Qualistar | HEALTHY child care COLORADO

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Colorado Child Care Health Consultant Needs Assessment

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Healthy Child Care Colorado, the Children's Hospital Colorado School Health Program, and the Adult and Child Consortium for Health Outcomes Research and Delivery Science (ACCORDS) collaborated to evaluate Colorado child care health consultants' (CCHCs) work load, typical visit types, typical health conditions encountered, competencies, and training needs. Results from this process will inform Healthy Child Care Colorado in determining future priorities and directions.

Background & Partnership

Healthy Child Care Colorado and Qualistar representatives included:

- Taran M. Schneider, MA – Director of Healthy Child Care Colorado
- Stacy Howard, PhD – Vice President of Quality Advancement

Children's Hospital Colorado representatives included:

- Theresa Rapstine, MS, RN
- Mary Utsler MSN, RN
- Pamela Nii, BSN, RN, NCSN
- Christine Perreault MHA, RN

Methods

Quantitative Data

The survey instrument was developed jointly with Qualistar/Healthy Child Care Colorado and Children's Hospital Colorado collaborators and pre-tested on 3 CCHCs. The final survey included 31 questions and was 7 pages long. Using e-mail addresses obtained from the medication administration trainer database, the CCHC list serve, and the technical assistance log at Qualistar/Healthy Child Care Colorado, 2626 contacts received an invitation to participate in an Internet survey on November 11th, 2016. Non-responders received up to two email reminders in a week interval. Verint©, a web-based program, was used to administer the surveys. Each survey respondent received $15 incentive for completed survey in a form of online Amazon gift card. In addition to the web-based survey, an identical paper version of the survey was administered to 63 CCHCs during a conference on November 4th, 2017. For questions with categorical responses, proportions and confidence intervals were calculated. For questions with ordinal or continuous responses, the mean, median, and interquartile range were calculated. Responses were analyzed as a group and divided into those who reported that their primary employer was a school versus those who reported that their primary employer was something other than a school (including child care center, self-employed, Head Start, hospital, agency, health department).

Qualitative Data

A semi-structured interview guide was developed jointly with Qualistar/Healthy Child Care Colorado and Children's Hospital Colorado collaborators. Forty CCHCs representing urban and rural areas were interviewed by professional research assistants from ACCORDS. The average interview length was 30 minutes. The interviews were completed over 7 weeks from December 9-January 30, 2017. Participants received a $20 e-gift card to Amazon. The interviews were recorded and transcribed. The interviews were divided between two professional research assistants trained in qualitative coding methods who identified key themes and illustrative quotes. A third professional research assistant also helped with the analysis.

Quantitative Findings

Respondents

A total of 325 surveys were used in the analysis with 63 completed on paper and 262 completed online. An additional 71 respondents replied to the online survey and indicated that they were not currently serving as CCHCs; these surveys were not eligible and were not included in the analysis. The respondents represented a diversity of locations with 54 or 64 Colorado counties represented. The vast majority (97%) of CCHCs were trained as nurses. Of those surveyed, 76% were employed by a school (this group could include those who were employed by a school *and* another employer), and 24% were employed by another type of employer with child care center and self-employed being the most common types of other employers. CCHCs reported working in a variety of settings with many reporting working in more than one setting: 81% worked at a pre-school, 42% at a child care center, 29% at a before or after school program, 18% at a camp, and 6% at a family child care home. Respondents reported a range of years of experience with 18% with less than one year of experience as a CCHC, 39% with 1 to 4 years, 22% with 5 to 9 years, and 22% with 10 or more years. While the majority (67%) reported traveling less than 20 miles one way to reach their farthest program, 18% reported traveling 20 to 39 miles, and 15% reported traveling 40 miles or more.

Health Conditions and Experience

When asked whether they currently cared for children with specific health conditions, the majority responded that they cared for at least one child with asthma (86%), severe allergy (85%), seizures (61%), and challenging behaviors (60%). As shown in Figure 1, less than half provided care for children with a wide variety of other conditions or needs. When asked about their level of experience caring for children with each of the same health conditions or needs, the majority responded that they were very experienced caring for asthma (75%), severe allergy (68%), seizures (61%), diabetes (55%), oxygen needs (53%), and gastrostomy tube feeds (50%) as shown in Figure 2. Of note, while challenging behaviors and obesity were fairly common conditions encountered by CCHCs (Figure 1), only 27% and 30% reported being very experienced with these

conditions respectively (Figure 2). The majority were very or somewhat comfortable delegating care to unlicensed assistive personnel for routine medication administration (98%), asthma care (96%), severe allergy care (91%), emergency medication management of seizures (85%), diabetes care (74%), accessing and using a feeding tube (73%), and oxygen care (72%). About half were very or somewhat comfortable delegating maintaining the stoma when a gastrostomy tube falls out (54%) and bladder catheterization (52%), and 65% were *not* comfortable delegating tracheostomy care.

Figure 1. Health Conditions Currently Managed by CCHCs

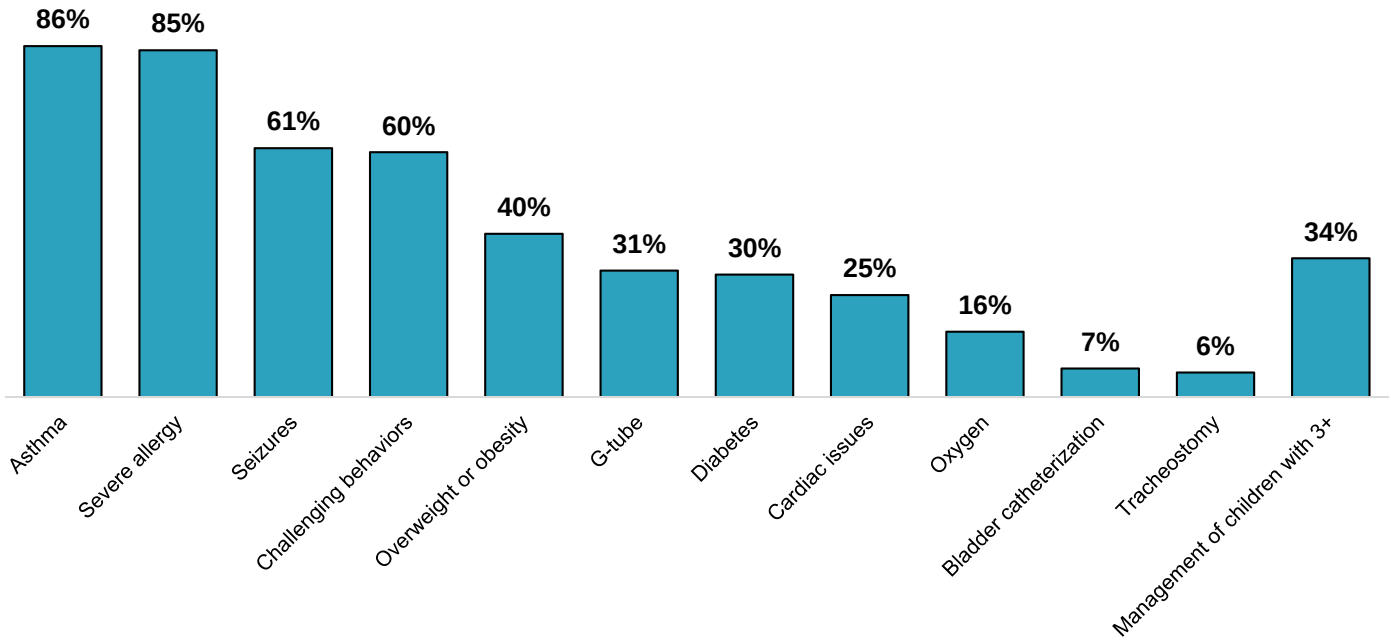
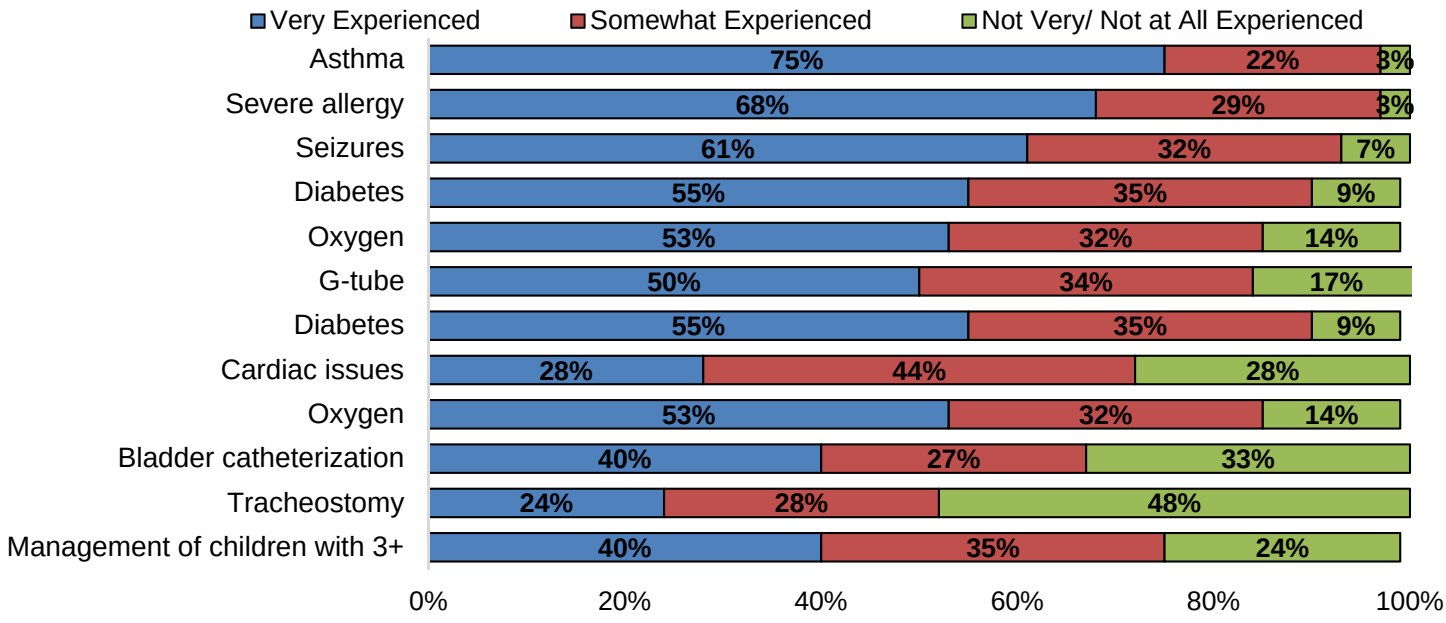


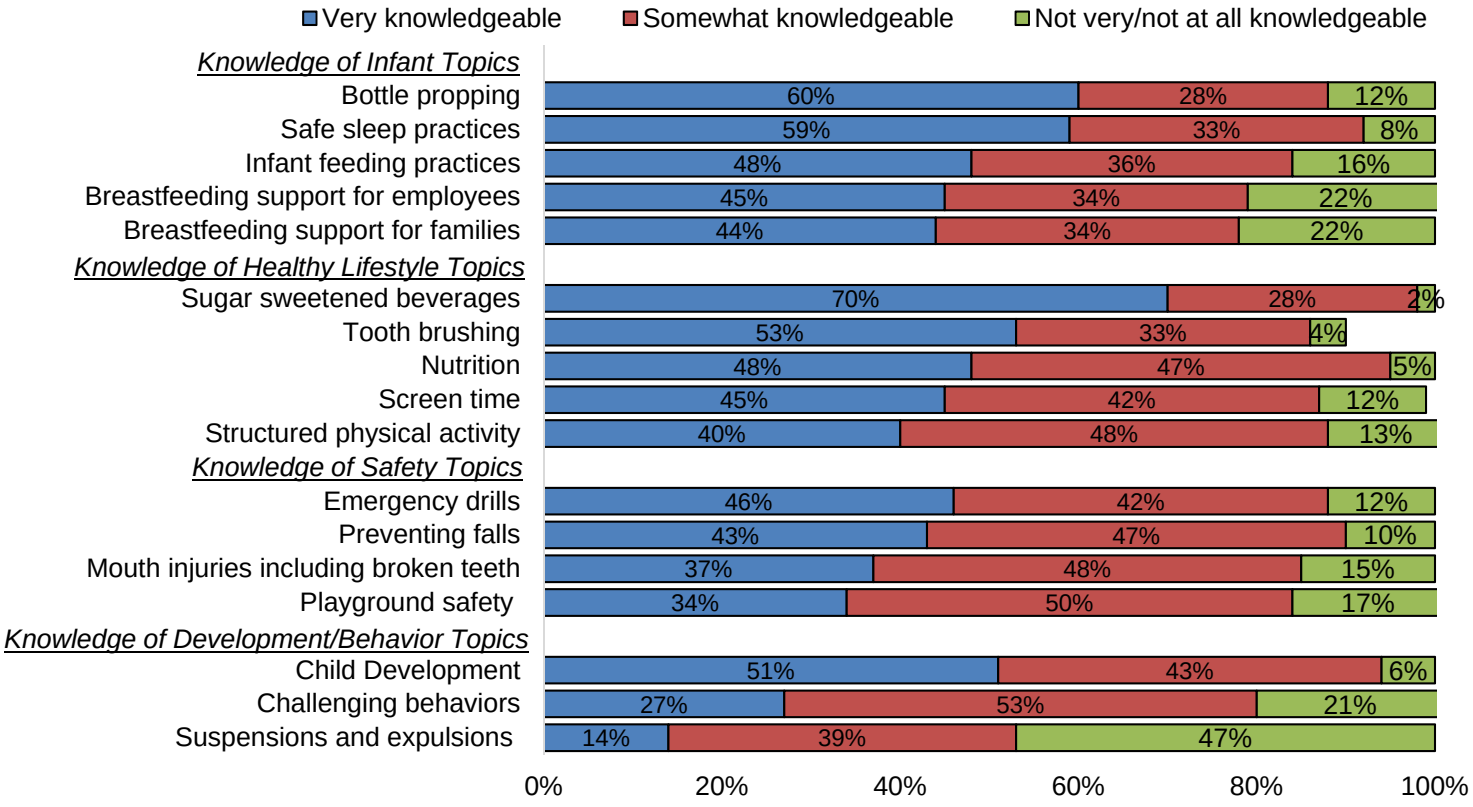
Figure 2. Experience Caring for Children with Health Conditions



Knowledge Gaps and Support Needs

Figure 3 shows CCHC's assessment of their own knowledge for a variety of topics. Overall, they reported fairly high knowledge for infant topics with the biggest gap (22% not very or not at all knowledgeable) being for breastfeeding support. CCHCs also reported fairly high knowledge for healthy lifestyle topics though more than 40% reported they were only somewhat knowledgeable about screen time, nutrition, and physical activity). Compared to most infant and healthy lifestyle topics, they were somewhat less knowledgeable about safety topics. Notably, while 51% reported being very knowledgeable about child development, 21% were not very or not at all knowledgeable about challenging behaviors (one of the more common conditions they reported encountering) and 47% were not knowledgeable about suspensions and expulsions. Other gaps were administrative procedures for CCHCs such as contracts, record keeping, business planning, and budgeting (38% not very or not at all knowledgeable), mental health (21%), sanitation rules for child care (20%), and obesity prevention such as teaching and mentoring child care providers on healthy meal plans that meet regulations (18%). Thirty-one percent were not aware of the Colorado CCHC Competencies published by Healthy Child Care Colorado. Seventy-percent or more thought that a private online discussion board, an online training platform, and an online library of resources would be useful supports from Healthy Child Care Colorado. Seventy-six percent were interested in attending an annual conference specifically for CCHCs. Seventy-five percent did not have a mentor and, among those without a mentor, 19% were very and 37% were somewhat interested in having a mentor.

Figure 3. Knowledge Level about Specific Practices Relevant to Child Care Programs



Qualitative Findings

Respondents

Of those interviewed, 17 worked in rural, 20 in urban, and in 3 suburban areas; 25 were employed by schools (public, private, and charter), 3 by an agency, 3 self-employed, 2 by Head Start, 2 by a health department, 1 by a hospital, and 4 described being employed by other (city and non-profits). When asked how many programs they support, many were confused about whether programs were the centers or classrooms they work with. After clarification, 15 reported serving 1 to 3 programs, 15 served 4 to 10 programs, and 10 served more than 10 programs. When asked about the length of time they had spent in the CCHC role, 6 reported less than 1 year, 16 reported 1 to 5 years, and 18 reported more than 5 years. A common theme was that many CCHCs had been doing the same tasks as school nurses and consultants for many years, but, since the title of CCHC was relatively new to them, they did not know how to say when exactly they began this role as a child care health consultant.

Key Themes

CCHCs desired a clear description of the job and tasks required before they started their role and they wanted a better understanding of the difference between consultants outside of schools and within school districts. For example, one CCHC said, "*I think there's just-- it's not necessarily a very well-defined role. And I think it's becoming more and more defined as it's becoming more and more enforced. I mean, it sounds like something that's been around for a very long time, but was not enforced until the last five-ish years, and even then it's been somewhat loose… I just think that there's not necessarily clear guidelines. It's like, 'Okay. To be a childcare health consultant, you have to be an RN, an NP, or an [NV?]. Right?' That doesn't tell you much…I think just knowing the role, what Licensing envisions the role, and perhaps what do childcare centers envision that role, and then where do those meet?*"

The length and content of routine visits were quite variable with time spent ranging from 10 minutes to 2 hours. One CCHC said, *"I spend as much time as I need. When we do trainings or whatever, I spend an hour, sometimes more. But in general, it's around 30 minutes, if there's not some specific training that I'm doing."* Most CCHCs reported delegating to 2-60 people in a year, depending on the setting, how many programs they work with, and how many students. A common theme that impacted the comfort levels of the CCHCs is the comfort level and competence of the teaching staff being delegated to; issues included: teaching staff don't want responsibility, CCHCs may decide not to train staff members who made them uncomfortable in their abilities, staff turn-over, task repetition (more comfort delegating frequent tasks), and some tasks weren't appropriate for delegation because of the need for assessment skills. For example, a CCHC indicated "*when we have, staff turn-over, it makes me anxious until I get to know [them] better and recognized their strengths and weaknesses."* The amount of time that CCHCs reported spending on documenting varied. Some spent 5 minutes after each visit, while others reported spending 50% of their time documenting. CCHCs described storing and filing notes in a variety of ways including: hard copy papers in notebooks and binders, often also

combined with scanning onto computers and saving on cloud drives; online software programs such as Infinite Campus or Child Plus; and using forms downloaded from the Colorado Department of Education, Children's Hospital Colorado, and 'the state school nurse website'. CCHCs noted a desire to have a 'centralized site' to find forms. A common theme was to spend the bulk of the time in the beginning of the school year delegating new tasks and medications, then this tapered off throughout the year with shorter regular visits and meetings.

When asked about the types of questions CCHCs were asked by child care program providers, a wide variety of topics were mentioned. Common issues were immunizations (how to complete the immunization survey and which vaccines are required for children and staff), nuisance bugs (lice and bedbugs), and rashes. Others included: asthma, seizures, food allergies, challenging behaviors (kids won't eat, managing the children that struggle with playing with other children, and potty-training), regulations/rules, medications, nutrition and exercise, diabetes, vision and hearing, dental hygiene, washing hands, playground safety, exclusion policy, and finance issues at home. CCHCs noted the topics that they were personally interested in addressing with the child care programs they serve include oral health, nutrition and physical activity, parent education, screen time, hand washing, safety in schools, and emergency planning.

CCHCs described using a variety of sources to keep up-to-date with regulations including: the Colorado or National Association of School Nurses listserv, early Head Start, Colorado Departments of Education and Early Childhood Education, Qualistar, health departments, e-mails from supervisors or center administrators, professional meetings, webinars, and meetings with peers. They noted that information about regulations is not always consistent with one CCHC saying, "*It seems like there are different regulations posted in different places."* When child care programs that the CCHCs work with receive violations from child care licensing, it is a common that the program administration is alerted first, and then they contact the CCHCs for issues regarding health and safety. CCHCs noted that missing immunization records and incorrect medication orders were common violations.

Barriers to training included cost issues such as not receiving support for registration and/or mileage and losing pay if the CCHC cannot work for a day. CCHCs also noted a lack of support to cover their role while out for training. For example, a CCHC noted, *"I think my biggest thing is, how I talk with my bosses to say, 'I need a couple extra days outside of the school arena so that I actually can have some sort of conference with peers.' Because they don't understand. I'm it. I'm it, out here in the middle of nowhere…"* They also noted a lack of training tailored to CCHCs. For example, they described often being 'lumped in' with all school nurses for meetings and conferences so that there was not enough time for discussions about regulations and licensing issues specific to the child care setting. CCHCs suggested that a combination of on-line and in person training might work best to meet their training needs. They noted that in person training promotes discussion but scheduling and location can be problematic. Some CCHCs had a preference for online materials, such as webinars, to be recorded and available so that they can be accessed at any time. Additional suggestions for improving training included: 'Save the Date' reminders months in advance, rotating

days and times meetings are held, having more meetings in areas outside of the Denver metro area, attending meetings with licensing and health inspectors, mentoring, and "*having already laid out the resources instead of having to go find my own resources for delegation*."

The table below provides additional illustrative quotes from the key informant interviews:

THEME	QUOTES
Visits	
How many people delegating to	*"Well, I know that EpiPens, inhalers, those things are delegated to all teachers in all classrooms. So that's at least two people in every classroom, so 23 times 2, let's see, so about 46 people are delegated so, I'd say."*
	'I'm happy to train any and everybody for these kids to make sure that they're safe."
Comfort level delegating	*"Sure, like I said, those are life-threatening conditions and if they're not done correctly and properly, it could be a bad outcome for the child. So that's a tough thing to ask a teacher, to do an intensive medical procedure like insulin, unless again, it's on a pump or a dial pen, but errors can still be made"*
Time spent documenting	*"Too much [laughter]. It varies. I do a lot of that work at home in the evening, or that I'm just doing notes for my whole day from my little sticky notes that I have hanging around. I probably spend almost more time documenting than I get to spend with the-- or as much time as I do in the classroom. Probably, after each visit, at least two to five minutes just documenting it with a regular visit. I'll just say, "Went in, saw Joanne. Spoke to her about this. Her level of understanding was this."*
	"I have so much paperwork. People complain that they are signing-- it's worse than buying a house. For diabetes, there's probably about 10 papers that people have to sign and we have to go through extensively before I even start delegation to be quite honest with you."
Interests	
	"I'm in [location] and we have a huge diabetes population, specifically type 2 diabetes, which is largely nutrition-based. So some of these kids aren't getting the nutrition education at home that they should be getting. So, I think if we can implement something there, that would really help. And then everything is so technology-based anymore, if they're not in front of a TV, they're in front of the video game, which then is going to increase our chances-- or increase our obesity population, just because of the lack of exercise and poor diet…"
Obesity	
	"[Heart Smart Assessment is] an assessment that our parents do at the beginning of the year. We give them an iPad with this assessment on it, and they ask how many sugary drinks a day these kids get. How much-- I think it's how much activity. It kind of pulls in all the nutrition and activity. And then puts in their height and weight and then we send them the results of-- the Heart Smart goes based on their BMI, and what percentile they're in. And then what the strengths are for the kiddo and what needs to be focused on. So that's something that they do with our registered dietitian that's here on staff. I mean, I've seen it and I've done it with families, but they do that with her. And then they have that discussion about obesity, or being overweight, or obese, and

	trying to target things that are good for kids. She has discussions with families about picky eaters. And any of our underweight kids that need PediaSure-- I get the orders for the PediaSure, so they can have it, and special diet statements and things like that. So a lot of those discussions go through her."
Regulations and Violations	
	"If I knew the specific guidelines that each program had to meet, or the ones that are most often a violation, juts to help them avoid those, that would be helpful."
	"I get a copy [of the violation report]. So when I do my monthly visits, if an inspector or someone has come in, the administration will actually hand me a hard copy of that so that I can look through it and see what they're doing and then discuss what they're doing to curtail that and that kind of thing."
Training	
	"I would do online. That would be fine. I think it's having the access to it, right? I do think-- and this is sort of a mixed bag, but I do think in person would be my favorite way, but that's also the hardest way for me to attend. So it's really easy to be like, "Oh, I wish things were offered in person, but I don't know if I'd be able to go." So I'm a big fan of when there's a lot of information offered on one day. So like when I went to the pre-conference that was from 8:00-5:00, and it was jam-packed, but it was like, "That's okay. I can give this day to this." And it was great. It was really, truly invaluable. I would do that. I would do a professional development day. Whereas a professional development hour, or two hours in person, is much harder for me to do."
Communication	*"I do think that the whole piece of communication, that maybe-- like right now, for Colorado Association of School Nurses, I'm on a blog with them, and it's really cool because somebody will just write in and say, "Hi, I have a child with this problem. Does anybody have a healthcare plan?" or they send out reminders for regional meetings or different opportunities that might be available. And I would love to see something like that, where it just goes out to all your healthcare consultants, because I don't even know who is one, and who isn't one, and who might be one in my area. So to be able to reach out with that communication, because I think we can mentor each other really well if we just had more communication."*
Support	*"You know what? It would be nice if we had some kind of format where we would find out what all is required of us, like the immunization course, annually. Some kind of schedule we know when things are due and we can keep them in our binder. Just right now it's kind of like, oh, yeah, we've got to do this, or we're told to do that, but it would be nice to say all this stuff is required on a yearly basis kind of thing, and we can keep track of it."*
Support	
Engaging in peer discussions	*"On line's good for just giving information out, but to actually discuss and talk, and figure out how to implement, it's better to be face-to-face, and regional meetings I think would be a good way."*
Barriers	*"And I just, I don't know-- I think my biggest thing is, how do I talk with my bosses to say, "I need a couple extra days outside of the school arena so that I actually can have some sort of conference with peers." Because they don't understand. I'm it. I'm it, out here in the middle of nowhere, and it doesn't matter if we have nurses that work at the clinic and nurses that work in*

	the hospital and nurses that work at the county. It's different. So it's isolating. But it's hard to find the time to be able to even get-- today is not a day that I'm at work. So, finding the time to be able to do those peer interactions-- regionally probably would work best, because things are different on the front range than they are out here in western Colorado."
Those working with IEPs	*"I think again if we could have a subgroup for childcare health consultants that have special needs and kids on IEP's specifically, I think that would be a good group to have. Because there is quite a few of us. All the districts have these types of programs but I think a lot of us share the same frustrations."*
Independent consultants	*"I guess the one thing would be we are all independent, so we really don't work together at all, and that's tough unless you develop your own network. I think so many people are afraid to work with someone else, because they're afraid they'll take their clients. So on a day when you're sick, you don't have anyone that can help you. If you're sick for two weeks with the flu, you miss your center visits and then they're written up. So I guess the lack of support in the day-to-day stuff."*
Wish had known before starting the CCHC role	
	"I wish I had understood the delegation more and everything associated with it, instead of kind of learning trial by fire"
	"I wish I knew just how much the regulations would increase and how this would be difficult to deal with all the regulation"

Appendices

- Survey
- Presentation PowerPoint Slides
- Qualitative Analysis Summary