Published in final edited form as:

Acad Pediatr. 2019 ; 19(4): 438–445. doi:10.1016/j.acap.2019.01.006.

A Qualitative Study Examining Stakeholder Perspectives of a Local Child Abuse Program in Community Emergency Departments

Gunjan Tiyyagura, MD¹, Paula Schaeffer, MA¹, Marcie Gawel, RN, MSN, CPEN¹, John M. Leventhal, MD¹, Marc Auerbach, MD¹, and Andrea G. Asnes, MD, MSW¹

¹Yale University School of Medicine, Department of Pediatrics, New Haven, CT, USA

Keywords

child abuse; emergency department; champions; community of practice

Introduction:

The acute nature of an injury and/or lack of access or availability of primary care may lead victims of child abuse and/or neglect (CAN) to seek care in emergency departments (EDs) where ED providers may be the only medical contact to recognize abuse or neglect. Studies of children presenting to EDs indicate that up to 2% have injuries for which CAN should be considered.^{1–4} In contrast, of children who died or suffered serious injuries from abuse, about 30% had been previously evaluated for injuries that were not recognized as abusive by a health care provider, often in EDs.^{5–9} ED providers must recognize those injuries suggestive of CAN and report them to child protective services (CPS) in order to prevent additional injury or death.

Recognition and reporting of CAN are especially important in community EDs, where the vast majority of emergency care for children in the U.S. is provided.^{10–12} Providers in community EDs care for both children and adults, are exposed to fewer pediatric cases, and have limited access to subspecialist consultation.^{10–12} Evidence suggests that abusive injuries are also missed more frequently in community vs pediatric EDs due to lack of recognition of abuse-related injuries.^{13,14}

Corresponding Author: Gunjan Tiyyagura, MD, gunjan.tiyyagura@yale.edu, Phone: (203) 737-7445, Address: 100 York Street, Suite 1d, New Haven, CT 06511.

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Meetings:

Eastern Society for Pediatric Research, Philadelphia, PA, March 2017 Pediatric Academic Societies, San Francisco, California, May 2017 Helfer Society, Denver, Colorado, April 2017

Conflict of Interest:

The authors have no conflicts of interest to disclose.

Despite the need to translate best practices regarding CAN to community EDs, efforts to improve recognition and reporting of CAN in EDs have been largely limited to the use of screening instruments and educational interventions aimed to improve clinical care. Neither of these approaches, however, has been successful in improving the detection of physical abuse, and studies examining these efforts have had limitations.^{15–19} Electronic health record-based clinical decision support and mobile apps to aid medical providers in identifying cases of child abuse have been developed and show promise in increasing CPS referrals for suspected CAN.²⁰

Recent studies examining factors related to improving aspects of pediatric care in community EDs have found that the presence of a pediatric emergency care coordinator who serves as a clinical champion for pediatrics improved pediatric readiness and was associated with having quality improvement plans and policies addressing the needs of children.^{10,21,22} We aimed to leverage this novel approach of using a pediatric champion who was provided with access to experts at an academic medical center, and resources and training focused on CAN, by implementing the Community ED CAN Program. The local CAN champions served as a resource to directly answer questions, provide case follow-up, provide CAN-related education, and facilitate access to regional CAN experts or local CPS staff for frontline ED providers when questions arose about CAN.

Goals of this investigation:

The specific aims of this qualitative study were 1) to understand stakeholders' perspectives on the strengths and challenges of the Community ED CAN Program model and 2) to explore factors that influenced implementation. The results of this qualitative study will be used to inform the quantitative assessment of program effectiveness and to inform development of future iterations of the program.

Methods:

Intervention and Study Setting:

Regional CAN experts, who were board certified in child abuse pediatrics, implemented the CAN program at three community EDs located in different regions in Connecticut. The local CAN champions were members of the clinical staff (physicians, advanced level practitioners, or nurses) with an interest in CAN and received a one-time training in CAN followed by monthly educational sessions provided by the CAN experts. The CAN experts also facilitated relationships between the local champions and local CPS program managers to improve communication between ED providers and CPS about questions related to CAN. The experts and local champions then obtained local multidisciplinary leadership buy-in to ensure support of the program in the EDs. Duties of the local CAN champions included: 1) providing consultation for ED medical providers about cases of suspected CAN either in real time while working clinically in the ED or by phone/email consultation when off-service, as well as occasionally after discharge; 2) reviewing and tracking of cases of suspected CAN reported to CPS; 3) facilitating a regular, multi-disciplinary team meeting involving CPS staff, ED providers, the CAN champions, radiologists and a CAN expert to discuss cases reported to CPS; 4) providing/facilitating case-based education and follow-up to ED staff;

and 5) serving as a liaison to facilitate communication between the ED staff, the CPS staff and the regional CAN experts, who were available 24–7 for consultation. Figure 1 illustrates these program components.

Participating EDs had established transfer relationships with the pediatric academic medical center to which they transferred children in need of higher levels of care. The academic medical center was home to a well-established child abuse program with CAN experts and advanced level practitioners who provided 24–7 on-call case consultation and review services for the hospital, including the ED and who had implemented the Community ED CAN programs. Characteristics of each ED are described in Table 1. None of the three community EDs had full-time on-site social work or CAN expert support, and a different CPS regional office served each ED. The CAN Programs were established in July 2013 in ED 1, January 2015 in ED 2, and January 2016 in ED 3.

Study design:

We used a qualitative research design with semi-structured, one-on-one interviews to understand key stakeholders' perspectives of the Community ED CAN Program. Stakeholders included: ED clinicians; local CAN champions; CAN experts; division chiefs/managers; and CPS and hospital social workers. We used both purposeful sampling (identifying participants with active roles in the CAN Programs, such as the CAN champions) and snowball sampling (in which existing participants recruited future participants from among their colleagues, such as social workers who worked with the CAN champions).²³ Participants were recruited via email contact up to 3 times over a month period. Four physicians, 4 Physician Assistants and 1 nurse did not respond to the interview requests.

The interview guide consisted of open-ended questions and included prompts to encourage detailed discussion related to experiences with the program. Figure 2 shows the questions used in the interview guide. Three trained research assistants conducted face-to-face interviews between October 2015 and November 2016. Interviews were audiotaped and transcribed verbatim. Identifying information was removed from the transcripts prior to review. We obtained institutional review board approval at the Yale School of Medicine and from each of the participating hospitals. Signed consent as well as verbal consent were obtained and participants were offered a \$10 gift card as a token of appreciation.

Analysis and Outcomes:

Analysis of the interview data occurred using the constant comparative method of grounded theory.²⁴ Researchers independently reviewed the transcripts and applied codes or labels to summarize and categorize portions of the data.²⁴ The code list was generated with definitions of the codes and categories, guidelines for their application and excerpts of data exemplifying the categories. Codes were iteratively expanded, revised, and merged as they were applied to incoming data by the research team until a final code structure emerged after review of 24 transcripts. When discrepancies about codes arose, text segments that had been assigned the same code previously were examined to decide whether they reflected the same concept. Coders engaged in further discussion to attain consensus about the correct label for

each segment of the text. One researcher (GT) reviewed previously coded transcripts and reapplied the final code structure while successive transcripts were coded with the final code structure by the coders. Qualitative software was used for data coding and management and to aid analysis (HyperRESEARCH version 3.5.2; Research Ware, Inc.).

The research team consisted of coders with varying backgrounds to ensure reliability of the qualitative process. The team included one pediatric emergency medicine physician who helped implement the Community ED CAN Programs (GT), one child abuse physician at the academic medical center who helped implement the CAN Programs (AGA), the child abuse team coordinator at the academic medical center (PS), and one ED nurse educator (MG). Three coders coded all the transcripts, and one researcher (MG) coded one-third of the transcripts. Data collection/analysis continued past the point of thematic saturation (ie, when no new data and concepts emerged).²³ When the coding process was complete, the research team refined and clustered codes and developed themes. We maintained an audit trail of our coding process to enhance the dependability of our analytical process.²³

Results:

Characteristics of study subjects:

Twenty-seven stakeholders working in various roles at 3 community EDs and 1 academic medical center participated in the interviews: 6 ED clinicians; 4 local CAN champions; 4 regional CAN experts; 5 Physician, Advanced Level Practitioner and Nursing chiefs/managers; 2 CPS social workers; 5 hospital social workers and 1 hospital lawyer. The median age of the participants was 49 years old, and the median number of years in their current roles was 14.5 years. Table 2 provides information about the roles of the participants from each institution. Thematic saturation was achieved after 24 interviews.

Main Results:

We describe three main themes with representative quotations: Program Strengths, Facilitators of Implementation and Program Challenges/Barriers to Implementation. Table 3 provides additional quotations related to each theme.

Program Strengths:

Perceived strengths of the program included 1) Comfort in seeking help from local champions, 2) Facilitated access to and direction from CAN experts on uncertain cases, 3) Increased education and awareness about CAN and 4) Improved networks and communication.

1) Comfort in seeking help from local champions:

As the CAN champions were ED frontline providers themselves, the participating providers felt that the threshold for consulting them was low when concerns arose related to CAN. Additionally, the champion's willingness to help care for these patients and facilitate access to the child abuse experts further decreased that threshold. A CAN champion commented on this comfort level, "I think that familiarity with us, having worked shoulder to shoulder, for

other staff members at X hospital really helps to alleviate any apprehensions about asking questions.”

2) Facilitated Access:

Facilitated access to the CAN experts resulted in specific direction on how to manage challenging cases, which was perceived to be beneficial to the community ED providers. One division chief described the benefit of having access to the child abuse experts, “whenever you are in a situation where you are not sure if you should file a case or if you need help navigating the case, I know now I can pick up the phone and have 24-hour availability to make some of the more difficult decisions, so to make them (CAN experts) be the bad guy in terms of holding people when sometimes it is a very challenging thing when you have to hold patients or parents... So, the nice thing is that it really gives me the support to make some really difficult decisions.”

3) Increased education and awareness about CAN:

Participants felt that the presence of the CAN Program led to increased education about CAN and earlier recognition of CAN in a vulnerable pediatric population. A division chief mentioned that having the CAN Program and a multidisciplinary team reviewing cases concerning for CAN made the provider team “more comfortable treating patients who might have been abused and gives us a better standardized approach to these patients and back up for when there’s questions about what to do...” Many felt that this program and its attention to a vulnerable population enhanced the focus on the pediatric care provided at community EDs.

4) Improved Networks and Communication:

Participants also described improved networks and communication as a result of the bimonthly multidisciplinary meetings facilitated by the CAN champion to perform case review. They felt that these meetings were vital for improving communication among different services involved in the care of children who presented for concerns related to CAN. These meetings resulted in the development of strong relationships, provided an opportunity to discuss informal consultations with CPS or CAN experts and provided a safe forum to review decision-making. One social worker said, “The key issue is the collaborative program. It’s not the doctors or the social workers or DCF (local CPS) - we’re there together and we’re huddling to look at the needs of children and we’re collaborating.” The discussions at the meetings also enabled the CAN champions to provide patient follow-up to the frontline providers who had initial concerns about CAN.

Facilitators of Implementation

Facilitators of the implementation of the Community ED CAN Program included: 1) Leadership support, 2) Engaging local champions, including the CAN champions and a committed multidisciplinary team, and external change agents, including a CAN expert interested in implementing the program and serving as a resource, 3) Positive attributes of the CAN champions and 4) Flexibility with program implementation.

1) Leadership support:

Participants identified physician, nursing and advanced practitioner leadership support as a critical step in successful implementation of the CAN Program. One CAN expert described the role of the leadership in starting and sustaining the program, “Luckily at x hospital, we’ve had leadership support from the beginning, which I think has really been key to getting that program going...” Many participants explained that leadership support allowed the local program to grow and provided legitimacy to the work done by the CAN champions and the multidisciplinary team. ED division chiefs also discussed the importance of their support to the implementation of the program.

2&3) Engaging Champions and their positive attributes:

Local champions were essential in facilitating the implementation of the program. Participants described the motivation and passion of the local champion as critical to implementing the CAN Program. One CAN expert stated, “Mostly, success is based on having a champion...one of the biggest challenges of sustainment will be getting other members of the department to have the same passion that the (champion) has ...” Positive attributes of the CAN champion were critical to assuring respect and support for the champion. These included being viewed as a champion for pediatrics in general and CAN specifically, being a facilitator among different disciplines, being an educator and a respected clinician, and having willingness to provide clinical support to colleagues.

Participants also described the importance of having support of a CAN expert from the children’s hospital to provide guidance for the growth of local programs, be available for consultations, be present to guide discussions at the local multidisciplinary meetings, and facilitate relationships between the CAN champions and other regional CAN experts and local CPS staff.

Also perceived to be important was the ongoing involvement of the multidisciplinary group that met regularly to discuss cases of suspected CAN. One CAN champion remarked on the group’s importance, “I think that the multidisciplinary aspect of the members of the team is really what makes it so successful because we have social workers from labor and delivery engaging with pediatrics in the ED. So we all meet and help support each other and increase our education base, to increase our availability towards other hospital members and help if they have a question.”

4) Flexibility:

Finally, CAN champions and CAN experts discussed the importance of flexibility with program implementation. CAN experts involved in the implementation of the program at different institutions reflected on the importance of adapting the program at the academic medical center to meet the resources available at the different community hospitals. For example, whereas each ED with a CAN program developed a multidisciplinary team to review cases, site-specific logistics such as frequency and make-up of the multidisciplinary meetings and case selection at each hospital varied and depended on the case-load as well as personnel availability and interest. The ability to adapt program logistics while maintaining

core components of the program at each institution was thought to positively influence its implementation.

Program Challenges/Barriers to Implementation:

Stakeholders identified two main challenges that served as barriers to implementation of the program, which included 1) Variability of available resources to support the work of the champions and 2) Variability in frontline provider knowledge of the CAN Program.

1) Variability of available resources to support the champion's work:

The CAN champions and the CAN experts described variability in the availability of supported time for the champions to accomplish their roles. One CAN expert summarized, "I think eventually if we work to sustain this kind of program, you would need some supported time for the champions to do this. I know Champion B and N are doing this out of the goodness of their hearts so they can't have that much time to put into it because they have a full clinical load..." Similarly, the champions mentioned that dependence solely on the motivation of individuals may be a challenge to the long-term sustainability of the program. Additionally, due to their clinical duties, CAN champions and members of the leadership described the need to keep the "Champion" role manageable. Champions discussed that their roles often involved more than being local champions for CAN and started encompassing being the expert on a wide range of topics related to child safety, such as restraint use in children. Some worried that the program may no longer function if there was turnover of the champion (s). However, some solutions provided by participants included having champions from each provider group (nursing, physician and/or advanced level practitioner) and having a committed multidisciplinary group that met regularly to review cases.

2) Variability in frontline provider knowledge of the program:

Variable access to information about the program and limited frontline provider engagement were perceived to be challenges to implementing the program. Participants discussed improving both provider awareness of the existence of the CAN Program as well as encouraging front line providers' presence at the multidisciplinary group meetings. Some suggested that marketing of the program at various staff meetings should occur early in the implementation of the program, but continued discussion with staff was critical so that ED providers were aware of this resource.

Discussion:

Our findings suggest key components of a strategy to improve frontline recognition and reporting of CAN by leveraging local resources within community EDs and establishing strong linkages with regional experts (Figure 3). These components include: 1) The identification, training and ongoing support of 1–3 local champions who work in the ED, have an interest in CAN and have the respect of their colleagues and who, due to existing relationships, can provide direct education, support, case follow-up and program publicity for the ED staff; 2) Securing firm buy-in from multi-disciplinary leadership who can protect

time for the champion(s) and demonstrate ongoing public support for the program; 3) Establishing relationships between the CAN champion (s) and regional CAN experts and local CPS that facilitates education, access, support and frequent communication between these groups; 4) Formation of a multidisciplinary team that meets regularly to review cases and 5) Enhancing relationships between the ED staff and CAN experts and local CPS such that the ED staff can directly have access, case consultation services and education from these entities.

Establishing a Community of Practice:

Even when health care providers recognize cases of child abuse and neglect, they often fail to report them, sometimes due to a distrust of CPS or lack of direction with cases that lack objective evidence.^{25–27} In contrast, real time case discussion with colleagues and access to expert support can serve as facilitators to reporting suspected CAN.²⁸ Our data revealed that stakeholders valued the improved relationships that developed through the CAN Program and felt these relationships aided providers in making better decisions when caring for children affected by possible CAN. The Community of Practice is a concept introduced by Wenger and consists of a group of people who share a concern or passion for a shared domain of interest they practice in their work and learn to do it better as they interact regularly to help each other and share information.²⁹ Within an ED and even a hospital, the CAN Program facilitates creation of a Community of Practice in which members share an interest in CAN and through enhanced relationships, improve the learning and practice of others caring for children affected by CAN. As the Community ED CAN Program is implemented in other EDs, future research examining change in providers' self-efficacy and evaluating change in the use of appropriate consultations to child abuse specialists and referrals to CPS may provide additional support for effectiveness of the program.

Increased use of evidence-based care and access to experts:

Evidence-based pediatric emergency care is applied inconsistently across community and pediatric EDs. Many children seeking acute care in community EDs do not receive care that is evidence-based, and one in five may receive treatments that are of no benefit.^{30–35} Previous studies of community ED pediatric readiness have shown that the presence of a specific pediatric emergency care champion is associated with a higher pediatric readiness score that is based on domains such as quality improvement, coordination of care, and availability of policies across EDs with different pediatric volumes.^{10,21,22} The CAN champions are a specific example of a pediatric emergency care coordinator and serve as trained local champions who focus on improving care of children possibly affected by CAN. Stakeholders in our study described the lack of supported time as a challenge to program sustainability. Merging the CAN champion and pediatric emergency care coordinator roles may be one solution. Further work to examine ED policies put in place related to CAN, change in the number of missed cases of abuse, quality improvement interventions and the cost effectiveness of such a role may provide additional support for the program.

Project ECHO (extension for community health outcomes) is a well-studied program that facilitates real-time multidirectional teaching and learning using videoconferencing technology between specialists at academic medical centers and frontline providers

practicing in local communities and seeks to disseminate specialist knowledge to community settings.³⁶ This model has not yet been used or evaluated in acute care settings but may be used to increase the generalizability of the Community ED Can program to EDs with varying relationships and distances to academic medical centers. Training of local champions could occur using the ECHO model and consults with CAN experts by phone or via telemedicine.

Limitations:

There are at least 4 limitations of this study. First, we interviewed providers from 3 community hospitals and 1 academic medical center in one state, which means that our findings may not apply to other regions and states in which ED providers may have different relationships with CPS, child abuse experts and regional children's hospitals. Second, we employed snowball sampling by asking existing participants to recommend others to interview. This approach may have skewed our sample to those more likely to have positive perceptions of the program. However, this sampling strategy allowed us to reach participants who were unknown to the researchers and yet who may have had experiences with or roles in the CAN Programs. Third, social desirability may have motivated participants to modify answers to avoid presenting themselves, their colleagues or their institutions in an unfavorable light. We hoped to limit this effect by employing research assistants who had no role in the program's implementation to conduct interviews. Finally these qualitative data were intended to gain formative insights about the Community ED CAN program but further quantitative studies will be needed to assess impact and effectiveness of the program.

Conclusions and Future Directions:

Although community ED providers are exposed to fewer pediatric cases and may have limited access to reliable resources about child abuse and neglect, they bear significant responsibility to effectively recognize and report abused and neglected children to CPS. Our stakeholders expressed a perceived improvement in awareness about CAN, linkages to subspecialty expertise, and communication about cases of suspected CAN through the Community ED CAN Program. Our findings will be used to iteratively improve current programs and inform development and dissemination of additional programs. Our ongoing work will measure the effectiveness of the CAN Programs to increase the appropriate reporting of cases to CPS and to improve provider self-efficacy related to caring for abused and neglected children.

Acknowledgments

Grant:

This publication was made possible by funds from a CTSA Grant, Number UL1TR001863, to Gunjan Tiyyagura from the National Center for Advancing Translational Science (NCATS), a component of the National Institutes of Health (NIH). Its contents are solely the responsibility of the authors and do not necessarily represent the official view of NIH.

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Whats new:

We describe strengths, challenges and factors that influence implementation of an innovative model leveraging local champions and linkages to subspecialty experts and child protective service social workers to improve recognition and reporting of child abuse and neglect in community emergency departments.

Figure 1:
Program Components

- Tell me about your experiences with the child protection team at your hospital.
 - How, if at all, has this program impacted your experiences with patients suspected of being abused or neglected?
 - How, if at all, has this program impacted your day to day work?
- Tell me about your relationship with your local child abuse expert.
- What do you see as advantages to having the child protection team in place at your institution?
- What do you see as drawbacks to having the child protection team in place at your institution?
- What are some challenges to creating/sustaining a program like this?
 - What do you think has made this program successful at your institution?
 - What do you think would make it successful at other institutions?

Figure 2:
Interview guide

Figure 3:
Strategy for program implementation

Table 1:

Characteristics of three Community Emergency Departments

	Annual Volume	Annual Pediatric Volume	*PEM Coverage	CAN Champions
ED 1	70,000	19,000	9 hours/day	General Pediatrician
ED 2	55,000	5,000	0	Physician Assistant
ED 3	50,000	7,500	8 hours/day	*1 PEM Physician Provider, **ED nurse

* PEM-Pediatric Emergency Medicine,

** ED-Emergency Department

Table 2:

Description of Study Participants

	Participants and Roles
ED1, n=5	1 CAN champion
	1 Physician Chief of Pediatrics
	1 ED Nursing Manager
	2 ED social workers
ED 2, n=11 *	1 CAN champion
	1 ED Physician Chief
	1 ED social worker
	5 ED clinicians
	1 ED Advanced Level Practitioner Manager
	1 CPS manager
	1 Hospital lawyer
ED 3, n=5	1 CAN champion
	1 Nursing Manager
	1 ED Physician Chief
	1 Labor and Delivery social worker
	1 CPS manager
Academic Medical Center, n=9 *	3 CAN experts
	1 Pediatric Emergency Medicine Physician
	1 ED social worker
	1 Multidisciplinary team member from labor and delivery (Advanced Level Practitioner)
	1 ED Advanced Level Practitioner Manager
	1 CPS manager
	1 Hospital lawyer

* 3 participants, the local CPS manager, the ED Advanced Level Practitioner Manager and a Hospital lawyer, were part of the CAN program at both sites.

Table 3:

Themes and Representative Quotations

Themes	Representative Quotations
Program Strengths	Comfort in seeking help from local champions:
	ED clinician: "...there was a time he (the champion at ED 2) was there and we said, 'what would you do? Should I call the DART (child abuse team at the academic medical center) team, and he said yeah and I remember talking to him about the case..."
	Facilitated access to experts on uncertain cases:
	ED clinician: "I think it makes us feel not so afraid when we see pediatric patients that are victims of abuse, that we know we have a resource we can contact if we need help. I think a lot of it is just anxiety whether or not or how to evaluate the patient, whether or not to accuse somebody, but the fact that there is a dedicated resource just takes a lot of stress out of the situation in an already high stress environment..."
	Increased education and awareness about CAN:
	Member of ED leadership: "it is the advocacy that the program builds for children. You can miss cases of child abuse because of the pressures to move people through, especially in emergency medicine, and you feel lousy missing an opportunity to intervene. You always want to do better."
	Improved networks and communication:
Facilitators of Implementation	CAN Champion: "I think it is really helpful that we get feedback to providers after they've made referrals or if they've had a case of abuse that they get some follow-up on what happened and it closes the loop, especially when you're dealing with sensitive issues like child abuse and neglect. It kind of hits close to home emotionally for every provider, and so to know that something happened hopefully in a good way to follow through on the care of that child. I think people really appreciate that feedback."
	Leadership support:
	Member of ED leadership: "It has to be embraced by the leadership, so even though I may not spend a lot of time, I make sure that I attend the meetings because it shows support. You need the medical leadership to embrace it and see the value of it and then have a champion, but I think if I were not involved and I only let the champion run it and I did not support him and give him positive feedback,..., it might not work."
	Engaging local champions and external change agents:
	Member of ED leadership: "if we have physician questions we can call the (physician champion) anytime, she is always willing to answer any questions if we have concerns whether to report or not to report. The nurses will usually either find (the champions) and say hey, here's what I got, what do you think? And if we don't know we call (the child abuse expert at the academic medical center)."
	Positive attributes of the CAN champions:
	CAN champion, describing an ideal champion: "Someone who has interest in pediatrics and child abuse in general..., a good negotiator and ... and somebody who likes to work with a lot of different folks..."
Program challenges/Barriers to Implementation	Flexibility with Program implementation:
	CAN expert: "...at the satellite hospitals, it's a person (the CAN champion) who has another clinical job who is taking on this role as an additional role...so you can take the core ideas from the pediatric hospital to the satellite hospital but I think we have to adapt the intervention to make sure it fits the hospital...there has to be specific core things about the program so people know what to do but at the same time there has to be flexibility..."
	Variability of available resources to support work of champions:
	CAN Champion: "I think the biggest challenge in a community hospital that's not academically based, is relying on people's self-motivation because people aren't funded by research grants or given additional pay for serving these roles and it's not part of their promotion drive, so it really is relying upon a group of people who are motivated to do the right thing."
	Variability in frontline provider knowledge of the CAN Program:
	Hospital social worker: "The resource (CAN Program) is invaluable and, I think it's really important for staff to feel supported. I think that all staff needs to know how to follow these different channels. I would like to see more education outside of here about the program."