Evidence from Investments in ECE Quality

Association between Receipt of TA and Earning a QRIS Rating

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Outline

• Brief Overview of Oregon’s QRIS Process Evaluation
• Methods and Data Sources
• Results
• Conclusions
Basics of the QRIS Process

Commit
- QRIS Increasing Quality Training
- Application
- Self Assessment

Participate
- Quality Improvement Plan
- Quality Improvement supports
- Technical Assistance with portfolio
- Financial Supports of $1000-$2000

Achieve
- Submit portfolio to Western Oregon University
- Portfolio reviewed by experts
- Receive a rating and financial incentive
- Incentives between $500-$2500
The purpose of the QRIS Process Evaluation is to provide information to guide the development and implementation of the QRIS.

In order to assist the field study, processes and procedures are carefully examined and assessed for recommendations for continued improvement.
Program Improvement Process

• Programs work with Quality Improvement Specialists.

• The improvement phase consists of different types of assistance from training to aid in documentation.
### How Many Programs?

**Number of Licensed Programs (New in September)**

<table>
<thead>
<tr>
<th>Program Type</th>
<th>914 (19)</th>
<th>666 (27)</th>
<th>2,522 (24)</th>
<th>63</th>
<th>141 (5)</th>
<th>Total 4,306</th>
</tr>
</thead>
</table>

**Achieved Commitment to Quality (C2Q)**

<table>
<thead>
<tr>
<th>Star Rating</th>
<th>CC</th>
<th>CF</th>
<th>RF</th>
<th>AC</th>
<th>HS</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>297</td>
<td>142</td>
<td>178</td>
<td>29</td>
<td>67</td>
<td>713</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>28</td>
<td>33</td>
<td>2</td>
<td>0</td>
<td>79</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>25</td>
</tr>
</tbody>
</table>

**Star Rated Programs**

- 3 Star: 3 programs
- 4 Star: 10 programs
- 5 Star: 42 programs

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*CC = Certified Center; CF = Certified Family; RF = Registered Family; AC = Accredited Programs; HS = Head Start*
HOW DOES THE AMOUNT OF TECHNICAL ASSISTANCE IMPACT A PROGRAM’S QRIS RATING?
Methods

• Data from Technical Assistance (TA) logs maintained by the QIS

• Documentation of all aspects of interactions with programs

• Main items collected: License numbers, Time spent with program, and topic of interaction

• Assumption: All contacts logged correctly
Methods

- Portfolio-reviewed programs
- N = 171 portfolios
  - Exclusions: Head Start – Accredited Programs – Multi-Sites

- Examined number of contacts and time spent with program

- Two Logistic Regressions performed in R
- Dependent Variable: Binomial (Rating Yes/No)
- Independent Variables: # of Contacts/Total Time (minutes), Program Type
**Programs Examined**

The proportion of programs who achieved a star rating was lower among Certified Centers.

<table>
<thead>
<tr>
<th></th>
<th>Total # of Programs</th>
<th>Achieved Rating</th>
<th>% Achieved Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>56</td>
<td>24</td>
<td>43</td>
</tr>
<tr>
<td>CF</td>
<td>54</td>
<td>32</td>
<td>59</td>
</tr>
<tr>
<td>RF</td>
<td>61</td>
<td>34</td>
<td>56</td>
</tr>
</tbody>
</table>

CC = Certified Center; CF = Certified Family; RF = Registered Family
Summary Statistics

Programs who achieved a QRIS ratings received more contacts by QISs and spent more time with QISs.

<table>
<thead>
<tr>
<th></th>
<th>Not Achieved Rating</th>
<th>Achieved Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average # of Contacts</td>
<td>3.25</td>
<td>7.17</td>
</tr>
<tr>
<td>Average Time Spent (mins)</td>
<td>127.84</td>
<td>343.97</td>
</tr>
</tbody>
</table>
Significantly More Contacts by QISs with Programs who Achieved Ratings

**Average # of Contacts**

<table>
<thead>
<tr>
<th></th>
<th>Not Achieved Rating</th>
<th>Achieved Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>4.88</td>
<td>12.63</td>
</tr>
<tr>
<td>CF</td>
<td>2.14</td>
<td>6.03</td>
</tr>
<tr>
<td>RF</td>
<td>2.22</td>
<td>4.38</td>
</tr>
</tbody>
</table>

CC = Certified Center; CF = Certified Family; RF = Registered Family
Logistic Regression
Is there a significant difference between number of contacts and achievement of rating? Is there also a significant difference between number of contacts and type of program?

|        | Estimate | Std. Error | z-value | Pr(>|z|) |
|--------|----------|------------|---------|----------|
| (Intercept) | -1.39115 | 0.3975 | -3.5 | 0.000466 |
| Contact | 0.13935 | 0.03481 | 4.003 | 6.24E-05 |
| rr$Type2 | 1.24424 | 0.44781 | 2.779 | 0.005461 |
| rr$Type3 | 1.18099 | 0.43373 | 2.723 | 0.006472 |

Number of contacts with programs is significant: the more times a program was contacted, the higher the likelihood of a rating.

There was a significant difference in number of contacts and program type, with Centers receiving more contacts than either types of family childcare.

- Model: glm(formula = Rate ~ Contact + Type, family = binomial(logit), data = rr)
More Time Spent by QISs with Programs who Achieved Ratings

Overall Average (Time Spent in mins)

- CC (Certified Center): Not Achieved Rating - 148.06, Achieved Rating - 494.5
- CF (Certified Family): Not Achieved Rating - 99.14, Achieved Rating - 310.06
- RF (Registered Family): Not Achieved Rating - 127.26, Achieved Rating - 269.62

CC = Certified Center; CF = Certified Family; RF = Registered Family
Logistic Regression
Is there a significant difference between time spent and achievement of rating? Is there also a significant difference between time spent and type of program?

|               | Estimate | Std. Error | z-Value | Pr(>|z|) |
|---------------|----------|------------|---------|----------|
| (Intercept)   | -1.02885 | 0.387255   | -2.657  | 0.00789  |
| Total         | 0.002809 | 0.001156   | 2.43    | 0.01511  |
| Type2         | 0.819695 | 0.534877   | 1.532   | 0.1254   |
| Type3         | 0.829828 | 0.511537   | 1.622   | 0.10476  |
| Total:Type2   | 0.000634 | 0.002098   | 0.302   | 0.76242  |
| Total:Type3   | -0.0005  | 0.001699   | -0.293  | 0.76988  |

Time spent with programs is significant: the more time spent, the higher the probability of a rating.

Time spent and type of program show no significant interaction, meaning there is no difference between program type when it comes to time spent to achieve a star rating.

- Model: glm(formula = Rate ~ Total + Type + Total * Type, family = binomial(logit), data = rr)
Conclusions

• The more often a program is contacted by a QIS, the higher the likelihood of achieving a star rating.

• Centers received more contacts than either type of family providers; however, this did not increase the likelihood of them achieving a rating.
Conclusions

• Clearly, the more time spent on technical assistance by Quality Improvement Specialists improves the probability a program will achieve a QRIS rating.

• This holds true for all types of programs.