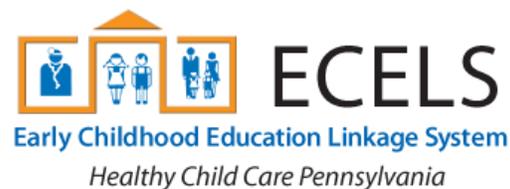


Early Childhood Education Linkage System
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Dear Grant Supporters and Early Childhood System Members,

In July 2016 the Early Childhood Education Linkage System (ECELS) of the PA Chapter, American Academy of Pediatrics, concluded work on a 3-year, federal Early Childhood Systems grant, known as the Infant/Toddler Quality Improvement Project (I/TQIP).

Project Summary:

Thirty-seven (37) Infant-Toddler child care centers at the STAR 2 and 3 level were recruited and randomly assigned to either an Intervention or a one-year Delayed Intervention (Contrast) group. The intervention was assignment of a child care health consultant (CCHC) to work with the program. ECELS Project staff selected 13 standards from a list provided by the Maternal and Child Health Bureau from *Caring for Our Children* for evaluation. Independent evaluators assessed performance of the 13 standards in the centers at project entry, 1 and 2 years later. Each center chose 3 of the 13 health and safety standards to work on with their CCHC. In the second year, in a cross-over comparison, a CCHC was assigned to work with the Contrast centers. The results demonstrated that working with a CCHC effectively improved performance of selected health and safety standards.

The following graph shows the score results over the 3-year period.

Intervention Group

On the pre-test, the range in scores was 175 to 267 with an average score of 212 out of a possible 322 points (66%). On the post-test, the range in scores was 213 to 297 with an average score of 254 out of a possible 322 points (79%). This change from pre-test to post-test was statistically significant ($t = -4.62$; $p < .0001$). The second post-test did not show any significant change but the initial results from the intervention were maintained (254 to 254).

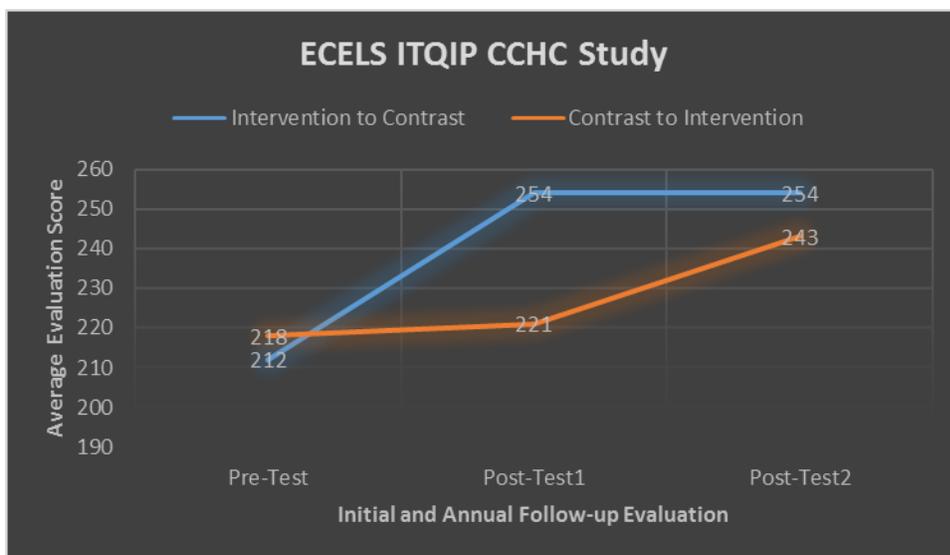
Control/Comparison Group

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 first post-test. All these changes from pre- to post-test were non-significant. The second post test showed significant change from the previous initial post-test to the second post-test (221 to 243) ($t = -1.80$; $p < .08$) when this group received the intervention.

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 (254) and Control (221) groups on the post-test were statistically significant ($t = -3.46$; $p < .002$). The second post test

showed no significant difference between the post-intervention scores for the initial intervention group and the control/comparison (delayed intervention) group change (254 vs 243).



The results demonstrate that the intervention of working with a Child Care Health Consultant (CCHC) was very effective in the pre to post-test scores. This intervention helped to improve the overall quality of specifically targeted health standards, such as:

- receiving training on medication administration;
- receiving and reviewing safe sleep policies and training;
- receiving the necessary education, policies, and procedures for preventing and recognizing child abuse;
- following proper adult hygiene and proper diapering protocols
- ensuring infants and toddlers had adequate physical activities and outdoor play.

These improvements occurred in both the original intervention and when the control group was switched to a delayed intervention group. This is a very significant finding because it clearly demonstrates the strength of this intervention (CCHC coaching/mentoring) and its lasting value i.e. the original intervention group sustained its original quality gains.

The infographic, "Pennsylvania Infant Toddler Quality Improvement Project," summarizes the results of this grant. Please share and disseminate the infographic to inform colleagues, stakeholders and early care and education staff.

Care Plans for Infants and Toddlers with Special Needs

Initial assessment of performance related to children with special needs revealed only 1 out of 66 infants and toddlers identified with a special need had a care plan in place and signed by the child's health care professional.

As a result of this area for improvement, ECELS prepared specific resources to help programs perform better. ECELS developed tools for programs to use to ensure children with special

needs have care plans documented and program staff are informed and trained to meet the daily needs of the child. The documents are available on the ECELS website at [Care Plan for Children with Special Needs and Process to Enroll](#)

Although this topic was not associated with a statistically significant improvement for the Immediate Intervention centers, there was a statistically significant improvement for the Delayed Intervention centers after Post-test2 on the question, “Every reviewed Care Plan for children with special needs includes the required elements.”

Post-test2 revealed 39 infants and toddlers identified with a special health care need in the remaining 26 centers. Only 15(38%) of the I/T with identified special health care needs had a care plan signed by a health professional. Four of the 15 care plans had all of the required elements. Sixty-two% of children who have a special health care need did not have a Care Plan at all. Examples of children who had special needs and had no care plan signed by a health care provider included: a child with gastro-esophageal reflux taking Zantac; a child with a history of febrile seizures, multiple children with asthma, multiple children with epi-pens on site, but no care plan describing what they were needed for; autism; non-febrile seizures; a child with torticollis and plagiocephaly, who wore a helmet for treatment every day.

Priority Recommendations to Improve Quality of Care in Infant Toddler Programs

1. Increase Child Care Health Consultation (CCHC) as a Quality Improvement Step

The results of this grant demonstrate the effectiveness of CCHC intervention. CCHC is an evidence - based practice to support health and safety procedure and policy in early care and education programs. More health professionals need to be recruited and taught how to carry out the role of CCHCs to meet the needs of all group care programs in Pennsylvania. CCHCs provide consultation (including assessment of performance and facility compliance with health and safety standards), technical assistance and professional development to reduce risk and promote health of young children and staff. *Caring for Our Children* [Standard 1.6.0.1](#) defines the depth of content areas addressed by child care health consultants. *Caring for Our Children* [Standard 1.6.0.2](#) states programs serving children younger than 3 years of age should have at least monthly visits from a child care health consultant.

How can CCHC be used more effectively in Pennsylvania?

- System-wide identification of CCHC as a key quality improvement area. This includes a proactive, ongoing relationship with child care health consultant as defined by *Caring for Our Children*.
- Strengthen the CCHC support in each Regional Key.
- Promote use of STARS awards funds to pay for CCHC services, currently in *Best Practices in Keystone STARS Financial Award Spending*.
- Promotion of individual program level identification of funds to allocate for CCHC support
- Identification of state level resources to support increased implementation of CCHC
- Recruitment and professional development for additional health professionals to provide CCHC services

2. Child Care Health Advocate (CCHA) for STARS 3 and 4 Programs:

A CCHA is a staff member who has received professional development about how to make sure current health and safety issues are addressed in their program. This role is usually merged with the role of Director or Lead Teacher. CCHA's maximize the services of a CCHC. CCHA's can monitor basic health and safety performance within a program, and seek the support of a CCHC for more complex issues. OCDEL supports the education required for the role of CCHA and the Regional Keys have provided sporadic funding of sections of the 3 credit hour course that uses the PA AAP CCHA curriculum at Northampton Community College. Making this role an expectation for high rated programs (STAR 3 and STAR 4) requires additional system building at the PA Key and Regional Key level.

3. Priority Risk Reduction Topics for Professional Development and Policy:

The federal Child Care Development Block Grant (CCDBG) requirements increase the professional development needed in key areas identified by the ITQIP grant. However, the CCDBG content is very basic and more in-depth professional development options should be promoted.

- a. Medication administration: Professional development for staff giving medication must include observing those who administer medication in group settings to assure proper use of principles when children are actively receiving medication in child care.
- b. Safe sleep policy and practice.
- c. Care plan use and completion to understand and make "reasonable accommodations" for children with any special need.

Please contact Libby Ungvary with any questions or comments about this summary at lungvary@paaap.org or 484/446-3077.

Sincerely,



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