



Florida's Quality Rating System: A Conceptual Model for Estimating Cost Assumptions, Explanations and Supporting Data

Publication 2007-0001a

July 2007

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This paper explains the ***programmatic*** and ***cost*** related assumptions that guide the estimation of costs for Florida's Quality Rating System (QRS).

The cost estimation model is intended to be a guide – based on the best available data – to what the eventual cost and key elements of a QRS available throughout Florida would be. It is distinct from the policies to be determined that will guide payment procedures or the method that may be used to calculate amounts of payment to any particular program or provider who may eventually choose to participate in the QRS. The cost model is also not the same as a method of payment or an implementation plan. (The ***Cost Estimate for Florida's Quality Rating System*** is available as a separate document and is a detailed analysis of cost factors discussed in this paper.)

This model assumes that the investments of state and federal funds to support programs and to improve program quality and professional development the state of Florida is already making through the Office of Early Learning, the Agency for Workforce Innovation and the Department of Education will continue. Additional revenue will be needed, which may be generated by the counties and/or the state, as well as from federal sources and through private foundation support.

The QRS described here is the full-operational system. If a pilot phase is desired, this estimate can be adjusted to determine the approximate cost of a pilot. The QRS is expected to involve all types of center-based early childhood programs in all parts of the state.

Program Assumptions

Quality rating systems have five major elements: program standards, accountability and monitoring, program and practitioner supports, financial incentives related to quality levels, and outreach to consumers.

Elements. The standards of Florida's QRS are in development; no cost is included here for that work. Generally QRS accountability/quality assurance monitoring includes ongoing costs for both on-site observation and the review of documents along with a data management system. The Florida QRS is expected to include an on-site observational assessment that will be conducted in each classroom and the review of an application of some kind with accompanying documentation. The two observation tools that will be used in Florida are:

- 1) Environment Rating Scales (ERS) – the Early Childhood Environment Rating Scale (ECERS) for preschool classrooms, or the Infant-Toddler Environment Rating Scale (ITERS) for infant and toddler classrooms, and
- 2) an assessment of teacher-child interaction using either the Arnett Global Rating Scale or the Caregiver Child Interaction Scale (expanded and revised version of the Arnett to be released in summer 2007).

A written application from each program will include several documents for review. The results of the assessments and the review of the application together will determine the designation of a quality level for the program.

Program and practitioner support generally includes professional development and technical assistance for program improvement. In Florida, program and practitioner support will be offered in the form of scholarships for professional development, technical assistance for program improvement, and access to loans for facility improvements.

Financial incentives may be delivered in several forms; all are related to quality rating levels. Common examples are: bonuses in the child care subsidy reimbursement system related to quality levels, grants to support improvements for programs at the entry levels, grants that increase according to quality rating levels and number of children enrolled, grants that increase according to quality rating levels and number of subsidized (or low-income) children enrolled, rewards based on qualifications of staff in the center, loan programs with preferential treatment of programs entering and/or improving in the QRS, tax credits for families with benefits increasing with the quality levels of program used, among others. To estimate the cost of financial incentives for Florida, we have used a proxy of funding per child related to quality rating levels to be offered to programs that participate in the QRS. These funds may be delivered as direct grants or spread among several of the common financial incentives described above.

Resources will be devoted to communication about the QRS. An evaluation will be conducted to guide and learn from the pilot (if one is desired), to inform the early years of implementation of the QRS, and later to measure outcomes.

Participation. All types of center-based programs will be eligible to participate – licensed centers, license-exempt centers, school-based centers, Head Start and Early Head Start centers. The expectation is that up to 75% of these programs may choose to do so. For cost estimation purposes, we assume the average program will have 4 classrooms and each classroom will have at least one teacher and one assistant.

Cost Assumptions

The following elements are included in the Florida QRS.

- Quality assurance monitoring
- Professional development
- Technical assistance for programs
- Facility improvements
- Financial incentives
- Communication
- Evaluation

Each element is described below and costs estimate assumptions and methodology are explained. The dollar figures included below represent only one cost-estimate scenario; the accompanying Excel file contains the flexible model that can be used to produce many different scenarios. Once a scenario(s) is agreed upon this memo may, if desired, be updated using those dollar figures.

Quality Assurance Monitoring. There are two parts: on-site observations and review of applications. Based on information from other states, the authors of the ERS and the company that manages electronic scoring all of the ERS tools (Branagh Systems), a trained observer working full-time can complete about 130 classroom assessments per year. To estimate the cost for trained observers, we use data from the U.S. Bureau of Labor Statistics (BLS) data for Florida. According to the BLS, the median annual salary of a social science research assistant/observer in Florida is \$40,790. Assuming that benefits and overhead are equal to 50% of salary, the unit cost for this position is \$61,185. Thus, the cost per classroom assessment is \$470.65. Taking the expected participation of programs and the average number of classrooms in each, we calculate the annual cost of onsite assessment is \$12,012,969. The Branagh system for ERS is an interactive data storage and management system that allows for calculating scores (overall and subscales), inter-rater reliability overall and on specific questions and subscales, and can be customized to include other tools. The cost for the annual license is \$6,500 per assessor using the system, making the annual cost \$1,404,000.

The cost for reviewing applications and making quality level designations is based on the combination of two occupations. BLS data for Florida show that the median annual salary of a compliance officer is \$46,700 and the median annual salary a human resources assistant is \$29,660. The average of these two is \$38,180. Again assuming that benefits and overhead are 50% of salary, the unit cost for this position is \$57,270. We assume that one QRS reviewer can completely process eight applications per week, taking account of necessary follow-up confirmation, missing documents, etc. Thus the cost per program for application review and designation is \$137.67.

Estimated Costs for Florida's Quality Rating and Improvement System

Model Parameters:

Quality assurance monitoring
 Program and practitioner supports
 Financial incentives in several forms related to quality levels
 Resources devoted to communication about QRIS
 All types of center based programs eligible to participate
 Voluntary participation

Cost Category	Statewide Cost	
Quality Assurance Monitoring		10%
Initial Assessor Training, Materials and Hardware	\$11,149,900	
Ongoing Program Assessment	\$14,378,006	
Review of QRIS applications and designation of level	\$948,738	
<i>Sub-total Quality Assurance Monitoring Costs</i>	<i>\$16,476,644</i>	8%
Professional Development	<i>\$13,319,901</i>	9%
Technical Assistance for Program Improvement	<i>\$14,073,296</i>	6%
Facility Improvements	<i>\$10,000,000</i>	61%
Financial Incentives	<i>\$96,767,865</i>	1%
Communication	<i>\$638,100</i>	5%
Evaluation	<i>\$7,563,790</i>	
Total	\$158,839,596	

The *Cost Estimate for Florida's Quality Rating System* is available as a separate document and is a detailed spreadsheet analysis of cost factors discussed in this paper. For a copy, call 863-651-8445 or email policygroup@att.net.

Taking the expected participation of programs, we calculate the annual cost for application review and processing will be \$878,461.

A one-time expense is necessary for initial training of assessors in the ERS and the Branagh system and the hardware for electronic scoring. ERS training is \$1,688 per assessor; Branagh training is \$1,050 per user; hardware is either a tablet or notebook for which the average cost is \$2,850. The training and hardware will cost \$1,149,900.

Professional Development. At the top level of the QRS, the expectation is 50% of teachers will have an AS degree in ECE or an AA with 18 credits in ECE/CD plus 25% of teachers will be working toward a higher degree in ECE/CD. The expectation is for 50% of assistants to have or be working toward achieving a CDA. The expectation is for directors to have the Advanced Level Credential and a minimum of an AS degree in ECE/CD or an AA with 18 credits in ECE/CD.

Two options for estimating the cost of increasing teacher qualifications are explored here. One extrapolates the cost of providing full scholarships for tuition at public college rates for the number of credits necessary to move staff to the level of an associate's degree in early childhood education. These scholarships would be available over a number of years as it may take up to four or five years for a teacher (or director) with a CDA to attain an associate's degree while working. The second approach is based on costs of scholarships in the current Florida T.E.A.C.H. program

Both methods rely on 2004 data on the actual qualifications of the Florida early childhood workforce. According to the *Child Care Workforce Study* (Florida Children's Forum, 2004), the following proportions of teachers (teachers and assistant teachers combined) have attained the levels of qualifications shown below:

Bachelor's degree	Associate's degree	CDA credential	High School
16%	18%	51%	15%

We see that about 34% of teachers have a bachelor's or an associate's degree and, if they have the requisite credits in ECE/CD, already meet the desired qualifications. We see that 51% of teachers already have a CDA and 15% have completed high school. We assume teachers with a CDA will need 12 ECE credits plus 42 other credits to get to AA/AS. Teachers with a high school diploma/GED will need 60 credits to get to AA/AS. Cost of one credit in the community college system is \$65. Similarly, we can use data about the educational attainment of directors with credentials to calculate the cost of their professional development. Directors with a Foundational Director Credential will need 18 ECE credits and 42 other credits to get the AA/AS and those with the Advanced Credential will need 48 other credits to get the AA/AS.

To calculate the cost of professional development, we use the tuition cost per credit across the community college system (\$65) and the number of credits needed for each category of staff to reach the expected qualifications. We assume that full-tuition scholarships would be offered for all credits needed. The total cost will be spread over 4 years, resulting in annual cost of \$13,310,991.

Using the T.E.A.C.H. approach to meet the demand for increased qualifications from directors, teachers and assistants involved in the QRS: The amount spent currently per participant is used to estimate the cost for all to meet the expectations and that amount is spread over 4 years to account

for the time required to achieve a degree while working full-time. The average T.E.A.C.H. scholarship for an associate's degree is \$1,800. The annual scholarship amount would be \$10,784,948.

Technical Assistance for Program Improvement. We assume that technical assistance (TA) may need to be provided intensively to programs as they enter the QRS and less intensively as they advance in quality over time. Some programs will need intensive work in the first year and may not need any further help; others may need modest help for several years. The cost of TA is estimated based on other states' costs of TA of varied intensity (about \$1,600 per program annually) and by estimating the caseload and compensation for a TA specialist. Again using BLS data for Florida, the median annual salary of an instructional coordinator is \$46,850. Assuming that benefits and overhead are 50% of salary, the unit cost for a TA specialist is \$70,275. If we assume a reasonable caseload is 25 programs, then the cost per program is \$2,811 per year. Taking the average of these, we estimate the cost at about \$2,206 per program per year, for an annual cost of \$14,073,296.

Facility Improvements. Some programs' facilities may need renovation to meet the requirements of the QRS. Rather than attempting to estimate the current status of facilities and the need for renovations, this is usually handled by setting up a revolving loan fund. For example, the Virginia Department of Business Assistance through the Small Business Financing Authority offers a child care financing program. Low-interest installment loans are available to regulated providers. Funds can be used to meet or maintain child care standards, including health, safety or fire codes or to make quality enhancements to a child care program, or for certain start-up costs. Loans cannot be used for building construction, working capital or to refinance or consolidate existing debt. Interest rates are fixed at prime minus 3%. The maximum loan amount for family home providers is \$5,000 with a repayment term of up to five years. The maximum loan amount for centers is \$50,000 also with a repayment term of up to five years. Virginia's revolving loan fund has total assets of \$3,650,000. Given that Florida has more than two and half times as many licensed centers as Virginia, a reasonable loan fund for Florida might be \$10 million.

Financial Incentives. Incentives should reflect and help defray the cost of meeting quality standards (for programs) and the price of tuition (for consumers). Determining the size of incentives could be done by costing out a hypothetical Florida program at each level of the QRS and comparing that with current costs and prices. In Duval County, Abt Associates used a survey to determine current operating costs of programs at different levels in their QRS. In the counties with QRS pilots, incentives for programs range from about \$2,000 to \$25,000 annually.

Two types of incentives are planned: one for programs at Levels 1-3 to support improvement and one for programs at Levels 4-5 to support the maintenance of quality achieved. We use the data from two counties (Duval and Hillsborough) on the proportion of programs at each level of the QRS. For improvement grants for Level 1-3, we assume \$100 per child enrolled or on average about \$6,000 per program. For the Level 4-5 grants, we use the average cost differential between levels found in the Duval Abt study. This works out to about \$44,000 per program. The annual total for incentives comes to \$ \$96,497,949.

Communication. Various kinds of communication will be planned to educate the public and especially consumers on the importance of early childhood education and choosing a rated program, as well as communication to promote program participation in the QRS. Based on other states'

experience, this is an opportunity for private sector partners (e.g., United Way, businesses) to engage. We expect that CCR&Rs will list QRS ratings and/or there will be a central website publicizing them. Communication can involve brochures, buttons, banners, sample media releases, media coverage (earned not paid), etc. The precise cost of these is difficult to estimate. Thus we include a set amount per year for communication based on the number of participating programs (\$638,000).

Evaluation. An evaluation will be conducted by a third-party, that is, not those agencies and organizations involved in implementing the QRS. The evaluation will concentrate first on the program implementation (process evaluation), will track the profile of program quality over time, and might be designed in later years to include some focus on outcomes. By evaluating early implementation and continuing to evaluate as the QRS goes to scale, mid-course corrections can be made to ensure that the design is effective. It is best to begin an outcome evaluation once the program to be evaluated is functioning at optimum levels and after children have been able to experience a significant amount of time (years) in well-functioning programs. A process evaluation can be useful in shaping the QRS as it unfolds and can lay the foundation for later evaluation of results. Evaluation should focus on process in the first years, shifting to measuring outcomes as the system is implemented.

To estimate costs for evaluation, we looked at what other states have spent or are spending and also considered “general rules of evaluation cost.” The general rule for estimating evaluation costs is about 5% of total program costs. Thus, we assume that the cost will be up to 5 percent of each year’s total for QRS costs, excluding the financial incentives, would be \$2,673,831. Including the financial incentives in the calculation increases the evaluation amount to \$7,498,729.

Summary of Cost Estimate for Florida’s QRS

Quality assurance monitoring	\$ 16,476,644
Professional development	\$ 13,319,901
Technical assistance for programs	\$ 14,073,296
Facility improvements	\$ 10,000,000
Financial incentives	\$ 96,767,865
Communication	\$ 638,100
Evaluation	\$ 7,563,790

Total = \$158,839,596

Sources

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The Policy Group wishes to thank the Children's Services Council of West Palm Beach and The Children's Trust, Miami-Dade, for their generous contributions to this project.

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