of quality in a way that is feasible and cost effective to implement on a large scale. The issue of how to measure quality given that programs are for children who vary in age; take place in different types of settings; and reflect different cultures, languages, and abilities is also of concern in QRSs (Child Trends, 2006). Work is underway on conceptualizing how to develop quality measures that can address these challenges (Child Trends, 2009a). The focus here includes the reliability of quality data gleaned from surveys and document reviews, as well as quality measures based on direct observation.

OPRE meeting participants identified as another area of research the cost of QRSs. The field needs information on the cost of QRS implementation and evaluation, and guidance on how to balance the cost of evaluation with the cost of improving quality, providing incentives, and disseminating information to parents. QRSs are also concerned about the cost of maintaining their program activities over time.

The extent to which QRSs affect low-income children's participation in higher quality care is also an area of concern. Systematic study of this issue is underway *within* states through the implementation of planned variations to their policies. For example, in Minnesota, low-income families in some communities are eligible to receive financial support if they enroll their children in higher quality care.

Evaluations are tracking participation in early care and education of differing quality, as well as the development of the children over time.

OPRE meeting participants identified as an important question for research the issue of the unintended consequences of QRSs. For example, research could examine how low-income families move between regulated and unregulated care when a QRS is implemented, whether licensed providers are entering or exiting the market, and whether the cost of care is rising as quality increases.

Overall, the field needs a synthesis of findings on implementation lessons, validation of QRS levels, parent perspectives, and effective quality improvement strategies. The field also needs to provide a synthesis of useful research methods for examining such important constructs as market changes, parent decision making, and children's outcomes in QRSs.

DEVELOPING A FRAMEWORK TO GUIDE QRS EVALUATION EFFORTS

Having identified the current status of QRS evaluation as well as critical research questions to be addressed in future efforts, we conclude in this section with a discussion of a potential framework to guide QRS evaluation efforts. This framework could play a foundational role in evaluating content and priorities in a consortium of researchers (Zellman & Perlman, 2008) or community of learners (Child Trends, 2009b).

LOGIC MODELS ARE IMPORTANT EVALUATION TOOLS.

Logic models are the foundation of program evaluation (W. K. Kellogg Foundation, 2004). A full logic model or theory of change explains the underlying assumptions about how the activities in a program or intervention will link to results. These models can help QRS stakeholders develop realistic expectations for the program, identify resource or service needs, and articulate outcomes of QRS activities. As noted above, QRSs target outcomes at multiple levels including communities, programs, families, and children. Logic models can be a useful tool for guiding evaluation of QRSs at each of these levels.

### VERY FEW QRSS HAVE ARTICULATED AND TESTED A FULL LOGIC MODEL OF THEIR PROGRAMS.

In most statewide or pilot QRSs, stakeholders describe their program as having an implicit logic model, rather than an explicit model. This means

that stakeholders have discussed a common set of goals for the program and developed a set of activities to reach the goals. However, stakeholders have not articulated these activities and expected outcomes in a formal, written document that details the specific assumptions or pathways of expected change for their program.

A GENERAL QRS LOGIC MODEL COULD SERVE AS A USEFUL GUIDING FRAMEWORK FOR QRS STAKEHOLDERS.

Regardless of whether an individual statewide or pilot QRS has a logic model or theory of change for its program, stakeholders across programs agreed at the recent meeting on evaluating quality initiatives (Child Trends, 2009b) that a general QRS logic model that can be used across QRSs would be useful for the field. A general QRS model would specify the elements of the model outlined in the following exhibit. Given the multifaceted goals of QRSs, a layered logic model showing the pathways to outcomes for communities and markets, programs, families, and children could also be beneficial. Such a layered model would use the general framework from the exhibit but add rows for each level in the system.

EXHIBIT: GENERAL QRS LOGIC MODEL
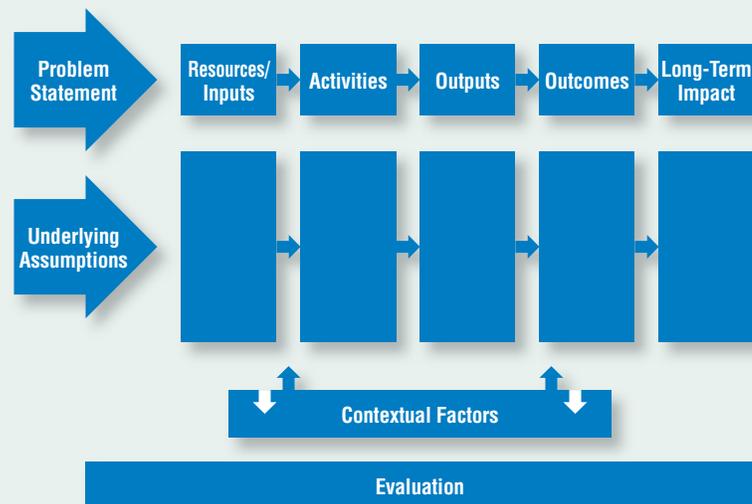
As seen in exhibit, a general QRS logic model outlines:

- **Resources** or inputs such as funding, legislation, QRS agency staff, planning, and collaborations, which determine the scope and content of the activities

- **Activities** such as assigning program ratings, providing technical assistance for quality improvement, and disseminating information to consumers; these will vary in scope and intensity across QRSs

- **Outputs** such as the number of rated programs, the number of programs receiving technical assistance, and the number of families accessing a QRS website, which reflect what the QRS has done; outputs can be used to track and monitor implementation and inform modifications in program design when activities are not meeting targets

- **Outcomes** that reflect changes occurring as a direct result of QRS activities; these could include increased program quality and improved ability of families to find and use high-quality care and education

- **Long-term impacts** that reflect the measurable impact a QRS will have over time, such as improved sustainability of high-quality of programs and improved school readiness for young children

When arrows are added to the model emphasizing expected pathways, a QRS logic model is useful for developing an evaluation strategy. At the left end of the model, formative or process evaluation is used to assess the effectiveness of implementation:

- Did the QRS have the necessary resources to implement the program?

- Was the QRS able to meet its goals for enrolling programs (an output)?

- Were the quality levels validated?

Moving toward the right of the model addresses the outcomes of the QRS. These are measurable changes that come about because of the QRS:

- Did quality change?

- Did families have more opportunities to find high-quality care?

- Were financial incentive used to promote participation in the QRS?

And for long term outcomes, assessed in a summative evaluation:

- Was quality sustained?

- Did children's well-being improve?

The group at the recent OPRE-sponsored meetings (Child Trends, 2009b) agreed that logic models adopted as a general framework could play an important role in statewide or pilot QRSs developing an overall research strategy for their programs. A logic model can be used not only to guide evaluation but also to develop feedback loops that use evaluation findings to inform decisions about program resources and activities. Mitchell (2005) describes a QRS that brings together previously unconnected strategies as an opportunity to critically assess the contributions of various initiatives, "phase-out those initiatives that are not contributing, and redirect those resources to maintain or expand initiatives and strategies that are effective" (p. 56).

CONCLUSIONS AND FOLLOW-UP

There is a great deal that can be learned from state QRSs about a range of important issues pertaining to the quality of early care and education, such as how parents learn about and access quality, its availability in communities and states and how this can change over time, and its effects on children. To maximize this learning, states and communities need to share what they are observing in response to their QRS initiatives.

Focusing on any one question, such as whether and how parents access the quality ratings to choose early care and education, will be meaningful within any one state. However, important additional information can be derived from looking at the accumulating evidence on this question across states, mapping patterns of parental use of QRS information against differing programmatic and policy approaches. Such mapping of information will not yield causal information, especially given that multiple policy and program variables will likely co-vary. Yet, looking at the patterns of findings across states may result in the identification of key questions that could be studied more rigorously through random assignment studies that have varying specific elements.

For example, parental use of quality information could be found to be greater in those states that allocate more funding for outreach to parents. In a more rigorous examination, one or more states

could randomly select among parents applying for child care subsidies to receive or not receive a special information session on using the quality information. Coordinated rigorous evaluations across multiple states on high-priority questions could help determine the extent to which findings can be generalized across differing demographic and policy contexts.

With the potential importance of looking across findings in states implementing QRSs, OPRE has taken two important steps. It has 1) created a Quality Initiatives Research and Evaluation Consortium to make research findings readily available as they emerge across states and provide opportunities for discussing and sharing

methodologies, and 2) launched a new study of QRSs (the QRS Assessment) which will document program elements across different QRSs, provide in-depth case studies of selected approaches to QRSs, conduct secondary analyses across QRS databases, and develop a toolkit to support research and evaluation on QRSs and other quality initiatives. It is likely that these two initiatives also will lead to the emergence of new hypotheses that can be rigorously tested through random assignment evaluation studies in one or more states.

Information on the Quality Initiatives Research and Evaluation Consortium and the QRS Assessment can be found online at Child Care & Early Education Research Connections (**www.researchconnections.org**).

REFERENCES

A quality rating and improvement system, Virginia's star quality initiative. (n.d.) Retreived on March 6, 2009 from **http://www.education. virginia.gov/Initiatives/EarlyChildhood/qris_overview.doc**

Barnard, W., Smith, W. E., Fiene, R., & Swanson, K. (2006). *Evaluation of Pennsylvania's Keystone STARS quality rating system in child care settings*. Pittsburgh, PA: University of Pittsburgh School of Education, Office of Child Development. Retrieved on March 6, 2009 from **www.pakeys.org/docs/Keystone%20STARS%20Evaluation.pdf**

Bryant, D. M. (2001). *Validating North Carolina's 5-Star child care licensing system*. Chapel Hill, NC: Frank Porter Graham Child Development Center.

Cheatam, J., Pope, B., & Myers, G. (2005). *Evaluating quality in state child care licensing: The Tennessee report card and star-quality child care program*. Retrieved on March 6, 2009 from **https://www.sworps.utk.edu/ann_rep_2005/docs/germanypaper.pdf**

Child Care Bureau. (2007). *Child Care Bulletin. Winter/Spring 2007*. Retrieved March 6, 2009 from **http://www.nccic.acf.hhs.gov/ccb/ issue32.pdf**

Child Trends. (2006). *Roundtable on measuring quality in early childhood and school-age settings: At the junction of research, policy, and practice*. Washington, DC: Meeting notes prepared for the U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation. Retrieved on March 6, 2009 from **http://www.researchconnections.org/ location/ccrca12621**

Child Trends. (2009a). *Roundtable on developing the next wave of quality measures for early childhood and school-age programs*. Washington, DC: Meeting notes prepared for the U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation. Available on the Early Care and Education Research Connections website, **http://www.researchconnections.org**.

Child Trends. (2009b). *Meeting on evaluation of state quality rating systems*. Washington, DC: Meeting notes prepared for the U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation. Available on the Early Care and Education Research Connections website, **http://www.researchconnections.org**.

Colorado School-to-Career Partnership. (n.d.). *Systems building elements, local evidence of sustainability*. Retrieved on March 6, 2009 from **http://www.cde.state.co.us/schooltocareer/download/pdf/rmatlas3locevi.pdf**

Halle, T., Vick, J. E., Flood, M., Weinstein, D., Martin, L., Tout, K., et al. (2007). *Quality in early childhood care and education settings: A compendium of measures*. Washington, DC: Prepared by Child Trends for the Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. Retrieved on March 6, 2009 from **http://www.researchconnections.org/location/13403**.

Harms, T., & Clifford, R. M. (1989). *The Family Day Care Rating Scale*. New York: Teachers College Press.

Harms, T., Clifford, R., & Cryer, D. (2005). *Early Childhood Environment Rating Scale (Rev. ed.)* New York: Teachers College Press.

Harms, T., Cryer, D., & Clifford, R. (1990). *Infant/Toddler Environment Rating Scale*. New York: Teachers College Press.

Harms, T., Cryer, D., & Clifford, R.M. (2007). *Family Child Care Environment Rating Scale–Revised*. New York: Teachers College Press.

Harms, T., Jacobs, E., & White, D. (1996). *School Age Care Environment Rating Scale.* New York: Teachers College Press.

McCormick Tribune Center for Early Childhood Leadership. (2008). *When quality counts and money matters. Research Notes.* Available online: Retrieved on March 6, 2009 from **http://cecl.nl.edu/research/issues/rnsp08.pdf**

Mitchell, A. W. (2005). *Stair steps to quality: A guide for states and communities developing quality rating systems for early care and education.* Alexandria, VA: United Way of America, Success by 6.

National Child Care Information Center. (2005). *Quick facts: Quality rating systems.* Fairfax, VA: National Child Care Information Center.

National Infant and Toddler Child Care Initiative. (n.d.). Including infants and toddlers in state quality rating and improvement systems. Retrieved on March 6, 2009 from **http://nccic.acf.hhs.gov/itcc/PDFdocs/qrsdesignelements.pdf**

Norris, D. J., Dunn, L., & Eckert, L. (2003). *"Reaching for the stars": Center validation study final report.* Norman, OK: Early Childhood Collaborative of Oklahoma.

Pope, B. G., Denny, J. H., Homer, K., & Ricci, K. (2006). *What is working? What is not working?: Report on the qualitative study of the Tennessee Report Card and Star-Quality Program and Support System.* Knoxville, TN: The University of Tennessee College of Social Work, Office of Research and Public Service. Retrieved on March 6, 2009 from **http://www.state.tn.us/humanserv/adfam/rept_insides.pdf**

Pope, B., Denny, J. H., Magda, J., Homer, K., & Cunningham, M. (2007). *Tennessee Report Card & Star-Quality Program—Year 5 annual report.* Knoxville, TN: The University of Tennessee College of Social Work, Office of Research and Public Service.

Swenson-Klatt, D. (2008, August). *Using quality measures in MN child care quality initiatives.* Presentation at the 2008 annual meeting of Child Care Development Fund State and Territory Administrators, Washington, DC.

Sylva, K., Sirai-Blatchford, I., & Taggart, B. (2006). *Assessing quality in the early years: Early Childhood Environment Rating Scale (ECERS-E).* London: Trentham Books.

Thornburg, K. (2008, April). *Evaluation strategies focusing on implementation and outputs.* Presentation at the meeting on Evaluation of State Quality Rating Systems, Washington, DC.

University of Minnesota (2007). *Child care information and rating system – Parent focus group results.* Retrieved on March 6, 2009 from **http://edocs.dhs.state.mn.us/lfserver/Legacy/DHS-4965-ENG**

University of Missouri (2007). *Missouri QRS models.* Retrieved on March 6, 2009 from **https://www.openinitiative.org/content.aspx?file=QRSModels.txt#OverviewofComponents**

W. K. Kellogg Foundation. (2004). *Using logic models to bring together planning, evaluation, and action; Logic model development guide.* Battle Creek, MI: W. K. Kellogg Foundation.

Zaslow, M., Tout, K., & Martinez-Beck, I. (Manuscript submitted for review). *Measuring the quality of early care and education programs at the intersection of research, policy, and practice.*

Zellman, G. L. & Perlman, M. (2008). *Child care quality rating improvement systems in five pioneer states: Implementation issues and lessons learned.* Santa Monica, CA: RAND Corporation.

Zellman, G. L., Perlman, M., Le, V., & Setodji, C. M. (2008). *Assessing the validity of the Qualistar Early Learning quality rating and improvement system as a tool for improving child-care quality.* (MG-650-QEL). Santa Monica, CA: RAND Corporation.