

Caring for Our Children Health and Safety Standards into Child Care Practice: Improving Infant and Toddler Care with Child Care Health Consultation

Introduction:

The Pennsylvania Chapter of the American Academy of Pediatrics (PA AAP), received a 3yr. (8/13-8/16) federal, Community-Based Integrated Service Systems, Early Childhood Comprehensive Systems (ECCS) grant from the Maternal Child Health Bureau. The purpose of the grant was to “improve state infant/toddler child care quality initiatives (Quality Rating and Improvement Systems [QRIS] and professional development) by incorporating 10 or more standards from *Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, 3rd ed. (CFOC3) (1)* focused on the care of infants and toddlers who are enrolled in child care centers.” The grant was administered by the PA AAP Early Childhood Education Linkage System (ECELS) program.

ECELS is a 27 year old program of the PA AAP. ECELS was one of the models for the establishment of the national initiative that created Healthy Child Care America programs in all 50 states. ECELS primary mission is to improve the quality of early childhood education and school age child care programs. ECELS provides consultation, training and technical assistance about health and safety in child care. Much of the work is focused in Pennsylvania. In addition, ECELS share resources with colleagues in other states and countries. ECELS is a statewide professional development initiative of the PA Key. The PA Key works with the Office of Child Development and Early Learning (OCDEL) to provide statewide leadership in the development of an integrated and coordinated system of program quality improvements and professional development supports for early childhood education. ECELS has been a participating stakeholder since the inception of Pennsylvania’s quality rating improvement system, Keystone STARS. Keystone STARS programs range from Star 1 to Star 4, with Star 4 programs having the highest quality rating of care. Keystone STARS primary tool for assessing health and safety for infants and toddlers has been the Infant and Toddler Environment Rating Scale-Revised (ITERS –R) (1). Increasing STARS levels requires higher ITERS-R scores. Scores within the Personal Care Routines (PRC) sub-scale, are some of the lowest performing scores repeatedly in Pennsylvania. Thus, repeatedly there is room for improvement in health and safety practices within infant and toddler care.

Methodology:

ECELS has used the resource, *Caring For Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs*, as a source of best practice standards in assessing health and safety practices since its inception in 1992. These grant resources provided ECELS with an opportunity to continue to improve the quality of care received by infants and toddlers related to CFOC3 health and safety standards in 37 child care centers throughout Pennsylvania. Standards chosen for this grant are listed in table 1

Table 1: CFOC3 Standards

- 1.4.5.2 - Child Abuse and Neglect Education
- 3.4.4.1 - Recognizing and Reporting Suspected Child Abuse, Neglect, and Exploitation
- 2.1.2.1 - Personal Caregiver/Teacher Relationships for Infants and Toddlers
- 2.2.0.2 - Limiting Infant/Toddler Time in Crib, High Chair, Car Seat, Etc
- 3.1.3.1 - Active Opportunities for Physical Activity
- 3.1.4.1 - Safe Sleep Practices and SIDS Risk Reduction
- 5.4.5.2 - Cribs
- 3.6.3.3 - Training of Caregivers/Teachers to Administer Medication
- 3.2.1.4 – Diaper Changing Procedure
- 3.2.2.1 – Situations that Require Hand Hygiene
- 3.2.2.2 – Handwashing Procedure
- 7.2.0.1 - Immunization Documentation
- 3.5.0.1 - Care Plan for Children with Special Health Care Needs

The grant was entitled “Infant/Toddler Quality Improvement Grant (I/T QIP)” and had 3 Objectives:

1. Assess present child care center practices related to Infant/Toddler (I/T) care as defined in 13 Caring for Our Children, 3rd edition (CFOC3) standards in STAR 2 and 3 programs, using the ECELS I/T QIP Evaluation Tool.
2. Assess whether compliance with these practices addressed by selected CFOC3 standards (ie the Evaluation tool items) can be improved with the services of a Child Care Health Consultant (CCHC).
Half of centers will receive immediate involvement with a CCHC/half will act as a comparison group and receive assistance from a CCHC after the second assessment with the evaluation tool one year later.
3. Adopt CFOC3 standards I/T care practices into Pennsylvania’s Keystone STARS program requirements and/or utilize OCDEL professional development resources for enhanced delivery of CFOC3 standards I/T care practices.

Star 2 and 3 programs were chosen for assessment because these programs were familiar with the benefits of Pennsylvania’s quality rating improvement program, but still had improvements to make to attain the highest quality levels. Each STARS level attained comes with an increase in child care subsidy rates for children enrolled in the state child care assistance program, and this incentivizes programs to work to attain a STAR 4 rating.

ECELS has trained Child Care Health Consultants (CCHCs) for many years throughout Pennsylvania using ECELS resources (www.ecels-healthychildcarepa.org) and a few remaining CCHCs had participated in the National Training Institute for Child Care Health Consultants, which had been funded by the Maternal Child Health Bureau until 2013. CCHC work in Pennsylvania has primarily been supported by grants obtained by ECELS. A very limited budget is provided to each of 5 Regional Keys to be used at the Regional Key’s Director’s discretion for CCHC. CCHCs have been shown in previous studies in other states to help child care programs develop health and safety policies, support health hygiene, improve immunization rates, improve hand washing practices and reduce infectious illnesses. (3, 4, 5,6,7). Alkon, et al. reported in *Public Health*, 2014, that using the Nutrition and Physical Activity Self Assessment for Child Care (NAPSACC) intervention, CCHCs were able to improve both child care and parent knowledge of nutrition and physical activity, child care center policies related to nutrition and physical activity, and the Body Mass Index (BMI) of a random sample of children in the centers. (8)

One challenge in using the CFOC 3 standards to improve care, is that standards are written in narrative form. Most standards translate to many different action steps. To assess practices related to the standards in child care programs, an evaluation tool had to be developed. The I/T QIP Evaluation Tool consisted of 4 sections: 1. Demographic Information, 2. Observation Items, 3. Interview items and 4. Training records, written policies, care plans for children with special needs and PA Child Abuse Clearance documentation reviews. As centers were recruited for participation, random assignment was made to either the initial intervention group or the comparison group (delayed intervention group). Scoring for the items within the evaluation tool consisted of the following:

- 0: Never meets item
- 1: Partly (<50%) meets item
- 2: Mostly (= or >50%) meets item
- 3: Fully (100%) meets the item
- NA: Not Applicable
- NOp: Not Observed or No Opportunity to obtain data
- DK: Don’t Know (interviewee response)

All observation items, interview questions and written records were divided into 9 topic areas. (Table 2)

Table 2: Topic Areas:

- CA = Child Abuse
- PR = Personal Relationships
- AO = Active Opportunities for Physical Activity/LA= Limited Physical Activity
- SS = Safe Sleep Practices and SIDS Risk Reduction
- MA = Training of Caregivers/Teachers to Administer Medication
- DC = Diaper Changing Procedure (includes changing soiled underwear/training pants)
- HH = Hand Hygiene
- SN = Care Plan for Children with Special Needs
- IM = Immunization Documentation

Evaluators were trained to use the tool and subsequent to the initial evaluation, a written report for each center was prepared by the Project Coordinator. The report delineated areas of strengths and areas to improve based upon the Evaluation tool results. The report was shared with the center director and the CCHC assigned to the center. The center director/CCHC partners were asked to choose 3 areas for action planning. Action plans included ideas for improvement of general knowledge gaps about the topic areas, technical assistance options (carrying through on knowledge to the early care and education environment practices), and policy development for staff and parent handbooks to direct staff and parent practices related to the topic areas. CCHC experience ranged from highly experienced with many years of previous consultation work, to beginning in the CCHC role. The Project Coordinator (a masters level nurse) mentored CCHCs as necessary and both the Project Director and Coordinator gathered resources relevant to infant/toddler care and distributed them via conference call or e-mail to the CCHCs. In addition, the Project Coordinator reviews quarterly CCHC's encounter forms for the centers and discusses progress on action planning and refers the CCHC to health and safety resources which may be helpful in their work with the centers.

Of the 13 centers in the immediate intervention group which completed 1 year of child care health consultation, Action Plans included the following topics: 12 centers working on Safe Sleep Practices and SIDS Reduction Risk, 11 centers working on Training of Caregivers/Teachers to Administer Medication, 5 centers working on child abuse, 4 centers working on Care Plan for Children with Special Needs, 4 working on Diaper Changing Procedures, and 3 or less centers working on the remaining topic areas.

CCHCs and center directors or their designee worked together for 1 yr. The most common ways in which CCHCs interacted with centers included: providing health education for the director and staff, providing on site consultation at the facility, providing technical assistance by phone or e-mail, providing print or audio-visual materials, helping the facility to comply with state regulations or develop health policies and procedures.

Findings:

Data analysis by Rick Fiene, PhD., of the Research Institute for Key Indicators, revealed a 13% increase in Evaluation tool scores for the group receiving Child Care Health Consultation. (see Table 3). Data analysis occurred for 13 intervention sites (3 child care centers dropped out of the project in the intervention group) and 16 comparison sites.

	Intervention Group				Comparison Group			
	Range	Average	%	Possible Total	Range	Average	%	Possible Total
Pre-CCHC	175-267	212	66%	322	164-271	218	68%	322
Post-CCHC	213-297	254	79%	322	149-257	221	69%	322

Initial Evaluation tool scores for the Immediate Intervention group and the Comparison group were similar (Immediate Intervention=212, Comparison group=218). After CCHC, the Immediate Intervention group had an average score of 254, the comparison group had a score of 221.

Which items from the evaluation tool showed statistically significant improvement after the intervention of a CCHC?

The interventions of the Child Care Health Consultants (CCHC) showed a statistically significant change from pre-CCHC to post-CCHC on 15 items (table 4) and 13 items (table 5) showed a statistically significant change in comparing the Intervention Group post CCHC to the Comparison Group.

Table 4: Statistically Significant Improvement after Child Care Health Consultation

AO 212: Infants are taken outside two or three times a day. (observation)

AO 219: Toddlers go outdoors except in weather that poses a significant health risk. (observation)

AO 306: Do the infants play outdoors each day unless weather conditions pose a significant health risk? (question)

AO 307: Do the infants play outdoors two to three times each day? (question)

AO 315: Do the toddlers play outdoors each day unless weather conditions pose a significant health risk? (question)

CA 310: In the past 12 months, have you received education about child maltreatment? By child maltreatment, I mean physical abuse, sexual abuse, psychological or emotional abuse and neglect, the danger of shaking infants and toddlers and harmful effects of being exposed to domestic violence? (question of the infant teacher)

CA 319: In the past 12 months, have you received education about child maltreatment? By child maltreatment, I mean physical abuse, sexual abuse, psychological or emotional abuse and neglect, the danger of shaking infants and toddlers and harmful effects of being exposed to domestic violence? (question of the toddler teacher)

CA 403: The written policy of the center for reporting child abuse and neglect specifies that 1) caregivers/teachers are mandated reporters of child abuse and neglect, 2) that the facility will report to the child abuse reporting hotline, department of social services, child protective services, or police as required by state and local laws, in any instance where there is reasonable cause to believe that child abuse and neglect has occurred and 3) that every staff person should be oriented to what and how to report. (record review)

CA 404: In accordance with PA Child Care Regulation 3270.192 check whether these (4) four randomly selected records of staff members include 1) a copy of requests for the criminal history record and child abuse registry clearance information, 2) a copy of the disclosure statement and 3) a copy of the completed clearance information required under the Child Protective Services Law—Title 23 of the Pennsylvania Consolidated Statutes Chapter 63 (relating to the Child Protective Services Law) (record review)

DC241: The changing surface is covered with disposable paper; the supplies removed from the containers and placed within arm's reach of the caregiver/teacher doing the change and out of the child's reach. Caregiver puts on gloves at this step if using gloves. (observation)

SS 405: The facility has a written safe sleep policy that explains practices to prevent SIDS and other sleep-related deaths. (record review)

SS406: The facility has documentation that caregivers/teachers of infants have received and reviewed the safe sleep policy before being allowed to care for infants. (record review)

SS 407: The facility has documentation that all caregivers/teachers of infants have received training about safe sleep practices. (record review)

SS 408: The facility has documentation that all parents and anyone else who enters the infant classroom has received and reviewed the safe sleep policy and education about safe sleep practices. (record review)

MA 410: Check training records for the staff mentioned by the director as authorized to give medications to infants and toddlers for documentation that these individuals have received training, within the year, from a health professional to give medication (record review)

Table 5: Statistically Significant Improvement between Intervention and Comparison Groups:

AO 211: The infants go outdoors except in weather that poses a significant health risk. (observation)

AO 306: same as table 4

AO 307: same as table 4

AO 315: same as table 4

DC 241: same as table 4

DC 249: The caregiver/teacher uses a separate fresh wipe to clean her/his and the child's hands. The caregiver/teacher puts the used wipes in the hands-free can. (observation)

HH 261: Times when hand hygiene for adults should be done (adults observed in the toddler room) (observation)

HH 263: Times when hand hygiene for children should be done (children observed in the toddler room) (observation)

MA 410: same as table 4

IM 413: The immunization records for the children in the TODDLER room show that the children are up-to-date. (record review)

SS 405: same as table 4

SS406: same as table 4

SS 407: same as table 4

In addition to the above evaluation tool items with statistically significant improvements, a noticeable increase in Care Plans for children with health care needs were available in child care programs after Child Care Health Consultation. Standard 3.5.0.1 - Care Plan for Children with Special Health Care Needs, was chosen as the standard to improve via a continuous quality improvement method (with a plan-do-study-act cycle).

Discussion:

The I/T QIP grant provided CCHC linkages to 37 centers (5 add-on centers were included in the event centers dropped out of the program). In all, 59 directors, 348 infant or toddler teachers and 1490 infants and toddlers were directly reached by this grant. Several challenges existed during the grant period. Over the one year time period for the provision of a child care health consultant, there were a wide variety of numbers of directors involved with various centers. 12 of the 37 programs had 2 to 4 directors during the one year period. This change in center leadership often made the work involved in improving infant and toddler care via child care health consultation extremely difficult. For the immediate intervention group, 3 of the original 16 centers withdrew from the grant. One center in the delayed intervention group closed during the grant period. Some programs were so overwhelmed with maintaining ratios in classrooms and staffing issues, that directors were not able to concentrate on action planning for health and safety improvements and either dropped out or had limited contact with their CCHC. The provision of knowledge via professional development is only the beginning for improved practice for the care of infants and toddlers. Taking acquired knowledge to subsequently improve actual practice is a more challenging step. Policy writing for many directors is difficult work even with the templates provided by the printed resource, *Model Child Care Health Policies, 5th edition*, Susan S. Aronson, MD, FAAP, editor (available through the AAP on-line bookstore @ www.aap.org) and may require corporate or board approval, which can take months to receive, if the program is part of a multi-site corporation. Despite these obstacles, many directors, teachers and infants and toddlers benefitted from the services of child care health consultation during this grant.

Many successes in improving health and safety practices for infants and toddlers are notable. A brief note of thanks from a program director to her CCHC read, "I am so proud of our center and how far we've come in our time spent during the project! You have been such an amazing consultant and I have learned so much from you. Thank you for all of your insight and for helping us reach our goals! I am looking forward to our final evaluation." As a member of Pennsylvania's leadership team in the provision of consultation, training, and technical assistance about health and safety in child care, ECELS "braided" its state financial resources for statewide professional development provision with the goal of enhancing recommendations of selected Caring for Our Children standards in this grant. Multiple webinars, free to Pennsylvania providers and offering child care provider professional development credit, were provided through ECELS professional development deliverable contract with the PA Keys, Office of Child Development and Early Learning. Webinars are all recorded and available at the ECELS website.

The Project Director, Beth DeIConte, MD was able to provide a webinar with Eileen Carlins, MSW, LSW, Director of Support & Education for Cribs for Kids, located in Pittsburgh. This webinar incorporated safe sleep practices from CFOC3 standard 3.1.4.1 and the national AAP. As an extension of collaboration throughout the early childhood system, ECELS arranged for 30 home visitors to attend a workshop by Ms. Carlins on safe sleep practices and how low income families could receive free Pack and Play cribs from Cribs for Kids. This effort provided parents with the same message from home visitors and child care providers about AAP safe sleep practices. Multiple home visiting programs agreed to be distribution sites for Pack and Play cribs for Cribs for Kids after the workshop presentation. Statistically significant increases in the number of written safe sleep policies in centers, in the number of teachers and parents who reviewed the safe sleep policies and were educated about safe sleep practices were a result of grant participation by the centers. An additional significant success related to safe sleep practices and SIDS reduction risk is that a program in the delayed intervention group during the second year of CCHC was able to spread its newly developed safe sleep policy from its center to be used system wide in other centers within the corporation.

In Pennsylvania during the grant period, 24 pieces of legislation were enacted, changing how Pennsylvania responds to child abuse. These changes significantly impact the reporting, investigation, assessment, prosecution and judicial handling of child abuse and neglect cases. ECELS child abuse workshop and self-learning module were revised during

the course of the grant period to reflect these changes. While awaiting state approval for child care provider professional development credit and Act 48 (department of education) credit, ECELS referred providers to Penn State Hershey's Center for the Protection of Children, which offered an interactive, free online learning module called iLook Out for Child Abuse. Hershey Center's module was approved to meet the child abuse training legal requirement for early educators.

Having statistically significant increases in the number of both infant and toddler teachers educated about child abuse and how, as a mandated reporter, they are required to personally report suspected incidents, as well as centers having required clearance documents on file for these teachers is a positive result of this intervention.

Several observation and caregiver questions revealed a statistically significant increase in infants/toddlers being taken outside to play, although only 2 of the immediate intervention programs chose to work on this topic as an action planning item. Several professional development activities were presented including the use of The Alabama ECCS grantees, Alabama Department of Public Health, "Building a Healthy Start" modules created for both nutrition and the promotion of physical activity for infants and toddlers in early childhood settings. The PA ECCS Project Coordinator was able to use content from these modules to present a workshop at the Delaware Valley Association for the Education of Young Children (DVAEYC) annual conference and to mentor a CCHC who presented a workshop at the statewide Early Care and Education Summit. For these presentations, a Pennsylvania specific resource list, the "Infant-Toddler Physical Activity Resource List" was developed. The list highlights specific developmentally appropriate activities both indoors and outdoors for infants and toddlers. The list was sent to CCHCs to utilize with their program either for professional development or on-site technical assistance. The list is available through the ECELS website using the search box on the home page. Lastly, utilizing its role as a state wide provider of professional development, ECELS was able to provide a webinar, free to child care providers, on "Active Play: Reducing Risk and Promoting Health", by Dr. Susan Aronson and 2 Certified Playground Safety Inspectors, Betsy Caesar and Tyrone Scott. The content covered included: the importance of active play to support social-emotional, cognitive and physical development of young children, the leading hazards that cause the most common injuries in active play environments and tools to implement a plan for active play area maintenance. Another example of a focus on improving active opportunities for physical activity include a delayed intervention CCHC center receiving a grant to purchase further equipment both indoors and outdoors.

No special training is required under Pennsylvania child care regulations, nor incorporated into the STARS quality rating improvement system for medication administration in child care. Dr. DelConte has spoken directly with the OCDEL Deputy Secretary and the Director of the Bureau of Early Learning about the need for certification regulations to require this training. During the course of the grant, the Project Director, Beth A. DelConte, MD was able to provide via webinar, a two part series, for a total of 3 hours of state approved child care provider professional development credit on practices for safe medication administration in early care and education settings. The course was available to all providers throughout Pennsylvania. The course content focused on safely storing, managing and administering medication, and was based on the Healthy Child Care America course from the national AAP. ECELS also refers child care providers to the national AAP Healthy Futures Curricula Pedialink online learning module, Medication Administration in Early Education and Child Care, as an additional option, free of charge to providers, available @ <http://www.healthychildcare.org/HealthyFutures.html>. ECELS also has developed a Medication Administration skills checklist for additional professional development credit for caregivers. A health professional can use the checklist to observe and document proper use of the Safe Medication Administration course practices. Statistically significant increases in the number of the staff mentioned by the director as authorized to give medications to infants and toddlers, now have documentation that these individuals have received training, within the year, from a health professional to give medication, is a further accomplishment of this grant.

The definition of a child with special health care needs is noted in the standard as: "A child who has or is at increased risk for chronic physical, developmental, behavioral or emotional conditions and who requires health and related services of a type or amount beyond that required by children generally." CFOC3 notes that any child who meets this criteria should have a Care Plan completed. The standard lists 14 components necessary to consider for a child's daily or emergency needs related to the health care need(s). The Project Coordinator reviewed each Care Plan and determined which of the components were necessary for each child's optimal care.

The Project Coordinator discovered several examples of children who had no care plan for their health care needs signed by a health care provider. These included: 1. a child with gastro-esophageal reflux taking Zantac, 2. a child with a history of febrile seizures, 3. multiple children with asthma, 4. children with epi-pens on site, but no care plan describing what they were needed for, 5. autism, 6. non-febrile seizures, 7. a child with torticollis and plagiocephaly, who wore a helmet for treatment daily.

Initial assessment by the Project Coordinator revealed 66 infants and toddlers identified with special health care needs in the 32 original centers. Only 15 (23% of children with special health care needs identified) of infants and toddlers having a special health care need had a Care Plan signed by a health care professional. Only 1 of 66 infants and toddlers with special health care needs had a care plan signed by a health care professional with all necessary components for optimal daily and/or emergency care. All CCHCs were asked to share the ECELS Care Plan and the explanation of the information needed for special health care needs. CCHCs were asked to complete two surveys and two audio-conferences were provided by the Project Director and Coordinator to understand challenges programs faced in obtaining care plans and then to provide education and resources to obtaining the necessary information in care plans. Only 4 programs in the immediate intervention group chose the topic area of care plans for children with special needs as an action plan item. Two additional forms were developed as a result of this continuous quality improvement process to support obtaining and utilizing care plans on site for enrollment and optimal care of children with special health care needs. First, a form entitled “Process to Support Enrollment of a Child with Special Needs” was developed. This form is an algorithm or map that describes the steps to follow to obtain and use a care plan. The form instructs child care providers to introduce the care plan and the explanation of the care plan to all parents at the time of enrollment and encourages the child care program to have a written policy about children with special health care needs. The family is asked to provide a copy of the care plan so the staff can plan prior to enrollment, to meet the child’s needs and to remain safe while participating in the program. The director /or designee is asked to review the care plan to make sure instructions for staff are clear. Often times care plans are written in medical language and require further explanation. Child care providers are encouraged to contact the child’s health care provider if clarification is needed. A parental signature on the care plan gives child care providers permission to discuss content on the form requiring clarification with the health care provider. The director or designee is to determine if the staff needs any professional development concerning the special need (including medication administration or special procedures) and arrange for it. Child care providers are instructed that children should not be in the program if it is not safe to care for them without the care plan instructions or necessary training.

A second form was developed for child care providers to assess the content of the care plans which are received from a health care provider, entitled “Care Plan Checklist for Children with Special Needs”. This allows the director/or designee to make sure all necessary components are completed. All 4 forms are available on the ECELS website, www.ecels-healthychildcarepa.org. These forms were also shared by ECELS lead TA coordinator at a joint statewide meeting for the PA Early Learning Council and the State Interagency Coordinating Council. ECELS staff frequently discusses with child care providers the many steps necessary to optimally care for children with special health care needs and refers providers to known resources for support and education. Sometimes resources are lacking such that children with special health care needs can not be enrolled safely in child care programs. CCHCs working with programs found they were most successful at providing optimal care plans for children with condition specific care plans, for example, children with food allergies, for which a national template and multiple educational resources from the Food Allergy Research and Education website, at www.foodallergy.org are available.

After 1 year of Child Care Health Consultation for the immediate intervention group, the care plans obtained from the immediate intervention group and the comparison group were assessed. The immediate intervention group had 30 infants and toddlers identified with special health care needs. 11 (37% of children with special health care needs identified) had care plans signed by a health care professional and 2 had all necessary components. The comparison group had 51 infants and toddlers identified with special health care needs and only 3(6% of children with special health care needs identified) had care plans. Although CCHCs were able to begin the process of inclusion for children with special health care needs by increasing the number of care plans available to child care providers, many children still exist with poorly defined and understood health care needs in their child care environments. Collaboration between families, child care providers and health care professionals continues to be urgently required for optimal inclusion of these children into child care programs. Expanded access to the service of CCHCs would increase the numbers of children who could be accommodated into child care programs with special health care needs.

To lessen the spread of infectious diseases for I/T and staff, best practice for diaper changing is delineated in standard 3.2.1.4. ECELS uses a Diapering Poster created by CCA Global with ECELS guidance, using the steps from CFOC3 for professional development and on site technical assistance. The poster may be reproduced and distributed to child care professionals free of charge from the ECELS website. Two steps which showed statistically significant

improvement after CCHC were: 1. the use of changing table paper, the gathering of supplies needed for the change from the container in which they are stored prior to the beginning of the change and the use of gloves and 2. The use of a separate fresh wipe to clean the caregiver's and the child's hands after removal of the gloves before the fresh diaper is put on. The caregiver/teacher puts the used wipes in the hands-free can. The process of a supervisor frequently observing diaper changing technique was encouraged by the CCHC to continue to promote best practice.

Only 2 centers chose to work on improving hand hygiene in the immediate intervention group with their CCHC. Two evaluation tool items documenting the observation of the times that toddlers and caregivers should have their hands washed showed statistically significant improvement after CCHC, but there was no similar improvement noted for infants and their caregivers. One center was quite creative in having parent's wash their I/T hands upon arrival each day and hung posters that said, "take a vacation day or a sick day, hand washing works".

Working with a CCHC was not directly associated with an increase in the percentage of I/T who were noted to be up to date (UTD) on their vaccines according to center records in this project. It is of note that only 1 of the 13 immediate intervention centers chose to work on immunization status as an action planning item. The immunization record check using the computerized tool WellCareTracker™ was performed to assess up-to-date reporting status of records for I/Ts in child care programs. Results reveal that on average only 23% of infants had up-to-date (UTD) immunization records on file at the centers and only 42% of toddlers had UTD immunization records on file at the centers on the initial evaluation. One year after working with a CCHC, the immediate intervention group did show an improved percentage of infants as being UTD (36%), however, the comparison group also showed an improvement of the percentage of infants that were UTD (38%). Toddler UTD immunization percentage for the immediate intervention group remained unchanged at 43% and the toddler UTD immunization rate for the comparison group dropped to 27%. No penalty exists for a lack of documentation of up-to-date vaccine status in centers in PA, so centers do not view documentation of UTD status in their child care centers as a priority. Measles and pertussis are reported sporadically throughout PA. The role that early care and education programs in PA can play to enhance immunization rates on a timely basis is being ignored, and made acceptable practice by a lack of enforcement of immunization documentation in child care programs.

ECELS has reviewed the feasibility of adopting CFOC3 standards I/T care practices into Pennsylvania's Keystone STARS program requirements and/or utilize OCDEL professional development resources for enhanced delivery of CFOC3 standards I/T care practices.

The grant Project Director spoke with the OCDEL administration about the limitations of the present CCHC system within Pennsylvania. The present state of OCDEL supported CCHC in PA is fractured and financial investments are marginal. Virtually no Regional Key in the PA Key support system has instituted CCHC as outlined in CFOC 3rd edition. Each Regional Key (five total) has a person in charge of CCHC, but they have very different preparation to carry out this role. Some are technical assistance and professional development administrators (not health professionals), others are administrators with health care experience and one is a nurse hired by the key to provide limited hours as a CCHC for an area with hundreds of child care centers. This constitutes the skeletal "CCHC Regional Key's team". Each Regional Key has different functions for Child Care Health Consultation. Some Regional Keys contract with health professionals to provide professional development about health and safety. Others offer limited technical assistance in a problem - targeted approach. Some use the funding for evaluation of health and safety practices and the develop a time limited action plan. OCDEL provides financial support to ECELS for " professional development for any and all individuals considering themselves CCHCs or any other PD or TA provider for early care and education programs with an interest in health and safety." 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. PA AAP ECELS is motivated to system build so all Pennsylvania directors, teachers/caregivers can receive CCHC services at the frequency recommended in the CFOC3 standard. To extend the work of the CCHC, an additional recommendation for the requirement of the position of a Child Care Health Advocate (CCHA) in STARS 3 and 4 Program

was made. 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, Assistant 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.

The grant Project Director also made 3 priority risk reduction recommendations for professional development based upon the successes of this grant. 1. Professional development for all staff members who administer medication in child care settings must occur. Content should focus on safely storing, managing and administering medication. Medication Administration is the most common topic area chosen for action plan improvement in the immediate intervention group centers. This recommendation should be strengthened by regulatory revision and broad ranging professional development work. It is also vital that a component of professional development involve observing those who administer medication in group settings to assure proper use of principles when children are actively receiving medication in child care. 2. Safe sleep policy and practices in all child care environments. 3. Care plan completion by a health care professional to understand and make "reasonable accommodations" for children with any special need. In 2016, the Office of Child Development and Early Learning, initiated a revision of the Pennsylvania quality rating and improvement system, Keystone STARS. An initial group of stakeholders of the early childhood system has drafted Core Principles to include: The Whole Child, Relationships, Diversity/Equity/Respect, Professionals, Alignment and Scalability, and Continuous Quality Improvement. The 3 priority recommendations are compatible with these core principles and PA AAP ECELS will continue to advocate for inclusion of these priorities within the Keystone STARS system.

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