

# Understanding and Measuring Program Engagement in Quality Rating and Improvement Systems

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### **Overview**

### Introduction

Defining and monitoring early care and education (ECE) program engagement in Quality Rating and Improvement Systems (QRIS) are essential tasks that can inform implementation and improvement efforts. Accurate data about the types of ECE programs that are rated, where they are located, and who they serve can shape outreach and recruitment efforts. The term engagement is used as a broad term in this brief to encompass varying levels of program involvement in QRIS, including programs that are unrated, programs that are working toward a rating but have not yet received one, and programs with a current rating.

### **Purpose**

The purpose of this brief is to describe approaches to measuring QRIS program engagement that can be used by QRIS administrators and other stakeholders to distinguish and address different levels of QRIS involvement among ECE programs.

### **Key Findings and Highlights**

Five metrics related to QRIS engagement are discussed.

- 1. **QRIS-eligible programs:** The number of ECE programs overall and by program type that qualify to participate in a QRIS.
- 2. **QRIS-participating programs:** The number of QRIS-eligible ECE programs overall and by program type that are participating in the QRIS rating process and/or quality improvement services, with or without a current QRIS rating.

- 3. **QRIS-rated programs:** The number of QRIS-eligible ECE programs overall and by program type with a current QRIS rating.
- 4. **Density of QRIS-rated programs:** The percentage of QRIS-eligible programs overall and by program type that have a current QRIS rating.
- 5. **Children served in QRIS-rated programs:** The overall number and percentage of children enrolled in QRIS-eligible programs with a current QRIS rating.

#### **Methods**

The brief presents QRIS data from the Quality Compendium (www.qualitycompendium.org), a web-based catalog of features of QRIS across the United States and information from structured interviews with QRIS administrators to learn about individual state practices tracking QRIS engagement.

#### Recommendations

Consistent and regular use of QRIS metrics can inform planning, budget projections, program recruitment, and progress monitoring. The metrics described in this brief can support consistency of reporting within and across QRIS. The brief also discusses challenges and potential solutions to calculating QRIS metrics.

### **Glossary**

Quality Rating and Improvement System (QRIS)—A statewide or local initiative that promotes quality improvement in ECE programs by implementing quality standards, ratings of program quality that are shared with consumers, and technical assistance to support changes in program quality.

# Understanding and Measuring Program Engagement in Quality Rating and Improvement Systems

Quality Rating and Improvement Systems (QRIS) are initiatives implemented in 42 states¹ to promote improvement in the quality of early care and education (ECE) programs. Though systems vary in their specific features, QRIS typically include a process for measuring and rating ECE program quality, sharing ratings with parents and the public, and providing supports (including financial incentives) to help programs improve their quality. Because program engagement in a QRIS is not always required, information about the number of ECE programs with QRIS ratings is important for QRIS administrators and other stakeholders to review on a regular basis. Data about the location of QRIS-rated and unrated programs and who they serve are useful for shaping outreach and recruitment efforts to increase the number of programs in the system and to improve the supply of

The term *engagement* is used as a broad term to encompass varying levels of ECE program involvement in QRIS, including programs that are unrated, programs that are working toward a rating but have not yet received one, and programs with a current rating. Tracking different aspects of engagement is a critical task for QRIS administrators.

rated programs, especially programs serving children with child care subsidies or other high-priority populations.

Despite the importance of QRIS data about programs, states encounter challenges in defining and tracking QRIS engagement in reliable ways.<sup>2</sup> Limitations in the availability and comparability of data can complicate the calculation of QRIS metrics about participation and ratings. For example, data on different types of programs (e.g., Head Start programs, licensed family child care programs) may present data management and analysis challenges because they are housed in different data systems, collected at different times, or defined in different ways.

The purpose of this brief is to provide information on approaches to defining, measuring, and tracking QRIS program engagement and to propose metrics that QRIS administrators, analysts, and other stakeholders can use to manage and improve QRIS data. The brief also describes common challenges states face in measuring QRIS engagement and possible solutions to address these challenges.

### **Approach**

This brief describes five metrics that can be used individually or in combination to support QRIS operations. The metrics cover QRIS eligibility, participation, ratings, density, and children served. Each metric can be calculated across a state or locality and can also be reviewed by program type. QRIS may calculate and review additional breakdowns of the metrics to focus on other priorities, such as regional differences.

The first step to identifying the metrics described in this brief was to learn how states are collecting, tracking, and reporting data about QRIS participation. Two data sources were used. First, participation data were summarized from the Quality Compendium website (www.qualitycompendium.org).<sup>3</sup> The data from the Quality Compendium are reflective of 44 QRIS operating in the United States as of October 31, 2017. Information and data from the Quality Compendium include QRIS eligibility by program type, QRIS rating by program type, and QRIS density for child care centers and family child care programs. Second, nine states were invited to participate in a structured interview on how they define, measure, and track QRIS participation. The states were selected to represent a range of

<sup>&</sup>lt;sup>1</sup> Note that California and Florida each have multiple QRIS operating at a county or local level.

<sup>&</sup>lt;sup>2</sup> For simplicity, we refer to "states" or "QRIS administrators" as those who are conducting QRIS engagement calculations, though we recognize that some QRIS are administered by localities or counties.

<sup>&</sup>lt;sup>3</sup> The Build Initiative & Child Trends. (2017). A Catalog and Comparison of Quality Rating and Improvement Systems (QRIS) [Data System]. Retrieved from <a href="https://qualitycompendium.org/">https://qualitycompendium.org/</a> on March 5, 2018.

QRIS on factors, including geographic location, size, length of QRIS operation, and experience with calculating and tracking participation. The interviewed states included Idaho, Indiana, Iowa, Minnesota, Mississippi, Rhode Island, Utah, Virginia, and Wisconsin. State staff provided details about the processes they used to calculate engagement, the challenges they encountered, and the contextual factors in their QRIS and state that affected those calculations. Interviews were conducted between April and June of 2015. Interview themes informed the selection of the proposed metrics and specific suggestions about their calculation.

## **Defining QRIS Engagement: Five Metrics**

The five metrics for calculating and tracking QRIS engagement include:

QRIS-eligible programs. QRIS-eligibile programs refers to the number of ECE programs overall and by type that qualify to participate in a QRIS. QRIS eligibility is a subset of the total number of ECE programs in the geographic area the QRIS represents. Criteria for eligibility typically address program type (e.g., child care centers, family child care programs, state pre-kindergarten programs, Head Start/Early Head Start programs), regulatory status (e.g., licensed or registered), and receipt of funding (e.g., CCDF, IDEA, Title I of the ESEA, Head Start). Each QRIS determines its own criteria for eligibility, and those criteria may change over time by adding or excluding criteria.

QRIS-participating programs. QRIS-participating programs is the subset of eligible programs overall and by program type that have either chosen or are required to be involved in the QRIS. Some QRIS are voluntary, with programs able to elect whether or not to be involved. Other QRIS require programs of a certain type, regulatory status, or that receive certain funding to participate and be rated in the QRIS. For example, ECE programs serving children with subsidies may be mandated to participate and be rated.

**QRIS-rated programs.** QRIS-rated programs refers to the number of QRIS-eligible programs overall and by program type with a current QRIS rating. These ratings may be awarded after a program has submitted documentation describing their program practices and been observed by an independent assessor, or the rating may be designated in a more automatic fashion based on, for example, the program's licensing or accreditation status.

Density of QRIS-rated programs. QRIS program density is the percentage of QRIS-eligible programs overall and by program type that have a current QRIS rating. Density is calculated by dividing the number of QRIS-rated programs by the number of eligible programs. This calculation can be completed for all programs in a state or locality, and for different types of programs or programs with different characteristics to understand patterns across important subgroups (e.g., calculating density of participation by program type, including family child care programs and Head Start programs).

Children served in QRIS-rated programs. This metric documents the number and percentage of children currently enrolled in QRIS-rated programs. Compared to the other metrics, this metric is quite challenging to calculate. Child-level enrollment in ECE programs is difficult for states to track for a variety of reasons. Enrollment changes frequently, and programs serve children enrolled full- or part-time (with a mixture that changes on any given day). Point-in-time assessments of enrollment can be used; however, availability of unduplicated child-level enrollment data is limited. This metric can be calculated and tracked as a percentage if the total number of children in the reference population (typically children age 5 and under participating in eligible programs) is known. Despite the feasibility challenges, the metric can be useful for addressing policy-relevant questions about children and their enrollment in high-quality programs, by program type and region.

The metrics presented here offer some but not all of the possible metrics for understanding QRIS program engagement. They will be most valuable when they are examined together to provide a well-

<sup>&</sup>lt;sup>4</sup> CCDF is the Child Care and Development Fund, IDEA is the Individuals with Disabilities Education Act, and ESEA is the Elementary and Secondary Education Act.

rounded portrait. Additionally, metrics can be calculated in combination with other characteristics of children, families, and programs to track progress toward state goals for serving high-priority populations. Program characteristics could include program type, geographic location, ages served, whether the program serves children receiving subsidies, and languages spoken by staff. Family characteristics could include age of the child as well as the race/ethnicity or income level of families served by QRIS-rated programs. Tracking engagement metrics for high-priority subgroups can help states to assess the effectiveness of their initiatives to improve equity in access to high-quality programs for underserved groups. Examples are shared throughout the brief for how the metrics can be calculated for some of the groups most likely to be targeted by states for improved access and inclusion in the QRIS.

## Overview of QRIS Engagement in 2017

Data about ECE programs, the number of children served by those programs, and, in some cases, program engagement in QRIS are available through a few sources, including Race to the Top-Early Learning Challenge grantee progress reports, individual states' QRIS or licensing datasets, the Head Start Program Information Report, and the Quality Compendium. The National Survey of Early Care and Education conducted in 2012 offers a national data portrait of the number of early care and education programs in the United States and the characteristics of the children who use them.<sup>5</sup> This brief summarizes and presents data exclusively from the Quality Compendium because it provides a recent source of comparable information across QRIS among the available data sources.

States and localities with a QRIS are asked by Child Trends to report on program engagement in the QRIS (and other QRIS details) on a yearly basis for the Quality Compendium. Respondents are provided with instructions for entering the number of QRIS-eligible programs for two programs types (licensed child care centers and licensed family child care programs) and the number of QRIS-rated programs for each of the two types. Density of QRIS-rated programs for each program type is calculated automatically. Ultimately, the data are self-reported, and each respondent enters the data based on what is available from their QRIS and other ECE data systems. Quality Compendium data included in this brief were reviewed and modified to promote consistency and comparisons across QRIS.

In 2017, there were 44 QRIS operating in the United States and documented in the Quality Compendium. While most QRIS operate at the state level, three represent separate counties in Florida (Miami-Dade, Duval, and Palm Beach). The California QRIS, while represented in the Quality Compendium as one system, is implemented at the county level and does not include all counties in the state. This brief presents QRIS engagement findings for 44 state and local QRIS.

### **QRIS Eligibility**

The Quality Compendium provides details about which program types are eligible for the QRIS. All 44 QRIS include licensed child care centers, while 43 of the QRIS include licensed family child care programs. Fewer QRIS include eligibility for Head Start programs (32), school-based programs (28), school-age programs (17), legally license-exempt centers (8), and legally license-exempt family child care homes (2).

Enrolling and earning a rating is a voluntary process for licensed child care centers and licensed family child care programs in about two-thirds of QRIS nationally (27 QRIS for centers and 28 QRIS for family child care programs). The remaining QRIS require ratings for some or all programs. Eight QRIS have a "rated license" in which all licensed centers and family child care programs are rated at the first level of the QRIS and then have an option to achieve a higher level if desired. Additionally, nine QRIS require a rating for licensed child care centers serving children receiving a subsidy or other public funds, while

<sup>&</sup>lt;sup>5</sup> Reports, briefs, and fact sheets from the National Survey of Early Care and Education can be found at <a href="https://www.acf.hhs.gov/opre/research/project/national-survey-of-early-care-and-education-nsece-2010-2014">https://www.acf.hhs.gov/opre/research/project/national-survey-of-early-care-and-education-nsece-2010-2014</a>.

seven QRIS have this requirement for licensed family child care programs. Appendix Table A contains state-level details about QRIS eligibility.

### **QRIS-Rated and Unrated Programs**

Over half (24) of the 44 QRIS in the Quality Compendium report participation data for unrated programs. Unrated programs are those that have enrolled in the QRIS but do not have a rating, typically because they are in the process of submitting documentation and fulfilling other provisions necessary for a rating; this process can take weeks or months depending on the system. Unrated programs may also be receiving quality improvement supports.

QRIS-rated programs are those that have a current QRIS rating. Table 1 describes the numbers of QRIS-rated programs in 2017 by program type (see Appendix Table B for state-level data). The program type with the highest average number of rated programs per QRIS is licensed center-based programs (1,014) followed by licensed home-based programs (910). Fewer school-based, school-age, and legally license-exempt center-based programs have a QRIS rating.

Table 1. Average number of QRIS-rated programs by program type\*, 2017.

	Number of QRIS reporting rated programs	Average number of QRIS-rated programs across all QRIS	Minimum number of rated programs	Maximum number of rated programs
Licensed center-based programs	41	1,014	28	4,321
Licensed home-based programs	39	910	9	7,648
Head Start/Early Head Start**	10	132	2	290
School-based programs	13	261	11	1,062
School-age programs	6	304	52	883
Legally license-exempt center- based programs	4	87	11	265

<sup>\*</sup>Even when a program type is eligible to participate, the QRIS may not have submitted current numbers of QRIS-rated programs.

### **Density of QRIS-Rated Programs**

Density of QRIS-rated programs is the proportion of eligible programs with a QRIS-rating. The Quality Compendium collects density of QRIS-rated programs for licensed center- and home-based programs.

Table 2 displays the average density for rated licensed child care centers and licensed family child care programs. The average density across all QRIS is higher for licensed centers (57 percent) than family child care programs (44 percent). See Appendix Table C for state-level data.

**Table 2.** Average, minimum, and maximum density for QRIS-rated child care centers and family child care programs, 2017.

	Number of QRIS	Average density	Minimum density	Maximum density
Licensed center-based program	37	57%	1%	100%
Licensed home-based programs	36	44%	0.4%	100%

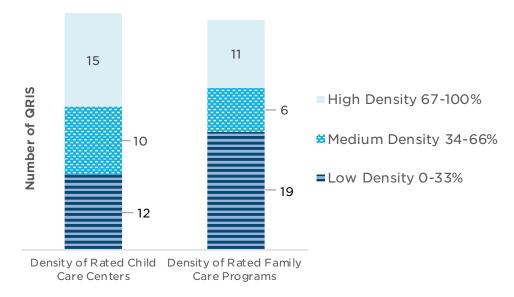
Source: www.qualitycompendium.org, 2017.

<sup>\*\*</sup>Reports of Head Start participation can include those rated at the grantee or site level.

Source: www.qualitycompendium.org, 2017.

Another useful approach for gaining a national portrait of QRIS density is by classifying density into three bands: low density (between 0 and 33 percent), medium density (between 34 and 66 percent) and high density (between 67 and 100 percent). Figure 1 presents the density data for 2017 by program type. The findings reveal that just less than a third (12) of QRIS have low density of rated child care centers, while more than half (19) have low density of rated family child care programs. These density trends will be important to track over time.

**Figure 1.** Number of QRIS with low, medium, and high density of rated child care centers and family child care programs, 2017.

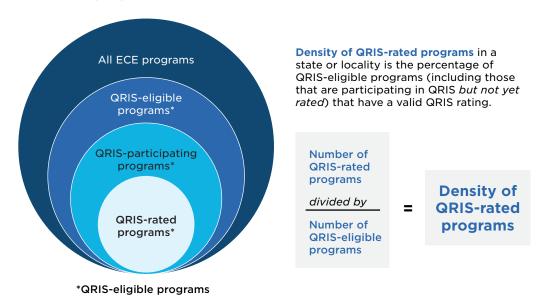


Source: www.qualitycompendium.org, 2017

The data presented from the Quality Compendium provide a useful snapshot of QRIS engagement nationwide. In the next section, each of the recommended QRIS participation metrics is discussed in detail. Challenges in calculating and tracking the metrics and possible solutions to address the challenges are also described.

To set the stage for the discussion of QRIS metrics, Figure 2 provides a depiction of the data points that are necessary to understand QRIS engagement in a state or locality. The figure shows how the data points are interrelated and outlines the formula for calculating density of QRIS-rated programs.

**Figure 2.** Elements necessary for examining program engagement in QRIS and calculating density of QRIS-rated programs.



Source: Child Trends

## **Metric 1: QRIS-Eligible Programs**

Documenting the number of programs that are eligible to participate provides a foundation for understanding overall engagement in the QRIS. All QRIS specify the types of programs that are eligible to participate. While most QRIS require licensing as a basic requirement for enrollment, some QRIS extend eligibility to certain programs that are not licensed. For example, religious-based programs in a particular state might be extended QRIS eligibility even if they are not required to be licensed.

Determining the number of QRIS-eligible programs can be challenging because data about different types of QRIS-eligible programs may be stored in separate databases. Data may be collected using different methods, at varying intervals, or at different levels. For example, a database with information about Head Start programs may record information at the grantee level rather than the individual site or center level.

A first step in establishing the number of QRIS-eligile programs is to complete a scan of data sources and identify accurate data that can be accessed on a regular basis. A licensing dataset with records of licensed child care centers and family child care programs typically covers a large proportion of QRIS-eligible programs. When reviewing licensing data, it is important to know the frequency with which they are updated and how to count programs with licenses that are suspended or in a provisional status.

Additional datasets likely will be needed to supplement licensing data when counting the number of eligible programs. Data about Head Start and state pre-kindergarten programs may not be housed in a licensing database. Furthermore, license-exempt programs eligible for a QRIS may not be included systematically in any dataset, making it impossible to document the total number of such programs. Existing datasets with information about the total number of programs eligible for QRIS include ECE licensing data, facility data collected by a child care resource and referral agency, lists of Head Start or Early Head Start programs, lists of state pre-kindergarten programs, and lists of programs

<sup>&</sup>lt;sup>6</sup> In this brief, dataset is defined as a collection of individual data elements. A database is the infrastructure that houses a dataset. A data system is a collection of databases.

receiving CCDF subsidies. These datasets may be maintained by federal, state, or nongovernmental agencies. For example, national data are available from the Office of Head Start to count the number of Head Start grantees and programs. When using data from external agencies, it is important to get information from those agencies about how the data were collected and reported. This will help QRIS administrators understand the limitations in how they can link and report on the data.

When completing the scan of data sources, it is important to assess the features of each data source that have implications for ongoing use of the data, including coverage, periodicity of data updates, availability of unique program identifiers (to facilitate data linking and de-duplication), and processes for accessing the data (including the development of data-sharing agreements).

Once appropriate data sources are identified, a second step is to assess the comparability and quality of the data. When multiple datasets are used, duplicate programs will need to be eliminated. In addition some center-based programs have classrooms funded by Head Start or the state prekindergarten program. Decisions will need to be made about how these programs should be classified for the purposes of tracking eligibility and, eventually, tracking participation and ratings.

QRIS eligibility can be reported overall and by program type. Some QRIS may also track the number of eligible programs by receipt of funding or other category of relevance to the QRIS.

### **Metric 2: QRIS-Participating Programs**

The point at which QRIS participation technically begins varies based on rules defined by each system. In some QRIS, participation begins when programs submit an intent to be rated but before they submit materials for the rating process. Other QRIS may not count programs as participating until they receive a rating or quality improvement supports. QRIS define these participation parameters to help support planning and implementation of different activities, including recruitment, rating, and coaching.

Regardless of the nuances of how participation is defined, tracking the number of QRIS-participating programs—those that have or do not have a current rating—provides a helpful engagement metric. For example, in early stages of QRIS implementation or following a redesign, it is helpful to compare the number of participating programs with the number of rated programs to identify potential backlogs in moving programs through the rating process. Ideally, the ratio of rated programs to participating programs is moving toward 100 percent over time. QRIS participation can also be used as a broad assessment of ECE program commitment to a state- or local-initiative that may be of interest to QRIS stakeholders.

## **Metric 3: QRIS-Rated Programs**

The number of ECE programs with a current QRIS rating is a central metric that documents the primary output (ratings) of the system. Though it may seem like a straightforward measure, care must be taken when measuring and tracking QRIS-rated programs.

First, it is important to document the process that is used for counting rated programs and to use it consistently. Issues that can cause discrepancies in numbers over time include inconsistent methods for dealing with programs that close or choose not to be re-rated, programs with a provisional status (because of a licensing violation or incomplete information in their rating documentation), or programs that change their status in some way (e.g., adding Head Start or state pre-kindergarten classrooms). When new programmatic or policy features require changes to the methods for tracking

<sup>&</sup>lt;sup>7</sup> Data on the number of Head Start programs and grantees are available through the Office of Head Start and the Early Childhood Learning and Knowledge Center. These data are collected yearly through the Program Information Report (<a href="https://eclkc.ohs.acf.hhs.gov/data-ongoing-monitoring/article/program-information-report-pir">https://eclkc.ohs.acf.hhs.gov/data-ongoing-monitoring/article/program-information-report-pir</a>). In addition, the Head Start Center Locator can be used to identify the number of centers and grantees in a state or nationally (<a href="https://eclkc.ohs.acf.hhs.gov/center-locator">https://eclkc.ohs.acf.hhs.gov/center-locator</a>).

participation—for instance, if a new program type becomes eligible for participation in the QRIS and data about those programs are housed in a separate database—systematic documentation of these changes will provide the necessary historical context for interpreting sudden changes in participation data.

Second, a determination should be made about the frequency for tracking and analyzing participation and rating data. For example, monthly or quarterly participation numbers might be calculated to inform QRIS administration staff about the achievement of outreach and recruitment goals and to plan caseloads. Annual rating numbers might be used for meeting federal reporting requirements or informing state policymakers and stakeholders about the reach of the program.

## **Metric 4: Density of QRIS-Rated Programs**

QRIS density is an indication of the extent to which eligible programs are participating in a QRIS. Density is calculated by dividing the number of *rated* programs (the numerator) by the number of *eligible* programs in the QRIS (the denominator). Separate density calculations can be developed for different program types, specific geographic regions in the state, or different funding streams.<sup>8</sup> Density is a helpful metric for tracking QRIS engagement because it accounts for fluctuations in the supply of ECE programs.<sup>9</sup>

The integrity of density metrics for QRIS relies on the quality of data used for the calculations. For all density calculations that are reported externally to stakeholders, it is important to provide an explanation of the data and methods used and to be transparent about any limitations of the analysis.

# Metric 5: Children Served in QRIS-Rated Program

Calculating and tracking the number of children served in QRIS-rated programs is a metric of high priority to stakeholders. QRIS administrators and other stakeholders may have a special interest in knowing the extent to which children in low-income families or with other risk factors are being served in high-quality programs. This metric may meet reporting requirements for certain funding streams and provide insight into whether QRIS-rated programs are reaching the most at-risk children.

Despite the value of a reliable metric about children's participation in QRIS-rated ECE programs, states and QRIS administrators are unlikely to have data available that would allow a precise calculation of individual children. ECE programs may report aggregate numbers of children enrolled at a point in time (for example, on their QRIS application or on an annual update for the resource and referral database). However, compiling these data will not account for some children who participate in more than one program. Children will be double-counted (and the overall number of children overestimated) unless the database has individual identifiers for children that allow them to be matched and deduplicated. In addition, it is important to acknowledge the rapid changes that occur in program enrollment and to develop methods for documenting enrollment data in standardized ways across programs.

Even with these data challenges, options exist for estimating the number of children served by QRISrated programs, particularly for QRIS with a data system that is regularly updated and, if possible,

<sup>&</sup>lt;sup>8</sup> In states with a rated license (in which participation in the first level of the QRIS is mandatory and density is therefore 100 percent), it may be useful to track the proportion of programs rated at the second level or higher.

<sup>&</sup>lt;sup>9</sup> Note that the definition of density includes only eligible programs in the denominator. It represents the penetration of QRIS into the population of programs it serves. A more nuanced measure of a reach of QRIS in a state might include non-eligible program types, such as license-exempt programs, in the denominator. This measure of "reach" would pose data challenges depending on the data available in the state or locality. Due to these potential data challenges, overall reach is not addressed as a metric in this brief.

linked to other source datasets (such as licensing data).<sup>10</sup> Available data elements—such as programs' self-reporting of children enrolled by age group or the number of children served from prioritized subgroups (including children who are homeless, have special needs, or are in the child welfare system)—can be used to create a duplicated count of children served by rated programs. These self-reported data on children are typically aggregate numbers for a program reported at the time of application to the QRIS rather than a list of individual children.

Another option is to focus on the number or percentage of children using CCDF subsidies who are served by rated programs. The advantage of focusing on children receiving subsidies is that the total number of children is known and data are available on service periods (e.g., the number of weeks or months a subsidy was paid for a child in a program). One approach is to calculate the number and percentage of children who receive a subsidy in a given month in at least one program with a high-rating (defined as the top level or top two levels in the QRIS). This metric would account for children who are in more than one program and count only the program with a high-quality rating. States with access to data about hours of care may choose a more advanced analysis that documents only the quality level of programs in which children spend the most time per week or month. Both of these approaches can be tracked as a percentage by generating an unduplicated list of children (using a Social Security number or other unique identifier) who receive a subsidy in the timeframe of interest as the denominator.

An analysis of subsidized children receiving care in rated programs can provide insights for one important population of children but will not provide information about other low-income or vulnerable children not receiving subsidies. In addition, data quality may vary, so it is important to conduct checks on the quality and reliability of the subsidy data.

### **Conclusion**

Data about QRIS engagement provide an important tool that QRIS administrators can use to assess and improve outreach efforts, plan for the provision of improvement supports, and communicate the effectiveness of the system in improving the overall quality of programs in a state or locality. Calculating QRIS participation, rating, and density relies on the identification of high-quality data sources as an important first step, and then using a consistent process over time to track and analyze the data. Engagement metrics are most useful when disaggregated by other key variables, such as program type, geographic location, QRIS level, and characteristics of the children served. Developing common language and methods for engagement metrics ultimately can help with cross-QRIS comparisons and an understanding of QRIS engagement nationally.

<sup>&</sup>lt;sup>10</sup> Friese, S., Tout, K. & Kirby, G. (2014). Best Practices in Ensuring Data Quality in Quality Rating and Improvement Systems (QRIS). OPRE Research Brief #2014-47. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

<sup>&</sup>quot; Unless the quality rating is available in the subsidy records, a program ID is needed to identify a program in the subsidy database and link it to a program rating in the QRIS database.

<sup>&</sup>lt;sup>12</sup> Decision rules would need to be generated to specify the necessary calculations.

# **Appendix**

Appendix Table A. QRIS eligibility in 2017 by state/locality and program type

State/Locality	Licensed child care centers	Licensed family child care programs	Head Start/ Early Head Start programs	School- based programs	School- age programs	Legally license- exempt child care centers	Legally license- exempt family child care homes
Alaska	Yes	Yes	Yes	Yes			
Arizona	Yes	Yes	Yes				
Arkansas	Yes	Yes	Yes	Yes	Yes		Yes
California	Yes	Yes	Yes	Yes		Yes	
Colorado	Yes	Yes	Yes	Yes			
Delaware	Yes	Yes	Yes	Yes	Yes		
District of Columbia	Yes	Yes					
Florida- Miami-Dade	Yes	Yes	Yes	Yes			
Florida-Duval	Yes	Yes					
Florida-Palm Beach	Yes	Yes	Yes	Yes		Yes	
Georgia	Yes	Yes	Yes	Yes		No	
Idaho	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Illinois	Yes	Yes	Yes	Yes	Yes	Yes	
Indiana	Yes	Yes	Yes	Yes	Yes	Yes	
Iowa	Yes	Yes	Yes	Yes	Yes		
Kentucky	Yes	Yes			Yes		
Lousiana	Yes	No	Yes	Yes			
Maine	Yes	Yes	Yes	Yes			
Maryland	Yes	Yes	Yes	Yes	Yes		
Massachusetts	Yes	Yes	Yes	Yes	Yes	Yes	
Michigan	Yes	Yes					
Minnesota	Yes	Yes	Yes	Yes			
Montana	Yes	Yes	Yes				
Nebraska	Yes	Yes					
Nevada	Yes	Yes		Yes	No		
New Hampshire	Yes	Yes	Yes	Yes	Yes		
New Jersey	Yes	Yes	Yes	Yes			
New Mexico	Yes	Yes	Yes	Yes	Yes		
New York	Yes	Yes		Yes	No		

#### Appendix Table A cont. QRIS eligibility in 2017 by state/locality and program type

State/Locality	Licensed child care centers	Licensed family child care programs	Head Start/ Early Head Start programs	School- based programs	School- age programs	Legally license- exempt child care centers	Legally license- exempt family child care homes
North Carolina	Yes	Yes					
North Dakota	Yes	Yes					
Ohio	Yes	Yes	Yes	Yes	No		
Oklahoma	Yes	Yes	Yes		No	Yes	
Oregon	Yes	Yes	Yes		Yes		
Pennsylvania	Yes	Yes	Yes		Yes		
Rhode Island	Yes	Yes	Yes	Yes	Yes		
South Carolina	Yes	Yes	Yes	Yes	Yes	Yes	
Tennessee	Yes	Yes					
Texas	Yes	Yes			Yes		
Utah	Yes	Yes					
Vermont	Yes	Yes	Yes	Yes	Yes		
Virginia	Yes	Yes	Yes	Yes			
Washington	Yes	Yes	Yes				
Wisconsin	Yes	Yes	Yes				
Total	44	43	31	27	17	8	2

Source: www.qualitycompendium.org, 2017; When possible, Child Trends made updates to the data to support consistency in reporting across QRIS.

 $Note: A \ blank \ cell \ indicates \ that \ no \ information \ was \ reported \ about \ the \ QRIS \ eligibility \ of \ that \ program \ type.$ 

Appendix Table B. Total number of QRIS-rated programs in 2017, by state/locality and by program type

State/Locality	Licensed child care centers	Licensed family child care programs	Head Start/ Early Head Start programs	School- based programs	School- age programs	Legally license- exempt center- based programs
Alaska	28	38				
Arizona	832	133				
Arkansas	1,258	173			52	
California	2,363	964				
Colorado	2,033	2,137				
Delaware	291	152	33	23	52	
District of Columbia						
Florida- Miami-Dade						
Florida-Duval	147	15				
Florida-Palm Beach	141	63		51		
Georgia	960	369				
Idaho	72	13				
Illinois	3,022	7,648	69	1,062		
Indiana	602	1,882				
Iowa	501	547		115		
Kentucky	1,124	169				
Louisiana	1,640					
Maine	488	479				
Maryland	1,252	2,113		90	550	
Massachusetts	1,632	4,297	176	200	883	24
Michigan	2,105	932				
Minnesota	592	1,004	290	724		
Montanta	93	102				
Nebraska	110	56	2	11		
Nevada	61					
New Hampshire	483	149	44		197	
New Jersey	39	9	3			
New Mexico	144	21				
New York	311	122		45		
North Carolina	4,066	1,784				
North Dakota	69	115				
Ohio	1,368	566		723		
Oklahoma	1,554	1,772				11
Oregon	1,084	2,818	247			
Pennsylvania	4,321	1,522	227			

### Appendix Table B cont. Total number of QRIS-rated programs in 2017, by state/locality and by program type

State/Locality	Licensed child care centers	Licensed family child care programs	Head Start/ Early Head Start programs	School- based programs	School- age programs	Legally license- exempt center- based programs
Rhode Island	252	390		36	87	
Sourth Carolina	692	243				265
Tennessee	1,395	465				
Texas	1,107	121				
Utah						
Vermont	515	470				
Virgina	379	112	228	147		47
Washington	567	468				
Wisconsin	1,886	1,062		166		

Source: <a href="https://www.qualitycompendium.org">www.qualitycompendium.org</a>, 2017

Note: -- indicates that no rated programs of that type were reported in 2017

**Appendix Table C.** Density of QRIS-rated programs by state/locality, program type, and whether ratings are voluntary or mandatory

State/Locality	Licensed center-based programs	Licensed child care center rating voluntary or mandatory?	Licensed family child care programs	Licensed family child care program rating voluntary or mandatory?
Alaska	15%	Voluntary	17%	Voluntary
Arizona	33%	Voluntary	11%	Voluntary
Arkansas	66%	Mandatory if serving subsidized children	48%	Mandatory if serving subsidized children
California		Voluntary		Voluntary
Colorado	100%	Mandatory at first level	100%	Mandatory at first level
Delaware	74%	Voluntary	22%	Voluntary
District of Columbia		Voluntary		Voluntary
Florida- Miami-Dade	30%	Voluntary	20%	Voluntary
Florida-Duval	83%	Voluntary	75%	Voluntary
Florida-Palm Beach	55%	Voluntary	25%	Voluntary
Georgia	30%	Voluntary	22%	Voluntary
Idaho	14%	Voluntary	4%	Voluntary
Illinois	100%	Mandatory at first level	100%	Mandatory at first level
Indiana	94%	Voluntary	70%	Voluntary
Iowa	33%	Voluntary	19%	Voluntary
Kentucky	60%	Voluntary	50%	Voluntary
Louisiana		Mandatory by regulation		Ineligible
Maine	66%	Mandatory if serving subsidized children	48%	Mandatory if serving subsidized children
Maryland	72%	Voluntary	40%	Voluntary
Massachusetts	59%	Mandatory if serving subsidized children	55%	Mandatory if serving subsidized children
Michigan	60%	Voluntary	20%	Voluntary
Minnesota	38%	Voluntary	12%	Voluntary
Montanta	35%	Voluntary	15%	Voluntary
Nebraska		Voluntary		Voluntary

**Appendix Table C cont.** Density of QRIS-rated programs by state/locality, program type, and whether ratings are voluntary or mandatory

State/Locality	Licensed center-based programs	Licensed child care center rating voluntary or mandatory?	Licensed family child care programs	Licensed family child care program rating voluntary or mandatory?
Nevada	17%	Mandatory if serving subsidized children		Voluntary
New Hampshire	100%	Mandatory at first level	100%	Mandatory at first level
New Jersey	1%	Voluntary	0.40%	Voluntary
New Mexico		Mandatory at first level		Mandatory at first level
New York	3%	Voluntary	1%	Voluntary
North Carolina	100%	Mandatory at first level	100%	Mandatory at first level
North Dakota	38%	Voluntary	10%	Voluntary
Ohio	33%	Voluntary	17%	Voluntary
Oklahoma	100%	Mandatory at first level	100%	Mandatory at first level
Oregon	100%	Mandatory at first level	100%	Mandatory at first level
Pennsylvania	67%	Mandatory if serving subsidized children	23%	Mandatory if serving subsidized children
Rhode Island	81%	Mandatory if serving subsidized children	88%	Mandatory if serving subsidized children
Sourth Carolina	49%	Voluntary	25%	Voluntary
Tennessee	100%	Mandatory at first level	100%	Mandatory at first level
Texas		Voluntary		Voluntary
Utah		Voluntary		Voluntary
Vermont	77%	Voluntary	76%	Voluntary
Virgina	21%	Voluntary	8%	Voluntary
Washington	29%	Mandatory if serving subsidized children	14%	Mandatory if serving subsidized children
Wisconsin	80%	Mandatory if serving subsidized children	66%	Mandatory if serving subsidized children

**Appendix Table C cont.** Density of QRIS-rated programs by state/locality, program type, and whether ratings are voluntary or mandatory

State/Locality	Licensed center-based programs	Licensed child care center rating voluntary or mandatory?	Licensed family child care programs	Licensed family child care program rating voluntary or mandatory?
		Total:		Total: Ineligible - 1
		Mandatory at First Level - 8 QRIS		Mandatory at First Level - 8 QRIS
Total		Mandatory if Serving Subsidized Children – 8 QRIS		Mandatory if Serving Subsidized Children - 7 QRIS
		Mandatory by Regulation - 1 QRIS		Mandatory by Regulation - O QRIS
		Voluntary – 27 QRIS		Voluntary – 28 QRIS
		Grand Total: 44 QRIS		Grand Total: 43 QRIS

Source: <a href="www.qualitycompendium.org">www.qualitycompendium.org</a>, 2017; When possible, Child Trends made updates to the data to support consistency in reporting across QRIS.

Note: -- indicates that no density data were reported.