Key Findings from the Phase II Study of Quality First and the Implementation of Quality Improvement Supports

Sarah Daily, Brenda Miranda, Tracy Gebhart, Julianna Carlson, Sara Anderson, Dale Epstein, Diksha Bali, and Chantelle Dowsett

Goals and key findings of the Quality First Validation Study, Phase II

First Things First, a voter-initiated, statewide organization that funds early education and health programs, was established to help more of Arizona's children enter kindergarten healthy and ready to succeed. As such, First Things First strives to be a partner in building a comprehensive early childhood system that supports the healthy development of all children from birth to age 5. One of First Things First's key strategies is Quality First, Arizona's voluntary Quality Improvement and Rating System (QIRS),[1] which is funded in 27 of 28 regions statewide. Quality First partners with more than 1,000 regulated early care and education (ECE) providers to improve the quality of early learning programs and practices. Through this partnership, Quality First supports providers with quality improvement efforts. This includes assessing providers on their program quality using a set of evidence-based indicators to calculate a rating based on a five-star scale.

First Things First is committed to a process of Continuous Quality Improvement. This includes a current three-year pilot study funded by the W.K. Kellogg Foundation, Department of Economic Security Child Care Administration, and First Things First to test modifications to Quality First recommended by a panel of stakeholders, including early childhood experts and practitioners. The process also includes a dedicated investment to study the implementation, fidelity, and outcomes of the Quality First model to make course corrections as needed. Child Trends, with funding from First Things First, was contracted to conduct the second phase of a multi-phase implementation study of Quality First. This study was intended to assess (1) the fidelity of implementation of supports designed to promote quality improvement among Quality First participants; and (2) the extent to which these supports—individually or in combination—influence a

[1] QRIS is the general term used nationally to refer to quality improvement frameworks like Quality First. However, Quality First prioritizes the improvement function over the rating function and is branded as a Quality Improvement and Rating System. To increase continuity with national discussions about quality improvement, the term QRIS will be used in the evaluation when referring to other state systems, although we recognize that this term differs from Quality First branding.

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positive change in star rating. References to corresponding page numbers in the full report (where more information can be found) are cited throughout this summary.

Quality First supports for participants

To support all participating ECE programs in their quality improvement efforts, First Things First offers what are referred to as the five main components of Quality First: Quality First coaching, child care health consultants, financial incentives, professional development, and assessment.

- **Quality First coaching**: Quality First coaches provide individualized guidance and support, monthly on-site visits, targeted training and technical assistance (TA), and support in quality improvement goal development and implementation.
- **Child care health consultant (CCHC)**: A CCHC is a nurse or professional health educator who provides a tiered set of supports to Quality First participants. The intensity of support offered ranges from sharing resources like newsletters, to short-term consultation services, to offering a comprehensive set of supports provided through in-person visits.
- **Financial incentives**: Quality First's financial incentives include funding to offset the costs of quality improvement. Financial incentives are determined by star rating and program size, ranging from $1,050 to $11,400. In addition, First Things First pays for 50 percent of the participating program's state licensing fees for all licensed programs.
- **Professional development**: Staff in Quality First programs have access to professional development opportunities through the Arizona Early Childhood Career and Professional Network. These opportunities and resources include college scholarships, a workforce knowledge and competencies framework, and an early childhood workforce registry that provides links to a variety of workshops and trainings. In some First Things First regions, financial incentives are available for practitioners working directly with children in high-quality settings.
- **Assessment:** Quality First participants are assessed using three assessment tools: the Environment Rating Scales (ERS),[2] the Classroom Assessment Scoring System (CLASS),[3] and the Quality First Points Scale.[4] The ERS and CLASS assessments help evaluate the quality of the learning environment (including the availability/accessibility of materials suitable for young children) and the quality of the interactions between teachers and children, respectively. The Quality First Points Scale was designed by First Things First to evaluate quality practices related to staff qualifications, administrative practices, and curriculum and child assessment. Assessment results are used to help programs identify areas of strength and improvement, guide coaching and TA that support quality improvement, and calculate a star rating.

Auxiliary quality improvement strategies

In addition, Quality First providers may have access to two additional types of consultation support, depending on the funding plan within each First Things First Regional Partnership Council. These supports are referred to as auxiliary quality improvement strategies because they are intended to support providers in implementing best practices rather than being primarily designed to improve programs' star ratings. These supports include early childhood mental health consultation (ECMHC), available in 12 regions, and inclusion coaches, available in three regions during the time of the study (state fiscal years 2016-2018). Children with social-emotional and behavioral problems may be at higher risk for expulsion from early education programs. The ECMHC strategy is intended to help early childhood education professionals

[2] For more information visit https://ers.fpg.unc.edu/environment-rating-scales.
[3] For more information visit https://teachstone.com/class/.
[4] The Quality First Points Scale was designed by First Things First to evaluate quality practices related to staff qualifications, administrative practices, and curriculum and child assessment.

interact more effectively with children and their families through consultation with trained mental health professionals. Based on evidence found in research on ECMHC programs, ECMHC is effective in preventing and reducing challenging classroom behaviors, improving teacher skills, and lowering preschool expulsion rates (Gilliam, 2005; Perry, Dunne, McFadden & Campbell, 2008; Shivers, 2015). Although not intended to address program quality specifically, the evidence demonstrating that ECMHC is effective at promoting positive social and emotional outcomes and reducing negative outcomes for children has led many states—including Arizona—to incorporate the practice in efforts to improve the quality of early learning settings, like child care and preschool. An ECMHC is a specialist in early childhood social-emotional development and provides on-site support to improve classroom emotional climate. The ECMHC model has three levels of service intensity depending on the Quality First participant's need. Early care and education inclusion coaches offer training and assistance to improve participants' skills in supporting young children with special needs. However, the examination of the relationship between the auxiliary strategies and increases in Quality First ratings was exploratory in this study. This is because auxiliary services are not specifically designed to improve overall program quality; rather, they are designed to improve the experiences and well-being of individual children.

Study overview

Child Trends, with funding from First Things First, was contracted to conduct a multi-phase implementation and validation study of Arizona's Quality First. Phase I of this study focused on providing a comprehensive examination of Quality First's conceptual framework, design, and implementation. It also included a validation analysis of the Quality First rating scale. Key findings from the Phase I study include[5]:

- Quality First programs improve in quality over time.
- Quality First ratings distinguish meaningful levels of quality, and higher ratings correspond with higher scores on the tools used to measure quality in both center- and home-based programs.
- Quality First stakeholders have generally positive perceptions of the system.
- Quality First data processes are implemented with rigor.

Phase II of this study examined the fidelity of implementation of each Quality First component and the extent to which each support was associated with quality improvement from state fiscal years 2016-2018. Child Trends surveyed Quality First participants and TA providers and analyzed administrative data. There were three main goals for this study:

- **Goal 1:** Evaluate the implementation of select Quality First components (coaching, financial incentives, and CCHC).[6]
- **Goal 2:** Examine to what extent select Quality First components support positive changes in star ratings over time.
- **Goal 3:** Examine the association between the use of auxiliary strategies and quality improvement.

When interpreting the findings, it is important to remember that all studies encounter limitations in designing data collection methods to best balance cost, time, and burden on participants. Therefore, there are a few key points to keep in mind while interpreting results. First and foremost, administrative and survey data may tell part of the story, but not the full story of the quality improvement process. For example, the limited number of statistically significant findings could be due in part to the fact that the quality improvement process may take more time than what was allotted in this study. Examination of the auxiliary services was constrained by the fact that not all auxiliary services were available in every First

[5] For more information visit https://www.firstthingsfirst.org/wpcontent/uploads/2018/02/AZ_QF_Phase_1_Report.pdf.
[6] Professional Development and Assessment were not included in the assessment of fidelity. Standards of Practice by which to assess fidelity of implementation of financial incentives and professional development do not exist in the same format that they do for the other Quality First components.

Things First region, nor were they funded for Quality First quality improvement purposes. As a result, it was challenging to detect significant associations between supports and changes in star rating, given the limited uptake of auxiliary supports or variation in the amount of supports received. These limitations do not diminish the importance of this study and the findings presented. Rather, they should be acknowledged as inevitable in large-scale research studies and should be considered accordingly when interpreting study results.

Key findings

In general, directors and teachers reported that Quality First components were implemented with fidelity.[7] There were some differences among the components:

- **Coaching** was delivered as intended, although coaches spent slightly fewer hours onsite than expected, which differed depending on geographic region (i.e., urban or rural) and program star rating. In addition, rural programs received fewer but longer visits per month than their urban counterparts.
- **Child care health consultants** provided, on average, about an hour of support to providers per month. Center-based, rural, and lower-rated programs received more CCHC hours than other Quality First participants (i.e., home-based, urban, or higher-rated programs).
- Nearly all participants spent 95 percent[8] or more of their **financial incentives**, which were used primarily to fund learning materials, equipment, or facility improvements (such as enhancing the safety of a play area or replacing worn equipment).

Quality First participants, Quality First coaches, and child care health consultants had similar perceptions about the facilitators and barriers to quality improvement:

- **Facilitators:** Overall, coaches and child care health consultants perceived Quality First components to have a high impact (ranking 5 or higher on a 10-point Likert scale) on both star rating and classroom practices. Directors and teachers reported that Quality First coaches had medium to high impacts on star ratings and classroom practices, particularly in supporting interactions with children.
- **Barriers:** Coaches, child care health consultants, and participants all reported that staff qualifications and turnover are the biggest challenges facing quality improvement efforts. Child care health consultants perceived participants' lack of motivation to change their practices as an additional barrier to quality improvement.

Eighty-eight percent of providers participating in the study either maintained or improved their star rating, only 12 percent declined. Time was defined as the time period between the most recent star rating (Time 2, T2) and the rating prior to that (Time 1, T1). In addition, Quality First Coaching, financial

[7] Fidelity of implementation was assessed by examining expectations identified in the Standards of Practice, which guide the implementation of Quality First components, including providing protocols, dosage, and activities.
[8] The remaining 5 percent was not requested for use by programs, and therefore was retained by First Things First.

incentives, and child care health consultation were associated with an increase in star rating between T1 and T2 for some types of programs.

- Lower-rated programs (1- or 2-star) had a higher probability of improving than higher-rated programs (3- to 5-star).
- For Head Start and accredited programs, higher financial incentives and the number of coaching hours provided to these programs were both associated with a higher likelihood of increased star rating.
- Working with a consistent coach is beneficial for program improvement. Programs that worked with fewer coaches between T1 and T2 ratings were more likely to increase their star rating than programs that worked with more coaches.
- The amount of coaching received at T1 by higher-rated programs is an important factor in improving star rating. Higher-rated programs at T1 that received more coaching hours by T2 were more likely to increase their star rating than higher-rated programs at T1 that received fewer coaching hours.
- Programs in rural areas that received more coaching hours were more likely to increase in star ratings than programs in urban areas, regardless of star rating at T1.
- For programs with higher T1 ratings, use of comprehensive CCHC services provided on a quarterly basis over a longer term (in-person visits) were more likely to increase a program's star rating than use of short-term CCHC consultation services to address an identified health need.

Quality First participants were generally positive, but not overwhelmingly so, about the auxiliary strategies and their role in improving program quality.

- Just over half (55%) of directors cited Quality First Scholarships for families as the primary motivation for participating in Quality First (p. 127). Smaller proportions of teachers cited financial incentives (41%) and college scholarships (36%) as their primary motivations to participate.
- Although not all participants receive college scholarships, among those that did and responded to the survey, one quarter of teachers indicated that college scholarships contributed to their Quality First star rating.
- Most directors (61%) indicated that the college scholarships either played a significant role (or somewhat of a role) in staff retention.

There was no association found between the auxiliary strategies, individually or clustered, and increases in star ratings. This was not surprising since the auxiliary strategies were designed to support specific teacher and program practices that are not necessarily reflected in the quality measurement tools used for the Quality First star rating process. As a result, the effects of the auxiliary strategies were likely not detectable by the assessment tools used by Quality First to determine a program's star rating. These supports have been found to improve teacher skills and outcomes for children (as discussed on page 3 of the Executive Summary) and are perceived by participants to contribute to quality.

Considerations for next steps

QRIS models combine different quality components to determine one overall star rating for a provider. These components focus on different yet important aspects of quality: children's learning and development, activities that support teachers' and caregivers' professional development, health and safety practices, business practices, and others (Tout et al., 2017). Thus, it is common for QRIS studies to yield mixed results; some quality improvement supports will support some of these components but not others. Although this QRIS study produced some mixed findings, the study also yielded important evidence to support the continuous quality improvement and refinement of Quality First. Notably, 88 percent of

providers participating in the study either maintained or improved their star rating over time, indicating that the combination of supports offered to programs is supporting quality improvement.

The considerations offered below are aimed at supporting First Things First in its commitment to continuous quality improvement.

- ***Continue to support Quality First participants by providing them with Quality First coaching*** that uses a relationship-based approach to model instructional practices for teachers and supports directors with overall program improvement goals.
- ***Consider creating a new Quality First navigator role***. Positioned in regions across the state, navigators would provide participants with administrative and logistical support (e.g., outreach, enrollment, paperwork, technical support, basic information/resource sharing), therefore freeing up time so that coaches can focus on content- and relationship-based coaching and quality improvement activities. States like Colorado have done this and found that adding a quality improvement navigator supported their state in doubling participation of licensed providers in the QRIS in just two years (Daily, et al., 2017).
- ***Prioritize the most intensive levels of support provided by CCHCs***. Shift the activities covered in the less intensive levels of support (e.g., resource sharing) to Quality First navigators as described in the previous recommendation. This suggestion is offered in response to the finding that participants expressed overall appreciation and recognized the benefits of working with CCHCs; higher-rated programs that accessed the most intensive set of CCHC supports were associated with a higher likelihood of increasing in star rating.
- ***Continue to provide financial incentives for program equipment and materials to Quality First participants, as these are a critical strategy for engagement***. In time, when Quality First includes more participants, First Things First may need to explore sustainable financial incentive strategies to promote the ongoing engagement of Quality First providers.

The overall goal of this study was to provide further information to First Things First about the implementation of Quality First components and the extent to which specific quality improvement strategies or combinations of strategies may support an increase in star rating. Overall, we found promising evidence related to the Quality First coaching model for supporting quality improvement, and mixed results related to the other Quality First support strategies. This study found evidence that Quality First continues to support participants in improving the quality of their practices and their star ratings, and provides further considerations for refining and targeting these existing supports.