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Developing the WATCh Nurse: A Qualitative Approach to Understanding a Pediatric Rapid Response Role



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ABSTRACT

Purpose: The objective of this study was to identify the characteristics and tasks vital for individuals to successfully navigate a proactive rapid response role at a quaternary children's hospital.

Design and methods: A qualitative thematic analysis of open-ended interviews was utilized to define the essential characteristics and functions of a WATCh (Watch, Assess, Triage for Children) nurse. The sample included both WATCh nurses and other healthcare providers that work with WATCh nurses.

Results: Effective WATCh nurses are excellent communicators with advanced skills who are experienced, confident, and visible. They work as an extension of the nurse and as a care facilitator for high-risk children, advocate, and educator.

Conclusions: A more proactive approach is essential for successful pediatric rapid response teams in hospital settings to prevent patient decompensation and code blue events. This study has identified that a successful program requires defined tasks and essential role characteristics.

Practice implications: Implications for integration into practice include a defined selection process and training program for the WATCh nurse role to provide standardization and consistency. Experience was identified as an essential characteristic for the role but an exact amount was not defined. Strong communication skills are also necessary and while training can help supplement the characteristic, a certain level of personality and confidence should be identified in potential candidates. Training will need to include not only practice skills, but also personal skills to be an effective role in the institution.

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Failure to rescue is a primary challenge for nurses caring for increasingly sick patients in an environment with limited budgetary resources. Encouraged by the 100,000 Lives Campaign of the Institute for Healthcare Improvement, hospitals around the world created rapid response teams (RRTs) to respond quickly when patients were at risk for respiratory or cardiopulmonary arrest (McCannon, Schall, Calkins, & Nazem, 2006). The professional background and composition of the teams vary as does the patient identification criteria, however, the overarching goal of all RRTs is to prevent cardiopulmonary arrest outside of the intensive care unit (ICU) and decrease mortality (Thomas, Force, Rasmussen, Dodd, & Whildin, 2007).

Rapid response teams

RRTs have been well received in adult acute care hospitals related to positive patient outcomes, such as decreases in cardiopulmonary arrest

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outside the ICU and early interventions to avoid the need for ICU admission among patients on acute care units. Implementation of RRTs is a low-cost item with significant potential for cost savings (Thomas et al., 2007). Although non-ICU pediatric cardiopulmonary arrests have been reduced with RRTs in place (Chan, Jain, Nallmothu, Berg. & Sasson, 2010), the relatively rare nature of pediatric cardiopulmonary arrests and the rapidity to decompensation make RRT implementation controversial. Care providers argue that the RRT needs to be involved earlier to be effective for pediatric patients (Bonafide et al., 2014).

In order to address this argument, many rapid response teams in pediatric settings use an early warning assessment system to objectively (Bonafide et al., 2014). Assessment criteria include change in behavior, cardiovascular, and respiratory assessments (Tucker, Brewer, Baker, ful information and the ability to monitor the patient before the situation becomes critical. Other contributing risk factors for deterioration vations or concerns from clinicians (Hueckel et al., 2008). All together,

these data indicate that a more proactive approach is needed and feasible in the pediatric setting so rapid response teams can start to intervene before decompensation becomes a crisis.

WATCh nurse role

The WATCh (Watch, Assess, Triage for Children) nurse program was instituted in an academic, quaternary children's hospital in a large, metropolitan city in 2016 as an evidence-based response to the need for a more proactive approach to prevent cardiopulmonary arrest and decompensation in the acute and intermediate care areas. Evidence was used from programs such as the Rover Team described by Hueckel et al. (2008). In creating the WATCh program, the PICU staff proactively worked with acute and intermediate care nurses and physicians to monitor and respond to children with a health status change. Eventually, the individual WATCh role emerged from this work. An evidencehased early warning system was also used to help trigger the WATCh nurse to action. Acute and intermediate care patients are given a score according to the Children's Hospital Early Warning System (CHEWS) (McLellan, Gauvreau, & Connor, 2017). This system uses objective health factors as well as staff and family concerns to determine the need for further assessment and intervention from higher level care providers (McLellan et al., 2017). Combining the proactive approach and the use of the early warning system make the WATCh program sufficiently agile to address the rapid decompensation unique to children in a timely manner.

The WATCh program is designed to provide continuous coverage of acute and intermediate care pediatric units 24 h a day, 7 days a week. The WATCh nurse of the shift does not have a patient assignment so the nurse can commit total time and energy to the WATCh role. Nurses who serve in the WATCh role are full-time Registered Nurses based in the 30-bed mixed cardiac and general pediatric intensive care unit. They rotate between shifts as a bedside nurse in the PICU and shifts as a WATCh nurse. All activities of the WATCh nurse are firmly in the scope of practice of a Registered Nurse working in a critical care area.

In 2020, 24 nurses (12 per shift) have been prepared to serve as a WATCh nurse. They were selected by unit managers based on their years of experience, clinical expertise, leadership qualities, and communication skills. The minimum experience required to apply for the WATCh role is 1 year following orientation; however, all successful applicants have had more. Many of the nurses had experience as a member of the rapid response team implemented in 2012 to respond to critical events involving children admitted to the acute and intermediate care units. Although the roles are similar, the WATCh nurse required a different set of skills necessitating additional education and preparation to specifically function in the proactive role.

The nurse assigned to the WATCh role rounds with hospitalists and acute and intermediate care specialty providers to identify children who may be at risk for decompensation including children newly transferred from the ICU and those identified by the charge nurse to have increased risk. The WATCh nurse rounds through the various areas several times a shift and assists acute and intermediate care nurses in assessing patients and moving concerns up the chain of command when necessary. They also carry a phone at all times so that any acute care nurse or physician can communicate, and problem solve with them.

or physician can communicate, and proplem solve with definition to proactive rounding in the acute and intermediate areas to prevent untoward events, the WATCh nurse serves as the rapid response nurse for the Children's Hospital and responds to all rapid response and code blue events, with physicians and ancillary derapid response and code blue events, with physicians and ancillary departments responding as well. They are alerted to these events through

a pager that they carry in addition to the WATCh phone.

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clinical assessment and decision-making and advocacy and coaching. The WATCh nurse is a highly sought-after role, with many more nurses applying to serve than open opportunities.

Characteristics of rapid response team nurses

Information of pediatric rapid response teams is very limited in the literature. Several qualitative studies of acute care nurses' interactions with adult rapid response teams included information on characteristics that nurses found important. One study of facilitators and barriers to calling a Rapid Response found that acute care nurses were more likely to call a rapid response when the rapid response nurses were caring, experienced, and good communicators (Astroth, Woith, Stapleton, Degitz, & Jenkins, 2013). Another study in an adult hospital looked at nurses' perceptions of a rapid response team in different hospitals that were either early adopters or late adopters of the approach. Nurses in these hospitals found that rapid response nurses were most helpful because they were able to facilitate communication and transfer of the patient to a higher level of care due to their ICU experience (Shapiro, Donaldson, & Scott, 2010). A third study from an adult hospital identified how rapid response nurses affected the individual nurse, the patients, and the system as a whole. Nurses in this study reported that the skills and abilities of the rapid response nurse and the ability to stay calm in difficult situations affected the outcomes (Williams, Newman, Jones, & Woodard, 2011). No study was found that specifically looked at essential characteristics and functions of rapid response nurses in adult or pediatric settings, and no study was found that included information about essential characteristics and functions of nurses working in a proactive rapid response role such as the WATCh

Purpose

The value of a proactive approach to addressing decompensation and reducing risk of code blue events outside of the intensive care unit has been documented in the literature (Henriksen, Battles, Keyes, & Grady, 2008; Hueckel et al., 2008). In order to build an effective proactive program for pediatrics, such as the WATCh nurse program, it is important to learn from the direct care providers how best to implement and sustain the role. The purpose of this project is to describe the essential characteristics and tasks of a WATCh nurse and implications for developing and maintaining the program in a children's hospital, including selection, education, and evaluation of WATCh nurses and the integration of their role with acute care nurses and physicians and the RRT to provide best care.

Project design

This quality improvement project was approved by the University of Texas Health Science Center at Houston IRB. Open-ended qualitative interviews were used to gather data from a variety of sources, and thematic analysis was used to discover themes. Criterion for participation was experience as a WATCh nurse, an acute care nurse working on one of the floors served by WATCh nurses, or a physician working with WATCh nurses in the intensive care unit, intermediate care, or acute care floors. Recruitment for interviews took place over 2 months. Hospital educators assisted in recruiting nurse participants by verbally asking individuals to participate at the staff meeting for acute care nurses. Physicians were recruited through visits to the medical school and e-mails, where all residents and hospitalists were invited to participate. The chief residents assisted in further identifying residents who had interactions with WATCh nurses. Purposeful sampling was used to invite WATCh nurses, to include nurses with varying levels of experience both as a nurse and in the WATCh role and to assure that perspectives were included both from the day and night shift. Interviewers ensured that each participant met criterion of being or having worked

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https://doi.org/10.1016/j.pedn.2020.03.002 0882-5963/© 2020 Elsevier Inc. All rights reserved. with a WATCh nurse. Recruitment efforts sought to engage a heterogenous group of participants to reach a wide range of experience levels and roles of physicians and nurses. The team was careful to use individuals who did not have direct authority over the interviewer to recruit participants to avoid coercion.

The two interviewers selected were not familiar to the individuals being interviewed in order to encourage the most complete explanations of processes and experiences as well as to reduce any perceived pressure to participate in the interview. Verbal consent was obtained, as the IRB deemed this data collection to be without risk to the participants as part of a larger quality improvement project. The interviewers were thoroughly coached to use a script with general questions and prompts and encouraged to ask additional questions for clarity or elaboration on a previous guestion. Questions were developed to elicit a comprehensive understanding of the role from the perspective of each type of participant (physician, acute care nurse, and WATCh nurse), so the scripts were individualized for the role.

Interviews took place in one of several private rooms identified as meeting or education spaces by the hospital and lasted from 15 to 25 min per interview. The interviews were recorded for analysis. Partial transcription was done by one of the investigators. All recorded and written data from the study were saved in a password-protected computer accessible only to the investigator team.

A group of three investigators, the two interviewers and a nurse researcher with experience in qualitative research and thematic analysis, reviewed the data collected in the interviews throughout the project to evaluate the effectiveness of the questions and begin to code the data and organize it into themes (Green et al., 2007). Interviews were reviewed and re-reviewed, and a set of codes were inductively generated. For each interview, the nurse researcher and the person who completed the interview assigned codes to the data. The third investigator was available if there was disagreement about the coding of the data, Codes were listed in a coding frame as each interview was analyzed. The coding frame included the emerging codes with a description and the quotes that related to the code. Saturation was determined when no new codes resulted from subsequent interviews (Green et al., 2007). Saturation was determined per group in order to assure that acute care nurses, WATCh nurses, and physicians were appropriately represented in the data.

One major tenet of qualitative analysis is that it reveals subjective experience as opposed to objective truth (Harper & Thompson, 2011). For this analysis, it was important that the subjective experiences from various perspectives came together to form a description that was inclusive of but also linked the many truths represented to describe the role of the WATCh nurse. For that reason, data from each group (acute care nurses, WATCh nurses, and physicians) were first analyzed separately to assess for saturation and potential differences in coding and then analyzes together to establish common themes.

Once codes are created, thematic analysis requires that investigators look both at the meaning and the prevalence of codes in order to synthesize them into themes (Harper & Thompson, 2011). Using the coding frame from all participants, themes were determined (Green et al., 2007; Harper & Thompson, 2011). The coding frame and resulting themes were presented to WATCh nurses, educators from the acute care floors, and the PICU leadership team to confirm reliability with their understanding of the role as well. No changes were made to the original themes.

Results

Ten nurses from acute or intermediate care were interviewed with five nurses from the surgical floor, two from the medical floor, and three from intermediate care. Their experience level ranged from two to 23 years (M = 7.6 years). Interviews took place April-June 2019. The physicians interviewed included a PICU attending, a PICU fellow. two cardiology fellows, and one resident. Five WATCh nurses participated, RN experience ranged from five-22 years (M = 10 years), with four months to three years (M = 20 months) experience as a WATCh

Themes

The two overarching themes were: essential characteristics and essential functions of the WATCh nurse.

Essential characteristics

Five themes emerged to define the essential characteristics of an effective WATCh nurse. The characteristics were: experienced, advanced skills, excellent communicator, confident, and visible.

All participants highly valued clinical experience, especially in the current setting. One acute care nurse said, "Experience is what brings clinical maturity. Experience specifically in this setting, they know the system, they know the strengths of certain places in the hospital." Many acute care nurses spoke of WATCh nurses being helpful because they "...have seen this before." Both WATCh nurses and acute care nurses said that ICU experience equipped the WATCh nurse with skills and experience that transferred to the role as WATCh nurse. The daily exposure to critically ill children in the PICU provided ICU nurses with different skills than an equally experienced acute care nurse.

Lack of experience was a barrier for someone working in the WATCh role according to both acute care and WATCh nurses. One nurse with more than 10 years of experience said that only in "desperate" situations would a WATCh nurse with less than 10 years of clinical experience be called. Lack of experience resulted in a lack of trust, according to several other acute care nurses.

Experience specifically as a WATCh nurse was helpful. In emergent situations, WATCh nurses must be careful to stay within their scope of practice while trying to assist the patient. One WATCh nurse said an important aspect of experience is, "...being able to know what you can fix and what not to fix. I have been called before because someone has a low [hemato]crit. That is something I can't fix." Clinical experience or "clinical maturity" as well as experience within the hospital helps the WATCh nurses navigate these situations and escalate them to the appropriate physician team while staying within the scope of nursing

Advanced skills

In addition to general experience, acute care nurses and physicians mentioned frequently that the WATCh nurses also had a great deal of experience with higher level skills. There was general agreement that these advanced skills were separate from experience and that WATCh nurses displayed skills superior to other PICU nurses with the same years of experience.

The higher-level skills mentioned by both physicians and acute care nurses included assessing a decompensating patient. One acute care nurse said, "Some of the really good WATCh nurses are very experi enced. They can come up here and do a pretty quick assessment and tell us what we should communicate to the doctors." Another nurse explained that the WATCh nurse was more familiar with, "what a patient looks like when he or they are going downhill." This ability to assess a status-changing patient was identified as an advanced skill by physicians, who noted that they would be more attentive if the WATCh nurse was concerned after assessing the patient.

Other advanced skills mentioned by participants included setting up equipment such as chest tubes, assisting physicians with procedures and using an ultrasound to place an IV catheter. Both acute care and WATCh nurses mentioned that they were better at doing these things because they happened more frequently in the PICU than in the acute care setting.

Excellent communicator

The role of the WATCh nurses was identified as a delicate one by both physicians and nurses. Because the role of the WATCh nurses is to respond to potentially critical events, they often encounter tense sitnations involving patients, parents, acute care nurses, and various levels of physicians. Difficult scenarios described by participants included acute care nurses not being heard by the physician, patients with difficult family situations requiring complex care, and acute care nurses having anxiety about a patient scenario they had never encountered. Several participants used words like "respectful" and "diplomatic" as important aspects of good communication from WATCh nurses. One nurse said it was important that the WATCh nurse, "not step on anyone's toes."

Listening was identified as a vital part of WATCh nurse communication. One acute care nurse stated, "I like it when they ask my opinion and then we go in and see (the patient) together." She went on to describe that calling someone for help can make an experienced nurse feel vulnerable but that good communication and listening skills from the WATCh nurse can alleviate that feeling.

Interacting with the physician team also requires special communication skills. According to one physician, "They need to be able to communicate with different levels of people and not be overly aggressive and abrasive to different teams they are interacting with." Working within their scope of practice, WATCh nurses relay nursing concerns to the physician team and follow the chain of command to assure that the patient is safe. One physician said that they listen to the WATCh nurses because, "...they can bring it to the attention of whoever is on at the time and present the facts without trying to make a decision in their own mind."

WATCh nurses use a variety of communication techniques that make interactions with both acute care nurses and physicians effective. One WATCh nurse reported using questions to enhance communication. She said, "Sometimes it is better to get people to see it your way by asking questions. Saying 'what about this or what about that.' You have to know how to help them see." The urgency of the situations to which WATCh nurses are summoned sometimes necessitate communication and action at the same time. Several acute care nurses described the WATCh nurses, "talking through their process," as a good way to communicate at the same time as taking action.

Another important attribute of the WATCh nurse described by acute care nurses was confidence. WATCh nurses are considered leaders in the hospital, and they are expected to remain calm and self-assured in the most stressful situations that occur relative to providing care and Protection to patients and families. Much of this confidence is related to the experience and "clinical maturity" that was previously described. Acute care nurses noted that WATCh nurses were more accustomed to Working in critical situations, so they did not seem as anxious or

While much of this confidence and leadership ability is learned over time with experience, some is imbued by the role and title. One nurse described feeling confident in talking to the physicians because, "They will be will listen to me because of the WATCh nurse title." Both physicians and acute care nurses described a certain respect given to the WATCh hurse based simply on the role. Several WATCh nurses stated that this respect helped them to feel confident during critical situations.

Visible

Acute care nurses stated that the best WATCh nurses were those who were visible. For example, one nurse said, "Usually just seeing them once earlier in the shift jogs my mind and I know I can use them if I need it." When a nurse is under stress, they may not think about all

of the resources available, but a WATCh nurse who is visible comes to the nurse's mind quickly as a potential resource. That visibility also equates to availability, and that was important to acute care nurses. Several nurses described WATCh nurses helping with patients after noticing something from outside of the room, such as a change in vital signs, or overhearing a conversation about a patient. WATCh nurses also mentioned the importance of visibility and availability. One WATCh nurse said, "The sickest kids I have found, no one called me about. I will be waiting for rounds or be there for someone else and see a kid in a room in respiratory distress." Physicians also commented on the importance of the visibility of the WATCh nurse and knowing with whom to communicate to better navigate difficult situations.

Visibility also increased trust in both nurses and physicians. Being "known" by both acute care nurses and physicians was described as a function of the frequency of rounding and not necessarily the length of service as a WATCh nurse.

Essential functions

The individuals interviewed described four essential functions of the WATCh nurse. Those functions were an extension of the nurse, advocate, care facilitator for high-risk children, and educator.

Extension of the nurse

The most frequent description of the function of the WATCh nurse by all participants was as an extension of the acute care nurse. Many participants said that WATCh nurses were either "an extra set of eyes" or "an extra set of hands" for the acute care nurse. That extra help manifested itself in a variety of ways. Several acute care nurses said that they called a WATCh nurse to confirm assessment findings. One nurse said, "I just want a more experienced nurse to take a look sometimes. It makes me more confident when calling." Other situations when the WATCh nurse might be helpful were a patient showing early signs of sepsis when an extra set of hands is vital to stabilize the patient and collect the appropriate labs and other assessment data. Physicians also commented on the helpfulness of having an extra nurse at the bedside, especially one with specialized skills when a child is decompensating. In the eyes of one physician, it was especially important, "...in that space between needing a full-on need for critical care and needing additional resources for the patient."

The WATCh nurse also serves as an extension of the acute care nurse by helping the nurse talk through the thought process. Some participants described the WATCh nurse as a person "to bounce ideas off of." Some nurses noted that they did not actually need the WATCh nurse to figure out how to confront a situation; they just needed to confirm that their thought process was correct.

Both WATCh nurses and acute care nurses described the WATCh role as advocacy. The focus of the advocacy, however, was described differently. Acute care nurses felt that the WATCh nurse was an advocate for the nurse caring for the patient, especially in communicating with physicians. One physician gave an example of this saying, "For example, the floors [nurses] were trying to gradually escalate things. Because the WATCh nurse brought it to everyone's attention, I was able to go and intubate the kid downstairs rather than make it a more chaotic intubation." Acute care nurses described feeling anxious to call the physicians at times and called on the WATCh nurse for help. An acute care nurse said, "You can call them, whereas with the doctors sometimes we get nervous. You can always reach out to the WATCH nurse." Often, the WATCh nurse is able to draw on experience, status and relational skills to facilitate communication between the acute care nurse and physician regarding questions concerning a child's plan of care. Acute care nurses also described the WATCh nurses "jumping in to help," when they noticed that things were busy.

F2 (2020) 64-69

WATCh nurses focused more on advocacy for the patient. "I definitely think about the patient first, with everything going on," said one WATCh nurse. "I am trying to help everyone out, but it all comes down to the patient." WATCh nurses described similar actions as acute care nurses, however, when talking about advocacy, especially communicating with physicians.

Care facilitator for high-risk children

Part of the role of the WATCh nurse is to round on patients that are at high risk for returning to the ICU, such as patients recently transferred to intermediate care or patients exhibiting signs of worsening condition. The physicians noted that this was an important role because, in the event of problems, the WATCh nurse would already know the patient and their situation. One physician said, "will call the rapid [WATCh nurse] and ask, "Hey, do you know about this kid, have you been following them, what is your interpretation of what has been going on?" One of the WATCh nurses mentioned something similar saying, "I really like how they will go keep an eye on patients who are a little more tenuous. The ones they do know, we tend to have a smoother transition to PICU if needed. The ones we don't know, it is a little harder."

Educator

WATCh nurses were described as both an active and passive educator. In the active educator role, WATCh nurses explained or taught assessment techniques, disease processes, and hospital processes.
Generally, this type of education took place when the WATCh was
called, and no action was needed. This type of education was also
most likely on the night shift. As one acute care nurse stated, "I think
WATCh nurses have a good role to identify things that we need to
know, especially when there are a lot of young nurses on and especially
at night when we don't have a lot of experience." WATCh nurses were
also active in teaching by talking through their thought process. For example, an acute care nurse said, "When they do their assessment, they
communicate with me at the same time and tell me what they are
thinking, and that is very helpful."

In the passive educator role, the WATCh nurse may either serve as an example for the nurse or help the nurse by listening to their thoughts about the patient and then either confirming or correcting. One nurse described passive learning by saying that, "the WATCh nurse asks what I think and sometimes they agree and sometimes they don't." This kind of education was repeatedly described by acute care nurses as being very effective because of the lack of judgment. An acute care nurse said, "You call a rapid response and they say, "Why did you call this?" That does not happen when you call the WATCh nurse." Communication with a WATCh nurse is also a confidence builder for many nurses. "Having someone with more experience tell you, 'Yeah, you are right, you got this,' is great," said an acute care nurse.

Discussion

The characteristics of the WATCh nurse as described by physicians, accurate care nurses, and WATCh nurses themselves are very similar to those described in the qualitative studies of adult rapid response nurses and focus on experience and communication skills (Astroth et al., 2013; Williams et al., 2011). Some of the essential functions matched as well. For example, nurses in the Shapiro et al. (2010) used almost the same words as participants in this project, stating that the rapid response nurses, "were team members" 'extra' eyes, hands, minds, and bodies" (pp 30). There were some essential differences, as the WATCh role has the extra function of serving as a proactive response to potential problems for the unique population of pediatric patients. Therefore, this generally new role requires a new definition and ways to select and prepare nurses.

Role defined

The project was undertaken to create a description of individuals working in a successful proactive rapid response program with evidence of effectiveness. The emerging role definition is as follows: Effective WATCh nurses are excellent communicators with advanced skills who are experienced, confident, and visible. They function as an extension of the nurse, a care facilitator for high-risk children, an advocate, and educator. The defined role gives guidance for selection, education, and essential processes for WATCh nurses.

Implications for selection of WATCh nurses

Many characteristics of effective WATCh nurses can be identified in potential candidates for the position and used for selection. The most obvious characteristic is experience, however, none of the participants could identify an ideal number of years of experience that WATCh nurses should have. The acceptable number of years of experience that watch on several factors including the number of years of experience of the acute care nurses (with younger nurses being more tolerant of less experience for WATCh nurses), amount of experience spent at the hospital in the PICU, and the advanced skills that WATCh nurses had gained during their experience. Leaders should consider all these factors when deciding required level of experience for a WATCh nurse.

Two additional characteristics are confidence and good communication skills, both a combination of experience and personality traits of the nurse. While education and practice can help develop these characteristics, it is important that novice WATCh nurses display the capacity to be self-confident and communicate appropriately in emergent situations. Therefore, these two characteristics must be present in potential candidates.

Implications for instructing WATCh nurses

A WATCh nurse must demonstrate a basic mastery of both soft and hard skills. Some of the hard skills are likely known to an experienced PICU nurse, such as the advanced skills required to help with procedures or do rapid, focused assessments. Other skills may need to be taught, such as placing intraosseous catheters or using an ultrasound to place an intravenous catheter. Even if nurses are experienced in specific skills, they will need regular updates to maintain skills, especially those not performed on a regular basis.

Soft skills, such as communication and working as an extension of the nurse rather than taking over care, also require education. While experienced PICU nurses are accustomed to having difficult conversations, the ones identified by participants were unique to the WATCh nurse in many ways. Many PICU nurses are more accustomed to providing total care for a patient, even in a critical situation. Learning how to perform the WATCh role takes education and coaching.

Using simulated experiences, such as a code blue event or rapid response can help with both hard and soft skill learning and sustained knowledge. In a study by Wehbe-Janek et al. (2012), nurses reported that participating in simulated code blue events increased understanding of everything from teamwork and role clarity to the actual code blue process. Simulation can increase elf-efficacy or confidence in pediatric critical care nurses (O'Leary, Nassel, & Lewis, 2016), a soft skill identified as an essential characteristic.

Implications for WATCh nurse processes

The essential tasks of the WATCh nurse include rounding on patients, responding to calls from nurses or other healthcare providers, and providing care to patients when necessary. The major process that seemed to have the most impact on the effectiveness of WATCh nurses was rounding. Because visibility was so important as a characteristic of the WATCh nurse, a concrete process was needed to facilitate interactions between the WATCh nurse and acute care nurses. The rounding process made the difference between a traditional rapid response nurse and a proactive early warning assessment nurse, such as the WATCh nurse.

limitations

The essential characteristics and functions described are those of a successful WATCh program implemented at one hospital. It is likely that different hospitals have different needs for a WATCh program that might not be addressed in this description. Also, it is important to note that thematic analysis is meant to describe an individual's experience and the meanings they attribute to the experience. Therefore, these essential characteristics and functions are the reality and preferences of the individuals in the study and not an objective reality that can be generalized. Even so, we believe the results of this analysis represent a good starting place for organizations wanting to build their own WATCh program.

Conclusion

This project provided foundational data that proactive early warning nurses are needed in pediatric areas and can be successful in preventing decompensation and code blue events in acute care areas. This project demonstrated that there are some essential nursing characteristics and functions that are necessary for effective role performance. Further work is needed to identify interventions to effectively teach and evaluate the role as well as to create processes to assure best outcomes for patients.

CRediT authorship contribution statement

Heidi Gilroy: Conceptualization, Methodology, Formal analysis, Investigation, Writing - original draft, Supervision. Danielle Salley. Writing - review & editing, Conceptualization. Lilliane Hanning: Investigation, Writing - review & editing, Formal analysis. Alison Krawacki: Resources, Writing - original draft, Supervision, Conceptualization. Leslie Schafer: Formal analysis, Investigation, Writing - review & editing, Methodology. Kristen Mattran: Formal analysis, Conceptualization.

eferences

Astroth, K. M., Woith, W., Stapleton, S. J., Degitz, R. J., & Jenkins, S. H. (2013). Qualitative exploration of nurses' decisions to activate rapid response teams. *Journal of Clinical Nursing*, 22(19–20). 2876–2882.

Bonafide, C. P., Localio, A. R., Roberts, K. E., Nadkarni, V. M., Weirich, C. M., & Keren, R. (2014). Impact of rapid response system implementation on critical deterioration events in children. JAMA Pediatrics, 168(1), 25–33.

Chan, P.S., Jain, R., Nailmortha, B.K., Berg, R. A., & Sasson, C. (2010). Rapid response teams: A systematic review and meta-analysis. Archives of Internal Medicine, 170(1), 18–26. Green, J., Willis, K., Hughes, E., Small, R., Welch, N., Gibbs, L., & Daly, J. (2007). Generating best evidence from qualitative research: The role of data analysis. Australian and New

Harper, D., & Thompson, A. R. (Eds.). (2011). Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners. Hoboken, NJ: John Wiley & Cone.

Zealand Journal of Public Health, 31(6), 545-550.

Henriksen, K., Battles, J. B., Keyes, M. A., & Grady, M. L. (2008). Beyond rapid response teams: Instituting a "rover team" improves the management of at-risk patients, facilitates proactive interventions, and improves outcomes-advances in patient splery. New directions and alternative amonomics (vol. 2: performance and tools).

tions and alternative approaches (vol. 3: performance and toob). Hucckel, R. M., Turi, J. L., Cheiferz, L. M., Mericke, J., Mellones, J. N., & Mistry, K. P. (2008). Beyond rangid response teams: Instituting a "Tweet team" improves the management of at-risk patients, facilitates proactive interventions, and improves outcomes. Advances in patient sighty: New directions and alternative approaches (vol. 3: performance and rook). U.S. Agency for Healthcare Research and Quality.

McCannon, C. J., Schall, M. W., Calkins, D. R., & Nazern, A. G. (2006). Saving 100,000 lives in US hospitals. British Medical Journal, 332(7553), 1328–1330.

McLellan, M. C., Gauvreau, K., & Connor, J. A. (2017). Validation of the children's hospital early warning system for critical deterioration recognition. Journal of Pediatric Nursing. 32: 524–58.

O'Leary, J., Nash, R., & Lewis, P. (2016). Standard instruction versus simulation: Educating registered nurses in the early recognition of patient deterioration in paediatric critical care. Nurse Education Today, 36, 287–292.
Shapiro, S. E., Donaldson, N. E., & Scott, M. B. (2010). Rapid response teams seen through

Shapiro, S. E. Donaldson, N. E., & Scott, M. B. (2010). Rapid response teams seen through the eyes of the nurse. Afth The American Journal of Nursing, 110(6), 28–34.
Thomas, K., Force, M. V., Rasmussen, D., Dodd, D., & Whildin, S. (2007). Rapid response

team challenges, solutions, benefits, Orifical Care Nurse, 27(1), 20–27.

Tucker, K. M., Brewer, T. L., Baker, R. B., Demeritt, B., & Vossmeyer, M. T. (2009). Prospective evaluation of a pediatric inpatient early warning scoring system. Journal for

Specialists in Pediatric Nursing, 14(2), 79-85.
Webbe-Janek, H., Lenzmeier, C. R., Ogden, P. E., Lambden, M. P., Sanford, P., Herrick, J.,
Colbert, C. Y. (2012), Nurses' perceptions of simulation-based interprofessional training program for rapid response and code blue events. Journal of Nursing Care Quality.

Williams, D. J., Newman, A. Jones, C., & Woodard, B. (2011). Nurses' perceptions of how rapid response teams affect the nurse, team, and system. *Journal of Nursing Care Onally*, 26(31), 265–272.