South Carolina's Child Care Data Bridge Project

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Approved Project Period: 09/30/2007-09/29/2011

Project Description.
South Carolina's Child Care Data Bridge Project is funded through the US Dept. of Health and Human Services, Administration for Children and Families, Office of Planning Research and Evaluation. The main purposes of the project are multifold, but include the following:

- Leveraging data resources by enhancing South Carolina's Data Warehouse with additional administrative childcare focused files
- Build research capacity to better track South Carolina's children and their families who use childcare subsidies and other services.

Specific project objectives:
1. Create new and/or improved administrative data with the capacity to integrate or link with the SC Integrated Human Services Data Warehouse.
2. Develop web-based tools to access linked data sets from multiple service providers capturing key data on families, children and child care service providers.
3. Investigate the impact of the CCDF on improving the quality of child care available to and utilized by low-income working parents and families who are at risk.

Research questions.
1. What percentage of Child Care Programs participating in the voluntary ABC Quality Program are at each level (A, B, and C) at baseline and how do those percentages change over time?
2. What are the characteristics of ABC child care centers that receive different types of CCDF quality enhancement support (ABC Bonus, TEACH, PITC Training)?
3. What are the scores on the on-site environment observation/assessments and how do they change over time?
4. Is there a relationship between completion of the SC PITC program and change in performance scores on ABC Quality Standards for classrooms serving children Birth – 2 Years of age?
5. Is there a relationship between centers' participation in TEACH and ABC quality levels?
6. How does the percentage of children in each ABC level change over time?
7. What are the human and economic services received by children and/or their families, in each of the ABC levels?

Sample. Since we used complete administrative data sets to test the integrated data system, our analysis was conducted using the entire population for each of the data systems included in the child care services data cubes. To answer the project research questions we included data from all child care programs participating in the ABC Quality Child Care Program, all children/families receiving child care subsidies, and childcare personnel who have participated in the TEACH scholarships.

Methods.
Questions 1 & 2 were answered by extracting child care providers who met conditions stipulated in the research questions, generating frequency distributions for each of the conditions and generating simple descriptive statistics and percentages.

Question 3: For the purpose of data analysis the data were cleaned of providers that left the program, changed ownership since 2007 or did not have at least two consecutive reviews. The final analyzed database included 645 providers that have been assessed twice. T-test procedures were conducted to examine the change in assessment scores over time. The tests were conducted separately for each group to indicate the change from baseline score to the score one year later. In order to examine the source of score reductions found in the first t tests, another set of t tests were conducted for each bonus level, separately.

Question 4: A t test procedure was used to examine differences between providers who participated in the PITC Program and those who did not participate, using the ABC Quality Performance standards for 0-2. Another t test was conducted to examine scores change over time, among providers that participated in the PITC program.

Question 5: To examine the relationship between participation in TEACH and quality level of care, providers participating in TEACH were identified. Each provider was identified in the ABC Quality provider dataset which included the participation year and number of staff members who had participated. Among providers who participated in TEACH, providers that moved to higher ABC quality level over the first year after baseline were further flagged. One hundred and thirteen providers satisfied this condition. A t test procedure was conducted with these facilities, to examine the change in bonus level and assessment scores, due to participating in the TEACH program.

Question 6: This question will be answered using an extract of the ABC child linked dataset. Frequency distributions and percentages will be generated and compared.

Question 7: This question will be answered using an extract of the ABC child linked dataset. Frequency distributions and percentages will be generated and compared.

Progress Update.

Major accomplishments of the project include establishing functional web-accessible linked datasets that include data from the SC state licensing database, SC ABC Quality Child Care Program database, ABC Child Voucher database, TEACH database, and PITC dataset. Overarching accomplishments that might be of interest to the CCPRC include:

- Enhancement of several major child care databases including Licensing, ABC quality, and TEACH
- Development of several automated consistent extracts regularly shared with the ORS (ABC Voucher, Licensing)
- Development of a provider unique id process for Licensing, ABC voucher, ABC Quality Provider, and TEACH systems.
- Development of three web-based tools (cubes) for the childcare research capacity team to explore usage: Licensing, ABC Quality, and Child Cube.
- Development of a history from the ABC Voucher system through extracts shared with ORS routinely.
- Development of internal and external audiences for the cubes
- Expanding the partnerships with ORS, USC, and Clemson University
- Expand the research capacity in SC particularly in the enhancements of relationships with USC and Clemson University.
- Inclusion of mapping technology to inform policy decisions with an example of its use mapping self arranged care.
- Developed a system to guide ongoing and future database development for Training and Technical assistance systems to evaluate impact of service on quality of programs.

For more information:

Lavenda, O., Hunter, B., McInerney, N., Bolick, L., Haselden, C., Tester, D., Knopf, H., Ha, Y. (2010). *Administrative data as children's well-being indicators: The South Carolina data bridge project* Child Indicators Research.

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