2019

A Practice Guideline for Triaging Mental Health Patients in the Emergency Setting

Florence Nguh
Walden University

Walden University

College of Health Sciences

This is to certify that the doctoral study by

Florence Nguh

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. Barbara Niedz, Committee Chairperson, Nursing Faculty
Dr. Marilyn Murphy, Committee Member, Nursing Faculty
Dr. Patti Urso, University Reviewer, Nursing Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2019

Abstract

A Practice Guideline for Triaging Mental Health Patients in the Emergency Setting

by

Florence Nguh

MS, Walden University, 2016

BS, Grand Canyon University, 2013

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

December 2019

Abstract

Today's emergency departments (EDs) are challenged with increasing numbers of patients with behavioral health (BH) issues and associated management problems. Patients presenting in the ED are increasingly in need of BH services due to a lack of available services in the community. The implication is that ED staff are faced with conducting a comprehensive review of their systems and processes for BH care delivery to ensure that the needs of this population are safely met. Specifically, this DNP project addressed the lack of evidence-based screening tools for the ED triage area for patients with BH issues. The purpose was to develop a clinical practice guideline targeting an improved triage process for providers with BH patients in the ED setting. Using a modified Delphi technique and the AGREE II model, an expert panel comprised of ED leadership was convened to (a) identify challenges; (b) review a clinical practice guideline that addressed the identified challenges; and (c) approve the implementation of the clinical practice guideline, which included an evidence-based BH screening tool that identified BH needs and expedites the appropriate process of care. Key findings included two 2 components: the expert panel agreed to full implementation of the BH screening tool including the use of the accompanying software, after an in-depth educational process is completed for the ED staff. Potential implications for positive social change include the ability to readily and effectively screen BH patients and provide them with proper BH care while reducing the overall wait time and improving the patient's ED care experience.

A Practice Guideline for Triaging Mental Health Patients in the Emergency Setting

by

Florence Nguh

MS, Walden University, 2016

BS, Grand Canyon University, 2013

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

December 2019

Dedication

I would like to dedicate this project to my father, Daniel Nguh, who taught me the importance of education and provided the solid foundation upon which I now stand. Your influence lives on in our lives today and has brought me to this point in my career.

Acknowledgments

I would like to acknowledge all those who have been instrumental in my academic journey. I thank both my family and friends. Special thanks go to my dissertation committee members. Not the least are my family members who have been supportive of my education including my husband, Nicholas; my mother, Debora; and son, Daryl, and daughter, MyraMonique and my sisters and brothers, especially my grandma who just passed Ijang. I am grateful for your love, patience, and sacrifice on my behalf. Thank you to the staff and administrators of Walden University for supporting me through this journey.

Table of Contents

List of Tables

List of Figures

Section 1: Nature of the Project

Introduction

The National Association of Mental Illness (NAMI) posited that 20% (47.6 million) of U.S. adults experienced behavioral health (BH) illness in 2018, which represents one in five U.S. adults (NAMI, 2019). BH concerns are more prevalent among women as compared to men and occur more frequently in adults aged 18 to 25 (Healthy People, 2020). Despite the increase in the number of individuals living with BH conditions, only 64% of those with BH conditions received treatment in 2018 (NAMI, 2019). Because of limited access, increasing costs, and lack of insurance, many emergency departments (EDs) are becoming the safety net for this population (Healthy People, 2020). For example, BH illness is involved in one out of eight ED visits by a U.S. adult, costing the U.S. healthcare system on average $187.8 billion per year (NAMI, 2019). Contending with the high number of clients with BH issues and associated management problems due to an increasing demand for services has been challenging for ED personnel. These statistics highlight the importance of providing adequate BH evidence-based services for this specific population.

The practice setting is experiencing an increase in the number of patients with BH conditions. The implication of this identified need is that the organization is now faced with conducting a comprehensive review of its systems and care delivery processes to ensure that this target population is provided with safe and effective health care. This comprehensive review of systems and processes includes education for staff to ensure not only that they have the knowledge and competencies to care for this population, but that

they are also able to identify, develop, and implement tools and systems that guide service delivery specifically geared towards the needs of this population (see Sinclair, Hunter, Hagen, Nelson, & Hunt, 2006).

Compounding this issue, in many United States community hospital EDs, the average wait time for patients with BH conditions to receive dispositional placement continues to increase (Misek, Magda, Margaritis, Long & Frost, 2017). In the community hospital that was the setting for the Doctor of Nursing Practice (DNP) project, the ED has experienced an increase in BH volume. Having a well-defined system and logical process for triaging, which includes a validated screening tool, may help ED personnel manage the increased BH volume. Some researchers have recommended these measures for screening patients who present to the ED with BH conditions (Coristine, Hartford, Vingilis, & White, 2007).

The purpose of the screening tool is to determine which patients are in emergent or urgent need of BH care so that appropriate safety interventions can be implemented. There is also value in identifying those patients who are not in urgent need of care and appropriating discharging them from the community ED with a referral for care as outpatients (see Sinclair et al., 2006). Currently, the processes in place at the community ED do not include the use of validated tool for BH screening. By implementing a formal BH screening process as part of a practice guideline change in the ED triage area, it is hoped that patients will be efficiently assessed with appropriate care rendered while reducing ED wait time and improving the patient's overall experience, which may lead to positive social change for the ED, the organization, and the community as a whole.

Problem Statement

An essential element for the provision of quality and effective services is the implementation of streamlined processes by healthcare institutions. According to an ED nursing administration at the facility that served as the setting for this DNP project had seen a rise by 60% in the number of patients with BH conditions within the past 12-24 months. The literature reveals that the average wait for BH patients in EDs before appropriate care and dispositional placement can be obtained is between 30-33 hours (Misek et al., 2017). At the local level, this problem was illustrated in the lack of systems and processes to meet the needs of this targeted population in a holistic and systemic approach. The local relevance of addressing this issue is that it may enhance the delivery of care and provide a systemic approach within which care is delivered. This project is significant to the field of nursing because it involves the development of a clinical practice guideline to assist nurses in the delivery of care to patients with BH conditions, who represent a vulnerable population group.

Purpose

Presently, there are no screening tools presently employed at the site in the ED triage area. Thus, individuals arriving at the ED with BH concerns are returned to the waiting room after staff obtain basic demographic and chief complaint information. Given the lack of a screening tool, the details of the patient's BH issues are left to the staff within the ED and outside of triage for further evaluation. This is a cause for concern as the needs of an individual who may be an imminent threat to self or others are not being appropriately addressed in a timely fashion. This project has potential to

address the existing gap in practice through the development of a clinical practice guideline that can be used by ED staff to address the individual's specific needs and hasten the delivery of appropriate and timely healthcare services. Moreover, implementation of the clinical practice guideline may provide a standardized method and tool to promote utilization of evidence-based practice for practitioners in the delivery of care for the target population.

As such, I aimed in this DNP project to develop a clinical practice guideline that would be used to screen and manage BH patients who present at the ED after approval by an expert panel. When this tool is used, it may aid in the provision of timely and effective services to this target population (see Cappelli et al., 2012; Happell, Summers, & Pinikahana, 2016). Once the practice guideline is approved and fully implemented, quality of care may be enhanced through the provision of timely and appropriate services (see Coristine et al., 2017). My role was to develop the practice guideline that will form the basis for the management of this patient population (Happell et al., 2016). However, full implementation of the practice guideline is out of the scope of this project and will be managed by the organization's operational and clinical team.

Organizations such as the American Academy of Pediatrics, the American Academy of Emergency Medicine, and many others have called for the greater utilization of standardized assessments in the provision and delivery of care (Cappelli et al., 2012). A key benefit of the use of such tools is that they inform the delivery of care and provide a framework for management of the patient and their condition (Cappelli et al., 2012). This DNP project involved the development of a practice guideline. Thus, the practice-

focused question for this project was, Will a practice guideline designed for use in a community ED to screen BH patients in triage be adopted for implementation by a panel of experts at the DNP project setting?

Nature of the Doctoral Project

I used multiple databases and search engines to collect evidence to meet the purpose of this doctoral project. These included Cochrane Database of Systematic Reviews, MEDLINE PLUS CINAHL, and Google Scholar. The literature was verified using Ulrich Periodical Directory to ensure they were peer-reviewed. A formal review of the literature will be presented in Section 2.

The focus of the DNP project was on developing a clinical practice guideline for triaging BH patients in the ED setting. In this section I will outline and discuss the steps that were used for this project. A modified process based on the AGREE II model (Brouwers et al., 2010) was used that started with topic identification and ended with full implementation. The first step was identification of the topic or subject matter. Following this identification was the establishment of the scope of the review. Establishing the scope of the review ensured that the target audience, setting, and important measures would be determined and included in the development of the project. For the third step, I formed an interdisciplinary team. This team was tasked with reviewing and evaluating the evidence for this project. I served as the primary organizer and facilitator of the team. During this evaluation and review period, the team developed the specific questions that were asked and determined the potential for harm of the project as well as availability of resources for the project's feasibility. The next phase was identification of the evidence;

during this phase, the team conducted a comprehensive search of the literature. I then synthesized and interpreted the evidence for application in practice.

Next was the development of a recommendation that was based upon the established outcomes, benefits, and harm indicated in the literature. Following the development of the recommendation, I drafted the policy and presented it to the expert panel for review. Implementation of the project was outside of the scope of the DNP project. However, the DNP project recommendations included a revised workflow based on the new practice guideline, recommendations for staff educational processes, and an implementation guide.

The gap in practice for this doctoral project was the lack of screening tools for BH patients who present in the ED. The purpose of this project was to develop a practice guideline that would include the use of a tool in the screening and management of patients with BH conditions presenting to the ED.

Significance

Healthcare providers have the ethical obligation to provide care that promotes the health and well-being of the individuals they serve (Beauchamp & Childress, 2009). Provision of such care is especially significant in the ED when managing multifaceted and complicated health issues for the mental health population, who are often vulnerable and disenfranchised (Friis & Sellers, 2009). According to an ED nursing administrator at the DNP project setting, current wait times ranged from 15 to 20 hours for full disposition of appropriate care. By efficiently screening patients with BH concerns in triage and providing a full and proper BH evaluation, appropriate care can be rendered in a timely

and effective manner while reducing the overall wait time in the ED. The hope is that by providing timely appropriate care and reducing wait time, the patient's overall satisfaction with the ED care delivery process will be increased and result in a positive social change for the patient, the organization, and the community at large.

Patel et al. (2009) noted the significance and importance of utilization of nurse triage systems to the ED, a setting where patient prioritization and resource allocation is necessary through early interventions as a model of care. Thus, this project also has implications for nursing in a more general sense in that the clinical practice guideline developed can be transferred to similar care settings where such challenges do exist. Doing so may help to close healthcare gaps that exist in other clinical environments.

Stakeholders invested in this DNP project include hospital administrators, advance practice nurses, behavioral healthcare providers, patients, and family members of those with BH issues. Addressing this problem would potentially impact all of these stakeholders in various ways including reduction of costs, streamlining of services, provision of efficient and effective care, and facilitation of a patient-centered approach to care.

Summary

In summary, the problem that this project addressed was the management of patients with BH conditions in the ED setting. Given the increase in the number of patients presenting to the ED with BH needs, the gap in practice that existed in the DNP project setting was that the ED was not currently meeting the needs of this patient population in a timely and effective manner. To address this practice problem, I

developed a practice guideline that may potentially be implemented within the DNP project setting after it is presented to an expert panel for approval with a draft policy. This project required an in-depth review of the current literature to develop a practice guideline for mental health patients within the ED setting. Desired outcomes may include staff compliance with utilization of the implemented guideline, enhanced monitoring of mental health clients, and improved screening and evaluation of clients in the ED setting. These outcomes may likely emerge after the practice guideline is fully implemented. The immediate outcome of the DNP project was the expert panel's acceptance and approval of the practice guideline and the accompanying draft policy regarding its use.

Section 2: Background and Context

Introduction

The practice problem for this DNP project was the lack of processes and systems available to staff at healthcare facilities to identify and streamline the delivery of care to the BH population presenting to the ED for treatment. The practice-focused question for this project was, Will a practice guideline designed for use in a community ED to screen BH patients in triage be adopted for implementation by a panel of experts at the DNP project setting? The purpose of this DNP project was to develop a practice guideline that would be used in the screening and management of patients with mental health conditions presenting to the ED. In Section 2 of this DNP project, I address the following areas: (a) the concepts, models, and theories underpinning the project; (b) the project's relevance to nursing practice; (c) local background and context; (d) my role in the project, and (e) the role of the project team. The section ends with a summary of key points.

Concepts, Models and Theories

Patient Flow

One significant problem faced by ED personnel is the challenge of balancing the provision of quality and timely care in an environment of limited healthcare resources (Leon & Rahn, 2014). The implications of this problem are that there are often wide gaps between what ED staff are able to deliver and the needs of the patient resulting in ED overcrowding and suboptimal patient flow management (Leon & Rahn, 2014). Appropriate management requires timely and effective delivery of care upon presentation at the ED. For this reason, some experts have advocated the use of the single flow process

that is standard practice in the automotive industry (Misek et al., 2017). The goal with utilization of this process is to reduce patient wait times during the delivery of care in the ED (Bullard, Villa-Roel, & Guol, 2016). One issue to consider in this discussion is that of cost, which has been cited as a barrier towards effective implementation and utilization of a single flow process (Lluch, 2011). However, there is growing evidence found in the literature (Murrell, Offerman, & Kauffman, 2017) that such models result in improved patient outcomes.

Findings from Happell et al. (2016) provide evidence to support the provision of timely assessment and screening upon presentation at the ED for BH patients. The authors evaluated the different methods and tools that psychiatric nurses used to triage mental health patients in the ED setting, comparing triage methods and tools and their outcomes among 137 EDs over a 3-month period (Happell et al., 2016). Findings from this study suggest that mental health education and utilization of clinical guidelines can be effective in improving patient outcomes for those with mental health conditions who present in the ED. The researchers determined that with the implementation of operational strategies, such as process streamlining using a standardized practice guideline, ED overcrowding decreased (Happell et al., 2016). The results from this study provide evidence to support the adoption and implementation of operational strategies to address ED overcrowding.

Pine and Hilton (2018) highlighted the current situation of ED overcrowding and its implications for patient safety and the broader health system. The aim of this study was to investigate the effect of ED overcrowding on patient outcomes (Pine & Hilton,

2018). Findings from this study suggest that ED overcrowding is associated with poor patient outcomes due to delay in care, treatment, and appropriate management (Pine & Hilton, 2018). In their comparative study conducted across EDs in 15 countries outside of the United States, Pine and Hilton highlighted the problem of ED overcrowding as a global issue. They highlighted the present gaps in service delivery and that there is a mismatch between supply and demand and the availability of resources within hospitals leading to long wait times and delay in treatment. Data categories that were assessed included crowding, visitation rates, and visitation patterns (Pine & Hilton, 2018). Findings revealed that operational policies and interventions provide a pathway forward toward improving patient outcomes (Pine & Hilton, 2018).

Asplin, Magid, and Rhodes (2017) discussed the adverse health effects of ED overcrowding in the United States. The authors evaluated over one million ED visits and found that there was an increased risk for mortality when wait times were greater than 2.5 hours and more (Asplin et al., 2017). In their cross-sectional observational study, Asplin et al. evaluated 120 EDs in the United States. Using a multivariate technique to analyze the data, Asplin et al. found that ED crowding was associated with the factors of increased patient visits, referral of patients, nursing staff, and timeliness of disposition. Findings from this study suggest that reducing ED overcrowding is important both for patient quality and as an organizational strategic goal. Recommendations include the need to utilize data and reorganization of priority areas to meet and address patient needs (Pine & Hilton, 2018).

Schneider and Gallery (2017) shed more light on the mismatch between ED capacity and patient demand to meet the increasing volume of mental health patients. The authors utilized a systemic review process to analysis evidence from a database of 5,064 articles as the sampling frame (Schneider & Gallery, 2017). The literature reviewed included a sample of 250 articles, and evidence-based strategies were identified to help reduce patient wait times in the ED (Schneider & Gallery, 2017). Findings from this systematic review suggest that implementation of evidence-based strategies such as rapid assessment, streamlining, and early triage can help improve patient outcomes (Schneider & Gallery, 2017).

Improving Emergency Department Risk Assessment in Behavioral Health Patients

Assessments of the mental health needs of patients in the DNP project setting have been inconsistent, lacking accuracy with several key items missing. Healthcare practitioners within the ED setting have verbalized feeling ill-prepared with a lack of knowledge and skill in management of mental health needs, sentiments which find support in research by Coristine et al. (2017). Using a mixed-methods approach, Coristine et al. evaluated utilization of mental health triage in the ED. A pre- and postintervention design was utilized to conduct this study in an urban community-based health hospital (Coristine et al., 2017). Findings provide evidence that support the implementation of a triage system for mental health patients using several mental health screening tools to improve delivery of care and patient outcomes.

Risk Assessment Matrix. Fazel and Wolf (2018) conducted a retrospective study over a 2-month period with 155 participants in a community ED implementing a risk

assessment tool in the ED. Fazel and Wolf used the Risk Assessment Matrix (RAM), a tool that is presently utilized for mental health triage by ED personnel. The RAM tool has been validated in the ED setting as a useful tool in identifying and screening mental health needs for patients in this setting (Fazel & Wolf, 2018). One area that remains a limitation for EDs is the strain on resources faced by EDs from an increase in patient volume (Carter, Pouch, & Larson, 2014). Utilization of a standard screening tool may integrate the delivery of care to address and meet both patient and organizational needs (Fazel & Wolf, 2018).

Normandin (2016) similarly focused on evaluation of mental health triage tool for risk assessment purposes within the ED setting. The purpose of this study was to assess the reliability and validity of a mental health triage tool so as to reduce ED overcrowding and improve the assessment skills of nurses in this setting (Normandin, 2016). Using a pre- and postintervention design, Normandin developed and implemented a mental health triage scale using an educational package which was then evaluated 2 years following implementation. Results indicated that customer satisfaction increased, the average wait time decreased, and the tool was considered appropriate by practitioners after implementation (Normandin, 2016). These findings suggest that having a systemic approach to mental health triage can be an effective means of addressing patient needs in the ED.

Galatean Risk and Safety Technology (GRiST). The screening tool that would guide the development of this project and its practice guideline was the GRiST tool (Adams & Buckingham, 2012; Fazel & Wolf, 2018) which has successfully been used in

ED settings, and has established reliability and validity. GRiST collects information about wider health and social care needs, so that risk assessment is based on a holistic view of the person being assessed (Fazel & Wolf, 2018). It provides for a thorough, holistic and systematic approach to risk assessment, which also takes account health and social care needs (Fazel & Wolf, 2018). The GRiST tool scores health assessment data using an 11-point scale. This scale is color coded and each color indicates the level of severity or potential for patient risk. The GRiST tool was used to develop the practice guideline utilized in the ED. The practice guideline was then used to support clinical judgement of the healthcare practitioner during the assessment and evaluation process. This tool would help guide practitioners as it provides a very structured and systemic process for assessment data to be collected. This tool involves identifying risk assessment information and a comprehensive patient profile which would be used to support the provider's clinical judgment in the assessment of patient health status during the delivery of care. Use of the GRiST tool generates a patient profile with corresponding color code that indicates their level of severity. The GRiST tool (Fazel & Wolf, 2018) is made up of a set of 10 risk assessment questions that will guide the practitioner in clinical decision making about the patient's mental health risk status. The tool is meant to be used by nurses. Each question is scored from a scale of 0-11; a score of zero indicates a non-urgent situation. As the score rises on each question, the urgency for the patient rises as well. The points are then totaled up and corelated to one of five colors (light green, green, yellow, orange, and red code) on the scale. The numbers in the scale represent level of severity and range from light green color reflecting the least severity to red color which

indicates the most urgent or severe situation. The tool can be completed within 15 minutes. The color codes identify the patient level of risk (from no risk to maximum risk along the color continuum). This tool was developed out of a collaboration between Aston University and the National Health Service in the UK. Evidence for reliability (the quality of being consistent) was achieved from an analysis of over 104,556 assessments that achieved an accuracy of 85% within plus or minus one point on the 11-point scale. Evidence for validity (ability of an instrument to do what it claims) is demonstrated in that accurate judgments decrease risk of repeat episodes. In the DNP project setting, the tool will be used as part of the assessment process that the nurse performs during the triage of mental health patients.

The GRiST tool was what the practitioner would use to support decision making. Results from the patient profile indicate their level of severity and this would determine practitioner decision regarding whether the patient gets admitted to the ED for intensive evaluation by a psychiatrist or when to refer to the ED doctor for evaluation and discharge home.

AGREE II Model

The methodological model that guided the development of this project was the Appraisal of Guideline Research and Evaluation (AGREE) II model (Moran, Bursin, and Conrad, 2017). The rationale for selection of this model was that it provided a systematic method and logical approach to developing clinical guidelines which was comprehensive in design and integrated the strength of the evidence. The AGREE II model has been tested for validity and reliability. It identifies 23 key items organized along six separate

areas as follows (a) scope and purpose, (b) stakeholder, (b) rigor, (c) clarity, (d) applicability, and (e) editorial.

The first section of scope and domain focuses on description of the aims, question and target population of the guideline. The second section of stakeholder involvement describes who the stakeholders are which the guideline targets as well as how much it was developed by the appropriate stakeholders who are relevant to the subject matter. The third section of rigor describes the process of gathering and synthesizing the evidence, and describes the methodology utilized to formulate recommendations. The fourth section of clarity describes the language, structure and format that will be used in the guideline. The fifth section of applicability describes factors that will either facilitate and or hinder the guideline development. Lastly, is the editorial section which describes measures taken to address and minimize bias in its development.

The Fineout-Overholt, Melynk, Stillwell and Williamson (2010) guide for evaluating the level of evidence was useful in the development of literature review matrix. A compilation of a matrix of the various studies is presented in Appendix A. Each article was ranked in terms of quality of evidence using the items and components of the Fineout-Overholt et al. (2010) framework.

Relevance to Nursing Practice

The development of a practice guideline for triaging BH patients in the ED setting provided a systematic and logical approach for nurses in triaging and assessing this population to identify and address mental health needs enabling the delivery of timely and appropriate care (Patel et al., 2009). The practice guideline informed the screening

and data collection for decision making, enabling the provision of care that is holistic in nature. This guideline also informed decision making for referral services and continuing of care (Cappelli et al., 2012). Most importantly it assisted ED nurses in making rapid and accurate assessments when patients with mental health needs present in the ED setting thus improving the provision of care to this target population. Relevance to nursing has implications for safety, quality and continuity of care for the patient. The paragraphs below discuss each of these areas and the implications they have for nursing, providing justification that supports this project.

Normandin (2016) discussed current gaps in delivery of care relating to the fact that many EDs do not currently have policies in place that specifically address mental health patients. The author highlights the fact that policies should be developed to address risk assessment and ongoing monitoring for patients with behavioral health issues (Normandin, 2016). The implementation of this DNP project helped address this issue as an initial step in creating the framework within which policies were developed.

Richmond, Berlin and Fishkind (2018) discussed the need for provision of safe and effective care within a timely manner which protects both the patient and the healthcare provider. It is not uncommon for patients with mental health issues to feel a loss of control and easily get agitated leading to an escalation of their condition. Richmond, Berlin and Fishkind (2018) assert that provision of timely triage enhanced safety through establishing of a sense of control for the patient. This DNP project was relevant in that it provided practitioners with a screening tool that communicated a sense

of urgency to the patient, by asking the right questions right away, helping patients to feel more in control of the process.

Zun (2016) discussed barriers to provision of care in the ED setting. The authors assert that issues such as fear, lack of resources, inadequate training, and overcrowding are just a few of some of the factors that hinder the provision of effective care for this target population in this setting. Zun (2016) proposes the above issues (training, resources, capacity building) as strategies to address this gap-in-practice. This DNP project was relevant because with the practice guideline developed, it provides an important tool for the staff members to use and help staff gain confidence and feel empowered to care for patients with mental health needs.

Local Background and Context

The U.S. BH system can be described as being as fragmented and decentralized (Hing, Decker, & Jamoon, 2015). One of the consequences of such decentralization and fragmentation in the system is that the entry point for those in acute BH distress is often the ED. Thus, due to the increase in BH patient volume that has been witnessed in the U.S, many ED's are overstretched and unable to meet this increase demand (Hing et al., 2015). Compounding this issue, the number of psychiatric beds in U.S hospitals has also dropped. Gindi, Kirzinger and Cohen (2012) noted that from 400,000 beds in the 1970's there are now approximately only 50,000 beds. Gindi, Kirzinger and Cohen (2012) also posited that psychiatric visits to the ED have almost doubled over the last decade from 6.3 percent in 2000 to 12.5 percent in 2011.

A significant amount of resources is required to meet the needs of BH patients in the ED setting. Boarding is a phenomenon that commonly occurs in the ED and refers to a state in which the available resources are unable to meet the increased demands for ED services (ACEP Crowding Resources Task Force, 2002). Boarding of patients in this setting delays the timely provision of care and services they require to meet their healthcare needs (Boccuti, Swoope, Damico & Neuman, 2013). Boarding increase patient wait times and leads to delay in provision of timely and effective care. By effectively screening patients with BH disorders early in their emergency department process, i.e., during the triage process, this can effectively remove at least some mental health patients from the ED setting early, freeing up beds for those who truly need to remain in the acute care setting.

The local background and context from which this project and problem stems from a lack of assessment tools in author's own practice setting to triage BH patients who presented at the ED. In author's practice setting, patients were simply asked to assess the level of their depression using a verbal self-rating technique similar to pain scale assessment. This did not meet standards of practice and does not align with evidence-based practice as it was not based on any theoretical or conceptual framework.

This project was be implemented within the context of an acute care emergency department setting. The institution which was the site of this project was a 250-bed community hospital with an average of about 55,000 patients being seen through the emergency department annually. Of this number about 7,000 were patients who present with psychiatric mental health needs.

An expert panel was convened for evaluation of the practice guideline. This panel was comprised of the following individuals: the medical director of the hospital, emergency medicine physician, psychiatrist, social worker, community health worker, substance abuse counselor, nurse case manager, and acute care advance practice registered nurse. Once the practice guideline with its revised workflow, recommended education and implementation plan, as well as an accompanying policy change was presented to the expert panel for approval, full implementation would proceed, however, complete adoption of the practice guideline would occur outside of the scope of this DNP project.

Role of the DNP Student

I work as a family nurse practitioner (FNP) in an acute emergency department setting. We serve a wide variety of needs including mental health clients many of whom have several comorbidities and are under or uninsured. The guiding principle for the provision of care in my practice setting was early intervention and treatment so as to reduce severity and mitigate poor outcomes. As the certified registered nurse practitioner (CRNP) in my practice setting with responsibilities for nursing staff education, it was within my role to identify areas of deficit and develop resources for improvement. This DNP project aligned with both my professional role and passion to contribute to the development of the nursing professional. As the author of this DNP project and facilitator, I took an active and spearheading role in the development and implementation of this project. This included coordinating all the various members of the multidisciplinary team, managing the project with regards to obtaining required resources

and approvals that would be necessary to disseminating the project to stakeholders. As the DNP student initiating this project, my role was to lead the development of the clinical practice guideline, develop a plan for its implementation and secure approvals from the expert panel for the guideline and the draft policy.

Potential biases that I may possessed included the fact that I worked in the setting where this project was implemented and as such, might not be as objective as could have been. Another potential bias was that being the lead of the project I might have allowed my own feelings to supersede the findings. To minimize the above biases, the following steps were taken such as incorporation of a team-based approach so that no one person had unduly influence on the outcome or product of the project. Next was the utilization of a conceptual framework to guide project development and lastly was the utilization of evidence-based practice and peer-reviewed articles to support choices and decision making in the guideline development.

Role of the Project Team

Establishing an interdisciplinary team to facilitate this project was essential and critical to this project. Members of this team included: the medical director of the hospital, emergency medicine physician, psychiatrist, social worker, community health worker, substance abuse counselor, nurse case manager, and acute care advance practice registered nurse. The use of an interdisciplinary team-based approach would guide the team in its processes for this practice guideline development. Areas of interdisciplinary engagement included the search and review of the literature, the definition of issues and patient factors for consideration, identification of patient needs to be included in the

triage tool. Feedback from the team would be critical to the review and revision process during the guideline development. The revision to the triage policy would include presenting it for approval to the expert panel. The process that was used in the development of practice guideline at a high level included the following components: (a) identification of the subject focus, (b) establishment of the project team, (c) gathering, (d) review and evaluation of the literature, (e) translation of evidence into recommendation, and (f) presentation to the expert panel for review.

To ensure that this project stayed on track and was implemented within a reasonable timeframe, a five-day period was provided to team members to review and provide feedback on project results. Responsibilities of team members included evaluation of the available literature, development of recommendations, and review of draft guidelines. Following the 5-day review period, a face-to-face meeting was scheduled to review the ED practice guideline using GRiST.

Opportunities for team members to share their expertise and contextual insights to this doctoral project was provided using a modified Delphi technique (Polit & Beck, 2012). Team members were given the opportunity to engage in discussion with each other and reach consensus on issues being discussed. Team members were also given opportunities to complete six rounds of questions for discussion about the subject matter, organized using the AGREE II domains and guided by questions (see Appendix F). Responses to each round of questions were verbally summarized before the expert panel moved onto the next domain. Team members were then required to reformulate their opinions with the panel's viewpoint in mind. This approach ensured that team members

had ample opportunity to share their expertise relative to this project and achieve consensus on the revised ED practice guideline using GRiST.

Summary

In summary, Section Two addressed the body of evidence and literature supporting this DNP project. It presented the evidence and the theory that guided the development of this project. The literature indicated that EDs are now having to deal with an increase demand placed by the overwhelming number of patients presenting with BH issues in the care setting (Leon & Rahn, 2014), resulting in care deficits between the needs of the patient and the delivery of services by the ED leading to poor patient flow and departmental crowding (Leon & Rahn, 2014). Evidence from the literature (Murrell, Offerman & Kauffman, 2017) indicates that implementation of a rapid assessment tool in this care setting has led to improve patient flow. The next section, Section Three presents the method that was used in the development of the guideline.

Section 3: Collection and Analysis of Evidence

Introduction

The problem that this DNP project concerned was the lack of a process or system for staff of healthcare facilities to use to identify and streamline the delivery of care for the BH population presenting to the ED for treatment. As such, the purpose of this DNP project was to develop a practice guideline that would be used in the screening and management of patients with BH conditions presenting to the ED. The U.S. BH system has been described as fragmented and decentralized (Hing et al., 2015). One of the consequences of such decentralization and fragmentation is that the entry point for those in acute BH distress is often the ED, and, due to the increase in BH patient volume that has been witnessed in the United States, many EDs are overstretched and unable to meet this increased demand (Hing et al., 2015).

This project was implemented within the context of an acute care ED setting. The institution that was the site for this project was a 250-bed community hospital with an average of about 55,000 patients seen in the ED annually. Of this number, about 7,000 are patients who present with psychiatric BH needs. I convened an expert panel for evaluation of the practice guideline. Once the practice guideline with its revised workflow, recommended education, and implementation plan, as well as an accompanying policy change, was presented to the expert panel for approval, full implementation proceeded; however, complete adoption of the practice guideline was outside of the scope of this DNP project. In Section 3 of this DNP project, I address the

following areas: (a) the practice-focused question, (b) sources of evidence used in the project, and (c) analysis and synthesis of findings.

Practice-Focused Question

The problem that this DNP project dealt with was the lack of a process or system that staff of healthcare facilities can use to identify and streamline the delivery of care to the BH population presenting to the ED for treatment. The gap in practice that this DNP project addressed was that at the DNP project setting, there were no screening tools in the ED triage area for BH patients presenting for care. The practice-focused question for this project was, Will a practice guideline designed for use in a community ED to screen BH patients in triage be adopted for implementation by a panel of experts at the DNP project setting? As such, the purpose of this DNP project was to develop a practice guideline that would be used in the screening and management of patients with mental health conditions presenting to the ED. This purpose aligned with the practice-focused question in that when this tool is utilized, it may aid in the provision of timely and effective services to this target population (see Cappelli et al., 2012).

Sources of Evidence

In this section, I discuss the evidence that was used to address the practice-focused question. There were several types of evidence including evidence from the research literature as well as evidence generated for the doctoral project. I conducted an extensive literature search using multiple databases and search engines including Cochrane Database of Systematic Reviews, MEDLINE PLUS CINAHL database, and Google Scholar. I verified the documents I found using Ulrich Periodical Directory to

ensure they were peer-reviewed. The literature was presented in Section 2 and was used to meet the purpose of the project.

Published Outcomes and Research

I performed a literature search using the following databases and search engines: Cochrane, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Google Scholar, PsycINFO, Medline, PubMed, Ovid Nursing Journals, ProQuest Health and Medical Collection, and EBSCO. The literature reviewed was within the past 5-10 years. Articles that were reviewed related to acute care and patients with mental health needs. Articles dealing with children under 12 years of age and articles published more than 10 years ago were excluded from the search. Articles on BH in adolescents were included, as this patient population very commonly uses the ED (Normmandin, 2016; Pines & Hilton, 2018). Key terms that were utilized in the search for evidence included *depression*, *advanced practice nurse*, *decision support*, *screening tools*, *behavioral health*, *primary care*, *depression case study*, and *emergency department delays.*

Evidence Generated for the Doctoral Project

In this section I address the evidence that was generated for the purposes of this project. The data from the expert panel was the primary data source analyzed and synthesized for the project. This section includes information on the participants, the procedures utilized, and the strategies for protecting participants.

Participants. I convened an expert panel to serve as the participants in this project. The expert panel consisted of eight individuals, namely the medical director of the hospital, an emergency medicine physician, a psychiatrist, a social worker, a

community mental health worker, a substance abuse counselor, a nurse case manager, and an acute care advanced practice registered nurse (APRN). The panel represented individuals in the DNP project setting with leadership responsibility for BH in the ED. The expert panel was selected through invitation and by virtue of their role at the site. I informed each individual about the project aims and goals and extended an invitation to participate in the project. Each of the participants was relevant to this project because they represent a different discipline in healthcare that works with BH patients, thus providing a holistic approach to the project and ensuring that the practice guideline is comprehensive in design and practical for application in a busy ED.

Procedures. In conducting this DNP project, I aimed to develop a clinical practice guideline that would ultimately be implemented in the local practice setting. In this section, I describe the procedures used in developing the practice guideline, present the tools that were developed, and discuss their alignment with the overall doctoral project. As the project leader, I developed the practice guideline with extensive support from the literature. The expert panel convened for this project reviewed the practice guideline, the proposed workflow for the ED, and the revised policy which are the tangible outcomes of this DNP project (see Appendices B and C). As the DNP project leader, I facilitated this process. Consensus amongst the expert panel was achieved using the Delphi technique. The rationale for using the Delphi technique (see Appendix F) was because it was an efficient means of combining expertise of a group (see Polit & Beck, 2012). With this approach the experts are able to have a face-to-face discussion in a formal meeting and are able to resolve issues and reach consensus on approval for

implementation (Polit & Beck, 2012). Furthermore, use of this method prevented one individual from having undue influence on opinion, and it encouraged candor that might otherwise have not been realized (see Polit & Beck, 2012).

After reviewing the materials on the practice guideline for a period of 5 days, the expert panel was convened for a 90-minute face to face meeting and asked to complete several rounds of questions for discussion about the subject matter. The questions in Appendix F were linked to the six AGREE II domains and were used to guide the expert panel discussion on the value of the proposed guideline as well as the implementation process. I reviewed and summarized the panelists' responses. Barriers and obstacles to implementation were discussed, and solutions were identified. Through the face-to-face discussion, the guiding questions were used until consensus was reached. The ED workflow diagram is presented in Figure 1.

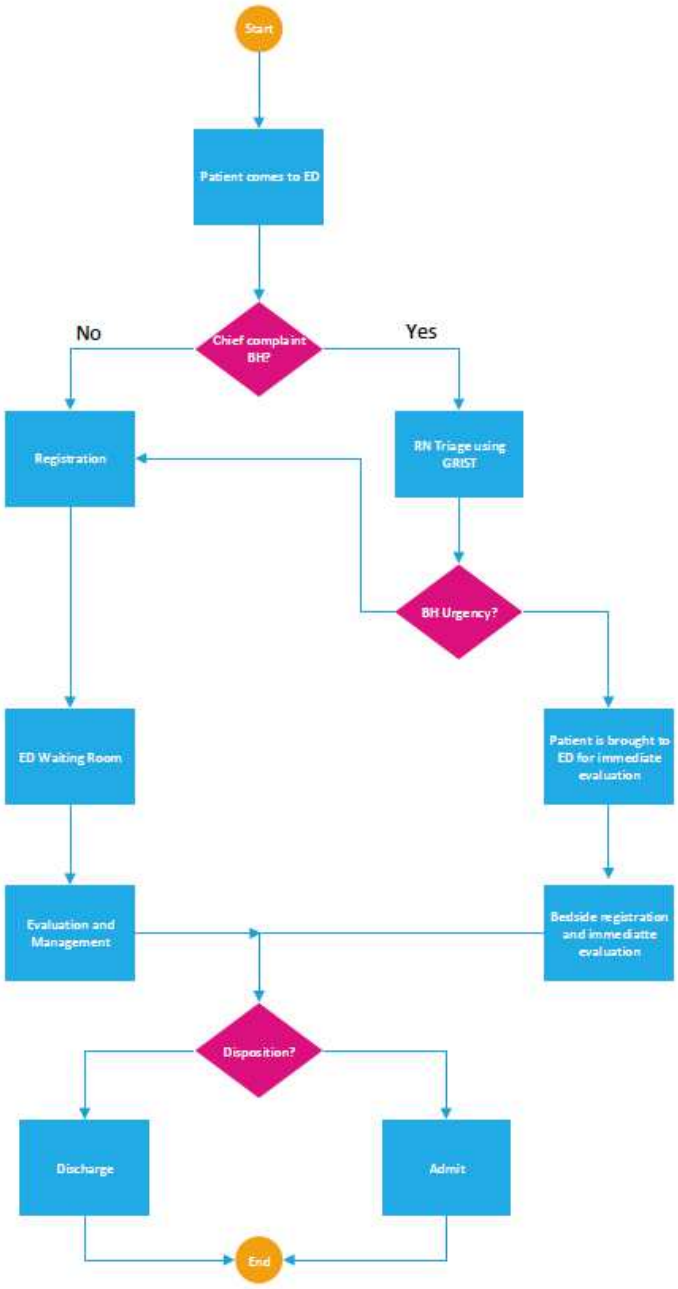


Figure 1. Revised ED workflow based on practice guideline.

Protections. I provided the participants with an information form that described the project, its objectives, and aims. The information addressed their role, and the procedures of the DNP project. This information form also indicated that their commitment was voluntary, and they were free to disenroll at any time and at will. The information form also indicated the risk and benefits of the project as well as any perceived or actual risk that may occur as a result of their participation. This form also addressed their privacy and confidentiality rights. Participation in this project had minimal risk to the participants. Privacy and confidentiality were ensured by using non-identifiers and no names were published on the final document that was developed as a result of this project. The collected information was also not be utilized for any other purposes without obtaining additional IRB approval. This project obtained IRB approval from Walden University (approval # 08-27-19-0389153) following the practice guideline manual prior to any data collection. As the DNP project facilitator, I agreed to adhere to all components of the Walden Manual for Practice Guideline projects, including consent from the DNP project Site.

Analysis and Synthesis

Upon obtaining IRB approval, I met with the interdisciplinary team to present the problem and discuss the project. Using the literature gathered for this project and the literature matrix developed as a guide, the practice guideline and policy were developed. An interdisciplinary project team was then assembled to review the resources gathered. The aim was to review and revise the policy which would guide staff in the triage of BH patients who present in the ED. The AGREE II model was used to develop the practice

guideline with the GRiST tool for BH patient screening as a key component of the guideline. This tool was tailored to meet the needs of this target population and the requirements of this care setting. The expectation was to utilize this tool to guide mental health screening at time of triage. The literature review matrix (Appendix A) presented the system that was used to organize and analyze the evidence (Fineout-Overholt, Melnyk, Stillwell, & Wiliamson, 2010). Procedures used to assure integrity of the evidence include adhering to selection criteria of including high quality peer-review articles published within 5-7 years, systemic review articles, and those relevant to this care setting. Compliance with inclusion and exclusion criteria enabled the managing of outliers and missing information. The analysis procedure that was used to address the practice question was that of the Delphi technique. The Delphi technique was an efficient means of combining expertise of a group (Polit & Beck, 2012) and enabled the project team to address, resolve issues and reach consensus on approval for implementation (Polit & Beck, 2012).

Summary

Section Three discussed the collection and analysis of evidence that guides this DNP project. It addressed the system that was used to record, organize and track the evidence to provide integrity of the practice guideline that was the outcome of this project. Section Four will present the findings and recommendations.

Section 4: Findings and Recommendations

Introduction

The local problem for this DNP project was the lack of an assessment tool in the practice setting that the staff could use to triage BH patients who present at the ED. In the DNP practice setting, patients were simply asked to assess the level of their depression using a verbal self-rating technique similar to a pain scale assessment. This method of assessment did not meet standards of care or practice and did not align with evidence-based practice as it was not based on any theoretical or conceptual framework. Thus, the practice-focused question for this project was, Will a practice guideline designed for use in a community ED to screen BH patients in triage be adopted for implementation by a panel of experts at the DNP project setting? The purpose of this doctoral project was to develop a practice guideline that would be used in the screening and management of patients with BH conditions presenting to the ED after approval by an expert panel.

Sources of evidence included an extensive literature search that was conducted using multiple databases and search engines including Cochrane Database of Systematic Reviews, MEDLINE PLUS CINAHL, and Google Scholar. The documents found were verified using Ulrich Periodical Directory to ensure they were peer-reviewed. The literature was presented in Section 2 and was used to meet the purpose of the project. The specific databases and search engines I used to obtain evidence were Cochrane, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Google Scholar, PsycINFO, Medline, PubMed, Ovid Nursing Journals, ProQuest Health and Medical Collection, and Elton B. Stephens Co. The literature reviewed was within the past 5-10

years. Articles included those related to acute care and patients with mental health needs. Articles dealing with children under 12 years of age and articles published more than 10 years ago were excluded from the search. Articles on BH in adolescents were included as this patient population very commonly uses the ED (Normmandin, 2016; Pines & Hilton, 2018).

I used the identified literature to develop the practice guideline. After developing the guideline, I presented it in an educational session to the eight members of the expert panel, who included the medical director of the hospital, an emergency medicine physician, a psychiatrist, a social worker, a community mental health worker, a substance abuse counselor, a nurse case manager, and an APRN. Following the presentation, the practice guideline was reviewed using the modified Delphi technique. The Delphi technique is an efficient means of combining expertise of a group and enables the project team to address, resolve issues, and reach consensus on approval for implementation (Polit & Beck, 2012). Six rounds of questions for discussion resulted in consensus among the team of experts to move forward with full implementation of the practice guideline using GRiST (Brouwers, et al., 2010).

Data Analysis

The expert panel reviewed the practice guideline using an iterative process to identify important themes and concerns related to the practice guideline. Prior to the face-to-face discussion, I sent panelists the key elements of the practice guideline (the literature matrix, the diagram, and the GRiST tool itself) via e-mail. In order to provide the expert panel adequate time for a robust discussion, this key information was

distributed to each expert panel member 5 days in advance of the expert panel meeting. As facilitator, I used the AGREE II model domains to guide each round of discussion. Each AGREE II domain was presented, and any clarifying questions were answered prior to engaging in discussion. Once the round began, the expert panel engaged in discussion within the context of the identified domain. As the facilitator of the group, I documented important points, questions, and other information that might be useful in determining the outcome of that domain. Members of the expert panel verbally agreed that the guideline met each of the six AGREE II domains. The results of this 90-minute discussion are presented in Table 1.

Table 1

Results of the Delphi Discussion Using Agree II Domains

AGREE II domain	Structured questions	Key points of expert panel discussion	% agreement based on eight members
Scope and purpose of GRiST practice guideline	What are the various frameworks that have been used for BH patients in this setting?	The ED nurse manager and the facility Medical Director both commented that in the past, they have used the following frameworks; Integration Framework, Healthcare Systems Framework, Continuum-Based Framework, and Emergency Care Clinical Framework. However, none of the above specifically provided a screening tool for triage of BH patients in the ED.	100%
Stakeholder involvement	What is the range of the rating scale reviewed? How appropriate is the rationale of the rating scale utilized? In what context have they been used and what factors are important to be considered for the ED setting?	The ED Physician commented that the rating scale of the GRiST tool, (1-10) is valued because not only is it simple and easy to use but also because its' reliability and validity have been established. The social worker commented that this scale has been used in similar settings making it applicable to the project site. The case manager and Medical Director identified the following factors that will need to be considered namely: accuracy of information, missing information, skipping sections of the assessment, and wording of questions.	100%
Rigor of the evidence	Review the literature matrix. Are there any missing research studies that should have been included? Does the research adequately frame the practice guideline? Do the recommendations emerge logically from the evidence?	The ED Physician commented that knowledge on BH screening continues to grow and there will always be something new or emerging that was not available previously, so we need to focus on what we have presently. He also commented that we are limited by our search databases and time constraints as far as exhausting of the search, so there most likely is information that will be missing from the review of literature. To address this, he said that is the reason why we conduct periodic review of the clinical guideline so that revisions can be made based on new or updated evidence. "If we don't start from somewhere, we will never get anywhere" is the quote used by the ED Physician. So, this was seen as a necessary first step from which review and evaluation will take place.	100%

(*table continues*)

AGREE II domain	Structured questions	Key points of expert panel discussion	% agreement based on eight members
		The Acute Care NP verbalized that the research adequately frames the practice guideline as it illuminates the existing gaps in practice, the problem, its significance, its scope and nature, and how it relates to professional practice at the DNP project site setting. Both the acute care NP and Nurse Case manager agreed that the recommendations were derived and supported by the evidence. All the recommendations developed had sufficient support (>2 peer reviewed articles per recommendation) from the literature.	
Clarity of presentation	What is the process and steps that have been used during the implementation process? How well does the selected implementation process address the needs of the target population?	The Physician, Medical Director, NP and Social workers verbalized that the first and preliminary educational session presented the information in a simple, yet effective format and approach. It was simple, clear and logical. The facilitator/presenter identified the goal of meeting BH patients' needs and demonstrated how the GRiST and the CPG will meet this area of deficit in staff members with simple but clear language.	100%
Applicability	How well does the selected implementation process address the needs of the target population? What are some barriers and challenges that would be important to consider during the implementation?	The Medical Director agreed that the incremental steps in the proposed implementation process allows for minimal disruption of daily operations and it also provides a process for changes to be made while gaining momentum. The attending physician (a psychiatrist), the case manager and the acute care NP identifed barriers and challenges that would have to be considered during the implementation. These included having someone to be accountable for monitoring and compliance, ensuring patient confidentially and privacy of the system/process, deciding when a review is due. The cost of ongoing training and education for staff needs to be addressed.	100%

(*table continues*)

AGREE II domain	Structured questions	Key points of expert panel discussion	% agreement based on eight members
Editorial independence	What is the role and duty of the practitioner in this process?	The Physician, Medical Director and Acute Care NP commented that the role of the practitioner would be to use the practice guideline as a tool to inform /support their clinical decision making. Their duty would be to conduct the assessment using the questions provided and ensure compliance with the guideline recommendations in the process.	100%
Overall, summary comments		In all, members of the expert panel agreed to implement the GRiST CPG pending a complete and thorough educational training. Monies have been budgeted for the cost of the GRiST software, and a commitment to ongoing monitoring on the use of GRiST to screen BH in the triage area with an amended version using six items on GRiST and with completion for any BH with a score of 8 or higher on any one of the trigger items would mean a definition of an "urgent" patient who would be transferred immediately to the ED for full evaluation on all GRiST items (to be completed within 72 hrs.) The NM and the NP agreed to develop a monitoring program on the use of GRiST and its impact on ED throughput, left without being seen, and patient satisfaction.	100%

Findings and Implications

Findings from the analysis and synthesis of the evidence revealed that healthcare providers face challenges in trying to balance the needs of BH patients who visit EDs with the increase in patient volume. This is an issue that is prevalent in many EDs across the United States and is not unique to the DNP practice setting (see Asplin et al., 2017; Coristine et al., 2017). The overflow of BH patients in the ED requires that ED staff develop a tool or system for early identification which determines level of urgency and appropriateness of services required.

Findings from the expert panel revealed that the lack of an evidence-based BH

screening tool in triage was a gap in practice and both the ED nurse manager and physicians verbalized that there was a need for development of such a practice guideline. Using the Delphi technique, the expert panel was able to reach consensus and agree on the adoption of the practice guideline which included the use of the GRiST tool as it was most relevant to ED setting, simple and clear to use thus enhancing compliance among clinical staff. As a result of the expert panel presentation, the organization has budgeted funds and has started the purchase process for use of the GRiST practice guideline and software for the ED.

Following presentation on the practice guideline and the GRiST tool, the ED leadership articulated an understanding of the existing deficits in work processes and were able to begin formulating a streamlined process incorporating the revised ED workflow using GRiST (Appendix D). Panel members agreed that education on an ongoing basis was key to successful adoption of the revised policy (Appendix E) so that it becomes integrated into practice. It was agreed that 100% of ED clinical staff would be educated on this and moving forward same education provided during new employee orientation and then annually during staff competency week. Potential barriers in the use of this tool include a knowledge deficit among the nursing staff and all members of the expert panel agreed that an educational program is necessary, so that all ED RNs who perform triage will understand the steps and processes involved. All agreed that the process should be monitored for compliance in using the GriST tool appropriately which would require additional clinical time.

To address this barrier, I will develop a competency checklist on the proper use of

the GRiST tool, the revised workflow, and the revised policy and procedure. Another barrier that is of concern is the challenge of balancing responsiveness to the BH patient's need using the GRiST tool, to a busy ED for patients who have medical needs just as pressing as the BH patient. It was concluded that more training and staff development are required prior to full deployment and that it will be deployed incrementally using a pilot testing strategy so that issues can be identified earlier and fixed before full implementation.

The process of working with the expert panel was an interactive one and utilized the Delphi technique process (Polit & Beck, 2012). Members of the expert panel were given the opportunity to engage in discussion with each other and reach consensus on issues being discussed. This took the form of being presented with opportunities to complete several rounds of questions for discussion about the subject matter. Responses to each round of questions revealed the following: (a) GRiST framework was identified for use as most appropriate in this care setting, (b) the GRiST rating scale of 1-10 was valued for its simplicity and clarity, (c) the redesign of the ED workflow as illustrated in Appendix D was agreed upon, (d) the role and duty of practitioners included responsiveness, consistency and accountability, and (e) barriers identified included knowledge deficit, lack of continuing education and a lack of systems perspective towards addressing issues.

Implementation of this doctoral project will take place after the educational processes are complete and will be phased in as barriers are addressed. Potential implications for positive social change include the ability to effectively screen patient

with mental health illness in triage and getting them full and proper mental health evaluation, thereby reducing the overall wait time that the patient experiences in the ED and improving the patient's experience of care in the ED.

Recommendations

The proposed recommended solution that addressed the gap-in-practice was the development of a clinical practice guideline. The expert panel recognized that a major educational effort will be required and they asked me to take responsibility for providing the education to the ED staff. This clinical practice guide will be used to inform the triage of care for behavioral health patients who present in the ED after the barriers and obstacles are addressed. Recommendations from the panel also include an ongoing education of all practitioners in the ED setting so that knowledge is maintained, and competencies kept up to date. The panel also recommended period review and revision of said policy to ensure it reflect current standards and practice.

Contributions of the Doctorial Project Team

This project utilized an interdisciplinary team to develop the clinical practice guidelines. The project team comprised the medical director of the hospital, emergency medicine physician, psychiatrist, social worker, community health worker, substance abuse counselor, nurse case manager, and acute care advance practice registered nurse. The team worked within a collaborative framework to identify, deliberate and achieve consensus on the development of the practice guideline. Each member of the team was selected because of their subject matter expertise and the contributions they bring to developing a holistic and comprehensive outcome.

Strength and Limitations of the Project

One of the most obvious strengths of this project is that it led to the development of a tangible product, the clinical practice guideline. This resource did not previously exist in this care setting and will serve as an aid to guide ED providers in their clinical decision making during the provision of care for BH patients. This tool will likely have an effect in reducing ED overcrowding, streamline services and improve patient flow.

A limitation of this project is that of generalizability. The clinical site upon which this project was conducted is small in size related to other major hospitals and has unique elements which may or may not be present in other healthcare settings. As such, the recommendations presented above may not be applicable to other settings or may be applicable to a small number and very similar type of environment. Another potential limitation is that this project was conducted at author's employment setting. Because of this familiarity, it could be argued that there are potential biases that could affect the project due to author's subjectivity.

Recommendations for future projects include evaluating the impact of the practice guideline on ED throughput six months after full implementation. Also, using the practice guideline in a larger, urban healthcare setting, may result in a different set of factors or recommendations. Future projects should also take into consideration a pre and post comparative analysis to evaluate improvements that occurred as a result of this project. Lastly, future projects should also evaluate nurse's compliance and utilization of the practice guideline.

Summary

Section Four discussed the findings and implications of this project. It also discussed the recommendations made by the expert panel noteworthy being the need to engage in full deployment in the ED and ongoing education of staff. Also discussed were the potential biases and limitations in this DNP project and how they were minimized. One implication is that of generalizability given the small scope of this project's clinical site. None the less, it is important to note that this project serves as a valuable tool as it produced a tangible product which helps guide practitioners in their work of caring for BH patients in the ED setting. Section Five will present the dissemination plan and an analysis of self during this DNP project.

Section 5: Dissemination Plan

Following the completion of any project, the next step is to disseminate its findings. Stakeholders involved in the project are an important group who would be interested in the findings of the project. This is especially true within healthcare, where there is a variety of stakeholders who would likely want to utilize the recommendations from a project to improve practice (see Forsyth, Wright, Scherb, & Gaspar, 2010). Dissemination of project findings is an important and necessary part of any evidence-based project. Forsyth et al. (2010) explained that dissemination is important for authors to describe what they did, what they found, and how came to develop the proposed recommendations.

After developing the clinical practice guideline, I presented it to stakeholders in the practice setting through an education session. This education session was conducted as an oral session with audiovisual aids to enhance clarity and understanding for multiple stakeholders of different educational and professional backgrounds. This method enabled me to engage more interactively with participants, answer questions, and obtain feedback. Outside of my clinical environment, this project is also useful to the broader healthcare field, including APRNs, psychiatrists, mental health workers, and healthcare administrators. This project is scheduled for presentation at a healthcare conference later this year as a poster presentation. Presenting at this conference will allow me to reach a much wider healthcare audience and will provide maximum visibility of project findings and recommendations.

Analysis of Self

My doctoral journey has increased my awareness of the role of the doctoral-prepared nurse in the area of program and policy development in healthcare settings. This doctoral project has provided me the opportunity to engage in translating evidence into a tangible outcome, thus enhancing my competencies as a nurse leader. The work for this project aligns with the competencies described in the IOM (2004) report as discussed by White and Brown (2012). My goal with this doctoral project was to develop an interdisciplinary clinical practice guideline for BH patients who present in the ED setting. This project has also increased my ability to work collaboratively within an interdisciplinary healthcare environment to address the quality of care and improve patient outcomes (White & Brown, 2012). Another competency developed as a result of engaging in this doctoral journey is that described by White and Brown (2012) as "performance envelope" (p. 187). This "envelope" is comprised of a visible, compelling, and pervasive strategy, which demonstrates quality (White & Brown, 2012).

This project has also impacted and defined my leadership style as a doctoral-prepared nurse. I would describe my personal leadership style as transformational and grounded in the framework of respect for the dignity of the individual. The commitment and compassion I have for my patient population, and my commitment to the profession of nursing, are the drivers that continue to motivate me in my pursuit for excellence. Aligning this commitment and compassion with my role in my practice setting, my responsibilities include the identification of gaps in practice and service delivery and the definition, planning, development, and implementation of programs to close those gaps

and improve service delivery for the BH patient.

My role in this project has been threefold: that of a scholar, a practitioner, and a project manager. As a scholar, I have developed my knowledge and competencies in searching for, reviewing, and evaluating the available literature. As a scholar, I have also learned to translate evidence into practice using principles of evidence-based practice and tailoring the findings to my own setting.

As a practitioner, this DNP project has enabled me to utilize my expertise in this subject area and develop a tool that may have a positive impact on practice and the profession. I began with first identifying the gaps in my own practice; from there, I used the wealth of knowledge to develop this practice guideline. My aim was not only to close the identified gap but also to improve patient outcomes.

Last, as a project manager, I have developed skills such as strategic thinking, resource allocation, interdisciplinary collaboration, team building, and change management leadership. This project involved multiple healthcare disciplines, and as the project lead and facilitator, I had to work with multiple stakeholders from different professional backgrounds who had competing and often different needs. As such, I find myself assuming a very strategic role that has implications across multiple areas and influences the provision of nursing services.

Though this doctoral journey, I have gained a new level of understanding of and appreciation for continued and lifelong development. My educational journey has developed in me the importance of being an agent of positive social change in one's environment. My goal moving forward is to continue this journey of excellence and

making an impact within my organization through engagement in research, activism, and academia.

Summary

The development of a clinical practice guideline for use by nurses in the triaging of BH patients in the ED setting is intended to bring about positive contributions to the practice setting by streamlining the delivery of care, reducing ED boarding, and impacting the quality of care provision.

References

Asplin, B. R., Magid, D. J., & Rhodes. (2017). A conceptual model of emergency department crowding. *Annuals of Emergency Medicine, 42*, 173-180. Retrieved from https://journals.lww.com/aenjournal/Pages/articleviewer.aspx?year=2011&issue=01000&article=00007&type=Fulltext

Beauchamp, T. L., & Childress, J. F. (2009). *Principles of biomedical ethics* (6th ed.). New York, NY: Oxford University Press.

Boccuti, C., Swoope, C., Damico, A., & Neuman T. (2013). Medicare patients' access to physicians: A synthesis of the evidence [Issue brief]. Retrieved from the Kaiser Family Foundation website: http://kff.org/ medicare/issue-brief/medicare-patients-access-to-physicians-a-synthesis-of-the-evidence

Brouwers, M., Hho, M. E., Browman, G. P., Cluzeau, F., Feder, G., Hanna, S., & Makarski, J. (2010). On behalf of the AGREE Next Steps Consortium. AGREE II: Advancing guideline development, reporting, and evaluation in healthcare. *Canadian Medical Association Journal*, *182*, E839-842. doi 10.1503/cmaj.090449

Cappelli, M., Gray, C., Zemek, R., Cloutier, P., Kennedy, A., Glennie, E., Doucet, G. and Lyons, J. (2012). The HEADS-ED: A Rapid Mental Health Screening Tool for Pediatric Patients in the Emergency Department. *PEDIATRICS*, 130(2), e321-e327.

Coristine, R. W., Hartford, K., Vingilis, E., & White, D. (2017). Mental health triage in the ER: A qualitative study. *Journal of Evaluation in Clinical Practice, 13*(2),

303-309. Retrieved from http://eenet.ca/sites/default/files/wp-content/uploads/2013/03/COI-Think-Tank-Backgrounder-March-2013.pdf.

Carter, E. J., Pouch, S. M., & Larson, E. L. (2014). The relationship between emergency department crowding and patient outcomes: a systematic review. *Journal of Nursing Scholarship*, *46*(2), 106-115.

Fazel, Seena, and Achim Wolf. "Selecting a Risk Assessment Tool to Use in Practice:a 10-Point Guide." *Evidence Based Mental Health*, vol. 21, no. 2, 2017, pp. 41–43., doi:10.1136/eb-2017-102861.

Fineout-Overholt, E., Melnyk, B. M., Stillwell, S. B., & Williamson, K. M. (2010, July). Evidence-based practice step by step: Critical appraisal of the evidence: part I. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/20574204.

Forsyth, D. M., Wright, T. L., Scherb, C. A., & Gaspar, P. M. (2010). Disseminating evidence-based practice projects: Poster design and evaluation. *Clinical Scholars Review*, *3*(1), 14-21. doi:10.1891/1939-2095.3.1.14

Friis, R. H., & Sellers, T. A. (2009). *Epidemiology for public health practice*. Sudbury, MA: Jones and Bartlett Publishers.

Gindi, R., Kirzinger, W., & Cohen, R. (2012). *Health insurance coverage and adverse experiences with physician availability: United States, 2012* (NCHS Data Brief 138). Retrieved from http://www.cdc.gov/nchs/data/databriefs/db138.htm

Happell, B., Summers, M., & Pinikahana, J. (2002, June 28). The triage of psychiatric patients in the hospital emergency department: a comparison between emergency department nurses and psychiatric nurse consultants. Retrieved from

https://www.sciencedirect.com/science/article/pii/S0965230201903364.

Hing, E., Decker, S., & Jamoom, E. (2015, March). *Acceptance of new patients with public and private insurance by office-based physicians: United States, 2013* (NCHS Data Brief no. 195). Retrieved from http://www.cdc.gov/nchs/data/databriefs/db195.htm

Lluch, M. (2011). Healthcare professionals' organisational barriers to health information technologies—A literature review. *International journal of medical informatics*, *80*(12), 849-862. Retrieved from https://www.sciencedirect.com/science/article/pii/S1386505611001961.

Misek R., Magda R., Margaritis S., Long R., Frost E. (2017). Psychiatric patient length of stay in the emergency department following closure of a public psychiatric hospital. Journal of Emergency Medicine 53 (1): 85-90.

National Alliance of Mental Illness (201). Statistics on mental health. Retrieved from http://www.nami.org

Normandin P (2016). Behavioral health emergencies. *J Emerg Nurs*. 42(1):81-4.

Patel, A., Harrison, A., & Bruce-Jones, W. (2009). Evaluation of the risk assessment matrix: A mental health triage tool. Emergency Medicine Journal, 28, 11-14.

Pines JM, Hilton JA (2018) International perspectives on emergency department crowding. Acad Emerg Med 18: 1358-1370.

Richmond S., Berlin S., & Fishkind A (2018). Verbal de-escalation of the agitated patient: Consensus statement of the American Association for Emergency

Psychiatry Project BETA de-escalation workgroup. *West J Emerg Med*. 13(1):17-25.

Schreiber, M. (2010). The psySTART rapid mental health triage and incident management system. Retrieved from http://www.cdms.uci.edu/pdf/psystart-cdms02142012.pdf

Schneider SM, Gallery ME (2017) Emergency department crowding: a point in time. Ann Emerg Med 42: 167-172.

Sinclair, L., Hunter, R., Hagen, S., Nelson, D., & Hunt, J. on behalf of the A7E Mental Health Study Group (2006). How effective are mental health nurses in A&E departments? Emergency Medical Journal 23(9), 687-692.

White, K., & Brown, S. (2012). *Translation of evidence into nursing and healthcare practice*. New York, NY: Springer Publishing Company.

Zun L. (2016). Care of Psychiatric Patients: The Challenge to Emergency Physicians. *The western journal of emergency medicine*, *17*(2), 173

Appendix A: Practice Guideline Literature Matrix

Authors	Year	Name of Journal or Book	Title of Article	Brief summary	Evidence Level
Asplin BR., Magid DJ., Rhode S.	2017	Annals of Emergency Medicine.	A conceptual Model of Emergency Department crowing.	The goal of the conceptual model is to provide a practical framework on which an organized research, policy, and operations management agenda can be based to alleviate ED crowding.	VI
Cappelli M, Gray C, Zeme R, Cloutier P, Kennedy A, Glennie E, Doucet G, Lyon J.	2012	Journal of the American Academy of Pediatrics	The heads-ed: a rapid mental health screening tool for patients in the emergency department	Evaluation of screening tools used in the ED for BH patients.	III
Coristine R.W, Hartford K, Vingilis E, White D.	2017	Journal of Evaluation in Clinical Practice	Mental health triage in the ER: a qualitative study.	Exploratory study addressing the challenges of mental health care in the ER setting.	VI
Happell B, Summers M, Pinikahana J.	2016	Accident and Emergency Nursing Journal.	The triage of psychiatric patients in the hospital emergency department: a comparison between emergency department nurses and psychiatric	Randomized control study addressing triage of psychiatric patients in the ER.	II

			nurse consultant.		
Misek R., Magda R., Margaritis S., Long R., Frost E.	2017	Journal of Emergency Medicine	Psychiatric patient length of stay in the emergency department following closure of a public psychiatric hospital.	Descriptive study that explores factors impacting ER overcrowding.	VI
Normandin P.	2016	Journal of Emergency Nursing	Behavioral health emergencies.	Systemic review on behavioral health patient needs in the ER	V
Patel A, Harrison A, Bruce-Jones W.	2009	Emergency Medicine Journal	Evaluation of the risk assessment matrix: A mental health triage tool.	A study conducted to evaluate the effectiveness of a mental health triage tool.	III
Pines JM, Hilton JA.	2018	Academy of Emergency Medicine	International perspectives on emergency department crowding.	Systemic review of best practices that reduce ER overcrowding across 15 countries	V
Zun L	2016	The Western Journal of Emergency Medicine	Care of Psychiatric Patients: The Challenge to Emergency Physicians.	The purpose of this article is to discuss disparity and challenges in caring for BH patients.	VI
Schneider SM, Gallery ME	2017	Annals of Emergency Medicine	Emergency department crowding: a point in time.	This is a pilot study designed to assess the feasibility of a point prevalence study to assess the degree of crowding in hospital	III

				emergency departments	
Evidence Level Key using Fineout-Overholt et al. (2010)					
I = Synthesis of evidence					
II=RCT					
III=Quasi-experimental design					
IV=Case studies					
V=Systematic Review					
VI=Qualitative or descriptive					
VII= Expert opinion					

Appendix B: Tip Sheet Practice Guideline for Emergency Departments Using GRiST

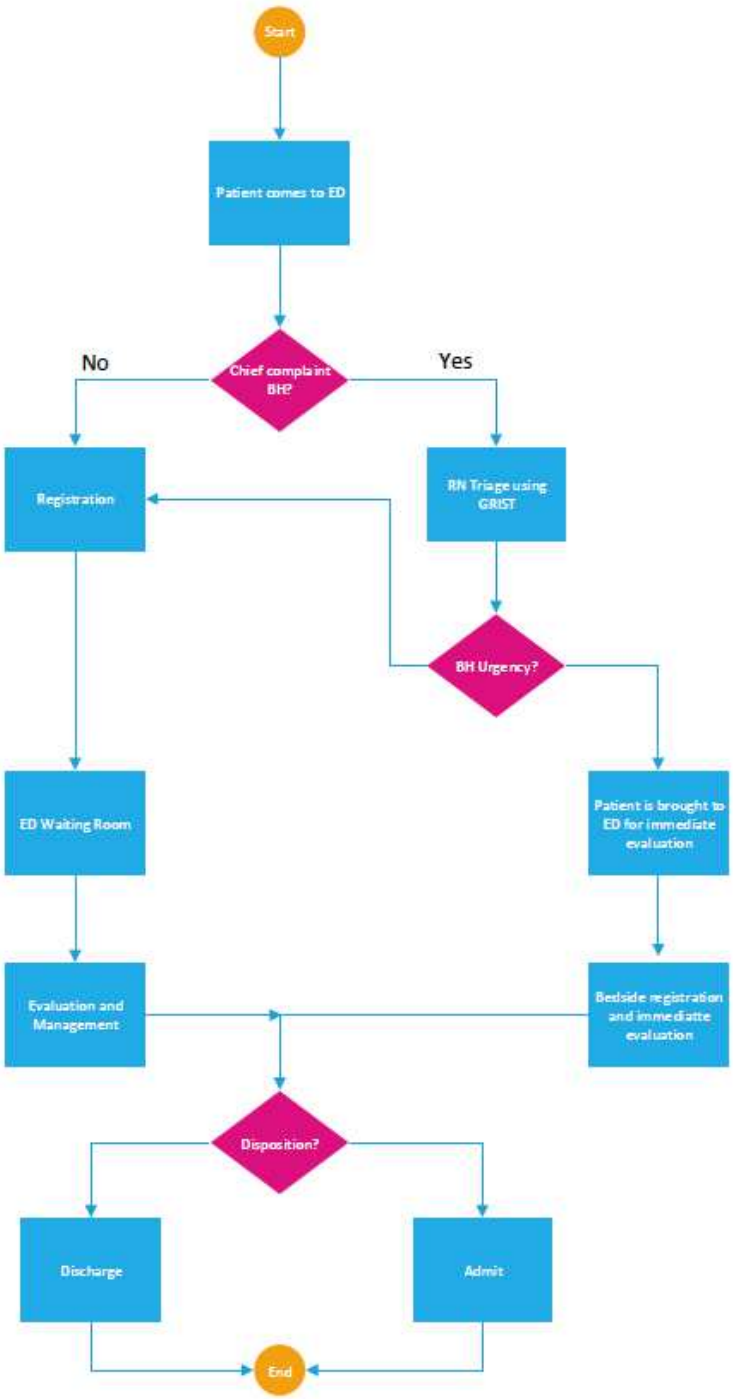
- Ask direct questions about risk
- The GRiST tool is only an aid to support clinical decision making
- Assess the patient's presentation
- Have team discussions about "risky" patients
- Use combined sources of risk information (history, presentation, body language)
- Identify level of risk and triage accordingly
- GRiST is designed to flag up areas for further inquiry
- Based on a multidisciplinary mental health model
- Structured approach to interviewing

Appendix C: Expert Panel Presentation Regarding GRiST Practice Guideline

Learning Outcome(s): Review the ED BH practice guideline and discuss its feasibility for implementation. Nursing Professional Development: Nurses will be able to use the GRiST tool in ED triage to be able to determine urgency for a BH patient. Patient Outcome: Patients will have a safe and more streamlined experience in the ED. Organizational Outcome: Reduce ED throughout by implementing a practice guideline for screening BH patients in triage.			
Topical Content Outline	Time Frame	References	Teaching method/learner engagement and Evaluation method
Overview of the Practice Guideline with support from the research evidence on its effectiveness.	10”	Misek R., Magda R., Margaritis S., Long R., Frost E. (2017). Psychiatric patient length of stay in the emergency department following closure of a public psychiatric hospital. Journal of Emergency Medicine 53 (1): 85-90.	Powerpoint with discussion.
The tips sheet, revised workflow and policy.	10”	Happell, B., Summers, M., & Pinikahana, J. (2016). The triage of psychiatric patients in the hospital emergency department: a comparison between emergency department nurses and psychiatric nurse consultants. Accident and Emergency Nursing, 10, 65-71.	Powerpoint with discussion
Anticipated barriers and obstacles	15”	After reviewing the presentation on the practice guideline, what are your first impressions? Does the evidence presented in support of the practice	Discussion

		guideline meet the organization's standards? Why or why not?	
Expected resources, equipment, support, education needed	15"	Do you see any barriers to implementation? Please describe. What additional issues need to be addressed prior to implementation?	Discussion
Decision-making: to revise, address barriers, full implementation?	10"	What revisions are needed (if any) to the practice guideline, revised workflow, policy and procedure? What are your recommendations for implementation?	Discussion

Appendix D: Revised Emergency Department Workflow for Management of Behavioral Health Patients



Appendix E: Revised Policy and Procedure

THE TRIAGE PROCESS

Triage is a clinical process to assess and identify the needs of the person and the appropriate response required.

The most important element of triage is the identification of risk.

Following this brief assessment, a recommendation for treatment and an interim management plan is formulated including a response timeframe for those accepted for care in public mental health services. Triage can be completed for all prospective consumers, existing consumers whose condition may have deteriorated and who require further assessment and intervention, and other service users. Mental health triage can be conducted in person (face-to-face) or on the telephone. Telephone contact is often timelier and more convenient for many service users. Telephone triage has the additional consideration of limited observation capacity, not being able to physically assess the person's behavior, mannerisms, body language, demeanor or distress.

Frequently referrals are made by third parties (concerned friends, careers, and health professionals). Every attempt should be made to speak to the referred party in order to complete the triage assessment process. All triages are to be completed using the Health Mental Health Clinical Documentation triage protocol and module.

The triage clinician must collect and document sufficient demographic, social and clinical information to determine whether there is a need, or potential need, for further intervention by the Mental Health Service, particularly face to face follow up, or whether referral to another service should be considered. The aim of the triage process is to obtain sufficient information from the person making the referral (including self-referral):

Determine whether the person requires a mental health service intervention;

- Identify symptoms of acute psychosis;
- Identify possible suicidal behavior or thoughts;
- Determine the level of risk of harm to self or others;
- Determine the level of risk of harm to children including pregnancy;
- Initiate emergency response where extreme and high urgency is identified;
- When a public mental health service intervention is not required, identify the service most likely to meet the needs of the person (e.g. refer to ServiceLink);
- Identify local community health services and other relevant services (e.g. refer to ServiceLink);
- Give the person clear and concise information about the services available and options for further assessment or treatment including to call back should the situation escalate;
- Refer the person to the service likely to meet the identified need for further assessment or treatment; models which may be culture bound;
- Ensure that the client / consumer has a clear understanding of the triage process and subsequent follow up actions.

RISK ASSESSMENT

Triage clinical risk assessment encompasses two components: initial alerts and a specific clinical risk assessment.

A brief risk assessment screening tool is incorporated in the triage document.

Possible risk factors include:

- Significant past history of risk

- Recent thoughts, plans, symptoms indicating risk
- Recent behavior suggesting risk
- Concern from others about risk
- Current problems with alcohol or substance misuse
- Major mental illness or disorder
- At risk mental state:
    - Deterioration due to untreated illness
    - Non-adherence to treatment
    - Lack of support

Emergence of early warning signs

- Unrecognized acute medical illness presenting as delirium (esp. older people)
- Significant circumstances that create volatile behavior
- Concern that a child or young person is being abused or neglected
- Refugee experience, migration and acculturation stressors, minority ethnic status, intergenerational conflict and concerns with multiple identity issues.

Alerts / risks identified are to be recorded on the front page of the triage document in the Alerts / Risks section.

CRISIS TRIAGE RATING SCALE

The Crisis Triage Rating Scale (CTRS) is a brief rating scale developed to screen emergency psychiatric consumers rapidly. It differentiates between consumers who require hospitalization from those who are suitable for outpatient crisis intervention treatment. The scale evaluates the consumer according to three factors: (1) whether they are a danger to themselves or others, (2) their support system, and (3) their ability to cooperate. The CTRS is available to assist decision -making regarding the determination of the UoR at triage once the clinician has gathered **ALL** the required information and has made the determination that a consumer requires mental health care. The guidelines regarding the completion of the UoR is that the clinician should use **ALL** available information (including the assistance availed by the CTRS), to inform their decisions regarding the UoR and the resulting action plan. A clinician can make a decision on the UoR on the basis of available information, without having to use the CTRS.

Rating A: Dangerousness

1) Expresses or hallucinates suicidal / homicidal ideas or has made a serious attempt in present episode of illness. Unpredictable, impulsive and violent.
2) Expresses or hallucinates suicidal / homicidal ideas without conviction. History of violent or impulsive behavior but no current signs of this.
3) Expresses suicidal / homicidal ideas with ambivalence or made only ineffectual gestures. Questionable impulse control.
4) Some suicidal / homicidal ideation or behavior or history of same, but clearly wishes to control behavior.
5) No suicidal / homicidal ideation / behavior. No history of violence or impulsive behavior.

Rating B: Support System

1) No family, friends or others. Agencies cannot provide immediate support needed.
2) Some support can be mobilized but its effectiveness will be limited.

3) Support systems potentially available but significant difficulties exist in mobilizing it.
4) Interested family / friends, or others but some question exists of ability or willingness to provide support needed.
5) Interested family, friends, or others able and willing to provide support needed.

Rating C: Ability to Cooperate

1) Unable to cooperate or actively refuses.
2) Shows little interest in or comprehension of efforts made on her / his behalf.
3) Passively accepts intervention strategies.
4) Actively seeks treatment, willing to cooperate.

Appendix F: Ancillary Questions for Expert Panel

- What are the various frameworks that have been utilized in this care setting for BH patients?
- What is the range of the rating scale reviewed?
- How appropriate is the rationale of the rating scale utilized?
- In what context have they been used and what factors are important to be considered for the ED setting?
- What is the process and steps that have been used during the implementation process?
- How well does the selected implementation process address the needs of the target population?
- How well does the implementation process integrate triage principle of access, responsiveness, consistency, and accountability?
- What is the role and duty of the practitioner in this process?
- What are some barriers and challenges that would be important to consider during the implementation?

Appendix G: Triage Practice Guideline for Emergency Departments Using GRiST

- The function of triage is very applicable to behavioral health care practice. In this care practice setting, the goal of care delivery is to prioritize the needs of the patient and provide optimum and seamless flow that ensure effective and efficient service to address the immediate patient need and minimize the potential of harm and or injury.
- The GRisT practice guideline (Solheim, 2016) provides a systemic and sequential risk screening tool that is useful in the assessment and determination of care needs of the behavioral health patient within an acute care setting. GRiST provides structured clinical judgment addressing issues such as suicide risk assessment, elopement risk evaluation, self-harm, abuse, family history of violence, vulnerability, history of delusions.
- Care is based on a severity index that is rated on a scale of 1-10; a score of 10 on each subscale represents the highest and most immediate need. The GRIST tool assesses risk evaluation, risk judgment, and development of a suitable safety plan. It measures risk to dependents; harm to others or properties; self-neglect; self-harm; suicide; as well as the vulnerability of other users of the service. Determination of urgency is based on a totality of all the scores added up to reach anywhere between 8-10 points.
- It utilizes an interdisciplinary framework ensuring that care delivery is holistic and systemic approach.
- There are 42 questions in seven subscales on the GRiST tool which are in Yes/No, multiple choice and scale format with color-coded responses ranging from green (absent symptom) to red (maximum risk).
- Completed in collaborative manner with client involved in the process, it takes no longer than 15 minutes to complete and should be fully completed within the first half hour as part of the ED triage process.
- Patients who score in the red zone with a score between 8 and 10 (patients who have an urgent need) for any of the 42 items are to be directed to the ED for care immediately rather than returned to the waiting room. All other patients can be returned to the waiting room (see also Appendix D).