

ECELS Infant Toddler Program Quality Improvement Project (ITQIP)

Richard Fiene, Ph.D.

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ABSTRACT

This brief report provides an analysis of the sites selected as part of the Infant Toddler Program Quality Improvement Project (ITQIP) in comparing data from the pre-test to post-test for both the Intervention and Control Groups. It is clearly demonstrated in the results that the Intervention Group was very effective in producing change in making sure children were being immunized; received training on proper medication administration; received and reviewed safe sleep policies and have been trained; were provided the necessary education, policies, and procedures for child abuse and prevention; followed proper adult hygiene and proper diapering protocols; and ensured infants and toddlers had adequate activities and outdoor play.

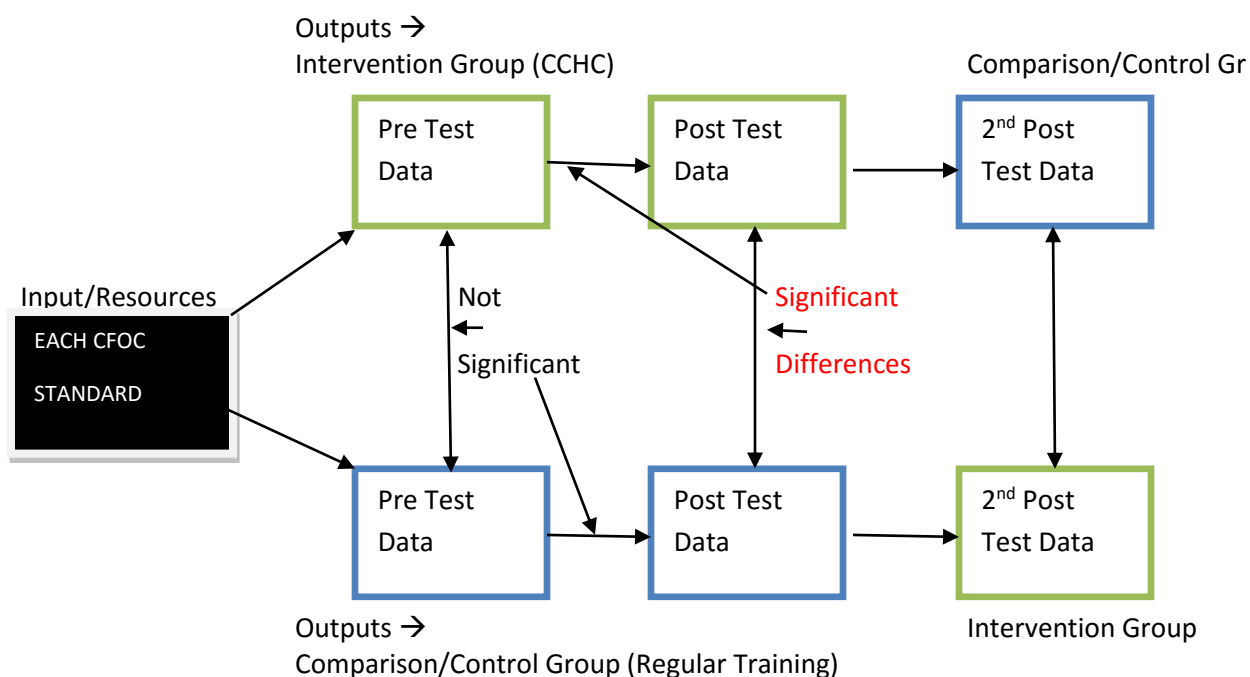
INTRODUCTION

This report compares pre-test and post-test scores between the 13 intervention sites (3 sites did not follow through with their Child Care Health Consultant (CCHC) and were dropped from the intervention group) and the 16 control sites of the Infant Toddler Program Quality Improvement Project. This will be a descriptive report demonstrating the similarities and differences between the two groups.

The evaluation plan (see Figure 1 for the Logic Model Display) is a classic randomly assigned clinical trial in which a group of child care programs were randomly assigned to the intervention group in receiving the specific training and technical assistance specific to the selected *Caring for Our Children (3rd Edition) CFOC3* standards. A comparison group also randomly assigned received the typical training and technical assistance that is available through the state training system in Pennsylvania. These two groups were compared on the pre-test for equivalency and then one year later in a post-test format. At this point the intervention group will be switched to a comparison format and the comparison group will become the intervention group. If funding

can be found to pay for it, a second post-test would be performed at this data point to determine the latent effects of the training/technical assistance.

Figure 1: EVALUATION PLAN LOGIC MODEL



RESULTS of Pre-Test to Post-Test (Summary and Detailed Item Results)

Intervention Group

The range in scores was 175 to 267 with an average score of 212 out of a possible 322 points (66%) on the pre-test. The range in scores was 213 to 297 with an average score of 255 out of a possible 322 points (79%) on the post-test. This change from pre-test to post-test was statistically significant ($t = -4.62$; $p < .0001$).

Control/Comparison Group

The range in scores was 164 to 271 with an average score of 218 out of a possible 322 points (68%) on the pre-Test. The range in scores was 149 to 257 with an average score of 221 out of a possible 322 points (69%) on the post-test. All these changes from pre- to post-test were non-significant.

Intervention – Control/Comparison Groups

The average scores between the Intervention (212) and Control (218) groups on the pre-test were non-significant. The average scores between the Intervention (255) and Control (221) groups on the post-test were statistically significant ($t = -3.46$; $p < .002$).

Intervention (I) and Control (C) Group Comparisons from Pre-Test to Post-Test Significant Changes Based Upon t-test Analyses and Comparisons of Intervention & Control Groups at Post-Test for Each Item (NS = Not Significant; **S = Significant)**

Item	Intervention Group (I)	Control Group (C)	Intervention - Control
PR21 OBS	NS	NS	NS
PR22	NS	NS	NS
PR23	NS	NS	NS
PR24	NS	NS	NS
PR25	NS	NS	NS
LA26	NS	NS	NS
LA27	NS	NS	NS
LA28	NS	NS	NS
AO29	NS	NS	NS
AO210	NS	NS	NS
AO211	NS	NS	S*
AO212	S*	NS	NS
AO213	NS	NS	NS
AO214	NS	NS	NS
AO215	NS	NS	NS
AO216	NS	NS	NS
AO217	NS	NS	NS
AO218	NS	NS	NS
AO219	S**	NS	NS
AO220	NS	NS	NS
AO221	NS	NS	NS
AO222	NS	NS	NS
AO223	NS	NS	NS
AO224	NS	NS	NS
AO225	NS	NS	NS
AO226	NS	NS	NS
SS227	NS	NS	NS
SS228	NS	NS	NS
SS229	NS	NS	NS
SS230	NS	NS	NS
SS231	NS	NS	NS
SS232	NS	NS	NS
SS233	NS	NS	NS
SS234	NS	NS	NS
SS235	NS	NS	NS
SS236	NS	NS	NS
SS237	NS	NS	NS
SS238	NS	NS	NS

SS239	NS	NS	NS
SS240	NS	NS	NS
DC241	S*	NS	S**
DC242	NS	NS	NS
DC243	NS	NS	NS
DC244	NS	NS	NS
DC245	NS	NS	NS
DC246	NS	NS	NS
DC247	NS	NS	NS
DC248	NS	NS	NS
DC249	NS	NS	S*
DC250	NS	NS	NS
DC251	NS	NS	NS
DC252	NS	NS	NS
DC253	NS	NS	NS
DC254	NS	NS	NS
DC255	NS	NS	NS
DC256	NS	NS	NS
HH257	NS	NS	NS
HH258	NS	NS	NS
HH259	NS	NS	NS
HH260	NS	NS	NS
HH261	NS	NS	S*
HH262	NS	NS	NS
HH263	NS	NS	S**
HH264	NS	NS	NS
CA31 INTER	NS	S**	NS
CA32	NS	NS	NS
CA33	NS	NS	NS
PR34	NS	NS	NS
PR35	NS	NS	NS
AO36	S**	NS	S*
AO37	S*	NS	S*
SN38	NS	NS	NS
SN39	NS	NS	NS
CA310	S***	NS	NS
CA311	NS	NS	NS
CA312	NS	NS	NS
PR313	NS	NS	NS
PR314	NS	NS	NS
AO315	S**	NS	S*
AO316	NS	NS	NS
SN317	NS	NS	NS
SN318	NS	NS	NS
CA319	S**	NS	NS

CA320	NS	NS	NS
CA321	NS	NS	NS
MA322	NS	NS	NS
MA323	NS	NS	NS
MA324	NS	NS	NS
MA325	NS	NS	NS
MA326	NS	NS	NS
MA327	NS	NS	NS
MA328	NS	NS	NS
CA41 DOCS	NS	NS	NS
CA42	NS	NS	NS
CA43	S*	NS	NS
CA44	S*	NS	NS
SS45	S**	NS	S***
SS46	S**	NS	S*
SS47	S*	NS	S*
SS48	S*	NS	NS
SS49	NS	NS	NS
MA410	S***	NS	S***
IM411	S*	NS	NS
IM412	S*	NS	NS
IM413	NS	NS	S*
SN414	NS	NS	S*

* p < .05
 ** p < .01
 *** p < .001

DISCUSSION

It is clear from the results that the intervention of the Child Care Health Consultants (CCHC) was very effective in the pre to post-test scores on a number of items (N = 17) that showed a statistically significant change from pre- to post-test for the Intervention Group and 14 items in comparing the Intervention Group to the Control/Comparison Group showed a statistically significant change. At the same time there was only one item in the Control/Comparison Group that showed a statistically significant change from pre- to post-test. As a footnote, there were also only 3 items that showed a statistically significant difference between the Intervention and Control Groups on the pre-test (Fiene, 2014).

These results are rather robust given the small sample size (N = 13 for the Intervention Group and N = 16 for the Control Group). This specific intervention utilizing CCHCs is a viable coaching/mentoring intervention that needs additional exploration in replication studies. At least when it comes to *Caring for Our Children* standards this is a first demonstration of an effective training/technical assistance/coaching/mentoring intervention.

In summary, the intervention appeared to be most effective in making improvements in the following areas:

- Children being immunized,
- Received training on proper medication administration,
- Received and reviewed safe sleep policies and have been trained,
- Were provided the necessary education, policies, and procedures for child abuse and prevention,
- Following proper adult hygiene and proper diapering protocols,
- Every Care Plan for children with special needs has the required elements,
- Making sure that infants and toddlers had adequate activities and outdoor play.

Reference

Fiene, R. (2014). *ECELS Infant Toddler Quality Improvement Project (ITQIP) Report of Pre-Test Data Collection*. Middletown: PA. Research Institute for Key Indicators (RIKI_{LLC}).

Richard Fiene, Ph.D., Research Psychologist/President
Websites: [Research Institute for Key Indicators, LLC](#) [RIKILLC](#)
41 Grandview Avenue
Middletown, Pennsylvania 17057
RIKI Direct Business Line: 717-598-8908
Email: RIKI.Institute@gmail.com