

1-1-2011

Nurses' Knowledge and Perceptions of Rapid Response Teams in a Psychiatric Facility

Kimberly Cecil-Riddle
Walden University

Follow this and additional works at: <http://scholarworks.waldenu.edu/dissertations>

 Part of the [Nursing Commons](#), and the [Psychiatric and Mental Health Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Health Sciences

This is to certify that the doctoral study by

Kimberly Cecil-Riddle

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. Andrea Jennings-Sanders, Committee Chairperson, Health Services Faculty

Dr. Janice Long, Committee Member, Health Services Faculty

Dr. Sue Bell, University Reviewer, Health Services Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University

2014

Abstract

Nurses' Knowledge and Perceptions of Rapid Response Teams in a Psychiatric Facility

by

Kimberly Cecil-Riddle

MS, Murray State University

BS, Murray State University

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

August 2014

Abstract

Psychiatric illnesses can sometimes lead to behavioral outbursts that need to be addressed quickly to deescalate potentially explosive situations. Nurses are in a unique position to respond to such outbursts by calling for a rapid response team. Nurses who are part of the rapid response team should be well-informed of their roles and responsibilities in managing aggressive and violent behavior. The purpose of this project was to explore RN's and LPN's knowledge and perceptions of a rapid response team in a psychiatric facility. The Iowa model of evidence-based practice provided the framework to integrate theory into practice to improve care. A quantitative descriptive design was implemented with a convenience sample of nurses using a 4-part questionnaire. Of the 64 surveys distributed on 5 wards, 59 were completed for a response rate of 92%. Descriptive statistics were used to analyze nurse responses to demographic data and background data. A Chi-square statistic was calculated to investigate the relationship between RN and LPN responses to the Likert Agreement Scale; no significant difference in responses was found. Open-ended questions allowed nurses to comment on their role and position during a code. The comments were sorted into categories of reoccurring themes. Results suggested that nurses need to understand signs of behavioral escalation and strategies to deescalate a potentially volatile patient. Nurses commented that knowledge during a code, reasons for calling a code, and good communication skills are essential in code situations. Findings from this project can benefit nurses who work psychiatric emergencies by underscoring the need to development of psychiatric rapid response teams and to update current standards of inpatient care.

Nurses' Knowledge and Perceptions of Rapid Response Teams in a Psychiatric Facility

by

Kimberly Cecil-Riddle

MS, Murray State University

BS, Murray State University

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

August 2014

UMI Number: 3633624

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI 3633624

Published by ProQuest LLC (2014). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Dedication

This project is dedicated to my late son Dylan Michael Riddle who inspired me to start this journey. In addition, I dedicate this project to my family: my husband Mathew and our sons Nathan, Ethan, and Dustan; and my fellow co-workers who have worked with me as I strived to become a scholarly practitioner and nurse leader.

Acknowledgments

I would like to thank Western State Hospital as well as my family who have helped me reach this point in my academic career. Thank you to my preceptor Dr. Barbara Newell, my professors Dr. Andrea Jennings-Sanders, Dr. Janice Long, and Dr. Sue Bell. A special thanks to all nurses who participated and those co-workers who helped me through this project: Jennifer Fritz, APRN; Dr. Nayyar Iqbal, Chief of Staff; John Honnold, Director of Computer Operations; Andrea Miracle, RN Consultant; Dr. Susan Vaught, Director of Psychology, and my statistician, Professor Patrick Riley.

Table of Contents

List of Tables	iv
List of Figures	v
Section 1: Overview of the Evidence Based Project	1
Introduction.....	1
Problem Statement.....	2
Purpose Statement and Project Objectives	3
Significance to Practice	4
Project Question(s).....	5
Evidence-Based Significance of the Project.....	6
Social Change in Practice	7
Definition of Terms.....	9
Assumptions and Limitations	10
Summary.....	11
Section 2: Review of Literature and Theoretical and Conceptual Framework.....	12
Specific Literature.....	13
General Literature	17
Conceptual Framework.....	22
Section 3: Methodology	25
Project Design/Methods.....	25
Population and Sampling	25
Data Collection (Instrument and Protection of Human Subjects)	26

Data Anlaysis	28
Project Evaluation Plan.....	29
Summary	30
Section 4: Findings, Discussion, and Implications	31
Findings.....	31
Discussion.....	31
Implications.....	35
Section 5: Scholarly Product.....	43
References.....	44
Appendix A: Signs of Escalulation.....	52
Appendix B: Iowa Model of Evidence Based Practice.....	53
Appendix C: Part 1 Demographic Data Collection Tool.....	54
Appendix D: Part 2 Nurses Perception and Knowledge Survey.....	55
Appendix E: Part 3. Five-Point Likert Agreement Scale.....	56
Appendix F: Part 4. Open-Response Questions.....	57
Appendix G: Invitation to Participate	58
Appendix H: Letter of Participation	59
Appendix I: Letter of Cooperation.....	60
Appendix J: Consent.....	61
Appendix K: Permission to Use Tool	63
Appendix L: Permission to Modify Tool.....	64
Appendix M: Poster Presentation	65

Appendix N: Table 1. Survey Demographics66

Appendix O: Table 2. Detailed Responses68

Appendix P: Table 3. Detailed Likert Agreement Scale.....69

Curriculum Vitae70

List of Tables

Table 1. Survey Demographics.....	66
Table 2. Detailed Responses	68
Table 3. Detailed Likert Agreement Scale.....	69

List of Figures

Figure 1. Signs of Escalation52

Figure 2. Iowa Model as Framework for a RRT53

Section 1: Overview of the Evidence-Based Project

Introduction

Psychiatric illnesses can lead to behavioral problems that escalate while patients are hospitalized, even to the point of overwhelming code responders. These care needs can often lead to a failure to rescue and contribute to in-hospital mortality and accidents (Buist et al., 2002). Additionally, failure to recognize crisis situations can damage the nurses' perception of their caregiving abilities and create confusion about team roles during these crises (DeVita et al., 2006). This may reduce the effectiveness of nurses in the hospital as a whole. Nurses who fail to identify behavioral outbursts are more likely to use invasive and potentially retraumatizing interventions, further decreasing ward instability.

Behavioral issues need to be addressed as soon as possible, to resolve potentially explosive situations and establish safety for patients and staff (Loucks, Rutledge, Hatch, & Morrison, 2010). Developing a rapid response team (RRT) is one step that hospitals can take to provide safety nets for patients who deteriorate and develop care needs outside the scope of clinical staff knowledge and skills (DeVita et al., 2006). A well-established RRT that have knowledge and training are prepared for early identification of unstable patients who may potentially suffer a medical emergency (Institute for Healthcare Improvement [INH], n.d.), such as cardiac or respiratory arrest, during outbursts and behavioral emergencies. Planning for such possibilities reduces mortality and accidents, improves ward stability, and helps to clarify nursing roles in crisis situations (Buist et al., 2002).

Problem Statement

Behavioral outbursts in patients with psychiatric illnesses can be problematic for staff members who are not trained to deal with these events or staff who are unfamiliar with the patients' histories. People referred for inpatient psychiatric care often become agitated, and outbursts constitute threats to their safety as well as the safety of others. Escalation to outbursts often follows a predictable course of phases, which is summarized in Appendix A.

The first phase of escalation to outburst usually involves yelling, screaming, threatening, demanding, and/or cursing (Loucks et al., 2010). If these "yellow flags" are ignored and allowed to continue, patients frequently proceed to Phase 2. Phase 2 typically includes talking loudly, pacing the floors, or becoming verbally abusive to staff or other patients. This phase can shift to agitation and, ultimately, to acting-out behavior that creates danger for everyone in the environment (Loucks et al., 2010). Often, agitated patients assault others and/or harm themselves (Donat, 2003). This last phase of escalation may include spitting, assaulting others, kicking, or throwing objects (Loucks et al., 2010).

Developing a structured and deliberate plan to interrupt the phases of escalation can minimize injuries to staff and to patients, and prevent or defuse major incidents, if strategies are implemented effectively. However, many staff members lack the training necessary to engage in such strategies and often resort to more invasive and potentially traumatizing interventions such as restraints, seclusions, or intramuscular injections (Agency for Healthcare Research and Quality [AHRQ], 2013). These interventions can

reduce risk in the moment, but also often reduce positive treatment outcomes for patients, increase risk for staff injury, create a culture of fear within treatment facilities, and lead to later, more severe outbursts from patients left feeling emotionally distraught, self-injurious, unbalanced, and unsafe (Singh, n.d.). De-escalation strategies involving calm verbal techniques without the use of restraints and seclusion result in better treatment outcomes (Jonikas et al., 2004). Hospitalized individuals need an RRT to deescalate potential volatile situations, thus allowing earlier treatment for overall behavioral and psychiatric issues (Loucks et al., 2010) and encouraging these better outcomes.

Purpose Statement and Project Objectives

The purpose of this project was to explore nurses' knowledge and perceptions of a RRT in an inpatient psychiatric facility. Nurses are often the first professionals to recognize deteriorating environmental conditions and patients progressing through phases of behavioral outbursts. As such, nurses are often the professionals activating a code or calling for help within hospitals. Shapiro and Donaldson (2010) and Pusateri, Prior, and Kiely (2011) found that, in most cases, clinical outcomes following code activations depend on nurses' perceptions and clinical judgment. Related objectives include determining characteristics of a successful RRT, specifically exploring the role of the nurse on the teams and determining challenges associated with activating a RRT.

Western State Hospital (WSH) does not have an assigned RRT. All available staff responds in the event a code is initiated. Licensed staff is given initial orientation on behavioral emergency standard operating procedures and are trained in crisis prevention intervention (CPI) techniques. Additional training includes yearly seclusion and restraint

training and yearly questionnaire testing on behavioral emergencies. In 2012, WSH had 166 behavioral emergencies in which 12 patients were injured. This same year, there were a total of 189 employee incidents involving patients. Of the 189 employees, 158 were involved in aggressive patient behavior incidents requiring 21 to seek medical attention. Moreover, 31 employees were involved in nonaggressive patient behavior incidents requiring 13 to seek medical attention (WSH, 2013). In 2013, WSH had 201 behavioral emergencies injuring 10 patients. In 2013, WSH had 181 total employee incidents consisting of aggressive behavior or nonaggressive behavior. There were 166 employees involved in aggressive patient behavior incidents requiring 25 to seek medical attention. Furthermore, 29 employees were involved in nonaggressive patient behavior incidents requiring 15 to seek medical attention (WSH, 2013).

It is imperative to promote an understanding on how to prevent adverse events. The data collected from the project was used to determine if more education was needed and to provide clarification of the team members' roles. A goal was to decrease the number of injuries that occurred through education and training. Moreover, measurement of injuries and behavioral codes initiated was acquired on a monthly basis through quality improvement.

Significance to Practice

An RRT typically creates reductions in the number of invasive interventions used in psychiatric hospital settings. Additionally, RRTs have been shown to reduce emergency room repetition or the necessity of sending patients for emergency evaluation due to injury (AHRQ, 2013). RRTs can reduce the number of injuries to mental health

workers, reduce injuries to patients not involved in outbursts (e.g., bystanders or aggression targets), and improve community relations by helping patients regain control while creating a safe environment for everyone. The body of literature describing the implementation of RRTs is growing, confirming the need for structured strategies and staff training to reduce violence in hospital settings (Shapiro & Donaldson, 2010). These teams are effective in improving outcomes for patients with emergent medical issues who become volatile (Rutledge, Hatch, & Morrison, 2010).

Nurses are the mainstay of patient care in any hospital setting, and they are subjected to violence in the workplace, both verbal and physical. Emotional abuse accounts for 14% of reported abuse incidents, while assault accounts for 20% (Roche, Diers, Duffield, & Catling-Paul, 2010). Miscommunication among clinical staff, ward instability, and a lack of leadership is associated with adverse patient outcomes and increases in violence directed toward caregivers. Therefore, it is important for nurses to understand the complexity of their environment and to be aware of negative perceptions that can have negative consequences (Roche, Diers, Duffield, & Catling-Paul, 2010).

Project Questions

The questions for this project included the following:

1. Are nurses knowledgeable about initiating psychiatric codes, and the roles they play in code responses?
2. What are nurses' perceptions of their roles in activating codes and participating in codes?

3. What are the challenges associated with activating RRTs in settings naïve to this practice?

Evidence-Based Significance of the Project

RRTs count on nurses as clinical experts to assess patients' deteriorating conditions. Nurses who are trained in rapid response can effectively respond to warning signs of escalating outburst phases typically exhibited in psychiatric emergencies, as well as proactively address additional challenges in psychiatric settings (Rutledge et al., 2012). Nurses who participate in RRTs should be knowledgeable about their team roles and responsibilities and about how their own behavior and reactions can have an impact on individuals being assessed (Crisis Prevention Intervention [CPI], 2005). Rutledge et al. (2012) described psychiatric nurses as individuals who use methods such as tone, pace, and activity level to control the environment to prevent outbursts or unpredictable behaviors. These interventions have been shown to be the most effective methods of preventing negative outcomes and/or adverse events.

This project has significance to the increasing body of literature dedicated to RRTs due to its exploration of nurses' roles and perceptions related to RRTs in behavioral emergencies. Nurses who lack experience with initiating and participating in emergency codes may feel inadequate in their role during those codes (Clements, 2011), reducing good clinical outcomes. In order to facilitate better outcomes, health care providers, specifically nurses, must be trained in the technical skills necessary to manage these emergencies while maintaining a safe and secure environment for all people involved (CPI, 2005).

Nurses must be able to recognize warning signs before behavioral emergencies occur. They must develop an awareness of trends in patients' statuses, know how to activate an RRT response if needed, and know how to provide nurse-to-nurse collaboration to prevent intramuscular injections, restraints, or seclusions (AHRQ, 2012). Experienced clinicians can provide advanced care before the patient worsens, fostering the use of a team approach (Williams et al, 2011), facilitating better clinical outcomes, and helping nurses to feel adequate in their team roles during such emergencies. Leach, Mayo, and O'Rourke (2010) found that RRTs contribute to the number of lives saved during medical emergencies. RRTs are significant to practice as evidence by reduced patient mortality, promotion of health care quality, and promotion of safety efforts (INH, n.d.). Therefore, it is critical for nurses to make decisions to intervene, in order to prevent adverse outcomes. They should be able to interpret and synthesize patient symptoms in order to make sound clinical decisions (Leach et al., 2010).

Implications for Social Change in Practice

Implementing an RRT produces social change through increasing understanding between staff members responsible for activating emergency codes. Lockes et al. (2011) recommended that all new team members know expectations of their role when responding to behavioral emergencies. Thus, training in-services are essential. This process can cause positive social changes in hospital environments by improving human and social conditions on treatment wards. This improves ward stability and reduces risk for patient escalation. Moreover, these changes help with nursing performance

improvement efforts, and they promote perceptions of worth, perceptions of dignity, and quality of care for patients (Loucks et al., 2011).

Mental illness represents vulnerable populations that can have higher comorbidities than those with no mental illness, and they often have reduced access to care and treatment in their communities. The National Institute of Mental Health (n.d.) found in 2008 that 58.7% of adults in the United States with a serious mental illness (SMI) received treatment for mental health problems. Individuals who are admitted are either court-ordered into care or come into hospitals voluntarily. Most have received little to no treatment for their illnesses prior to arrival. These illnesses include, but are not limited to, depression, cognitive disorders, alcohol and substance-use disorders, and psychoses. Disruptive behavior associated with untreated or poorly treated mental illnesses can become epidemic in inpatient settings without nursing interventions for aggression, agitation, psychosis, cognitive impairment, and confusion (Rutledge et al., 2012). Nursing interventions such as a well-implemented RRT have the potential to break cycles of under-treatment/treatment refusals, relapse or decompensation, community outbursts, hospitalization, and hospital violence.

With the intention of producing a social change, staff members need to embrace the necessity of an RRT. Leadership support in nursing departments promotes staff buy-in and dissemination of information and reinforces agency dedication to patient and staff safety. By implementing and educating toward an RRT, nurse educators can heighten staff awareness of multiple nursing skills and strategies to promote change in practice (Crawford, 2003). Additionally, educating nurses about behavioral issues and de-

escalation techniques, the cornerstone of RRT establishment, can cause a positive cultural change within hospitals by reducing staff helplessness in crises, improving staff responses in all aspects of behavioral crises, and increasing positive patient outcomes. When nurses are transformed into scholar-practitioners using evidence-based strategies and practices, psychiatric emergencies in facilities begin to decline. Crawford (2003) found that nurses should follow what is current, but should also keep up with changes in practice to meet new demands. Therefore, when RRTs are initiated, nurses solidify their roles in crisis situations, better prepare for crises, and engage in the follow-up necessary to perform duties successfully (Clark, 2008).

Definition of Terms

Behavioral emergency: Behavioral emergencies are also known as psychiatric emergencies, mental health crises, or behavioral crises. These events occur when patient behavior escalates through phases of outburst, creating danger to themselves, other patients, and staff members (Loucks et al., 2010).

Behavioral outburst: Behavioral outbursts include verbal and/or physical violence such as cursing, hitting, or spitting (Loucks et al., 2010).

De-escalation Strategies: De-escalation strategies are techniques used during potential crisis situations to prevent people from causing harm to themselves or others (CPI, 2005).

Likert scale: A Likert scale is a psychometric measurement of participant responses, in which participants' rate perceptions across a preestablished range of possibilities, typically using 5, 6, 7, 8, or 9 possibilities (Bagshaw et al., 2010).

Medical emergency: Medical emergencies include acute illnesses or injuries that pose immediate risks to patients' lives or long-term health (WSH, 2012).

Nurse engagement: Nurse engagement is a term that indicates a nurse with greater than 3 years' experience (Wynn, Egelke, & Swanson, 2009), theoretically "engaged" in their practice or field.

Psychiatric Illness or mental Illness: These terms refer to a wide range of mental health conditions and disorders that affect mood, thinking, and behavior (WSH, 2012; NAMI, n.d.).

Rapid response team (RRT): An RRT is a multidisciplinary team trained to respond to and evaluate patients showing signs and symptoms of rapid deterioration of behavioral stability (The Hospital Rapid Response Team, n.d.).

Team leader: Team leaders provide guidance, leadership, instruction, and direction to groups of people for the purpose of achieving a key result (Leach & Mayo, 2013).

Assumptions and Limitations

The primary limitation of this project was the small sample size. Convenience sampling of 60 nurses may not provide enough evidence to represent the full spectrum of nurses' experiences and knowledge of RRTs. Generalizability was limited due to the small sample size, single location, and type of emergency chosen.

Summary

Behavioral outbursts need to be addressed quickly to de-escalate potential explosive situations, thus preventing potential injury to patients and caregivers, allowing

for prompt treatment to avert medical crisis and alleviate emotional suffering and to increase the odds of successful psychiatric treatment (Loucks et al., 2010). Nurses are in a unique position to respond to such outbursts. The nursing process is dynamic and allows adaptation to practice across the continuum of care, including learning and employing de-escalation techniques grounded in sound nursing knowledge.

RRTs are a recognized effective way to bring nurses to the forefront in managing behavioral crises. Nurses who are part of RRTs should be well-informed of their roles and responsibilities in managing aggressive and violent behavior. In addition, they should have a comprehensive understanding of their own behavioral responses and how those responses can have an impact on patients in behavioral crises (CPI, 2005). With training and awareness of their own reactions, nurses in RRTs can proactively handle agitated patients, using the safest and least restrictive means. Ultimately, nurses in RRTs can facilitate effective communication among members of a health care team, promote teamwork, and foster greater patient safety (AHRQ, 2013).

The next few sections of this project consisted of a review of literature concerning RRTs. Multiple databases were utilized to obtain the best evidence for this topic. Utilizing the Iowa model of evidence based practice; these articles were reviewed to determine a need for this project. Once data showed a need and approval was obtained, I began data collection over a one day period. After the results are disseminated, recommendations were made.

Section 2: Review of Scholarly Evidence

Nurses are frequently the first professionals to recognize escalating events that can lead to behavioral outbursts. As such, nurses need to be knowledgeable of their role and the perceptions they have when activating a code or calling for help within the hospital. The purpose of this project was to explore nurses' knowledge and perceptions of a RRT in an inpatient psychiatric facility. In addition, I reviewed the challenges associated with activating a code and the clinical-making skills when all available staff responds.

A review of literature pertaining to the nurses' knowledge and perception was collected using the following nursing and health databases: CINAHL, MEDLINE, and Ovid. Search terms used included *rapid response team*, *nurse perceptions and knowledge*, and *behavioral response team*. Exclusion criteria included RRT. The term nurse engagement or years of experience became apparent during the literature review. Multiple studies were reviewed; however, only 12 articles were chosen for the review. One study pertained to implementation of a behavioral emergency response team (BERT; Loucks et al., 2010); whereas two studies pertained to a medical emergency team (MET; Bagshaw et al., 2010; Daffurn et al., 1994). The nine other studies (Brown, Anderson, & Hill, 2012; Benin et al., 2012; Pena et al., 2011; Shapiro, Donaldson, & Scott, 2010; Thomas et al., 2007; Williams et al., 2011; Wynn et al., 2009; Wynn, 2007; Salamonson, van Heere, Everett, & Davidson, 2005) described a RRT in relation to nurse perceptions, knowledge, and years' experience.

RRT Specific Literature

The challenge most hospitals face is in identifying changes patient symptoms or conditions that lead to volatile situations or complications such as death (Loucks et al., 2010). Nurses should be trained to recognize patients who are presenting signs and symptoms of a life-threatening complication. Shapiro et al. (2010) found that nurses are the individuals who most often identify codes and alert health care teams to rapid deterioration. This action promotes timely rescue efforts and prevents higher-risk interventions such as seclusion and/or restraint. For this reason, intervention success depends on nursing knowledge, vigilance, and clinical decision-making skills (Shapiro et al., 2010).

Researchers have shown both positive and negative implications for employing a RRTs. Negative implications identified by Benin et al. (2012) included limited human power, reduced autonomy for trainees, and tension among staff. In contrast, Benin et al. found that the positive implications of RRTs were that they strengthened nursing morale and empowered nurses by providing immediate access to a team of experts. Additionally, facility-wide benefits were noted, including improvement in hospital culture of safety, hospital employee morale, and interdisciplinary collaboration. Professional respect increased amongst RRT members, enhancing collaboration about diagnoses and treatment strategies. Researchers hypothesized that the intense communication necessary to work with RRTs was a critical factor in increasing collaboration amongst the teams (Thomas et al., 2007). Moreover, Thomas et al., found knowledgeable nursing staff increased the incidence of identifying deteriorating patients and initiating successful

rescue; therefore, RRTs also improved overall patient outcomes.

Education and training are key components to a team approach in order to have a desirable clinical outcome. Williams et al. (2011) examined nursing perceptions of RRTs and found that the multidimensional experience of nurses helped with problem-solving when there were changes in environments of care and helped to promote nurse autonomy. Furthermore, Williams et al. found that team approaches to behavioral crises resulted in higher quality of care and more expert treatment than individual nurses could provide. However, nursing knowledge in initiating the activation of RRTs was essential to therapeutic outcomes. In comparison, Wynn et al. (2009) reported similar findings in a survey of 75 staff nurses who responded to codes. Wynn et al. found that educational level and nursing experience comprised autonomous predictors of code outcome. Bachelor of Science in Nursing (BSN) nurses were 5 times more likely to call a code than nurses with more than 3 years of experience, leading to better clinical outcomes. These clinical outcomes may include fewer restraints, intramuscular (IM) injections, and less pharmaceutical interventions with proper de-escalation techniques.

Nurses are in a unique position to provide better clinical outcomes through nurse engagement, perception, and positive nurse patient relationship. The relationship between nurse characteristics and nurse engagement in RRTs was studied by Wynn (2007). Wynn found that the nurses' actions and perceptions varied between nurses who cared for and had relationships with their patients. These nurses independently called codes, whereas nurses who did not have engagement had to be told to call codes. Thus, the roles of nursing in patient care have an impact on patient safety and timeliness of

calling codes and engaging RRTs. In contrast, Daffurn et al. (1994) conducted a 2-year study of registered nurses (RNs) to determine opinions, knowledge of, and use of the MET system. A questionnaire consisting of hypothetical situations was given to 141 nurses. Daffurn et al. indicated that nurses were in favor of METs; however, some could not determine severe deterioration and did not know criteria to follow for activating METs. Education for both medical and clinical staff is needed on the importance of and adoption of METs.

Identification of deteriorating patients calls for knowledgeable nurses who can identify these warning signs. The concept of RRTs was studied by Brown et al. (2012) to determine nursing perceptions and knowledge of RRTs using a survey approach. Brown et al. found that nurses needed more education on early identification of deteriorating patients. Brown et al. recommended case studies and simulations to further test knowledge of when to activate codes. In order to empower nurses and promote autonomy, nurses need knowledge of well-worded hospital policies and procedures. Pena et al. (2011) also recommended educational classes with specific information on code activation and warning signs to identify deteriorating patients. Bagshaw et al. (2010) conducted a survey of 275 nurses to determine nursing behavior and beliefs related to the Medical Emergency Team (MET) system in a Canadian Tertiary Hospital. Bagshaw et al. concluded that a lack of communication between MET team members and an inadequate assessment of patients in crisis contributed to failure to rescue. Bagshaw et al. also evaluated obstacles to activating codes, whether or not nurses found METs useful, precipitating events leading to codes, and code outcome (e.g., did patients benefit from

code activation). Reportedly, 94% of nurses believed that METs provided positive patient outcomes; however, nurses were not competent in activating codes without calling physicians first, due to fear of criticism (Bagshaw et al, 2010). Nurses often feel a need to obtain permission most often due to hospital policy or the tension they feel calling a certain provider.

Initiating a code requires confidence amongst clinical staff as well as knowledgeable clinical skills. Salamonson et al. (2005) presented a descriptive exploratory survey to nurses to collect data on their satisfaction with and the perceived benefits of RRTs, in an attempt to determine which nurses would be most likely to activate use of RRTs. Salamonson et al. found that experienced nurses were more likely to call codes and to be more confident in their decision-making. Out of 73 questionnaires, Salamonson et al. found that the average years of nursing experience reported was 12.3 years. Salamonson et al. found no correlation between work status (part-time or full-time). Thus, years of experience in the field proved to be the most important variable. Salamonson et al. recommended increased education for clinical staff to promote quality improvement, including briefing sessions on the benefits of RRTs. In addition, Salamonson et al. recommended that nurses become more vigilant in identifying deteriorating patients and activating codes. In comparison, Loucks et al. (2011) found that nurses trained in behavioral health could de-escalate dangerous and potentially explosive situations more easily than nurses without such training.

Training and experience is an important component to team approach. Loucks et al. (2011) performed a study to evaluate behavioral emergency response teams (BERTs).

These response teams were implemented to address episodes of disruptive or threatening behavior that compromised the safety and well-being of others. This team implemented a BERT pilot program in 2007. They provided educational activities and cue cards to assist nurses in identifying situations requiring calling of codes and interviewed 39 nurses to determine their knowledge, experience, and comfort level with activating BERTs. Additional benefits of BERTs included enhanced collaboration and communication amongst the staff involved. Loucks et al. concluded that it was essential that all members who responded to the behavioral crisis be debriefed immediately following the incident to determine resolution to any issues and how the crisis situations could have been handled differently. Both Salamonson et al. and Loucks et al. found satisfaction, debriefing, and perceived benefits of RRTs are enhanced with education and training.

General Literature

Effective teamwork can lead to early intervention and avoid deterioration. The IHI (2004) identified a need for RRTs as part of its 100,000 Lives Campaign in 2004, which was an initiative identified during the IHI's 5 Million Lives Campaign. The IHI proposed development of an initiative to decrease mortality by rescuing distressed patients early and avoiding further deterioration. Positive patient outcomes follow institution of RRTs. These outcomes include decreased number of emergency and intensive care unit (ICU) transfers and a decreased amount of cardiac arrest (Dacey et al., 2007; Williams et al., 2011). RRTs focused on preventing further deterioration of patients through assessment, communication, immediate interventions, support, and education (Clements, 2011). Thomas et al. (2007) found that failure to rescue was due to

lack of compunction, failure to recognize deterioration, and incomplete nursing assessments. These findings support the need for effective communication and assessment skills to sufficiently rescue a distressed patient.

RRT's are considered effective in decreasing mortality and improving adverse patient outcomes. King et al., (2006) performed a retrospective analysis of RRTs in an urban academic hospital over one year. They found implementation of RRTs provided significant and even marked improvement in alleviating cardiac arrests, postoperative arrests, and episodes of respiratory failure. They reported that 82% of codes occurred during the daytime hours, with 98% being justified, and 85% resulting in no further deterioration. Statistics such as 50% reduction in the occurrence of cardiac arrest outside the ICU have been noted (Buist et al., 2002). Also, a 17% decrease in incidence of cardiopulmonary arrests was reported by DeVita et al. (2004). The same authors reported that RRTs reduced severe postoperative adverse events by 58%, emergency ICU admissions by 44%, and postoperative deaths by 37%. Mean duration of hospital stays decreased from 23.8 to 19.8 days in surgical patients (Bellomo et al., 1999). Finally, RRTs have been shown to improve the morbidity and mortality rate in acutely ill ward patients who experienced acute physiological deterioration (Jones et al., 2011).

Standardized communication between clinical staff nurtures team work promoting patient safety. Yvette et al. (2008) did a study on the nurse to nurse approach when implementing RRTs. They found that success hinged on clear communication. As recommended by the INI (2004), the situation, background, assessment, recommendation system (SBAR) is an effective way to communicate multiple situations, including hand-

offs, patient transfers, critical conversations, and telephone conversations. This method of communication ensured transfer of basic information such as current history as well as history of violent behavior (AHRQ, 2011). The Joint Commission (TJC) on Accreditation of Hospitals added “standardized communication” to Patient Safety Goals, and recommended SBAR as the best practice (TJC, 2009). Standardized communication is most commonly used during nursing shift changes and remained an excellent tool to implement when there was a change in the patient’s condition (SBAR, 2011). The SBAR gave nurses a focused way to set expectations for communications among members of healthcare teams, promoting teamwork and fostering patient safety (Yvette et al., 2008). As a nurse, it is important clinical staff work together and communicate to promote such safety.

Ultimately effective communication is needed to meet expectations and promote standards of care when a code is initiated. The SBAR system described was composed of guidelines and worksheets to further aid communication to maintain and promote patient safety. In comparison, Yvette et al. (2008) recommended these guidelines for effective communication amongst clinical staff. The SBAR process included (1) Modalities to reach the MD, (2) Steps to take before calling, (3) SBAR process, and (4) Documenting changes in the patient’s condition, as well as documenting physician notification concerning those changes. These guidelines were simplified using the SBAR worksheet detailing the SBAR process: (S) Situation: identify yourself and the patient and give concise problem statement, (B). Background: provide medical history, vital signs, labs, x-rays, medications, allergies, and review of symptoms (A) Assessment:

provide an opportunity for healthcare provider to list concerns and give their impression of the patient, and (R) Recommendation: orders received, clarification, and follow-up (SBAR, 2011).

In order for RRTs to be effective, healthcare providers must have in-depth knowledge of mental health to aid in de-escalation. Brown, Anderson, and Hill (2012) recruited a sample of 57 nurses in a rural hospital. Findings showed a need for increased education to identify unstable patients. According to the CDC (2011), mental illness affects 25% of adults in the United States. These individuals often suffer from diabetes, cardiovascular disease, and/or obesity. Most often the medications they take will cause these symptoms. These patients suffer from depression, schizophrenia, anxiety, psychosis, or bipolar illnesses. Patients with these mental illnesses are less likely to adhere to treatment than those who do not have mental illnesses. Therefore, this population is at risk for adverse health outcomes (CDC, 2011).

Mental illnesses can affect anyone of any age, race, and religion regardless of income or community status. There is a stigma that mental illnesses are due to weaknesses or upbringing (NAMI, n.d.). Fortunately, mental illnesses are treatable if patients participate in their treatment plan. The National Alliance of Mental Illness (n.d.) found that pharmacological treatment was 70-90% effective in reducing symptoms and improving quality of life; however, medications had to be individualized to meet the needs and achieve results. If early identification and treatment was not initiated, recovery was delayed and the patient remained at increased risk for harming others or themselves (NAMI, n.d.). Risk of harm to others can be reduced with effective de-escalation

techniques. Johnson and Delaney (2007) performed a study on keeping a unit safe with the use of de-escalation techniques. De-escalation techniques involved the “people skills” and “talking skills” people involuntarily implement when confronted with challenging situations or challenging behavior. Patient outcomes depended on proper assessment of symptoms, and the methods nurses used to de-escalate situations (Johnson & Delaney, 2007).

De-escalation involves a variety of skills nurses need in difficulty and challenging situations. These skills included (a) maintaining a calm environment to prevent the patient from feeling anxious and unsafe; (b) maintaining eye contact to prevent fear and rejection; (c) providing neutral facial expression; (d) providing positive stance and avoiding crossing arms across the chest or excessive movement; (e) maintaining one leg length and angling body 45 degrees to provide for escape if possible; and (f) maintaining calm and professional voice and demeanor (CPI, 2005). De-escalation skills and a team approach can provide safe, reliable care. A study performed by Leach and Mayo (2013) found that RRTs, if activated early enough, could reduce the magnitude of outbursts and increase patient safety and good clinical outcomes. Team approaches prevented further deterioration, adverse outcomes, and death. The authors recommended that teams be knowledgeable of each other’s roles to promote trust and further empower communication. The team approach was considered imperative to achieving safe and responsible care.

Conceptual Models/Theoretical Frameworks

Effective nursing care rests on the advancement and use of nursing evidence found in clinical trials, observational studies, outcomes research, and case reports (Dontje, 2007). Evidence-based nursing practice integrates the best research evidence with clinical expertise and patient values to facilitate clinical decision making. The ability to synthesize evidence and apply it appropriately can sometimes be a challenging in psychiatric nursing (Loucks et al., 2011). Identifying the most effective approach to deal with hostile and volatile patients involves a systematic approach.

The Iowa Model of Evidence-Based Practice provides a framework for systematically integrating evidence-based practices (EBP) into operations to improve care. The model involves four steps, including a) identifying and prioritizing problems, b) reviewing and critiquing available literature, c) identifying research that supports change, and d) implementing change and monitoring outcomes (Dontje, 2007). Appendix B shows the following process:

- Step 1: Problem identification. For RRT nurses who work in psychiatric settings does knowledge and perception provide more effective RRTs?
- Step 2: Reviewing and critiquing literature. The literature reviewed in this paper clearly indicates that RRTs improve patient outcomes, as well as numerous other nursing, interdisciplinary team, and

hospital variables. More engaged, educated, and experienced nurses also utilized RRTs most effectively.

Step 3: Identifying research supportive of change. Multiple studies cited in this paper suggest need for RRTs in psychiatric and medical settings, contingent on adequate education and training for nurses to be involved.

Step 4: Disseminating results, putting results into practice, and monitoring outcomes. The IOWA Model will be utilized to develop additional evidence to support the need for RRTs in inpatient psychiatric settings.

The trigger for this project began with the decision-making process for responding to behavioral emergencies. WSH nurses were questioned whether the current system was accurate in identifying patients at risk, and sufficient for the task. In addition, nurses were asked if they were knowledgeable of their own roles in activating codes. Barriers needed to be explored, such as whether or not RRT development was a priority and/or benefit to the organization. Members of the executive staff, quality improvement, and clinical staff met and indicated that it was important to examine the appropriateness of RRTs.

The next step in exploration was to form a team. This team was composed of one physician and one advanced practice nurse (APRN). The physician watched over the APRN in data collection from 59 nurses, exploring nursing perceptions, expectations, and

satisfaction related to RRTs. Available data was synthesized to determine if there is a need for change at the facility involved, including need for increased education and training amongst nursing staff. After the change has taken affect, the team will go back and reevaluate outcomes and disseminate findings, and assist the facility in making a decision about the use of RRTs. Strategies to enhance rigor and quality will be based off the Iowa Model of Evidence-Base Practice to Promote Quality Care. Ultimately, new evidence-base practice guidelines may be developed and piloted, if the facility consents. If not, then additional data will be collected in a second cycle of nursing questionnaires.

In summary, the Iowa Model of Evidence Based Practice was used as the framework to selectively synthesize evidence based studies. The 12 studies reviewed pertained to the nurses' perception and knowledge of a RRT and/or MET (Bagshaw et al., 2010; Benin et al., 2012; Brown, Anderson, & Hill, 2012; Daffurn et al., 1994; Pena et al., 2011; Salamonson, van Heere, Everett, & Davidson, 2005; Shapiro, Donaldson, & Scott, 2010; Thomas et al., 2007; Williams, Newman, Jones, & Woodard, 2011; Wynn, 2007; Wynn, Egelke, & Swanson, 2009). The literature reviewed indicates that RRTs can improve patient outcomes. However, nurses need to be more engaged, educated, and experienced in order for a RRT to be effective. It is recommended educational classes with specific information on code activation and warning signs to identify deteriorating patients be implemented to decreases adverse events (Pena et al., 2011).

Section 3: Methodology

Project Design/Methods

In the project, I used a quantitative descriptive design to collect data from nurses using a 4-part questionnaire in March 2014. The questions were designed to determine the nurses' knowledge and perception of a code event, their roles in the code, and the challenges they encounter. The survey was completed over a 1 day period by nurses before and at the end of their shift.

Population and Sampling

The project was conducted in a 222-bed acute care, adult state psychiatric facility. This hospital employed one family physician, one nurse practitioner, nine psychiatrists, multiple psychologists, and numerous registered/licensed nursing staff. Criteria for participant selection consisted of a minimum of 30 nurses who were registered nurse (RN) and/or licensed practical nurse (LPN) from each of the patient care areas. These areas included the multi-needs unit (patients with a high acuity of care), intensive treatment unit (patients that are known to have behavioral issues), admissions unit (new admissions), acute unit (length of stay < 1 year), and comprehensive support program (CSP; patients who are admitted months to years). Sixty four surveys were distributed using a nonprobability, convenience sample of available nurses working each of the five units.

I posted an invitation to participate in this survey and a letter of interest describing the project was posted at all time clocks, the nursing hallway, and all nursing wards to promote participation (see Appendix G and Appendix H). The day of data collection I

distributed survey packets to nurses during shift change. These packets included the 4-part questionnaire (see Appendixes C, D, E, & F) and a consent approved by Walden University prior to data collection (see Appendix J). Walden University's approval number for this project is 02-26-14-0372450 and it expires on February 25, 2015. No consent was required because the project participant data were maintained anonymous. Nurses placed their sealed manila envelope in a designated area. I collected sealed envelopes and was not present during survey completion. These envelopes were not opened until time for data analysis.

Data Collection (Instrument and Protection of Human Subjects)

A data collection tool utilized by other researchers can improve validity and reliability therefore I chose to use the tool used by Pusateri, Prior, and Kiely (2011). Pusateri et al. used a 3-part data collection tool to collect data from nurses at Allegheny General Hospital (AGH) in Pittsburgh, Pennsylvania who responded to MET. AGH applied this survey 2 years and 5 months after their MET system was implemented to determine the nurses' perception and understanding of a MET. Permission to use this tool was obtained through Wolters Kluwer Health (see Appendix K). Each of the 3-parts of this tool was used for data collection. I added Part 4 consisting of open-response questions that allow for complex thinking and will yield multiple answers. Permission to change the tool was obtained prior to its use in this project (see Appendix L).

Part 1: A survey demographic tool, consisting of eight multiple choice questions (see Appendix C). This tool was used to collect demographic variables such as the type of nurse, years of experience as a nurse, degree

preparation, age, work experience, gender, and number of years as a nurse at WSH. Part 1 of Pusateri et al.'s (2011) survey was composed of seven demographic questions. I used all of these questions. I added one question to ask the type of nurse (RN or LPN) and changed the hospital initials from AGH to WSH.

Part 2: Part 2 of Pusateri et al.'s (2011) questionnaire was composed of eight multiple choice responses. I used all eight questions to determine the nurses' perceptions and knowledge of a RRT by exploring the nurses' challenges, role, and familiarity of a RRT when caring for patients who are involved in emergencies (see Appendix D).

Part 3: Pusateri et al. (2011) composed 17 questions in Part 3. I used only six of these questions because the others were not applicable. Questions chosen were used to determine the nurses' knowledge and educational preparation as well as working relationships (see Appendix E). A 5-point Likert Assessment Scale provided information on participant perception of his/her own knowledge and abilities in working with a RRT. The scoring consisted of *strongly disagree* = 1, *disagree* = 2, *neutral* = 3, *strongly agree* = 4, and *agree* = 5.

Part 4: I designed seven open-response questions through feedback from the ethics committee and the executive staff committee to elicit information from nurses (see Appendix F). The open-ended questions allow respondents to answer in their own words.

The project had minimal to no risk to its participants. Walden University provides an internal review board (IRB) application consisting of a data use agreement that was completed prior to implementing the project. The IRB is an important part of this project to ensure, through periodic review, that appropriate steps are taken to protect the rights and welfare of humans participating as subjects in a project. The facility does not have an IRB; therefore, the project was reviewed by the ethics committee and the executive staff committee. The signed letter of cooperation is attached (see Appendix I). Following approval, data collection began Spring 2014 at the inpatient psychiatric facility.

Data Analysis

I manually entered the responses to questions on the completed questionnaires into Excel. A researcher knowledgeable of the Excel program served as a consultant for data analysis. Descriptive statistics (mean, standard deviation [SD], frequency distributions, and percentages) were used to analyze the data (Polit, 2010). A Chi-square (χ^2) statistic was used to investigate for relationships between the characteristics of participants. The cut-off level for statistical significance was set at $p < 0.05$. The responses to the Likert-scale items were summarised in terms of histograms and/or statistical summaries.

A content analysis of the open-ended responses were conducted to identify key recurring phrases and ideas, as proposed for coding open-ended questions (Polit, 2010) to determine if common themes were emerging. Categories were developed in accordance with the coded comments of participants, as well as analyses for frequencies of comments

in each category. Once data were analyzed, a descriptive summary of findings was written incorporating narratives directly from the respondents.

Project Evaluation Plan

Identifying the most effective approach to dealing with hostile and volatile patients involves a systematic approach. The Iowa model of evidence-based practice can provide the framework for systematically putting evidence based practice (EBP) processes into operation to improve care. This model involves four steps. These steps include problem identification and prioritizing, review and critique of the literature, identifying research that supports the proposed change, and implementing change and monitoring outcomes (Dontje, 2007). A knowledgeable RRT trained in de-escalation strategies can proactively reduce the amount of agitation and threat perceived by the patient, thus decreasing the amount restraints, seclusion, and/or intramuscular injections.

The evaluation plan goals include the following: (a) determine the nurses' perceptions of a RRT and (a) determine what the nurses' knowledge of a RRT. These goals were achieved through an evaluation of the RRT and nurse response. This included analyzing the data from the open- and closed-ended questions on the questionnaire. Findings from this project showed a need for increased education for nurses. This project will provide some important insights into the perceptions and knowledge nurses have regarding the RRT. In addition, it will give awareness into the barriers to calling a code and what the nurse feels is his or her role.

Summary

A quantitative descriptive design was implemented using a 4-part questionnaire to determine nurses' understanding of the process, their knowledge, and their perceptions of rapid response. Open-ended response questions provided information about the nurses' role and position. The goal was to clarify the perceived role of nurses in RRTs conducted in an inpatient psychiatric setting and to provide an understanding of how nurse perceived RRTs in this context. Following IRB approval, data collection began in March 2014 at the inpatient psychiatric facility. Walden University's approval number for this project is 02-26-14-0372450 and it expires on February 25, 2015. The findings will be reported in Section 4.

Section 4: Findings, Discussion, and Implications

Summary of Findings

Nurses are the mainstay of patient care in any hospital setting, and they are frequently subjected to violence in the workplace, both verbal and physical (Loucks et al., 2011). A response team was initiated as a way to improve patient safety by exploring the perceptions and knowledge of a RRT. Although there is controversy around the clinical benefits of a RRT, as of 2006, more than half of U.S. hospitals have these implemented (AHRQ, 2012). The findings of this project were used to determine if nurses were knowledgeable about initiating psychiatric codes and the roles they play in code responses. I also explored the nurses' perceptions of their roles in activating codes and participating in codes. Moreover, I found challenges associated with activating RRTs in settings naïve to this practice.

Discussion of Findings

Of the 64 surveys distributed on the five wards, 60 were returned; however, one was not sealed and could not be used. The response rate of those used was 92% ($n=59$). This is a higher rate compared to other studies; nevertheless, the sample size was smaller than those of similar studies. Respondents were not consistent in completing all questions, resulting in missing data. The majority of those responding were white (85%) and female (88%). I found that most nurses who completed this survey were between the ages of 36 and 45 and totaled 3 to 5 years of nursing experience. In addition, these nurses worked at WSH for 3 to 5 years (30%). The responding nurses had worked in a variety of patient care areas with psychiatric areas being the most common (93%). Of the 59 nurses who completed surveys,

40 nurses (68%) reported past experiences in more than two areas. Medical-surgical nursing was the second most common work experience after psychiatric nursing. The associate degree (68%) was the most common educational background. For detailed demographic data see Table 1.

The majority of responders (73%) reported feeling comfortable with the MET. Although the term MET was used, the nurses were asked to evaluate psychiatric emergencies. Only 27% marked they were unfamiliar with the MET; whereas 52% were aware at hire and 48% were not familiar at hire. I found that 48% of nurses had called a code and 52% had not executed a call. Twenty six nurses (72%) had called a code more than once; 10 nurses (28%) had not. Overall, 44% of nurses were hesitant to call a code, whereas 56% was not hesitant. Of those who were hesitant, 60% were unclear on patient severity. Seventy-four percent of nurses reported that they had responded to a code. Nurses reported multiple roles when responding to a code. The most common role reported was documentation (55%) and vital signs (52%). For detailed results of the MET background experience, see Table 2.

The Chi-square analysis was used to compare RN to LPN responses to the Likert Agreement Scale. In these questions, I surveyed the nurse's perception and knowledge of a RRT. In Questions 15, 16, and 19, I found that the nurses were consistent in their answers at the 95% level of confidence. I surveyed if patient knowledge affected the nurse role, if education and training affected role, and if nurses felt prepared when a code was called. In the responses to Questions 17, 18, and 20, I found nurses were not consistent in their answers at the 95% level of confidence. I looked at RRT to improve

patient outcomes, familiarity of role during a code, and if a code improved working relationships. These inconsistencies could be due to the perceived role of RN and LPN during a code. See Table 3 for a detailed report.

Comments were obtained from open-ended questions listed on Part 4 of the survey. The comments were sorted into categories of reoccurring themes. Of the 59 surveys reviewed, 51 participants answered all questions (86%). In Question 21, I asked nurses to provide reasons they would hesitate to call a code. The reoccurring responses included the following: unfamiliar with the patient ($n=9$), unaware and/or unsure a code should be call ($n=7$), too much paperwork ($n=7$), too much staff ($n=6$), patient could be deescalated ($n=5$), nonlife-threatening ($n=4$), and shortage of staff ($n=3$).

In Question 22, I asked the nurse “what is considered a code event?” The most common response ($n=25$) included a patient who is not redirectable, acting out, and is a danger to self or others. Additional themes included nonresponsive ($n=24$), medical emergency ($n=19$), and requires immediate attention ($n=14$).

In Question 23, I asked the nurse about when to call a code and the challenges of calling a code. The top two responses for calling a code were an out of control patient that could not be deescalated ($n=19$) and when additional help was needed ($n=12$). There were no common themes for challenges. Some responses include paperwork, unpredictable patient, too many people respond and do not return to their assigned ward after the code, and a code is called prematurely. Selected comments included the following: “I feel that the facility puts staff at an even greater risk of harm because of the physicians’ hesitancy to restrain, seclude, or medicate a patient in a crisis for fear of

having to report to a regulatory body.” “Strong communication skills among team members required for patient proficient levels. Rehearsal can be in the form of written case studies, regarding assignments, exercises but should be on a regular basis. Clear roles ID for each team member.”

In Question 24, I asked who was involved in a code. Respondents listed all available staff ($n=32$), including licensed staff, MD/APRN, patient aides, and security. In Question 25, I inquired about the nurse’s role during a code. The most common responses included proving safety, care, and taking orders ($n=19$), giving and getting medication ($n=18$), directing and redirecting patient and staff ($n=14$), calling MD ($n=12$), assessing ($n=12$), documenting ($n=12$), and taking charge ($n=9$).

The final two open-response questions, 26 and 27, were about the level of comfort in calling a code and the rapport between code responders. The most common themes noted for comfort included okay/good/very comfortable ($n=26$), and fairly/slightly comfortable ($n=15$). The most common response for staff rapport was good ($n=24$). Overall, these participants felt satisfied with the RRT; however, felt that better preparation on role explanation was needed when responding. Furthermore, nurses needed to understand signs of escalation and strategies to take to deescalate a potentially volatile patient.

The Iowa model of evidence-based practice provided the framework to integrate theory into EBP to improve care. Identifying the most effective approach to deal with hostile and volatile patients involves a systematic approach. This approach to theory was useful in obtaining feedback from nurses who work psychiatric emergencies. Overall,

nurses' are satisfied with the role they play when responding to emergencies. The results were consistent in detailing the nurses' ability to call a code in the presence of a deteriorating patient or ineffective de-escalation techniques. Patient and staff safety was a concern. Several nurses commented that a lack of practice with current team members could affect the outcome. Strong communication skills are essential among staff, as well as clear cut roles of each team member.

Implications

Implementing a RRT is not a new notion. In fact, the setting where RRTs are deployed can have an impact on the team and efficiency of clinical outcomes (Leach & Mayo, 2013). The IHI (year) identified a need for RRTs as part of its 100,000 Lives Campaign in 2004, which in turn was an initiative identified during the IHI's 5 Million Lives Campaign. Although research studies vary concerning the effectiveness of a RRT (Stolldorf, 2008), the initiation of a RRT is an attempt to promote quality of patient care by deploying knowledgeable staff nurses to the code event.

The Joint Commission for Accreditation does not make any recommendations for a RRT; however, as a part of the National Patient Safety Goals, they recommended that health care staff members call for assistance when the "patient's condition appears to be worsening" (TJC, 2009). The implications for such a team may be evident in the future with the help of policy-makers on an organizational and national level (Stolldorf, 2008).

Policy

RRTs can be an essential element in promoting quality of care and promoting patient safety. Moreover, establishing clinical protocols outlining written policies and

procedures of a RRT can promote understanding of the role of the team. According to Devita et al. (2004) and Stolldorf (2008), there is no standardization of practice regarding a RRT. Structured and standardization of team roles and expectations can improve the overall action and outcome of the approach (Kirk, 2006).

Effective educational and staff development classes are essential aspect in promoting knowledge and providing nurses with an understanding of the roles and functions of the team (Kirk, 2006). Furthermore, detailed records will assist quality improvement to amend nursing policies and procedures to promote quality of care. Stolldorf (2008) recommended motivating positive outcomes by linking staff education and training to standardization of RRT practices. In addition, involving national organizations such as TJC, INH, and AHRQ in establishing policies can assist in future research and funding on RRTs (Stolldorf, 2008),

Practice

The body of literature describing the implementation of RRTs is growing rapidly, confirming the need for structured strategies and staff training to reduce violence in hospital settings (Shapiro & Donaldson, 2010). Hospital qualifications of a RRT vary statewide and there are no current regulatory agencies requiring a RRT be implemented. Nurses who make up the team should be knowledgeable and certified in CPR and have well-developed communication skills. Additional skills include assessment skills, decision making skills, and clinical intervention skills (Leach & Mayo, 2013). Nurses should be knowledgeable of their scope of practice as well as the

policy and procedure for the role they play once a code is announced (Kirk, 2006).

These are important aspects in fostering effective teamwork and communication.

Studies showed that a systematic approach will enhance communication skills, clarify nursing roles through understanding the scope of practice, and nurture teamwork (Yvette, Campbell, & Goodlett, 2008). Team debriefing immediately after a code is an important intervention to obtain immediate feedback to improve effective team functioning. The evaluation of clinical data can be useful in performance improvement, cultivation of team learning, and measurement of the effectiveness of the RRT.

Overall, this evaluation will improve the quality of the work and tension among nursing staff (Leach & Mayo, 2013).

WSH was receptive of this project and its findings. Once this DNP project is completed, WSH's education and training will review the findings and make recommendations. These recommendations will be evaluated by key stakeholders such as the ethics committee and the Executive Staff Committee. These are the stakeholder who determine is a new policy should be implemented or updated.

Research

Research is needed to set standards of care using the best available evidence. Moreover, this will support the facilitation of RRT evidenced-based policies and procedures. Organizations are blind without the use of evidence-based practices for implementation of RRTs. Stolldorf (2008) called this type of practice "a trial-and-error" that ultimately will be costly and of no significance. More studies are needed regarding the cost-effectiveness of RRT. In addition, continued studies on the appropriateness of

RRT use, the composition of the teams, and triggers for activation are necessary (Molyneux, 2009).

Social Change

Implementing a RRT creates significant social change through increasing understanding between staff members responsible for activating emergency codes. Bruckell (2009) found implementing a RRT is a modification within the organization that requires a system-wide change in culture rather than a clinical decision. Loucks et al. (2011) recommended that all new team members know expectations of their role when responding to behavioral emergencies. Input and feedback is important during training and debriefing sessions for evaluating the effectiveness of RRTs. Thus, training in-services and debriefing are essential for quality improvement. In-services alone can cause positive social changes in hospital environments by improving human and social conditions on treatment wards. Moreover, these changes help with nursing performance improvement efforts, and they promote perceptions of worth, perceptions of dignity, and quality of care for patients (Loucks et al., 2011).

Project Strengths and Limitations

The project findings represent the evolution of an existing RRT in an inpatient psychiatric hospital. The inclusions of project participants from all nursing wards helped address variations that may be present in similar settings. The structure of an RRT varies among health care institutions that have implemented such teams. For this project, all licensed staff were trained to respond in the event a code was initiated. Since the nature of the RRT was to respond to behavioral emergencies, the nurse responding to such codes

varied on based on the responding ward stability during the code announcement. The psychiatric wards the nurses are responding from may have an event going on making the ward unstable preventing nurses from participating in a code.

Strengths

Data were collected from all licensed nursing personnel (RN and LPN), unlike most RRT studies whose participants were mainly nurses, respiratory therapist, and physicians. This project reviewed behavioral emergencies, whereas most research has been conducted to review medical emergencies.

Limitations

The primary limitation of this project was the small sample size. A convenience sample of 59 nurses may not provide enough evidence to represent the full spectrum of nurses' experiences and knowledge of RRTs. Another limitation discovered after data collection was the use of the term MET. Although nurses were instructed that this project explored psychiatric emergencies, some answered in terms of MET to the questions on Part 2 of the questionnaire. Generalizability was limited due to the small sample size, single location, and type of emergency chosen.

Recommendations for remediation of limitations in future work

Future research should address various team structures. Recommendations for the project of nurse perception and knowledge of RRTs include (1) more field-based research to determine the effect of initiating a RRT in a setting naïve of its use; (2) modification of RRT team roles and responsibilities; (3) educational in-services detailing team roles and

responsibilities; and (4) quarterly reports to determine if implementation of RRTs is clinically effective and investigate if barriers to effectiveness still exist.

Analysis of Self

The DNP experience has prepared me as a scholar, as an advanced practice nurse, and as a project developer. Though these roles I have been given the opportunity to bring about many initiatives throughout my course of project. Additionally, I was given the opportunity to develop a project that may one day be part of future professional development for nurses who work at WSH. Future professional development includes educational course on RRTs.

As scholar

The DNP program has better prepared me as an advanced practice nurse, nurse leader, and initiator of practice inquiry. I feel more competent to enter the political arena at the local, state, and national levels regarding my area of nursing expertise. As a scholar, I am more alert to the skills and capacity it takes to bring issues of special interest into nursing such as this project. A great honor as a nurse scholar is graduating from the DNP program, publishing the findings of this project for the next generation of nurses to read, and preparing nurses for the demands of the increasingly complex healthcare system.

As practitioner

I feel this project as well as this program has strengthened my nursing skills in the areas of leadership, nursing ethics and nursing empowerment. As a nurse practitioner, I can now see the bigger picture of how nursing fits into health care delivery and its

politics. I feel I have a better working relationship with all my colleagues, both clinical and nonclinical, through the knowledge gained from the courses in which I was enrolled. Likewise, I am more focused on critically appraising and translating evidence into practice.

As project developer

I would like to develop an educational class on RRTs including job responsibilities and warning signs of deteriorating patients. Moreover, I think all staff involved with mentally ill patients should be educated on psychiatric diagnoses. This will included presentation descriptions and scenarios of different patient personalities and behaviors, as well as hands on examples of de-escalation and communication techniques used when responding to behavioral emergencies.

What does this project mean for future professional development?

The findings of this project will help update the current standards of care and will support the adoption of future RRT initiatives. Initiatives will include beginning a RRT education and training class for emergencies, communication training, and education on mental illness and de-escalation techniques. Furthermore, a pilot project of individuals assigned to a RRT could be initiated to improve practice expertise and accelerate the translation of evidence into practice.

Summary and Conclusions

The data collected revealed that nurses are knowledgeable about their roles during a code event. Nurses were able to recognize patients who were deteriorating and would respond quickly to deescalate an emergency. Nurse perceptions of calling a code varied from the staff who were unfamiliar with the patient to an overwhelming

abundance of staff who responds to the code event. Overall nurses were satisfied with the current system; however felt there were challenges in calling a code. Challenges included familiarity of the patient and ward stability throughout the hospital. Furthermore, nurses need to understand signs of escalation and strategies to take to deescalate a potentially volatile patient.

It is recommended that further research be done in the area of codes for psychiatric emergencies. Despite de-escalation techniques, WSH's rapid response team for psychiatric emergencies continues to evolve in this complex healthcare environment. Nurse must be educated on their role during a code, the reasons for calling a code, and the communication skills effective in code situations for enhancing outcomes. It is recommend an educational in-service to clarify the role and expectations.

Section 5: Scholarly Product

The student submitted a poster presentation for WSH nurses to review during National Nurses Week May 6-12, 2014. For detailed diagram of the poster presentation, see Appendix M.

References

- Agency for Healthcare Research and Quality. (2012). Rapid response teams. Retrieved from <http://psnet.ahrq.gov/primer.aspx?primerID=4>
- Agency for Healthcare Research and Quality. (2013). Crisis prevention team calms agitated patients in psychiatric units, leading to a reduction in the use of restraints and seclusion and fewer injuries. Retrieved from <http://www.innovations.ahrq.gov/content.aspx?id=2813#2>
- Bagshaw, S., Mondor, E., Scouten, C., Montgomery, C., Slater-MacLean, L., Jones, D.,...Capital Health Medical Emergency Team Investigators. (2009). A survey of nurses' beliefs about the medical emergency system in a Canadian tertiary hospital. *American Journal of Critical Care, 19*(1), 74-83.
doi:10.4037/ajcc2009532
- Bellomo, R., Goldsmith, D., Uchino, S., Buckmaster, J., Hart, G., Opdam, H.,...Bellomo, R. (2004). Prospective controlled trial of effect of medical emergency team on postoperative morbidity and mortality rates. *Critical Care Medicine, 32*, 916-921.
- Benin, A. L., Borgstrom, C. P., Jenq, G. Y., Roumanis, S. A., & Horwitz, L. I. (October). Republished: Defining impact of a rapid response team: Qualitative study with nurses, physicians and hospital administrators. *Postgraduate Medical Journal, 88*(1044), 575-82. doi:10.1136/postgradmedj-2012-000390rep
- Brown, S., Anderson, M., & Hill, P. (2012). Rapid response team in a rural hospital. *Clinical Nurse Specialist, 95*-102. doi:10.1097/NUR.0boi3e31824590fb

- Bruckell, J. (2006). Evidence-base medicine and rapid response team implementation. *McGill Journal of Medicine*, 9(1), 5–7.
- Buist, M. D., Moore, G. E., Bernard, S. A., Waxman, B., Anderson, J. N., & Nguyen, T. V. (2002). Effects of a medical emergency team on reduction of incidence of and mortality from unexpected cardiac arrests in hospital: Preliminary study. *BMJ*, 324, p. 1-6.
- Center of Disease Control (CDC). (2011). CDC: Mental illness surveillance. Retrieved from <http://www.cdc.gov/mentalhealthsurveillance/>
- Clements, H. (2011). Med/surg nurses hold information vital to a patient's outcome in a rapid response. *Advance for Nurses*, 27(1), 20-27. Retrieved from <http://ccn.aacnjournals.org/content/27/1/20.full>
- Crawford, H. (2003). Practice: What will change in nursing practice over the next five years? *Nursing Leadership*, 16(3), 35-39. doi:10.12927.cjnl..16250
- Crisis Prevention Intervention. (2005). *Nonviolent crisis intervention*. Milwaukee, WI: Author.
- Dacey, M., Mirza, E., Wilcox, V., Doherty, M., Mello, J., Boyer, A.,...Baute, R. (2007). The effect of a rapid response team on major clinical outcome measure in a community hospital. *Critical Care Medicine*, 35(9), 2076-2082.
- Daffurn, K., Lee, A., Hillman, K., Bishop, F., & Bauman, A. (1994). Do nurses know when to summon emergency assistance? *Intensive and Critical Care Nursing*, 10(2), 115-120. doi:10.1016/0964-3397(94)90007-8

- DeVita, M.A., Braithwaite, R. S., Mahidhara, R., Stuart, S., Foraida, M., & Simmons, R. L. (2004). Use of medical emergency team responses to reduce hospital cardiopulmonary arrests. *Quality and Safety in Health Care, 13*(4), 251-254.
- Dontje, K. (2007). Evidence-based practice: Understanding the process. *Topics in Advanced Practice Nursing eJournal 7*(4).
- Donat, D. (2003). An analysis of successful efforts to reduce the use of seclusion and restraint at a public psychiatric hospital. *Psychiatry Services, 54*, 1119-1123.
- Institute for Healthcare Improvement . (n.d.). Establish a rapid response team. Retrieved from <http://www.ihl.org/knowledge/Pages/Changes/EstablishaRapidResponseTeam.aspx>
- x
- Institute for Healthcare Improvement. (2011, June). SBAR technique for communication: A situational briefing model (SBAR). Retrieved from <http://www.ihl.org/knowledge/Pages/Tools/SBARTechniqueforCommunicationASituationalBriefingModel.aspx>
- Fawcett, J., & Garity, J. (2009). Chapter 1: Research and evidence-based nursing practice. In *Evaluating Research for Evidence-Based Nursing*, (pp. 3-20). Philadelphia, PA: F. A. Davis.
- Ferguson, J. (2010, March). Coney Island reduces restraint use in behavioral health patients. Retrieved from <http://news.nurse.com/article/20100308/NY02/103080017>

- Hospital Rapid Response Team. (n.d.). Definitions.net. Retrieved January 21, 2013, from [http://www.definitions.net/definition/hospital rapid response team](http://www.definitions.net/definition/hospital%20rapid%20response%20team)
- Johnson, M. & Delaney, K. (2007) Keeping the unit safe: The anatomy of escalation. *Journal of the American Psychiatric Nurses Association, 13*(1), 42-52.
- Jones, D. A., DeVita, M. A., & Bellomo, R. (2011). Rapid-response teams. *The New England Journal of Medicine, 365*(2), 139–146. doi:10.1056/NEJMra0910926.
- Jonikas, A., Cook, J., Rosen, C., Laris, A., & Kim, J. (2004). A program to reduce use of physical restraint in psychiatric inpatient facilities. *Psychiatric Services, 55*, 818-820. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/15232023>
- King, E., Horvath, R., & Shulkin, D. (2006). Establishing a rapid response team (RRT) in an academic hospital: One year experience. *Journal of Hospital Medicine, 1*, 296-305. doi.10.10002/jhm.114
- Kirk, T. (2006). Rapid response teams in hospitals: Improving quality of care for patients and quality of the work environment for nursing staff. *Holistic Nursing Practice, 20*(6), 293–298.
- Leach, L., & Mayo, M. (2013). Rapid response teams: Qualitative analysis of their effectiveness. *American Association of Critical-Care Nurses, 22*(13). doi:10.4037/ajcc2013990
- Leach, L., Mayo, M., & O'Rourke, M. (2010). How RNs rescue patients: A qualitative study of RNs' perceived involvement in rapid response teams. *Quality and Safety in Health Care, 19*, 1-4. doi:10.1136/qshc.2008.030494

- 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. doi:10.1177/1078390310363023
- Molyneux, J. (2009). Do rapid response teams save lives? *AJN, 109*(3), 19. Retrieved from doi: 10.1097/01.NAJ.0000346905.35218.09
- National Alliance on Mental Illness (NAMI). (n.d.). *Mental health*. Retrieved from http://www.nami.org/template.cfm?section=About_Mental_Illness
- Pusateri, M., Prior, M., & Kiely, S. (2011). The role of the non-ICU staff nurse on a medical emergency team: Perceptions and understanding. *AJN, 111*(5), 22-29. doi:10.1097/01.NAJ.0000398045.00299.64
- Pena, M., Artia, M., Ruiz, E., Lorda de los Rios, M., Ortega, A., & Melon, F. (2011). EICS (Extended Intensive Care Service): Looking outside the ICU. *Med Intensiva, 35*(6), 349-353.
- Polit, D. (2010). *Statistics and data analysis for nursing research* (2nd ed.). Upper Saddle River, NJ: Pearson Education.
- Roche, M., Diers, D., Duffield, C., & Catling-Paull, C. (2010). Violence toward nurses, the environment, and patient outcomes. *Journal of Nursing Scholarship, 42*(1), 13-22. doi:10.1111/j.1547-5069.2009.01321.x
- Rutledge, D., Wickman, K., Drake, D., Winokur, E., & Loucks, J. (2012). Instrument validation: Hospital nurse perceptions of their behavioral health care competency. *Journal of Advanced Nursing, 68*(12), 2756-2765. doi:10.1111/j.1365-2648.2012.06025.x

- Salamonson, Y., Can Heere, B., Everett, B., & Davidson, P. (2006). Voices from the floor: Nurses' Perceptions of the medical emergency team. *Intensive and Critical Care Nursing*, 22, 138-143. doi:10.1016/j.iccn.2005.10.002
- Shapiro, S., Donaldson, N., & Scott, M. (2010). Rapid response teams seen through the eyes of the nurse. *American Journal of Nursing*, 110(6), 28-34. doi:10.1097/01.NAJ.0000377686.64479.84
- Singh, S. (n.d.) The Scarborough Hospital launches Mental Health Community ... (SHMHC). Retrieved from <http://www.hospitalnews.com/the-scarborough-hospital-launches-mental-health-community-crisis-response-team>
- Stolldorf, D. (2008). Rapid response teams: Policy implications and recommendations for future research. *Journal of Nursing Law*, 12(3), 1-13: doi: 10.1891/1073-7472.12.3.115.
- Terry, A. J. (2012). *Clinical research for the doctor of nursing practice*. Sudbury, MA: Jones & Bartlett Learning.
- The Joint Commission (TJC). (2011). 2012 national patient safety goals: Behavioral health care. Retrieved from http://www.jointcommission.org/standards_information/npsgs.aspx
- The Joint Commission. (2009). Patient-centered communication standards for hospitals. Retrieved from <http://www.jointcommission.org/assets/1/18/R3%20Report%20Issue%201%202011.PDF>

The National Institute for Mental Health (NIMH). (n.d). Mental health statistics.

Retrieved from <http://www.nimh.nih.gov/statistics/index.shtml>

Thomas, K., Force, M., Rasmussen, D., Dodd, D., & Whilidin, S. (2007). Rapid response team. Challenges, solutions, benefits. *Critical Care Nurse*, 27(1), 20-27.

Titler, M. G., Kleiber, C., Steelman, V., Rakel, B. A., Budreau, G., Everett, L. Q...

Goode, T. (2001). The Iowa model of evidence-based practice to promote quality care. *Critical Care Nursing Clinics of North America*, 13, 497-509.

Walden University. (2012). DNP project plan. Retrieved from

https://class.waldenu.edu/webapps/portal/frameset.jsp?tab_tab_group_id=_2_1&url=%2Fwebapps%2Fblackboard%2Fexecute%2Flauncher%3Ftype%3DCourse%26id%3D_2646013_1%26url%3D

Waters, N., Hall, W., Brown, H., Espezal, H., & Palmer, L. (2012). Perceptions of Canadian labor and delivery nurses about incident reporting: A qualitative descriptive focus group study. *International Journal of Nursing Studies*, 49(7), 811–821.

Western State Hospital (WSH). (2012). *Medical and psychiatric emergencies*.

Hopkinsville, KY: Author.

Western State Hospital (WSH). (2013) *Medical and psychiatric emergencies*.

Hopkinsville, KY: Author.

Williams, D., Newman, A., Jones, C., & Woodard, B. (2011). Nurses' perceptions of how rapid response teams affect the nurse, team and system. *Journal Nurse Care Quality*, 26(3), 265-272. doi:10.1097/NCQ.0b013e318209f135.

- Wynn, J. (2007). *The front line of patient safety: Staff nurses' actions and perceptions in rapid response team calls*. Greenville, NC: Author
- Wynn, J., Engelke, M., & Swanson, M. (2009). The front line of patient safety: Staff nurses and rapid response team calls. *Quality Management in HealthCare*, 18(1), 40-47. doi:10.1097/01.QMH.0000344592.63757.51
- Yvette Bertaut, Y., Campbell, A., & Goodlett, D. (2008). Implementing a rapid-response team using a nurse-to-nurse consult approach. *Journal of Vascular Nursing*, 26(2), 37-42.

Appendix A

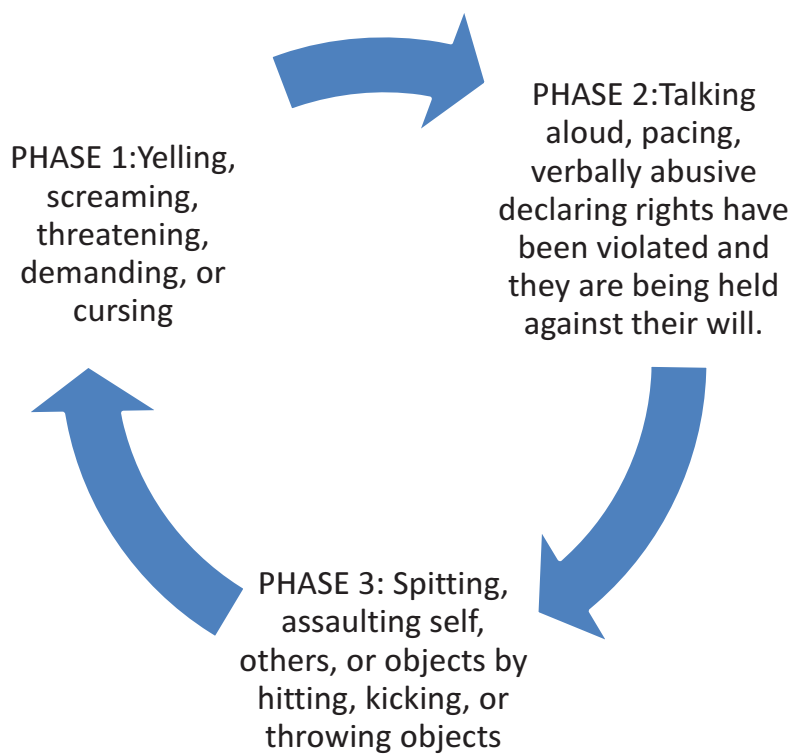
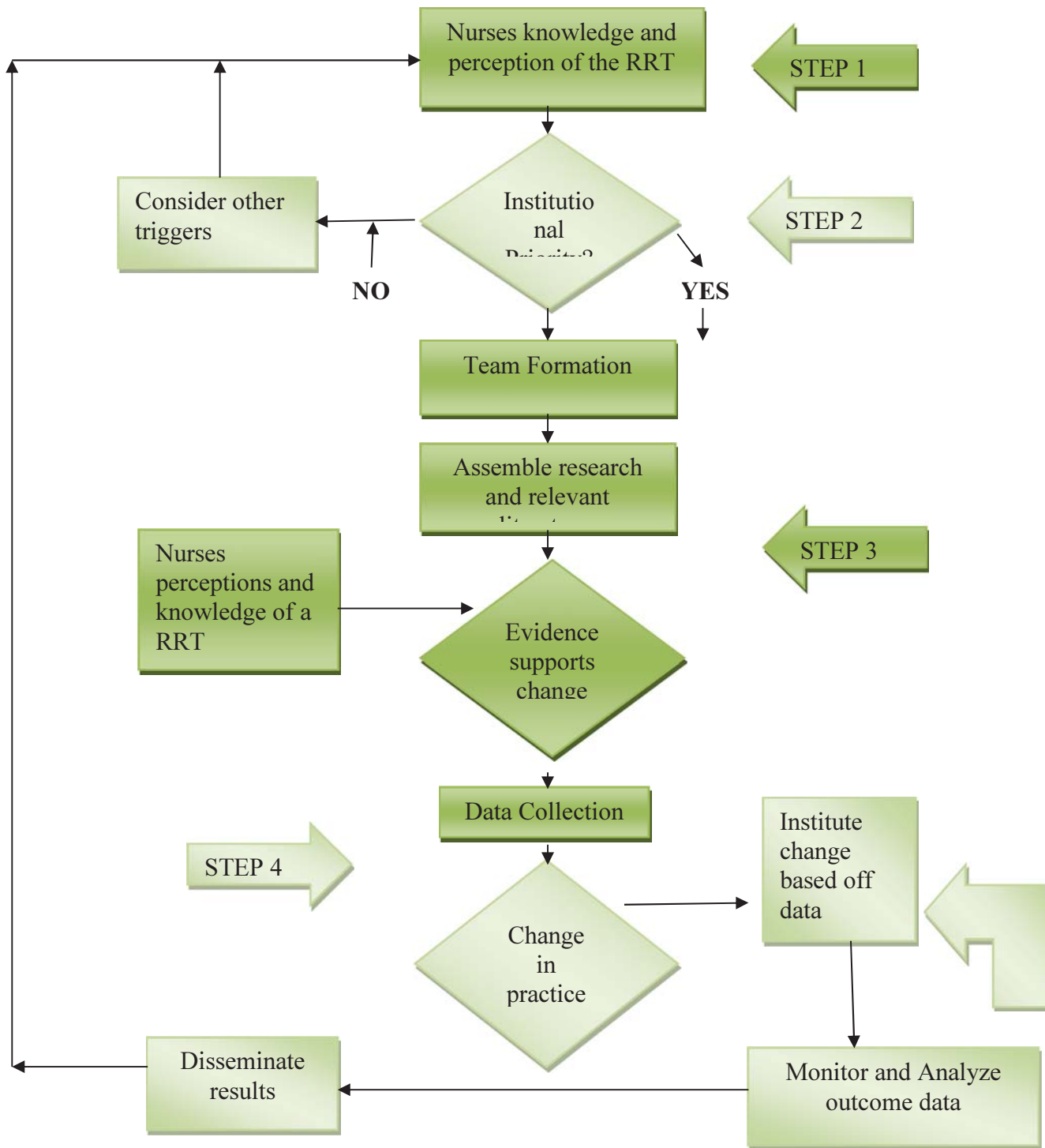


Figure 1. Signs of Escalation (Loucks, Rutledge, Hatch, & Morrison, 2010, March).

Appendix B

Figure 2. Iowa Model as Framework for a RRT



Appendix C

RAPID RESPONSE TEAM SURVEY**Part 1: Survey Demographics**

<p>1. Type of Nurse:</p> <ul style="list-style-type: none"> a. RN b. LPN <p>2. Number of years as a nurse</p> <ul style="list-style-type: none"> a. 1 year b. 1-2 years c. 3-5 years d. 6-10 years e. 10-20 f. More than 20 <p>3. Education preparation:</p> <ul style="list-style-type: none"> a. Diploma b. Associate c. Bachelors d. Masters e. Doctorate f. PhD 	<p>4. Work Experiences:</p> <ul style="list-style-type: none"> a. ER b. med-surg c. OB d. home health e. Hospice f. Surgery g. Psychiatric h. ICU/CCU i. Office/Clinic j. other _____ _____ <p>5. Age</p> <ul style="list-style-type: none"> a. 18-25 b. 26-35 c. 36-45 d. 46-55 e. 56 and older 	<p>6. Race</p> <ul style="list-style-type: none"> a. White or Caucasian b. African American c. Hispanic d. Asian or Pacific Islander e. Native American f. Other <p>7. Gender:</p> <ul style="list-style-type: none"> a. Male b. Female <p>8. Years working at WSH?</p> <ul style="list-style-type: none"> a. < 1 year b. 1-2 years c. 3-5 years d. 6-10 years e. 10-20 f. More than 20
---	---	--

RAPID RESPONSE TEAM SURVEY
Part 2: Detailed Responses to "Medical Emergency Team (MET) Background Experience" Questions

<p>9. Are you familiar with the MET?</p> <p style="padding-left: 40px;">a. Yes</p> <p style="padding-left: 40px;">b. No</p>	<p>12a. Have you ever been hesitant to call a code?</p> <p style="padding-left: 40px;">a. Yes</p> <p style="padding-left: 40px;">b. No</p>
<p>10. At hire, were you aware of the MET?</p> <p style="padding-left: 40px;">a. Yes</p> <p style="padding-left: 40px;">b. No</p>	<p>12b. If yes why?</p> <p style="padding-left: 40px;">a. patient severity unclear</p> <p style="padding-left: 40px;">b. staff member discouraged</p> <p style="padding-left: 40px;">c. physician discouraged</p> <p style="padding-left: 40px;">d. other</p>
<p>11a. Have you ever been called to an MET personally?</p> <p style="padding-left: 20px;">a. Yes</p> <p style="padding-left: 20px;">b. No</p> <p>11b. If yes, more than once?</p> <p style="padding-left: 40px;">a. Yes</p> <p style="padding-left: 40px;">b. No</p>	<p>13. Have you ever participated in a MET?</p> <p style="padding-left: 40px;">a. Yes</p> <p style="padding-left: 40px;">b. No</p> <p>14. What roles did you play?</p> <p style="padding-left: 40px;">a. Initiated the call</p> <p style="padding-left: 40px;">b. Relay patient history</p> <p style="padding-left: 40px;">c. Administered Medications</p> <p style="padding-left: 40px;">d. vital signs</p> <p style="padding-left: 40px;">e. Direct other team members</p> <p style="padding-left: 40px;">f. Update the family</p> <p style="padding-left: 40px;">g. Facility move to other area</p> <p style="padding-left: 40px;">h. Document MET</p>

Appendix E

Part 3: Likert Agreement Scale**Detailed Responses to "Medical Emergency Team (MET) Participation" Questions**

Survey Item	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
15. My knowledge of the patients affects how well I participate.					
16. The education I have received on codes has helped me perform effectively,					
17. I think a rapid response team improves patient outcome?					
18. I know my role in a code event.					
19. I feel fully prepared when a code is activated.					
20. I feel the RRT improves working relationships.					

Appendix F

Part 4: Detailed Responses to "Medical Emergency Team (MET) Participation" Open-**Response Questions**

21. What reasons would cause you to be hesitant to call a code?
22. What do you consider a code event?
23. When do you know to call a code & are their challenges?
24. Who is involved in the code?
25. What is the nurse's job in the event of a code?
26. What is your level of comfort in caring for psychiatric emergent patients?
27. Describe the rapport between the nursing staff and all those who respond?

Additional Comments: _____

Appendix G

**Invitation to Participate in a
Nurse Survey concerning a RAPID
RESPONSE TEAM for Emergencies**

This survey will be an excellent opportunity to discuss your perception and
knowledge when responding to a code.

What is your role? What are your barriers?

Surveys will be Anonymous

RSVP and questions

Kimberly Cecil-Riddle, DNP-S, APRN, FNP-BC

Western State Hospital

Appendix H

Dear Fellow Nurse,

I am interested in your thoughts and perceptions of a rapid response team. As part of an effort to obtain information and knowledge for my Doctor of Nursing Practice (DNP) project, I am asking nurses for feedback and guidance. I am inviting nurses to participate in this process by participating in a 3-part survey to determine the nurse knowledge and perceptions of a Rapid Response Team at this inpatient psychiatric facility. I am focusing on behavioral emergencies.

I plan to distribute surveys at Western State Hospital (WSH) before or at the end of your shift. The survey should take about 15-20 minutes to complete. During this time I will briefly review the survey and answer any questions. Completed surveys must be placed in provided sealed envelopes and placed in a designated box. Feel free to write any comments you feel relevant to a rapid response team. At no time will your name appear on an official document associated with this survey. All responses will be confidential. By attending and participating in this survey you will be giving your informed consent (permission). There is no compensation for participating.

If you have any questions please e-mail Dr. Andrea Jennings, DNP Professor Walden University concerning questions about rights of participation. Please know that completing this survey implies consent or permission to participate in this project.

Sincerely,

Kimberly Cecil-Riddle, DNP-S, MSN, APRN, FNP-BC

Appendix I**Letter of Cooperation from a Community Research Partner for Data Collection when
Researcher has Dual Roles**

Western State Hospital

10-24-13

Dear Kimberly Cecil-Riddle, APRN,

We are pleased to work with you in your capacity as an Advanced Practice Family Nurse Practitioner who will be providing medical care and physical examinations as part of our organization's operations during the hours of 0645 to 1915. We agree to supervise and assume responsibility for these activities within the scope of our regular operations.

We understand that you will also be undertaking a Walden University student researcher role that is separate from your Advanced Practice Nurse role. In your student researcher role, I authorize you to conduct the study entitled Exploring the Nurses Perception and Knowledge of a Rapid Response Team in and Inpatient Psychiatric Setting here at Western State Hospital. I give permission for you to perform random data collection from nurses using a 3-part survey that will be returned in provided sealed envelopes. I authorize a Western State Hospital colleague of your choice to assist you in collecting sealed envelopes and assisting in dissemination of activities such as coding to insure validity. Individuals' participation will be voluntary and at their own discretion.

We understand that you allow participants to volunteer and decline anonymously in order to minimize conflicts of interest and other potential ethical problems.

We understand that our organization's responsibilities include: allowing nurses' time to complete the 20 minute survey before or after their shift in the nursing office on all five wards (Admissions, Intensive Treatment, Acute, CSP, and Multi-needs). The Ethics Committee and the Executive Staff Committee will have the right to review and make recommendations since this facility does not have an onsite IRB team. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,



Roger Westfall, Hospital Administrator

Appendix J

CONSENT FORM

You are invited to take part in a project of Nurses' Knowledge and Perceptions of Rapid Response Teams (Psychiatric/Behavioral emergencies). The researcher is inviting available RN and LPN's to be in the project. This form is part of a process called "informed consent" to allow you to understand this project before deciding whether to take part.

This project is being conducted by a researcher named Kimberly Cecil-Riddle, who is a doctoral student at Walden University. You may already know the researcher as an APRN, but this project is separate from that role.

Background Information:

The purpose of this project is to explore the nurses' knowledge and perceptions of Rapid Response Teams. Related objectives include determining characteristics of a successful RRT, specifically exploring the role of the nurse on the teams and determining challenges associated with activating a RRT. The questions are designed to determine the nurses' knowledge and perception of a code event, the roles they play, and the challenges they encounter.

Procedures:

If you agree to be in this project, you will be asked to: Complete a 4-part descriptive questionnaire.
Place your sealed manila envelope in a designated box provided that I provide.

Here are some sample questions:

What reasons would cause you to be hesitant to call a code?

What do you consider a code event?

When do you know to call a code & are their challenges?

Who is involved in the code?

What is the nurse's job in the event of a code?

What is your level of comfort in caring for psychiatric emergent patients?

Describe the rapport between the nursing staff and all those who respond?

Voluntary Nature of the Project:

This project is voluntary. Everyone will respect your decision of whether or not you choose to be in the project. No one at Western State Hospital (WSH) will treat you differently if you decide not to be in the project. If you decide to join the project now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Project:

Being in this type of project involves some risk of the minor discomforts that can be encountered in daily life, such as anxiety or stress. Being in this project would not pose risk to your safety or wellbeing. Research is needed to set standards of care using the best available evidence. Moreover, this will support the facilitation of RRT evidenced-based policies and procedures and will provide feedback to the current system.

Payment:

No payment will be provided for participating in this project.

Privacy:

Any information you provide will be kept anonymous. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the project reports. Data will be kept secure by placing the completed data in a locked area in the researcher's desk. Only the researcher has a key to this desk. Data will be kept for a period of at least 5 years, as required by the university.

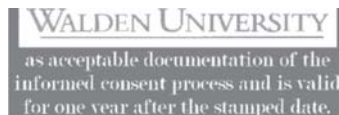
Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher email kimberly.cecil-riddle@waldenu.edu If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this project is 02-26-14-0372450 and it expires on February 25, 2015.

Please keep this consent form for your records.

Statement of Consent:

If you have read the above information and feel you understand the project well enough to make a decision about my involvement, you may indicate your consent simply by returning a completed survey. To protect your privacy, no consent signature is requested.



RightsLink



Thank You For Your Order!

Dear Kim Riddle,

Thank you for placing your order through Copyright Clearance Center's RightsLink service. Wolters Kluwer Health has partnered with RightsLink to license its content. This notice is a confirmation that your order was successful.

Your order details and publisher terms and conditions are available by clicking the link below:

<http://s100.copyright.com/CustomerAdmin/PLF.jsp?ref=c5c4c4af-a6d5-4198-89b8-f96cf9d41ad3>

Order Details

Licensee: Kim Riddle

License Date: Nov 5, 2013

License Number: 3262860139040

Publication: AJN: American Journal of Nursing

Title: Original Research: The Role of the Non-ICU Staff Nurse on a Medical Emergency Team: Perceptions and Understanding.

Type Of Use: Dissertation/Thesis

Total: 0.00 USD

To access your account, please visit <https://myaccount.copyright.com>.

Please note: Online payments are charged immediately after order confirmation; invoices are issued daily and are payable immediately upon receipt.

To ensure we are continuously improving our services, please take a moment to complete our [customer satisfaction survey](#).

B.1:v4.2

+1-877-622-5543 / Tel: +1-978-646-2777



Appendix L

Permission to Modify Tool

Original E-mail

From : Meg Pusateri [meg.pusateri@gmail.com]

Date : 11/14/2013 10:03 PM

To : Kimberly Cecil-Riddle [kimberly.cecil-riddle@waldenu.edu]

Subject : Re: Permission to Use Data Collection Tool for Capstone Project

Kimberly,

I'm sorry for taking so long to get back to you. I've been traveling over the last week and have been remiss in replying to email. I happily give you my permission to use the survey we developed for your project. Please feel free to adjust the questions as needed for your purpose. Let me know if you have any questions - good luck!

Meg Pusateri, MS4

University of Louisville School of Medicine

Class of 2014

On Wed, Nov 6, 2013 at 1:32 AM, Kimberly Cecil-Riddle <kimberly.cecil-riddle@waldenu.edu> wrote:

Hi Dr. Pusater,

I am a doctorate of nursing student at Walden University. I am asking permission to reuse your data collection to in an inpatient psychiatric facility in Western Kentucky. I plan to make minor modifications in your 3-part survey to fit the project. I am exploring the nurses perception and knowledge of a rapid response team in an inpatient psychiatric facility. I will be addressing psychiatric emergencies. My current facility does not have a functioning rapid response team. Your survey was found to ask the most appropriate questions to address the problem. Thank you for taking time to read this and I look forward to your feedback.

Kind Regards,

Kimberly Cecil-Riddle, DNP-S, MSN, APRN, FNP-BC

Appendix M 2014 National Nurses Week Poster Presentation

References

References Continued

Exploring Nurses' Knowledge and Perceptions of Rapid Response Teams in an Inpatient Psychiatric Facility

Rapid Response Team

Introduction

Sign of Escalation

De-escalation Strategies

Rapid Response Team

Significance to Practice

Results

Purpose Statement and Project Objectives

Evidence-based Significance of the Project

Recommendations

Table 1 Survey Demographics

Table 2 Detailed Response to "Medical Emergency Team Background Experience"

Table 3 Detailed Likert Agreement Scale

Open Response Questions

Conclusion

Appendix N

Table 1: Survey Demographics

1. Type of nurse (n=59)	
RN	39 (66%)
LPN	20 (34%)
2. Years as a nurse (n=59)	
1 year	0 (0%)
1-2 years	8 (14%)
3-5 years	16 (27%)
6-10 years	10 (17%)
10-20 years	15 (25%)
> 20 years	10 (17%)
3. Education preparation (n=56)	
	11 (20%)
Diploma	38 (68%)
Associate	7 (13%)
Bachelors	0 (0%)
Masters	0 (0%)
Doctorate	0 (0%)
PhD	0 (0%)
4. Work Experiences (n=56)	
	7 (11%)
ER	21 (36%)
Med-Surgical	2 (3%)
OB	10 (17%)
Home health	1 (1%)
Hospice	3 (5%)
Surgery	55 (93%)
Psychiatric	9 (15%)
ICU/CCU	11 (19%)
Office/Clinic	5 (8%)
other: Nursing Home	3 (5%)
other: Long-term Care	2 (3%)
other: Geriatrics	1 (1%)
other: Assisted Living	1 (1%)
other: Pediatrics	1 (1%)
5. Age (n=57)	
18-25	2 (4%)
26-35	17 (31%)
36-45	20 (35%)
46-55	10 (18%)
56 and older	8 (14%)
6. Race (n=59)	
White or Caucasian	50 (85%)
African American	8 (14%)
Hispanic	1 (1%)
Asian or Pacific Islander	0 (0%)
Native American	0 (0%)
Other	0 (0%)
7. Gender: (n=59)	
Male	7 (11%)
Female	52 (88%)
8. Years working at WSH (n=54)	
	1 (2%)
< 1 year	16 (30%)

1-2 years	17 (31%)
3-5 years	5 (9%)
6-10 years	13(24%)
10-20	5 (9%)
More than 20	

Appendix O

Table 2. Detailed Response to “Medical Emergency Team Background Experience”

Survey Item	n (%)
9. Are you familiar with the MET? (n=49)	43 (73%)
Yes	6 (27%)
No	
10. At hire, were you aware of the MET? (n=56)	29 (52%)
Yes	27 (48%)
No	
11a. Have you ever been called to an MET personally? (n=56)	
Yes	27 (48%)
No	29 (82%)
11b. If yes, more than once? (n=36)	
Yes	26 (72%)
No	10 (28%)
12a. Have you ever been hesitant to call a code? (n=59)	
Yes	26 (44%)
No	33 (56%)
12b. If yes why? (n=28)	
patient severity unclear	17 (60%)
staff member discouraged	3 (11%)
physician discouraged	1 (4%)
other	7 (25%)
13. Have you ever participated in a MET? (n=58)	
Yes	43 (74%)
No	15 (26%)
14. What roles did you play? (n=44)	
Initiated the call	14 (32%)
Relay patient history	13 (30%)
Administered Medications	21 (48%)
Vital signs	24 (55%)
Direct other team members	17 (39%)
Update the family	9 (20%)
Facility move to other area	12 (27%)
Document MET	23 (52%)

Appendix P

Table 3. Detailed Likert Agreement Scale

Survey Item n=57	Score	RN N	LPN N	O-E	(O-E) X ²	(O-E) X ² /E	Chi-Square	p value
15. Knowledge of patient	1	4	2.2	1.8	3.24	1.472727	X ² =8.65572	0.07
	2	7	6.5	0.5	0.25	0.038462		
	3	4	6.5	-2.5	6.25	0.961538		
	4	17	10.9	6.1	37.21	3.413761		
	5	7	13	-6	36	2.769231		
		N=39	N=39.1					
16. Education	1	0	0	0	0	0	X ² =10.19043	0.017
	2	3	0	3	9	3		
	3	8	6.5	1.5	2.25	0.28125		
	4	19	28.2	-9.2	84.64	4.454737		
	5	9	4.3	4.7	22.09	2.454444		
		N=39	N=39					
17. Improves patient outcomes	1	0	0	0	0	0	X ² = 13.723	0.001
	2	0	0	0	0	0		
	3	4	2.2	1.8	3.24	1.472727		
	4	20	10.9	9.1	82.81	7.597248		
	5	15	26	-11	121	4.653846		
		N=39	N=39.1					
18. Know Role	1	0	0	0	0	0	X ² = 0.5516	0.758
	2	0	0	0	0	0		
	3	6	6.5	-0.5	0.25	0.038462		
	4	26	23.9	2.1	4.41	0.184519		
	5	7	8.7	-1.7	2.89	0.332184		
		N=39	N=39.1					
19. Feel Prepared	1	0	0	0	0	0	X ² =16.1603	0.001
	2	8	4.3	3.7	13.69	3.183721		
	3	9	4.3	4.7	22.09	5.137209		
	4	19	17.4	1.6	2.56	0.147126		
	5	3	13	-10	100	7.692308		
		N=39	N=39					
20. Improves work relationships	1	0	0	0	0	0	X ² =2.289773	0.51
	2	1	0	1	1	1		
	3	11	13	-2	4	0.363636		
	4	16	13	3	9	0.5625		
	5	11	13	-2	4	0.363636		
		N=39	N=39					

NOTE: Due to rounding, some percentages may not add up to exactly 100%

O = Observed (RN Values) E=Expected (LPN Values)

LPN values scale up by 2.17 to be proportional to RN values. There were 39 RN responses and only 18 LPN.

strongly disagree = 1, disagree = 2, neutral = 3, strongly agree = 4, and agree = 5.

Curriculum Vitae

Kimberly J. Cecil-Riddle**Education**

- Doctor of Nursing Practice; Walden University Minneapolis, MN; Expected Completion August 2014
- Walden University, Doctor of Nursing Practice, 2014. Capstone Title: *Nurses Perception and Knowledge of Rapid Response Team in a Psychiatric Setting.*
- Master's Degree in Nursing; Murray State University Murray, Kentucky, 2004.
- Baccalaureate Degree in Nursing; Murray State University Murray, Kentucky, 1998.
- Associate Degree in Nursing; Madisonville Community College, Madisonville, Kentucky, 1997.

Professional Background**2005-present Advanced Practice Registered Nurse; Western State Hospital, Hopkinsville, Kentucky.**

APRN. Provide medical care to all psychiatric patients. I perform a complete physical exams on all new admissions and those placed at other facilities. Responsibilities included managing and coordinating medical issues throughout the hospital. This includes assessing, diagnosing, prescribing, interrupting lab results, and referring. Assist with codes and help with policies and procedures.

2003-2004 Registered Nurse; Gateway Health System, Clarksville, Tennessee.

Emergency Room Agency Nurse. Provided medical care to all ages in the emergency room setting. Responsibilities include triage, leading trauma codes including CPR and defibrillation. Proficient in starting IV's and drawing arterial blood gases. Trained in assisting doctors in intubations, suturing, and wound cleansing. Trained in giving report to other hospitals, police, and other medical personnel.

1998-2004 Registered Nurse; Baptist Health (AKA: Regional Medical Center [RMC]), Madisonville, Kentucky.

RMC employee 1998-2001; Agency Nursing Surecare of Kentucky, Aberdeen, KY 2002-2004 Emergency Room Staff/Agency Nurse. Provided care to all age and races of patients in the Emergency Department. Responsibilities for patient care same as above employment. Additional responsibilities included being in charge and precepting paramedic, EMT, and nursing students.

1998-1999 Registered Nurse; Murray Calloway County Hospital, Murray, Kentucky.

Critical Care Staff Nurse. Responsible for patients admitted to the Telemetry and ICU department. Trained in codes and cardioversion. Responsibilities included ADLs, medication administration, interrupting rhythm strips, assisting providers, new admissions and/or pre/post-op orders.

1997-1998 Registered Nurse; Henry County Medical Center, Paris, Tennessee.

Medical-Surgical Staff Nurse. Responsible for medical-surgical patients admitted and discharged. Charge nurse overseeing ADLs, medication administration, admissions and pre/post op orders.

Licensors

- Registered Nurse in the state of Kentucky.
- Advanced Practice Registered Nurse in the state of Kentucky.
- Registered Nurse in the state of Tennessee.
- Board Certified APRN with American Nurse Credentialing Center
- ACLS Certified

Professional Affiliations

- Member of The Kentucky Coalition of Nurse Practitioners/Nurse Midwives
- Member of Hopkinsville Kentucky Coalition of Nurse Practitioners and Physician's Assistants
- Honor Society of Nursing, Sigma Theta Tau International

Professional Experience Summary

- Trained as an APRN in clinical practice for diagnosing, interpreting, treatment, and follow-up care.
- Experiences as an APRN include family practice and psychiatry.
- Experiences as an RN include med-surg, critical care, and emergency nursing.
- Experienced in educating nursing students, EMT students and EMT-P students in the areas of theory, skill, and clinical practice.
- Experienced in Root-Cause-Analysis

Professional Work Honors

- Customer Service Award 1st Quarter 2012

Goals

- Involvement in policies and procedures at the local, state, and federal level.
- Continued research to promote EBP (submit findings for the wound care pilot program at WSH—this is a long-term goal)
- Continue to be an effective and scholarly practitioner transforming care to others