Implementation and Evaluation of a Violence Screening Tool in a Community Hospital Emergency Room

By

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DNP Team Approval Form

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has been approved

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Abstract

Violence towards healthcare providers, specifically in the Emergency Room (ER), is a growing concern that leads to physical and mental injury, decreased morale, staff turnover, and costly bills to the organization. Implementation of a violence screening tool is a quality improvement project aimed at reducing the number of verbal/physical abuse events in the ER. The DNP student designed and implemented an intervention that was built into the electronic medical record (EMR) EPIC with the assistance of Information Technology (IT) staff, various ER managers throughout the hospital organization, the DNP project mentor, and ER staff at a small Community Hospital in Northwest Ohio. The efficacy of the violence screening tool was measured through a Likert scaled named the Safety Screening Questionnaire, which asked the ER staff at the small Community Hospital in Northwest Ohio six questions specifically aimed at evaluating the perception of safety in the department before and after the tools were implemented. All the questions asked in the Safety Screening Tool were indicated as a way to screen the ER staff's perception on safety in the department relating to violence against staff. However, the specific question that was used to determine if the violence screening tool was successful was the last question: I feel that I can quickly use the electronic medical record EPIC to identify a potential for violence on any given patient, whether they are my patient or not. With the violence screening tool in place, there was an increase in staff (13.89% to 82.60%) who felt they could quickly identify a potential for violence on any given patient. The next step for research on this tool would be to study the number of violent events documented before and after the tool was implemented.

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Chapter 1: Introduction

Emergency Rooms (ERs) across the country are experiencing a high rate of workplace violence. In fact, 54.5% of nurses surveyed in a seven-day period reported an account of physical and/or verbal abuse (Walsh et al., 2011). Even worse, a Baton Rouge nurse died after being assaulted by a psychiatric patient (Brusie, 2019). Some of the factors that contribute to workplace violence include increased number of psychiatric visits and holds, low staffing ratios, emphasis on patient satisfaction, and lack of proper training to deal with violent patients and visitors. Current interventions for violent patients/visitors include recognizing the signs that violence is impending, de-escalating strategies, and reporting techniques to document and review the event. Not only does violence towards personnel leave staff with mental exhaustion but often includes physical injuries that need assessment, treatment, and follow up.

There is a need for more attention on this topic, not only to address what healthcare teams are experiencing, but also to find solutions that will prevent, rather than follow up, on the issue. This project is aimed at creating a tool that recognizes the potential for violence before it occurs so that measures can be taken to reduce the incidence of violence in the ER.

Background and Significance

Violence in the workplace is one of the many serious occupational hazards that ER staff face and is defined as intentional use of power, both threatened or actual, against another person or group (Yenealem et al., 2019). Hospital employees in the United States have four times greater rates of violence compared to the overall sector at the state and private levels (Arnetz et al., 2018). In recent years, rates of injury have increased from 14.1/10,000 full-time equivalents

(FTEs) to 16.8 as of 2014 (Arnetz et al., 2017). A global review of 150,000 nurses demonstrated that one-third had experienced physical assault, bullying, or injury while another two-thirds experienced nonphysical assault (Yenealem et al., 2019).

Patients are the primary perpetrators towards healthcare employees, with assault being the main cause of absence from work (Arnetz et al., 2018). Review of studies have demonstrated seven main consequences of workplace violence including physical, psychological, emotional, work functioning, relationships with patients/quality of care, social/general, and financial (Lanctot & Guay, 2014). There is not enough data surrounding the prevalence of non-physical violence, with research suggesting workplace violence is grossly underreported, especially when no physical injury occurs (Arnetz et al., 2018). Overall, there are few studies that focus on the act of reducing violence (Baby et al., 2018).

Needs Assessment

A SWOT analysis was utilized to assess the current state surrounding violence in the ER. The objective of this project is to create a screening tool in EPIC that alerts staff of potentially violent threats in the ER to promote staff and patient safety. Generally speaking, opportunities surrounding this project include that literature has deemed obvious need of intervention based on the rising prevalence of violence among ER staff (Baby et al., 2018). The small Community Hospital ER in Northwest Ohio experiences frequent violent outbursts from both patients and visitors. Based on data obtained from an anonymous reporting system within the hospital, in 2019, there were 14 documented physical injuries that occurred due to patient or visitor violence (J. Spare, personal communication, March 4, 2020). Over half of these reported physical injuries occurred throughout the summer, when staff were repeatedly encouraged to report such events for further review (J. Spare, personal communication, March 4, 2020). The 14 documented cases

of physical injury only represent 15% of overall violence against staff that was reported through the anonymous reporting system, but it is a known problem that staff are underreporting these events, likely due to acceptance of the problem in relation to their job (J. Spare, personal communication, March 4, 2020).

There are several threats to the project that should be noted. For one, is it difficult to isolate all factors that contribute to violence in healthcare, and the screening tool in EPIC is limited to gathering information from what is available in the patient's chart. Further, it was difficult to discuss and design a tool with Information Technology (IT) that serves the purpose it is intended to serve. Fortunately, the staff of the organization welcomes evidence-based practice and positive change, and the facility has supportive leadership who encourages change when appropriate.

Problem Statement

Violence towards healthcare providers, specifically in the ER, is a growing concern that leads to physical and mental injury, decreased morale, staff turnover, and costly bills to the organization.

Purpose and Objectives of the Proposed Project

A violence screening tool was created in EPIC to alert staff of the potential for violent threats. Since its completion, the tool has provided ER staff with a way to identify a potential for violence in patients in two different places in EPIC. There were several steps that needed to be taken in order to successfully implement this project into practice.

- Specific: A violence screening tool was created in EPIC to alert staff of the potential risk a patient may have that leads to a violent event.

- Measurable: A violence screening tool report is available with every patient encounter that has proven risk factors for violence.
- Actionable: After discussion with IT, project mentor, department manager, and DNP student, a violence screening tool was implemented on October 20, 2020.
- Realistic: Because of the professional relationship between the project mentor and IT staff, an EPIC screening tool (similar to what has been designed previously for other uses) was built and utilized by the staff in our organization's ER.
- Time-bound: A violence screening tool was implemented in the EPIC EMR by October of 2020 with evaluation of effectiveness of the tool conducted in October of 2020.

PICOT

For staff in the ER, how does a violence screening tool compared to no intervention affect physical abuse from patients/visitors towards employees during the duration of a patient's ED stay? (Mercy Health, n.d.).

Congruence with Organizational Strategic Plan

The mission of the Community Hospital in Northwest Ohio is to extend compassion by improving the health and well-being of the community and bringing good to those in need, especially in the poor, dying and underserved populations (Mercy Health, n.d.). Serving these vulnerable populations takes employees with compassion to make a difference. Since the majority of workplace violence is committed by patients (Gates et al., 2011), staff need to be protected against the dangers of the job so that they can continue to provide compassionate, competent care.

The violence screening tool aligns with the mission of the Community Hospital in Northwest Ohio by protecting the staff, who carry out the mission every day at work. Utilizing

the screening tool, staff can identify the potential for violence when a patient is registered to be seen in the ER, and appropriate interventions can take place, such as putting the patient in a room closer to the nurses' station. When interventions to maintain safety are implemented, there is less of a chance of violence against healthcare workers that yields negative repercussions like decreased work satisfaction, increased turnover, and psychological consequences such as sleep disorders, depression, and PTSD (Arnetz et al., 2017). By protecting the staff from the consequences of violence, the violence screening tool demonstrates the organization's commitment to the overall wellbeing of its' employees and the mission of the organization.

Search Strategy

Google Scholar was used to capture literature related to the subject of violence in healthcare. Because of the prevalence and lack of interventions surrounding the topic, any qualifying literature since 2000 was included to help demonstrate growing concern of violence. Literature that came from respected research databases or from national organizations/ associations were included. Upon entering the website, "violence in healthcare" was typed in the search box and results were narrowed down to start at year 2000; 383,000 results populated and articles from the first ten pages of results were reviewed to assess whether or not they were applicable to the current project. In total, 20 articles have been utilized and referenced throughout the project, and enough support was gathered. Other broad searches were not conducted due to the high volume of articles with the initial search. The goal of finding data was not only to find research, but also to discover statistics that develop a sturdy background to the current problem being discussed.

Synthesis of Evidence

Violence in healthcare occupations has an assault-injury rate ten times that of other occupations, with ER staff being at the greatest risk for such events (Kowalenko et al., 2012). A global review of 150,000 nurses demonstrated one third had experienced physical assault or injury while another two-thirds had experienced non-physical assault (Yenealem et al., 2019). Time off work related to workplace violence was four times more common in healthcare than other private industry (Occupational Safety & Health Administration, n.d.). The U.S. Bureau of Labor Statistics reported in 2007 that 60% of workplace assaults occur in healthcare, and most acts are committed by patients (Gates et al., 2011). Similarly, between 2011 and 2013, the average number of workplace assaults was 24,000 per year and about 75% of those occurred in the healthcare setting, with healthcare workers four times as likely to miss work days due to violence/injury (Samuels et al., 2018). A survey conducted by the Northwestern Academy of Quality and Safety Initiatives program found that 34.4% of healthcare workers reported an incidence of verbal/physical violence in the past twelve months and 13.5% of those events were assault (Rosenthal et al., 2018). On reviewing several Medical-Surgical units, one study found one-third of the nurses who participated had experienced emotional abuse from patients/visitors within the last five shifts worked (Roche et al., 2010). While the selected studies did not define how often a patient is committing an act of abuse in the ER, one study found that nearly one in five patients admitted to an adult psychiatric unit would commit an act of violence (Iozzino et al., 2015).

A study conducted by the Emergency Nurses Association (Gacki-Smith et al., 2009) found 25% of respondents reported physical violence more than twenty times in the past three years, with 20% reporting verbal violence 200 times in the same period. Based on pooled data

collected by Walsh et al. (2011), 6,504 ER nurses who responded to the question of whether they had experienced workplace violence recently showed 54.5% had reported verbal/physical abuse from a patient and/or visitor during the past seven calendar days, or the average of 36.9 hours worked. From the nurses' perspective, the main reasons for violence include waiting time, overcrowding, and patient/family expectations not being met (ALBashtawy & Aljezawi, 2015). Despite the evidence that workplace violence is a common occurrence in the ER, only 30% of ER nurses and 26% of ER physicians have reported incidents of violence (Stephens, 2019). A quality-improvement project demonstrated that reporting processes were found to be inconsistent and worse, nurses did not know what acts were deemed as violence; therefore, nurses were/are under-reporting violence in the ER and the result is resources are not recognized or provided (Stene et al., 2015).

Besides the data surrounding prevalence of violence against healthcare staff, another common theme found in the literature includes the repercussions of violence. Studies have identified seven categories of consequences when an employee experiences workplace violence: physical, psychological, emotional, work functioning, relationship with patients/quality of care, social/general, and financial (Lanctot & Guay, 2014). Healthcare workers who have been exposed to a form of violence experienced decreased job satisfaction, increased occupational strain, and poor patient outcomes (Gates, 2004). Besides the obvious physical injuries, abuse towards staff can result in reduced work satisfaction, increased turnover, and psychological consequences such as sleep disorders, depression, and PTSD (Arnetz et al., 2017). For nurses who have experienced a violent event in the workplace, 94% were found to have at least one posttraumatic stress disorder symptom, with 17% having a high enough score to be considered for a formal diagnosis of PTSD. In addition, 40-70% of victims report significant levels of PTSD

symptoms, such as being “super-alert” and watchful, trying to avoid recollecting the event, experiencing chronic fatigue, or being bothered by memories of the event (Martino, 2002). Interestingly, intent to leave one’s present position is often associated with emotional violence and not with threats or actual assault (Roche et al., 2010).

There are few studies that focus on the act of aggression reduction; the quality of what exists lacks in terms of active controls and overall design, limiting generalizability (Baby et al., 2018). Ramacciati et al. (2016) state “the studies that have attempted to evaluate the effectiveness of interventions (ie. environmental changes, new policies/procedures, education/training on violence) have shown weak evidence to date…further research is needed”. What research has identified is the perpetrator (patients and/or visitors), the victim (healthcare workers such as ER nurses), and what situational (psychiatric history, alcohol/drug abuse, low IQ, prior exposure to violence/conflict) and environmental factors (short staffing, long wait times) are associated with violence towards healthcare workers (Arnetz et al., 2018). With that being said, the point of the violence screening tool is to use the factors we do know and then create interventions that can protect both patients and ER staff.

Conceptual Framework

The conceptual framework that best aligns with this project is Roy’s Adaptation Model of Nursing. The Adaptation Model of Nursing was developed by Sister Callista Roy in 1976 with the idea that a person is a bio-psycho-social being who is constantly interacting with a changing environment (Nursing Theory, n.d.). In order to cope with a world that is constantly changing, an individual must use coping mechanisms, both innate and acquired, which belong to a biological, psychological, and social origin (Nursing Theory, n.d.). The model specifies that health is an

inevitable dimension of a person's life and that healthcare professionals should be adapting to help guide a patient towards health (Nursing Theory, n.d.).

Adaptation is one of the main components of this project in several ways. First, patients and visitors have to use coping mechanisms to deal with the stressors of coming to the hospital, but if those mechanisms fail, their reaction may incorporate a form of violence. If a patient or visitor is displaying violence, it can inhibit the individual from receiving timely, competent care, which delays health. Employees who experience violence have been shown to have decreased job satisfaction, increased occupational strain, and therefore poor patient outcomes (Gates, 2004). For an employee to care for a patient after experiencing violence, they must adapt to their environment and cope with the events of their shift in order to continue carrying out their job responsibilities.

Healthcare employees have to adapt in situations where patients and visitors display violence to protect themselves and others. With the violence screening tool, staff will be able to utilize a resource that can quickly identify an issue with adaptation in the past and redirect interventions towards guiding the patient to health in the present moment.

Chapter II: Methodology

Project Design

Implementation of a violence screening tool is a quality improvement project aimed at reducing the number of verbal/physical abuse events in the ER. The literature reviewed has stated that ERs are one of the most at-risk settings for violence against staff, so implementation of this project in an ER is appropriate and necessary. After background and education surrounding the topic was presented at a staff meeting in May, an outlined policy put into place with the violence screening tool will continue to be used by the ER staff to rapidly identify and intervene on potentially violent patients/visitors. The ER staff who work in the small Community Hospital in Northwest Ohio will be expected to continue utilizing the screening tool after implementation.

The original project design was meant to be a pop-up tool that would alert staff promptly if the patient had documented risk factors that research has demonstrated contribute to violence against staff. This tool would produce a notification upon entry into the patient's chart and provide information such as psychiatric history, drug/alcohol abuse, and previously documented violent events in the healthcare setting including the use of violent restraints. After a discussion with IT staff, it was proposed that the project be changed to better align with charting productivity. IT staff suggested that the project consist of two separate parts.

To better understand how one would use the tool, it is helpful to know that in EPIC, the main screen for all employees is called a trackboard and has all the patients in the department listed. Further, there is a section in each patient's chart called FYIs (for your information) that houses various notes from providers and one of the specific notes that clinicians can include in this section is called Violence Against Staff. If a patient has a violent event during their stay,

designated staff members (such as nurses, providers, and social workers) can enter a Violence Against Staff FYI so in the future, other clinicians can view this information.

The violence screening tool, with IT staff's considerations, was created in two separate parts to be more conducive to clinician workflow and productivity. The first part of the project was the addition of a column onto the trackboard that hosts an icon if the patient has a violence against staff FYI documented in their chart. This allows for rapid identification of previously violent patients in the ER while enabling all clinicians to have the information readily available without entering a patient's chart. The second part of the project is at the bottom of the trackboard and includes all the relevant patient information that research has demonstrated contributes to violence against healthcare workers. As mentioned before, this information includes psychiatric history, drug/alcohol abuse, history of violent events in the healthcare setting including the use of violent restraints, and the last documented Broset score (which is commonly used by psychiatric teams for evaluation of their patients). Both tools are intended to make previously documented information more readily available for clinician use so that quicker identification of the potential for violence is possible.

Setting

The project was implemented in a small Community Hospital in Northwest Ohio. This specific hospital has 390 beds, with 40 beds found in the ER. In the ER, there is a locked unit (with a small, open work area for the social worker and nurse) that is meant to hold up to seven psychiatric patients at a time; this area is typically staffed by a security guard, social worker and intermittently, a nurse. Another seven beds are in a dedicated "quick care" area, which serves patients with emergency severity index (ESI) levels of 4 and 5, with typical staffing being an advanced practice provider and one nurse. Both of these areas in the department are located off

one corner of the main ER, and with the limited staffing, can be dangerous if a violent event were to occur. There are two doors into the ER from the waiting room, one that leads to the acute care side, and one that leads patients into the quick care and behavioral unit. There are cameras that look over the waiting room with a monitor in the main nurses' station and another set of cameras in the behavioral unit with a monitor located next to the nurse's computer in the locked unit. The only locked area staff can go to protect themselves is the break room, located in the far corner of the department. Because of this setup, there is potential for patients and/or visitors to take advantage of the few staff that are available for help if needed. The reason this project was designed was to accommodate the gap in safety with the design of this department.

Participants

Participants of the project include any staff member who provides direct patient care in the ER. These positions include registration employees, nurses, PCTs, doctors, advanced practice providers, phlebotomists, and pharmacists, for a total of 72 ER staff members. When a patient registers to be seen in the ER, any of the above staff members have access to the ER trackboard located in the EMR EPIC and can quickly see the violence against staff column as well as the behavioral risk assessment report tool. As stated in the literature, staff working in the ER are more at risk for violence in the workplace (Kowalenko et al., 2012), so the participants for this quality improvement project are appropriate.

Data Collection Tools or Instruments

The data collection tool used to support the needs assessment was an anonymous reporting system used within the hospital's organization called SafeCare. When an event occurs that threatens the safety of staff or patients, any hospital employee is able to file a report in SafeCare. However, to evaluate the effectiveness of the project, a Likert scale questionnaire was

developed by the DNP student to assess each employee's perception of safety related to the interactions between ER staff and patients/visitors. After the Likert scale was approved, it was created as a survey on an online website called surveymonkey.com and was emailed to all ER staff participating in the project. Initially, the questionnaire was going to be completed by pencil and paper but after receiving feedback from the ER staff, it was requested that the survey be made better accessible by being created online. The Safety Screening Questionnaire (see Appendix A) was anonymously completed by all ER staff two weeks prior to implementation of the project and again completed two weeks after initiation. Questions included in the questionnaire were formulated to evaluate how effective the project would be in the ER setting at improving the employees' perception of safety. Permission to use the questionnaire was granted by the ER manager of the small Community Hospital in Northwest Ohio (see Appendix B).

Project Plan

First, the DNP student spoke with the site manager, project mentor, and IT staff to discuss the specifics of the project to determine if the project was realistic. After obtaining approval from all three entities, the DNP student evaluated the different factors that would need to be addressed prior to creation of the tool, such as how to evaluate effectiveness of the project, what protocol needs to be in place with the violence screening tool, and how much this project will cost. A Safety Screening Questionnaire was created by the DNP student as a way to evaluate the effectiveness of the project in relation to affected ER staff's perception.

Next, the DNP student submitted the project to the local Institutional Review Board (IRB) and Bradley University Committee on the Use of Human Subjects for Research (CUHSR) for approval. After discussion with the site manager who oversees the local IRB, it was

determined that the project was strictly a quality improvement project and therefore did not require a formal sign off. Bradley University CUHSR approved the project on 26 May, 2020.

At the end of April into May, the DNP student and project mentor discussed the project with IT staff and what was expected of the EPIC build. The DNP student spoke with three different members of the IT staff to ensure the right person was assisting to build the project. After a lengthy discussion with an IT staff member, it was proposed that the project be changed to be more conducive to charting productivity. After an IT staff member made a mock-up of the proposed project, the IT staff member discussed with the DNP student that the project would need to be implemented in all of the organization's ERs instead of just the proposed hospital, so the DNP student would need to present the project to the leaders of all the ERs for approval.

Because of the expected timeline for implementation of the violence screening tool, the DNP student educated the ER staff at the small Community Hospital in Northwest Ohio on the tool and how it would be used in the department. Staff were informed that they would be given a survey before and after the project's implementation to evaluate effectiveness of the tool. The ER staff were encouraged to provide suggestions or concerns, if willing.

In June of 2020, the DNP student was invited to present the project to the Safety Committee of the small Community Hospital in Northwest Ohio to gain support for its implementation. The DNP student presented the project to all the members of this committee, which included all the managers of the hospital from the various departments. The Safety Committee of the small Community Hospital in Northwest Ohio gave their approval for the violence screening tool (see Appendix E).

In July of 2020, the DNP student presented the project idea to the Emergency Department (ED) Super User Group. While many in this meeting were supportive of the project, several

members had concerns about implementing a project in relation to violence against staff and a suggestion was made to form a task force to discuss the idea further. At the end of the meeting, an invite to join the task force was sent out and was scheduled to meet two weeks later.

At the end of July, the DNP student met with the ED Super User Group task force and the project was discussed in great detail, including the FYI column, the report tool at the bottom of the trackboard, a policy to accompany the project implementation, and how the project would be used in ER workflow. The members created a presentation for the next ED Super User Group.

At the beginning of August of 2020, the ED Super User Group met again and the suggestions from the task force were presented by an IT staff member. After the presentation was over, the ED Super User Group collectively gave their support for implementation. One IT staff member noted that the project had to be approved through one final committee, the Emergency Services Informatics Committee, which would meet at the end of August. That specific IT staff member presented the project to this group and they gave their approval for the project to be built.

In September of 2020, the DNP student worked with a new assigned IT staff member to create the violence screening tool. The DNP student also created a workflow document that discussed why the project was being implemented and how staff could benefit from this project (see Appendix I). The ER staff at the small Community Hospital in Northwest Ohio was again educated on the revised violence screening tool and was given the workflow document through an email. After suggestions from the ER staff, the DNP student created the violence screening tool questionnaire on an online platform called Survey Monkey. After the survey was created, the DNP student emailed the survey to all the ER staff.

In October of 2020, the ER staff members completed their anonymous online surveys. On October 20, 2020, the violence screening tool was implemented. For two weeks, the DNP student encouraged staff to utilize the tool and provide feedback as appropriate. The first week of November, the DNP student recreated the violence safety screening questionnaire on Survey Monkey and the survey was emailed out to the same ER staff who received the first survey. The ER staff was encouraged to complete the survey once they utilized the violence screening tool in EPIC.

The longevity of this project is supported by the community hospital administrators and staff, as verbal, physical, and sexual violence displayed by patients/visitors towards staff has been an ongoing issue. As long as the project yields safer conditions for ER staff, as evidenced by the staff's perception of safety on the Safety Screening Questionnaire, the project will continue to be used.

Data Analysis

The Safety Screening Questionnaire is a six-item instrument used to measure a staff member's perception of safety in the ER (See Appendix A). Participants were asked to reflect on their perception of safety using a six-point Likert scale, once before implementation of the violence screening tool and once after. The questionnaire was created with an online program called Survey Monkey, which allowed each member from the ER staff to receive the survey to their email and answer anonymously. The benefit of using an online program such as Survey Monkey is it allowed the DNP student to organize data that could be used for the final project. Quantitative data from both surveys was used to show statistical support of the implemented project. All six of the questions were important to the organization as a way to evaluate the

staff's perception of safety, but question 6 was specifically used to evaluate the effectiveness of the violence screening tools.

IRB/Ethical Issues

The small Community Hospital in Northwest Ohio did have their own IRB and the DNP student spoke with the site manager, who deemed that the project was strictly quality improvement and therefore, did not require further IRB approval. The IRB site manager for the small Community Hospital in Northwest Ohio did recommend that the DNP student get approval from the quality department at the hospital. The DNP student presented the project to the manager of the quality department at the small Community Hospital in Northwest Ohio and approval was obtained that the violence screening tool did not need further IRB approval (see Appendix F). The project will be submitted for exempt review, as human subjects are being surveyed, to the Bradley University CUHSR. Approval from Bradley University CUHSR was obtained on May 26, 2020 (see Appendix G) and the DNP student then began to work on implementing the violence screening tool in the small Community Hospital in Northwest Ohio with the assistance of the project mentor, site manager, and IT staff. In August, the staff requested that the Likert scale that would be utilized to evaluate the effectiveness of the screening tools be changed to an online survey rather than a paper survey. The change was requested by the DNP student to Bradley University CUHSR and approved on October 9, 2020 (see Appendix H).

An ethical issue related to this project is the judgement that could be pre-assumed by staff prior to caring for a patient. If the screening tool populated a warning for the patient, ER staff may be cautious with the patient without full knowledge on how the patient will act throughout the encounter. A consideration with this in mind is that patients may be unknowingly treated

differently than someone who presents for a similar issue that did not generate a violence screening warning. Another ethical issue related to this project is the use of questionnaires to obtain data for the project's support. To ensure privacy and protection of the staff who are participating in this quality improvement project, questionnaires will remain anonymous, and only be handled by the DNP student through the online survey website Survey Monkey.

Chapter III: Organizational Assessment and Cost Effectiveness Analysis

Organizational Assessment

Leaders of the Community Hospital in Northwest Ohio, at which this project will be implemented, have sought for solutions to the increased violence problem. Employees that experience frequent violence from patients and/or visitors are at risk for decreased job satisfaction, lessened productivity at work, absence from work, post-traumatic stress disorder, etc. Due to the behavioral health unit in the facility, psychiatric/behavioral patients from all over the city have a long-standing history of violence or risk factors that increase their chances of violence. The Community Hospital in Northwest Ohio as a whole is ready for a change.

As previously mentioned, one of the barriers to implementing this project was working with IT staff, who may not have a full understanding of what is being asked for this specific project. The IT staff member that initially assisted the DNP student was a previous ER nurse and therefore had a better understanding of the project and its necessity. Another barrier to this project that was unforeseen was implementing a quality improvement project based around violence against healthcare workers, as Risk Management was concerned about legal ramifications associated with addressing this problem in the EMR EPIC. However, there has been interprofessional collaboration between IT staff, Risk Management, ER managers across the organization, the project mentor, the site manager, and the DNP student, so thorough communication will continue to minimize the risk associated with this project.

Cost Effectiveness

Costs associated with this project include the time it takes staff in IT to discuss and build the project, training of the ER staff to utilize the tool, and further time needed to make necessary changes. When an ER staff member is verbally/physical abused, there can be financial

repercussions for the institution such as decreased productivity and time away for work. With successful implementation of the violence screening tool, overall number of violent events will be decreased and therefore, money will be saved.

A sample budget for implementation of the violence screening tool at the Community Hospital in Northwest Ohio is shown below (see Figure 1). Included in the budget is the time it took IT staff to build the tool and the cost to educate the nursing and support staff on the use and goals of the violence screening tool. The nursing and support staff were educated on the tool at a staff meeting that was held on June 4, 2020. The staff meeting typically lasts one hour; however, the DNP student only required 15 minutes of that time to discuss the background of violence against healthcare workers, the violence screening tool design, and how the tool would be utilized in day-to-day operations. The project mentor and site manager were present for the initial staff education at this meeting held on June 4 and their paid time came from their regular scheduled hours. The pre/post implementation surveys did not require an additional budget as they were conducted online and took an average of 49 seconds to answer as documented on the website Survey Monkey. Like many other previously implemented changes in the small Community Hospital ER, the focus of education for this project was directed at nursing and support staff, who then assisted other members of the staff, providers and a pharmacist, on learning about the violence screening tool in effort to save on the budget with implementation.

(Figure 1)

Profession	Hours required	# Employees	Cost per hour	Total Cost
Information Technology	10	1	$34	$340
Nursing	0.25	37	$30	$277.50
Support Staff	0.25	20	$15	$75

Total implementation cost: $692.50

Chapter IV: Results

Analysis of Implementation

The implementation of the violence screening tool did not go according to plan and required a lot of flexibility by all members involved to see it finished. As mentioned in previous sections, the design of the project was altered from being a pop-up screening tool that a clinician could view upon entry into the patient's chart. Further, the original timeline for the violence screening tool was to obtain approval for the project by April, create the project with IT staff in May, and to have the project implemented in EPIC by June (see Appendix C). After the project was implemented, the DNP student had planned to have the ER staff utilize the tool throughout the summer months and then reevaluate the staffs' perception of the tool on safety by September of 2020.

Unlike the proposed aforementioned timeline, the project took several months longer than anticipated. To start, the DNP student had spoke with the site manager for the local IRB and it was recommended that the DNP student get a letter from the quality department at the small Community Hospital in Northwest Ohio to prove that the violence screening tool was a quality improvement project. Once that approval was obtained, the DNP student submitted the project to Bradley University CUHSR with approval obtained on May 26, 2020. Immediately after obtaining approval from CUHSR, the DNP student spoke with an IT staff member provided by the project mentor. This IT staff member then directed the DNP student to another IT staff member, who was a former ER nurse. The IT staff member discussed the proposed project with the DNP student and had concerns that the project was formatted as a pop-up screening, since the company who created EPIC was not allowing more pop-ups to be created due to their negative impact on productivity for hospital staff. The DNP student, IT staff member, and director of IT

services discussed the project at length over a phone call and it was suggested that the project be changed to coordinate with the current trackboard setup. The IT staff member told the DNP student that while the project was likely feasible, it would need to go through several committees for approval before it could be created and implemented. Of note, the DNP student had not anticipated that the violence screening tool would require committee approval nor was it anticipated that this process would take months to achieve.

During the Summer of 2020, the DNP student spent a considerable amount of time meeting with various committees to obtain approval for the violence screening tool. Outside of the unexpected timeline for this project, another barrier to implementation was the reservation several members on the committees had against addressing violence against healthcare workers, specifically on a platform such as EPIC. There was a concern that patients would be labeled as violent after only one event of violence, especially if they were sick and not at their baseline. The DNP student explained that healthcare workers should have the knowledge that even if the patient had an isolated event of violence, the knowledge that the patient has a potential for violence during their illness could be useful for other caregivers to know so that they can ensure proper measures are taken to reduce the probability. Many of the committee members felt the violence screening tool was an appropriate project and demonstrated their support through the meetings. With the support from other committee members, specifically the violence task force that was created as a subgroup of the ED Super User Group, the DNP student was able to obtain approval for the violence screening tool in August, 2020.

After approval was obtained for the violence screening tool, the IT staff member that had been assisting the DNP student through the course of redesigning the project and discussion at committee meetings assigned the creation of the tool to another IT staff member. The DNP

student worked with the new IT staff member through the month of August into September to create the two different tools that would be utilized by ER staff for the prevention of violence. Once the tool was created, the DNP student was notified that the project could only be implemented in EPIC two times a month due to prescheduled system updates, so there was a period of time where the project was complete but not yet implemented into EPIC. On October 20, 2020, the organization's EMR EPIC updated and the violence screening tool was implemented into practice (see Appendix J). The greatest lesson through the course of this project was that there are many details that may be unknown to a leader when initiating a change in a system and that ample time should be allotted in order to prepare for such events.

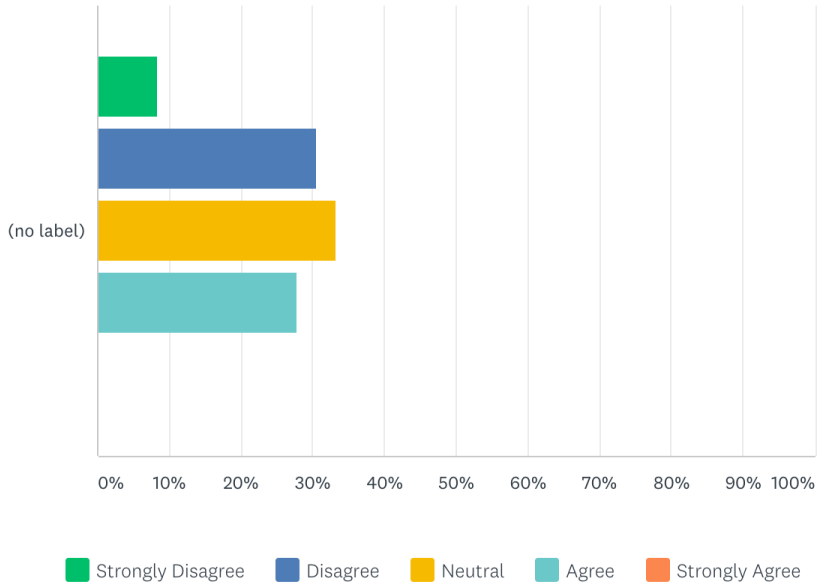
Outcome Data

The following data was obtained from Survey Monkey, the online survey system that was utilized to collect responses from the ER staff pre/post implementation of the violence screening tool. As mentioned previously, there were six questions included on the Safety Screening Questionnaire survey that 59 ER staff members were emailed to complete. Thirty-six (61%) of the ER staff members responded to the pre-implementation survey. The results are found in Table 1.

Table 1: Pre-Implementation Results

I feel safe when interacting with patients at work.

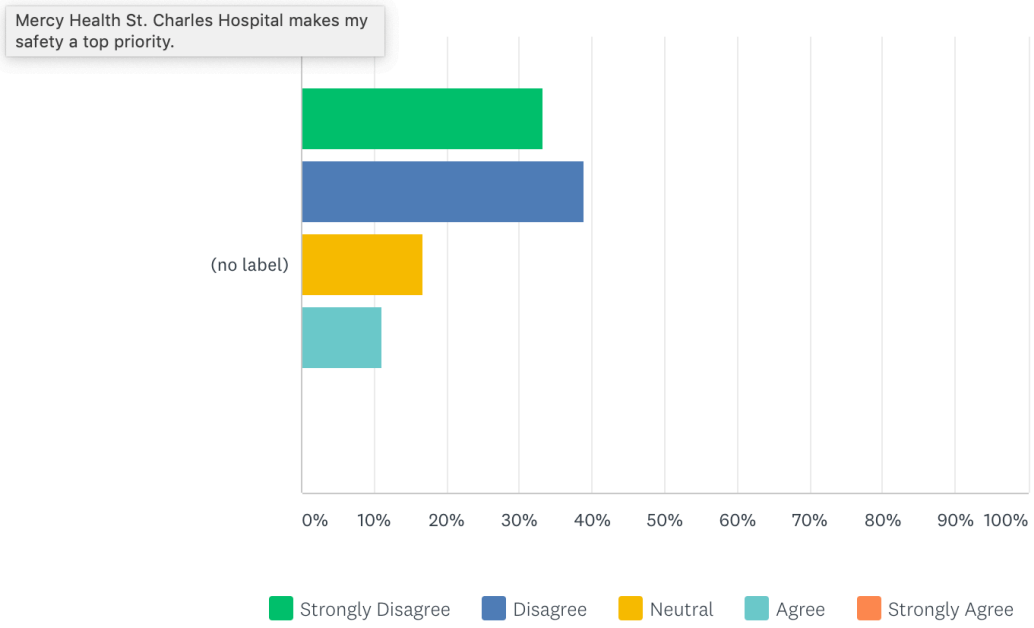
Answered: 36 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	8.33% 3	30.56% 11	33.33% 12	27.78% 10	0.00% 0	36	2.81

Mercy Health St. Charles Hospital makes my safety a top priority.

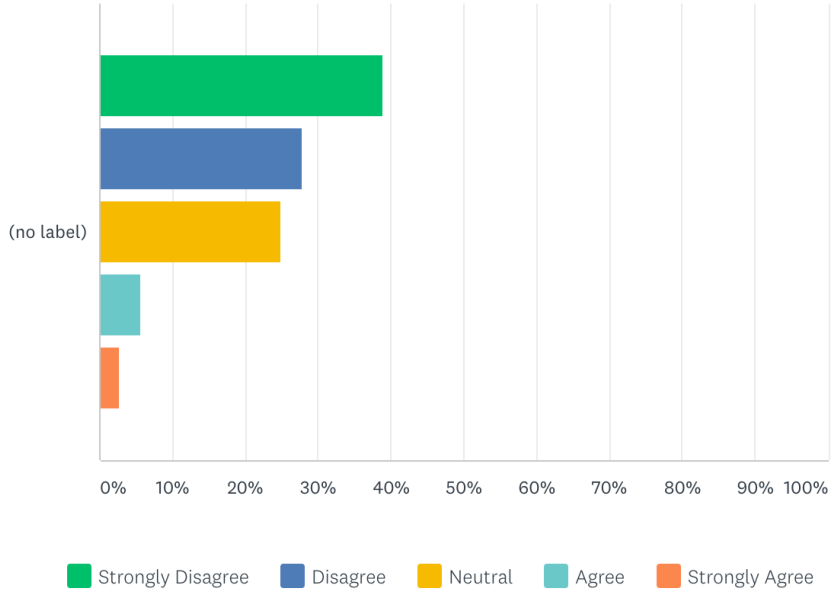
Answered: 36 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	33.33% 12	38.89% 14	16.67% 6	11.11% 4	0.00% 0	36	2.06

I believe that the current reporting system (SafeCare) for violence against healthcare workers is taken seriously.

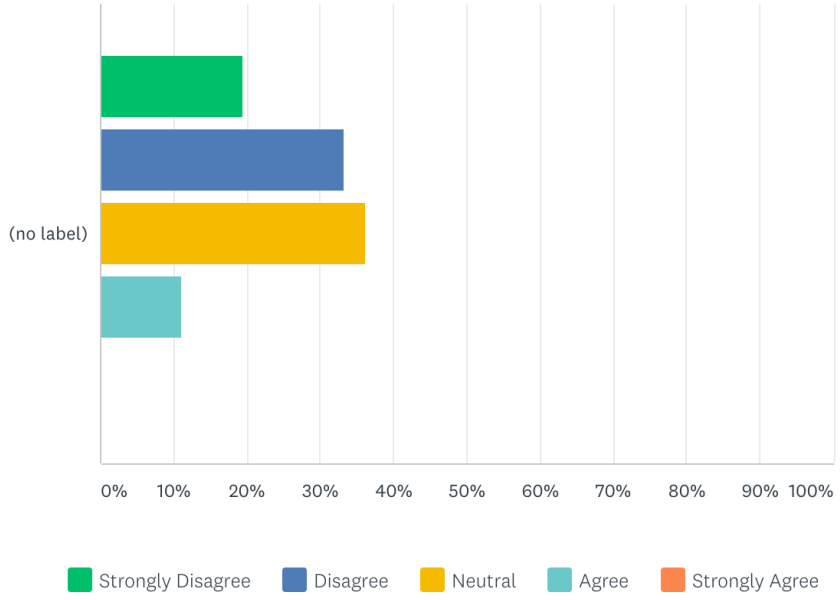
Answered: 36 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	38.89% 14	27.78% 10	25.00% 9	5.56% 2	2.78% 1	36	2.06

I feel safe being the first point of contact with a new patient/visitor.

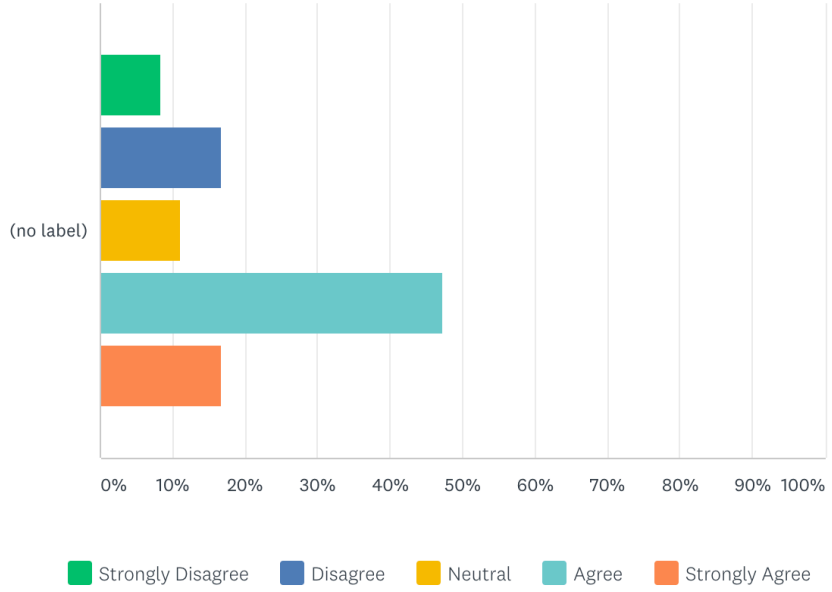
Answered: 36 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	19.44% 7	33.33% 12	36.11% 13	11.11% 4	0.00% 0	36	2.39

I feel that ER staff takes appropriate actions against patients who have the potential for violence and/or display violence against staff.

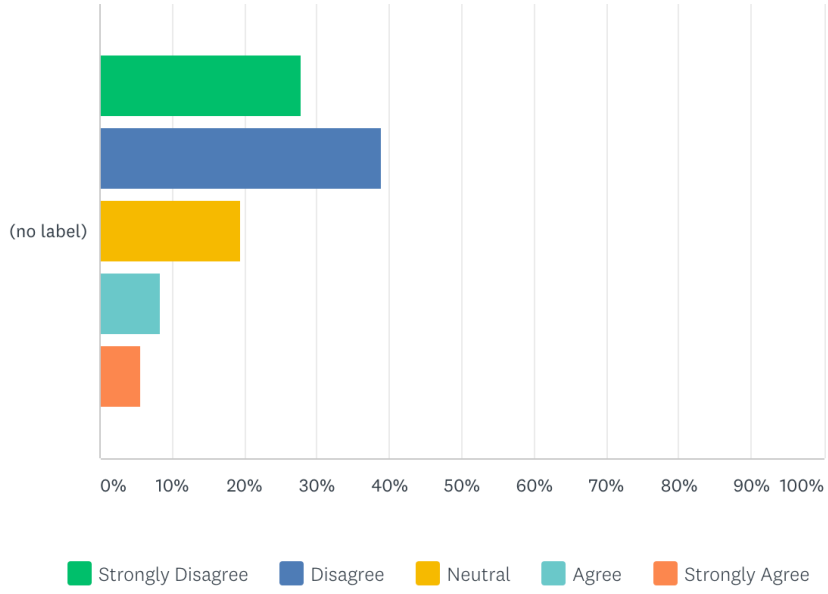
Answered: 36 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	8.33% 3	16.67% 6	11.11% 4	47.22% 17	16.67% 6	36	3.47

I feel that I can quickly use the electronic medical record EPIC to identify a potential for violence on any given patient, whether they are my patient or not.

Answered: 36 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	27.78% 10	38.89% 14	19.44% 7	8.33% 3	5.56% 2	36	2.2

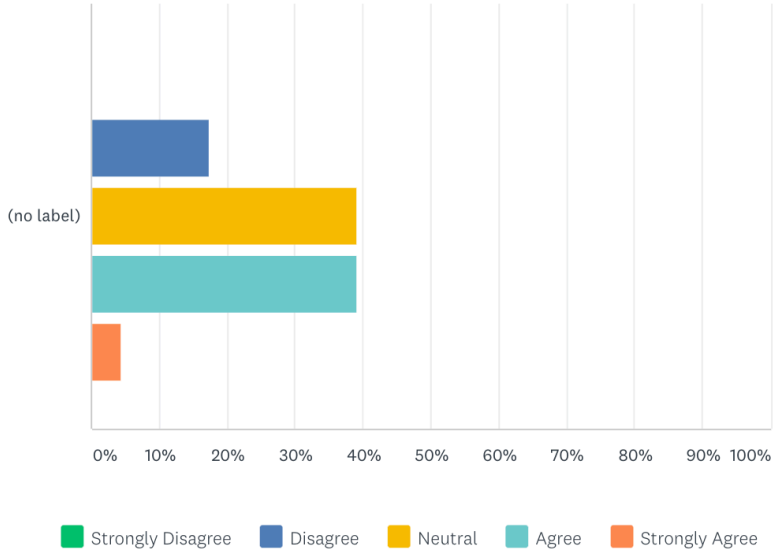
All of the questions in the Safety Screening Questionnaire were created to identify the ER staff's perception on safety in the department relating to violence against staff. However, the specific question used to determine if the violence screening tool was successful was the last question: I feel that I can quickly use the electronic medical record EPIC to identify a potential for violence on any given patient, whether they are my patient or not.

After the violence screening tools were implemented, the ER staff was asked to complete the Safety Screening Questionnaire again once they felt they had adequate experience using the tools. The same 59 ER staff members were sent the anonymous post-survey; the results are found in Table 2.

Table 2: Post-Implantation Results

I feel safe when interacting with patients at work.

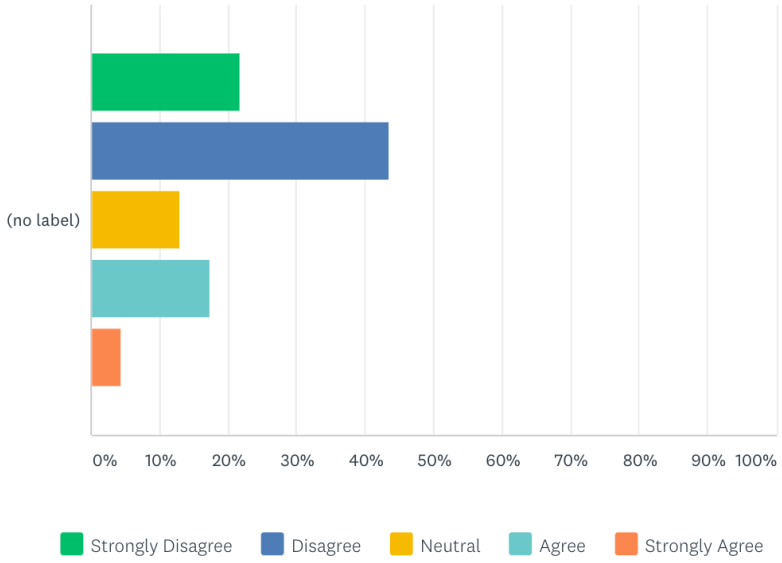
Answered: 23 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	0.00% 0	17.39% 4	39.13% 9	39.13% 9	4.35% 1	23	3.30

Mercy Health St. Charles Hospital makes my safety a top priority.

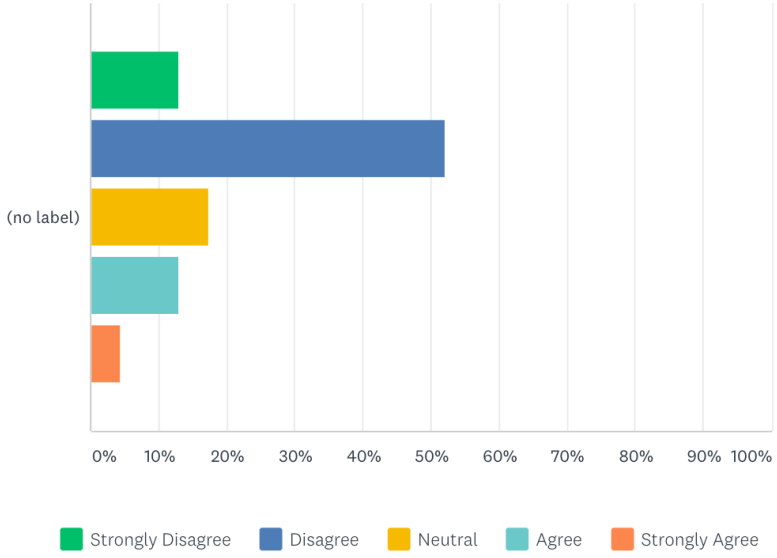
Answered: 23 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	21.74% 5	43.48% 10	13.04% 3	17.39% 4	4.35% 1	23	2.39

I believe that the current reporting system (SafeCare) for violence against healthcare workers is taken seriously.

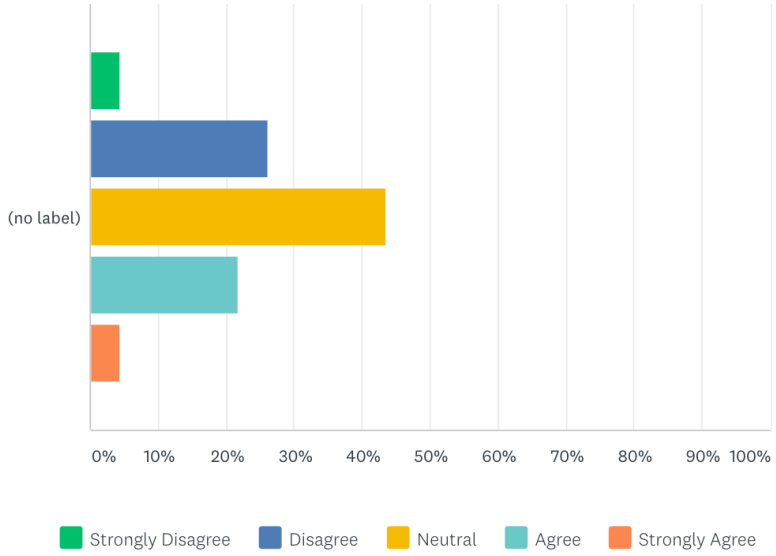
Answered: 23 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	13.04% 3	52.17% 12	17.39% 4	13.04% 3	4.35% 1	23	2.43

I feel safe being the first point of contact with a new patient/visitor.

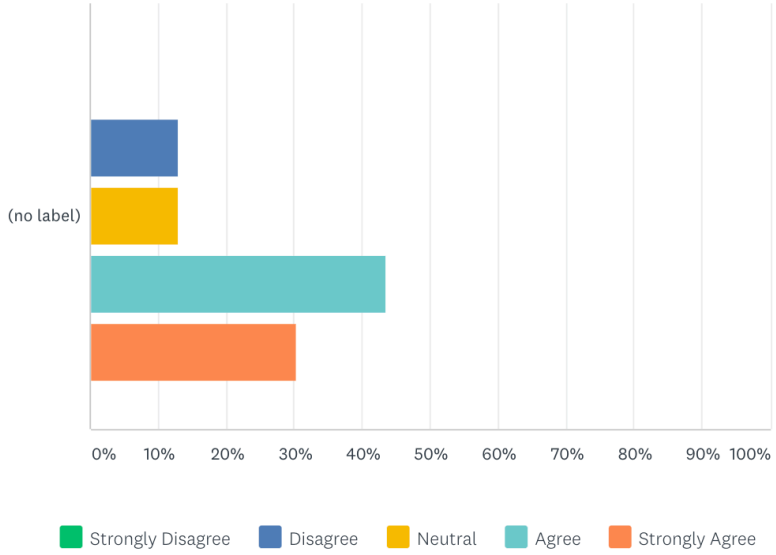
Answered: 23 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	4.35% 1	26.09% 6	43.48% 10	21.74% 5	4.35% 1	23	2.96

I feel that ER staff takes appropriate actions against patients who have the potential for violence and/or display violence against staff.

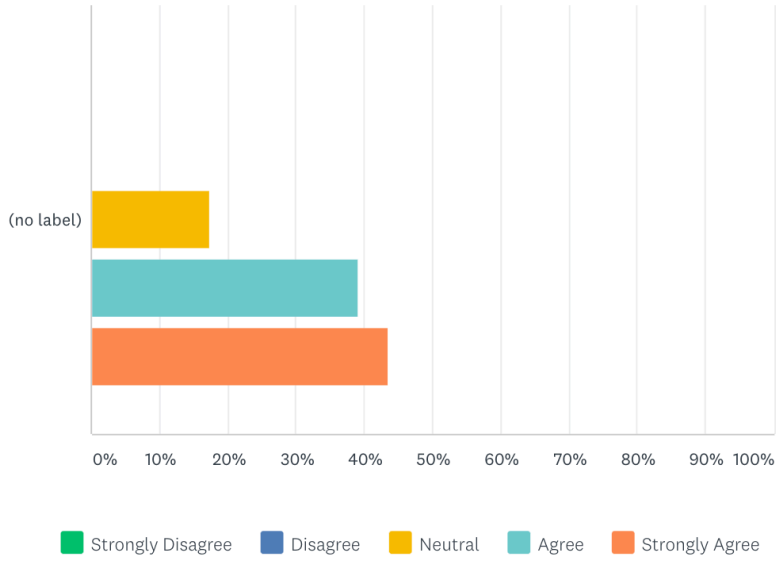
Answered: 23 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	0.00% 0	13.04% 3	13.04% 3	43.48% 10	30.43% 7	23	3.91

I feel that I can quickly use the electronic medical record EPIC to identify a potential for violence on any given patient, whether they are my patient or not.

Answered: 23 Skipped: 0



	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE	TOTAL	WEIGHTED AVERAGE
(no label)	0.00% 0	0.00% 0	17.39% 4	39.13% 9	43.48% 10	23	4.26

Out of the 59 staff members who were sent the Safety Screening Questionnaire post-implementation survey, 23 (38.9%) responded. As mentioned previously, the question that demonstrated success of the violence screening tool was the last question which asked participants if they could quickly identify a potential for violence on any given patient, even if it was not their own patient. Of the 23 participants, 19 (82.60%) agreed that with the violence screening tool in place, they were able to quickly identify a patient who had the potential for violence. Of note, 5 of the 36 participants (13.89%) in the pre-implementation survey responded they agreed they could quickly identify a potential for violence on any given patient. With the violence screening tool in place, there was an increase in staff (13.89% to 82.60%) who felt they could quickly identify a potential for violence on any given patient.

Chapter V: Discussion

Results Linked to Project Objectives

As discussed under objectives, the plan for this project was to implement a violence screening tool by October of 2020 that would report violence risk factors of patients to the ER staff through EPIC. On evaluation, the DNP student wanted to demonstrate that the violence screening tool would allow for ER staff to quickly identify the potential for violence on any given patient and ultimately provide a preventative measure for violence against healthcare workers instead of a reactive measure. As demonstrated by the results of the Safety Screening Questionnaire, the ER staff believe the violence screening tool is an effective intervention to allow ER staff to rapidly identify violence risk factors on any given patient in the department.

The change in care delivery related to the implementation of the violence screening tool has been the process when a potentially violent patient is identified. When the ER staff is aware that the patient has a history of violence or has risk factors for violence, they may choose to put the patient in a room closer to the nurses' station or call for security presence in the ER. Additionally, if the patient has a history of being violent, the staff member may take an additional staff member into the room when delivering care or have someone close by that can assist if needed.

Another success of project implementation was that not only was it implemented in the small Community Hospital in Northwest Ohio, but the violence screening tool was implemented in all ERs across the organization. Further, the DNP student facilitated important conversations about violence with others in various roles in healthcare which opened up dialogue on the issue of violence against healthcare workers and allowed for further suggestions on safety to be made in efforts to solve the problem. Another success with this project was that it went from being one

tool that would only be utilized by the individuals providing direct care to these patients, to two tools that could be utilized by any staff member on any patient during their ER nstay. This change to the project was through interprofessional collaboration, specifically between the IT staff members and the DNP student, which demonstrates that teamwork allows for greater successes. One challenge of project implementation was meeting a timeline, as the violence screening tool needed approval by several hospital committees that already had a large agenda prior to the discussion of the project.

Limitations

A limitation to this project is the small sample size for the pre/post survey that was conducted to obtain data for the support of the violence screening tool. The DNP student had intended to conduct the surveys in person at a department staff meeting to ensure more participation. However, the ER staff requested that the surveys become electronic to better accommodate the anonymity while allowing easier access for those who couldn't attend the meetings in person. Because the survey responses were anonymous and electronic, the ER staff were able to voluntarily choose when and if to complete them. Further, some ER staff were not at work during some of the weeks of surveys being conducted due to unrelated reasons and therefore did not access their work email to complete the surveys.

Outside of the small sample size, another limitation to this project's data was that it screened staff's perception of safety and ease of use of the violence screening tool rather than collected data on how many violent events were being reported before and after implementation of the project. The reason this type of data was not selected for this project was due to refusal from the risk management department at the small Community Hospital in Northwest Ohio, but this is an area where future research could be conducted internally for further support.

Lastly, another limitation to this project was the timeline for implementation. Unfortunately, approval processes took longer than anticipated, which pushed the entire project back, from collecting pre-implementation data, to implementation, to collecting post-implementation data. While this timeline did not ultimately affect the violence screening tool, it did affect the timeline for data collection.

Implications to Practice

The violence screening tool is a sustainable change that was made to the workflow of the ER. As a tool that was created in EPIC, the violence screening tool is a voluntary option that the clinicians can choose to utilize in order to quickly identify the potential for violence in any given patient, using documentation in the patient's chart from prior encounters. The two locations of the violence screening tool allow it to be easily identified while remaining functionable with the rest of the trackboard so that it does not interfere with typical clinician operations.

In the future, there are modifications that can be made to ensure the violence screening tool remains effective. ER staff requested that violence-specific FYIs will become a permanent part of the patient's record rather than the current option where any FYI can be deleted by any user. This small but dynamic change will ensure that if the patient has been previously violent and the clinician charted it, the information will be utilized for all future encounters. This change would directly affect the violence screening tool alert column, which shows an icon if the patient has an FYI for a documented violence against staff. Another change that would improve the performance of the violence screening report tool would be to include characteristics that identify a potential for violence on a patient. Specifically, there are screening tools being created in other healthcare facilities that a clinician can complete using objective patient data to yield a

score for potential for violence. This type of screening tool could be a valuable addition to the violence screening report tool.

The violence screening tools are unique to the parent organization of the small Community Hospital in Northwest Ohio, however due to the widespread use of the EMR EPIC, these tools could easily be designed and implemented in other facilities for use. As further research is done and improvements are implemented regarding the issue of violence against healthcare staff, it is expected that more healthcare facilities will make use of these tools to improve the safety of their staff and other visitors in the ER.

Future Research

As mentioned in previously, future research related to the violence screening tools should include evaluation of the number of violent events documented one year before the project was implemented and a year after the project was implemented. This specific research surrounding the violence screening tool would demonstrate that the tools contribute to overall staff safety rather than only improving the staffs' perception of safety within the ER department.

Once the project has concluded, the DNP student will present the results of the Safety Screening Questionnaire survey to the Safety Committee at the small Community Hospital in Northwest Ohio and ED Super User Group. Both of these groups were directly involved in the creation of the violence screening tool and have asked for follow up on results collected by the DNP student. The Risk Management department at the small Community Hospital in Northwest Ohio had asked the DNP student not to utilize the number of violent events as a way to measure effectiveness of the violence screening tools. However, during the presentation and discussion of results with these groups, it could be discussed whether the number of violent events could be used to measure effectiveness of the tools.

Implications to Nursing

The use of violence screening tools is of great significance to nursing. While violence is not "part of the job", patient violence is becoming a large part of clinical nurses' routines and collectively, the mindset has shifted to accept violence as "part of the job". When nurses accept violence as part of their job, it is not surprising that patients and visitors also accept this type of behavior as typical and resort to violent actions when in distress rather than using appropriate coping mechanisms. Burnout in the field of nursing is a major concern and results in turnover of quality nurses who are needed at the bedside to care for patients. The violence screening tools are a small step to address the issue of violence against healthcare workers and in the future, there should be more research and interventions directed towards addressing this issue as a whole. Nursing leaders should be setting the standard early in nursing education that violence is not an aspect of nursing and should not be tolerated. Nurses and other leaders in healthcare should continue to work towards having difficult conversations that address violence against staff and work together to create solutions that will end this significant problem. No one should encounter any form of violence when performing the duties of their job, especially when those duties include caring for others. Healthcare workers, including nurses, deserve better work environments with policies and procedures that do not tolerate violence of any kind towards staff.

Health Policy

Besides creating interventions such as the violence screening tools, policies surrounding violence against healthcare workers must change to support the staff. As a unit, signs should be posted in the ER that state there is a zero tolerance for violence against staff. If a patient or visitor does not abide by these rules, there should be an expectation that they could be asked to

leave or be escorted out of the building. In Ohio, a documented assault against a healthcare worker, such as a nurse, is not considered a felony until the second assault (Ohio Nurses Association, 2016). Moving forward, nursing leaders such as the DNP student plan to address these policies at a state and national level so that laws change in favor of protecting healthcare workers. Just like other members of society, if a patient or visitor assaults a healthcare worker, it should be a felony right away. Until policies and laws surrounding violence against healthcare workers change, it should not be expected that the culture of violence against healthcare workers will change.

Chapter VI: Conclusion

Value of Project

The violence screening tools add great value to the delivery of care that healthcare professionals provide every day. Verbal, physical, and sexual violence from visitors towards ER staff prevents quality care that healthcare employees seek to provide. By providing tools that are built into EPIC that enable clinicians to preemptively identify and intervene on these violent events, the focus of their care can continue to be towards improving the patient condition.

DNP Essentials

Engagement in this project allowed for growth in all eight DNP essentials. Below are ways that all eight essentials were addressed during this project.

Essential I: Scientific Underpinnings for Practice. A DNP student that demonstrates essential I has a wide variety of knowledge that can quickly be utilized to positively impact the patient in a demanding environment (Hathaway et al., 2006). The violence screening tools were created as a solution to the identified problem that affects care delivery within a hospital's ER. Using nursing science at a leadership level, I identified a problem, created a solution, worked with other professionals to develop the intervention, and evaluated one of the outcomes of the tools.

Essential II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking. As noted by Hathaway et al. (2006), the DNP graduate must be able to recognize quality improvement strategies and create sustainable changes at the organizational level. The violence screening tool project was not originally intended to be an organizational change but it is a quality improvement measure that addresses a concern that inhibits care delivery. Throughout the project, I worked with many members of the organization such as

Information Technology staff, the hospital's leadership team, department managers, and ER staff to create a tool that ended up being utilized by all ERs within the organization.

Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice. Scholarly nursing practice involves integration of knowledge from multiple resources and curating the information to solve problems and improve health outcomes (Hathaway et al., 2006). At the beginning of this project, I researched the problem of violence against healthcare workers from many different resources and used the information to create a plan that not only addressed the issue but also calls for further action in the future. Other healthcare leaders can utilize the work done in this project and create more lasting solutions for violence against healthcare workers.

Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care. For this essential, the DNP graduate must be proficient in using information systems and other technology sources to implement quality improvement initiatives, which is the foundation of the violence screening tools (Hathaway et al., 2006). The violence screening tools are technology-driven resources that allow a clinician to identify a potential for violence early on in the care of a patient. Further, information technology software, Survey Monkey, was selected as a way to evaluate the DNP project.

Essential V: Health Care Policy for Advocacy in Health Care. Hathaway et al. (2006) states that health care policy, even at an organizational level, creates a framework for care delivery. It was not intended that the violence screening tools would need a policy attached, but one was created to assist the organization's employees with what the tools were designed to do and how they were to be utilized in practice. I personally helped create the policy that was implemented with the violence screening tools. In addition to the creation of a policy, I feel it is

noteworthy that I had to advocate a considerable amount to have this project implemented into practice as there were individuals that did not want to address the issue of violence against healthcare workers for the sake of legality.

Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes. The healthcare system that we participate in today is multidimensional and requires collaboration from all professional roles (Hathaway et al., 2006). The violence screening tools were the product of interprofessional collaboration, particularly with IT staff, department managers, various ER staff, the DNP student, and the DNP mentor.

Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health. The DNP graduate should be able to analyze data, including environmental data, and further evaluate care delivery models that affect the dimensions of health (Hathaway et al., 2006). The violence screening tools were created to address a concern related to the ER environment and how care delivery was being conducted. With the tools in place, clinicians now are able to view a potential for violence in EPIC and create a safer environment when appropriate.

Essential VIII: Advanced Practice Nursing. Essential VIII concludes the DNP practice essentials and is focused on the overall knowledge, leadership, and practice skills of the advanced practice nurse (Hathaway et al., 2006). The violence screening tool is an intervention that was designed, implemented, and evaluated using principles from nursing science and leadership. During the implementation process, I led complex discussions and used conceptual skills to link a solution to practice problems that affect care delivery. Additionally, I developed many partnerships with other professions throughout the course of this project and I have already collaborated with them to address the continuing problem of violence against staff, such as

discussing a screening that could be added into the violence screening report tool for improved safety awareness.

Plan for Dissemination

The results of the Safety Screening Questionnaire in regards to the violence screening tools will be presented to two of the organization's committees that I worked closely with to implement this project. These presentations will be completed in December of 2020. After further data is obtained related to how many violent events were reported after the violence screening tools were implemented, I would like to present this project to the Emergency Nurses Association (ENA). I am hopeful that staff from other ERs across the country can discuss and implement similar interventions to solve the problem of violence against healthcare staff.

Attainment of Personal and Professional Goals

The DNP degree has been a professional goal of mine since I decided years ago that I wanted to be a nurse. To me, this degree signifies a commitment to the nursing profession with an advanced skillset in leadership, evidence-based practice, and care delivery. The challenges that I have overcome with the implementation of this project have demonstrated that I am capable of navigating the complex healthcare system in order to improve the way care is given while focusing on improving health outcomes for my patients. I look forward to serving many more patients in the future with these qualities as my foundation while guiding others in improving the way we provide care.

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Appendix A

Safety Screening Tool Questionnaire

Below is a list of six questions to assess your current perception of safety in our department, specifically related to the interactions with patients/visitors. Please circle the number that correlates to one of the answers below:

1= strongly disagree 2=disagree 3= neutral 4= agree 5= strongly agree

1. I feel safe when interacting with patients at work.

   1 2 3 4 5

2. Mercy Health St. Charles Hospital makes my safety a top priority.

   1 2 3 4 5

3. I feel safe being the first point of contact with a new patient/visitor.

   1 2 3 4 5

4. I feel that the current reporting system (SafeCare) for violence against healthcare workers is taken seriously.

   1 2 3 4 5

5. I feel that ER staff appropriately implements a plan for patients who have the potential for violence and/or display violence against staff.

   1 2 3 4 5

6. I feel that I can quickly use the electronic medical record EPIC to identify a potential for violence on any given patient, whether they are my patient or not.

   1 2 3 4 5

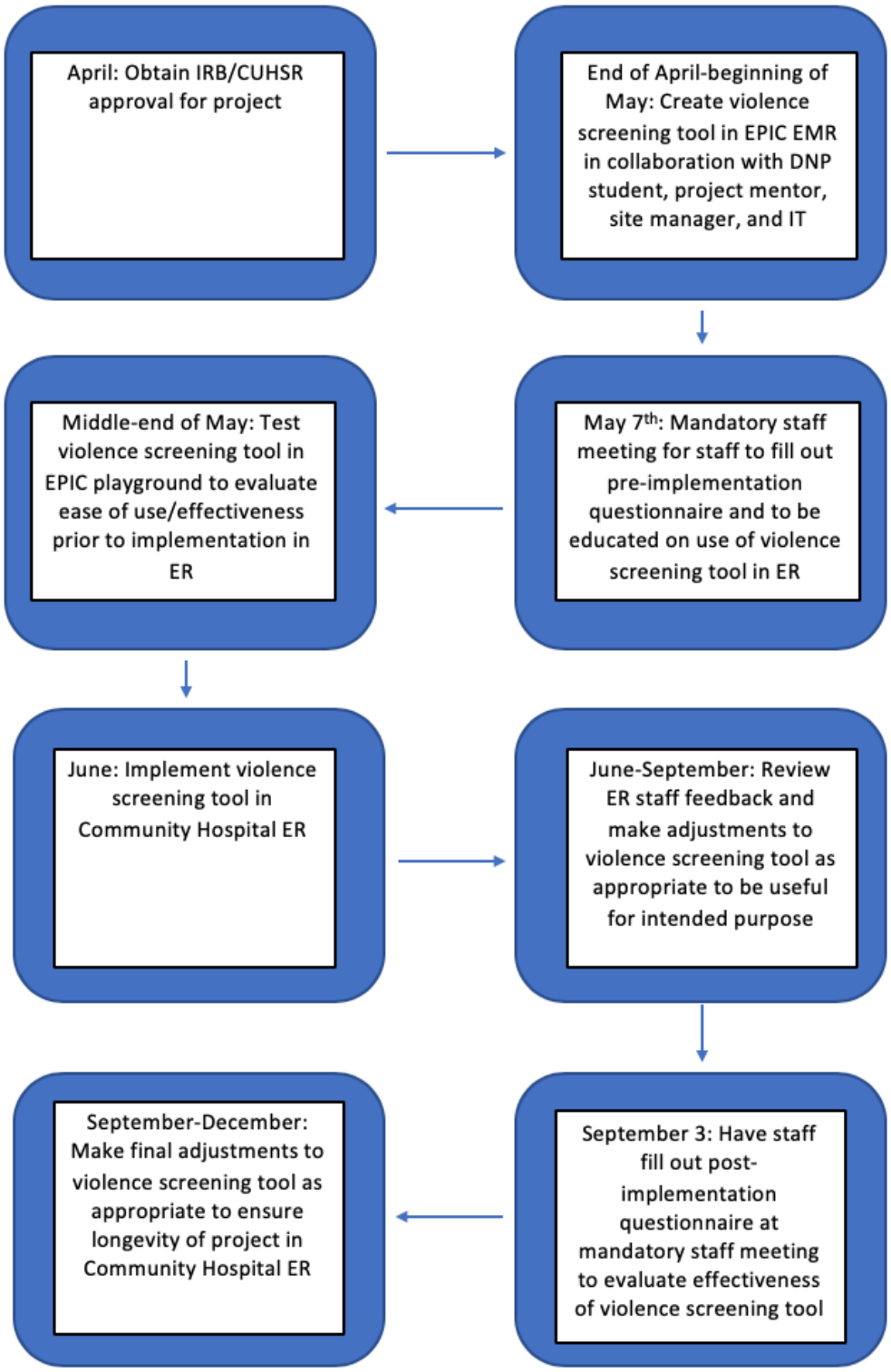
Appendix B

I, Janet Spare, give the Doctor of Nursing Practice student, Rachel Parker, permission to implement the Violence Screening Tool, as well as survey the staff for effectiveness, in the Emergency Department at Mercy Health St. Charles Hospital.

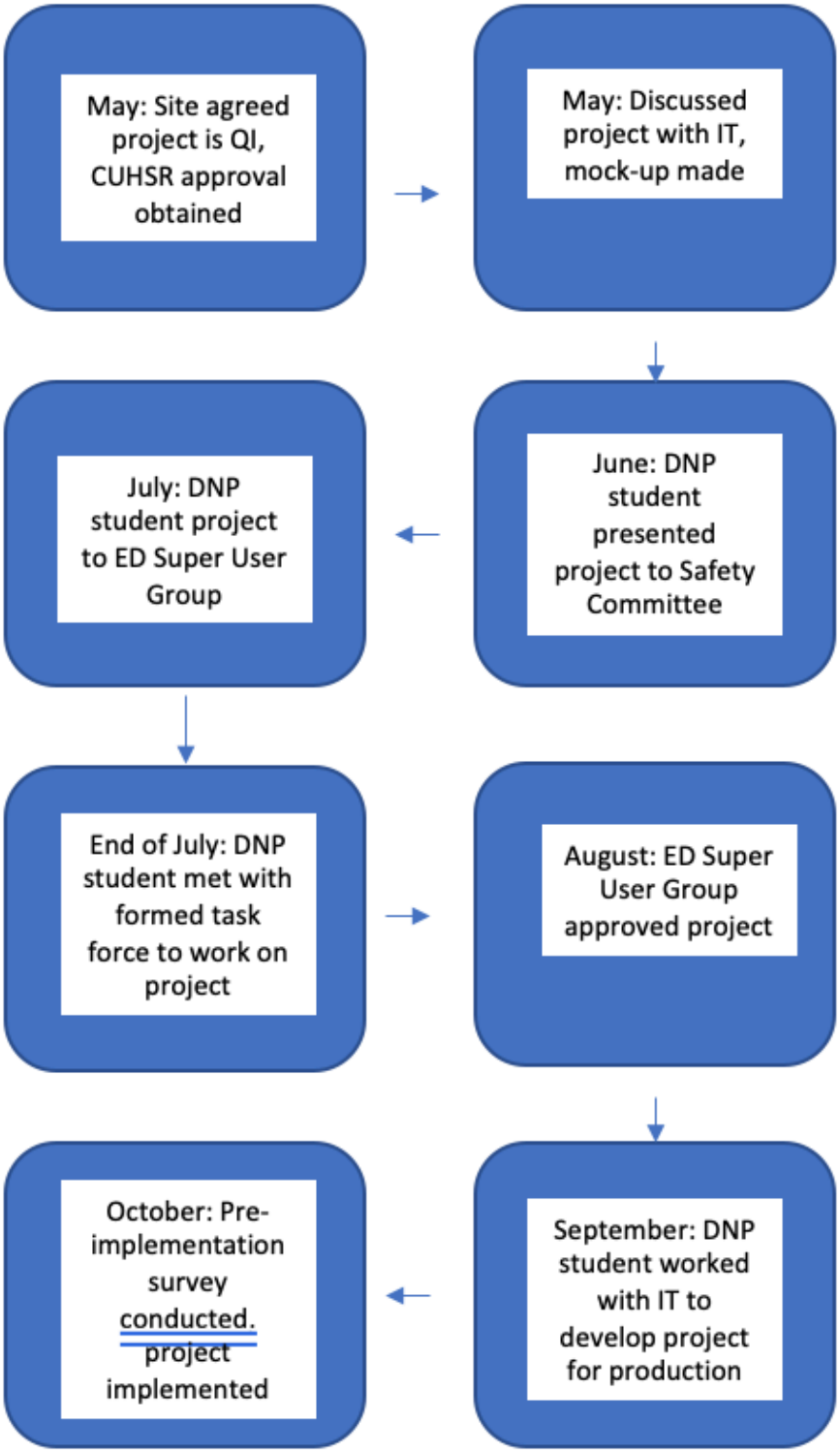
Janet Spare RN 4-16-20

Signature *Date*

Appendix C


April: Obtain IRB/CUHSR approval for project
End of April-beginning of May: Create violence screening tool in EPIC EMR in collaboration with DNP student, project mentor, site manager, and IT
May 7th: Mandatory staff meeting for staff to fill out pre-implementation questionnaire and to be educated on use of violence screening tool in ER
Middle-end of May: Test violence screening tool in EPIC playground to evaluate ease of use/effectiveness prior to implementation in ER
June: Implement violence screening tool in Community Hospital ER
June-September: Review ER staff feedback and make adjustments to violence screening tool as appropriate to be useful for intended purpose
September 3: Have staff fill out post-implementation questionnaire at mandatory staff meeting to evaluate effectiveness of violence screening tool
September-December: Make final adjustments to violence screening tool as appropriate to ensure longevity of project in Community Hospital ER

Appendix D


May: Site agreed project is QI, CUHSR approval obtained
May: Discussed project with IT, mock-up made
June: DNP student presented project to Safety Committee
July: DNP student project to ED Super User Group
End of July: DNP student met with formed task force to work on project
August: ED Super User Group approved project
September: DNP student worked with IT to develop project for production
October: Pre-implementation survey conducted. project implemented

Appendix E

MERCYHEALTH

June 25th, 2020

To: Rachel Parker, RN

From: The Mercy Health – St. Charles Safety Committee

Dear Rachel,

I write on behalf of the Mercy Health – St. Charles Safety Committee in support of the *Implementation and Evaluation of a Violence Screening Tool* project to reduce the number of assaults and or possible assaults on the hospitals staff. We strongly support this study, and the focus on reducing violent disparities among Emergency Room staff by increasing delivery of evidence-based interventions that you have provided.

The committee looks forward to monitoring the results of the project you presented. Your education and innovative idea will allow the Safety Committee to pursue a new approach towards decreasing violent situations in the hospital setting. At this time, I would like to welcome you to attend the monthly Safety Committee meeting and provide updates regarding the use of your study as you feel necessary.

Thank you for your efforts in this project, and willingness to present this Violence Screening Tool to the members of the committee.

Ryan Alek

Environmental Safety Engineer

Chairperson of Mercy Health – St. Charles Safety Committee

A Catholic health care ministry serving Kentucky and Ohio

Appendix F

May 7th, 2020

To Whom It May Concern:

I have read and reviewed Rachel Parker's project proposal, Implementation and Evaluation of a Violence Screening Tool in a Community Hospital Emergency Room, and believe this meets a quality improvement project, therefore not requiring IRB approval.

Sincerely,

Amanda J Caldwell RN

Amanda Caldwell, RN, BSN, MBA, NE-BC

Appendix G

BRADLEY University

DATE: 26 MAY 2020

TO: Rachel Parker, Deborah Erickson
FROM: Bradley University Committee on the Use of Human Subjects in Research

STUDY TITLE: Implementation and evaluation of a violence screening tool and a community Hospital emergency room
CUHSR #: 20-033-Q
SUBMISSION TYPE: Initial Review

ACTION: Approved
APPROVAL DATE: 26 MAY 2020
REVIEW TYPE: Quality Assurance

Thank you for the opportunity to review the above referenced proposal. The Bradley University Committee on the Use of Human Subject in Research has determined the proposal to be NOT HUMAN SUBJECTS RESEACH thus exempt from IRB review according to federal regulations.

The study has been found to be not human subject research pursuant to 45 CFR 46.102(i), not meeting the federal definition of research (not contributing to generalizable knowledge). Please note that it is unlawful to refer to your study as research. A waiver of documentation of consent is granted.

Your study does meet general ethical requirements for human subject studies as follows:

1. Ethics training of project personal is documented.
2. The project involves no more than minimal risk and does not involve vulnerable population.
3. There is a consent process that:
    - Discloses the procedures
    - Discloses that participation is voluntary
    - Allows participants to withdraw
    - Discloses the name and contact information of the investigator
    - Provides a statement of agreement
4. Adequate provisions are made for the maintenance of privacy and protection of data.

Please submit a final status report when the study is completed. A form can be found on our website at https://www.bradley.edu/academic/cio/osp/studies/cuhsr/forms/. Please retain study records for three years from the conclusion of your study. Be aware that some professional standards may require the retention of records for longer than three years. If this study is regulated by the HIPAA privacy rule, retain the research records for at least 6 years.

Be aware that any future changes to the protocol must first be approved by the Committee on the Use of Human Subjects in Research (CUHSR) prior to implementation and that substantial changes may result in the need for further review. These changes include the addition of study personnel. Please submit a Request for Minor Modification of a Current Protocol form found at the CUHSR website at https://www.bradley.edu/academic/cio/osp/studies/cuhsr/forms/ should a need for a change arise. A list of the types of modifications can be found on this form.

While no untoward effects are anticipated, should they arise, please report any untoward effects to CUHSR immediately.

This email will serve as your written notice that the study is approved unless a more formal letter is needed. You can request a formal letter from the CUHSR secretary in the Office of Sponsored Programs.

Committee on the Use of Human Subjects in Research – 100 Kauffman
1501 W Bradley Ave.
Peoria, IL 61625

Appendix H

DATE: 9 OCT 2020

TO: Rachel Parker, Deborah Erikson

FROM: Bradley University Committee on the Use of Human Subjects in Research

STUDY TITLE: Implementation and evaluation of a violence screening tool in a community hospital emergency room

CUHSR #: 20-033-Q
INITIAL APPROVAL: 26 MAY 2020
SUBMISSION TYPE: Request for Minor Modification

ACTION: Approved Minor Modification
APPROVAL DATE: 9 OCT 2020
REVIEW TYPE: Expedited Modification

The modifications to your study have been approved. These modifications include;

- Survey Monkey will be used to collect the survey data and one question was added to the survey. The new survey is on file.

The expedited approval of this modification is pursuant to 45CFR46.110(b)(i) in that it does not alter the risk to subjects per the initial approval.

Be aware that future changes to the protocols must first be approved by the Committee on the Use of Human Subjects in Research (CUHSR) prior to implementation and that substantial changes may result in the need for further review.

While no untoward effects are anticipated, should they arise, please report any untoward effects to CUHSR immediately.

This change to the study will be noted on the next CUHSR meeting agenda. This email will serve as your written notice that the change to the study was approved prior to implementation. Thank you for alerting CUHSR of the proposed change.

--
Andrew J Strubhar, PhD, PT
Professor
Associate Department Chair
DPT Graduate Program Coordinator
Chair Committee on the Use of Human Subjects in Research
Bradley University
Department of Physical Therapy and Health Science

Appendix I

Violence Against Staff Documentation in the ED

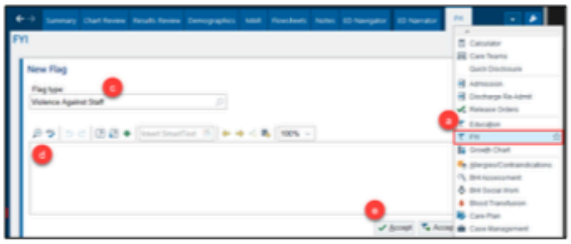
Summary

To support a new ED initiative for Violence Against Staff, a column is created in the ED Track Board to show the Violence Against Staff FYI. A Track Board report is also created to show related information.

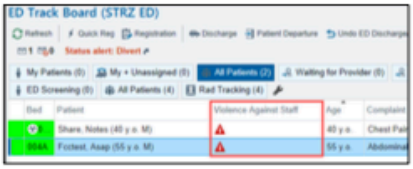
How Do I Benefit?

ED Providers, Nurses, and other clinicians will be able to identify violent patients easily from the ED Track Board.

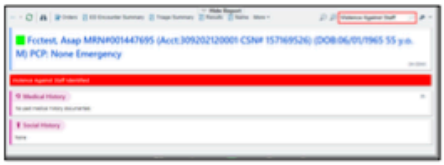
1. To document a FYI for Violence Against Staff:
    a. Select **FYI** from the More Activities Menu from within the patient's chart.
    b. Click **New Flag.**
    c. Select **Violence Against Staff** in Flag type.
    d. Enter any specific information in the text box.
    e. Click **Accept.**



2. Add the **Violence Against Staff** column to the ED Track Board with the wrench icon. An icon will appear if the patient has a Violence Against Staff FYI documented.



3. You can search or add the **Violence Against Staff** report.
    a. This will include a Banner for the FYI, Medical HX, Social HX, Last Broset, and Hx of Violent Restraints Flowsheet documentation.



Tip Sheet

Instance
Both CarePATH and ConnectCare

Title
Violence Against Staff Documentation in the ED

Release Date
Tuesday, October 20, 2020

Application Owner
ASAP

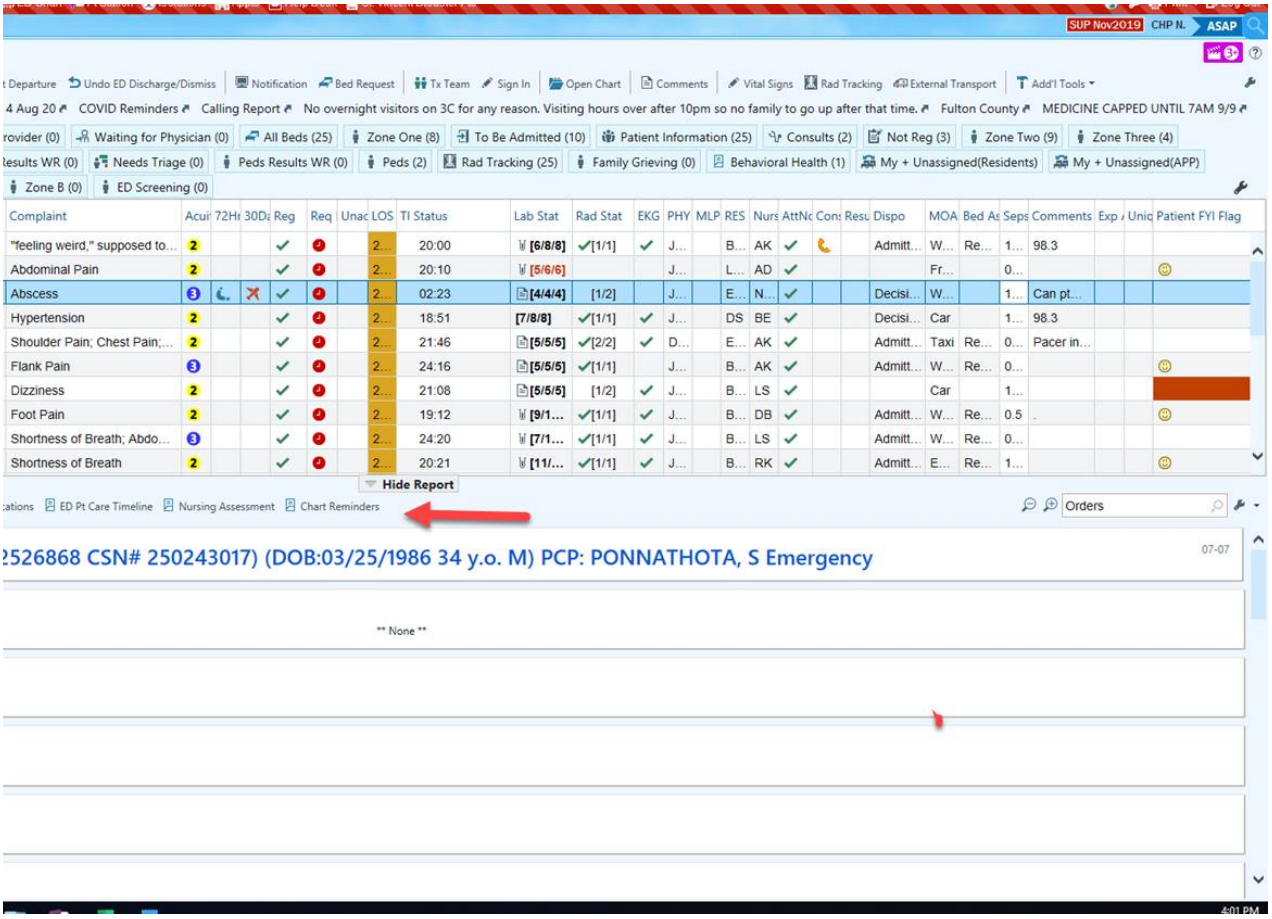
Affected Activity
ED Track Board; FYI; Reports

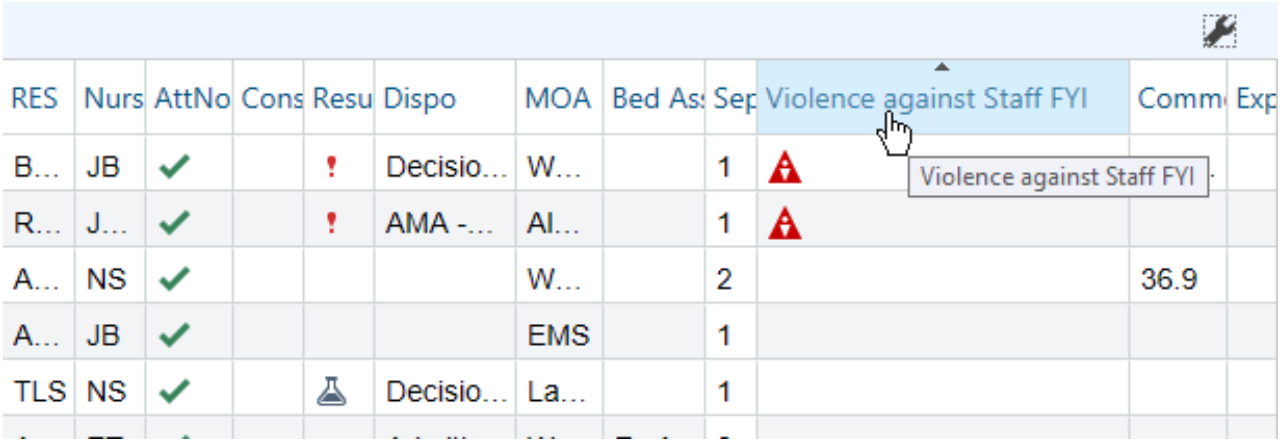
User Type
Advanced Care Practitioner; Nursing ; Physicians; Technicians

Department / Specialty
Emergency

Market
BSHSI Enterprise; Mercy Health Enterprise; Charity Enterprise; COV Enterprise; CRH Enterprise; Summa; Wyandot

Appendix J


Hide Report
Orders
** None **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