2017

The Critical Role of the Psychiatric Emergency Response Team in the Adoption of a Violence Risk Assessment Tool.

Angela Mackay
Walden University

Walden University

College of Health Sciences

This is to certify that the doctoral study by

Angela Mackay

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Oscar Lee, Committee Chairperson, Nursing Faculty
Dr. Linda Matheson, Committee Member, Nursing Faculty
Dr. Jonas Nguh, University Reviewer, Nursing Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2017

Abstract

The Critical Role of the Psychiatric Emergency Response Team in the Adoption of a Violence Risk Assessment Tool.

by

Angela Mackay

MSN, Walden University, 2013

BSN, Metropolitan State University, 2010

PHN, Metropolitan State University, 2010

RN, Century Technical College, 2006

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2017

Abstract

Workplace violence is a persistent problem in health care, and incidence rates have increased over the years. Traditional reporting systems, relying mostly on paper formats, are inadequate for developing effective predictive models for intervention and reducing acts of violence by patients to staff. The purpose of the development and deployment of the psychiatric emergency response team (PERT) was to provide effective intervention within the MIAHTAPS (Altered Mental status, Irritability, Agitation, History of Violence, Threatening, Attacking Objects, Pacing, and Staring) behavior prediction tool to reduce the severity and rates of violence in a hospital setting. Lewin's change theory was used to implement the necessary cultural change for effective deployment of PERT and MIAHTAPS. MIAHTAPS, with PERT as an integral component, was used by the primary nurse on admission and during every care shift to assess patients' potential for violence. Pre- and post- intervention assessments were completed to determine the effectiveness of the intervention. Quantitative and open-ended question responses from 200 nurse participants, who completed the 2 online surveys, were analyzed using descriptive and frequency distributions. Findings from the project showed that nurses could identify patient potential for violence and recognize how to diffuse situations effectively 34% of the time, compared to 14% before PERT. A post-implementation survey showed that 75% of the nurses found the MIAHTAPS and PERT system useful and easy to use. Having an easy-to-use tool that helps to identify potential for violence will help hospital and other workplace staff to develop and implement preventive interventions and as a result promote positive social change.

The Critical Role of the Psychiatric Emergency Response Team in the Adoption of a Violence Risk Assessment Tool.

by

Angela Mackay

MSN, Walden University, 2013

BSN, Metropolitan State University, 2010

PHN, Metropolitan State University, 2010

RN, Century Technical College, 2006

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2017

Dedication

This evidence-based project was devoted to my siblings (Bridget, Mary, Michala, and Michael), my four daughters (Corrina, Amarinda, Rayla, and Cynthia), who, with their great support, enabled me to spend endless hours in achieving the end results of a successful implementation and evaluation. They effortlessly kept me close to the child-heart, and energized mood, through their personal thought, interest, individual characters, and prayers. Your understanding and acceptance of many missed school activities and doctor visits, for example, have been the motivation for me to do my best. Most importantly, my education and drive would not have been successful without the love and support of my Minnesota parents and sponsors, Mr. and Mrs. Desmond Lewis, Emmanuel King, and Pastor and Mrs. Maurice Grey. You were the individuals who listened to me whenever I needed to vent my frustration when things seemed impossible over the past few years. I have no words to express my gratitude. Finally, to all my friends and or acquaintances, remember the sky is our limit but also as noted by my oldest daughter, Corrina "Americans made footsteps on the moon."

Acknowledgments

I have taken great strides in completing this project. However, it would not have been possible without the great support and guidance of several individuals including but not limited to my mentor, my children (Corrina, Amarinda, Rayla, and Cynthia), and my siblings (Bridget, Mary, Michala, and Michael). I would like to extend my sincere thanks and appreciation to all of them.

I am incredibly grateful and indebted to Regions Hospital

- Executive Leaders Chris Boese,
- Director of Nursing Dr. Wendy Waddell,
- Nurse Manager Dr. Denise Herrmann,
- Members of the Psych consult team Cris Nelson, Dr. Christian Stanson, and Dr. Lisa Capell.
- The staff of the simulation center, non-mental health and mental health units for their guidance and constant supervision as well as for providing necessary information regarding my DNP project, and for their support in completing the project in such a timely manner.

TABLE OF CONTENTS

List of tables

List of figures

Section 1: Overview of the Evidence-Based Practice Project

In the postmodern era, workplace violence continues to be viewed as part of the job for many healthcare workers. A report by the Center for Disease Prevention and Control (CDC) indicates that a workplace violence prevention program (WVPP) should include a system for documenting incidents, procedures to be taken in the event of incidents, and open communications between employers and workers (CDC, 2014a). The Occupation Safety and Health Administration (OSHA, 2015) reports that there were over eleven thousand patients to staff assaults in the health care system alone in 2010. This report indicates that there was a 13% increase of patient to staff assaults reported in 2009. The OSHA report noted that 19% of these incidents happened in nursing or residential care facilities (OSHA, 2015). Within Regions Hospital, which is a part of a larger enterprise, there were over eighty reported incidents of workplace violence in 2014, which resulted in staff needing more than three days off work. Based on this data and concern, executive leaders agreed to be a part of several other organizations that completed a gap analysis launched by the Minnesota Department of Health (MDH), to address gaps within the facility relating to workplace violence from patient to staff.

This quality improvement project was part of a larger project being developed and implemented hospital wide. The Workplace Violence (WPV) committee members were tasked to develop a violence risk assessment tool, develop a communication strategy, improving the reporting system, and plan the education process for all six thousand employees. The role of the psychiatric emergency response team (PERT) is to assist with agitated patients, defusing and preventing patient to staff assaults which were the focus of this Doctoral candidate quality improvement project.

In the literature search that this DNP candidate reviewed, it was evident that having assessment tools and methods that help predict or prevent violent or aggressive behaviors will lead to fewer injuries, a safer work environment, better care for patients, and lower cost of healthcare (CDC, 2014b). Timely deployment of strategies to de-escalate or defuse potentially violent situations requires development, education, and training (Crisis Prevention Institute, 2014). According to Roche et al. (2010), adequate care cannot be delivered successfully in a working environment that staff considers unsafe or poorly resourced. Roche et al. (2010) suggest that perceptions of poor safety in the workplace are detrimental to the healthcare providers within the organization. The authors from the literature review that was completed by the WPV committee members found that healthcare providers need to understand the complexity of workplace violence, patient care outcomes, and the work environment. A survey by the American Nurses Association (ANA) concluded that a significant number of nurses do not feel safe in the inpatient environment where there are persistent occurrences of violence from the patients they are providing care to daily (ASIS Healthcare Security Council, 2010).

This Doctor of Nursing Practice (DNP) candidate was the sole developer of the PERT team, which was supported and approved by the mental health director and executive leaders of Regions Hospital a year and a half before the development and implementation of the violence risk assessment tool MIAHTAPS. The violence risk assessment tool was designed by the workplace violence committee of Regions Hospital, after reviewing several assessment tools that had been researched by committee members, to help in reducing the number of assaults in the establishment. Regions Hospital is presently conducting a research on the validity and reliability of the violence risk

assessment tool, MIAHTAPS. The violence risk assessment tool is an electronic, predictive, observational tool that aids direct care nurses in identifying patients with the potential of being violent on the units and identify possible interventions such as the PERT, thereby preventing or mitigating patient staff assaults. In using the MIAHTAPS tool, direct care staff can assess as to whether there is a need to call or page for the deployment of the PERT team, depending on the total score of the assessment that was completed by the direct care or primary nurse.

When patient scores, a three or more out of a total possible score of 12 on the MIAHTAPS assessment tool which was completed by the direct care nurse, PERT members and or security officers are trained and equipped to assist with or defuse those crisis situations as they arise. As mentioned above, this DNP candidate was the primary designer of the PERT team, which is a critical component in the development of the violence risk assessment tool, MIAHTAPS. The violence risk assessment tool enables staff to use available interventions (See Table 1), to reduce the incidence of patient-to-staff assaults.

The PERT is a cross-functional team that includes mental health nurses, mental health associates, and security officers, used in combination with other interventions to defuse or de-escalate aggressive, violent patients on the non-mental health units. The experience and skills of this mental health team were critical for providing the appropriate interventions for the patient, and for providing training and support for non-mental health staff to deal with aggressive and violent patients. The MIAHTAPS violence risk assessment tool helps to reduce incidences of violence by incorporating known variables that can lead to violent behavior during the admissions process, and at least once every

care-shift (8 or twelve hours depending on your hired expected work shift). The adoption of the violence risk assessment tool has allowed for increase awareness and competency amongst staff that does not work with aggressive and or violent patients. High-stress levels, connected with operating in volatile environments where safety is likely to be a concern can have an impact on staff attempting to care for patients safely as well as themselves. The assigned primary nurse completes the violence risk assessment alongside other assessments of the patient and records the information in the electronic charting system. Once the patient scores a three or more and appears to be actively restless or displaying violent behaviors, PERT is activated. PERT respond to the call for the assistant, during an actual event, a threat of violence, or as a preventive resource to help the non-mental health staff deal with a potentially violent situation.

The primary stakeholders for MIAHTAPS and PERT are inpatients, nursing staff, residents, doctors, psychiatrist, security officers, patient care assistants, mental health associates, case managers, social workers, and therapist. All stakeholders on the site were involved in the development of mission statement, goals, and objectives and will continue to be part of the ongoing improvement and evaluation of the tool. The component of MIAHTAPS includes an assessment by direct care nurses, charting and scoring of patient behaviors, and several interventions which can help in reducing patients identified unsafe behaviors. Most of the interventions are standard or basic environmental procedures such as relaxation channels, dimming the lights, offering warm blankets, and occupational therapy consults (See Table 2). The list of interventions can be used when a patient's score is three and below. Patients scoring above four have the potential to become violent, and therefore preventative interventions are critical in reducing the incidences of

violence and improve staff safety. Using security alone frequently resulted in short-term de-escalation of violence, but could not clinically address underlying causes, and often patients would repeat their violent or aggressive behavior later. The decision was made for PERT to be one of the intervention options for MIAHTAPS as a more clinically appropriate tool than security alone. The purpose of this project was to evaluate the effectiveness of PERT as an intervention, after identifying that a patient has the potential of being violent. This process helps to prevent or mitigate patient to staff assaults, and lower a patient's violence risk score.

Problem Statement

According to Minnesota Department of Health (MDH), workplace violence is a health problem that affects many professional organizations but is particularly acute in care setting and medical services (MDH, 2014). The Minnesota Department of Health (MDH, 2014) and Center for Disease Prevention and Control (CDC, 2014b) reports show that workplace violence can affect employees, and assailants can be either male or female. Health care staff often incur physical and emotional injuries because of verbal or physical assaults. Resulting injuries vary from various levels of emotional distress to bodily harm that impairs the ability of the medical professional to work, and may even result in death.

Situations mentioned above can lead to increase in workers' compensation claims and loss of productivity through missed days at work. High staff turnovers mean that the hospital should invest more resources in training and fewer highly skilled nursing staff at any given time. Furthermore, violence reduces staff confidence and morale and could result in conflicts among staff working relationships (American Psychiatric Nurses

Association, 2008). Assaults include physical contact as well as verbal threats of physical violence (NIOSH, 2015).

Report by the American Nurses Association (2014) indicates that health care organizations also need to be improved predictive models to help anticipate and prevent assaults from patients to staff. The incidents of violence are underreported by many health care providers especially nurses resulting from inadequate reporting mechanisms due to the victims fear of isolation, embarrassment, and reprisal. As mentioned earlier, Regions Hospital received reports of the increasing number of patient to staff assaults as well as more critical injuries resulting to staff needing more than three days off work. Executive leaders agreed to make changes to the educational training staff being received on an annual basis not only for the bedside health providers but also to the rest of the staff within the organization, to meet organizational concerns as well as meeting with MDH expectations.

Purpose Statement

The goal of this evidence-based project was to evaluate the effectiveness of the PERT which is one of the interventions used in helping to prevent or mitigate patient to staff assaults and lower a patient's violence risk assessment score. This goal was achieved after a patient score from the violence risk assessment tool MIAHTAPS shows that they have a potential or was displaying aggressive behaviors that are deemed a danger to self or others. PERT was developed independently by this DNP candidate, as a resource for the inpatient non-mental health units to help prevent workplace violence from patient to staff. The PERT team was later incorporated into the MIAHTAPS tool as a critical

component of the non-pharmacological list and evaluation completed to prove the effectiveness of the PERT.

Project Goals and Objectives

The goal of this quality improvement project was to complete an evaluation showing the effectiveness of PERT as one of the interventions used as part of the adoption of the violence risk assessment tool MIAHAPS. Successful deployment of the team would result in a reduction of the number of patient assaults on staff on a year by year comparison. A decrease in the number of assaults means that the organization would have the lower number of workplace violence such as emotional distress, fear of the workplace, absenteeism, high staff turnover, physical injuries, long-term disability, and even death.

The methodology for achieving the goal of reducing the number of assaults on a year by year comparison followed the SMART guide.

- Specific: Implementation of the patient risk assessment tool and the use of PERT response to calls hospital-wide at Regions Hospital.
- Measurable: Goal is to increase staff awareness of behaviors relating to increasing patient agitation and reduce the number of assaults by 15% on year by year relative basis.
- Achievable: The goal of 15% is a stretch but achievable.
- Realistic: The project was accomplished on time with enough resources being allocated.
- Time-framed: Project time allocated was six months to a year.

The objectives of this project were:

- Determine nurses' adoption of MIAHTAPS and potential recommendations from staff related to its implementation
- To evaluate the use of PERT pre-and post MIAHTAPS implementation

Mission Statement

The mission of this project is to foster a safe and secure environment for staff, patients, and families with an emphasis on inpatient assessments and preventive interventions to enable reductions in the number of assaults by patients against staff at Regions Hospital.

Brief Description of Regions Hospital

Regions Hospital is a 458-bed level 1 trauma hospital with a 100-bed inpatient mental health unit, eleven mental health crisis beds in the emergency room, and 340 inpatient Medicine and Intensive Care units (www.regionshospital.com, 2014). These Medicine and Intensive Care units provide care for patients with medical needs who also may be exhibiting disruptive behaviors, have a mental health diagnosis, and or pose a violent threat to the establishment. Between November 2013 and December 2014, Regions Hospital had a total of 80 reported patient-staff assaults. Some prevention strategies that Regions Hospital has implemented over the years for minimizing the risk of workplace violence include securing the environment with security guards and cameras where appropriate, having safety and workplace violence policies in place, and developing a training session for employees such as a disruptive behavior class which this DNP candidate facilitated.

One of the goals of the hospital's leadership is to deploy a system and processes will enable maximum safety for staff and other patients. Such a system should aid in reducing patient-on-staff assaults, and increase the confidence of direct care staff that the work environment was safe. In 2014, Regions' executive leaders signed an agreement with the Minnesota Department of Health (MDH) to help analyze current work conditions and safety histories, and identify safety gaps in healthcare. To meet the expected requirements that were identified during this analysis, the leaders formed a workplace violence prevention (WPV) committee which included professionals from various departments within the hospital, and a representative from the local police department. The workplace violence prevention committee continues to meet once a month to discuss work done to date about the gap in the analysis that was accomplished by the workplace violence team and executive leaders. Three sub-groups were identified; *Communication, Education,* and *Reporting* Committees. One of the tasks of the WPV committee was to classify or develop a patient risk assessment tool that could be used throughout the hospital and in other similar settings outside the hospital.

Significance and Relevance to Practice

Creating and maintaining a culture of safety is paramount in preventing violence or aggression throughout the hospital, and especially in inpatient settings. McNamara (2010) referenced that workplace violence can be avoided when leaders address physical and psychological hazards of workplace violence which then provides culture aspects of safety. With the constant changes in the healthcare system, it is imperative that executive leaders and organizations implement and maintain evidence-based practice programs which will aid in enhancing the clinical practice (Burns, 2014).

Direct care nurses are expected to complete the MIAHTAPS assessment on admission, and at least once during each care shift. Patient behavior was scored based on the physical behaviors that are being observed by the care staff. For patients that score a medium-high (i.e. three or above), a green magnet was placed on the outer door frame of the patients' room, to alert all direct care and auxiliary staff about the potential for violent acts. The above process was not so much for the direct care staff that conducted the assessment or received the report at the beginning if their shift, but also for the ancillary staff that enters patients' room without knowing the symptoms or behaviors of the patient which includes but not limited to housekeeping, food and nutrition, and physical therapist. This magnet ensures that staff put on their self-protective mindset and or manner such as keeping their distance, being more mindful of their reasons and body language and being prepared to leave the room if the behavior is to escalate.

For various levels of behavior and clinical symptoms, pharmacological and nonpharmacological interventions have been determined by departments to help provide timely and appropriate responses to patient distress and needs. The violence risk score includes line item scores that help the intervention team to include the most significant factors in their situation assessment and intervention response. As mentioned earlier, PERT was included in the list of non-pharmacological interventions and staff are encouraged to call for the assistant as early as possible to prevent staff-patient assaults or situations getting out of control on the inpatient medicine units.

Significance to Practice and Regions Hospital

The National Institute for Occupational Safety and Health (2009) states that ongoing high-stress levels of staff working in health care leads to missed time from work, poor work performances, and physical and mental breakdown. Additionally, a 2014 report by the CDC on occupational violence states that between 1992 and 2012, there was an estimated number of 14,770 reported workplace *homicide* victims. The Minnesota Department of Health (MDH, 2015) also states that workplace violence is a leading cause of death at worksites.

The development and implementation of the patient risk assessment tool will enable leaders and workplace violence committee members to evaluate and see results of reduction in *assaults* within the organization. With this reduction, Regions Hospital will, in turn, improve health and wellness of their health care providers, significant improvement in the quality of care and safety outcomes especially the Registered Nurses and Nursing Assistant that provide direct care to our patients.

The Doctorate of Nursing Practice (DNP) project for which is paper is grounded, took place in a level 1 trauma hospital, which unfortunately see a verse number of violent episodes from patients. Violence from patient to staff continues to be very concerning to many including but not limited to staff's safety and safety of other patients needing care and attention. The hospital did not have a formal process in place to assess patients that have the potential for violence. With this process in place, nurses would be able to use the available and necessary interventions including PERT to minimize escalating behaviors and in turn reduce the staff assaults.

Definition of Terms

Altered mental status: a mental state that differs from the expected state of awareness. Patients may or may not be aware of the situation. The patient is often not in control of their behaviors when in this state.

Assault: these include physical actions such as hitting, sexual assaults, verbal threats, violence with or without weapons that could lead to death. (NIOSH, 2015).

Irritability: mental or physical state characterized by restlessness without apparent external stimuli. Cognition is at its lowest point when an individual is irritable.

Agitation: a physical state characterized by sometimes violent motion, inability to stay calm, irregular breathing, uncooperative, and resistant to restraints. Individuals displaying signs and symptoms of increase agitation tend to have lower cognition level.

Pacing: repetitive walking back and forth often because of increase anxiety, irritability, and agitation. The patient is often upset and or expressing anger.

Starring: prolong glaring, not breaking eye contact

History of violence: history of violence

Threats: physical or verbal actions with clear intent to intimidate or cause harm

Homicide- The killing of one person by another (Copeland, 2007). There's often a lack of premeditation in the inpatient setting.

Stakeholders: These include individuals and groups that have direct and indirect involvement in the project and those that will be affected by the outcome of the project (Hodges and Videto, 2011).

Nonverbal aggression: physical actions of the assailant such as posturing, looks, noises, gestures, clenched fists, and hitting other objects. Such actions are intimidating and suggest an intent to harm.

Needs Assessment

The first step in developing this project was conducting a needs assessment. According to Hodges & Videto (2011), "before conducting any needs assessment or evaluation, an extensive determination of the available resources should be made. Knowing what resources are available ahead of time aided in making the systematic decision when mapping out the needs assessment and evaluation plan" (p.66). This systematic approach seeks information from clientele or secondary sources as to a gap or need such as a societal, personal, economic, or environmental issue, for instance, which needed to be addressed and required some planned actions to achieve a positive impact on improving or changing the identified situation. To develop the plan of services, DNP candidate needed to complete an assessment of the gaps relating to workplace violence within Regions Hospital which was well-defined and quantified. Hodges and Videto (2011) mentioned that the needs assessment allowed program planners to "paint a picture" of the target population, its environments, and the systems affecting the individual's health and quality of life to have an appropriate action plan.

Based on previous practice, direct care staff did not have an assessment tool to use to assess and identify patients' that have the potential for violence; it was inevitable that direct care staff was not recognizing aggressive behaviors. As the only mental health resource nurse in this facility, also working on my DNP project and assisting with crisis situations, it was apparent that staff view and interpret patients' behaviors differently.

There are times when staff response to situations was grounded on intuitions rather than training and expectations (Sansone & Sansone, 2014). During 2014 and 2015, it was reported that there was an increasing number of patient to staff assaults all of which were not reported, due to the well-known underreporting of violence reported in the literature search and witnessed in the practice setting.

Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis

SWOT analysis is an analysis of the organization's "Strengths, Weaknesses, Opportunities, and Threats," was completed by creating a picture of the internal and external layout of Regions Hospital. A SWOT analysis is an evidence-based methodology to facilitate decision making related to a strategic plan, vision, and objective(s), (Kelly, 2011). The SWOT analysis is a management tool that was used to collect information on the issue that influenced the organization's operations and growth. In healthcare, the SWOT analysis can be used by an organization to set benchmarks and to examine the scorecard on the achievement of quality indicators. As mentioned by Pearce (2007), and White & Dudley (2012), strengths, identify what steps were done well, weaknesses highlight deficiencies, opportunities indicate the potential for success, and threats shows barriers to prevent success. The following SWOT analysis was based on Regions Hospital as the project champion and Mental Health Department as the project owners (see Table 1 below). The interpretation of this study focused on the change process that the nursing care team had to go through to achieve a safer work environment. Without the exact steps being taught, people have tendencies to revert to old ways. The freezing stage

of Lewin's change theory enables staff to support the desired change to ensure safe practice continues by all direct care staff.

Table 1

SWOT analysis summary relating to the facility, workplace violence committee, PERT, and the adoption of MIAHTAPS

Strengths	➢ Robust inter-disciplinary committee ➢ Executive leaders support ➢ Active Information Technology group to deliver a documentation flow sheet and the electronic system ➢ Financing approved by executive leaders ➢ Level 1 Trauma Hospital ➢ Diverse population ➢ Inpatient staff/stakeholders buy-in ➢ MIAHTAPS tool is well researched and evidence based ➢ Role of the reporting, education, and communications committee will strengthen the workplace violence plans for changes ➢ 100% no staff or patient injury when PERT members are present. ➢ Evidence-based tool ➢ Skills of the PERT team and security officers ➢ Training via the online education system (My Learning) ➢ Rounding on staff on various units to get feedback on the implementation of the tool ➢ Bathroom brief distributed throughout the hospital ➢ Evaluate the success of the PERT team ➢ Evaluate nurses' adoption of the MIAHTAPS tool

Weaknesses	➢ Poor buy- in from some departments ➢ Rigid shift schedule makes it challenging for representative staff to attend meeting ➢ Structural barriers often delay decision making across units ➢ Change in practice for direct care staff ➢ Time for staff to be educated ➢ Variation in application of the process being introduced to staff
Opportunities	➢ Recruitment and Retention of staff contributes to culture change for staff ➢ Collaborate effectively with St Paul Police ➢ Information can be retrieved by other HealthPartners organizations and Minnesota Department of Health. ➢ Prevent or mitigate patient staff assaults ➢ Involve the PERT team in crisis situations ➢ Identify patients that have potential for violence ➢ Improvement in nursing practice through implementation of the evidence-based risk assessment tool
Threats	➢ Changes in the state may take precedence over the project and reduce the sense of urgency to implement the violence assessment tool. ➢ If education and communication committee is not well defined and planned, this can hinder stakeholder's adaptation to change ➢ Staff perception of increased workload ➢ EPIC (electronic charting system) documentation

One of the structural weaknesses of the organization is the inability sometimes to implement the changes across department due to perceived differences in patient needs,

acuity, and timing of new process or procedure. The PERT team and violent risk assessment tool were implemented hospital-wide. Therefore, some advanced education on the benefits of the tool as well as the resource (PERT team) was required for satisfactory evaluation.

Scope and Limitations

This quality improvement project looked at the role that PERT played as an intervention as well as the adoption of the MIAHTAPS violence risk assessment tool in ensuring patient and staff assaults are being reduced. The results thus far showed a positive outcome with a 100% no staff patient injuries to date when PERT members are present. Based on the size of the establishment, and the merge of other facilities under the same umbrella company, there was a delay in the implementation of the MIAHTAPS tool. We needed to acquire feedback from these other facilities before the go-live as this electronic charting could be seen by all staff with the umbrella organization. There was obviously an urgent need for this assessment tool to be implemented due to our rising numbers of staff-patient assaults in the establishment by management, but the overall approval process had to be delayed for nearly a year. Limitations on the side of the PERT team came from certain departments such as the Rehab unit. Most brain injured patient behavior tend to escalate when there is a new face or increase number of staff in their personal space. PERT team needed further training relating to our approach to a brain injured patient.

Implications for Social Change in Practice

Successful implementation of the PERT team and the violent risk assessment tool resulted in staff feeling safer at work, fewer sick calls, improved patient care, improve

staff morale, and reduce costs. The Occupational Safety and Health Administration (OSHA) under the U.S. Department of Defense (2014) defines workplace violence as any physical assault, threatening behavior, or verbal abuse occurring in the work setting. A workplace may be any location either permanent or temporary where an employee performs any work-related duty (OSHA, 2004). "Workplace violence ranges from offensive or threatening language to homicide. National Institute for Occupational Safety and Health (NIOSH) defines workplace violence as violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty" (NIOSH, 2006). The World Health Organization (WHO) defines workplace violence as "incidents where the staff is abused, threatened or assaulted in the circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being or health (WHO, n.d.)."

Violence in the workplace affects all stakeholders. It exposes patients and staff at risk, affects the quality of patient care, has an impact on the reputation of the hospitals, and changes the relationship between staff and patients. It can have permanent damage to employees and patients and can cause a high staff turnover if not addressed appropriately. Stokowski (2010) referenced that there are several reasons why violence in health care is underestimated and underreported by approximately 70%. Stokowski (2010) went on further to state that "the social impact of workplace violence includes but not limited to reduced quality of life, poor job performance, flashbacks, and decrease staff morale" (p. 6).

Project Timeline and Resources

PERT

- Go live was in December 2014
- PERT data available December of 2014 to August of 2015 (pre-MIAHTAPS implementation)
- PERT data available post-MIAHTAPS (August 2015 to May 2016)
- Evaluate the effectiveness of the tool (Spring to Summer 2016)

MIAHTAPS

- Pilot stage was from February to March 2015
- Implementation or "go live" was August 2015
- Adoption of the MIAHTAPS staff survey was opened to direct care staff from January 2016-March 2016

For the project to be a success, it needed both human and financial resources. The project required dedicated time from the DNP candidate, the preceptor, licensed nurses, mental health associates for the training of the PERT members as well as the implementation of the violent risk assessment tool. Other resources included literature search, planning venues such as meeting rooms, computer access and usage, and printed materials for direct care staff. The cost for human resources was reduced tremendously because DNP candidate was also a member of the workplace violence committee and the lead nurse of the PERT team as a part of my daily expected daily job duties.

Summary of Section1

In this section, DNP candidate provided a detailed description of the role of the PERT team as well as the use of the patient risk assessment tool, MIAHTAPS to reduce patient staff assaults. The workplace violence committee comprised of inter-disciplinary staff (nurses, psychiatrist, pharmacist, social worker, executive leaders, nurse managers, and mental health associates) at Regions Hospital. Being able to combine the use of various interventions in the adoption of the violence risk assessment tool, direct care staff are better equipped to identify violent behaviors, thereby aiding in reducing aggressive or potentially violent patients' behaviors. The use of PERT continues to be a successful intervention in this process, as team members are trained specifically in verbal de-escalation and hands-on techniques to de-escalate crisis situations. The DNP candidate included the goal and objectives, problem statement, definitions, the role of the PERT team, and the evidence-based significance of the patient risk assessment tool. With support from executive leaders, a research project was started to determine the validity and reliability of the violence risk assessment tool MIAHTAPS. If successful, the research would be published as the newest evidence-based tool that can be used throughout all departments of a healthcare setting to assess patient that have the potential of being violent.

Section 2: Review of Scholarly Evidence

The purpose of section two is to provide a detailed literature search of workplace violence assessment tools that have been researched and are peer reviewed as evidence-based practice tools. Change in healthcare is unavoidable and inevitable. Inpatient care or direct care nurses play a large role in facilitating and expediting change for staff, patients, and the environment. In the vision to have a reduction in patient and staff assaults hospital-wide, an initial goal is to reduce violent and or aggressive behaviors on the inpatient units. At the same time, the organization must preserve staff and patient safety, which presents a hard effort, although it is not impossible. Within healthcare it was anticipated that staff enters the profession to provide and improve the lives of others in a caring manner, they very rarely expect the risk that is involved about their wellbeing. Violence has undesirably been looked at by healthcare staff as part of the job for some professionals especially nursing. It's also been evident that patient to staff assaults remain underreported.

Description of Search and Specific Literature

A literature search was conducted of the Cumulative Index to Nursing and Allied Health Literature (CINAHL), ProQuest, PsychINFO, and OVID, for research that was relevant to the quality improvement project. Key search words included *violence, workplace violence, agitation in healthcare, violence risk assessment tool culture change, response team, and aggressive behavior.* This review is a synthesis of literature on the workplace violence and related topics such as the impact of nursing care, violence intervention, crisis response teams, risk assessment and prevention, and cultural change. To stay current with quality improvement projects and evidence-based information, the

review of the literature was limited to studies done within the last 15 years, and to landmark studies. DNP candidate researched was on articles written in English only, and research studies that included an inpatient healthcare setting, as well as research studies evaluating risk assessment for potential violent patients.

In settings, such as Emergency Rooms, and Psychiatric units, it was reported that physical aggression was higher than verbal assaults which was experienced by medical, surgical nurses. Unfortunately, from articles reviewed, it was apparent that nurses who had the encounter with patients that were verbally or physically abused, most often experienced post-traumatic stresses. These assaults were done mainly during direct patient care times. Compared to other healthcare providers, nurses felt less safe in the inpatient settings as they were the most likely recipients of the assaults. Categories that are a part of this review section are workplace violence risk assessment tool, culture change, and higher crisis response. (D. Herrmann, personal communications, February 15th, 2016).

The National Institute for Occupational Safety and Health (NIOSH, 2015) defines workplace violence as "violent acts (including physical assaults, and verbal or nonverbal threats of assaults) directed toward persons at work or on duty" (p. 2). According to a 2014 report by the Center for Disease of Prevention and Control on occupational violence, that there was an estimated number of 14,770 reported workplace homicide victims between 1992 and 2012. The broken windows of behavior emphasize that broken people tend to act more violently as a way of demanding attention. McPhaul et al. (2013) addressed the broken windows theory and highlighted the importance of paying close attention to the underlying causes of workplace violence to help prevent recurrences.

The Occupation safety and health administration (OSHA, 2015) reports that there were over eleven thousand assaults in the healthcare system in 2010. This number represents a 13% increase over assaults that was reported in 2009. It was noted that 19% of these incidences that were reported happened in nursing or residential care facilities (OSHA, 2015). Sharp (2015) highlighted the severity and persistence of workplace violence noting that nursing and nursing assistants have an increase chance of dealing with the risk of violence due to their work role and direct contact with patients. Sharp also reported that between 2004 and 2011, workplace violence involving patients and nurses increased, and also noted that 90% of perpetrators of physical assaults and 67% of verbal attacks were patients.

Several other authors also found that workplace violence, especially in mental health care, has been rising over the past two decades in other western nations outside of the Unite States, and suggest staff education as a means of enabling reduction (Burn, 2014, Sansone & Sansone, 2014). The study by Sansone and Sansone found that other research efforts reported that, since 1995, acts of violence towards caregivers has been steady or has increased not only in psychiatric units and emergency rooms but also in non-mental health units. The data concluded that over the past 20 years or more, patients had displayed aggressive behaviors not only towards nurses but also towards trainees and physicians. In the Samsone and Samsone study, some researchers argue that the apparent rise in violent acts was not due to actual increases, but were a result of improved technology, reporting, and increased awareness of violence by patients as something that is not part of the job, but a behavior that should not be ignored.

The absence of reduction and the increase of violence, highlight the reality that despite efforts to address and reduce workplace violence, the efforts have not resulted in reductions in various industries. Due to the nature of their profession, nurses interact intimately with patients as well as with family members. Nurses often find themselves in situations such as patients or family members are confused, under the influence of alcohol or street drugs, disoriented due to a medical procedure, and frustrated with the situation of not being able to provide for their loved ones because of their present medical or mental health condition. Some other conditions include but not limited to angry, and or stressed out, and thus often have the potential of displaying aggressive behaviors towards their care provider. BjORkaul et al. (2013) suggest that preventative measures such as education for care providers on general safety in the workplace, which includes violence by patients or family towards staff. The author described the Bergen Model of safety education which was then implemented in a health care facility. The model was grounded upon three essential personal factors: *positive appreciation of patients*, *emotional regulation* (of staff), and *efficient organizational structure*. Staff training focused on iterative primary, secondary and tertiary preventions. The study compared results between trained staff and non-trained staff and found that the focus on team factors and iterative preventions resulted in improved staff skills in managing and preventing crisis situations.

Other models of intervention and prevention suggest that regular and structured interactions with patients will help to engender trust and improve the patient and caregiver relationship. Research by Lansen et al. (2009) over a 20-week period with inpatient mental health nurses leading the violence prevention community meeting

(VPCM) showed a decrease in the number of assaults. This reduction was effective throughout all care shifts. For one of the shifts, when twice-weekly VPCM treatment took place, violent incidents decreased 89% from pre-treatment to treatment and 57% from pre-treatment to post-treatment. The Lansen et al. (2009) research was a single-sample design. The findings did not include how the variables of the VPCM influenced the reduction of violence. Further research will be needed to determine the mechanism of change. Industries such as health care need effective predictive and preventive tools to help reduce the rates of workplace violence significantly.

From a research study that was completed by Clark, Brown, and Griffith (2010) the Broset Violence Checklist (BVC) was implemented. The BVC is a violence risk assessment tool that is used to assess and predict violent patients in inpatient. Findings from the study after three months showed a decrease in aggressive incidences from patient to staff and a reduction in the use of seclusion and restraints in an intensive care unit in Canada. There was the belief from bedside nurses that decision relating to the risk of violence and aggression depended on not only on intuition or experience of staff but also on being able to use an assessment tool which highlights the potential for violence. Most staff found the BVC easy to use during their work day. The authors discussed the fear nurses have in working with patients that display violent behavior on inpatient units and how violent behaviors of patients affect the quality of care that healthcare staff provides. In conclusion, this tool showed to be reliable and valid in predicting patients' violent behavior with the first 72 hours of admission as well as throughout their admission, and it takes less than a minute to complete.

Vaaler, Iversen, Morken, Flovig, Palmstierna, and Linker (2011) at St. Olavs University Hospital in their psychiatric emergency area and Almvik (2008), both tested the BVC tool extensively throughout its center in Norway. This pilot result showed that with the BVC checklist staff could observe and predict violence in the inpatient setting as well as in various other settings nationally and internationally. Broset violence checklist is made up of six variables which are used by care providers to assess a patient that could have the potential to display violence such as confusion, irritability, boisterousness, physically threatening, verbally threatening, and attacking objects. The patient was given a score once the direct care nurse had completed the assessment which would indicate a small, medium, or high risk, at which time preventative measures would be taken to manage the behavior before staff was assaulted by the patient. Other indications mentioned in these studies were: prospect design was used, validated measures, and general psychopathology

Another assessment tool that has proved to be valid and reliable is the starring, tone, and volume of voice, anxiety, mumbling, and pacing (STAMP). These behaviors were observed by bedside nurses which were indicative of potential aggressive behaviors. Luck, Jackson, and Usher (2007) conducted a study in an emergency room in a public hospital. This tool incorporates both interpersonal and psycho-social aspects of a patient that present in the emergency room such as alcohol intoxicated, altered mental status, and cognitive impairment. Conclusion notes that further studies are needed to establish the validity and reliability of the components of this tool. The generalizability across the board was also recommended.

A study was done in Australia, by Chapman, Styles, Perry, and Combs (2010) surveyed 113 nurses working in non-teaching hospitals. The purpose of the study was to take the violent assessment tool: STAMP and expand it to include four more components that might enhance the predictability of possible violence in a patient. The four elements are emotions, disease process, assertive or non-assertive behavior, and resources and organizational features were added to the previously stated study by Luck et al. (2007) which already had five components namely: starring, tone, anxiety, mumbling and pacing. This tool was later named STAMPEDAR which was the first tool to be used by nurses working in all areas of the hospital in predicting violent behavior. This article also indicated that the utilization of this tool enable nurses to be able to use the intervention that would enable the patient to de-escalate a violent behavior which in turn helped the nurses to gain a much greater control and thus experience more job satisfaction. There were several similarities found between this study and the study by Luck et al. (2007) which indicated that being able to predict a violent behavior is used throughout the hospital and not just in one area. It was also reported, that having a history of violence is a significant indicator of a patient that has the potential to be violent again. This article also noted that poor communication of patient and staff could be a trigger for violent behavior for example if a nurse uses authoritarian communication or show incompetence and lack of caring could trigger being possibly abused or assaulted by an agitated and or irritable patient.

Studies by researchers Kennedy, Bresler, Whitaker, and Masterson (2007) as well as Kim, Ideker, and Todicheeney Mannes (2012) concluded the usefulness of a behavioral risk assessment tool on non-mental health units or as known medical-surgical

units. Being able to predict the behavior of a patient enables the caregivers to use interventions to defuse or prevent as escalating patient from assaulting staff.

It was apparent from the studies reviewed that the perpetrators of workplace violence are mainly patients. The result of the research concluded that health care providers are exposed to a high risk of violence from individuals that walk through our doors most of the time unsure of their history or potential for violence. Unfortunately, research also shows that a significant amount of assaults were not reported because many healthcare providers believe that verbal attacks and physical aggression, both of which are classified as workplace violence, are part of the job (Clark, Brown, & Griffith, 2010). As a part of developing and implementing the violent risk assessment tool, it was apparent that culture change needs to be addressed.

Larsen, Peters, and Keast (2011) focus their attention on the use of a tool which will enable them to give real-time feedback to the patient which became part of the staff daily process and enabled the patient to be part of the decision-making of their care plan, resources that can be used as well as providing better and more quality improvement services for less. Weiss & Delia (2007) reiterated the need for culture change from a general inpatient psychiatric unit to a locked acute unit with patients from and with diverse cultures, mental health, and medical diagnosis. There was a verse need for appropriate education, critical medical required training for healthcare providers, policy and procedure changes, changes to the physical environment. This culture shift process was adapted by staff over a three and a half-year period. With the implementation of a violent assessment tool and interventions applied, it will be a culture change for many of the healthcare providers within my organization.

Cultural change is necessary within health care settings to align with evidence-based practice changes. Again, it indicates that there is a need for assessment tool and clinical interventions to defuse or de-escalate agitated or aggressive patients. Clinical intervention such as a crisis response team has proven valuable to defuse or de-escalate agitated or aggressive patients towards care providers in the inpatient settings.

The background of the Rapid Response Team (RRT) was to have a team approach in caring for decompensated patient while assisting the direct care nurse in decision making for the patient condition to improve. The RRT process and procedure was used as a model in setting up the PERT including the charting required by a team member. PERT teams per research studies have been set up by police departments in several different states in responding to older adults who lacked access to mental health services.

Loucks et al. (2010), noted that psychiatric nurses responded to the activation of the behavioral emergency response team (BERT) on non-mental health units in an inpatient setting. The BERT nurse would assess the situation as well as make the decision as to what type of intervention could be used for that crisis. The BERT nurse would ensure that a debriefing was done by available staff once the situation is calm. Surveys that was sent out to staff indicated that non-psychiatric nurses felt the needs of a safe environment was being met and that eventually, the non-mental health nurses would use the resources less since they were more knowledgeable and equipped to address the situations from the experienced mental health nurses.

A health care system in New Jersey completed similar study between three campuses (Jones, Manno, & Vogt, 2012). Code Gray was used for situations that patient

was in imminent danger to themselves or others. This team was like that of a rapid response team. This team received further training to be competent in assessing the risk at hand and safety of the environment, verbal de-escalation, as well as physical interventions (Jones et al. 2012). It was concluded that there was a decrease in the number of code grays and tier one over the research period.

Psychiatric emergency response teams are comparable to that of the Rapid Response Team for medical situations. Rapid response teams (RRT) respond to medical situations such as decompensation, low blood pressure, respiratory and cardiac issues. The RRT at Regions Hospital consists of a critical care nurse, respiratory therapist and a physician. The Psychiatric Emergency Response Team include a mental health nurse, a mental health associate and security officer. During the day shift, the team can call for assistance from the psychiatric consult doctor that's on shift. Literature review above covers response team modeled after RRTs that were implemented on non-mental health units with psychiatric staff members. Response team can assess and assist with crisis situations on all units including medical units whereby patients are displaying aggressive behaviors towards staff. It was determined that non-mental health personnel felt safer knowing that there is a resource available to assist with these situations.

The above studies described the various risk assessment tools that have proven to be successful in various settings over the years such as mental health, emergency room, and forensic units. There was not a tool noted in the literature review that could be used in a medical, surgical setting. All studies showed that the utilization of a violent risk assessment tool to assess patients for the potential of violence was a success one way or the other. So, the adoption of MIAHTAPS throughout various hospital departments is

important as a tool to decrease workplace violence and patient to staff assaults. DNP candidate also agrees with research studies completed that also address cultural changes and response team that have been successful in the healthcare setting and have proven to be a success within Regions Hospital to date.

Conceptual Model: Lewin's change theory

In starting this project, the workplace violence committee needed to create the motivation to change. The committee received its initial direction from executive management, after which the committee members worked with the various department to examine internal processes for screening incoming patients and communications between departments for example about patient transferring from one department to the other. The team moved to the change process by promoting effective communications, rounding on units, clarifying and answering questions, and empowering healthcare staff to embrace and appreciate the need for change while highlighting the need for using interventions available to them to aid with the crisis situations. The process ended when the workplace violence committee members returned the organization to a sense of stability after the adoption of the violence risk assessment tool and the need to call for the PERT team to assist with hazardous situations, which is so necessary for creating the confidence from which to embark on the next, inevitable change. Hodges and Videto (2011) mentioned that for program planners to be guided, well-founded theories and models need to be used in program planning.

Lewin's changes theory includes three stages which can be applied to nursing.

Unfreezing.

Stage one of Lewin's change theory is unfreezing. Unfreezing is the process of using active drivers to allow key stakeholders to re-examine current beliefs and cultural habits, and include the possibility of change. In this project, this process included working with staff to reconsider their knowledge and practice in dealing with aggressive behaviors. The primary drivers of the cultural unfreezing at Regions Hospital were executive leaders and required policy changes because of legislative action. An annual survey showed that employees were ready for change, as evidenced by responses on the survey related to the safety of the workplace at Regions Hospital. Part of the legislated requirements from the Minnesota Department of Health was for all healthcare organizations to complete a gap analysis and by August 2016 all employees should have completed workplace violence training. Regions Hospital executive leaders were supportive of this including this change process in the development and implementation of the PERT as well as the MIAHTAPS project.

Movement.

In the second phase of the Lewin's change theory is movement. In this step, the process of introducing new ideas, thoughts, behaviors, and methods based upon sound data and evidence to improve past practices. In this project, the change includes a need to reduce assaults through predictive modeling and adequate preventive interventions. The development and implementation of the PERT and later the violence risk assessment tool, MIAHTAPS changes our assessment of patients on admission and every care shift in the inpatient setting. The communications from the workplace violence committee and

executive leaders continued to be conducted under a strict discipline of transparency to provide trust and continued buy-in from staff, executive leaders, managers, and other stakeholders.

Refreezing.

Refreezing is the process which includes the establishment of a new and improved norm. The committee members discussed ways of re-establishing the change without incurring extra burdens of time or resources. In this project, refreezing will occur once significant changes have been modified by front line staff and become part of their daily work.

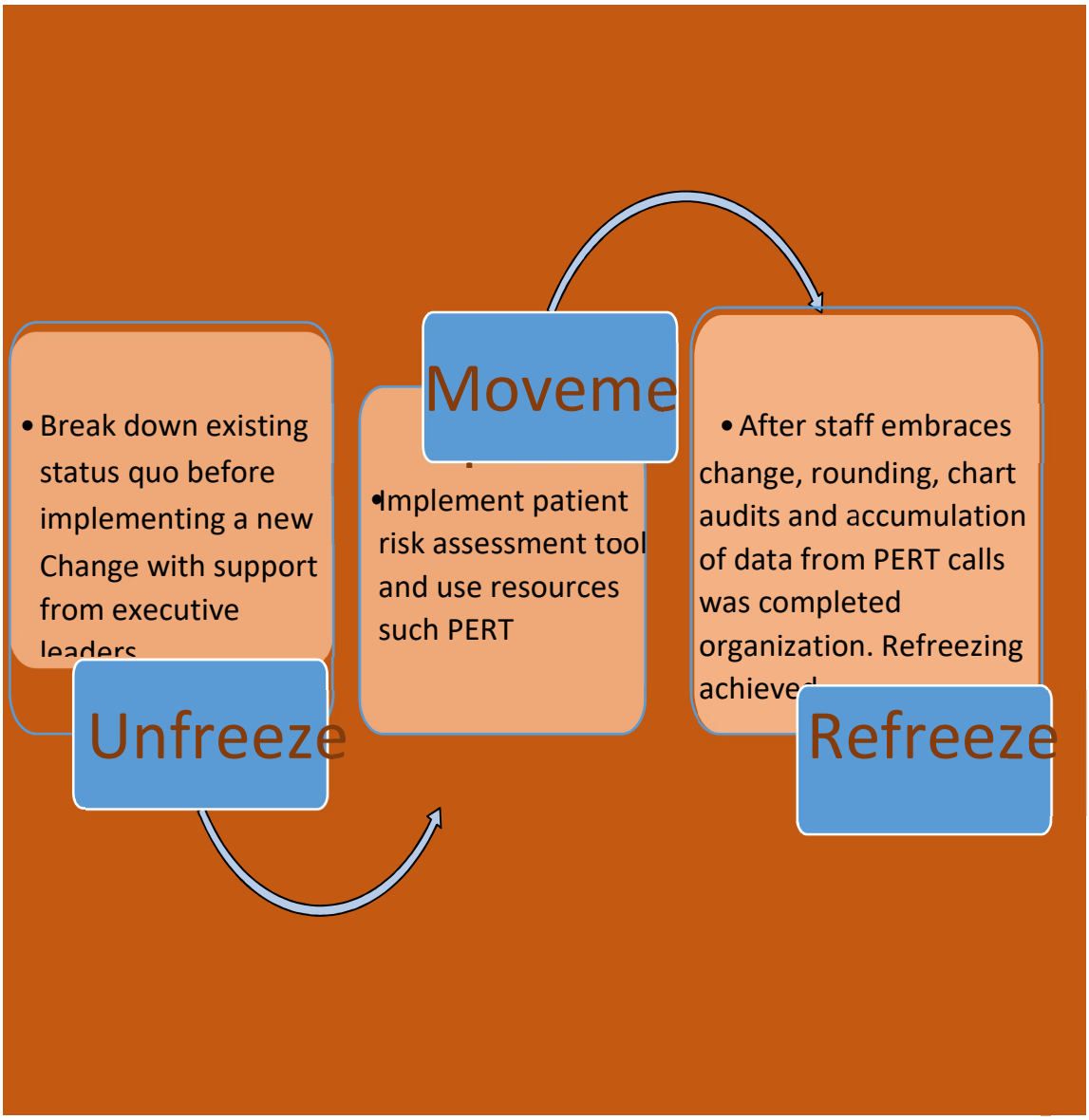


Figure 1: Lewin's change theory (Adapted from *Batras, Duff, Smith,* 2016)

Results of the Lewin's change theory as it relates to this project.

During the evaluation process, it was evident that staff are more aware of behaviors that are related to the potential for aggression by patients and are calling the team sooner for assistance with situations that potentially can lead to violence. The DNP candidate audited PERT

calls and developed scorecard that shows data of calls over the past two years and since the adaptation of the MIAHTAPS risk assessment tool. This information provides executive leaders and the workplace violence committee with the information needed to evaluate the progression and success of the PERT team and the frequent use of the patient risk assessment tool by direct care nurses to be competent in identifying violent behaviors.

Several studies and articles have concluded that the utilization of a tool to predict violent behavior will enable health care providers to manage behavior by using non-pharmacological and pharmacological interventions to be able to defuse and or de-escalate an agitated patient which in turn will allow them to provide better and safe care. It was noted that patients who have a history of violence, are irritable, agitated, paces and stares without a break, who has altered mental status, who becomes physically and verbally threatening have the potential of being violent in an inpatient setting. Using an evidence-based assessment tool will allow direct care staff to be able to preempt behavior and seek assistance from PERT which aids in reducing the number of patient staff assaults and provide a safe working environment for inpatient medicine units.

Section 3: Project Plan and Execution

The DNP candidate developed and implemented the PERT team which was supported and approved by mental health director and executive leaders. PERT is the main intervention used alongside the MIAHTAPS violence risk assessment tool. Nurses area expected to include the MIAHTAPS as part of their shift assessment of the patient, and once a patient is deemed as having a potential for violence, they are encouraged to page out for the PERT team. PERT members will assist with reassessing the situation as well as de-escalate or defuse patient behavior and situation to prevent a potential patient staff assault.

A detailed plan for implementation of the violence risk assessment tool was built into the nurses' current workflow, and documentation practices by working with the information technology specialists. Emails were sent to nursing staff on four of the highest noted acute units indicating the reasons for the change in present practice and how PERT members can be deployed to aid with mental health crisis situations. Direct care staff were trained using the online education program about the MIAHTAPS assessment tool in a power point format. DNP candidate later sent another email requesting staff input in sharing their adoption of the MIAHTAPS tool within their daily practice. DNP candidate later did an in-person site rounding on these four units which allowed for questions or concerns to be addressed, further explanation of the tool, and to provide bedside support through the change process including but not limited to the seven assessment criteria, explaining the meaning of the MIAHTAPS risk scores, and associated nursing interventions (non-pharmacological). Direct care nurses went through training on the assessment process on admission and every care shift after that.

Throughout this training process, it was clarified to nurses and PERT members that forced medications and or restraints should be avoided whenever possible or used as a last resort. The goal for the evaluation of PERT and the adoption of the MIAHTAPS was to raise awareness among inpatient medicine unit staff in being able to identify, chart, interpret and communicate about patient risk for violent behavior, while also increasing nursing interventions to de-escalate aggressive and violent acts. For DNP candidate and members of the workplace violence prevention committee to achieve this goal, it was necessary to review responses to defuse or de-escalate the situation. These interventions included but not limited to verbal de-escalation techniques, environmental modifications, and offering oral medications as ordered by the physician or psychiatrist as well as other known nursing interventions that are indicated in the pocket card that was handed to staff as a reference guide as shown in Appendix A.

The electronic charting system allowed the violence risk assessment documentation flowsheet to become visible on the go-live day August 18th, 2015. Six months after implementation of MIAHTAPS, a survey monkey was sent to the direct care of the selected high acute units via the email system. The surveys were anonymous and not mandatory. Nurse Managers on each of the selected units also assisted in encouraging their direct care staff to complete the survey. DNP candidate de-identified medical record number to collect patient data from the PERT calls made as well as with the survey monkey that was sent to direct care nurses to maintain confidentially for both the patient and nursing staff.

However, this DNP candidate continues to work as the lead of the PERT team and a member of a large team with diverse disciplines, which continues to help reduce personal bias in data collecting and analysis. As the data was being collected and records

accessed, the team rigorously complied with all relevant confidentiality laws and policies, and provide informed consent to human subjects when applicable. The IRB department at Regions Hospital gave approval for the DNP candidate to conduct this quality improvement project while evaluating the intervention PERT that continues to be used to assist with crisis situations on the non-mental health units.

Assessment Strategies and Sample Size

The MIAHTAPS tool was implemented to assess and identify patients with potential for violence. Several processes need to be established, for the framework to be built by the technological team. There are over 2000 nursing staff at Regions Hospital, 200 of those participated in the survey monkey. These staff represented four different departments throughout the hospital, who had cared for patients during this time to gain knowledge of staff ability to use the violence risk assessment tool appropriately and use interventions when necessary including but not limited to PERT to assist with patient escalating behavior. The desired outcome was to increase staff awareness, capability, and ability in identifying patients' behavior that has the potential of getting aggressive or violent, while also increasing ease and use of pharmacological and non-pharmacological nursing interventions to prevent escalating actions.

When direct care staff calls for assistance, the call goes through the hospital operator and to the PERT team members' silent pages. Staff assigned to respond to the PERT call would carry the pager on their person and respond accordingly to assist with the situation at hand. In 2015, a total of 147 PERT calls was received, and techniques used include but not limited to verbal de-escalation, medication administration, and periodically restraints. There were times when the team was paged but the situation resolved without the PERT intervening. In those cases, staff

would not complete the documentation in the electronic chart. The DNP candidate reviewed all PERT calls during 2015 as well as the first quarter of 2016. The sample size for this project incorporates all calls made from the inpatient medicine units over the all of 2015 and first five months of 2016. The DNP candidate reviewed all intervention(s) that were used to defuse or de-escalate patient including the request of the PERT and or security. Information gathered also included time of the day calls were made the most, patients MIAHTAPS score if charted before the crisis call, and what techniques or skills were effective by the PERT response members.

With patients that score a low (scoring 0-1) in the violence risk assessment tool and PERT was not needed, direct care staff could use other interventions such as the warm blanket, reducing stimuli in the environment, and distractions. Historically this group would not perpetrate the act of violence towards staff. With patients that score a high or severe (see figure 2 below), the DNP candidate could retrieve data from the PERT call such as time of the event, interventions used by the team, security responding, and triggers that warranted the team to be called. The maximum, and most severe, score possible is 12. The data collected on episodic basis was reviewed daily by this DNP candidate and a scorecard presented to executive leaders as well as the workplace violence committee.

Results of Survey Monkey: MIAHTAPS and PERT data

The strength of PERT demonstrated that there had been a significant reduction in the number of violent incidents and modifications in the patient on staff assaults. Continued education and maintaining the proper diversity within PERT team will enable continuous improvement and further reductions in attacks.

The MIAHTAPS scoring system incorporates the STAMP model and the Broset model of behavior assessment (Clarke, Brown, & Griffith, 2010). These evidence-based models are widely used in the healthcare industry and have a track record of reliability and validity. Table1 shows the scoring system for MIAHTAPS and PERT. The PERT team was paged when a patient scores a three or above. The seven behavioral markers do not carry equal scoring weight. As indicated in Figure 2 verbal threats, physical assault, and attacking/throwing of objects carry more scoring weight than other behaviors.

MIAHTAPS Assessment

Behavior Exhibited	Descriptions	Yes/No
Altered Mental Status:	• Appears confused, disoriented, disorganized, intoxicated with drugs or alcohol	○ Yes (1) ○ No (0)
Irritable:	• Upset, easily startled, easily annoyed, alarmed, mumbling, but cooperative	○ Yes (1) ○ No (0)
Agitated:	• Rapid Speech, hyperventilation, uncooperative, raised voice/shouting, flailing around in bed	○ Yes (1) ○ No (0)
History of Violence:	• Any history of violence	○ Yes (2) ○ No (0)
Threatening Verbal/Physical:	• Physical/verbal actions with clear intent to intimidate or cause harm	○ Yes (3) ○ No (0)
Attacking Objects:	• A physical attack directed at an object, NOT a person	○ Yes (3) ○ No (0)
Pacing & or Staring:	• Not breaking eye contact, prolonged glaring, pacing	○ Yes (1) ○ No (0)
	Total Score	

Assessment Score	Level of Risk	Intervention
0	Low	Assess once a shift at a minimum
1-2	Medium	Consider verbal & non-pharmacological interventions, monitor, reassess according to guidelines
3-4	High	Consider verbal interventions and/or offering ordered PO medications, monitor, reassess according to guidelines
5+	Severe	Consider verbal interventions, offer PO ordered medications, consider IM/IV medications per orders, reassess according to guidelines and monitor

Figure 2: MIAHTAPS Violence Risk Assessment Tool

These tools have been shown to be more reliable than clinical intuition and non-model based evaluations (Clarke, Brown, & Griffith, 2010).

- Profiling of patients, using well founded personal, clinical, and family history is a reliable method of assessing predictive variables to help in preventive intervention. Studies have shown that profiling patients are useful as a preventative measure to defuse or de-escalate patient's behaviors in inpatient settings (Clarke, Brown, & Griffith, 2010).
- MIAHTAPS is a dynamic, iterative tool. Each successive data and intervention outcomes were used to update the accuracy of the profile scores and the quality of response.

Summary of the Data Collection Activities

Quantitative and qualitative data were collected from staff through the survey monkey from the four-inpatient medicine direct care nursing staff as well as the PERT call documentation compiled by this DNP candidate. Ten survey questions were sent out to nurses six months after the violent risk assessment tool was implemented with PERT as the primary intervention for patients scoring three or above on the violence risk scale. One of the questions asked respondents about all interventions they have used historically and up to the present. The period would include pre-MIAHTAPS and with PERT practices. The data showed that while PERT use was significant, the usage rate was still lower than for calls directly to security. Security calls result mostly in the use of restraints and non-verbal clinical force, as opposed to the comprehensive set of interventions available from a PERT team.

Table 2 below shows survey results.

A list of interventions used and the percentage of respondents that use them over a six months' period, by 200 nurses on four different non-mental health units. As mentioned above data was collected about past exposure that had contributed to the triggers of the aggressive or violent behavior towards direct care staff. This data collection incorporated both primary and secondary sources meaning will be both from data recorded in excel spreadsheet relating to PERT calls as well as staff that has used the violent risk assessment tool, MIAHTAPS on the inpatient medicine units. DNP candidate sent out survey monkey to direct care nurses on all the inpatient medicine units on four of the highest acute units. Information was collected by self-report, survey monkey, and from recorded information which is susceptible to recall bias and relies on completeness or accuracy of recorded information (Song and Chung, 2010). To reduce bias, survey questions needed to be in a non-judgmental atmosphere and sent to well trained and knowledgeable individuals. As mentioned by CDC (2014a), there is a universal need for ensuring that safety is taking into consideration when designing low-cost violence prevention interventions for inpatient settings. Song and Chung (2010), caution against information bias because of the researcher's intimate involvement, this DNP candidate worked within a large with diverse disciplines, which would aid in reducing personal bias in the collection of data and analysis.

Table 2

Interventions implemented with the adoption of the MIAHTAPS tool

1	Offer as needed meds as ordered	85.19%
2	Decrease stimulation	85.19%
3	Comfort items (Fidgets, stress ball, word puzzle, coloring sheets, journals, music)	81.48%
4	Provide comfort measures as indicated: warm blanket, drink, snack, weighted shrug	81.48%
5	Provide communication: plan of care update, wait time, orient patient, verbal de-escalation, allow a chance to vent	74.07%
6	Dim Lights	70.37%
7	Notify Security	70.37%
8	Physical restraints	70.37%
9	Notify charge RN	68.52%
10	Distraction	64.81%
11	Provider at bedside	51.85%
12	Identify triggers	50.00%
13	Relaxation channel	48.15%
14	PERT (psychiatric emergency response team) call	40.74%
15	ALERT- potential risk of aggression with cares	37.04%
16	Administer as needed medications	31.49%
17	Have staff and other patients leave area to protect themselves	31.48%
18	Behavioral emergency	29.63%
19	Comfort room as indicated (MH)	25.93%
20	Oral motor interventions- gum, hard candy	25.93%
21	Music consult	24.07%
22	Code red or purple (ED)	22.22%
23	Headphones & rocking chair	20.37%
24	Weighted shrug/pad	18.52%
25	Seclusion room (MH)	16.67%
26	Pet therapy	14.81%
27	Exercise equipment	11.11%

Project Evaluation Plan

The project included the measurable goal of a 15% reduction in violent incidents, and implements a sustainable predictive system of violence.

- Goal of 15% decrease in the number of patient staff assaults (2014 - 256 assaults as compared to 185 in 2015)
- Increase PERT calls after the adoption of the MIAHTAPS by 10% (pre-MIAHTAPS there as 57 calls. Post MIAHTAPS there was 100 PERT calls).

According to Kettner, Moroney, and Martin (2013), there are two categories of evaluation of concern to program planners: the formative and summative evaluation. This project evaluation warranted the DNP candidate to collect information about the implementation of the patient violence risk assessment tool. This process aided in the success of the project. This project evaluation addressed the developmental, process, and outcome of the tool. Formative evaluation encompassed the implementation phase of the project.

Proposed Outcome

The use of an assessment tool in the healthcare system relating to nursing care for assessing patients with violent or aggressive behavior is not new to providers. For us at Regions Hospital to continue providing the best care, best experience for staff and patients, the workplace violence prevention committee made a consensus decision to implement this patient violence risk assessment tool, followed by a post survey six months after implementation to conclude whether the tool is successful or not.

Plan and Execution Summary

As mentioned by McPhaul, London, and Lipscomb (2013), there are cultural complexities that hinder health care providers from making reports relating to patient/staff violence. Majority of health care workers have the notion that workplace violence especially in the Emergency room, demented or delirious patients in medical units, and inpatient Mental Health units are part of the job. McPhaul, London, and Lipscomb (2013) went on further to state that lack of organizational policies on violence in the workplace will put health care providers at greater risks of assault. Some of the challenges that organizations will encounter includes but is not limited to increase stress, ill calls, increase anxiety, and decrease staff productivity on high acute units which will lead to an unsafe working environment for all.

According to Hodges and Videto (2011), evaluation plan directs DNP candidate through the different stages of evaluation. This project helps DNP candidate to gather and decide on what information is needed to complete the project promptly. As a member of the workplace violence committee, DNP candidate believes that not all assaults were reported during this time including verbal assaults.

Section 4: Findings, Discussion, and Implications

The evaluation of the role of the PERT as a critical intervention in the adoption of the violence risk assessment tool MIAHTAPS was to predict patients that have the potential of exhibiting violent behaviors. The team continues to assist the non-mental health staff with raising the awareness of how to recognize and respond to aggressive behaviors being displayed by patients during their hospitalization and treatment phase. Over the years, executive leaders have noticed that staff responses to annual engagement survey question relating to safety have been extremely dissatisfying. Staff felt unsafe in the inpatient and emergency room setting as our patient population continues to show the increase in agitated and aggressive behaviors.

The primary objective of this project was to aid in reducing workplace violence, maintaining a safe work environment for all patients and staff, and to adopt certain strategies that will protect the establishment. A survey that was sent out in an email to nursing staff identified the comfort level of direct care nurses in using the violence risk assessment tool as well as gain the perception of nurses in regards to safety on our inpatient units. Speroni et al. (2014) reference that this group of care staff would be the expert panel. For the DNP candidate to conduct the adoption of the MIAHTAPS risk assessment tool, and the role of the PERT team, writer, audited all reports from the PERT and the MIAHTAPS score that patients had at the time of the call over the first past five months of 2016. The PERT reports from 2015 did not all have the MIAHTAPS score as the violence risk assessment tool was implemented in August of 2015.

Section four includes the analysis, findings, and discussions from the data collected. Data includes comparative PERT responses and an analysis of PERT's role in

the effectiveness of the MIAHTAPS tool. The sample sizes ranged from 182 reports for all of 2015, 78 reports for the first five months of 2016, and 65 nurses' responses for the post-MIAHTAPS survey.

MIAHTAPS

DNP candidate collected qualitative and quantitative data from the survey monkey that was sent out to direct care staff over eight weeks and transcribed data onto an excel spreadsheet. The DNP candidate was responsible for the storing of the information that included de-identified patient medical record number. The information gathered was protected on the work computer by candidate password.

PERT

Data was collected after the implementation of PERT in 2015 and for 2016 daily. Before PERT, the response team consisted only of security and the assigned staff, with interventions limited to physical restraint and medications as needed. As shown in Figure 3 below, before the implementation of PERT, medications, restraints and security personnel consisted about 70% of the interventions.

One of the benefits of the implementation of MIAHTAPS and PERT is the increased education and awareness that the efforts have created with the nursing and other care providers. For a significant 34% of the time, the patient was relatively calm by the time the PERT team arrived at the unit. Over the period non-mental health staff have had the opportunity to work on increasing their skill set and apply environmental awareness training skills to decrease irritability, agitation, inappropriate behaviors, and other unsafe and potentially violent behaviors.

Staff has access to an electronic device that can summon security at the touch of a button, whereas calling PERT requires making a telephone call to the operator who then summons the PERT team via the paging system. Given the concern for immediate safety, and the tradition of calling security first, it is not surprising that security calls are still high. Such practice would be acceptable, and even desirable if the security call is immediately followed by a call to PERT when the situation requires it.

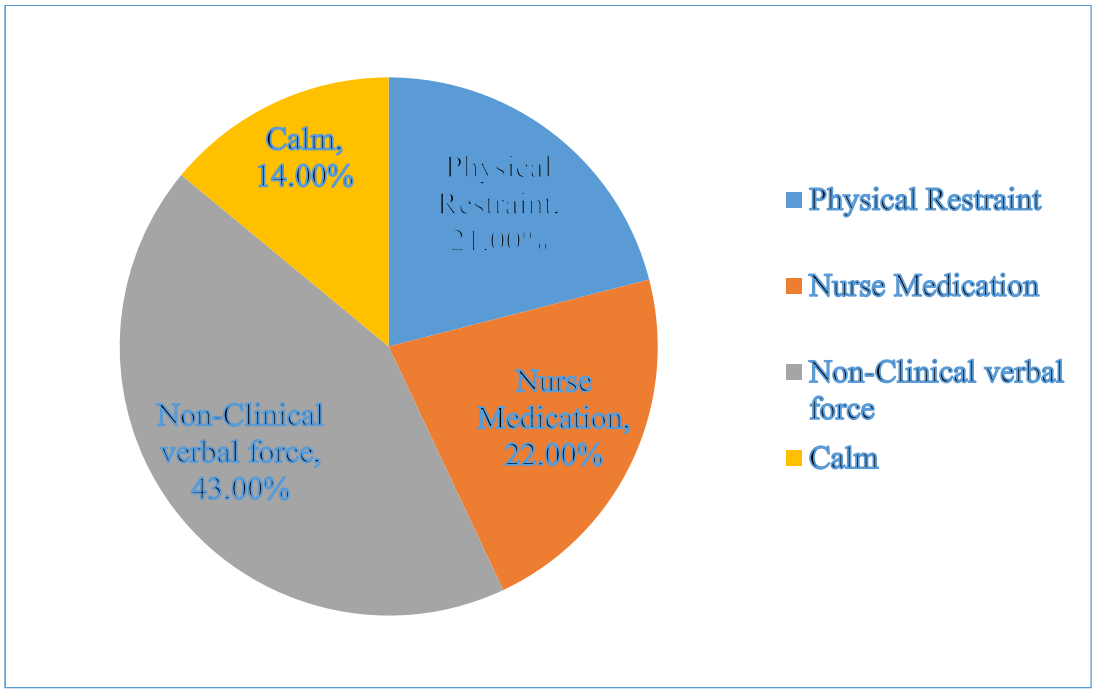


Figure 3: Pre-PERT Intervention for Violent or Agitated Patients

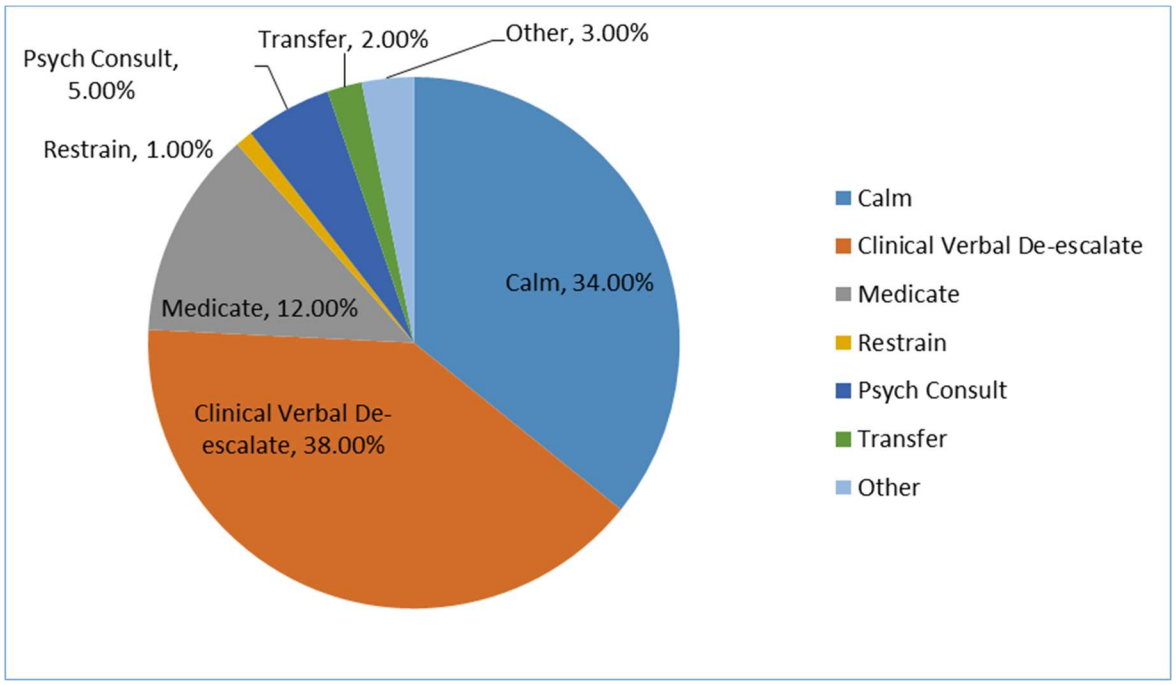


Figure 4: 2015 PERT Interventions for Violent or Agitated Patients

As noted in figure 4 above, interventions used by PERT members include but not limited to verbal de-escalation, medication, restraints, consulting the psych consult team, and in very few occasions transferring the patient to the mental health department with the hospital campus.

In this context, non-clinical verbal force is defined as an authoritative, designed-for-immediate results tone and manner that is not necessarily supportive to the patient or family member and is intimidating. With the PERT team responding, physical restraints were reduced by 5%. The non-clinical verbal force was essentially eliminated, replaced by the communications of trained medical personnel who use clinically appropriate and supportive verbal communications to help de-escalate the situation.

Figure 5 shows a chart for the first five months of the year 2016. While Security is always part of the cross-functional response team, the interventions displayed in the graph suggest that the use of PERT decreases the use of *restraints* and *non-clinical verbal force* significantly.

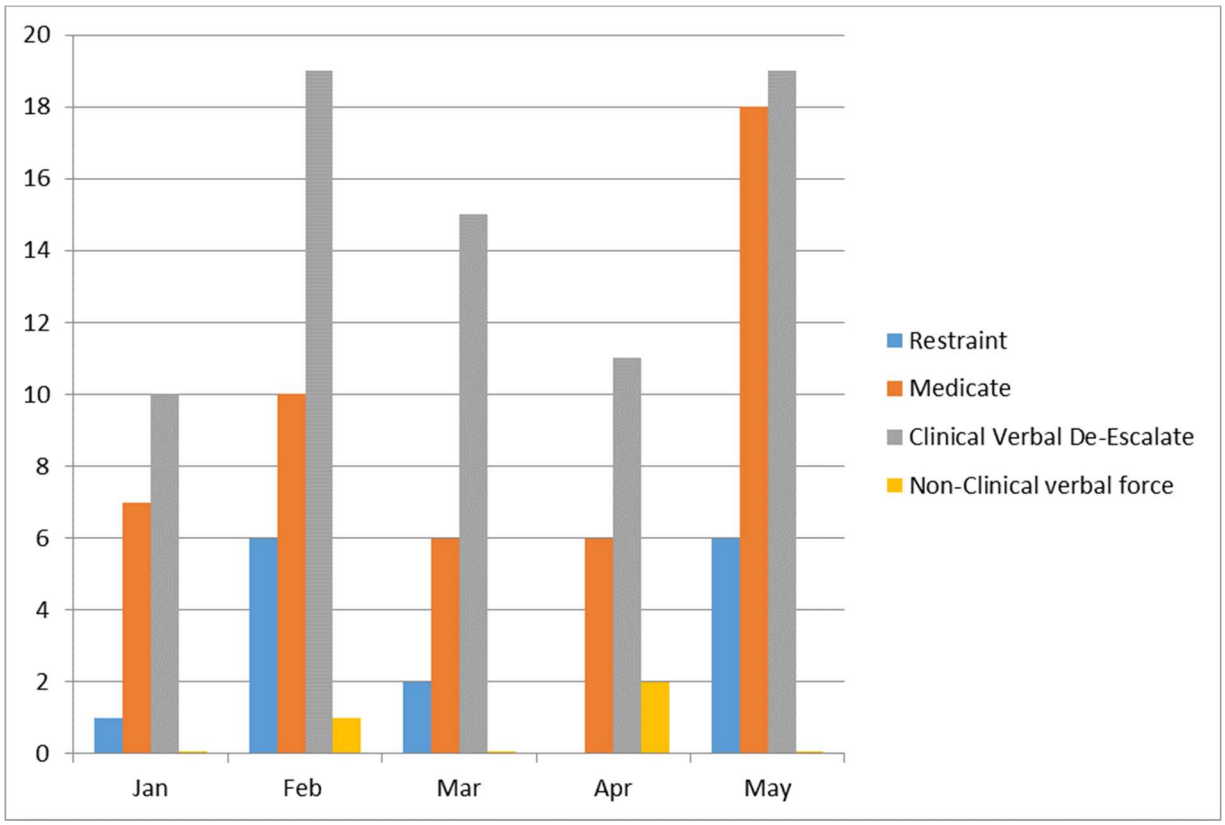


Figure 5: PERT data for the first five months of 2016

The data also shows that use of the PERT team results in greater effectiveness of clinical verbal de-escalation, which also makes it easier and safer for nurses to administer medications.

Post-MIAHTAPS Survey Results and Analysis

The purpose of the survey was to generate feedback from nurses on the use, effectiveness, and improvement of the MIAHTAPS tool which includes PERT as one of

its critical interventions. The survey monkey was emailed to 200 nurses in four hospital units; trauma, intensive care, medical-surgical, and the crisis section of the emergency room, with 61 respondents.

Key findings from the survey include:

- 75% of nurses used MIAHTAPS more than ten times. Those that have used the tool found it easier to use and thought it was a useful tool (See Figure 5 and Figure 6).
- Most respondents said it was either easy (71%) or somewhat easy (23% to use
- 73% said it was useful, 27% said it was not a useful predictive tool. The respondents that completed the survey did not think it was necessary to make changes to the structure of the tool presently. The two major improvements suggested were *fewer questions*, and *improving the scoring system* (see Figure 4).
- While PERT has been around for over two years and the respondents were aware of its existence, nurses still tend to call security first instead of requesting a PERT team, which could be due to a couple of factors. Some nurses had difficulty relearning the process, and others were just too comfortable with the status quo.

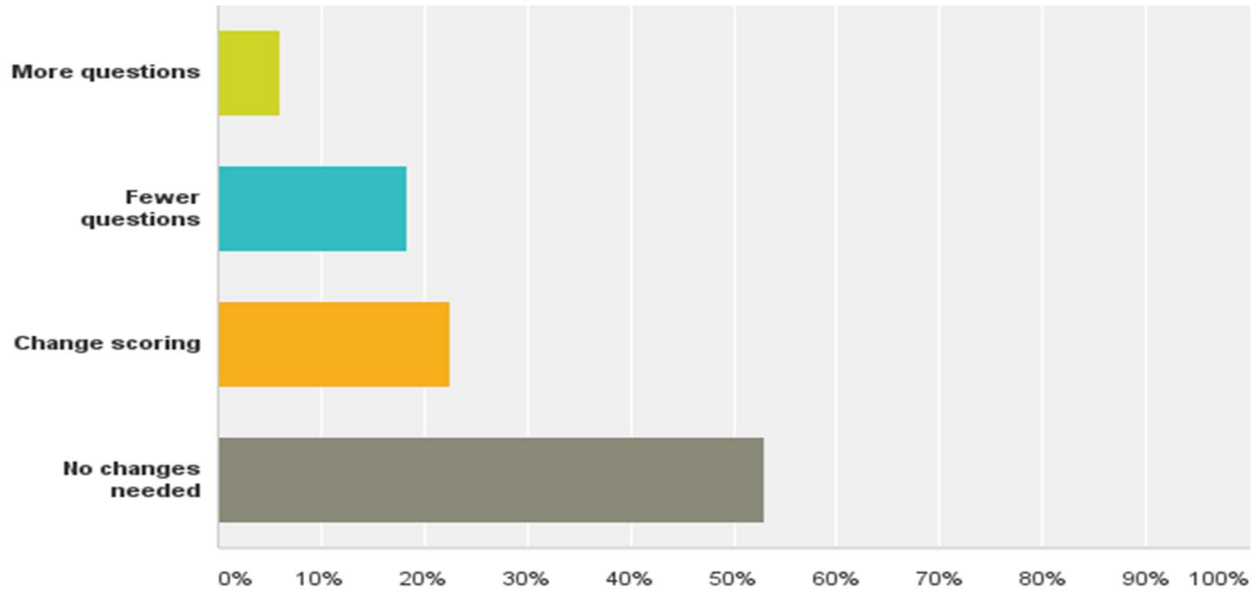


Figure 6: Responses to Question 10: "In what ways do you think the MIAHTAPS Tool could be improved?

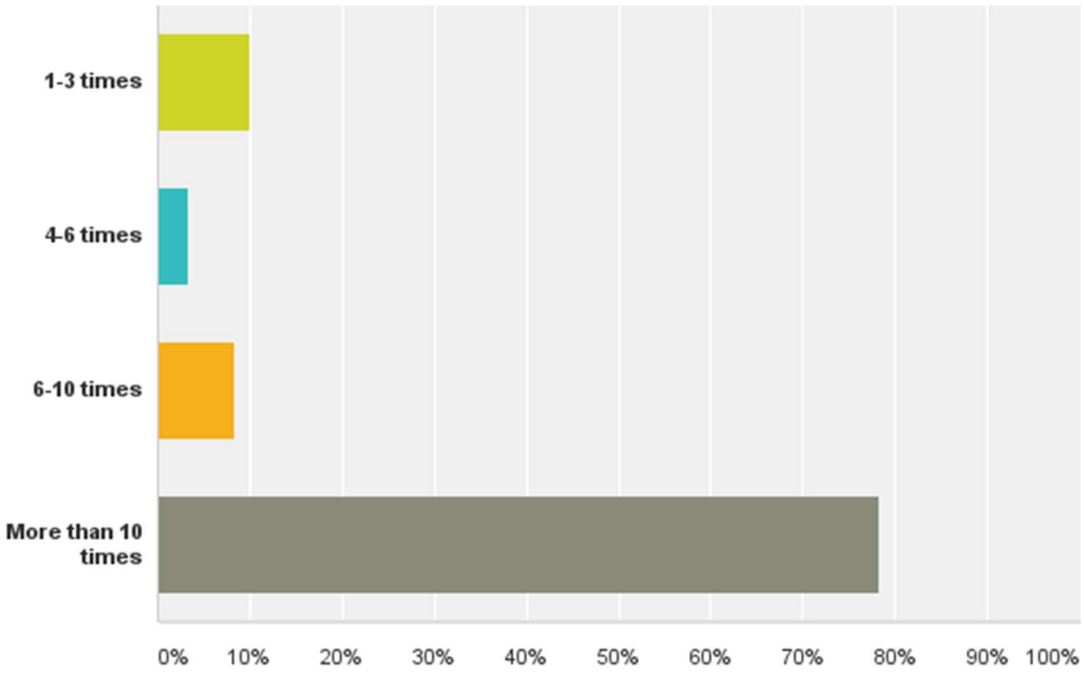


Figure 7: Responses to Question 2: How many times do you think you have used the MIAHTAPS tool?

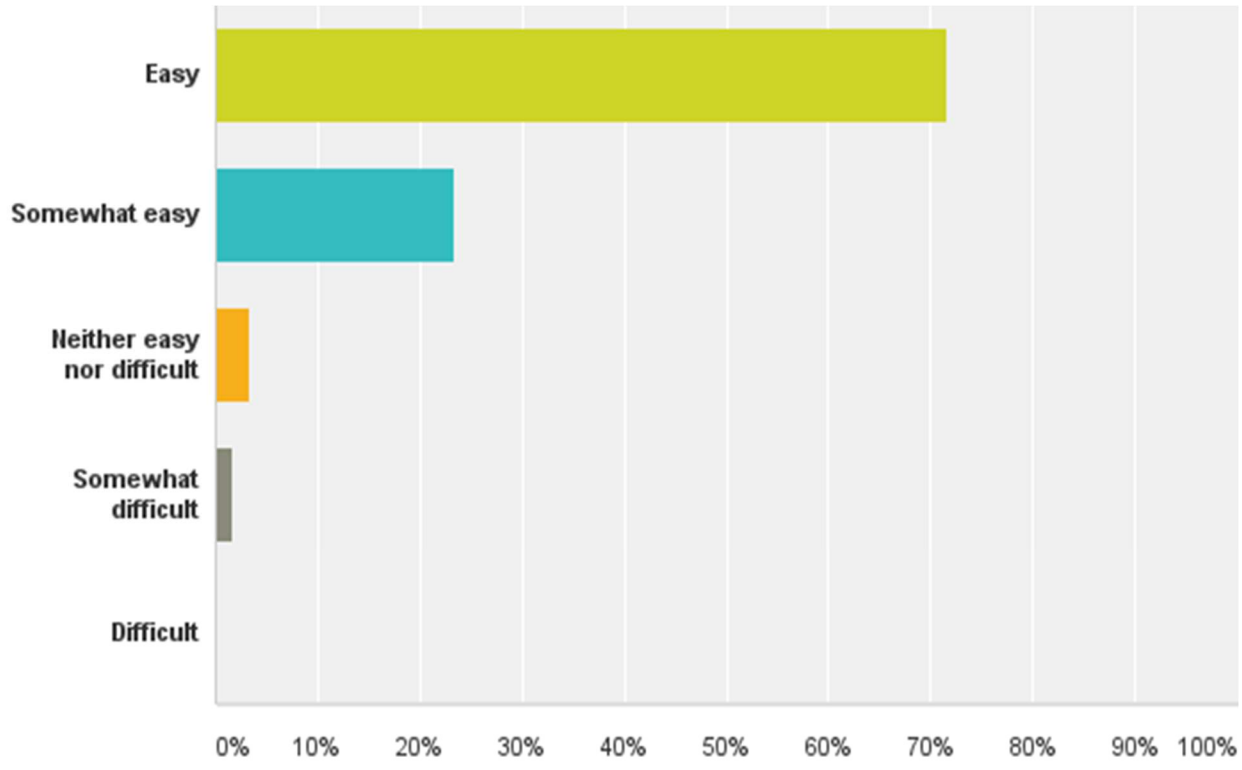


Figure 8: Response to Question 3: "How easy was it to use the MIAHTAPS tool?

Clinical and Social Change

With the evaluation of the PERT team as part of my DNP project, the plan is for this to aid in the reduction of the number of reported assaults in my facility, and in return improve staff safety and moral. Including but not limited to support in increasing staff productivity, improve recruitment and retention of healthcare providers which will also improve the quality of care being provided to our patients.

Implications relating to the violence and or aggressive patient's behavior towards inpatient staff can cause detrimental and at times devastating effects on management and employees. The personal and economic toll can be incalculable regarding loss and suffering. Report from Society

for Human Resource Management (2012) indicates that experts agree that billions of dollars are lost each year in time, productivity, litigation and added security measures as a direct result of violence at work. Direct costs were reported to be the 10th leading cause of nonfatal occupational injury at a workers' compensation cost of $590 million during 2009. As mentioned by Blanco et al. (2013), when employees understand that there is a value placed on safety in the workplace, safety-oriented actions will then be noticeable by staff such as assessing patients for potential as well as completing workplace violence reporting form in the MIDAS system. Sadly, nurses, mental health associates, patient care staff, and Emergency Room techs who provide direct care to our patient's experience both physical injury and psychological complications due to patient assaults. Based on this evidence-based information, nurses are leaving the nursing profession sooner than they plan to for less stressful, and better health jobs. This, in turn, leads to increased medical care, high turnover, increased number of call-ins, dissatisfied staff, and patients, long wait times for care to be provided as units run with low staffing, and finally, staff increases the feeling of dissatisfaction in their job (Gates, Gillespie, Succop, 2011).

Project Strength, Limitations, and Recommendations

The strength of this entire project was being able to identify the need for a violence risk assessment tool and the role of the PERT team to predict patients with the potential of being violent in the inpatient setting while using the resources available to defuse a violent or aggressive patient. This process was used throughout the organization which met the needs noted in the gap analysis that was conducted as well as the needs of nurses and direct care staff working with all our patients. Since the implementation of the PERT team, there has been 0% staff or patient injuries in the establishment while the team is present.

Limitations on the side of the PERT team came from some departments such as the Rehab unit. Most brain injured patient behavior tend to escalate when there is a new face or increase number of staff in their personal space. PERT team members, completed further training on how to approach a brain injured patients. Based on the size of the establishment, and the merger of other smaller facilities under the same umbrella company, there was a delay in the implementation of the MIAHTAPS tool. We needed to obtain feedback from these other facilities before go-live as this electronic charting can be seen by all. There was obviously an urgent need for this assessment tool to be implemented due to our rising numbers of staff-patient assaults within the establishment by management, but the overall approval process had to be delayed by nearly a year.

Recommendations for Future Project

For DNP project to be successful, DNP candidate continuously made changes and adjustments to the evaluation plan. The assessment plan acts as a roadmap which elucidates the steps needed to evaluate the processes and outcomes of the project. Limitations that were encountered by DNP candidate was relating to the gathering of data has been very time consuming since this information continued to be entered manually into an excel spreadsheet by the DNP candidate. Once MIAHTAPS scores were extracted from the electronic system after the implementation of the violence risk assessment tool MIAHTAPS in August 2015, and for the first five months of 2016, it was easy then to see the correlation between the purpose of why the team was called and the interventions needed to defuse or de-escalate the patient's violent behaviors. Information Technology department can work towards assisting with an electronic version instead. The request was sent to Director of Nursing supervising this DNP candidate.

Educating staff of the behaviors that needed to be assessed relating to the MIAHTAPS tool was done via the self-learning online system in a power point format as well as daily rounding on all non-mental health units and the emergency room on various shifts. After that, as the mental health resource nurse, this DNP candidate had the opportunity and continues to have one on one coaching with nurses that are not meeting the expectation on charting on patients on admission and every care shift. Pocket cards were designed and handed out to direct care staff during this time as a quick reference guide when attempting to complete the assessment on patients (See Figure 1). It was recommended by DNP candidate to executive leaders that the MIAHTAPS violence risk assessment tool and the PERT calls will be included in the electronic health record to make scoring and documentation easy and or simple for the direct care staff. This step was vital to the success of the project. In collecting the data relating to MIAHTAPS scores and PERT calls, sometimes it was noted that nurses would not go back and reenter patient scores after an incident has occurred or that some nurses would copy and paste from previous shifts which then would give us a false negative score of patient's behaviors. Continued and ongoing education was deemed as necessary to avoid these results as well as coaching once nurses responsible has been identified either by DNP candidate or nurse manager of that unit.

Based on the use of the PERT as one of the interventions on the MIAHTAPS risk assessment tool, recommendations where needed.

- Comprehensive research is being conducted presently by the organization on gaining validity and reliability of the violence risk assessment tool MIAHTAPS.
- Categorize the level of assaults to know the severity of the patient-staff assault if necessary

- The addition of a Clinical Nurse Specialist or a psychiatrist to the team to have consistency in medication orders as well as increase the time of getting medication orders, instead of having to wait for primary doctors to be contacted during the crisis.
- Keep up with ongoing with training for direct care staff with the education on behaviors to assess.
- Make changes to annual training, to the orientation week for new employees, and before for they are assigned to preceptors.

Summary of Findings

The task to reduce patient staff assault on the inpatient medicine units by the workplace violence committee can be achieved by collaborating with a multi-disciplinary team throughout the hospital. Quality Improvement project has proven to be successful thus far. The PERT team continues to allow for empowerment and accountability by the inpatient medicine direct care staff who are expected to work and provide the best care for all patients including but not limited to mental health crisis patients. Data transparency has also proven to be a success. The DNP candidate does a power point presentation monthly to executive leaders as well as send update information to PERT members. This process has been successful due to improving awareness and accountability.

Project Evaluation and Dissemination

The results from the evaluation of the role of the PERT team and the adoption of the Violence Risk Assessment tool MIAHTAPS was initially disseminated through a power point presentation. Later in the year, DNP candidate was able to conduct podium presentation at the American Psychiatric Nurses Association conference as well as a podcast interview with

Johnson and Johnson Pharmaceutical Company early this year. The DNP candidate did power point presentations which aided with scholarly debate or discussion among stakeholders at different committee meetings within the organization and eventually to the steering committee. According to Forsyth et al. (2010), conducting a power point presentation ensures stakeholders positive and negative criticism relating to the project, and seek out further information if content is not clear. With the use of this visual aid, DNP candidate could observe the viewer's reaction, and take note to assist with adjustments and changes as needed. The DNP candidate was also able to describe and or explain the project results, which helped in a better understanding and clarifying content. For scholar presenters to develop their leadership role, it is vital for the individual to be able to improve clinical practice and patient outcome, which is all done using evidence-based information.

The DNP candidate plans to publish an article on the Psychiatric Emergency Response Team within the inpatient medicine units by the end of the year, which is known to be an enduring contribution to the health care profession (White and Dudley-Brown, 2012). Being able to use an article to disseminate this evidence-based project results that are focused on the safety and security of patients and staff within the inpatient setting, is a vital way of raising health care provider's awareness of violent behaviors which can hinder or affect best care, the best experience for all involved. Disseminating the results in clinical nursing article electronically would allow for the information to reach a wider population. Workplace Violence is a hot topic presently throughout healthcare organizations and therefore will gain the attention of many providers' especially bedside nurses and assistants.

According to Terry (2012), DNP practitioner needs to have the ability to develop, implement clinical projects which will close the gap between the research and the clinical practice. By disseminating the evidence-based knowledge and findings, this will aid to improve the patient care outcome and promote a healthy environment.

Implications and Policy

Implications.

The role of the PERT team and the adoption of the violence risk assessment tool MIAHTAPS was aimed at improving and reducing the perception of the direct care staff relating to safety in the inpatient medicine units, and the Emergency Room within the organization, as well as the security of the facility. As mentioned by Maurer (2015) a report from Occupational Safety and Health Administration (OSHA) indicates that over 23,0000 injuries were due to violence assaults at work in 2013, with more than 70% of those attacks occurring in health care and social service settings. These assaults were predominantly a result of violent behavior from patients to staff. Workers who are at greatest risk are those that do offer direct care to patients, who in some situations have a history of violence, drug, and alcohol abuse. A plan by the Department of State in Minnesota includes all healthcare organizations offering training to workers and contract workers on how to respond or react to aggressive and or violent patients in our settings. Executive leaders at my facility put a team together that would offer the best management and participation to ensure the committee stays on track with project expectations.

Policy.

The DNP candidate organization has made changes to the workplace violence policy since the decision was made by executive leaders to abide by the agreement to complete a gap analysis. This analysis showed our flaws relating to safety as well as the MN legislation passed April 2015 that required all health care organization to provide workplace violence training for all staff. A PERT policy is also in for review by the policy team and will be ready by the end of June 2016.

Conclusion

The mission of the PERT team was to improve the safety of staff and patients in the inpatient medicine units within my organization, which can only be fulfilled with the collaboration and buy-in of all stakeholders. The goal of this quality improvement project was to evaluate the adoption of the violent risk assessment tool and the effect of the PERT team to respond to mental health crisis situations on the inpatient medicine units. Inclusion of the PERT team made the violent risk assessment tool more effective than it would have been otherwise. After evaluating the survey monkey that was sent out to all direct care staff on selected units as well as the PERT calls to date, it's evident that assessing a patient behavior and calling for assistant from the PERT time, ensures the safety of patient and staff. The PERT team permitted for both empowerment and liability during caring for inpatients. When there was evident of aggression and or violent, staff also had the option to provide safe patient handling in a professional manner, without hindering the care of the patient. Executive leaders have increase communications internally and externally to other branches of the establishment relating to assaults and injuries from patient to staff and continue to be an open conversation amongst all

direct care staff and leaders and our work to improve environmental safety for patients and employees. Sharing workplace violence data with the staff increases awareness and importance of reporting patient behaviors that hinder the daily workflow of the unit, and highlights resources available to all personnel to provide a safe working environment. A combination of increasing awareness of what behaviors can trigger an assault and use of the resources available to us all employees can jointly reduce the number of patient staff assaults in health care.

Section V: Scholarly Product

Overview

The purpose of this DNP project was to evaluate the role of the PERT team in the adoption of the violent risk assessment tool as a critical intervention. The drive of this added tool was for direct care nurses to use to enable them to predict a patient that has the potential of being violent and use the suggested interventions such as the PERT to reduce or calm that patient throughout the hospital. Throughout the review of all evidence-based research, it was noted that there was no evidence-based tool nationally and internationally that can be used in hospital-wide (ER, inpatient, and mental health) to predict a patient with the potential of being violent. For the last two years, staff was strongly encouraged to attend the disruptive behavior session that was made available to them monthly. This training session two hours long.

Background

Regions Hospital was one of many health care organizations that agreed to complete the gap analysis where it was evident that we needed to make several changes and adjustments to our training program as well as communication and reporting system relating to workplace violence for the safety of both staff and patients. Hodges & Videto (2011) mentioned that a formative evaluation needs to be conducted to enhance program planning and provide insight for future steps and processes to be implemented.

A gap analysis allowed the workplace violence committee members and executive leaders the opportunity to categorize the project being done namely: the communication committee, reporting system to workplace violence, and level of training and education needed by all staff hospital-wide. One of the identifiers was that direct care nurses needed an assessment

tool to be able to predict patients that have the potential of violence that became the first goal of the committee. This tool was piloted for one month and during that time it was noted that predicting patients for violence were aiding in direct care being more proactive in using interventions that would aid in defusing or deescalating patients, in turn, reducing the number of assaults from patient to staff. It was later then implemented on August 18th, 2015 throughout the hospital.

Role of the DNP Student

The role of this DNP candidate within the inpatient hospital is a mental health resource nurse. Within this role, I am the first point of contact for all inpatient non-mental health nursing staff who may have questions relating to mental health crisis patients. My interest in workplace violence relating to the patient to staff assaults surfaced during this time also. Over the years, I had the opportunity to work alongside the security team to ensure staff and patient safety.

I approached the Vice President of the inpatient relating to my DNP project to ask what would be beneficial to the organization as a project. The suggestion was made by the Vice President for me to partner with the co-chair of the Workplace Violence Committee who was also my preceptor at that time. I was fortunate to not only be the contact for mental health crisis situations; the team lead for the Psychiatric Emergency Response Team but to also be a member now of the Workplace Violence Committee.

No potential biases were in the foreseeable future, and caution was taken throughout the project to ensure that there was no bridge of confidentiality by the electronic system used in the hospital and this DNP candidate by using the password on both personal and work computers.

Analysis of Self

My name is Angela Mackay, and I am the Mental Health Resource Nurse at Regions Hospital, St Paul Minnesota. I am presently completing my DNP with Walden University and hope for completion is by spring of 2016. I received my Masters of Science in Nursing at Walden University. Before that, I received my Bachelors of Science in Nursing and Public Health Nursing at Metropolitan State University, St Paul Minnesota and Associates Degree, Registered Nurse at Century Technical College, White Bear Lake, Minnesota. After my five years' career as a supervisor of Brain Injury Rehabilitation Unit, Northampton, England, I decided it was time for a change of scenery and moved to the beautiful city and state: St Paul, Minnesota, where I continued my nursing career. I have worked in the healthcare field for over 25 years gaining educational and hands-on experience with patients in Brain Injury Rehabilitation, Med-Surg, Neuro, Ortho and Mental Health units. Most recent involvement is working with inpatient psychiatry consult team covering the non-mental health units, facilitating Disruptive Behavior class for staff on the non-MH units, and an active member of the Workplace Violence Committee. The goal of the PERT team is to contribute to the health and well-being of individuals with mental illness by enthusiastically and empathetically assisting with patients 18 years of age and older. These individuals could be displaying severe agitation, such as yelling, making threats, or harming themselves or another person, not responding to verbal de-escalation techniques, negotiation, and redirection by non-mental health staff.

In addition to working full time, I am a member of several committees within the hospital, and a single mother of four beautiful girls, an ambassador of the Anti-Stigma Campaign, an advocate of the National Association of Mental Illness and a volunteer at my church (Crossroads in

Woodbury). I developed and implemented the Psychiatric Emergency Response Team (PERT) and have trained over 160 mental health Registered Nurses as well as Mental Health Associate to respond to crisis situations to the non-Mental Health. My contact email is amackay72@gmail.com

Educational Outline Objectives (3):

- Provide consultation and intervention services to assist in de-escalation and or restraint of the patient in a crisis promptly on the inpatient non-metal health units for teens and adults.
- Educate non-mental health staff how to identify disruptive behavior.
- Develop staff knowledge and awareness of psychiatric emergency medications

Some of the challenges faced during this project were being able to differentiate at times between what was DNP project related and what was job expected. The DNP candidate needed to make the conscious effort to outline steps to prevent role conflict which helped tremendously during this project. The support of my preceptor who was also the co-chair of the workplace violence aided and kept me in the right direction with frequent meetings throughout the week.

Summary of this Scholarly Product

The mission of the PERT team was to improve the safety of staff and patients in the inpatient medicine units within my organization, which can only be fulfilled with the collaboration and buy-in of all stakeholders. The goal of this quality improvement project was to evaluate the adoption of the violent risk assessment tool and the effect of the PERT team to respond to mental health crisis situations on the inpatient medicine units. After evaluating the survey monkey that was sent out to all direct care staff on selected units as well as the PERT

calls to date, it's evident that assessing a patient behavior and calling for assistant from the PERT time, ensures the safety of patient and staff. The PERT team permitted for both empowerment and liability during caring for inpatients. When there was evident of aggression and or violent, staff also had the option to provide safe patient handling in a professional manner, without hindering the care of the patient. Executive leaders have increase communications internally and externally to other branches of the establishment relating to assaults and injuries from patient to staff and continue to be an open conversation amongst all direct care staff and leaders and our work to improve environmental safety for patients and healthcare providers. Sharing workplace violence data with the staff increases awareness and importance of reporting patient behaviors that hinder the daily workflow of the unit, and highlights resources available to all employees to provide a safe working environment. A combination of increasing awareness of what behaviors can trigger an assault and use the resources available to us all can jointly reduce the number of patient staff assaults in health care.

References

Almvik, R. P. (2008). *The Broset Violence Checklist: Risk assessment made essay.* St Olavs Hospital University. Trondheim.

ASIS Healthcare Security Council (2010). *Managing disruptive behavior and workplace violence in healthcare*. Retrieved from http://www.g4s.us_/~/media/Files/USA/PDFArticles/Hospitals%20and%20Healthcare/Council_Healthcare_WorkplaceViolence.ashx

Batras, D., Duff, C., & Smith, B.J. (2016). Organizational change theory: Implications for health promotion practice. *Health Promotion International*. Vol. 31(1), 231-241 doi: 10.1093/heapro/dau098

BjÖRkdahl, A., Hansebo, G., & Palmstierna, T. (2013). The influence of staff training on the violence prevention and management climate in psychiatric inpatient units. *Journal of Psychiatric & Mental Health Nursing,* 20(5), 396-404. doi:10.1111/j.1365-2850.2012. 01930.x

Center for Disease Control and Prevention (CDC, 2014a). *Violence in the workplace.* Retrieved from www.cdc.gov/niosh/docs/96-100

Center for Disease Control and Prevention (CDC, 2004). *Workplace violence prevention Strategies and research need*. Retrieved from http://www.cdc.gov/niosh/docs/2006-144/pdfs/2006-144.pdf

Center for Disease Control and Prevention (CDC, 2014b). *Occupational Violence: Workplace prevention for nurses.* Retrieved from http://www.cdc.gov/niosh/topics/violence/

Chapman, R., Styles, I., Perry, L., & Combs, S. (2010). Examining the characteristics of workplace violence in one non-tertiary hospital. *Journal of clinical nursing,* 19(3-4), 479-488. doi:10.1111/j.1365-02.2009. 02952.x

Clark. D.E., Brown. A.M., & Griffith. P. (2010). The Broset Violence Checklist: Clinical utility in a secure psychiatric intensive care setting. *Journal of psychiatric and mental health nursing.* 17, 614-620

Crisis Prevention Institute (2014). *About CPI.* Retrieved from http://www.crisisprevention.com/About-CPI

Forsyth, D. M., Wright, T. L., Scherb, C. A., & Gaspar, P. M. (2010). Disseminating evidence-based practice projects: Poster design and evaluation. *Clinical Scholars Review*, 3(1), 14–21

Gates, D., Gillespie, G., & Succop, P. (2011). Violence against nurses and its impact on stress and productivity. *Nursing Economics*, 29(2), 59-66

Gillespie, G.L., Gates, D.M., & Berry, P. (2013). Stressful incidents of physical violence against Emergency nurses. *The Online Journal of Issues in Nursing* 18(1) Manuscript2 doi: 10.3912/OJIN.Vol18No01Man02

Hodges, B. C., & Videto, D. M. (2011). *Assessment and planning in health programs.* (2nd ed.). Sudbury, MA: Jones and Bartlett Learning. Jacofsky, M.D., Melanie.D., Santos, T., Khemlani-Patel, S. & Neziroglu, F. (2013). *Anxiety disorder: Operant conditioning.* Retrieved from http://www.mentalhelp.net/poc/view_doc.php?type=doc&id=38493&cn=1

Jones, C. D., Manno, M. S., & Vogt, B. (2012). Tier one alert! A psychiatric rapid response team. *Nursing Management, 43*(11), 34-40. doi: 10.1097/01.NUMA.0000419447.44632.52

Kelly, D. L. (2011). *Applying quality management in healthcare: A systems approach*. (3rd ed.). Chicago, IL: Health Administration Press.

Kennedy, J., Bresler, S., Whiteaker, A., & Masterson, B. (2007). *Assessing violence risk in psychiatric inpatients: Useful tools.* Retrieved from http://www.psychiatrictimes.com/articles/assessing-violence-risk-psyhciatric-inpatientsuseful- tools

Kettner, P.M., Moroney, R.M, & Martin, L.L. (2013). *Designing and managing programs: An effectiveness-based approach*. (4th ed.). Los Angeles, CA: Sage.

Kim, S. C., Ideker, K., & TodicheeneyMannes, D. (2012). Usefulness of aggressive behavior risks assessment tool for prospectively identifying violent patients in medical and surgical units. *Journal of Advanced Nursing, 68*(2), 349-357.

Lanza, M., Rierdan, J., Forester, L., & Zeiss, R. (2009). Reducing violence against nurses: The Violence Prevention Community Meeting. *Issues in Mental Health Nursing,* 30(12), 745-750. doi:10.3109/01612840903177472

Larsen, D., Peters, H., & Keast, J. (2011). Using real-time patient feedback to introduce safety changes. *Nursing Management – United Kingdom,* 18(6), 27-31.

Loucks, J., Rutledge, D. N., Hatch, B., & Morrison, V. (2010). Rapid response team for behavioral emergencies. *Journal of the American Psychiatric Nurses Association, 16*(2), 93-100.

Luck. L., Jackson. D., & Usher. K. (2007). STAMP: components of observable behavior that indicate the potential for patient violence in emergency departments. *Journal of advance nursing.* 59(1), 11-19. doi: 10.1111/j.1365-2648.2007. 04308.x

McPhaul, K., London, M., & Lipscomb, J. (2013). A framework for translating workplace violence intervention research into evidence-based programs. *The Online Journal of Issues in Nursing*, 18(1).

Minnesota Department of health (MDH, 2014). *Workplace violence prevention: A comprehensive guide for employers and employees*. Retrieved from http://www.doli.state.mn.us/wsc/PDF/WorkplaceViolencePreventionGuide.pdf

Murray, J.S. (2007). Before blowing the whistle, learn to protect yourself. *American Nurse Today,* 2 (3), 40-42.

National Institute for Occupational Safety and Health (NIOSH, 2015). *Fast Facts: Home Healthcare Workers – How to prevent violence on the job*. NIOSH Occupational Safety and Health Administration [OSHA] (2004). *Workplace violence: OSHA Standards*. Retrieved from http://www.osha.gov/SLTC/workplaceviolence/standards.html

Occupational Safety and Health Administration (OSHA, 2015). *OSHA update guidelines on Workplace Violence in Healthcare*. Retrieved from http://www.shrm.org/hrdisciplines/safetysecurity/articles/pages/osha-violence-health-care.aspx

Pearce, C. (2007). Ten steps to carrying out a SWOT analysis. *Nursing Management*-UK, 14(2), 24. Retrieved from, the Walden library databases.

RegionsHospital.com (2014). *Workplace Violence.* Retrieved from https://www.regionshospital.com

Roche, M., Diers, D., Duffield, C. & Catling-Paul, C. (2010). Violence toward nurses, the work environment, and patient outcomes. *Journal of nursing scholarship.* 42 (1). Sigma Theta Tau International.

Sansone, R. A., & Sansone, L. A. (2014). Patient Aggression: Is the Clinical Practice Setting Safe? *Innovations in Clinical Neuroscience,* 11(11/12), 36-40.

Sharp, M.T. (2015). *Workplace: Assessing risk, promoting safety.* Retrieved from www.NursingMadeIncrediblyEasy.com

Society for Human Resource Management (2012). *Dealing with violence in the workplace*. Retrieved from http://www.shrm.org/templatestools/toolkits/pages/dealingwithviolenceintheworkplace.aspx#sthash.ewCEvwyq.dpuf

Song, J.W. & Chung, K.C. (2010). Observational studies: Cohort and Case-Control studies. *Plastic reconstructive surgery*. 126 (6): 2234-2242 doi: 10.1097/PRS.0b013e3181f44abc

Terry, A. (2012). *Clinical research for the doctor of nursing practice*. Sudbury, MA: Jones & Bartlett Learning.

Stokowski, L.A. (2010). *Violence: Not in my job description.* Accessed on January 24th 2015 from http://www.medscape.com/viewarticle/727144_print

Speroni, K., Fitch, T., Dawson, E., Dugan, L., & Atherton, M. (2014). Incidence and cost of nurse workplace violence perpetrated by hospital patients or patient visitors. *Journal of Emergency Nursing*, 40(3), 218-228.

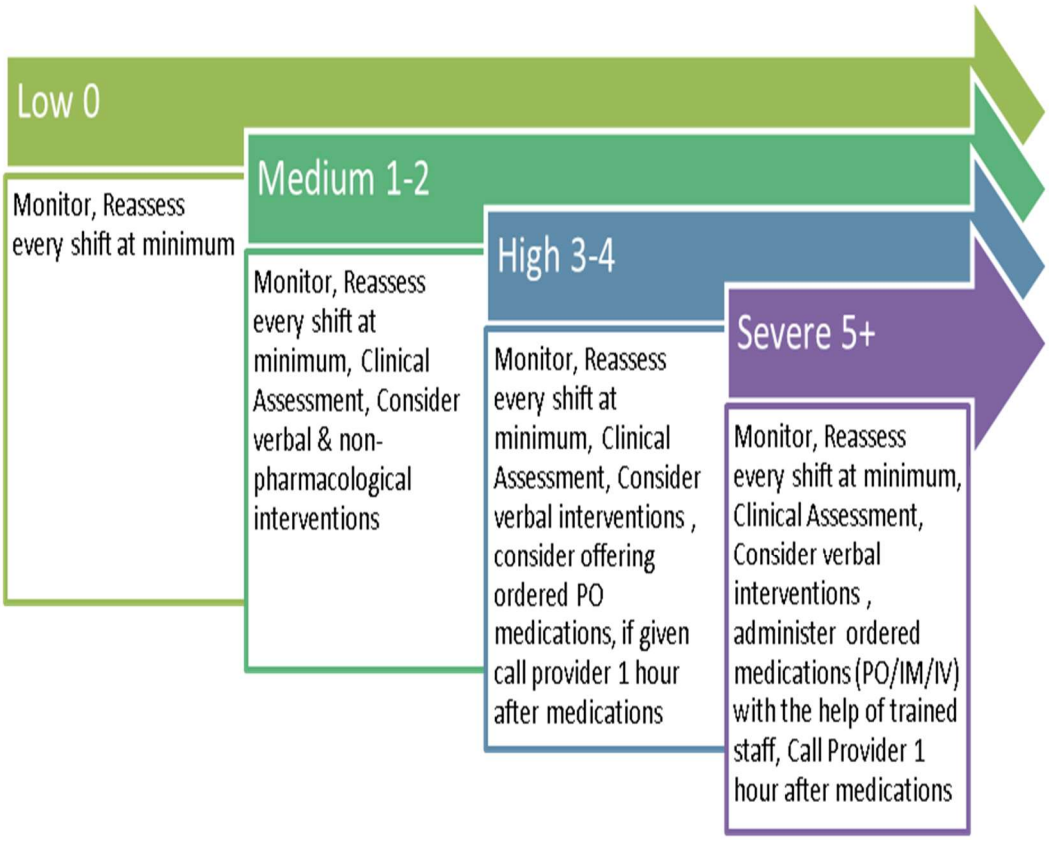
Vaaler, A.E., Iversen, V.C., Morken, G., Flovig, J.C., Palmstierna, T. & Linaker, O.M. (2011). Short-term prediction of threatening and violent behavior in an acute psychiatric intensive care unit based on patient and environment characteristics. *Biomedical Central psychiatric journal.* 11:44

Weiss, L.M., & Delia, L.L. (2007). Therapeutic Challenges Identified While Implementing a Mission and Cultural Change on an Acute Inpatient Psychiatric Unit. *Nursing Administration.* Vol. 31, No. 3, pp. 202–208. Wolters Kluwer Health | Lippincott Williams & Wilkins

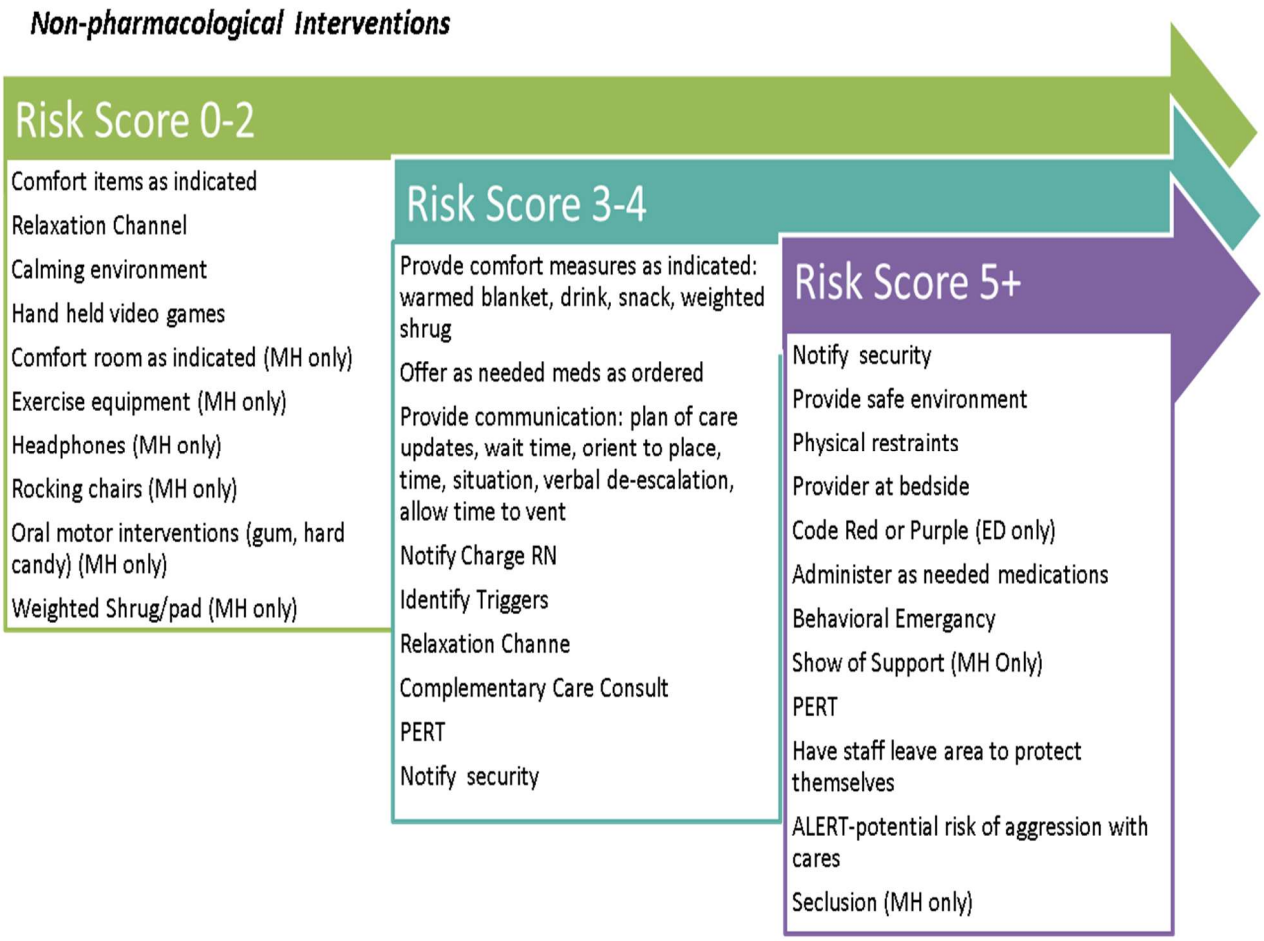
White, K. M., & Dudley-Brown, S. (2012). *Translation of evidence into nursing and health care practice*. New York, NY: Springer.

World Health Organization. (n.d.). *What is workplace violence*? Retrieved from http://www.who.int/violence_injury_prevention/injury/work9/en/index2.html

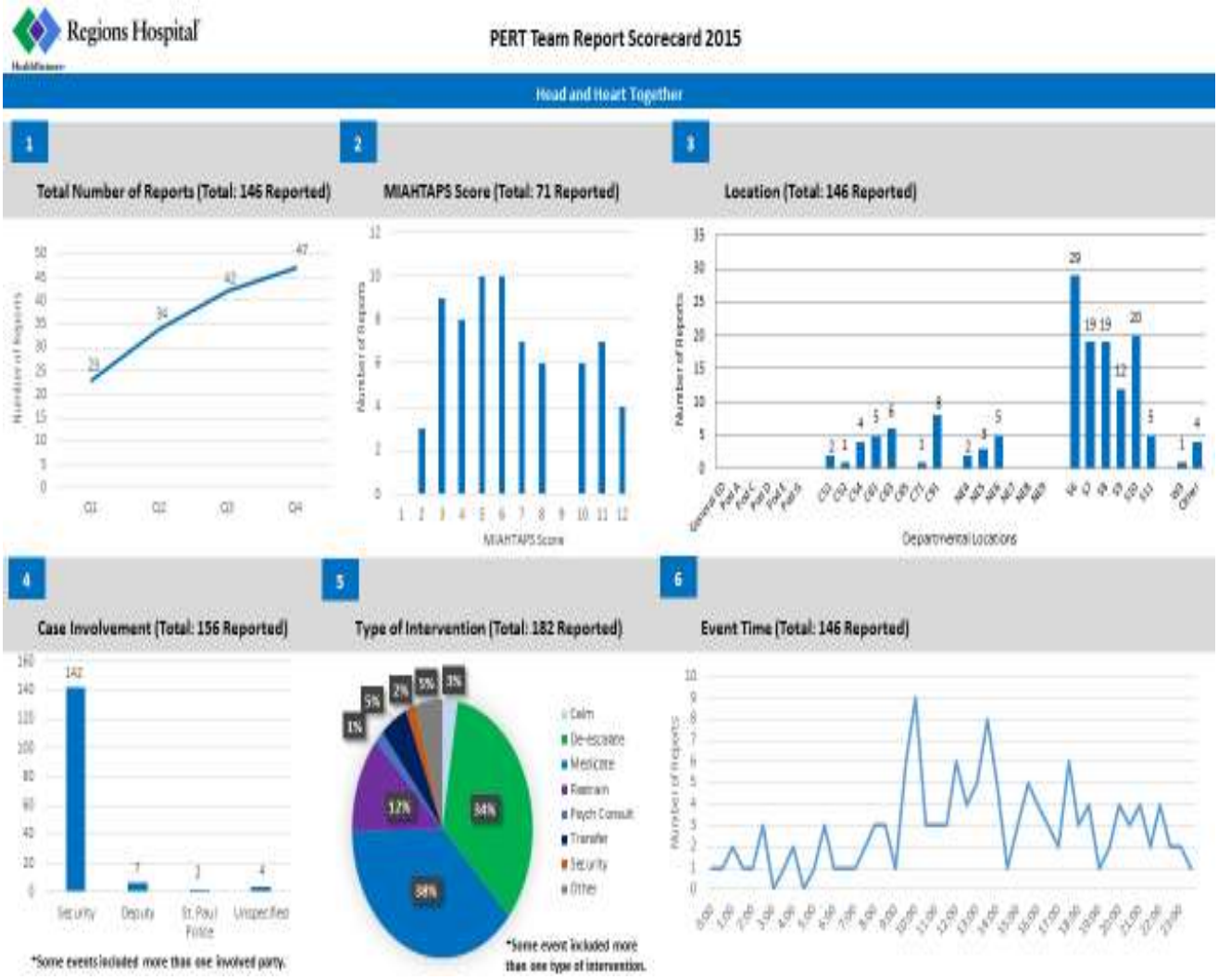
Appendix A: Scoring Guidelines for MIAHTAPS



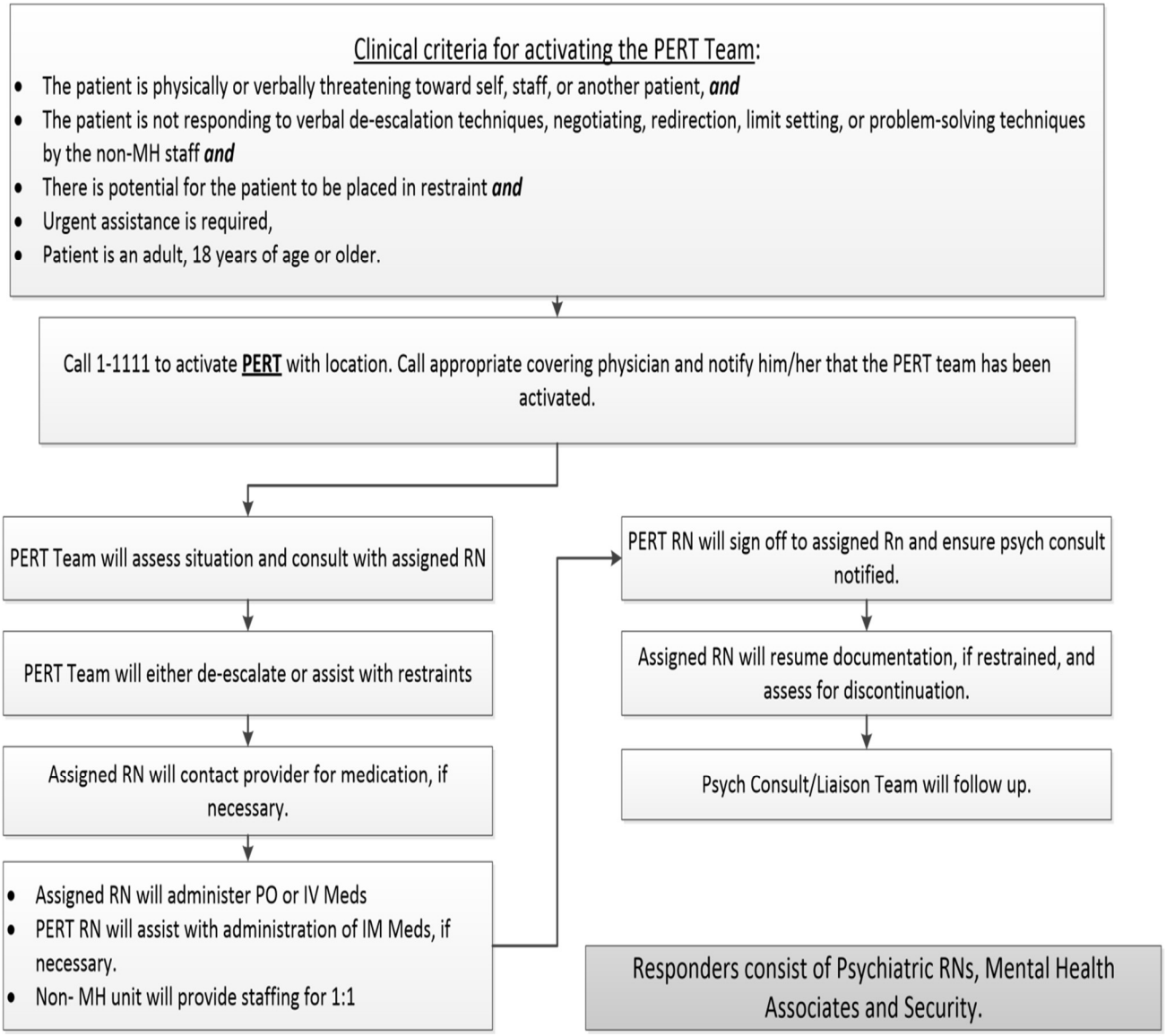
Appendix B: Non-pharmacological interventions used with MIAHTAPS



Appendix C: PERT team scorecard 2015



Appendix D: PERT Algorithm and Flow-chart - 2016



Appendix E: Curriculum Vitae

Angela Mackay

7262 Imperial Avenue S

Cottage Grove, MN 55016

AMACKAY72@GMAIL.COM

OBJECTIVE

To advance personally and professionally in the health care field.

LICENSURE

LOCKUP Training: Active verbal diffusion and physical control – Instructor training
Regions Hospital December 2015

Crisis Intervention Training (CIT): Verbal de-escalation training – Train the trainer
Regions Hospital November 2015

Simulation Facilitator
Health Partners June 2015

Registered Nurse (RN)
State of Minnesota

Public Health Nurse (PHN)
State of Minnesota

EDUCATION

Doctorate of Nursing Practice (DNP candidate): Practice-focus: Leadership
Walden University
Projected graduation date: Summer 2016

Masters of Science in Nursing (Leadership and Management): MSN

Walden University
August 2013

Bachelors of Science in Nursing: BSN
Metropolitan State University June 2011

Associate Degree in Nursing: RN
Century College May 2006

TRAINED MEDICATION AIDE: TMA
St. Paul College
2003

CHILD CARE LICENSURE
Resources of Child Care
2002

CERTIFIED NURSING ASSISTANT (CNA)
Thomas Health Care Institute, North Carolina
2000

MANAGEMENT OF CARING SERVICE (HNC)
Nene College University, Northampton, England
1999

NATIONAL CERTIFICATE HOTEL AND CATERING (BTEC)
Nene College, Northampton, England
1997

AFFILIATIONS & PROFESSIONAL ACTIVITIES AND ORGANIZATIONS

Member of:

- American Psychiatric Nurses Association (APNA)
- President of the Minnesota APNA Charter 2015
- Minnesota Psychology Association

- Minnesota Organization of Registered Nurses
- American Nurses Association

Workplace Violence Steering Committee (Education, Reporting, and Communication Committee) August 2015 to present
Regions Hospital and Health Partners

Total Joint Program May 2015 to present
Regions Hospital

Interdisciplinary Care Plan Design Team September 2014
Regions Hospital

Delirium Steering Committee 2015
HealthPartners

Psychiatric Emergency Response Team (PERT) Implementation December 2013
15 Non-Inpatient Medical Units (350+ beds), Regions Hospital

Educator and Trainer for Disruptive Behavior course January 2013 to present
(non-Mental Health staff), *Regions Hospital*

Safety Assistant Committee (Representing Mental Health Department) August 2013 to present
Regions Hospital

Falls Prevention Committee (Representing Mental Health Department) 2013 to present
Regions Hospital

Quality, Practice and Education Council (Representing Mental Health Department) 2012 to present
Regions Hospital

Unit Practice Council 2013 to present
Regions Hospital, Mental Health

Team Lead, Environmental Standardization 2012
New 100 bed Mental Health Building, Regions Hospital

Cultural Diversity Team 2012
Regions Hospital

After Visit Summary Committee 2012
Regions Hospital

Health and Wellness Committee 2013 to present
Regions Hospital

Community Service Learning 2006
Como Park Nurse Block Program and Head Start

EXPERIENCE

Mental Health Resource Nurse
Regions Hospital, 2013 – Present

- Develop daily duties of the mental health resource nurse
- Work alongside the inpatient psych consult team (rounding on 13 non-MH units)
- Coordinate with patient flow coordinator the transfer of patients needing Mental Health inpatient after discharge from Med-Surg unit
- Represented the Mental Health Department at the Quality, Practice, and Education Committee
- Facilitate Disruptive Behavior class for all non-MH staff hospital-wide
- Assisted Decentralize Educator for mental health with safety classes for mental health staff
- Assisted with orientating new mental health staff
- Developed and implemented the Psychiatric Emergency Response Team – Regions Hospital
- Developed and collaborated with the Simulation center in training the Mental Health staff in responding to crisis situation on the non-MH units

- Collaborated with the Emergency Room educator in providing chemical health emergencies series to direct care staff
- Assisted with de-escalation training program for health partners EMT staff
- Assisted with developing Mental Health Resource Nurse and consult program with Essentia Health Care
- Collaborate and work efficiently with Regions Hospital security staff to provide a safe and effective response time to crisis situations
- Assisted with bi-monthly mock codes for the Mental Health Department
- Represented mental health department at the Interdisciplinary design team kickoff and super-user training sessions
- Attended Ambassador for mental health anti-stigma "Make it OK" training
- Member of the mental health and emergency room collaboration team
- Collaborate with pharmacy manager in setting up the behavioral emergency medications in the medication system (Pyxis)
- Team lead as a Doctorate candidate the Workplace Violence Prevention Committee with preceptor
- Collaborate with St Cloud director of the mental health department relating to their BERT program and electronic assault reporting system
- Facilitate de-escalation class for staff at Gillette Hospital
- Facilitate de-escalation class for psych and inpatient medicine residents at Regions Hospital

Resource/Charge Nurse, Mental Health
Regions Hospital, 2007 - 2013

- Collaborate with patient flow coordinator in transferring patients to MH units
- Responsible for decision making and supervising night shift in the absence of unit managers

- Collaborate in the development of policies and procedures relating to mental health services at Regions Hospital
- Addressing staffing issues
- Training and education of night staff
- Assigning float MH staff

Registered Nurse
United Hospital, 2006 – 2011

- Providing care for patients with Ortho and Neuro needs
- Participated in a variety of health care initiatives
- Provided leadership and development of the role of the nursing assistants
- Collaborated with leaders and educators to develop and implement initiatives to improve health and wellbeing of patients and staff

Nursing Assistant, Trained Medication Aide, Registered Nurse
Transitional Care Unit, 2004 – 2008

Certified Nursing Assistant, Trained Medication Aide
Roseville Assisted Living, 2003 – 2004

Nursing Assistant
Ameri-Care Staffing, 2000 – 2003

Rehabilitation Unit Supervisor
Brain Injury Services, Northampton, England
1990 – 2000

PRESENTATIONS:

- Several presentations throughout the hospital 2016: Workplace Violence, Patient and staff safety, Violence Risk Assessment Tool- MIAHTAPS.
- Presented October 2015: American Psychiatric Nurses Association annual conference in Florida- Evidence Based Workplace Violence Risk Assessment tool (MIAHTAPS: Altered Mental Status, Irritability, Agitation, History of Violence, Threatening, Attacking objects, Pacing and Staring).
- Mental Health Partners Advisory Council (PERT power point presentation, February 2015)
- Patient Safety Council: Regions Hospital (PERT power point presentation, February 2015)
- Workplace violence assessment tool (presentation to the WPV committee)
- Senior Leadership Disruptive Behavior and de-escalation class 2015
- Make it ok campaign (mental health anti-stigma) Health Partners Bloomington, MN September 2014 and Alcohol and Drug Abuse Program, MN June 2015
- American Psychiatric Nurses Association 27th annual conference in Indianapolis (Psychiatric Emergency Response Team poster presentation, October 2014)

AWARDS, PUBLICATIONS, & NOMINATIONS

- Nominated for the March of Dimes Nurse of the Year award 2014: Mental Health
- Nominated for the March of Dimes Nurse of the Year award 2015: Mental Health and Innovation for the work done with the Psychiatric Emergency Response Team at Regions Hospital
- Receive award for Nurse of the year: March of Dimes 2015 for Mental Health

- Received award from the American Psychiatric Nurses Association 2015 for Innovation relating to the work done at Regions Hospital with the implementation of the Psychiatric Emergency Response Team.
- Article published in the Nursing Notes by Johnson & Johnson Pharmaceutical: Title: Why Talking About Mental Health Matters and Improving Psychiatric Care: One Nurse-Led Idea 2016
- Podcast for Johnson & Johnson Pharmaceutical 2016

LANGUAGES

Fluent in Sierra Leonean Creole

REFERENCES

References available upon request