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**Adding Coaching to Child Care Health Consultation
(CCHC) Services:**

**Evaluation Findings from North Carolina's Race to the Top
Early Learning Challenge CCHC Project**

Submitted to the North Carolina Partnership for Children

Allison De Marco, MSW, Ph.D.

Doré R. LaForett, Ph.D.



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The report is available at <http://fpg.unc.edu/projects/evaluation-smart-starts-race-top-early-learning-challenge-child-care-health-consultant-proj>

TABLE OF CONTENTS

List of Figures & Tables.....	4
Background & Significance.....	5
Methods & Results.....	8
Methods Overview.....	8
Implementation & Impact of Coaching.....	9
Reports on CCHC Training and Sessions Spent on Consultation vs. Coaching.....	9
Consumer Interviews and Focus Groups.....	11
Quality of Implementation Survey.....	34
Intersections across Implementation & Impact of Coaching Data Sources.....	40
Achievement of Outputs & Outcomes	41
Outputs: Services Provided by CCHCs.....	41
Outcomes: Quality of Health & Safety Practices, Teacher Knowledge about Best Practices in Health & Safety.....	44
Sanitation Scores.....	44
Teacher Knowledge of Health & Safety Practices.....	46
Intersections across Outputs & Outcomes Data Sources.....	53
Summary & Implications.....	54
Recommendations.....	57

LIST OF FIGURES AND TABLES

Figure 1. Conceptual Framework

Figure 2. Consultation and Coaching Sessions (FY 2014-2015)

Figure 3. Counties Served by Quality of Implementation Survey CCHC Participants

Figure 4. Number of ECE Facilities Receiving Smart Start-funded CCHC Services (FY 2011-2012–FY 2014-15)

Figure 5. Number of On-site Consultations Made to ECE Facilities by Smart Start-funded CCHCs (FY 2011-2012–FY 2014-15)

Figure 6. Number of Children Enrolled in ECE Facilities Receiving On-site Consultation from Smart Start-funded CCHCs (FY 2011-2012–FY 2014-15)

Table 1. Settings Served by CCHC Focus Group Participants

Table 2. Employment Settings for ECE Provider Focus Group Participants

Table 3. Demographic Table for Quality of Implementation Survey Participants

Table 4. Settings Served by Quality of Implementation Survey Participants

Table 5. Age Groups Served by Quality of Implementation Survey Participants

Table 6. Receipt of Coaching Strategies

Table 7. Services CCHCs Received from Regional Coaches

Table 8. Services ECE Providers Received from CCHCs

Table 9. Satisfaction with Coaching

Table 10. FYs 2011-2015 Outputs: Services Provided by Smart-Start Funded CCHCs

Table 11. Sanitation Scores and Demerits

Table 12. Change in Teacher Knowledge: Sanitation

Table 13. Change in Teacher Knowledge: Medication Administration

Table 14. Change in Teacher Knowledge: Handwashing

Table 15. Change in Teacher Knowledge: Toileting/Diapering

BACKGROUND & SIGNIFICANCE

Child Care Health Consultants (CCHCs) are health professionals knowledgeable about child health and development as well as child care safety. CCHCs work with early childhood program (ECE) facilities to promote healthy environments for children and staff. This work often begins with a comprehensive review of the program's health needs using assessment tools, such as those developed by the NC Child Care Health and Safety Resource Center (NCCCHSRC). Together, the CCHC and center director select an area in which to focus the CCHC's work. This may revolve around ensuring health and safety regulations are met, inclusion of children with special needs, injury prevention, and so on. The CCHC subsequently provides consultation to the center through periodic site visits and phone calls to promote healthy and safe environments for young children in child care settings in North Carolina. This is done by:

- Assessing the health and safety needs and practices in the child care facility.
- Developing strategies for inclusion of children with special care needs.
- Establishing and reviewing health policies and procedures.
- Managing and preventing injuries and infectious diseases.
- Connecting families with community health resources.
- Providing health education for staff members, families, and children.¹

Initial evaluations of CCHC services received in 77 child care centers revealed significant increases in the quality of written health and safety policies and health practices, which brought improved children's access to a medical home, take-up of health insurance, immunization rates, and a wide range of screenings (Isbell, Kotch, Savage, Gunn, Lu, & Weber, 2013).² In 2013, North Carolina's federal Race to the Top, Early Learning Challenge (RTT-ELC) project funded enhancements to these services to *increase the percentage of children with high needs who participate in ongoing health care as part of a schedule of well child health visits, and of those participating children, the percentage who are up-to-date in a schedule of well-child care.*

The RTT-ELC-funded enhancements included explicitly infusing coaching, a mutually-agreed upon relationship between two people who are working to achieve an agreed-upon goal or intended outcome, within CCHC services. This was done by: 1) developing a statewide regional coaching module for the coaching process with specific coaching strategies; 2) hiring 3 Regional Coaches to be trained in the module, and use coaching in interactions with CCHCs; and 3) training current and new CCHCs in the module so that they, with support from their Regional Coach, could integrate coaching in interactions with ECE providers. Coaching might be used:

1. To acknowledge and improve existing knowledge and practices;
2. To develop new skills; or
3. To promote continuous self-assessment and learning on the part of the person being coached (Rush & Sheldon, 2011).³

¹ healthychildcarenc.org

² Isbell, P., Kotch, J., Savage, E., Gunn, E., Lu, L., & Weber, D. (2013). Improvement of Child Care Programs' Health and Safety Policies, and Practices, and Children's Access to Health Care, Linked to Child Care Health Consultation. *Dialog*, 16(2), 34-52.

³ Rush, D.D., & Sheldon, M. L. (2011). *The early childhood coaching handbook*. Baltimore, MD: Brookes.

In the early childhood setting, coaching strategies may be used to build capacity for specific professional dispositions, skills, and behaviors (NAEYC, 2011).⁴ Coaching may promote professional growth and development, or to integrate specific, new practices and policies. The process uses reflective questioning, consideration of what has or has not worked in the past, observation, and feedback. The coaching module developed by the NCCCHSRC provides definitions for five specific coaching strategies to be used in CCHC service delivery:

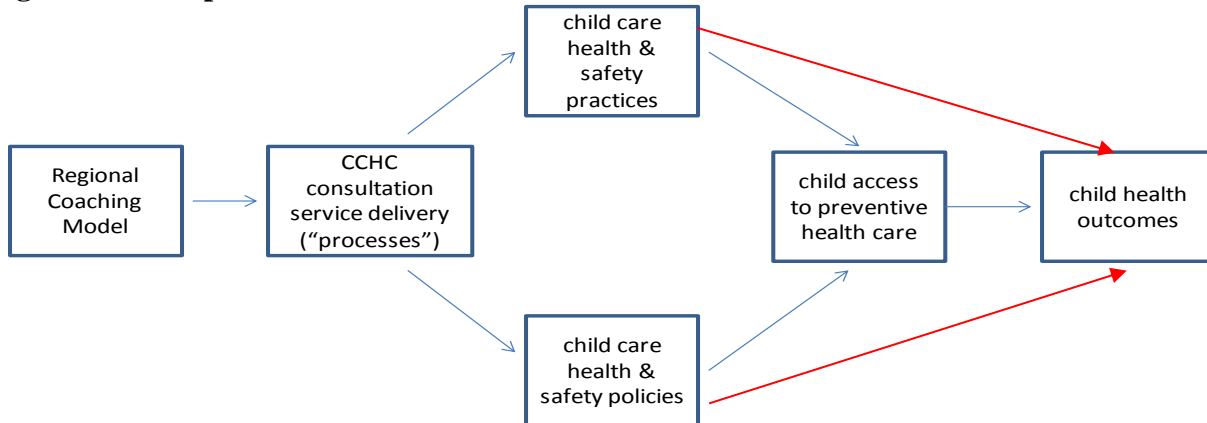
1. *Joint planning* – Joint planning is an agreement by the coach and the coachee on the actions they will take during a coaching visit or the opportunities that the coachee will take to practice a skill, strategy, or idea between coaching visits.
2. *Observation* – Observation is the examination of another person’s actions or practices for the purpose of developing new skills, strategies, or ideas. Observation of the coachee practicing or using recently discussed ideas and strategies is a critical characteristic of the coaching process.
3. *Action/practice* – Action/practice refers to spontaneous or planned events that occur in real life situations that provide the coachee with opportunities to practice, refine, or analyze new or existing skills.
4. *Reflection* – Reflection involves the examination of existing strategies or practices to determine if they are consistent with the evidence-based practices and how they may need to be modified to obtain the intended outcomes. Reflection helps to identify knowledge that the coachee already has and techniques and strategies they have already tried.
5. *Feedback* – Feedback is information provided by the coach based on his/her direct observation of the coachee, actions reported by the coachee, or information shared by the coachee. It provides information the coachee wants and helps to problem solve on what else they might try.

Three Regional Coaches received training and supervision from the NCCCHSRC in the coaching module. These Regional Coaches then trained CCHCs who in turn are expected to use coaching strategies in their consultation work with child care staff. Training of CCHCs in the coaching module began in February 2014. The most recent cohort completed training in January 2016.

To further examine the addition of the coaching module to CCHC services, a comprehensive evaluation study was designed to determine how well the module, combined with coaching from the Regional Coaches, is meeting stated goals. To guide the design of the evaluation study, the evaluation team developed the conceptual framework on the next page to depict the addition of the coaching module to CCHC service delivery.

⁴ National Association for the Education of Young Children. (2011). *Early Childhood Education Professional Development: Training and Technical Assistance Glossary*. National Association of Child Care Resource & Referral Agencies.

Figure 1. Conceptual Framework



The questions for the evaluation study were as follows:

Evaluation Question 1: To what degree is the RTT-ELC CCHC project achieving each of the anticipated outputs and outcomes identified in the Expected Results?

1. *Outputs.*
 - a. 2320 early care and education facilities statewide will receive CCHC consultation each year
 - b. 12,760 on-site CCHC consultations will be provided annually
 - c. Over 80,000 children across the state will be enrolled in child care facilities that receive on-site CCHC consultation each year
2. *Outcomes.*
 - a. 75% of Medicaid-enrolled children at 15 months and at 3-6 years are up-to-date in the schedule of well-child health care
 - b. 95% of Medicaid-enrolled children less than 1 year of age receive developmental screenings
 - c. 85% of Medicaid-enrolled children ages 1-2 years receive developmental screenings
 - d. 75% of Medicaid-enrolled children ages 3-5 receive developmental screenings
 - e. 95% of teachers report increased knowledge of best practices in health and safety
 - f. Improve or maintain quality of health and safety practices in participating facilities
 - g. 10% increase in child immunization rates

Evaluation Question 2: What is the impact of the CCHC coaching module?

1. How does the coaching module affect each of the anticipated outcomes for the project?
2. Does the coaching module have a larger effect for certain subpopulations? For instance, are there differences based on geographical location, urbanicity, child care center star ratings, child characteristics, teacher characteristics, CCHC level of education and experience, etc.?

Evaluation Question 3: What is the impact of additional CCHCs in the Transformation Zone?

1. How do the additional CCHC's affect each of the anticipated outcomes for the project?
2. Do the additional CCHCs have a larger effect for certain subpopulations? For instance, are there differences based on child care center star ratings, child characteristics, teacher characteristics, CCHC level of education and experience, etc.?

METHODS & RESULTS

Methods Overview

The overall purpose of the evaluation was to examine the impact of the CCHC coaching module, focusing on changes in CCHC practices (i.e., support from Regional Coaches, implementation of the coaching module) and anticipated impacts on key outputs in service delivery areas and outcomes for ECE programs, providers, and children served. Although the most rigorous test of the CCHC coaching module would be to conduct a randomized controlled trial (RCT) assigning CCHCs to treatment (i.e., coaching module) or control (i.e., no coaching module) groups, this research design was prohibitive given that all NC CCHCs were expected to be trained and implement the coaching module upon its launch. An alternative research design would have been to collect data prior to the launch of the coaching module and again following implementation after a determined period of time. However, this design largely could not be carried out by the evaluation team for feasibility reasons. Specifically, the “rolling” training and implementation of the coaching module prevented: 1) establishing a “true” baseline for pre-intervention data collection, and 2) determining an intervention window for establishing an end point for post-intervention data collection that could be conducted within the evaluation timeline. Instead, the team developed a research plan that generated primarily descriptive data. Efforts were made to collect data before and after the launch of the coaching module when possible. As a result, the methods for the evaluation study subsequently prevented the ability to draw causal conclusions that any observed changes in practices, outputs, or outcomes were due to the launch of the coaching module, which could only have been determined by an RCT approach.

A variety of quantitative and qualitative data collection methods were employed to examine the three evaluation questions. The core focus of the evaluation is comprised in Evaluation Question 2, “What is the impact of the CCHC coaching model.” To generate rich, descriptive information on the implementation and impact of coaching, individual interviews were conducted with the three Regional Coaches which focused on their experiences being trained in the coaching module and providing services to CCHCs. Similar data were obtained via focus groups with CCHCs, ECE providers, and families in CCHC-served ECE programs to learn about experiences with CCHC services and coaching. The sampling strategy for these interviews and focus groups consisted of population- (i.e., Regional Coaches) and regional-level approaches (i.e., CCHCs, ECE providers, families). Although CCHC implementation defines three state regions (West, Central, and East/Transformation Zone), the evaluation specified the Transformation Zone (TZ) as its own region when regional-level sampling was employed. In addition, a web-based Quality of Implementation Survey was collected from CCHCs and ECE providers to learn about their experiences receiving coaching. The sampling strategy for these surveys was at the population level for CCHCs and for a targeted sample of ECE providers based on caselogs submitted by CCHCs to the evaluators in late 2014. Data from interviews, focus groups, and web-based surveys were supplemented with descriptive information from the NCCCHSRC on Regional Coaches’ and CCHCs’ participation in the coaching module training, along with reports of CCHCs’ consultation and coaching sessions from 2014-2015.

Evaluation Question 3, “What is the additional impact of CCHCs in the Transformation Zone,” similarly addressed information about the implementation and impact of CCHCs and coaching in this specific region of NC. In addition to the interviews and focus groups within the TZ

described above, interviews were conducted with an ECE program director and her CCHC at two time points to produce a case study highlighting CCHC work in this region. An additional interview with the director of a local Smart Start Partnership provided further information on the TZ. These data collection methods used a targeted sampling strategy to recruit the three individuals to participate (i.e., CCHC, ECE director, partnership director). To protect these participants from deductive disclosure, findings specific to the TZ are described in a separate report to the North Carolina Partnership for Children (NCPC) and are not presented here.

Whereas Evaluation Questions 2 and 3 generated information about the implementation and impact of coaching, Evaluation Question 1 focused on whether the RTT ELC CCHC project achieved its intended outputs and outcomes. To examine outputs, extant data from NCPC were obtained and included the number of programs served by Smart Start-funded CCHCs, the number of facilities receiving on-site consultation, the number of on-site consultations, and the number of children enrolled in CCHC-served programs receiving on-site consultations. For outcomes data, it was agreed that the evaluators would gather data on the quality of health and safety practices among sites served by CCHCs as well as ECE teachers' knowledge of best practices in health and safety⁵. Quality of health and safety practices was measured using sanitation data from the North Carolina Department of Child Development and Early Education (DCDEE). For the full population of programs that received CCHC services, data were collected for 2013 and 2015 to determine if sanitation scores improved with the introduction of coaching. An examination of the health and safety subscales from the Environmental Rating Scales (ERS) was also planned; however these data are only collected for programs on the higher end of the star-rating system (i.e., higher quality programs) and would not have provided a diverse sample. Teachers' knowledge of best practices in health and safety was measured using pre/post surveys administered to ECE providers during CCHC-led training sessions. These surveys examined knowledge in 4 health and safety areas: sanitation, handwashing, diapering/toileting, and medication administration. The data were restricted to providers who attended trainings in these topics that were offered by Smart-Start funded CCHCs who offered trainings in these topics.

Implementation and Impact of Coaching

Reports of CCHC Training and Regional Coach Sessions Spent on Consultation vs. Coaching

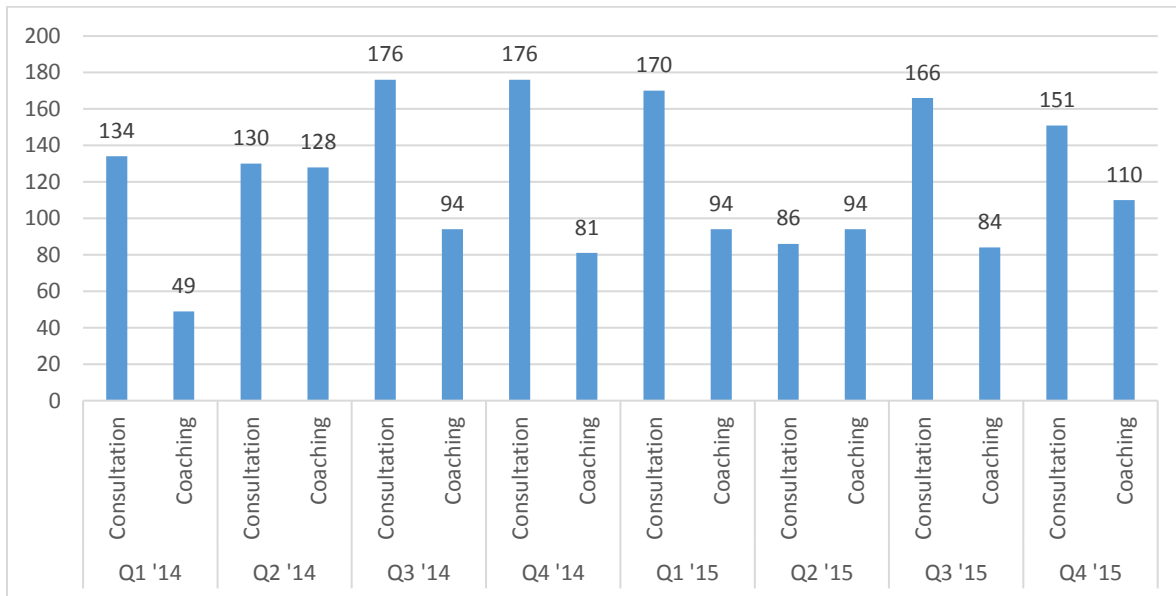
Extant data on CCHC training activities and Regional Coach consultation and coaching sessions were obtained through reports accessed via the Resource Center. Data on CCHC training activities included CCHCs' participation in small group trainings on coaching conducted by the Regional Coaches between February 26–September 14, 2014 (Western $n=25$; Central $n=26$; Eastern/TZ $n=23$; total $n=74$). An additional 24 CCHCs completed training on coaching through the module in the NC CCHC Training Course and through one-on-one/small group work with

⁵ At the onset of the evaluation, it was determined that outcomes related to well-child visits and developmental screenings for Medicaid-enrolled children would be examined by another evaluation funded by NCPC and therefore were not included in the data collection plan for the present evaluation. Further, obtaining reports of child immunization rates for CCHC-served programs over the period of the evaluation was deemed not feasible. Instead, a sampling of immunization rates obtained from ECE providers participating in the Quality of Implementation survey relative to the average for the state is included in the results for descriptive purposes only.

Regional Coaches (August 2014 – January 2015 $n=7$; January to June 2015 $n=11$; August 2015 to January 2016 $n=6$). As of January 2016, the grand total of CCHCs trained in coaching was 98.

Data on Regional Coaches’ consultation and coaching sessions were available in quarterly increments from 2014 through 2015 (Figure 2), which illustrate patterns since the implementation of the coaching module. Coaching sessions were defined to include both in-person and remote coaching, and therefore were not limited to on-site visits. Across 2014, Regional Coaches provided 616 consultation sessions and 352 coaching sessions. Across 2015, there were 573 consultation sessions and 382 coaching sessions. The number of consultation sessions was stable for the first two quarters of 2014, but then increased in the third quarter through the majority of 2015. This shift coincided with the majority of CCHCs having been trained in the coaching module. There was also a sharp increase in coaching sessions between the first and second quarter of 2014, when perhaps the first CCHCs trained in the coaching module began implementing it in the field and needed coaching support. However, since then, there was a large drop in coaching sessions in the second quarter of 2014 which remained stable throughout 2015; this drop nonetheless still indicates a higher number of coaching sessions conducted compared with the first quarter of 2014. At each quarter, the number of coaching sessions was less than generally half the number of consultation sessions conducted.

Figure 2. Regional Coaches’ Consultation and Coaching Sessions (FY2014–2015)



Summary. It is clear from these data that training of CCHCs in the coaching module has occurred on a “rolling” basis over the period of two years. As a result, CCHCs as a group varied in their capacity to implement coaching in their service delivery. Whereas the quarterly data showed an initial increase in coaching sessions by the Regional Coaches after the first quarter of 2014, a drop after the second quarter and subsequent relative plateau does not comport with the increased numbers of CCHCs being trained in coaching. That is, these numbers do not reflect a reasonable expectation that coaching sessions would increase following training when CCHCs would need that support. Further, the disparity between the number of consultation and coaching

sessions suggests that consultation remains the dominant form of service delivery among the Regional Coaches, and that barriers to increasing coaching sessions should be examined.

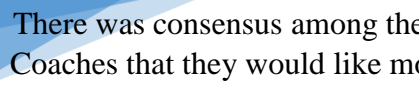
Consumer Interviews and Focus Groups

To gather information about the implementation and impact of the coaching module, evaluators collaborated with NCPC and Resource Center staff to develop a Consumer Protocol for conducting interviews (Regional Coaches, local partnership staff in the TZ) or focus groups (CCHCs, ECE directors and teachers, families). Questions were tailored to participant group to broadly understand experiences with CCHC service delivery, with additional questions for TZ participants. Demographic surveys were completed at the end of each focus group or interview.

Notes were taken from each interview or focus group session. Based on this information, theme analysis, an inductive process used to identify emerging themes generated from specific pieces of information in the data, was conducted. A primary goal was to uncover themes around the most pertinent information being sought for the study, such as the implementation of the coaching module as well as stakeholders' (ECE providers, parents, CCHCs) perceptions of the impact of the program and its successes. The themes identified for each group are elaborated below, followed by a summary of commonalities across multiple groups.

Regional Coaches. All three Regional Coaches of CCHCs were invited to participate in interviews, rather than focus groups, given the small number of coaches and the desire to obtain more in-depth information from this group. All three Regional Coaches (Western, Central, Eastern/TZ) participated in phone interviews during May 2015. Due to the small number of Coaches participating in the study, demographics will not be reported.

The purpose of the interview was to learn about Regional Coaches' experiences with their role, including their training to become a Regional Coach, how they support CCHCs in their work, and perceptions of the CCHC project overall. The interview focused on how the Regional Coach utilized the coaching module to support CCHCs and to encourage its use with ECE providers.



There was consensus among the Regional Coaches that they would like more formal training in coaching from FIPP, and for that training to occur sooner upon being hired into the Regional Coach role.

Training. Regional Coaches provided information on the training experiences they had for their role. There was some variability in training experiences based on when the Regional Coach was hired. With regard to content and formal training, the Regional Coaches described participating in the CCHC training, the CCHC coaching module training, and Motivational Interviewing. They also described

several informal and/or self-study training experiences. One common informal training experience involved observations and conversations with Resource Center staff. Regional Coaches were also informal resources for each other. In addition to seeking resources on their own, Regional Coaches read a book about coaching and materials from The Family, Infant and Preschool Program (FIPP) Center for the Advanced Study of Excellence (CASE) in Early Childhood and Family Support Practices. They then tried to adapt this information based on their own field experiences.

There was consensus among the Regional Coaches that they would like more formal training in coaching from FIPP, and for training to occur sooner upon being hired into the Regional Coach role (note: at the time of these interviews, the Regional Coaches were scheduled to attend FIPP training within the next several months). In particular, Regional Coaches expressed interest in having formal training cover coaching-related topics such as: understanding what coaching is; how to get individuals to interact with the coach; how to coach individuals who do not want to be coached; how to adapt one's previous experiences as an expert in a specific content area (e.g., nursing, health education); how to keep motivated as a coach; and how to support others to use coaching. Other suggestions for enhancing the training included conducting mock observations and role plays with the CCHCs, and having increased support or direct involvement from the CCHC Association. One Regional Coach identified participation in the CCHC Association Conference as a pivotal experience for becoming integrated in the CCHC community.

Coaching. The Regional Coaches varied in how they conceptualized coaching. One Regional Coach described coaching as:

"...taking people from where they are to where they want to go...not telling people how to solve their problems but have them reflect on whether their practice is leading to desired results."

Another provided a distinction between consultation and coaching, saying:

"Coaching is when you're addressing a problem that is typically related to emotions (fear, frustration). The CCHC needs to recognize the emotions coming up and put aside other things that were on the agenda to take care of the problem with feelings."

Regional Coaches defined their roles in many ways. For example, one Coach talked about using her role to foster CCHCs' confidence and ultimately practice capacity. This Coach expressed that building the CCHC's confidence was vital for their practice to be effective, and that the Coach can motivate the CCHC but cannot "do it for them." This Coach added that evidence of this confidence would be seen if the CCHCs only call the Coach when they have questions. Coaches also provided the following descriptors of their role: being available; being ready; being physically and emotionally present; having strong content knowledge; making the CCHC feel valued; and connecting CCHCs with other individuals if the Coach cannot provide the needed answers. One Coach described the importance of the strong relationships she has built with CCHCs, where the relationship is one characterized by trust and that it is not supervisory or threatening. This Coach shared that one of her CCHCs refers to her as her "safe place."

Regional Coaches were asked to describe their use of coaching strategies in the interactions with CCHCs (i.e., Regional Coaches providing coaching to CCHCs) and how they encouraged CCHCs to use coaching strategies (i.e., CCHCs providing coaching to ECE providers). Indeed, in her description of coaching, one coach alluded to this "parallel process" across the Regional Coach, CCHC, ECE provider, and parent. Regional Coaches described engaging in each coaching strategy to a variable degree, and the examples they provided depicted using the strategies in isolation rather than as a unified process.

Joint planning. All Regional Coaches described using joint planning in their direct support of CCHCs. This was depicted as a collaborative activity primarily driven by the CCHC, and was pivotal for getting buy-in from the CCHC. The process for creating the plan included identifying an issue, a target goal, and steps for how to arrive at the goal. These steps specified

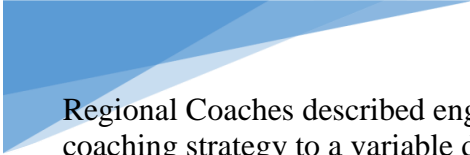
actions to be taken by the Regional Coach and actions to be taken by the CCHC. One Regional Coach emphasized the importance of the plan featuring multiple strategies for reaching the target goal. Once developed, the information was written down as a “coaching plan.”

In terms of Regional Coaches’ encouragement of CCHCs to use *joint planning* with ECE providers, Coaches’ generally commented on relationship building. One recommendation given by Coaches is that CCHCs find something specific for which they can help the child care program. When CCHCs face resistance from programs, Coaches described recommending CCHCs seek advice from others and not force the issue. One Regional Coach remarked that CCHCs are unsure about what *joint planning* entails, and the Coach described this as a process that requires perseverance while working together “*to learn what the site wants to do.*”

Observation. There was mixed use of *observation* strategies by Regional Coaches with CCHCs. One Coach stated that she had not been able to visit her CCHCs’ sites. Other Coaches had observed CCHCs’ practice. Coaches described offering to go to centers and observing a CCHC work with a site director. One Coach remarked that Coaches observing CCHCs’ practice “*will become more normalized once it is part of the CCHC’s formal training.*”

Similar to CCHCs’ use of *joint planning*, one Coach stated that CCHCs are unsure about how to use *observation* strategies. This Coach suggested that tools to make this process clearer (e.g., a “cheat sheet” to structure an observation reflecting the program’s goal) may help CCHCs.

Action/practice. The Regional Coaches did not describe engaging in *action/practice* strategies in interactions with CCHCs. There was mixed response about CCHCs’ use of *action practice/strategies* with ECE providers. Although one Coach expressed that CCHCs are unsure about how to use *action/practice strategies*, one Coach shared how she and CCHCs worked to ensure that *action/practice* strategies were reflected in the coaching plan by including opportunities for ECE providers to practice their skills; for CCHCs to model their practice; for CCHCs to check the provider’s practice in the moment; and for CCHCs to check the provider’s practice on a subsequent site visit.



Regional Coaches described engaging in each coaching strategy to a variable degree, and the examples they provided depicted using the strategies in isolation rather than as a unified process.

Reflection. Relative to other coaching strategies, the Regional Coaches provided several examples of using *reflection* strategies in interactions with CCHCs. Coaches described using open-ended or reflective questioning, with more directive questioning as needed. One Coach elaborated on the strategies she used in the reflective process, such as having the CCHC review steps in the original plan; talk about the steps in her process/practice, including any assistance received from TA providers and other professionals; reflect on how well the plan worked, particularly if the plan did not go as expected; and talk about ideas for moving providers toward the target goal. Reflection time was also used to discuss the Coach’s observation of the CCHC’s practice. Coaches have provided reassurance to CCHCs and encouraged them to acknowledge their own knowledge and practice expertise. To that end, Coaches encouraged CCHCs to think of a variety of solutions to situations encountered in their practice, but also stated it was okay if they did not come up with answers right away. Still, one Coach indicated that CCHCs were not

comfortable engaging in *reflection*. For instance, one Coach expressed that it is difficult when a CCHC makes statements such as “[just] tell me what the rules say.”

Regional Coaches described how they encouraged CCHCs to use *reflection* with ECE providers. For example, one Coach encouraged CCHCs to use reflective statements themselves, ask ECE providers to reflect back the CCHC’s statements, and ask open-ended questions that allow the ECE providers to describe their practice. One theme Coaches expressed related to the importance of recognizing that a “top-down approach” does not work. For instance, one Coach stated:

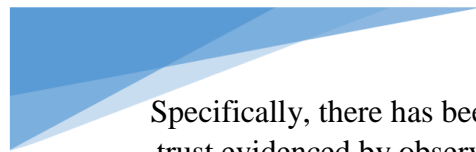
“We talk about how [CCHCs] coming up with solutions for [ECE providers] does not work. We want them to come up with ideas on their own so they will be more invested. We don’t want staff to be more dependent on CCHCs, we want to increase their capacity. ‘I’ll fix it for you,’ doesn’t fix anything.”

In addition, one Coach remarked that the idea of “readiness for coaching” has also been part of reflection conversations. This was conceptualized as making sure the person being coached has a willingness to do their part and that the person has a clear understanding about what to do.

Feedback. Regional Coaches did not describe many examples of using *feedback* strategies. One example was providing specific suggestions on how to use *reflection* strategies, described above. One Coach indicated that she gave feedback on how the CCHC handled questions from ECE providers and specific suggestions offered to providers.

Program Successes and Practice Challenges

Coaching. Regional Coaches had mixed opinions about the implementation and impact of the coaching module. One Coach indicated that having a Regional Coach and the coaching module has been helpful to CCHCs. For example, one Coach had the impression that CCHC practices are starting to become more uniform across the state, and that CCHCs seem less confused than in the past. Coaches also agreed that communications among the Coaches and between the CCHCs and Coaches have improved, using regular contact across different communication modalities. In terms of impacts on ECE providers and the children, the Coaches identified positive outcomes such as programs expressing the value of having a CCHC; helping programs bring up or keep their star ratings; and being able to catch outbreaks, diseases, and other health and safety issues.




Specifically, there has been an increase in trust evidenced by observations that ECE providers who turned away CCHCs in the past are “*now opening their doors and calling CCHCs for services and advice.*”

One highlight of success was the impact of RTT-ELC funding on services in TZ counties. These funds enhanced the capacity to provide more CCHC services in these counties. The impact of this investment is reportedly realized in changes such as identifying programs that need intensive services and more ECE providers wanting CCHC services. Specifically, increased trust has been shown where ECE providers who turned away CCHCs in the past are “*now opening their doors and calling CCHCs for services and advice.*”

Nonetheless, the Regional Coaches identified numerous aspects of the Coach role and implementation of the coaching module that need improvement. Some Coaches expressed challenges with trying to define their role as Coach. There was consensus that a significant

complicating factor in role definition is that the Coach is not the CCHC's direct supervisor, but instead is a helpful resource to the CCHC. These role challenges have created communication difficulties across Coaches, CCHCs, and the supervisors at the local Smart Start partnerships. A concrete example of this difficulty can be seen when the Coach's plan for practice is different from that of the CCHC's supervisor. These confusions also carry over to ECE providers' misunderstandings of the CCHC role.



"I'm still waiting for someone to tell me coaching has been put in their quarterly report [to their local partnership or funding agency]. On the quarterly report they ask how many visits you did, not how many coaching sessions you have led."

In addition to these challenges, the Regional Coaches indicated that some gaps and inconsistencies in fully implementing the coaching module remain. There was consensus that coaching still needed to be formally defined for CCHC practice. One Coach indicated that there needed to be multiple repetitions of the coaching module in order for CCHCs to "get it." Further, one Coach noted that although

CCHCs are being encouraged to use coaching, their professional title has the word "consultant" in it, creating some ambiguity. Also, there was the perception that coaching has not been emphasized as a priority for CCHC practice as illustrated by one Coach:

"I'm still waiting for someone to tell me coaching has been put in their quarterly report [to their local partnership or funding agency]. On the quarterly report they ask how many visits you did, not how many coaching sessions you have led."

Indeed, one Coach suggested that formalized coaching feedback loops are needed for CCHCs to become embedded in the coaching process. Other challenges Coaches identified for themselves included being told by CCHCs that they do not want the Coach's help; dealing with CCHCs who get discouraged; and having to cover such a large geographical region.

Infrastructural issues. Regional Coaches identified numerous infrastructural issues that play a role in CCHC service delivery more broadly. At a proximal level, more than one Coach pointed out the issue of CCHC services being limited to certain counties. For example, one Coach frequently receives calls from providers who do not have a CCHC, and she encourages them to contact their local partnership and express their need for a CCHC. One Coach stated that a systematic framework is needed across counties for embedding CCHC services. Within counties served, CCHCs feel frustrated about limitations on their availability to serve their assigned ECE programs. For example, a CCHC may only be able to visit a site once a month, or may experience significant resistance from sites while trying to establish a partnership. In addition, Coaches mentioned turnover of CCHCs due to funding constraints as a significant challenge. As a result, they worried that the state is losing high-quality CCHCs and that CCHCs express fears about job security. Further, delays in hiring for new or vacated CCHC positions, particularly when combined with a lengthy 6-month training, result in additional gaps in service delivery. One Coach specified that CCHCs need more training in Motivational Interviewing and reflective questioning. Another suggestion was to have more systematic follow-up from the CCHC Association conference (e.g., conducting a survey on issues encountered by CCHCs, learning what questions CCHCs have about the coaching module).

At a distal level, the Regional Coaches described the ECE field undervaluing CCHCs' work despite their positive impacts on children's health and safety. One Coach stated that CCHCs' impact on improving children's outcomes needs to be demonstrated so that ECE providers, other health professionals, legislators, and the public better understand what CCHCs do, how much they are committed to this work, and that they are protecting children in child care and keeping them healthy. This will require better communication overall.

Some Regional Coaches expressed that a more multi-disciplinary focus on young children's health and safety, rather than specialty-focused efforts, was needed and that these efforts should be characterized by better communication and more coordinated care. For example, inconsistencies (e.g., using different terminologies) exist across early childhood and health care systems in how they serve children and families. Avoiding duplicative efforts across ECE providers, CCHCs, and technical assistance providers are needed, as are better services in health and safety issues targeting children and families (e.g., expanding Medicaid coverage).

Summary. Core themes identified by the Regional Coaches spanned the areas of training, coaching, and program successes and practice challenges. In the area of training, the dominant themes were that Coaches needed formal training in coaching, and that the training needed to occur sooner in their employment. In Regional Coaches' use of the coaching module with CCHCs, the Coaches appeared to use the coaching strategies in isolation, rather than as a unified process; further, some coaching strategies seemed not to be used at all. This practice was mirrored in their description of CCHCs' use of coaching strategies, indicating that CCHCs were confused about several of the coaching strategies.

Several areas of program success were identified, including increased interest in CCHCs by ECE providers and progress toward uniformity in CCHC practices. In terms of challenges with Regional Coaches implementing coaching, a key theme was a disconnection in local partnerships' understanding of the Coaches' role, which has created strain for the CCHCs. Further, the Regional Coaches agreed that for CCHCs, coaching has not yet been well-defined as applied to CCHC practice. Another key theme was that the value of the coaching process has not been reflected in local Smart Start partnerships' expectations for how CCHCs are to be delivering services. Infrastructural issues impacting the implementation of coaching included: limited numbers of CCHCs; heavy caseloads spread across wide geographic regions; high turnover of CCHCs; and concerns about funding and job security.

Taken together, there appears to be emerging evidence of the promise of adding Regional Coaches as an enhancement to the CCHC service delivery model. The full impact of the Regional Coaches cannot be determined for several reasons, namely the gaps in the training experienced by the Regional Coaches and the extent to which they have fully implemented the coaching module in their direct work with CCHCs. In addition to CCHC turnover and geographic constraints, Regional Coaches' abilities to effectively implement coaching have been limited by CCHCs not understanding parts of the coaching process, some CCHCs being resistant to coaching, and that coaching has not been marked as a valued practice in CCHCs' reporting processes. Improvements in training, as well as funding to build increased service capacity, would help facilitate uptake in Regional Coaches' implementation of the coaching module.

CCHCs. CCHCs were invited to participate in regional focus groups (Western, Central, Eastern, or TZ). A total of 24 CCHCs participated during March and April 2015. Nearly all of these CCHCs described themselves as White/European American females. On average, CCHCs

were 44.6 years old ($sd = 13.5$; $range = 25-68$). Nearly two thirds had a Bachelor’s degree (62.5%); another quarter of CCHCs had an Associate’s degree with the remainder having a Master’s degree. Again, nearly two-thirds indicated that their highest educational degree was in the field of Nursing, and this same proportion reported Nursing as their health profession. The next most frequently reported educational degree field was Health Education (25%).

Across these CCHCs, 23 different counties were represented, with 10 of these counties represented by more than one focus group participant. Most of these CCHCs (75%) reported serving only one county. On average, CCHCs have been in their CCHC role for nearly five years ($mean = 4.9$; $sd = 5.2$; $range = 0-16$). The breakdown of years as a CCHC was as follows: less than one year: 16.4%; 1-5 years: 37.4%; 6-10 years: 16.7%; and greater than 10 years: 12.5% (information was missing for three individuals). The majority of CCHCs (58.3%) were employed by a Smart Start local partnership, with nearly all others being employed by the local health department. Further, the majority (75%) reported that they are employed full-time as a CCHC. Table 1 describes the ECE programs served by these CCHCs:

Table 1. Settings Served by CCHC Focus Group Participants ($n=24$)

Descriptor	Percentage
Primary geographical work setting	
Urban	8.3%
Rural	37.5%
Mixed	54.2%
Setting type	
Non-profit child care, single site	37.5%
Non-profit child care, multiple sites	45.8%
For profit child care, single site	45.8%
For profit child care, multiple sites	87.5%
Head Start/Early Head Start, single site	29.2%
Head Start/Early Head Start, multiple sites	58.3%
School district	41.7%
Other	8.3%
Ages served	
Infants (birth-younger than 12 months)	100%
Toddlers (1-2 year-olds)	100%
3-year-olds	100%
4-year-olds	95.8%
5-year-olds	91.7%
Kindergarten*	16.7%
1 st -12 th grade	0%
Mean proportion serving 50% or greater low-income families	68.6% ($sd = 17.6$)

*Some participating CCHCs were funded by non-Smart Start sources. Smart Start-funded CCHCs do not provide services for kindergarten-age or older children.

The purpose of these focus groups was to learn about CCHCs’ experiences in their role, including their training to become a CCHC and in the coaching module, their implementation of coaching in interactions with ECE providers, and their perceptions of the CCHC project overall. Common themes that emerged in each topic area are described with examples.

Training. CCHCs discussed their training for the CCHC role, as well as specific training on the coaching module. A common endorsement was that the training, and the support from the Regional Coach, was helpful. Indeed, CCHCs in the majority of the regions felt that the training was helpful. One CCHC reported: *“the 6-month CCHC training was very good and very intense.”* A veteran CCHC also stated:

“[When I] started 15 years ago when there was nothing, the hospital had been structured, was told ‘here’s your budget...good luck!,’ had to figure it out, buddied up with school health nurse – figured out outcomes, had to find centers because nothing was established then, no resource center and coach, this framework is good.”

CCHCs shared how they appreciated support from Regional Coaches during the training process. They provided examples of how Coaches supported CCHCs’ learning of the coaching module, such as having opportunities to observe coaching and engage in role plays. Specifically, one CCHC discussed how coaching was a new way of interacting with providers and so her coach helped by role-playing with her. Two CCHCs described their experiences with their Coach:

“[Coach] has been very helpful with the health and safety assessments, which we never did before. She walked us through it step by step [because it was] something that was foreign to us.” Moreover, *“When there are challenges on the model we could call her for clarification. When the health and safety assessment came out we thought we had to do all 13 pages instead of just what the center needed. [She helped] clarify how to use the tool and how to document using the tool.”*

“[My coach] helped with a case about a mom who didn’t transition the baby from breastfeeding to bottle before coming to child care. It was helpful to see how [she] handled the situation. Good learning opportunity. She used open-ended questions and got to talk directly with the mom. Then went back to the director and teachers in the classrooms about ways to transition the baby. They needed a better space for breastfeeding so we went over that too. When it first rolled out there was confusion about expectations and [the Regional Coach] contacted me to let me know she was available for help. Now we look for opportunities to utilize the more experienced coaches and when the experienced coaches have questions.”

The second theme that arose was a gap or delay in receiving training. Several CCHCs spoke about starting their job and having to deliver services before participating in the training session, which was challenging. This was true for both CCHCs who were new to the role and those who had been doing the job for a number of years. Newer CCHCs stated: *“I started in October but training wasn’t until January...the formal training,”* *“I figured things out on my own”* and *“I missed the first face-to-face. They said ‘Go and do it’ and I said ‘do what?’ I worked on auditing immunization reports.”* Another CCHC reported: *“I concur with everyone. When I came, I came from Head Start. When I came, I wasn’t briefed, I was just sent into the field.”*

Still another CCHC elaborated:

“I’ve seen a lot of frustration from partnerships and CC’s in long transition periods because it takes so long to get training ... can’t offer trainings they (ECE staff) need yet, try to meet needs

as best as I can but I have to wait, 120 centers in the county so I've had to say I can't help, [Regional Coach] helps troubleshoot, also use [other support person] to bounce ideas off of. I would like to attend a training over a few weeks and have it be more intense rather than drag it out over 5-6 months."

Third, CCHCs commented on the format of the trainings. There was some concern that the current format did not meet preferred learning styles and was too removed from actual practice. In the words of one newer CCHC:

"I'm currently in the training. I don't learn that way best. When we did a visit at a playground that helped. The training itself would not be as helpful. I'd rather hear from people, see ideas, go with people. You get a checklist with links to resources, need to answer questions. It doesn't feel like a good use of my time at this point...I have to make time for the training. It is hard to just sit behind a computer. I'd rather go out and do it."

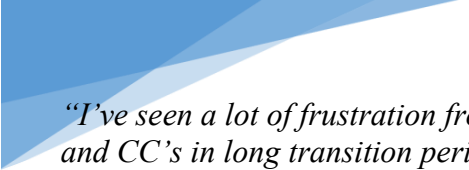
Finally, some CCHCs felt overwhelmed in the training because of the amount to learn and the reading (*"the books were overwhelming."*). This was related to both formal and informal training. One CCHC stated:

"The training was overwhelming and time consuming and overwhelming with all the laws ... threw me for a loop. It was all online so it was a lot to absorb. So many resources. Need to breakdown to 'What do I really need and what does this center need to know.'"

One CCHC who had just been hired a few months earlier reported: *"I still don't know what I am doing, even with the module, it is different and overwhelming."*

Other themes endorsed by a few CCHCs included: 1) too much paperwork required; 2) more training needed, particularly regarding coaching (*"The training is not enough. I've learned more about coaching from other sources."*); 3) appreciation of training in Motivational Interviewing; and 4) having to adapt training to the specific context (*"Can adapt [this] to my own county as needed...address different needs of counties."*). Other suggestions for improving training and feeling more supported included offering incentives, adjusting training length (longer or shorter but more intense), changing formats (more hands-on, real-life observation; in-person sessions), and more connections to resources.

Coaching. CCHCs were asked to describe their use of coaching strategies in the interactions with ECE providers. Like the Regional Coaches, CCHCs described engaging in each coaching strategy to a variable degree, and their examples typically showed using the strategies in isolation rather than as a unified process.



"I've seen a lot of frustration from partnerships and CC's in long transition periods because it takes so long to get training ... can't offer trainings they (ECE staff) need yet, try to meet needs as best as I can but I have to wait, 120 centers in the county so I've had to say I can't help, [Regional Coach] helps troubleshoot, also use [other support person] to bounce ideas off of. I would like to attend a training over a few weeks and have it be more intense rather than drag it out over 5-6 months."

Joint planning. Several CCHCs described using *joint planning* strategies. Having a collaborative, rather than directive, attitude was a theme that marked CCHCs' approaches to *joint planning*. A number of them conceptualized this strategy as a mechanism for empowering ECE providers. For example, CCHCs said:

"But doing it with them not for them, needs to be what they think needs to happen."

"It's empowering – the joint process – work together to see what best meets everyone's needs, becomes engrained in the approach"

"Start out with "what works for you" "What do you want to change" then I observe and establish a common goal as foundation, everyone's opinion is valuable."

Further, one CCHC's example suggested that *joint planning* is an iterative process that evolves over several meetings and is developed based on data-driven goals. Specifically:

"I use action plans and we will look at it together. We will do an assessment together and look at the results together. I leave them with a copy to think about it. I remind them not to get upset about things where they need improvement. Then I come back the next week and they tell me what they're interested in working on and we create an action plan."

In total, these examples illustrate a relationship characterized by collaboration and the idea that both the CCHC and ECE provider have valuable expertise to contribute. These sets of expertise, along with other information such as findings from observations and assessments, are critical components to the process of developing joint goals that are meaningful to the ECE provider.

Observation. There was mixed use of *observation* strategies by CCHCs, with variability in the frequency and time spent in observation. Some CCHCs reported conducting observations on a weekly basis, whereas others have not done them at all. When conducting observations, there was consensus that CCHCs used note-taking strategies to document what they are seeing, and then they refer back to resources that specify "...*best practices to find out the answers.*" Several CCHCs shared that they have offered to do observations at ECE programs, but if the providers did not accept these offers the CCHC did not push the issue.

Action/practice. Several CCHCs shared their experiences implementing the *action/practice* strategy. Multiple CCHCs remarked that this strategy meets a particular need of ECE providers, where the CCHC can provide an opportunity to go through a procedure step-by-step given that providers sometimes forget parts of a procedure's sequence. One CCHC reported:

"My biggest success has been in the modeling area. I've mostly done observing and modeling."

Other CCHCs elaborated on how they have incorporated other strategies such as visual aids, props, and role plays while implementing the *action/practice* strategy. For example:

"I've done a little bit of role playing with my staff members. Like if there's a disagreement with a parent. We will role play to prepare them."

These comments perhaps suggest that CCHCs see particular value in the hands-on or active learning component that is central to successfully implementing action/practice.

Reflection. Various CCHCs described using the *reflection* strategy, such as asking ECE providers to share their thoughts, even in a candid way. Several CCHCs talked about trying to communicate to ECE providers that the CCHC is there to support the provider, saying:

“I remind them that I am there to work with them, not report them.”

CCHCs shared that this process involves figuring out what programs are willing to do, acknowledging good ideas, balancing director and teacher wants and needs, and discussing what is minimally necessary for being in compliance. Having a copy of the health and safety policies was noted to be helpful to check that ideas are consistent with regulations.

Feedback. Several CCHCs mentioned that *feedback* was the coaching strategy they most often implemented. One CCHC shared:

“I think they get a lot of verbal feedback from me. Anything we mark inadequate we provide feedback on and check in with them again. Also with positive things they do. We give feedback on positive things.”

Several CCHCs described being strategic in delivering feedback, including balancing positive and negative feedback, not giving all feedback at once, and timing feedback to coincide with a recently completed assessment.

Program Successes and Practice Challenges

Coaching. Again like the Regional Coaches, CCHCs had mixed opinions about their ability to implement the coaching module and its impact. Some CCHCs took a positive outlook on incorporating coaching into CCHC services. Notable examples included CCHCs’ descriptions of using specific coaching strategies to promote ECE providers’ empowerment and to help CCHCs establish trust, such as dealing with providers’ resistance and attaining buy-in.

However, CCHCs described many challenges with implementing coaching. One key theme was resistance from ECE providers and the difficulty of establishing trust. CCHCs shared experiencing resistance to initiating a relationship with an ECE provider, as well as examples of resistance in the context of an established relationship.

One newer CCHC talked about her experiences and need to build trust when starting out, saying:

“I was having a hard time with counties... they wanted to call someone else not me because I was new so I needed to build relationships – brought new stuff to them to get in the door, they weren’t comfortable at first. I’m still learning to be able to share and build a working relationship with child care staff.”

Others reported not being allowed in the door of child care programs when they showed up to introduce themselves. Several CCHCs noted:

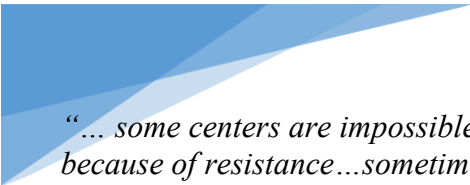
“... some centers are impossible to coach because of resistance...sometimes you can coach and sometimes you have to drag them kicking and screaming...[Program] is impossible to coach because they had so far to go.”

Once a relationship is established, a CCHC suggested that CCHCs needed to be careful and strategic in negotiating the relationship. She stated: *“Need to get your foot in the door. Tread carefully. Say you will only be there a little while. Don’t overstay your welcome. Be aware of their schedule and let them invite you.”*

These examples illustrate the importance of successful relationship building as a gateway to providing coaching. Even once the relationship is established, CCHCs need to be continually mindful of encountering resistance while implementing coaching. For example, one CCHC pointed out how the *feedback* strategy can bring out resistance from ECE providers, stating: *“When I’ve made recommendations, I’ve been told ‘that won’t work’ or ‘I’ve tried that.’”*

Another theme raised by CCHCs was the idea about a possible conceptual mismatch between coaching and the subject area of health and safety. Supporting this, CCHCs noted:

“It has been very difficult because sites want you to tell them what to do and then you do it. And modeling is fine, but then they want you to do it every time instead of themselves.”



“... some centers are impossible to coach because of resistance...sometimes you can coach and sometimes you have to drag them kicking and screaming...[Program] is impossible to coach because they had so far to go.”

“The coaching is a great idea in theory. You would think it would make things come together, but it doesn’t work that way.”

A specific illustration of this conceptual mismatch may occur when working with providers with high and/or emergent needs, either making coaching difficult or not a good fit for the services needed. One CCHC summarized this issue:

“I don’t see it working because staff call you at the last minute when their assessment is coming up. I haven’t found anyone with whom I could do the coaching because people are calling me with their emergencies. It takes a long time to learn how to do coaching, but I am not sure it is worth the time because of the lack of buy in with working with CCHCs. They only want us to be there for emergencies.”

In total, CCHCs saw potential value for specific coaching strategies to help with relationship building, creating trust, and empowering providers. Yet, the challenge of developing a relationship with an ECE provider in the first place is a major barrier to implementing coaching. Further, the idea of a possible conceptual mismatch between coaching and the realities of CCHC

service delivery also raises questions about expectations for the implementation and impact of coaching.

Infrastructural issues. The CCHCs identified numerous infrastructural issues that play a role in CCHC service delivery more broadly. At a proximal level, CCHCs described challenges related to balancing the time-consuming nature of coaching with having heavy caseloads. Specifically, CCHCs expressed that covering more providers is perceived as more desirable than working in-depth with a few. These thoughts are exemplified in the following comments:

“I have a lot on my radar. I can’t get to everyone, or do intense work with everyone.”

“For our quarterly report, we need to report the number of centers we are working with. If you truly do coaching, your numbers will be lower.”

“You don’t get credit for multiple visits.”

“Do you want us to focus on coaching or on numbers?”

“The partnerships decide who you need to focus on.”

At a distal level, CCHCs talked about role confusion, reporting that providers often did not understand the CCHC’s role particularly because they do not have a “regulatory function.” That is, CCHCs are not regulatory and cannot force ECE providers to make changes; instead they can provide support to help the program perform better when regulatory agencies do visit the program. Although this idea paints CCHCs as helpers and resources rather than rule enforcers, some CCHCs expressed that ECE providers subsequently dismiss CCHCs for this reason. Some ECE providers reportedly used this as a reason to prevent CCHCs from entering a program.

To compound this situation, CCHCs described how the lack of clarity between the various agencies that address health and safety issues in child care settings creates inconsistencies among various systems. This situation creates added stress and compliance issues. For example:

“I think there could be a better relationship between DCDEE, the resource center, and CCHCs about the best practices forms. Like the Carolina Breastfeeding. There’s too many different forms for them to use and they’re all different. I wish there was more collaboration.”

“Want all EC consultants to be on the same page---Instead of ‘Well, licensing didn’t say that, consultant didn’t say that.’”

This last remark reiterates how CCHCs may be put in a bind as they try to support programs that view the CCHC’s contributions as less important.

When ECE providers do implement the CCHC’s recommendations, some CCHCs felt that some ECE providers seem to only use best practices when the CCHC is present. One CCHC said:

“It is frustrating when sites just do the best practices on the day of the assessment then go back to bad practice. Some want to ‘just get by.’”

Not only does this comment illustrate challenges in attaining balance between best practices and minimum requirements, but also the difficulty of sustaining changes in practice. This comment also reflects concerns about the processes used by the field to assess child care quality.

CCHCs expressed a desire for the child care field to understand their role and the contributions they make to young children’s health and safety. In terms of bringing awareness to their role, CCHCs stated observations such as: *“Trying to partner with TAs within partnerships and explain what CCHCs do”* but *“Don’t know how aware parents are of CCHC benefits to centers and want to educate residents and parents.”*

In addition, many CCHCs talked about the value of their work because of the importance of young children, saying:

“How important children are for the future, more we can do to help have a good beginning”

“If we don’t help kids with health and safety, those kids will be sicker than us and not able to take care of us. Many kids will not outlive their parents.”

They also talked about their work as a service to the community, stating:

“Raise awareness of what we are doing in the community.”

“That we work hard to keep kids healthy and safe, have to have passion, we have a real desire to make a difference.”

“I’m here to build a healthy community.”

Despite their own challenges with having their roles understood, these CCHCs nonetheless expressed their commitment to having a strong infrastructure that broadly supports early childhood professionals. They recognize broader issues in the early childhood field, such as high turnover among ECE providers. They specifically advocated for increased recognition of the efforts of their ECE provider colleagues. The following quotes provide good examples:

“Want the public to know we are advocates for staff who deserve more pay, respect for work they do, have their work recognized in a better way”

“I would like everyone to know we as CCHCs empower child care providers to continue to do a fabulous job, quality care of kids, help kids be healthy and safe. The child care staff needs to know they’re doing important things that can be difficult at times.”

These CCHCs pointed out other challenges within the broader early childhood field, but their comments nonetheless exhibited their passion and commitment to partnering with ECE providers to promote healthy young children and communities.

Summary. Core themes identified by CCHCs spanned the areas of training, coaching, and program success and practice challenges. In the area of training, dominant themes were that the training was helpful and that the addition of the Regional Coaches was a helpful training resource. However, several common criticisms of the training were dissatisfaction with gaps or delays in training, mismatch of training formats to learning styles, and general feelings of being overwhelmed. In CCHC's use of the coaching module, they appeared to use the coaching strategies in isolation, rather than as a unified process. Although some CCHCs endorsed the value of specific strategies, a number of themes critiquing coaching were raised. Among these included significant resistance from ECE providers and questions about how well coaching fit with CCHCs' heavy caseloads and requests for emergency services.

CCHC identified using the coaching process to foster empowerment of ECE providers as an example of program success; this theme reflected CCHCs' frequent endorsement of advocating for the work of ECE providers. In addition to concerns about providers' resistance and fit of coaching with CCHC practice, CCHCs raised other practice challenges. Most central to the CCHC's day-to-day experience were themes of balancing heavy caseloads with trying to do the intensive work required of coaching; the confusion ECE providers and other ECE professionals have about the CCHC role; the degree to which CCHCs can enforce change given their non-regulatory role; and concerns about how child care quality is measured and sustained.

In summary, there appears to be some uptake of coaching within CCHC services, albeit seemingly piecemeal and sporadic. Given the lack of consistent and sustained implementation of coaching as provided by CCHCs, the impact of coaching as an addition to CCHC service delivery cannot be fully determined. There are several reasons that explain lack of full implementation, namely the resistance from ECE providers to establish relationships with CCHCs, possible mismatch between the nature of coaching and the realities of CCHC service delivery, and logistical barriers. Further, training for the coaching module was newly developed at the time the CCHCs received it. Further work is needed to improve the delivery of the trainings experienced by the CCHCs, such as reducing training delays and offering more supports to learn and apply the coaching module. Notwithstanding logistical barriers, more systematic and uniform training experiences may potentially enhance the capacity of CCHCs to better implement coaching and deliver services in a more timely and effective manner.

ECE Providers. ECE directors and teachers from select programs served by a CCHC were recruited to participate in focus groups (Western, Central, Eastern, and TZ). During March and April 2015, ECE providers ($n=19$) participated in separate focus groups across the Eastern region and TZ; three interviews were conducted in the Western and Central regions due to limited response rates. Nearly half of the providers described themselves as White/European American females (48.4%). On average, ECE providers were 44.9 years old ($sd = 15.3$; $range = 24-71$). The most common educational level was high school diploma (19.4%) and Bachelor's degree (19.4%), followed by Associate's degree (16.1%); the remainder had a Master's degree.

The majority of the participating ECE providers were assistant teachers (67.7%), followed by lead teachers (32.3%), and directors (22.6%). On average, the ECE providers have been serving children for over 15 years ($mean = 15.6$; $sd = 11.4$; $range = 1-39$). They have been serving their respective age group on average for 9.4 years ($sd = 9.3$; $range = 0-30$) and have been employed at their current site for just over 6 years ($mean = 6.1$; $sd = 7.6$; $range = 0-30$). These providers

spanned three NC counties, and within each region were typically drawn from the same ECE program. Table 2 describes the employments settings for these ECE providers:

Table 2. Employment Settings for ECE Provider Focus Group Participants (n = 22)

Descriptor	Percentage
Setting type	
Non-profit child care, single site	6.5%
Non-profit child care, multiple sites	0%
For profit child care, single site	25.8%
For profit child care, multiple sites	0%
Head Start/Early Head Start, single site	0%
Head Start/Early Head Start, multiple sites	29.0%
School district	0%
Other	3.2%
Ages served by program	
Infants (birth-younger than 12 months)	67.7%
Toddlers (1-2 year-olds)	67.7%
3-year-olds	67.7%
4-year-olds	67.7%
5-year-olds	67.7%
Kindergarten	48.4%
1 st -12 th grade	22.6%
Ages served by provider	
Infants (birth – younger than 12 months)	35.5%
Toddlers (1-2 year-olds)	45.2%
3-year-olds	38.7%
4-year-olds	41.9%
5-year-olds	41.9%
Kindergarten*	22.6%
1 st -12 th grade*	9.7%
Mean proportion of families receiving child care subsidies**	55.7%
Mean proportion of children immunized**	99.1%

*Some participating CCHCs were funded by non-Smart Start sources. Smart Start-funded CCHCs do not provide services for kindergarten-age or older children.

**These data should be interpreted with caution as there were 7 cases with missing data for subsidies and 5 cases with missing data for immunizations.

The purpose of these focus groups and interviews was to learn about ECE providers’ use of CCHC services, participation in coaching, impact of CCHC work, additional needs, and what they would like others to know about the program.

Knowledge of CCHC services. Some ECE providers knew their center was served by a CCHC, but others did not. Providers who were aware of CCHCs and had learned about these services through their local Smart Start partnership via letters, newsletters, and outreach about trainings taught by CCHCs. Providers who were unaware of CCHCs remarked “*If staff don’t know about the CCHC, how could the families?*” In the words of another: “*Families not really aware of the CCHC, beyond being aware of ‘who is in the building’ (not explicitly*

communicated.)” Some providers reported that their CCHC serves families by bringing parent flyers or using the CCHC to call parents to explain that a child has to go home due to illness.

Services to ECE providers and centers. Providers reported receiving a variety of services from their CCHCs. Trainings for staff were among the most common. Topics included SIDS, First Aid, CPR, diapering, nutrition, handwashing, fire safety, food allergies (e.g., peanuts), medication administration, and blood borne pathogens. Trainings were either in group settings or in the classroom. Diapering was described by several participants: the CCHC *“walked through process with staff; this is huge because new steps are added each year.”* One participant noted that their CCHC did a pre- and post-test for a fire safety DVD. Many noted that trainings often had a practice or observation component in addition to lecture. The CCHC provided practice for tooth brushing, diapering, hand washing, and talked to children about teeth brushing, exercising, and keeping their bodies healthy.

Multiple providers also mentioned that their CCHC helped with records tracking: *“When I owned my own center they were invaluable to the immunization records.”* Another reported that her CCHC helps with immunization records, by going through children’s files, and pulling them together. Still another reported:

“We’ve asked her to contact parents and she helps get parents to turn in paperwork – she has a little more teeth/pressure. When people hear who she is people turn in the paperwork.”

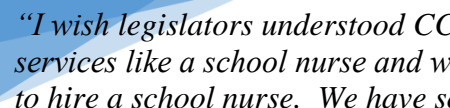
Screening was also a commonly provided service. As one participant noted:

“They’re wonderful. They provide the vision and hearing screening for us. We are EHS so it is required. Across the board we find that doesn’t happen routinely so we utilize their services for that.”

CCHCs were also called upon when a specific health issue came up at a center. Some specific issues included lice outbreaks, a whooping cough case, and rashes. One director reported she sought out the CCHC’s help for these issues because she is *“Making sure it’s not contagious, to let others know, just to know and to have that information. [CCHC] brings documented proof.”*

Another reported a specific case in which the staff sought out their CCHC’s assistance – the case involved plans for two enrolled children to visit their home country during the Ebola outbreak.

“...there was a situation when children were leaving the country and coming back, related to Ebola – never really had anything major but she checked in on those children to see when they returned. We didn’t know anything so we called [CCHC] and our superiors to set rules and guidelines. She responded and asked which families, the number of kids, dates of travel. We had 2 kids in Africa, they were coming home for the holidays, could this impact the child care center and family? Our boss decided the kids needed to be quarantined for [a certain] number of days but the kids never came and the rest of the family never left to visit, but [CCHC] checked a lot, brought family in to talk about plans. Family didn’t bring it up, teachers were concerned, that



“I wish legislators understood CCHCs provide services like a school nurse and we can’t afford to hire a school nurse. We have so many kids with chronic needs that we need someone. Because we are EHS we have to have someone with health but other places do not, but everyone needs some kind of health person.”

news might have been overblown but felt we should still follow-up, contacted [CCHC] through phone and email.”

Helping prepare for ECERS visits was also noted in several of the regions. *“They are our local Smart Start consult for rating scales. Environmental ratings. They’ll check policies (ex SIDS).”* Another participant noted that their CCHC helped prepare for the rating scale visit by rearranging areas in some of the rooms. Again, *“In the last year she has done a lot of work with the smaller site working on rating scales (sanitation up to par).”*

The CCHC also provided information that was helpful to focus group participants. For example, she *“provides flyers to staff about changes from DCDEE. If there is an “across the board” change the CCHC will come by or call to explain the change.”* In another region: *“She will email something out to all her programs (ex. ITERS and ECERS came out with new version). She highlights the changes and says for us to let her know how she can help.”*

Finally, ECE providers described how much they valued their relationship with their CCHC and the services provided, stating that she is a *“caring individual”* and that she is *“responsive, very involved, and has good communication.”* The value of having a CCHC was expressed in the following comments:

“If you have one who does her job, your daycare, staff, and kids are better off. You get impact on local, state, and national level.”

To accentuate their support of CCHCs, some providers expressed wishing that state legislators knew more about the CCHC program. In one provider’s words:

“I wish legislators understood CCHCs provide services like a school nurse and we can’t afford to hire a school nurse. We have so many kids with chronic needs that we need someone. Because we are EHS we have to have someone with health but other places do not, but everyone needs some kind of health person.”

Coaching. Coaching is clearly happening with some of the providers who participated in the focus groups. Several described a process that fit with the coaching strategies CCHCs are trained to utilize. One provider described the coaching she receives this way: *“she leads you...helps you arrive at the conclusion and validates it with documents.”* Another participant reported: *“She doesn’t tell you, she [has you help] make part of the decisions.”* This comment likely reflects the CCHC’s use of *reflection* and *joint planning*.

In another example, the CCHC used *observation, feedback, reflection, and joint planning* to help a teacher improve her performance:

“[I had the CCHC] come to do an independent observation of a teacher, then the CCHC shared her observations with the teacher, then they talked about the observations and best practices. The CCHC used the ITERS, sanitation, and laws as resources. Then they brainstormed on what had taken place and how to enhance things.”

The *action/practice* strategy was one of the most commonly reported. An example was given for a 3-year-old child with diabetes:

“The consultant walked staff through what to do when blood sugar was low/high, exercises to bring sugar down, how to check blood sugar, has parents and child be part of the demo, trained

teachers on who would work with child and parents, what to do if the child has onset of a diabetic coma, brought child appropriate books about diabetes.”

The strategies of *observation* and *action/practice* also commonly happened around diapering and hand washing. As one participant reported: *“She came in with one student she was training to observe hand washing. She modeled it with kids in 3 classrooms, this site was serving as a demo site.”* In another instance the CCHC *“modeled diaper changing with dolls and wipes. Then she observed the staff practice this skill, and then she followed up by assessing their performance (providing feedback).”*

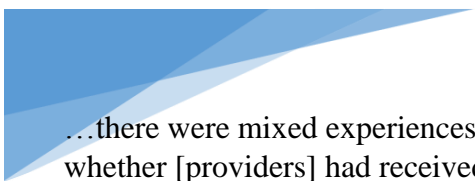
Other providers reported that they did not have a lot of experience with receiving coaching. Some ECE providers described a process in which the *“CCHC drives who does what and [the process is really] one-sided.”* In addition, providers felt that many issues did not lend themselves to coaching. In one region, a provider reported that observation was not possible because it was just too hard for the CCHC to accomplish with so many centers to visit and so much turnover.

Future needs. Providers were asked about unmet needs they were experiencing. A common theme was wanting more time from the CCHC or a full-time CCHC for their community. A second theme was needing more trainings covering topics such as: child health (i.e., communicable disease, blood borne pathogens); child development; sanitation and hygiene; obesity; nutrition; exercise; and child abuse and neglect (to supplement Darkness to Light training). One provider suggested, *“need[ing] training on things parents aren’t willing to be trained in.”*

In addition, one provider expressed that off-site trainings are hard logistically so trainings offered on-site are preferred:

“That’s been the hardest thing for providers in the community. Our program is on the opposite end of the county and it is very difficult to get there for evening trainings. It is wonderful when they can come to us.”

Providers also had a number of suggestions for how CCHC services might be improved. The first related to making teachers feel better supported and *“not graded.”* The visit can be very stressful for the teacher, who feels panicked and wants to make sure to do everything right (*“Coming in with a clipboard makes teachers feel stressed”*). One suggestion echoed the need above: *“If teachers saw CCHCs more often, it would make teachers feel less threatened or intimidated.”* Providers suggested that this might be accomplished by making sure CCHCs talk to the teachers when they enter the classroom and not immediately begin an observation. They should also *“come in and shake the teacher’s hand, give goodies, free stuff.”* Finally, a hotline could be established so teachers could call a CCHC without the director feeling threatened or intimidated.



...there were mixed experiences in terms of whether [providers] had received coaching from their CCHC. Among ECE providers who received coaching, several described experiences where the CCHC had used multiple strategies as a coaching process. The most commonly described coaching strategy was action/practice.... ECE providers who had not experienced coaching described logistical barriers and poor fit of coaching process with specific issues.

Most providers mentioned needs among families, wanting CCHCs to provide families with more information through monthly flyers and signs. Suggested topics included communicable disease, car safety, sleep schedules, and specific programs like Color Me Healthy and Be Active Kids.

Summary. Several themes emerged for ECE providers' experiences with CCHC services, including their opportunities to participate in the coaching process. There were mixed responses for whether ECE providers knew about and had worked with a CCHC. ECE providers who had worked with a CCHC described a range of services provided, including offering trainings for staff; helping with records tracking; screening children; dealing with specific health issues; helping prepare for ERS visits; and providing resources to programs. In addition, there were mixed experiences on whether they had received coaching from their CCHC. Among ECE providers who received coaching, several described experiences where the CCHC had used multiple strategies as a coaching process. The most commonly described coaching strategy was action/practice, and ECE providers' examples frequently centered on handwashing and diapering. ECE providers who had not experienced coaching described logistical barriers and the poor fit of the coaching process with specific issues. Finally, ECE providers identified a number of needs for improving CCHC services, with increasing the CCHCs' overall availability to programs and their ability to provide more services emerging as dominant themes. Strategies for improving relationships between CCHCs and ECE providers were also discussed.

Taken together, there is mixed evidence on how much ECE providers are experiencing CCHC services. Further, some ECE providers are clearly receiving coaching from their CCHC, whereas others are not. For those who are receiving coaching, it appears that ECE providers are often experiencing coaching as a collaborative process marked by the CCHC's use of multiple coaching strategies. This information suggests evidence of partial uptake of coaching by CCHCs. Yet, the reasons described explaining why coaching does not occur raises questions about significant logistical and conceptual barriers to implementing coaching. Clearly, heavy caseloads and geographical spread in CCHCs' assigned programs create limits on the time available to serve a given program. To be done well, coaching requires a time investment that is marked by frequent and regular program visits. Further, CCHCs' services to help ECE programs make improvements are directly linked to a specific issue (e.g., ERS scales, DCDEE licensing regulations). As a result, it appears that the "discovery process" that is inherent in the coaching philosophy may not be a good fit conceptually for situations where the CCHC is serving as a resource to help the program attain a clear and indisputable outcome. These issues should be seriously considered when making projections about the specific situations and the degree to which CCHCs can be expected to successfully incorporate coaching into their practice.

Families. Families whose children attended select ECE programs served by a CCHC were invited to participate in focus groups in the Western, Central, and Eastern regions and TZ. A total of 7 parents participated in separate focus groups in the Central and Eastern regions and TZ; no families elected to participate in the Western region. Focus groups were conducted from March to April 2015. The participating parents spanned three NC counties, and each group was drawn from the same ECE program, which was for-profit child care (single site: 71.4%). Typically, parents were the child's mother (71.4%). Over half described themselves as White/European American females (57.1%) and/or African American (57.1%). On average, parents were 33.7 years old ($sd = 6.6$; $range = 24-41$), and reported speaking English and no other languages at home. The most commonly reported educational background was a Bachelor's degree (42.9%) followed by high school diploma (28.6%) and Master's degree

(28.6%). Most of the parents were single, never married (71.4%) and all reported working full-time. Parents reported receiving some social services including: child care subsidy (42.9%); Medicaid (42.9%); WIC (28.6%); and SNAP (14.3%). No parents endorsed receiving TANF or CCFP.

Typically, parents reported having one adult (42.9%) and one child (71.4%) in the home. Most of the children were aged two years (42.9%), with 28.6% being 5 year-olds (there were two children whose age was not reported). The majority of the children were males (71.4%). Just over half of parents (57.1%) reported that their child had a specific health care need. The most commonly reported health care needs were: allergies (57.1%); ear infections (28.6%); and attention problems (28.6%). Other health needs identified included asthma, dental problems, overweight/obesity, and speech problems.

The purpose of these focus groups was to learn about families' experiences with health and safety issues at the child's ECE program, with attention to direct experiences with the CCHC and health and safety practices in the program. The questions covered: knowledge of services provided by CCHCs, health and safety practices in the classroom, and experiences working with a CCHC. However, all participating parents were unaware that their child's program was served by a CCHC and about the existence of CCHC services more generally. This prevented exploring topics specifically related to CCHC services. Instead, focus group discussion addressed parents' knowledge and observations about health and safety policies, materials, and practices.

Parents' knowledge and observations about health and safety issues in early childhood classrooms. Parents offered observations about health and safety policies, materials, and practices in their child's ECE program. Several parents mentioned examples in the area of medication administration, including specific policies such as completing paperwork for a child's prescription (e.g., how much of the medication to administer and how to do so). They also described needing to have exact labeling for medications. Other examples included policies about which medications can be brought to the center (both prescribed and over-the-counter). More than one parent also observed allergy charts posted at their child's center.

Many parents shared observations about handwashing procedures, and more than one described handwashing signs with specific steps posted at their child's program. Parents described specific practices based on children's ages (e.g., parents of children ages 2-3 years asked to assist their children) and on certain points in the classroom routine (e.g., after coming in from outside).

In the area of sanitation, more than one parent described observing that ECE providers used sanitizer to clean tables and that they observed providers engaging in other "cleaning activities." For example, teachers have been observed washing toys regularly.

Regarding illnesses, several parents stated that their child's center required that their child's immunization and health records were due at enrollment. There was also consensus about policies requiring that the center contacts a parent about child illness and whether the child needs to be picked up from school. Other illness prevention practices observed included turning one's head and covering one's mouth when coughing (and teaching children this practice) as well as requiring the use of foot coverings or to take off one's shoes when entering infant rooms.

In terms of nutrition, parents commented about centers sending home or posting the food menus to keep parents informed. Other observations related to food practices include teaching children

about healthy food choices; policies about not bringing certain food items to school (home-cooked foods, peanuts, sweets); and seeing signage about choking posted.

Other general safety issues described largely focused on security such as having specific sign in/out procedures. There was a range of observations about security and other supervision procedures, with some programs described as having advanced technologies (e.g., magnetized or biometrics-activated doors vs. push-bar doors). Other general issues included observing children being encouraged to use “walking feet;” completing incident reports; not allowing sheets or stuffed animals for naptime; and having rules about what toys can be brought for show and tell.

Future needs. Time was spent discussing the areas of health and safety where parents would like more information. In general, parents expressed wanting a broad base of information that would address ways to be healthy and safe and to learn what is “*true and not true.*” Indeed, many parents described needing to rely on themselves, other parents, and friends for information about health and safety. Many parents also described turning to the internet for information, utilizing informational website such as WebMD as well as social media (e.g., post a photo of a child’s condition, describe symptoms to get feedback). Upon learning about what CCHCs do, one parent stated that she would have called the CCHC for help if she had known about the program.

Parents indicated that they would like to receive handouts and attend informational sessions about health and safety topics, particularly in the areas of illness, food and nutrition, behavioral issues, as well as other topics. In the area of illness, there was consensus that hand, foot, and mouth disease was a topic of interest. Other topics included: common childhood illness and symptoms; keeping your child home when your child has a fever; influenza, RSV; chicken pox; croup; cradle cap; conjunctivitis, diabetes; and GERD.

For food and nutrition, parents mentioned several “transition” issues including transitioning from nursing and from using a pacifier (and pacifier sanitation). They also mentioned wanting to know more about childhood obesity and strategies for food portions and food “on the go.”

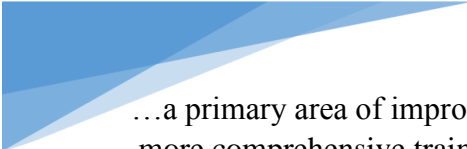
Parents also brought up behavioral health issues such as discipline across the age span, including how to curb challenging behaviors and encourage desirable behaviors. They also offered topics on keeping children safe, such as teaching “stranger danger” and how to safely cross the street.

Other topics raised included how to brush young children’s teeth, dealing with seasonal allergies, using epi-pens, how to hold a child, and combating lice.

Summary. These parents were unaware that their child’s program was served by a CCHC, and could not comment on experiences with the CCHC or the impact of the coaching. Yet, parents described a number of health and safety policies, practices, and materials that could indirectly speak to the impact of the CCHC on these specific ECE programs. Parents wanted to learn more about health and safety topics, and utilize materials and other resources – including the CCHC – to boost their knowledge in these areas. Some parents were frustrated about the lack of information about health and safety policies, even if the ECE program had a parent handbook, and some parents felt that policies were by trial and error. Taken together, this information suggests a gap in CCHC services reaching parents directly (e.g., direct contact with CCHCs) and indirectly (practices, policies, and materials being clearly communicated or evident to parents).

Commonalities. A number of common themes can be drawn from the focus groups and interviews conducted across Regional Coaches, CCHCs, ECE providers, and families. These themes span the areas of training, the coaching module, infrastructure, and relationships between CCHCs and the ECE providers and families they serve.

Training. Improvements are needed in the training experienced by Regional Coaches and CCHCs. Regional Coaches and CCHCs could benefit from training enhancements that provide clarifications on the Coach and CCHC roles, respectively. Training experiences should be matched with individuals' learning styles when possible, and should anticipate whether training experiences could overwhelm participants. Finally, reducing gaps and delays in training is needed to avoid situations where Regional Coaches and CCHCs are



...a primary area of improvement involves more comprehensive training in coaching, with training experiences that are specified to the context of CCHC service delivery and are applied in nature.

expected to begin service delivery prior to being properly trained.

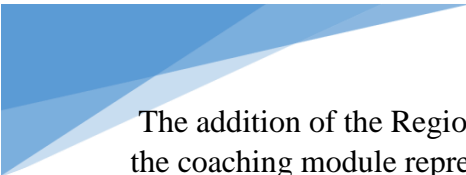
Coaching. The parallel process of coaching from Regional Coach to CCHC to ECE providers and families is not yet being fully implemented. There are similarities in Regional Coaches' and CCHCs' use of coaching, where coaching strategies appear to be used in isolation rather than as a unified process. Further, some strategies seem to be used more frequently than others. This pattern is consistent with ECE providers' descriptions of receiving coaching from CCHCs. Some CCHCs described not being able to implement coaching, which was consistent with some ECE providers reporting not having received coaching. Addressing training issues (e.g., reducing training delays) could improve the quantity and quality of coaching. Still, examining the fit of coaching with CCHC service delivery should be explored.

Building relationships. Regional Coaches and CCHCs frequently described ongoing challenges in building relationships with ECE providers, including experiencing clear resistance from ECE providers. This resistance has been experienced while trying to establish a new relationship with a provider (e.g., providers unwilling to meet with the CCHC) as well as in the context of an established relationship (e.g., rejecting recommendations from the CCHC; lack of maintenance of improved practices). Surprisingly, the struggles noted by Regional Coaches and CCHCs to build relationships are incongruent with some ECE providers and families being unaware of having a CCHC at their program. Upon learning about services CCHCs provide, these ECE providers and families had a wealth of suggestions for how CCHCs could support them and their ECE programs. Clearly, further innovation and funding is needed to resolve this gap in successfully connecting CCHC service delivery with ECE providers and the families they serve.

CCHC service delivery infrastructure. Several common themes pointed to infrastructural challenges impeding Regional Coaches' and CCHCs' ability to establish relationships let alone implement coaching. Regional Coaches and CCHCs experience the challenges of heavy caseloads and geographic spread, preventing them from investing the time needed for coaching. Information from ECE providers speaks to how much programs value the contributions of CCHCs, and that they have unmet needs in the area of health and safety given the limited hours

that CCHCs can offer. Further, both Regional Coaches and CCHCs described challenges related to role confusion with both groups reporting local partnerships misunderstanding their respective roles. Regional Coaches also indicated some misunderstandings by CCHCs whereas CCHCs reported misunderstandings by ECE providers about their respective roles.

Summary. The addition of the Regional Coaches and the coaching module represents a potential innovation to enhance CCHC service delivery. Data from focus groups and interviews with Regional Coaches, CCHCs, ECE providers, and families suggest that there are some emerging benefits from these additions to CCHC services. Yet because coaching has not been



The addition of the Regional Coaches and the coaching module represents a potential innovation to enhance CCHC service delivery. Data from focus groups and interviews with Regional Coaches, CCHCs, ECE providers, and families suggest that there are some emerging benefits from these additions to CCHC services.

fully implemented, evaluation data cannot determine the extent of the impact of the Regional Coaches and coaching on the desired outputs and outcomes. Given the recent development and launch of the coaching module, its training components, and the hire of the Regional Coaches, it is likely that there has not been sufficient time between these developments and the program reaching capacity for full implementation. Indeed, experts on coaching practices suggest that it takes nine months or longer for an *individual* to implement coaching well (Rush & Shelden, 2011);⁶ this process is likely

exponential when the implementation is on a programmatic or scaled-up level. Clearly, the delays in training and limited opportunities to engage in coaching experienced by Regional Coaches and CCHCs inhibit the practice opportunities individuals need to attain expertise in coaching. Further, these issues related to coaching implementation must consider the infrastructural programmatic context of CCHC service delivery, expectations from local Smart Start partnerships, the broader early childhood field, and the ancillary human services agencies that support ECE providers and families with young children.

Quality of Implementation Survey

A web-based Qualtrics survey was emailed to all CCHCs and to ECE providers identified in caselogs to collect data about demographic characteristics, service provision, and implementation of the coaching module. Participants were given 3 weeks to complete the survey (July 13 – 31, 2015). Of the 59 CCHCs who received the survey, 37 completed it (response rate = 63%; 3 surveys [5%] were screened out because the CCHC had only been employed for a few weeks). Of the 819 ECE providers emailed, 732 messages were successfully delivered (1 email failed and 86 bounced back). Of those providers who received the survey, 128 fully completed the survey for a response rate of 17.5%.

Demographics (Table 3), employment settings, and ages served (Tables 4 and 5) were gathered for all survey participants. All CCHCs were female; most (95%) were White. Average tenure as

⁶ Rush, D. D., & Shelden, M. L. L. (2011). *The Early Childhood Coaching Handbook*. Baltimore, MD: Brookes Publishing Company.

a CCHC was just over 5 years and most had a college degree or higher. Nursing was the most common field of CCHCs' highest degree (61%) and the health profession they represented (59%). Other health professions included Health Educator (22%), Public Health (16%), and Recreational Therapy (3%). Most CCHCs' services were in both urban and rural settings (57%).

Figure 3 visually displays the 33 NC counties represented by the CCHC participants: Alamance, Ashe, Beaufort, Buncombe, Cabarrus, Catawba, Chatham, Cherokee, Chowan, Craven, Davie, Gaston, Guilford, Haywood, Hyde, Jackson, Lincoln, Martin, Moore, Orange, Perquimans, Person, Pitt, Richmond, Robeson, Stanly, Swain, Transylvania, Tyrrell, Wake, Washington, Wayne, and Yadkin. Most CCHCs were employed by their local health department (54%) or the Smart Start/Local Partnership for Children (35%). A few worked for Head Start/Early Head Start or as an independent contractor (8%). The majority (65%) spent 100% of their work time in CCHC activities. They most heavily endorsed serving sites characterized as for-profit child care with multiple sites. Nearly all of them served children aged birth-5 years. Within these programs, CCHCs served a high proportion of low-income families (*mean*=70%; *sd* =18.3, range 35-100%). About half of these CCHCs (48.6%) also participated in the CCHC focus groups. CCHCs who participated in the survey were relatively comparable to focus groups participants on proportions of settings and ages served and CCHC tenure.

Figure 3. Counties Served by Quality of Implementation Survey CCHC Participants



Among the ECE providers, most were female (98%); almost 60% were White and 40% were African American. Most had at least an Associate's degree and the most common field was Early Childhood Education (ECE; 55%). Most (60%) were program directors. The providers averaged about 18 years as a teacher, director, or other education administrator. Immunization rates for their programs were high (89.7%, *sd* = 23.6), compared to an NC immunization rate of 72% for children aged 19 to 35 months in 2013 (NC Department of Health and Human Services,

2015).⁷ Finally, a large proportion of the families served qualify for child care subsidy (40.4%, *sd* = 37.8). Providers were typically employed at single-site, for-profit child care with most sites serving toddlers through children aged five; however, most ECE providers reported that they themselves typically worked with children aged 3-5 years. There were no ECE providers who participated in both the survey and the ECE focus groups.

Table 3. Demographic Table for Quality of Implementation Survey Participants

Characteristic	CCHC (n=37) Mean (<i>sd</i>) or Percent (n)	Provider (n=144) Mean (<i>sd</i>) or Percent (n)
Female	100% (37)	98% (125)
Age (years)	44.5 yrs (<i>sd</i> = 13.1)	48.1 yrs (<i>sd</i> = 9.1)
Race		
White	95% (35)	59% (76)
Black/African American	5% (2)	40% (51)
American Indian or Alaska Native	3% (1)	2% (2)
Latino/a	0	4% (5)
Tenure as CCHC	5.1 yrs (<i>sd</i> = 5.1)	N/A
Tenure serving current age group as a teacher or director		12.9 yrs (<i>sd</i> = 9.1)
Tenure serving children as a teacher, director, or other education administrator	---	18.1 yrs (<i>sd</i> = 10.3)
Highest Degree		
High School Diploma	0	9% (12)
AA/AS Degree	38% (14)	42% (54)
BA/BS Degree	54% (20)	33% (43)
MA/MS Degree	5% (2)	14% (18)
Education Specialist	3% (1)	1% (1)
PhD/EdD	0	1% (1)
Field of highest degree		
Nursing	61% (23)	3% (3)
Public Health/Health Education	26% (10)	0
Recreational Therapy	2.6% (1)	0
Education	2.6% (1)	18% (17)
Nutrition and Well-being	2.6% (1)	0
Criminal Justice	2.6% (1)	0
Science	2.6% (1)	0
ECE	0	55% (53)
Business	0	7% (7)
Human Development & Family Studies	0	7% (7)
Sociology	0	3% (3)
Psychology	0	3% (3)
Other	0	3% (3)
Health Profession		N/A
Nurse	59% (22)	
Health Educator	22% (8)	
Public Health	16% (6)	
Recreational Therapy	3% (1)	
Position (n=130)		

⁷ NC Department of Health and Human Services. (2015). NC Immunization Rates. Available: <http://www.immunize.nc.gov/data/immunizationrates.htm>

Director	---	60% (78)
Other*		22% (29)
Lead Teacher		15% (20)
Assistant Director		3% (4)
Center Immunization Rate (n=130)**	N/A	89.7% (<i>sd</i> = 23.6)
Percent of families receiving child care subsidy (n=130)	N/A	40.4% (<i>sd</i> = 37.8)

*The Other response was largely owner/operator = 19 (15%)

** This is calculated by dividing the # of children immunized by the total # of children in your program. Do not count children as immunized if they are only partially immunized or not up-to-date on their immunizations.

Table 4. Settings Served by Quality of Implementation Survey Participants

Setting*	Served by CCHC Percent (n)	Served by Providers Percent (n)
Non-profit child care center, single site	24% (9)	24% (31)
Non-profit child care center, multiple sites	57% (21)	4% (5)
For-profit child care center, single site	35% (13)	30% (39)
For-profit child care center, multiple sites	86% (32)	9% (12)
Head Start program, single site	19% (7)	2% (2)
Head Start program, multiple sites	62% (23)	3% (4)
School district	32% (12)	9% (12)
Other (please specify)	8% (3)**	20% (26)***

*Participants could check all options that applied

**Family child care homes

***Family child care homes, a company child care program, Early Head Start, Pre-K

Table 5. Age Groups Served by Quality of Implementation Survey Participants

Age Group*	Served by CCHC Percent (n)	Served by ECE Provider's Program Percent (n)	Served by ECE Provider Percent (n)
Infants (birth – younger than 12 months)	100% (37)	72% (94)	66% (86)
Toddlers (1-2 year-olds)	100% (37)	100% (76)	73% (96)
3-year-olds	100% (37)	87% (114)	82% (108)
4-year-olds	97% (36)	94% (123)	93% (122)
5-year-olds	84% (31)	87% (114)	82% (107)
Kindergarten	5% (2)	50% (65)	44% (57)
1st-12th grade	0%	36% (47)	34% (44)

*Participants could check all options that applied

To gather information about the coaching the CCHCs received from their Regional Coach, CCHCs rated whether their coach had utilized each of the five coaching strategies with them: *joint planning, action/practice, observation, reflection, and feedback*. *Joint planning* questions asked whether the CCHC and Regional Coach came to mutual agreement in setting goals for improving the services provided by the CCHC. For *action/practice*, CCHCs were asked whether their Coach created opportunities for action/practice, such as planned events in ECE settings where the CCHC practiced, refined, or analyzed the CCHC's skills. CCHCs were also asked

whether their Coach observed the CCHC’s practice in an ECE program (*observation*). For *reflection*, CCHCs were asked whether their Coach helped the CCHC to reflect on his or her current practice, such as talking about what the CCHC currently does, if those practices could be implemented without change, or if modifications were needed. Finally, CCHCs were asked if there were regular check-ins with their Coach to obtain *feedback* assessing the CCHC’s progress in a quality improvement plan. As shown in Table 6, *reflection* was the most common strategy experienced (92%) by CCHCs, whereas *action/practice* was only experienced by 38%.

Table 6. Receipt of Coaching Strategies – CCHCs and ECE Providers

Strategy	CCHCs	ECE Providers
	Percent (n) Responding Yes	Percent (n) Responding Yes
Joint Planning	79% (30/38)	57% (77/135)
Action/Practice	38% (14/37)	70% (94/135)
Observation	55% (21/38)	88% (127/144)
Reflection	92% (35/38)	86% (124/144)
Feedback	70% (26/37)	76% (103/135)

Table 7 presents more detailed information on the services the CCHCs received from their Regional Coach. Most CCHCs endorsed that their Coach followed proper confidentiality procedures, identified needed resources, and helped to set goals for improvement. CCHCs were less likely to endorse receiving needed trainings or developing quality improvement plans. Some CCHCs reported that they did not need their Coach to provide training or resources.

Table 7. Services CCHCs Received from Regional Coaches

Service	Percent (n) Responding Yes
Coach followed proper confidentiality procedures (n=37)	95% (35)
Coach identified needed resources (n=38)	76% (29) [16% (6) not needed]
Coach helped set goals for improvement (n=38)	76% (29)
Coach evaluated the success of work with you (n=37)	62% (23)
Needed training was provided (n=37)	59% (22) [38% (14) not needed]
A quality improvement plan was developed (n=38)	32% (12)

ECE providers were similarly asked about the coaching they received from their CCHC (Table 6). For *joint planning*, providers were asked, “did you come to mutual agreement in setting goals for improving your program and the services you provide?” Providers were asked whether their CCHC created opportunities for *action/practice*, such as planned events in the provider’s ECE program where she/he practiced, refined, or analyzed her/his skills. Providers also indicated whether their CCHC *observed* the provider’s hand washing, food preparation, or toileting/diapering practices. For *reflection*, providers were prompted with “did you talk about what you currently do and if it could be implemented without change or if modifications were needed?” Providers were also asked if there were regular check-ins with the CCHCs to obtain *feedback* to assess the provider’s progress. As seen in Table 6, providers gave high endorsements for having experienced the *action/practice*, *observation*, *reflection*, and *feedback* coaching strategies in interactions with their CCHC. Just over half (57%) engaged in *joint planning* with their CCHC.

Table 8 presents more detailed information on the services ECE providers received from their CCHC. Most providers endorsed that their CCHC followed proper confidentiality procedures, reviewed policies around health and safety, and evaluated the success of the provider’s work. About half of the providers endorsed that their CCHC identified needed resources, reviewed USDA guidelines for meals and physical activity, and completed individual health plans. Fewer providers (40%) indicated that their CCHC assured child health screenings (i.e., the CCHC provided a recommendation or referral to a facility, child, or family for appropriate services or provided the services themselves). Over 40% of these providers indicated that they did not need their CCHC to assure health screenings or complete individual health plans.

Table 8. Services ECE Providers Received from CCHCs

Strategy	Percent (n) Responding Yes
CCHC reviewed policies around health and safety (n=144)	85% (122)
CCHC assured screenings for child health when no direct services were available (n=144)	40% (58) [47% (68) Not Needed]
Needed individual health plans and/or action plans completed (n=135)	47% (63) [43% (58) Not Needed]
USDA guidelines for meals and physical activity reviewed (n=144)	55% (79)
CCHC identified needed resources (n=135)	64% (86)
CCHC followed proper confidentiality procedures (n=135)	98% (132)
CCHC evaluated success of his/her work (n=135)	81% (110)

As indicated in Table 6, both CCHCs and ECE providers highly endorsed having received the *reflection* and *feedback* coaching strategies in their interactions with their Regional Coach and CCHC, respectively. Although CCHCs highly endorsed engaging in *joint planning* with their Regional Coach, just over half of providers endorsed this experience. Conversely, providers were more likely to endorse receiving *action/practice* and *observation* strategies relative to CCHCs.

In addition, CCHCs and ECE providers were asked to rate their satisfaction with the coaching services received (1 = very unsatisfied, 5 = very satisfied). Table 9 shows that the majority of CCHCs (76%) reported that they were satisfied or very satisfied with services (*mean* = 4.1, *sd* = 1.2). For providers, the majority (66%) reported that they were satisfied or very satisfied with services (*mean* = 3.6, *sd* = 1.6). Notably, nearly one-quarter of ECE providers indicated they were very unsatisfied with the coaching provided by the CCHC.

Table 9. Satisfaction with Coaching

Rating	CCHCs Percent (n=37)	ECE Providers Percent (n=134)
Very Unsatisfied	8% (3)	23% (31)
Unsatisfied	3% (1)	1% (2)
Neutral	14% (5)	10% (13)
Satisfied	27% (10)	22% (29)
Very Satisfied	49% (18)	44% (59)

Summary. These data illustrate variability in the implementation of coaching as experienced by CCHCs. The coaching strategies that require face-to-face interaction between the CCHC and Regional Coach (i.e., *action/practice, observation*) were rated the lowest, whereas strategies that could be done remotely via telephone calls and email were rated the highest (i.e., *joint planning, reflection, feedback*). The especially high endorsement of the *reflection* strategy is a natural fit, as it helps CCHCs to analyze their practice and effect change by fostering their ability to identify, implement, and analyze alternative methods for working with providers. Reflection questions such as, “Did that work as you expected?” and “If that didn’t work, what are some other things you could try?” help CCHCs to reflect on their practice methods and come up with ways to improve while maintaining a collaborative relationship with the provider. With the exception of *joint planning*, the high endorsement by ECE providers for the other four coaching strategies suggests promise for CCHCs utilizing coaching strategies with ECE providers. This is the most collaborative of the five strategies and thus requires a high level of readiness and willingness from the coachee and sufficient availability of the coach.

Generally high satisfaction with coaching for both CCHCs and providers is encouraging, although 24% of providers were not satisfied with the coaching provided by their CCHC. Because data from the ECE providers cannot be directly linked to the CCHCs who responded to the survey, conclusions cannot be drawn about whether these providers’ experiences with their CCHC’s coaching are related to these CCHCs’ experiences with their Coach.

Intersections across Implementation and Impact of Coaching Data Sources

The implementation of the coaching module is intended to impact CCHCs by having them experience coaching strategies in their interactions with Regional Coaches, which were newly created positions using RTT-ELC funds. Data from interviews conducted with Regional Coaches and surveys from CCHCs indicate there has been variability in Regional Coaches’ implementation of coaching strategies in their interactions with their CCHC. Across these data sources, Regional Coaches appeared to use the coaching strategies in isolation, rather than as a unified process; further, some coaching strategies seemed to be used very little or not at all. Coaches’ universal depiction of using *joint planning* and *reflection* strategies was consistent with CCHC survey respondents’ high endorsement of having engaged in these activities with their Regional Coach. The variability in Coaches’ use of strategies requiring face-to-face interaction with the CCHC (i.e., *action/practice, observation*) was mirrored in CCHCs’ low ratings for experiencing these strategies with their Coach. There were some inconsistencies between Regional Coaches’ descriptions of the coaching strategies they used, and the ones reportedly experienced by CCHCs. For instance, Coaches gave few examples of providing *feedback*, yet 70% of CCHC survey respondents reported receiving feedback from their Coach. Nonetheless, high satisfaction among the CCHCs indicated the value-added of the Regional Coaches.

In addition, the coaching module is intended to change CCHCs’ practices by having them implement coaching strategies in interactions with ECE providers; this change in practice anticipates impacts for ECE providers, children, and families in programs served by CCHCs. Data from focus groups conducted with CCHCs and ECE providers, and surveys from ECE providers also point to variability in CCHCs’ implementation of coaching strategies in their interactions with providers. CCHCs gave examples of using each of the coaching strategies, but these descriptions reflected isolated use, rather than a unified process. Similarly, ECE providers who responded to the surveys highly endorsed experiencing *action/practice, observation*,

reflection, and *feedback* with their CCHC, and the providers who participated in the focus groups gave isolated examples of experiences with these strategies. Although CCHCs gave examples of using *joint planning*, data from ECE providers suggested less use of this strategy (57% endorsement). Further, some ECE providers described *joint planning* as a positive experience (e.g., arriving at next steps together), whereas others described their interactions with their CCHC as “one-sided.” Some providers who were in the focus groups reported not having had experienced coaching at all with their CCHC. These provider statements were qualified by some providers not knowing that their program was served by a CCHC. Focus group data suggest a number of reasons that interfere with CCHCs being able to provide coaching, some of which were identified by both CCHCs and providers (e.g., high caseloads, some issues not amenable to coaching). Some inconsistencies in CCHC and provider reports (e.g., CCHCs indicating feedback was their more commonly used strategy, whereas this strategy was not the most highly endorsed by providers) may be explained in that CCHCs reported on their implementation across all programs on their caseload, and that there were different samples across these data sources. Nonetheless, this overall pattern of results suggests that for providers who do get coaching from their CCHC, they experience a high number of coaching strategies. The slightly lower level of satisfaction reported by ECE providers, while still indicating value-added for the coaching, may reflect issues related to the coaching process (e.g., experience of specific coaching strategies) or logistical barriers (i.e., number of programs that CCHCs are expected to serve).

These findings also must be considered in the context of themes related to the training process. Both Regional Coaches and CCHCs expressed frustrations with delays in receiving training on the coaching strategies. These findings are consistent with reports from the Resource Center documenting that the CCHC workforce received training in the coaching module on a “rolling” basis over the course of two years, creating variability in the extent to which the CCHCs had the capacity to implement coaching. Further, despite both groups indicating the training was helpful once they received it, they both shared experiences where they were expected to engage in coaching prior to being trained. These training issues were reflected in Regional Coaches reporting that CCHCs are confused about the coaching strategies, which was also observed in some misclassifications of coaching strategies in Coaches’ own descriptions. Such confusion could also shed light on the lack of increased coaching sessions over time.

Achievement of Outputs & Outcomes

Outputs: Services Provided by CCHCs

Extant data on the number of services were obtained through reports submitted by CCHCs to their local Smart Start partnerships, which were sent to NCPC. These data include the number of programs served by CCHCs, the number of facilities receiving on-site consultation, the number of on-site consultations, and the number of children enrolled in CCHC-served programs receiving on-site consultations. Because the data were submitted by CCHCs to their local partnerships, these outputs do not reflect the full spectrum of services for all NC CCHCs. The data were reported quarterly for fiscal year (FY) 2011-2012 through FY 2014-2015.

From 2011-2012 to 2014-2015, the number of ECE facilities that received Smart Start-funded CCHC services increased 0.6% (from 2,303 to 2,318; first row Table 10). Each year the number of facilities served came close to or exceeded the target (2,320 facilities). The number of early childhood facilities that received at least one on-site consultation from a Smart Start-funded

CCHC decreased 22%, from 2,267 to 1,764. This measure did not have a target number. The total number of on-site consultations made to ECE facilities by a CCHC dropped about 20% from 10,273 to 8,170. This is the measure that most diverged from the yearly target of 12,760 on-site consultations. Finally, the number of children enrolled in ECE facilities that received on-site consultation from a CCHC decreased about 7% (from 81,876 to 76,271) across those years, yet rebounded considerably from 65,695 (FY 2013-14) to 76,271 (FY 2014-15). Again, the number of children enrolled came close to or exceeded the target of 80,000 children.

Table 10. FYs 2011-2015 Outputs: Services Provided by Smart Start-funded CCHCs

Output	FY 2011-2012	FY 2012- 2013	FY 2013- 2014	FY 2014- 2015	Target
The number of child care facilities that receive child care health consultation services funded by Smart Start	2,303	2,447	2,333	2,318	2,320
The number of child care facilities that receive at least one on-site consultation from a Smart Start funded CCHC	2,267	2,128	2,083	1,764	N/A
The total number of on-site consultations made to child care facilities by a CCHC during this quarter	10,273	10,264	8,547	8,170	12,760
The number of children enrolled in the child care facilities that receive an on-site consultation from a CCHC	81,876	76,328	65,695	76,271	80,000

Figures 4-6 visually display the outputs data. The red line indicates the target for that output measure. Although these targets were specified, the RTT-ELC did not fund an expansion of CCHCs, except for in the TZ. In Figure 4, the number of ECE facilities receiving Smart Start-funded CCHC services has been fairly stable since FY 2011-2012. The total number of on-site consultations peaked in FY 2012-2013, with similar counts in the years before and after. FY 2014-2015 (on-site visits = 2,318) was quite close to attaining the target of 2,320, with only a slight drop from the previous year. Figure 5 depicts on-site consultations per year, a target that was the most difficult to attain and was not reached in any of the examined years. The target came close to being achieved in 2012-2013, with a substantial drop in the most recent fiscal year. Figure 6 shows that the number of children enrolled in served facilities has fallen each year. During the 2015 fiscal year, CCHCs came close to meeting the target of 80,000 children.

Figure 4. Number of ECE Facilities Receiving Smart Start-funded CCHC Services (FY 2011-2012–FY 2014-15)

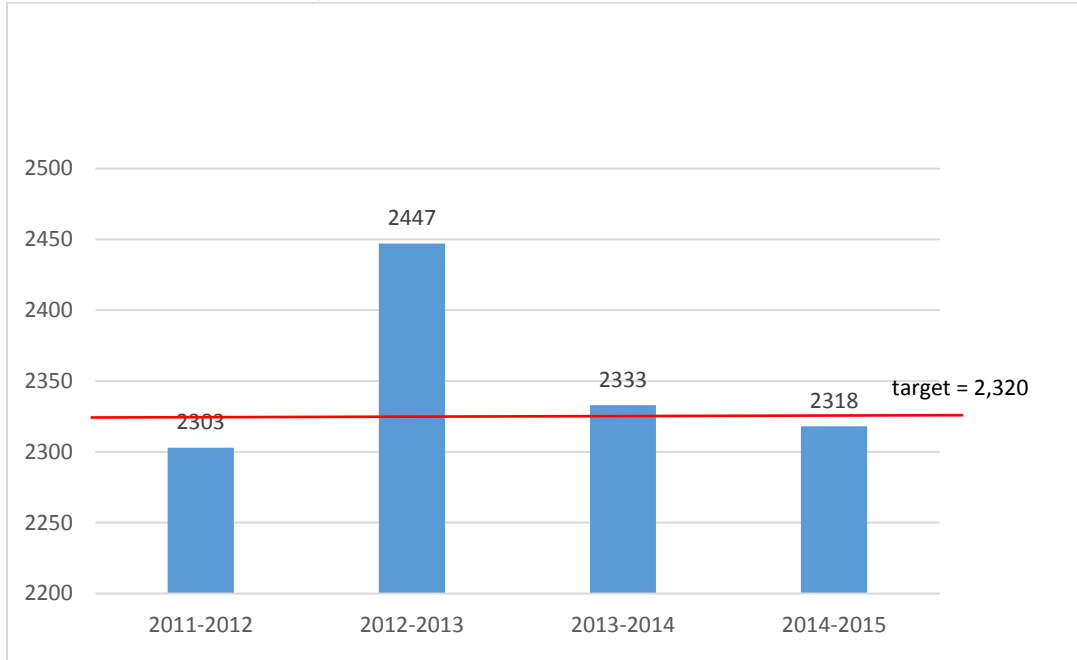


Figure 5. Number of On-site Consultations Made to ECE Facilities by Smart Start-funded CCHCs (FY 2011-2012–FY 2014-15)

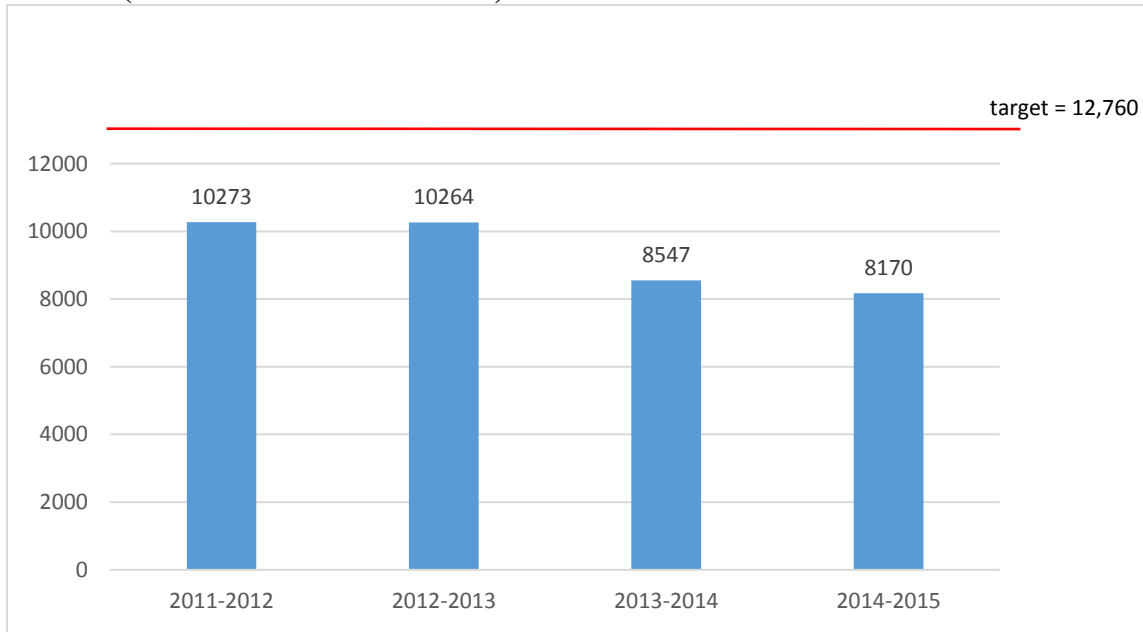
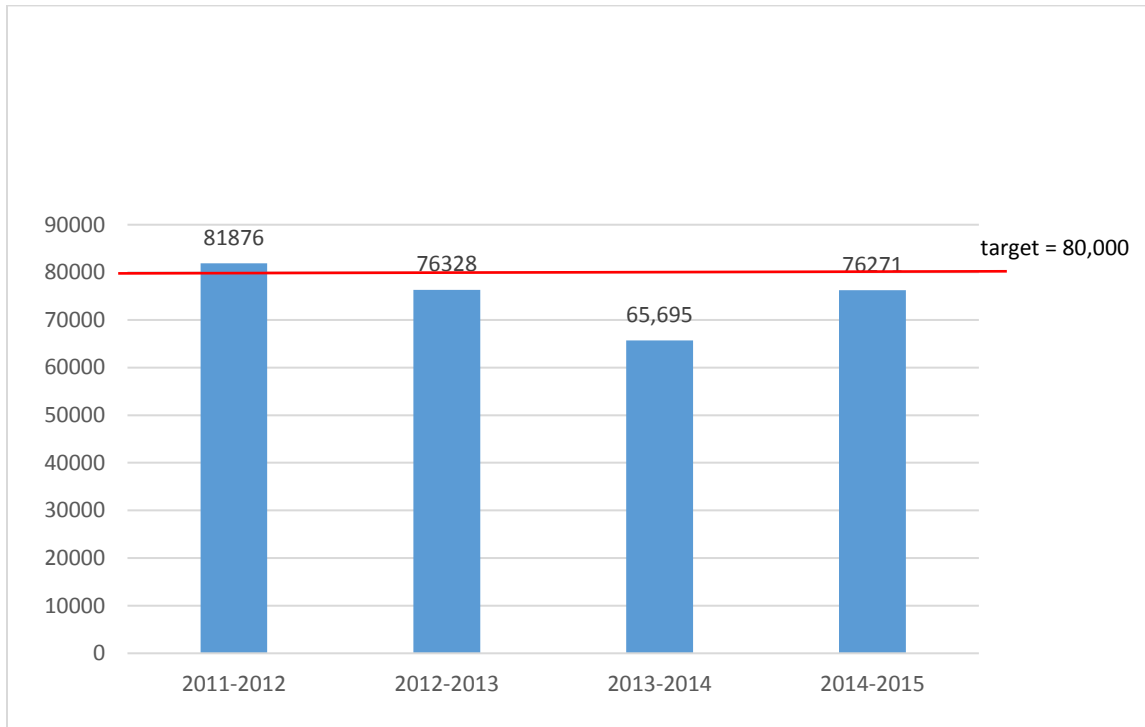


Figure 6. Number of Children Enrolled in ECE Facilities Receiving On-site Consultation from Smart Start-funded CCHCs (FY 2011-2012–FY 2014-15)



Summary. Since the coaching module was launched in 2014, Smart Start-funded CCHCs have met or nearly met the projected RTT-ELC targets for number of programs served and number of children enrolled in CCHC-served programs. These numbers are consistent with those prior to the launch of the coaching module. The RTT-ELC target for number of on-site consultations was not reached (note: there was no target for number of programs receiving on-site consultations), and there were steady declines for this area and for the number of programs receiving on-site consultation. Fluctuations over time in number of programs and children served, as well as declines in on-site consultations, may be related to factors including CCHCs increasingly serving smaller programs, having large caseloads across wide geographical areas, and perhaps adding more intensive coaching services that limit the number of programs they can ultimately serve.

Outcomes: Quality of Health & Safety Practices, Teacher Knowledge about Best Practices in Health & Safety

Sanitation Scores

Sanitation data were obtained from the North Carolina Division of Child Development and Early Education (DCDEE) from 2013 and 2015 for all NC ECE programs to examine whether sanitation scores improved after implementing the coaching module. The dataset was merged with a list of CCHC-served child care programs identified in caselogs CCHCs submitted to the evaluation team. There was not clear one-to-one correspondence between the caselogs and the sanitation data, and a number of strategies were employed to make a match if possible (e.g.,

searching for program license numbers online, seeking guidance from the Resource Center). Any CCHC-identified in-home child care programs were eliminated because they did not have sanitation data. For these reasons, and because not all CCHCs submitted caselogs, these data do not reflect the sanitation scores for all programs served by all CCHCs across the state. Rather, the data represent only those ECE programs that were reported in CCHCs' caselogs (36 of approximately 59 CCHCs submitted caselogs, 61%) that could be matched to the sanitation data and were not in-home child care programs. Moreover, it was not possible to compare these sanitation scores to programs in served counties that did not receive CCHC services because there is no complete list of those programs.

The sanitation dataset included scores and number of demerits. Programs can receive scores of Disapproved (46 or more demerits); Provisional (31-45 demerits or one 6-point item); Approved (15-30 demerits and no 6-point items); or Superior (0-14 demerits and no 6-point items). Details about inspections and violations can be found here:

http://ncchildcare.nc.gov/pdf_forms/center_appendix_c.pdf.

T-test analyses were used to examine whether there were improvements in sanitation scores and demerits in CCHC-served programs following the launch of the coaching module. Of the 682 programs in the dataset, 529 and 525 programs had sanitation scores and demerits data, respectively, for both years. As seen in Table 11, at each year the vast majority of programs received a rating of Superior (over 90%). For the 14 programs that were Provisional in 2013, 11 (78.6%) received a rating of Superior by 2015. The other 3 were not rated in 2015. Of the 31 programs that received ratings of Approved in 2013, by 2015 19 (61.3%) were rated as Superior, 7 (24.1%) maintained their Approved rating, 1 (3.2%) received a Provisional rating, 2 (6.5%) moved to Disapproved, and 2 were not rated in 2015. Scores were not significantly different from 2013 to 2015, $t(524) = .44, p = .66$, however, there were significantly more demerits in 2015, $t(528) = 2.24, p = .03$.

Table 11. Sanitation Scores and Demerits (2013 & 2015)

	2013	2015
	Percent (n) or Mean (sd)	Percent (n) or Mean (sd)
Sanitation Scores (n=529)		
Disapproved	.5% (3)	.3% (2)
Provisional	2.5% (14)	2.2% (13)
Approved	5.5% (31)	6% (35)
Superior	91.5% (516)	91.7% (531)
Demerits (n=525)*	6.0 (5.6)	6.6 (6.1)

* $p < .05$

Summary. These data suggest that for a select number of center-based ECE programs served by CCHCs, over 91% of programs achieved sanitation scores in the Superior range, which remained stable from the launch of the coaching module and for two years thereafter. Although there was an increase in demerits during this time period, this change is likely the result of the large sample – capitalizing on small differences (less than 1 demerit difference across years).

Teacher Knowledge of Health and Safety Practices

Survey data from teachers and other ECE providers were collected to measure changes in knowledge about health and safety practices for CCHC-served programs. Using a collaborative process involving NCPC, Resource Center staff, and other content experts (e.g., Dr. Jonathan Kotch, University of North Carolina at Chapel Hill), decisions were made about the content of the surveys and the data collection methods. For the content, four areas were identified as most reflective of group-based training sessions conducted by CCHCs: sanitation, hand washing, toileting/diapering, and medication administration. A unique survey was created for each content area, with 10 items that were developed from related areas in the North Carolina Health and Safety Assessment. Item content was reviewed by the above mentioned group prior to finalization. Each survey contained 10 true/false questions about the health and safety content area. Percent correct for the pre-test and post-test administrations were calculated.

Materials for collecting Teacher Knowledge Survey data were distributed to CCHCs in late October 2014, and CCHCs were asked to collect these data through May 2015. CCHCs were asked to collect survey data during group training events that covered any of the four content areas by distributing a pre-test prior to conducting the training and a post-test immediately following the training. From a list of 112 CCHCs, 50 CCHCs weighted by number of CCHCs in each county were selected to collect the surveys. Of this number, 26 CCHCs were funded by Smart Start; 2 were funded by Race-to-the-Top, and 22 were funded by other agencies. From the original mailing, 5 CCHCs did not collect these data due to inaccurate contact information ($n=3$), supervisor declined participation ($n=1$), and retirement ($n=1$).

A total of 141 ECE providers completed a Teacher Knowledge Survey (i.e., pre- and post-data); 10 providers completed surveys in two different content areas. From this number, 15 surveys were dropped from analyses due to missing data (Sanitation: $n=1$; Medication Administration: $n=1$; Handwashing: $n=13$). Results for complete cases are reported by survey area.

Sanitation. There were 22 ECE providers who took the Sanitation survey. The average age of the participants was 40.6 years old, with ages ranging from 22 to 76 years. The ECE providers represented two NC counties: Moore and Wake. Table 12 presents the items in the Sanitation survey. For each item, the mean percent correct is listed for ECE providers at pre- and post-test. In addition, the “total correct” represents the average percent correct across ECE providers for the 10-item survey.

Across this sample of ECE providers, scores averaged greater than 80% for 6 of the 10 items at pre-test and across the survey as a whole. Approximately 68% of ECE providers scored at or above the 80% mark. At post-test, 8 of the 10 items had scores averaging greater than 80%, as was the average score for the post-test as a whole. At post-test approximately 96% of ECE providers scored at or above 80%. About 36% of these ECE providers showed improvements in their knowledge about sanitation.

To examine whether ECE providers’ knowledge changed from pre- to post-test, a series of paired *t*-tests were conducted (Table 12). There were six items where ECE providers’ scores were significantly different from pre- to post-test. ECE providers demonstrated improvements in their knowledge for four survey items: Item 2, $t(21)=-4.58, p<.001$; Item 5, $t(20)=-2.17, p=.04$; Item 6, $t(21)=-2.81, p=.011$; and Item 10, $t(21)=-2.49, p=.02$. There were two items where ECE providers’ scores evidenced a higher degree of incorrect responses at post-test compared with the

pre-test: Item 1, $t(21)=4.58$, $p<.001$ and Item 9, $t(21)=5.51$, $p<.001$. Of note, both of these items contained content concerning utility gloves. There were no significant differences between the pre- and post-test in the total percentage of correct items.

Table 12. Change in Teacher Knowledge: Sanitation ($n=22$)

Item	Correct Answer	Mean% (sd) Pre-Test	Mean% (sd) Post-Test
1. For each cleaning, staff must use utility gloves and equipment designated for sanitizing toileting areas, which should not be used for another cleaning purpose. ***	True	100% (0%)	50% (51.2%)
2. Water play center and toys must be cleaned and disinfected at least once a week. ***	False	50% (51.2%)	100% (0%)
3. In rooms where children are not toilet trained, mouthed surfaces must be cleaned and sanitized at least daily or when visibly dirty.	True	82% (39.5%)	100% (0%)
4. For toys, equipment, and furniture that can be submerged, it is required to do all of the following: clean with warm soapy water using a brush; rinse with clean water; and submerge in sanitizing solution for two minutes or sanitize with approved sanitizing solution per instruction.	True	86% (35.1%)	95% (21.3%)
5. There is no good method for properly cleaning and sanitizing toys, equipment, and furniture that cannot be submerged in water. *	False	81% (40.2%)	100% (0%)
6. It is never okay to clean hard plastic toys in the dishwasher. *	False	73% (45.6%)	100% (0%)
7. Pacifiers may only be shared between siblings.	False	100% (0%)	100% (0%)
8. Water play centers should be filled before and emptied after each session, or when soiled.	True	100% (0%)	100% (0%)
9. After each use, utility gloves should be washed with warm soapy water and dried. ***	True	59% (50.3%)	0% (0%)
10. If children's mouths come in contact with equipment or furniture, these should be sanitized daily. *	False	77% (42.9%)	100% (0%)
Total correct		81% (12.8%)	84% (6.4%)

* $p<.05$, ** $p<.01$, *** $p<.001$

Medication Administration. There were 40 ECE providers who took the Medication Administration survey. The average age of the participants was 47.6 years old, with ages ranging from 24 to 69 years. The EC providers represented six NC counties: Bertie, Davidson, Guildford, Person, Randolph, and Richmond. Table 13 presents the items in the Medication Administration survey. For each item, the mean percent correct is listed for ECE providers at pre- and post-test. In addition, the “total correct” represents the average percent correct across ECE providers for the 10-item survey.

Across this sample of ECE providers, scores averaged greater than 80% for 8 of the 10 items at pre-test and across the survey as a whole the average was 90% correct. Approximately 85% of the ECE providers scored at or above 80% at pre-test. At post-test, 9 of the 10 items had scores averaging greater than 90%, and the average score for the post-test as a whole was greater than 90%. Further, approximately 98% of ECE participants scored at or above 80%. In addition, 45% of these ECE providers showed gains in knowledge on medication administration.

To examine whether ECE providers’ knowledge changed from pre- to post-test, a series of paired *t*-tests were conducted (Table 13). There were three items where ECE providers’ scores were significantly different from pre- to post-test. ECE providers demonstrated improvements in their knowledge for three survey items: Item 2, $t(38)=-2.08, p=.04$; Item 4, $t(38)=-2.09, p=.04$; and Item 9, $t(39)=-2.08, p=.04$. Of note, there was no significant change in Item 7, where participants consistently had an average score around 70%. There was a significant increase in the total percent of items correct from pre- to post-test, $t(39)=-3.12, p=.003$.

Table 13. Change in Teacher Knowledge: Medication Administration (n=40)

Item	Correct Answer	Mean% (sd) Pre-Test	Mean% (sd) Post-Test
1. Medication should be stored in a locked receptacle, and at appropriate temperature.	True	97% (16.0%)	100% (0%)
2. Medication should be stored near food, as a reminder to administer it.*	False	90% (30.7%)	100% (0%)
3. Storing emergency medications in children’s cubbies is helpful for easy access.	False	98% (15.8%)	95% (2.2%)
4. Controlled substances must be: counted in and out; have a parent’s signature; and be co-signed by a staff member.*	True	89% (31.1%)	100% (0%)
5. Prescription medications must have: the original pharmacy label; the child’s name; the dosage; the name of the health care provider; and the date of the prescription.	True	100% (0%)	100% (0%)
6. Over-the-counter medications, including diaper cream and sunscreen, can be transferred in other containers as long as they are labeled with the correct contents.	False	75% (43.9%)	90% (30.4%)
7. Prescribed medications must not be administered after the expiration date, but there is a “grace period” for over-the-counter medications.	False	73% (45.2%)	70% (46.4%)
8. Parents’ written medication administration instructions must match the instructions on the prescription label from the pharmacy for prescription medications or the instructions on the manufacturer’s packaging for over-the-counter medications.	True	95% (22.1%)	100% (0%)
9. When measuring our proper dosage, “eyeballing” the correct amount is sufficient in the absence of an appropriate device.*	False	88% (33.5%)	98% (15.8%)
10. It is important to organize medication authorization forms for the purposes of safe practice and confidentiality.	True	98% (15.8%)	100% (0%)
Total correct		90% (11.4%)	95% (8.5%)

* $p < .05$, ** $p < .01$, *** $p < .001$

Handwashing. There were 64 ECE providers who took the Handwashing survey. The average age of the participants was 41.3 years old, with ages ranging from 19 to 64 years. The ECE providers represented four NC counties: Craven, Guilford, Mecklenburg, and Wake. Table 14 presents the items in the Handwashing survey. For each item, the mean percent correct is listed for ECE providers at pre- and post-test. In addition, the “total correct” represents the average percent correct across ECE providers for the 10-item survey.

Across this sample of ECE providers, scores averaged greater than 80% for 8 of the 10 items at pre-test and across the survey as a whole. Approximately 72% of ECE providers scored at or above 80%. At post-test, 9 of the 10 items had scores averaging greater than 80%, and across the survey as a whole. Further, approximately 86% of ECE providers scored at 80% or above on the post-test. About half of these ECE providers showed an increase in knowledge about handwashing.

To examine whether ECE providers’ knowledge changed from pre- to post-test, a series of paired *t*-tests were conducted (Table 14). There was one item where ECE providers’ scores were significantly different from pre- to post-test, as evidenced by improvements in their knowledge on Item 5, $t(63)=-3.97, p<.001$. Despite this significant improvement, post-test scores on this item averaged 70%. Further, there was no significant change in Item 7, where participants consistently had an average score around 30%. There was a significant increase in the total percent of items correct from pre- to post-test, $t(63)=-2.84, p=.006$.

Table 14. Change in Teacher Knowledge: Handwashing (n=64)

Item	Correct Answer	Mean% (sd) Pre-Test	Mean% (sd) Post-Test
1. The handwashing area must have <u>both</u> paper towels <u>and</u> a hand drying device.	False	83% (38.0%)	86% (35.0%)
2. Children must wash their hands before and after playing with play-doh, sand, or water.	True	97% (17.5%)	92% (27.0%)
3. Proper handwashing procedure requires rubbing hands vigorously with soap for 20 seconds.	True	92% (27.0%)	97% (17.6%)
4. Children do not need to wash their hands before leaving the child care center.	False	77% (42.7%)	89% (31.7%)
5. Antibacterial soap is required for handwashing.***	False	45% (50.2%)	70% (46.0%)
6. It is acceptable to use hand sanitizer after changing diapers.	False	89% (31.5%)	94% (24.4%)
7. For infants and toddlers, adults should use a wipe or wet soapy paper towel to clean children's hands.	True	29% (45.5%)	31% (46.7%)
8. It is optional to display a handwashing poster.	False	92% (27.0%)	84% (36.6%)
9. Proper handwashing procedure requires using a paper towel to turn off manually operated faucets.	True	100% (0%)	98% (12.5%)
10. Adults must wash their hands after removing disposable gloves.	True	95% (21.3%)	98% (12.5%)
Total correct		80% (10.7%)	84% (10.5%)

* $p < .05$, ** $p < .01$, *** $p < .001$

Toileting/Diapering. There were 10 ECE providers who took the Toileting/Diapering survey. The average age of the participants was 32.2 years old, with ages ranging from 24 to 53 years. The ECE providers represented one NC county. Table 15 presents the items in the Toileting/Diapering survey. For each item, the mean percent correct is listed for ECE providers at pre- and post-test. In addition, the “total correct” represents the average percent correct across ECE providers for the 10-item survey.

Across this sample of ECE providers, scores averaged greater than 80% for 6 of the 10 items at pre-test and across the survey as a whole. At pre-test, 80% of ECE participants scored at or

above 80%. At post-test, 7 of the 10 items had scores averaging greater than 80%, as was the average score for the post-test as a whole. Although the percentage of ECE participants scoring at or above 80% remained unchanged at post-test, 30% of these ECE participants showed improvement in their toileting/diapering knowledge.

To examine whether ECE providers' knowledge changed from pre- to post-test, a series of paired t-tests were conducted (Table 15). At both the item level and for the total percent correct, there were no significant differences between pre- and post-tests, though the sample size may have been too small to detect effects.

Table 15. Change in Teacher Knowledge: Toileting/Diapering (n=10)

Item	Correct Answer	Mean% (sd) Pre-Test	Mean% (sd) Post-Test
1. The toileting area must have <u>both</u> paper towels <u>and</u> a hand drying device.	False	70% (48.3%)	80% (42.5%)
2. Toilets must be cleaned and disinfected at least once a week.	False	80% (42.5%)	70% (48.3%)
3. Clean clothes must be available for all children in the event their clothes become soiled.	True	100% (0%)	100% (0%)
4. A hands-free trash receptacle is preferred, but not required, for disposing soiled diapers.	True	70% (48.3%)	80% (42.5%)
5. Staff should always provide direct supervision and/or assistance for children when toileting.	True	100% (0%)	100% (0%)
6. Soiled cloth diapers and soiled clothing should be sent immediately to the facility's laundry room.	False	70% (48.3%)	60% (51.6%)
7. The toileting schedule meets the needs of each individual child.	True	100% (0%)	100% (0%)
8. Potty chairs are recommended as part of best practice in toilet training.	False	70% (48.3%)	70% (48.3%)
9. Facilities must have at least one toilet for each group of 1-9 toddlers, preschool-age, or school-age children.	True	80% (42.5%)	90% (31.6%)
10. Instructions for handwashing and for diapering must be posted in the diaper changing area.	True	100% (0%)	90% (31.6%)
Total correct		84% (12.6%)	84% (12.6%)

* $p < .05$, ** $p < .01$, *** $p < .001$

Summary. Less than 95% of ECE providers scored at or above 80% at pre-test on each of the Sanitation, Medication Administration, Handwashing, and Toileting/Diapering surveys. At post-test, 95% or greater of the ECE providers scored at or above 80% on the Sanitation and Medication Administration surveys only. Overall, approximately 82% of ECE providers scored at 80% or greater on the pre-test, and 98% scored at 80% or greater on the post-test. Further, a total of 48% of ECE providers made gains in health and safety knowledge. Whether gains were made across these participants was somewhat constrained by the generally high level of knowledge in these health and safety topics prior to their participation in the CCHCs' training sessions. These data cannot directly speak to any overall changes in teacher knowledge of best practices in health and safety since the launch of the coaching module. However, they do shed light on specific practices within certain content areas that may need more attention from CCHCs and for which CCHCs might use coaching strategies in their interactions with ECE providers.

Intersections across Outputs and Outcomes Data Sources

The RTT-ELC grant anticipated that implementation of the coaching module would achieve results in the number and type of services provided by CCHC (outputs) as well as improvements in child care quality and teachers' practices in the area of health and safety (outcomes). Extant and original data collected for the evaluation examined patterns of change in CCHCs' services and child care quality, specifically in the area of sanitation. These two sets of data suggest that there has been relative stability in the number of programs and children served by Smart Start-funded CCHCs and in programs' sanitation scores (with 91% of over 500 ECE programs achieving Superior ratings) since the launch of the coaching module. These sanitation data are potentially supported by the data collected by the evaluation team on ECE providers' knowledge of best practices in health and safety. These data from ECE providers showed that about 82% of ECE providers scored 80% or greater at pre-test, and 98% scored 80% or greater at post-test following a CCHC didactic training. The small number of providers who participated in the surveys prevents us from generalizing their results to programs across the state. Yet, these data do show that most of these ECE providers had high knowledge about health and safety practices during the years when the coaching module was being launched. It might be expected that teachers with high levels of knowledge about health and safety practices may work at programs that are more likely to receive high sanitation scores, particularly if they were served by CCHCs. Nonetheless, our data prevent us from making such causal links.

It is concerning that during this time, however, there was a decline in on-site consultation by Smart-Start funded CCHCs. Not only is on-site consultation a fundamental component of CCHC service delivery, it is *the* primary mechanism for implementing coaching with high fidelity. Indeed, certain coaching strategies, namely *action/practice* and *observation* cannot be done remotely. Moreover, the other coaching strategies (*joint planning*, *reflection*, and *feedback*) are likely more effective when done in-person. Further, the increased number of demerits from the sanitation data and the 48% improvement rate on the teacher knowledge surveys (despite the high pre- and post-test scores for the majority of the providers) illustrate opportunities for CCHC services that could be potentially enhanced by incorporating coaching. As indicated in earlier sections of this report, it is likely that other logistical factors independent of the launch of the coaching module (e.g., high caseloads and geographic spread) play a role in the decreased on-site consultations. Nonetheless, it is also possible that the demand for adding time-intensive coaching may further reduce CCHCs' capacity to provide on-site services across their caseload.

SUMMARY & IMPLICATIONS

Child Care Health Consultation is an established mechanism for promoting high quality child care environments within the domain of health and safety. Funds from the RTT-ELC grant aimed to enhance this practice by explicitly infusing coaching strategies within CCHC service delivery. This was done by: 1) developing a coaching module to provide training in the coaching process and in five specific coaching strategies; 2) hiring three Regional Coaches to be trained in the module, and to subsequently use coaching in interactions with CCHCs; and 3) training current and new CCHCs in the coaching module so that they, with support and additional coaching from their Regional Coach, could integrate coaching in their interactions with ECE providers.

RTT-ELC funds supported the evaluation study, which examined the impact of the coaching module, focusing on changes in CCHC practices (i.e., support from Regional Coaches, implementing coaching) and anticipated impacts on key service delivery outputs and outcomes for ECE programs and providers. Three main conclusions can be drawn from the evaluation:

1. **The goal of training Regional Coaches and CCHCs in the coaching module is being met**, albeit in a “rolling” fashion where Coaches were initially trained followed by several cohort groups of CCHCs dating back to February 2014 through January 2016.
2. **There is variation in implementation of the coaching module in practice**, with variability in the degree to which coaching strategies are being used by Regional Coaches with CCHCs, and by CCHCs in interactions with ECE providers.
3. **There appears to be some emerging benefit of the coaching module**, despite little change in some program- and provider-level outcomes and also declines in key service delivery practices such as on-site consultation.

Multiple data sources from the evaluation illustrate variation in the implementation of the coaching module. Data from Regional Coaches, CCHCs, and ECE providers revealed that the coaching strategies were used selectively rather than as a unified and complementary process, though it is possible that this implementation pattern simply reflected typical consultation practices. For example, *observation* could be just as much a part of consultation as coaching and does not indicate that coaching is occurring in the field.

Variation in implementation clearly intersects with how training in the coaching module has unfolded. A “rolling” training timeline resulted in Regional Coaches and CCHCs being prepared to use coaching at different time points during the evaluation study. Also, delays in coaching training and the length of time needed for it impacted CCHCs’ ability to provide services. Moreover, some remaining confusion about the coaching strategies raises questions about its effectiveness.

Another likely significant reason that may explain implementation variability is the number of on-site visits conducted by CCHCs. It might be expected that on-site visits would increase following the launch of the coaching module, given the importance of in-person interactions for conducting coaching successfully, but there was no such marked increase. Indeed, data from

Smart Start-funded CCHCs showed that the RTT-ELC target number of on-site visits was difficult to reach (12,760/year). There are a number of infrastructural reasons explaining the lower number of on-site visits. For instance, the number of CCHCs in the workforce limits the capacity of CCHC service delivery to reach this targeted number of on-site visits. Further, the high numbers of programs combined with the wide geographic catchment areas for the average CCHC's caseload creates challenges for individual CCHCs to initiate and foster coaching relationships with providers; although ECE providers expressed wanting additional time with their CCHC, they were aware that CCHCs are spread quite thin. Indeed, this is consistent with the increased time demands needed for investing in coaching relationships compared with consultation with providers, which tends to be more time-limited and focused on problem-solving issues that might be characterized as more "straightforward."

Moreover, utilization of specific coaching strategies seemed dependent on factors such as challenges in establishing relationships with providers, determining the fit of coaching with ECE providers' needs, and balancing logistical barriers (e.g., ability to use specific strategies remotely vs. in-person). For example, providers' needs often involve concrete issues (e.g., covering food during transport, disposing of diapers properly) that do not lend themselves to coaching but might be met more efficiently through consultation. Further, CCHCs described logistical barriers, such as high needs of programs and being spread so thin, preventing them from engaging in the more in-depth work that coaching requires.

Given the variable implementation of the coaching module, it is not surprising that the evaluation data showed mixed results of its potential impact on outputs in service delivery areas and program- and provider-level outcomes. From a positive perspective, CCHCs' and ECE providers' survey data showed that they are experiencing an array of coaching strategies with their Regional Coach and CCHC, respectively, and that they generally have high levels of satisfaction with these experiences. In addition, the RTT-ELC goals for serving the target number of children (80,000/year) and the target number of facilities visited (2,320/year) were nearly attained. Also, the stability in high sanitation scores suggests that ECE programs have been doing very well in this area prior to and following the launch of the coaching module, although this does not suggest direct impact of adding coaching.

Despite variable implementation, the evaluation data suggest possible opportunities that may be ripe for enhancing coaching interactions between CCHCs and ECE providers. The high sanitation scores suggest that CCHCs may not be serving the most high-need programs. Although CCHCs are often limited by which programs request and are willing to receive services, the sanitation data suggest that more targeted efforts and outreach are needed to insure the most in-need programs receive services. Further, results from the teacher knowledge surveys suggest that ECE providers are already quite knowledgeable about health and safety practices and benefit from CCHC-provided trainings. This suggests gaps in health and safety practices may not be due to a lack of provider knowledge, but that there may be a gap in translating providers' knowledge into practice. In addition, providers who have a strong foundation of knowledge in health and safety issues may be better equipped to contribute to the coaching relationship. For some providers, this may allow them to be more open to coaching so they can

focus on translating their knowledge into sound practice. Alternatively, the high knowledge among providers may also lead them to view coaching as unnecessary, which may result in CCHCs needing to attend to possible barriers to creating a successful relationship with the provider. Finally, ECE providers and parents who participated in focus groups had a wealth of suggestions for needed services, identifying several content areas and collaborative strategies that would lend themselves toward coaching from CCHCs.

Taken together, the evaluation data illustrate that there is slow but encouraging progress in launching a coaching module for NC CCHCs, but that consistent and comprehensive implementation has not yet been achieved. Challenges in the uptake of these new practices must be considered within the broader context of CCHC service delivery. The evaluation data showed that a large need remains for CCHC services overall across the state. In general, the imbalance between what CCHCs can provide and the level of service desired or needed by programs leads to unmet need. This service delivery gap is potentially compounded by the degree of time and intensity needed for CCHCs to use coaching strategies in their interactions with ECE providers, which may further drain the capacity of the existing workforce. However, should there be progress in addressing the significant logistic and conceptual challenges identified in this evaluation, there is an increased potential for the coaching module to have more consistent and complete uptake by CCHCs; such changes may help realize the anticipated benefit of coaching to directly impact health and safety for ECE programs, providers, and the young children served.

Limitations. For this descriptive study, sampling and recruitment were the primary challenges to collecting data that would fully address the evaluation questions. A number of data collection methods originally proposed utilized a population-based sampling plan for recruiting participants. However, logistical barriers such as lack of mechanisms for identifying and contacting specific target groups (i.e., providers, families) as well as feasibility issues (e.g., constraints on locations for focus groups) resulted in revising the data collection methods to utilize more strategic sampling methods. In addition, lack of population-based recruitment methods limited some opportunities to have enough variability in the data to examine large-scale contextual issues and to have enough statistical power to explore effects for subpopulations such as urban and rural geographic regions, program and provider characteristics, and child demographics. To counter these challenges, a strategic sampling plan was used to collect data at the population level (e.g., Quality of Implementation Survey for CCHCs; interviews of Regional Coaches) or via sampling by geographic region (e.g., focus groups) to the extent possible. In total, these sampling strategies somewhat strengthened the ability to describe evaluation findings to experiences within specific geographic regions and across the state of NC as a whole.

Nonetheless, different sampling approaches resulted in different samples for each method, preventing the ability to match data sources across participants. Also, obtaining data from parents was limited due to feasibility issues. Recruiting parents for focus groups occurred through the child care programs, and was limited to 1-2 volunteer programs in each region who agreed to help with recruitment. Despite providing child care, meals, and incentives, the small number of parents who participated in each region represented just one or two ECE programs.

Most of this small group of parents was unaware of CCHC services, making it not possible to obtain information on the impact of coaching and CCHC services more broadly on families.

RECOMMENDATIONS

The following recommendations may serve as a road map or action plan in using the findings from the evaluation to support more widespread and consistent uptake of coaching:

- **Reduce gaps in training experiences.** For both Regional Coaches and CCHCs, it is recommended that training delays be kept to a minimum and to avoid expectations that service delivery begins prior to formal training in the Regional Coach or CCHC role and the coaching module. Expectations for the Regional Coach and CCHC roles should be well delineated including how the role is defined; the scope of service delivery demands; the specific practice approaches to be utilized; and the content knowledge in health and safety, early childhood environments, and young children’s development. These expectations should be evident upon recruiting Regional Coaches and CCHCs into these positions, throughout training, and when providing services all while considering the unique learning styles and individual approaches a given Coach or CCHC brings to the role. Further, the training process should include checks or other safeguards to ensure that Regional Coaches’ and CCHCs’ understanding of specific coaching concepts and strategies is consistent with widely-accepted operational definitions in the field. In addition, training should include similar checks on whether Coaches and CCHCs have a strong working knowledge of how to translate and apply these concepts and strategies in the context of CCHC service delivery.
- **Fully implement the coaching module and support Regional Coaches in this role.** Full implementation of the coaching module will be evidenced by Regional Coaches and CCHCs employing the coaching strategies in a unified process rather than in an ad hoc or isolated manner. This process requires that both Regional Coaches and CCHCs have a concrete foundational understanding of each coaching strategy and how the strategies build upon and interact with one another to create a fluid process. When Regional Coaches and CCHCs equally have the same conceptual understanding of the coaching process and the specific strategies within it, this joint understanding has the potential for enhancing communication between Regional Coaches and CCHCs. Regional Coaches can be further supported by increasing Local Partnerships’ understanding of the specific ways that Regional Coaches can use coaching to support CCHCs, thereby reducing misunderstandings of Coaches’ roles. Moreover, readiness for coaching should be assessed prior to taking on and implementing the coaching process. It may be that smaller, slower scale implementation coupled with a more intentional and well-supported use of the full coaching approach would improve uptake.
- **Support translation of coaching training into practice.** For both CCHCs and Regional coaches, on-going, intensive coaching support would be useful in the first year following training to assist new coaches to translate what they have learned to their practice.
- **Give guidance to CCHCs on how to determine when providers’ needs can be most effectively addressed via coaching vs. consultation methods.** CCHCs can benefit from guidance provided during and after training to help determine which situations are more or less amenable to coaching. Coaching is not a “one size fits all” solution to create change with

an implementation framework. Utilizing coaching approaches requires thoughtful examination of the “fit” of coaching strategies for addressing the specific situations encountered by CCHCs in their typical service delivery. When changes in providers’ practices are needed to achieve a specified, concrete criterion (e.g., a specific rule or regulation required by a regulatory body such as DCDEE), the use of coaching may be inappropriate. These situations may be better addressed by consulting approaches, where the CCHC serves as an expert in health and safety regulations and gives a direct recommendation for changing practice. However, coaching may be more appropriate in situations that do not involve meeting a specific criterion (e.g., coaching a provider to change practices that will enhance provision of healthier meals), or when exploring attitudinal, behavioral, or other logistical barriers to changing practices when the provider has knowledge of expected regulatory standards (e.g., using coaching to explore why meals are not being covered, when the provider knows they should be).

- **Demonstrate the importance of coaching by encouraging including these services in CCHCs’ regular reports.** Documenting service delivery is an indisputable need for creating accountability. The absence of coaching from CCHCs’ required service delivery reports gives the clear message that coaching is not a highly valued work activity within the CCHC role. Requiring documentation of coaching has the potential to increase the likelihood that CCHCs will more frequently incorporate coaching into their regular practice. However, adding this element to CCHCs’ documentation must be considered in light of whether CCHCs have the capacity to engage in coaching given the constraints of their caseloads.
- **Target programs most in need for CCHC services (i.e., those with low star ratings, ERS scores, Sanitation scores).** Some early childhood quality assurance systems over-represent programs that exhibit higher levels of quality, and these programs may be more open to receiving services from CCHCs. However, these are not the programs that can most substantively benefit from CCHCs services. Using data from assurance systems that are population-based (e.g., Sanitation visits), could help determine which programs are most in need of CCHC services and can help CCHCs prioritize which programs to target. CCHCs could further be supported to serve high-need programs by assurance systems creating consequences for programs that receive low sanitation scores and/or high numbers of demerits, where such programs might be required to participate in CCHC services prior to their next Sanitation visit.
- **Continue examining how to identify and leverage funding sources to enhance the capacity of the CCHC workforce.** Primary challenges in the CCHC service delivery model include gaps in service such as limited on-site visits from CCHCs to their programs; limited numbers of CCHCs to serve a given county; some CCHCs needing to serve more than one county; and some counties having no CCHC services at all. Further, counties that have CCHCs may struggle with CCHC turnover and challenges in finding funding to support these positions, creating fears about job security for current CCHCs. These challenges illustrate the limited capacity of the CCHC workforce to affect changes in health and safety across the state of North Carolina as a whole. Further advocacy for the importance of the CCHC role and its contributions to promoting young children’s health and safety is needed for ongoing efforts to identify new and leverage existing funding sources. These efforts are critical

components to enhancing the capacity of the CCHC workforce and ultimately the state-wide uptake of CCHC services in ECE programs.