2018

Creation of an Evidence-Based Practice Guideline for a Seclusion Alternative

Patricia Green
Walden University

Walden University

College of Health Sciences

This is to certify that the doctoral study by

Patricia Green

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. Diane Whitehead, Committee Chairperson, Nursing Faculty
Dr. Barbara Barrett, Committee Member, Nursing Faculty
Dr. Marisa Wilson, University Reviewer, Nursing Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2018

Abstract

Creation of an Evidence-Based Practice Guideline

for a Seclusion Alternative

by

Patricia Green

MSN, Excelsior College, 2009

BSN, State University of Brooklyn, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2018

Abstract

Seclusion is a behavioral management intervention used at the practicum site to manage maladaptive behaviors seen in mentally ill patients. Seclusion is not a voluntary occurrence for patients. The practice-focused question asked: Can development of an evidence-based practice (EBP) guideline help guide health care providers in the development of a multisensory room as an alternative to seclusion for people living with mental health disorders (PLWMHD)? The purpose of this DNP project was to develop the EBP guideline for a multisensory room as an alternative to seclusion for the practicum site. To aid in the development of the EBP guideline, the AGREE II model provided the framework for quality improvement related to better patient outcomes. The sources of evidence for this DNP project were drawn from the systematic review of the literature related to primary, original, and peer-reviewed journals. The electronic databases used for conducting these searches were CINAHL with Plus Full, Medline with full text, PsycINFO, SocINDEX and the Walden University library. The analytical strategy for this DNP project was to conduct a content analysis of research studies for recurrent themes, related to maladaptive behaviors, seclusion, and sensory rooms, in order to develop the draft guideline. Subsequently, 14 experts were selected for review of the resultant draft guideline using the AGREE II tool. Expert input and feedback was incorporated to achieve consensus on the final version. The potential implication for nursing practice is patient safety for a targeted population. The positive social change expected to occur for health care providers at the practicum site is the use of a best-practice tool based on evidence during their provision of care for PLWMHDs.

Creation of an Evidence-Based Practice Guideline for a Seclusion Alternative

by

Patricia Green

MSN, Excelsior College, 2009

BSN, State University of Brooklyn, 1995

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2018

Dedication

This DNP project is dedicated to all health care providers who work and care daily for people living with mental health disorders. It takes a special, dedicated, committed, and skilled person to embrace those seen within this targeted population. Despite their mental health illnesses, all of them have emotions and feelings and expect those caring for them to respect them as individuals. Having worked with people with mental illness for over 15 years, I have seen health care workers who are truly dedicated to serving this population, and I feel honored to be one of them. I would also like to dedicate this to my eldest sister who passed away from diabetes complication. As the younger sibling, I always felt the need to nurture her, and this is what started me on my journey of becoming a nurse many decades ago. Thank you, Sis, and may you rest in peace!

Acknowledgments

I would first like to acknowledge and thank my Lord and Savior, Jesus Christ, who has strengthened me and allowed me to remain persistent during all my challenging times here at Walden University. I am grateful to know you as my Creator, Father, and the One who has orchestrated all my steps. Your grace alone has been sufficient for me. I would also like to acknowledge all my family members for their ongoing support during this journey. I love you all dearly. I sincerely thank all my past professors at Walden University and a special thanks to my present chair, Dr. Whitehead.

Table of Contents

List of Tables

List of Figures

.

Section 1: Introduction

Introduction

According to the Substance Abuse Mental Health Services Administration (SAMHSA, 2010), the use of any coercive treatment such as seclusion indicates a failure in the provision of care to people living with mental health disorders (PLWMHDs). Seclusion is the involuntary solitary confinement of an individual in a locked room for a period (New York State Office of Mental Health [NYSOMH], 2014). This practice compromises the secluded person's autonomy, dignity, and freedom (American Nursing Association [ANA], 2012). One of the main goals of the NYSOMH (2014) is to promote the use of a positive therapeutic environment as an alternative to seclusion in the form of a multisensory room. The implementation of a multisensory room is a sensory approach that has demonstrated a reduction in the use of seclusion on mental health units (Sivak, 2012). A multisensory approach stimulates sight, smell, hearing, touch, and taste and promotes a place for a person to relax and develop his or her own self-soothing routines (Bjorkdahl, Perseius, Samuelsson, & Lindberg, 2016).

Registered nurses at the practicum site currently use seclusion as a safety intervention to manage maladaptive behaviors seen in PLWMHDs. The practicum site is seeking to develop a multisensory room to change the practice of seclusion. The use of an evidence-based practice (EBP) alternative to seclusion is to ensure consistency in nursing practice, policies and procedures, and to promote safety and quality of care for PLWMHDs. The focus of this DNP project is to develop an EBP guideline for a projected multisensory room at the practicum site. The Institute of Medicine (IOM, 2011)

indicated that EBP guidelines are statements that include recommendations intended to optimize the care of patients through systematic reviews of the evidence and should include an assessment of the benefits and harms for using alternative care options.

The positive social change expected to result from the availability of an EBP guideline for the planned multisensory room is an improvement in the provision of care for PLWMHDs who have exhibited maladaptive behaviors. This social change is intended to promote a practice change toward a more ethical treatment of PLWMHDs. The reduction of seclusion in mental health facilities is currently a national priority based on ethical, legal, and humanitarian concerns (NYSOMH, 2014).

Problem Statement

The local nursing practice problem is the current lack of an EBP guideline for the implementation of a projected multisensory room at the practicum site. The inpatient mental health department is planning to implement a multisensory room as a new behavioral quality improvement approach to help decrease the use of seclusion (I. Murillo, personal communication, October 5, 2015). The local relevance and the need to address this problem is primary to the nursing education department at the practicum site because data are collected quarterly, based on all the incidents of seclusion that occurred within the inpatient mental health department, and then posted as quality improvement indicators. These data ~~a~~re used to promote the consistent use of data sharing and data transparency to guide quality improvement initiatives in the inpatient mental health department. The quarterly data-sharing reports have consistently shown the prevalent use of seclusion in the inpatient mental health units. The American Psychiatric Nurses

Association (APNA, 2014) reported that seclusion causes negative psychological outcomes among PLWMHDs and, therefore, supports a sustained commitment to the reduction and ultimate elimination of seclusion through the exploration of research that promotes the use of best EBP alternatives.

Bjorkdahl et al. (2016) found that there was an increased interest in exploring the uses of multisensory rooms in mental health inpatient settings to decrease the use of seclusion. In 2007, the NYSOMH (2014) awarded a grant called the Positive Alternatives to Restraint and Seclusion (PARS) to three diverse mental health facilities. This grant was used to promote a therapeutic trauma-informed culture of healing and recovery and to decrease the use of restraint and seclusion at the selected sites. The present DNP project holds significance for the field of nursing practice because my intention is to foster a change for managing maladaptive behaviors seen in PLWMHDs through the development of the EBP guideline for the projected multisensory room at the practicum site.

Purpose

The purpose of this DNP project was to close a gap in practice, namely, the lack of an EBP guideline for the projected multisensory room at the practicum site. An EBP guideline for the projected multisensory room is intended to assist the health care providers at the practicum site to use the best evidence available to deliver safe and effective care to a targeted population. The Walden University College of Health Sciences School of Nursing (n.d.) stated in its directives that the development of *Clinical*

Practice Guidelines through a DNP project must be guided by the following eight defining principles:

- describing the appropriate care based on the best available scientific evidence using a broad consensus;
- reducing inappropriate variations seen in practice;
- providing a rational basis for referral;
- providing a focus for the use of continuing education;
- promoting efficient use of resources;
- providing a focus for quality control to include audits;
- highlighting gaps seen in the existing literature; and
- suggesting appropriate areas for future research. (Walden University, n.d.)

The use of a multisensory room in a mental health unit as an alternative method is intended to decrease the need for seclusion by de-escalating the maladaptive behaviors seen among PLWMHDs (Sivak, 2012). The guiding practice-focused question asked: Can the development of an evidence-based practice guideline help guide health care providers in the development of a multisensory room as an alternative to seclusion for PLWMHDs? This DNP project had the potential to close the meaningful gap seen in practice.

Addressing the Gap-in-Practice

The gap-in-practice was the lack of an EBP guideline for the seclusion alternative. Addressing this gap experienced in practice was important in the present DNP project because the health care providers at the practicum site lacked the EBP guideline for the

projected multisensory room, and without it they would not be able to achieve the desired outcome for PLWMHDs. The agency for healthcare research and quality (AHRQ, n.d.) stated that, in order to address a gap in practice, a health care organization must be armed with current evidence-based information, staff members who had good intentions, and organizational plans to implement new clinical and operational practices.

At the practicum site, the gap-in-practice included how the health care providers managed behavioral issues seen in PLWMHDs. Despite having an accumulating body of knowledge through continuing staff education and the promotion of alternate interventions to reduce the use of seclusion, a gap still existed between what was known and what was being practiced. To address the gap-in-practice at the practicum site and bring about a practice change, an organizational readiness was required that evolved only after the mental health survey, which was done in 2015.

The EBP guideline for the projected multisensory room bridged the gap seen in practice because it had a strong link of support from the health care facility's leadership and the management team members in the department of inpatient psychiatry. Additionally, it supported a practice change with a clearly defined aim related to safety. It linked a physical space on the unit with safe objectives for managing maladaptive behaviors seen in PLWMHDs and addressed the gap experienced in practice.

Nature of the Doctoral Project

This DNP project consisted in a review of the professional literature with respect to EBP guideline development for multisensory rooms. This DNP project aimed at developing an EBP guideline for a projected multisensory room on one of the inpatient

mental health units at the practicum site. The development of the EBP guideline for the multisensory room required reviewing the best sources of evidence found through a thorough review of the professional literature. Systematic reviews of the literature were undertaken to identify all the research evidence related to the DNP topic. Upon completion of the reviews, the methods seen in the literature were evaluated for validity. To organize the evidence in this doctoral project, Melnyk and Fineout-Overholt's (2011) Rating System for the Hierarchy of the Evidence was the approach used. To aid in the development of the EBP guideline, I used the appraisal of guidelines research and evaluation by *AGREE II Instrument* (n.d.) as a framework. The importance of developing the EBP guideline within a nursing specialty is to provide a systematic method to translate research evidence into the practice of nursing and to close a gap in order to improve patient safety outcomes (Walden University College of Health Sciences School of Nursing, n.d.).

The development of an EBP guideline for the projected multisensory room was consistent with the DNP Essential III (American Association of Colleges of Nursing [AACN], 2006). The DNP Essential III states that translation of research into practice, dissemination, and integration of new knowledge are key activities of DNP graduates.

Significance

The primary stakeholders in the development of the EBP guideline were the administrative and leadership staff at the practicum site. These stakeholders supported the implementation of a multisensory room and recognized the need for the EBP guideline. Other stakeholders were the PLWMHDs, their families, the treatment team members,

community members, and this DNP student. The PLWMHDs and their families are the stakeholders who will benefit from the EBP guideline for the multisensory room because it will promote a positive social change in the management of maladaptive behaviors. The treatment team members were stakeholders in this DNP project because they considered the use of seclusion to be a treatment failure. They also understood the goal for reducing inpatient seclusion at the practicum site and welcomed the development of the multisensory room as an alternative for managing maladaptive behaviors seen in PLWMHDs.

This DNP project was designed to close a gap in the practice setting by providing best-practice evidence that supported the use of a multisensory room as an alternative to seclusion. The EBP guideline will support a nursing practice change for the mental health providers at the practicum site by helping them to make informed decisions related to an environment of care. LaVela, Etingen, Hill, and Miskevics (2016) reported that an environment of care (EOC) influences the patients' care perceptions as well as their health outcomes. This doctoral project is transferable to other mental health units within the practicum site's continuum of health care facilities because the sites are similar and have inpatient mental health units. It will also promote safety and the aim of achieving a change in culture for decreasing the use of seclusion at the practicum site.

Happell and Harrow (2010) reported that the elimination of seclusion is a priority for health care providers because it is a coercive strategy with negative consequences. Cummings, Grandfield, and Coldwell (2010) indicated that the reduction of seclusion remains a national patient safety priority. To achieve the desired social change, this DNP

project required the active promotion of an alternative (i.e., the multisensory room and an EBP guideline) and emphasized the safe collaboration in the care of PLWMHDs. This collaboration occurred within a nonrestrictive environment that promoted a practice change among the health care providers at the practicum site.

Summary

Section 1 provided an overview of the practice problem and stated the purpose and nature of this doctoral project. It indicated the significance of the results for positive social change. The identified problem was the lack of an EBP guideline for a projected multisensory room at the practicum site. The purpose of an EBP guideline for the multisensory room was to support a clinical practice change in the management of maladaptive behaviors seen in PLWMHDs. This DNP project aligns with the AACN's (2006) DNP Essential VI by improving the health care outcomes for a targeted population by employing effective communication and collaborative skills in the development of a new standard of care.

The ANA (2014) position statement indicated that standards of care in nursing are to give an explanation, justification, and recommendation for a course of action. Singleton (2017) reported that EBP transforms nursing practice through the influence of one's belief. The EBP guideline for the projected multisensory room was to influence the entire mental health team within the context of a system at the practicum site with new knowledge related to the management of maladaptive behaviors seen in PLWMHDs.

Section 2: Background and Context

Introduction

At the practicum site, I identified the practice problem as the lack of an EBP guideline for the projected multisensory room. The EBP guideline was needed once the multisensory room had been implemented. The use of an EBP guideline for the multisensory room remained essential to quality improvement and patient-centered care. According to Zaccagnini and White (2011), advanced practice registered nurses (APRNs) were prepared to serve as content experts who advocated for the profession of nursing.

In this acute inpatient mental health setting, the director of mental health services identified seclusion as a practice failure based on the high percentage rates of quarterly inpatient seclusion reports (I. Murillo, personal communication, October 5, 2015). The practice-focused question asked: Can the development of an evidence-based practice guideline help guide health care providers in the development of a multisensory room as an alternative to seclusion for PLWMHDS? In this section, I explored concepts, models, and theories relevant to nursing practice, local background and content, and the role of the DNP student. I ended with a summary.

My role of advocacy consisted in carrying out this DNP project, using a conceptual framework for evidence and practice change. I chose to apply the Appraisal of Guidelines for Research and Evaluation (AGREE II) model as the conceptual framework because it provided information on how to assess the quality of an EBP guideline. The quality of an EBP guideline meant that potential biases in guideline development were

adequately dealt with and the recommendations made by me were both internally and externally valid for the practicum site (Zaccagnini & White, 2011).

Brouwers, Kerkvliet, and Spithoff (2016) stated that the AGREE II model is a free open-access resource, which supports the practice guideline developmental field and international initiatives that seek to improve the value of published health research literature through transparency and accurate reporting. Klein, Woods, and Klein (2016) reported that there was a growing drive for best practices in all fields and that research evidence must not only be reliable and valid but also applicable and useful for actual decision making in clinical settings. In this section, I address the model and conceptual framework, the definition of terms, relevance to nursing practice, local background and context, and the role of the DNP student, and I end with a summary.

Concepts, Models, and Theories

Walden University (2017) pointed out in its *Manual for Clinical Practice Guideline Development* (CPGD) that using the AGREE II model to develop an EBP guideline was a process to be used within a nursing specialty. My process involved the systematic review of the evidence related to multisensory rooms for PLWMHDs and the development of EBP statements that included recommendations to optimize patient care in order to inform practice at the practicum site. Grading of Recommendations Assessment, Development, and Evaluation (GRADE) was used critically to appraise the evidence. Melnyk and Fineout-Overholt's (2011) Rating System for the Hierarchy of the Evidence was used to grade the research in the literature I reviewed, which informed best practices used in multisensory rooms. The AGREE II model was used to determine how

well the steps of the EBP guideline could be appraised by the expert panel at the practicum site.

The AGREE II (2013) model that informed this DNP project was developed in 2003 and had been widely used for assessing the methodological rigor and transparency in which a guideline was developed. The AGREE II model was appropriate for use with this DNP project because it provided a systematic method with inclusion and exclusion criteria for searching the literature and for grading the strength of the evidence (Moran, Burson, & Conrad, 2013). The AGREE II model consists of 23 items organized into six quality domains. The rationale for choosing to use the AGREE II model was that it could assist with the development of the EBP guideline for the multisensory room. It allowed the health care providers at the practicum site to make appropriate decisions related to behavior management for PLWMDs. Brouwers et al. (2010) found the AGREE II model to be a generic instrument, useful for assessing the processes of guideline development based on rigorous methodologies. The AGREE II model is illustrated in Table 1.

Table 1

Conceptual Framework to Develop the EBP Guideline

Overview of the EBP Guideline for a Comfort Room Using the Agree II Model		
Structures	Description	Content
Domain 1	Scope and purpose	How the implementation of an EBP guideline can help guide health care providers in the use of a multisensory room as an alternative to seclusion for PLWMHDs
Domain 2	Stakeholder involvement	Administrative leaders, inpatient treatment team members, the community, the DNP student, and the PLWMHDs
Domain 3	Rigor of development	The processes and synthesis used to gather the evidence and the recommendations that will help formulate the EBP guideline for the multisensory room
Domain 4	Clarity of presentation	The English language would be the original language used during the development of the EBP guideline for the multisensory room
Domain 5	Applicability	Types of barriers and facilitators noted during the development of the EBP guideline will be assessed here
Domain 6	Editorial independence	The name of the funding department, if any, and any other competing interests related to the development of the EBP guideline will be addressed and recorded here for editorial independence

Note. From “Appraisal of Guidelines for Research and Evaluation II,” by The AGREE Research Trust, 2013, pp. 6–8. Reprinted with permission.

Melnyk, Fineout-Overholt, Stillwell, and Williamson (2010) reported that evidence-based research was necessary to evaluate and support a practice change. In this DNP project, Melnyk and Fineout-Overholt's (2011) hierarchy of evidence was used to appraise the evidence. Table 2 shows the components of the Melnyk and Fineout-Overholt rating system for the hierarchy of the evidence.

Table 2

Melnyk and Fineout-Overholt's Rating System for the Hierarchy of the Evidence

Levels of Evidence	Description of the Evidence
Level 1	Evidence obtained from systematic reviews or meta-analyses of randomized controlled trials
Level 2	Randomized controlled trial(s)
Level 3	Evidence obtained from well-designed controlled trials without randomization, quasi-experimental
Level 4	Evidence from well-designed case-control or cohort studies
Level 5	Systematic review(s) of descriptive or qualitative studies
Level 6	Evidence obtained from a single descriptive or qualitative study
Level 7	Evidence obtained from the opinions of authorities and/or reports of expert committees

Note. From "Evidence-Based Practice in Nursing and Health Care: A Guide to Best Practice," by Melnyk and Fineout-Overholt, 2011, p. 12. Reprinted with permission.

Definitions of Terms

Evidence-based practice (EBP) guideline: An EBP guideline is designed to support clinical decision making in patient care. The content of the guideline is based on a systematic review of clinical evidence that supports evidence-based care (OpenClinical, n.d.).

Inpatient psychiatry quality reporting: A mandatory program, developed by Section 1886(s) (4) of the Social Security Act, which was amended by Sections 3401(f) and 10322(a) of the Affordable Care Act (Pub. L. 111-148). It is to meet the program requirements of Inpatient Psychiatric Facilities (IPFs) by collecting aggregate data quarterly that is submitted to the Centers for Medicare and Medicaid Services (CMS) annually. The collection of data, upon completion of each quarter, is intended to allow for adequate reviews and corrections by IPF health care providers (AHA, n.d.).

Inpatient quality report indicator: A set of measures that provides a perspective on hospital quality of care using hospital administrative data. It reflects quality of care inside hospitals and includes inpatient mortality rates, procedures, and medical conditions. It assesses the utilization of procedures for which there are questions of overuse, underuse, and misuse (AHRQ, n.d.).

Least restrictive alternative: This means to treat PLWMHDs in the least restrictive environment so that their dignity and autonomy are preserved in order to maximize opportunities for recovery (Mental Health America, n.d.)

Maladaptive behaviors: These behaviors are defined as behaviors that interfere with an individual's activities of daily living or with his or her ability to adjust to and

participate in mental-health-setting activities. Maladaptive behaviors lie along a spectrum from minor to major. Minor are less impairing behaviors such as nail biting and difficulty separating from others. Major are severely impairing behaviors such as self-injurious, oversexualized behaviors and violence, all of which can seriously interfere with an individual's ability to maintain positive relationships with others, learn, or engage in adaptive, age-appropriate activities and settings (Volkmar, 2012).

Multisensory room: This is an intervention, also called a comfort or snoezelen room, which is used to prevent the use of restraint and seclusion seen in inpatient mental health units. It is used to calm and reduce agitation. It is a voluntary option for PLWMHDs. It is not a reward for good behavior and must not be withheld as a form of punishment. The multisensory room is a therapeutic intervention offered to PLWMHDs before the onset of aggressive and uncontrollable behaviors (NYSOMH, 2009).

People living with mental health disorders (PLWMHDs): Persons diagnosed, according to the Diagnostic and Statistical Manual (DSM-5), with mental health disorders.

Seclusion: The placement of an individual alone in a locked room or area from which he or she cannot leave at his or her will. In this secluded area, the patient knows that he or she cannot voluntarily leave. This includes restricting the person's egress through the presence of staff, coercion, or by imposing implicit or explicit consequences. However, it does not mean confinement on a locked unit or ward where the person is with other individuals (NYSOMH, 2009).

Relevance to Nursing Practice

According to Stevens (2013), the impact of EBP is echoed today throughout the profession of nursing to promote the need for redesigning care to make it safe, effective, and efficient, and aligned with the articulated vision of Institute of Medicine (IOM, 2011). The rationale for this gap seen in practice was the lack of new knowledge that could transform care and produce better patient outcomes within a health care system at the practicum site. The director of inpatient psychiatry, the unit mangers, and all the members of the inpatient treatment team showed interest in this DNP project and welcomed the adaptation of this new environmental change. The stakeholders at the practicum site have incorporated evidence-based practices into their mission and vision, and they welcome new evidence that brings about a transformative change within the organization. To bring about such a change, this DNP project was designed to use evidence to support a change that would promote safety, quality, and better patient outcomes. The practice-focused question asked: Can the development of an evidence-based practice guideline help guide health care providers in the development of a multisensory room as an alternative to seclusion for PLWMHDs?

Existing Scholarship and Research

PLWMHDs and health care providers have different perceptions regarding the use of seclusion. It is essential to understand both views, so that health care providers can assess the underpinnings that will determine the use of a multisensory room for PLWMHDs. Sambrano and Cox (2013) conducted a phenomenological study of PLWMHDs who were secluded in Australia and found that their experiences were

feelings of punishment and powerlessness, being in a place of incarceration, and receiving degrading treatment. The results showed that PLWMHDs shared the same feelings postseclusion of receiving a discriminatory and degrading treatment, but the health care providers who secluded the PLWMHDs felt that their use of seclusion helped reduce the clients' aggression and agitation.

Larue et al. (2013) did an exploratory descriptive study to determine the perspectives of PLWMHDs who experienced seclusion in Quebec, Canada. The authors used a questionnaire with 50 secluded patients who met the inclusion criteria. The results showed a nuanced perception of seclusion because some of the PLWMHDs felt that it was helpful, while others felt quite the opposite. Those who found seclusion not helpful reported that it deepened their feelings of abandonment.

In a phenomenological study, undertaken in the southwestern part of the United States with 20 PLWMHDs who experienced seclusion at a 250-bed inpatient psychiatric acute-care hospital, each of the patients reported his or her seclusion experience as being a negative event, one that elicited shame, abandonment, and past traumatic experiences (Ezeobele, Malecha, Mock, Mackey-Godine, & Hughes, 2014).

Some health care providers at the practicum site viewed the use of seclusion as a safety intervention and not as a restrictive measure, while others saw it as traumatic during and after an event. Menneau-Cote and Morin (2014) reported in their study that staff members who used restrictive measures with people with mild to moderate intellectual disabilities often experienced psychological symptoms such as anger, pain, and anxiety before and after the event.

Kuosmanen, Makkonen, Lehtila, and Salminen (2015) conducted a study in which mental health professionals were secluded, and post seclusion the authors explored with these professionals what it felt like to be secluded, in order to assess if they understood the impact seclusion had on PLWMHDs. The authors reported that those mental health professionals found the seclusion room to be inhumane, and after their experiences with seclusion, they seriously questioned it as a behavior management method.

Mann-Poll, Smit, Koekkoek, and Hutschemaekers (2015) did a vignette study to assess how nurses made decisions prior to implementing seclusion and to gain a better understanding about how clinical decisions were finally made. The study included 128 nurses. The results showed that some of the nurses viewed seclusion as a necessary measure rather than as an appropriate one, a view that could ultimately help them to reduce their use of seclusion (Mann-Poll et al., 2015).

Knox and Holloman (2012) reported several issues surrounding the reduction of seclusion for PLWMHDs with maladaptive behaviors. These issues were seen in risk areas of concern such as emergency departments, crisis clinics, inpatient psychiatric units, and mental health clinics because the acutely ill PLWMHDs are first seen in those areas. Bullock, McKenna, Kelly, Furness, and Tacey (2014) did a 12-month retrospective study and reported that, internationally, seclusion practices remain a common concern. However, the early identification of clients with risks for seclusion is crucial to reducing the incidents seen in the real world of mental health practice settings.

Seclusion reduction is a public health concern due to the negative effect it has on PLWMHDs. Today, seclusion reduction screening begins before a patient's admission to a mental health unit in New York State. Tools such as risk assessment are used to provide a standard for evaluating PLWMHDs for violence. According to the CDC (2016), risk assessment tools enable health care providers to share a common frame of reference for understanding maladaptive behaviors seen in PLWMHDs and minimize the possibility of miscommunication regarding a person's potential for violence. Therefore, the purpose of this DNP project is to conduct an integrative review of factors that contribute to or trigger maladaptive behaviors seen in PLWMHDs and to develop an EBP guideline for the projected multisensory room at the practice setting.

Standard Practices Used by Accrediting, Regulatory, State, and Nursing Organizations

Seclusion was once thought to be a therapeutic practice used in the treatment of PLWMHDs and substance abusers who exhibited maladaptive behaviors (Substance Abuse and Mental Health Services [SAMHSA], 2010). Today, research has shown that this practice is nontherapeutic and traumatizing to all, even when all the other least restrictive measures have failed. Wale, Belkin, and Moon (2011) reported that seclusion is a coercive and traumatic event associated with a high risk of injuries to both PLWMDs and health care providers. The NYSOMH (2009) identified seclusion as having a deleterious effect on PLWMDs, especially on those with a history of hearing impairment, sexual trauma, or physical abuse.

Today, regulatory and accrediting agencies are promoting the development of safe therapeutic environments to be used as treatment alternatives in the form of multisensory rooms. A multisensory room is a sensory modulation approach, which has emerged as a best practice alternative to seclusion (NYSOMH, 2009). The National Association of State Mental Health Program Directors (NASMHPD, n.d.) identified seclusion as a treatment failure, one that remains costly in terms of patient and staff injuries, time, turnovers, and litigations.

The NYSOMH (2014) found that the use of seclusion for behavior management could be reduced through the creation and maintenance of an environment that promotes the empowerment of PLWMHDs. This is done by identifying and implementing strategies that advance positive behavioral management. Crisis prevention intervention (CPI, n.d.) is a training that emphasizes the education and sensitization of staff regarding the appropriate use of strategies for behavioral management.

The American Nursing Association (ANA, 2012) is a nursing organization that has identified the use of seclusion as a problematic practice and reported that, when professional registered nurses use seclusion in their practice, they are being contrary to the fundamental goals and ethical traditions of the nursing profession. The ANA strongly supports registered professional nurses who participate in the reduction of seclusion in health care settings so that they may uphold the autonomy and dignity of PLWMDs and those of the nursing profession.

In 2012, the Centers for Medicare and Medicaid Services (CMS, 2016) implemented proposed changes under the Inpatient Prospective Payment System (IPPS)

related to 72 Inpatient Quality Reporting (IQR) measures. The Inpatient Psychiatry Quality Reporting Program is one of the measures developed by the Joint Commission, but is paid under CMS. The goal of this measure is to improve the quality of care provided to PLWMHDs during their hospital stay.

The American Psychiatric Nursing Association (APNA, 2014) is an organization that advocates for policies at federal, state, and organizational levels to protect PLWMHDs from needless trauma associated with seclusion. APNA members believe that professional standards apply to all populations in all settings where behavioral emergencies may occur and advocate and support EBP through research that is directed toward examining the variables associated with prevention and safe management of behavioral emergencies.

The current state of nursing practice in this area is the Joint Commission's (n.d.) measure set ID-3 of Hospital-Based Inpatient Psychiatric Services (HBIPS), which relates to the total number of hours all patients admitted to an inpatient mental health settings were secluded. This measure set is to ensure that the use of seclusion by health care providers is strictly limited to dangerous situations that meet the threshold of imminent danger. It is also used to help prevent the future use of seclusion.

The CMS (2016) indicated that their seclusion guidelines were applicable to all hospital patients, including those in behavioral health units. The CMS seclusion guidelines were to ensure that any health care facilities seeking Medicare and Medicaid reimbursements adhered to patient safety by not having standing orders for the use seclusion.

A strategy used by the NYSOMH (2014) contained a policy directive that stipulated conditions and procedures for the use of seclusion. The NYSOMH indicated that the use of seclusion must serve as a prompt to health care providers to allow them to assess their treatment approaches for PLWMHDs. The goal for doing this recommended assessment was to make seclusion a rare occurrence and to promote the creation of safe, nonpunitive therapeutic environments (APNA, 2014; NYSOMH, 2014). The APNA (2014) reported that psychiatric mental health nurses were responsible for maintaining safety in all treatment environments by first using the least restrictive interventions for PLWMHDS. The APNA has made a standard practice commitment for the reduction of seclusion by calling for ongoing research to support safe EBP alternatives to manage maladaptive behavioral issues seen in PLWMHDS.

Crisis prevention instructions (CPI) provided by the Crisis Prevention Institute (CPI, n.d.) and enforced by the Joint Commission (n.d.), encompasses the use of nonviolent physical crisis-intervention strategies. These strategies are used when responding to agitated, disruptive, and assaultive individuals. The CPI nonviolent strategies align well with the Joint Commission standards for reducing the use of restraint and seclusion. In CPI, the framework used to assess crises teaches the participants in the train-the-trainer course how to monitor the physical and psychological needs of PLWMHDs and how to meet those needs before maladaptive behaviors escalate to the point of requiring seclusion.

Healthy People 2020 (n.d.) has a National Mental Health Services Survey (N-MHSS) designed to collect information from all mental health facilities in the United

States. This information comes from both public and private facilities that provide mental health treatment services to PLWMHDs. The survey collects data based on location, characteristics, and utilization of mental health service providers throughout the 50 states, the District of Columbia, and the U.S. territories. It is the only source of data for mental health services delivery systems. The N-MHSS is a point-prevalence survey used to provide information on how mental health facilities treat their clients. According to Healthy People 2020, PLWMHDs are one of the largest groups of ill people seen in the United States, and as such this group ranks the highest among all diseases and is the most common cause of disabilities. Healthy People 2020 is striving to improve mental health nationwide through its N-MHSS data collection survey in order to improve the mental health treatment delivery system.

In New York State, standard practices govern the use of seclusion by accrediting, regulatory, state, and nursing organization in health care facilities. Scheuermann, Peterson, and Ryan (2015) reported that the use of seclusion is controversial and problematic in schools throughout the United States because limits for the use of restraint and seclusion in schools are largely state law issues. Therefore, the reduction of seclusion is one of the Healthy People 2020 goals for PLWMHDs. This DNP project is to align itself with the goals of Healthy People 2020 by implementing a change to decrease the use of seclusion seen in the mental health units at the practicum site.

Other Approaches Used for Seclusion Reduction

Early recognition of maladaptive behaviors exhibited by PLWMHDs remains a crucial strategy for health care providers at the practicum site, in order to prevent the

escalation of maladaptive behaviors that may require the use of seclusion. Knox and Holloman (2012) reported that the use of best practices in the evaluation and treatment of agitation (BETA) is a therapeutic strategy based on noncoercive de-escalation. BETA has been used as a first-choice strategy for managing acute agitation seen in patients with mental health issues.

Wisdom, Wenger, Robertson, Van Bramer, and Sederer (2015) reported that the positive alternatives to restraint and seclusion (PARS) are strategies used as an alternative to seclusion. The goal of PARS is to eliminate restrictive interventions such as seclusion and to promote a health care system governed by recovery, resiliency, and wellness. In a study by Wieman, Camacho-Gonsalves, Huckshorn, and Leff (2014), the six core strategies (6CS) for reduction of seclusion and restraint were implemented in 43 inpatient psychiatric units throughout the United States, and their implementation was considered feasible at other inpatient mental health facilities as well because they supported a decrease in the use of seclusion. The 6CS promote leadership toward organizational change and the use of data and de-escalating strategies to inform practice (NASMHPD, n.d.; Wieman et al., 2014).

A recovery approach is a strategy used in forensic psychiatry for the early recognition of violence and for the treatment planning of PLWMHDs (Olsson & Schon, 2016). A recovery approach is one in which the mental health providers work in collaboration with the PLWMHDs to foster personal responsibility, motivation, and shared decision making while supporting the patients toward self-management and self-empowerment.

According to Steinert, Noorthoom, and Mulder (2014), mental disorders are psychological behavioral disorders that are difficult to manage. The methodical work toward problem solving is an approach used to decrease the use of seclusion in mental health facilities by providing guidance to the multidisciplinary team (Boumans, Walvoort, Egger, & Hutschemakers, 2015). The methodical approach has five phases, which are as follows:

1. Translation of the problems into goals;
2. Search for means to realize the goals;
3. Formulation of an individualized plans by matching specific means to individual needs and preferences;
4. Implementation of a treatment plan; and
5. Evaluation and readjustment of the treatment plan (Boumans et al., 2015)

At the practicum site, the methodical approach helps the multidisciplinary team in a systematic way to assess each patient upon admission. The key purpose for using this approach is to assess for the early identification of risk factors that may contribute to the future use of seclusion. However, not all PLWMHDs at the practicum site accept this approach; many of them fail to sign their inpatient treatment plans when they are not in agreement with their behavioral goals.

Using a Multisensory Room to Advance Nursing Practice

A multisensory room is an alternative sensory approach that fills a gap-in-practice as revealed in the review of the literature. The use of a therapeutic space in a multisensory room promotes the use of self-organization through positive behavioral

changes (OT-Innovations, n.d.). In mental health systems, a multisensory room promotes a recovery approach toward developing a therapeutic alliance between the treatment team and the PLWMHDs. It provides PLWMHDs adequate time to reduce their stress and allow them opportunities for engagement, de-escalation, self-care, self-nurturing, resilience, and self-recovery (OT-Innovations, n.d.).

Wiglesworth and Fanworth (2016) reported that, in 2014, the Australian law required the use of alternative interventions to manage behavioral problems seen in PLWMHDs. An alternate intervention used in Australia is the multisensory room that emphasized recovery, self-coping, and self-management skills. In Australia, the multisensory room is used as a recovery approach; it has shown stress reduction benefits that improved patients' experiences within a forensic mental health facility (Wiglesworth & Fanworth, 2016). A study with 56 adolescents who were multisensory-room users and 56 who were not multisensory-room users indicated that multisensory rooms were a valuable intervention for reducing distress in adolescents, especially in those with aggressive behaviors (West, Melvin, McNamara, & Gordon, 2017).

Ten inpatient wards in Stockholm, Sweden, developed multisensory rooms, between 2012 and 2014, to decrease the use of containment processes such as seclusion and restraint, and to promote the use of person-centered nursing and recovery-based mental health services (Bjorkdahl et al., 2016). Recovery-based mental health nursing is associated with a reduction in seclusion and includes a focus on risk reduction because recovery is a process and not an outcome (Ash, Suetani, Nair, & Halpin, 2015).

The multisensory room has been used for decades in occupational therapy and is a tool for health care providers to use with PWLMHDs as well because it gives the latter a sense of control over their treatment options and promotes their self-empowerment (West et al., 2017). A multisensory room has been used in several other fields besides nursing for creating positive outcomes and to promote emotional regulation (West et al., 2017).

Scanlan and Novak (2015) stated that using a multisensory room as an intervention, which is a noninvasive, self-directed, trauma-informed, recovery-oriented approach, is safe to implement for seclusion reduction. Niedzielski, Robin, Emmerson, Rutgers, and Sellen (2016) noted that the use of multisensory room experiences has emerged in residential hospice settings to enhance the experiences of patients at the end of their lives.

Fisher (2016) reported that 25%–35% of PLWMHDs who are hospitalized engaged in violence and stated that a simple change made within the physical environment of an inpatient psychiatric hospital led to a reduction in seclusion and restraints within in a short period. SAMSHA (2014) reported that nearly one in five adults has a mental health condition in the United States. Today, the use of person-centered caring along with the integration of multisensory approaches are being recognized locally and internationally to facilitate a more humane and collaborative approach to crisis intervention (OT-Innovations, n.d.).

The projected multisensory room is a new safety alternative for managing maladaptive behaviors seen in PLWMHDs at the practicum site and will advance nursing practice and fill the gap as seen in the review of the literature. Multisensory rooms are

used to promote safety and to decrease the use of seclusion by assisting the health care providers during their decision-making processes for behavioral management. At this Magnet health care facility, the department of inpatient psychiatry recognized how essential it was to reduce the use of seclusion by choosing to offer a sensory modulation alternative in the form of a multisensory room.

Local Background and Context

In 2014, during a New York State Department of Health (NYSDOH, n.d.) mental health survey at the practicum site, the NYSDOH surveyors reviewed the prevalence of seclusion at the exit interview. They discussed with the stakeholders and leaders a successful alternative used in New York State in the form of a multisensory room. This alternative was suggested to the stakeholders and leaders as an option for helping to reduce their high seclusion rate. This on-site evidence justified the practice-focused question and the need for a seclusion alternative in the form of a multisensory room.

The use of a multisensory room addresses the gap seen in practice by providing health care providers with an additional tool to reduce their use of seclusion at the practicum site. It is to promote a trauma-informed culture of care for healing and recovery for PLWMHDs (NYSOMH, 2009). As a tool, a multisensory room, when implemented at some of the New York State mental health care facilities, showed significant reduction in the use of seclusion (NYSOMH, 2014). Trauma-informed care promotes a trauma-specific treatment service that is evidence-based and avoids practices that retraumatize PLWMHDs during the delivery of their care. The present DNP project was intended to advance the delivery of care seen in nursing practice at the practicum site

and to close a gap with respect to the management of maladaptive behaviors seen in PLWMHDs.

The institutional context of this DNP project was to improve the safety outcomes of a targeted population and to change the culture for behavioral management seen at the practicum site. The director of mental health services at the practicum site has identified seclusion as a treatment failure, one that requires a change in practice due to the high number of seclusion incidents seen in the quarterly reporting indicator for seclusion (I. Murillo, personal communication, October 5, 2015). The focus unit for this DNP project was an adult inpatient mental health unit at the practicum site within the behavioral health care system. It comprised a 24-bed unit with 25 professional registered nurses, 40 mental health associates, two chief doctors, four residential doctors, one mental health nurse practitioner, two social workers, one rehabilitation and one occupational therapist, and two nurse administrative leaders. The strategic mission and vision of the behavioral health system at the practicum site was to provide compassionate, patient-centered care with seamless coordination and to advance nursing through unrivaled education and research.

According to SAMSHA (2010), each year approximately 50 to 150 individuals die from either being restrained or secluded. The institutional context applicable to this problem is the performance improvement initiative at the practicum site in the form of a projected multisensory room. The nursing education department collects data monthly to monitor clinical performances that will guide safe quality-improvement initiatives from each system at the health care facility. The NYSOMH (2009) reported that no

environment of care is free of risks; however, maintaining a therapeutic environment for PLWMHDs is mandated today.

The position statement of the APNA (2014) regarding the use of seclusion and restraint indicated that trained and competent staff members must monitor PLWMHDs who are secluded in accordance with federal, state, and regulatory agency guidelines. They must be able to recognize and report all untoward physical and psychological reactions of PLWMHDs during restraint or seclusion episodes to facilitate the early release from these containment processes.

According to the NYSDOH (n.d.), all health care facilities within the state of New York must follow departmental codes and regulations that support minimum standards of care for safety. At the practicum site, the rules, regulations, and laws outlined by the NYSOMH, the Joint Commission (2016), and the Centers for Medicare and Medicaid Services (2016) are part of the corporate compliance regulations.

As a Magnet health care facility, the practicum site's guiding principle of shared governance is to promote quality that supports professional practice and to identify excellence in the delivery of nursing services to all patients. Shared governance has helped in the dissemination of best practices seen in the delivery of nursing services at the practicum site. The mission of the health care facility is to provide timely, professional, effective, and efficient services to all patients. The strategic vision at the practicum site is to establish noncoercive, person-centered treatment environments that will support the goal of having collaborative relationships with the patients.

State and Federal Contexts Applicable to the DNP Project

The health care facility that facilitated this DNP project has a Behavioral Health Care System, which is committed to improving mental and emotional health in PLWMHDs. It strives to provide outstanding in- and outpatient services for all age groups. The goal is to integrate clinical care, leading-edge science, and education to deliver newer models of treatments that support large-scale infrastructures. The Behavioral Health Care System strives to provide PLWMHDs unparalleled mental health services by advancing the field of mental health care.

In order to meet its accreditation needs, the Behavioral Health Care System at the practicum site has undergone regular reviews and audits that validated state, federal, and local contexts. These reviews and audits were related to delivery of care and clinical and administrative standards that benchmarked their performances and set goals for ongoing improvements in the department of inpatient psychiatry.

The Hospital Consumer Assessment of Healthcare Providers and Systems survey was developed by CMS as a national standardized survey tool and data collection methodology, used to measure patients' perspectives of hospital stay (HCAHPS, n.d.). HCAHPS is used at the practicum site by the department of inpatient psychiatry and has captured the PLWMHDs' perspectives of their hospital stay producing comparable data for future improvements.

The HCAHPS scores for the department of inpatient psychiatry showed the high rate of the PLWMHDs' dissatisfaction related to seclusion and restraint. Therefore, the EBP guideline for the projected multisensory room was to help the health care facility

meet HCAHPS's benchmark standards for the department of inpatient psychiatry as well as meet the reimbursement standards set by CMS for mental health services.

Role of the DNP Student

In the current era of health care reform, my role as an advanced practice nurse (APN) leader was to design and deliver an EBP guideline for a projected multisensory room that will support a sustained commitment to the reduction of seclusion and to promote a new standard of care for the inpatient mental health department. This standard of care is related to safety for a targeted population at the practicum site. Having worked with PLWMHDs for over 15 years, I have witnessed the prevalent use of seclusion and restraint at different health care facilities. During that time, I found seclusion to be an intervention that was not helpful to the PLWMHDs because, post seclusion, some patients became more violent and threatening toward the health care providers and their peers. As a nurse advocate for PLWMHDs and one who is currently working at a Magnet health care facility on a mental health unit, I saw the opportunity to develop the EBP guideline for the projected multisensory room as an emerging opportunity to engage in an EBP project related to a practice change. The AACN (2006) stated that DNP students and graduates possess a plethora or knowledge from the sciences as well as the ability to translate this knowledge quickly and effectively into practice environments that will benefit different patient populations. My role as a DNP student was to translate current evidence into practice for the safety of a specific population and to develop effective leadership skills through collaboration.

My motivation for this DNP scholarly project was to use the DNP Essentials to develop a transformational change as a leader. The AACN (2006) stated that any form of nursing intervention that influences health care outcomes for individuals and populations will strengthen nursing practice and health care delivery systems. My goal as a DNP student was to educate nurses and others across the disciplines on how to use a delivery-of-care model based on evidence in order to promote safety and quality of care for PLWMHDs.

Summary

The gap seen in practice was the prevalent use of seclusion at the practicum site and the lack of an EBP guideline for the projected multisensory room as an alternative. Today, performance measures are directly linked to quality reporting indicators where national benchmark standards are monitored for safe patient outcomes. The goal of safe patient outcomes has become imperative to all health care facilities because, today, the Affordable Care Act is paying health care facilities for their performance. Therefore, the projected multisensory room was intended to close the gap experienced in practice and to align with the Affordable Care Act because this would promote a methodological strategy for the development of the EBP guideline for a specific population while promoting safer outcomes. Section 3 will start with an introduction and then concentrate on the practice-focused question, sources of evidence, and analysis and synthesis; it will end with a summary.

Section 3: Collection and Analysis of Evidence

Introduction

Seclusion is a local, national, and international concern because it does not promote a culture of safety for PLWMHDS. The CDC (2016) collectively described mental health illnesses as all diagnoses characterized by sustained, abnormal alterations in thinking, mood, and behaviors that are associated with impaired functioning. Mental health illnesses are a public health concern because they are associated with other chronic diseases that result prematurely in morbidity and mortality (CDC, 2016). The World Health Organization (WHO) reported that mental health illnesses account for more disabilities in developed countries than any other group of illnesses (CDC, 2016).

This DNP project was intended to address the lack of an EBP guideline for a projected multisensory room to reduce the use of seclusion at the practicum site for PLWMHDs. At the practicum site, the use of seclusion had no therapeutic value for the PLWMHDs and this justified the practice-focused question of the DNP project. To promote the use of an alternative for managing maladaptive behaviors seen in PLWMHDs, several perspectives were reviewed from the evidence that informed this DNP project.

These perspectives were recovery-oriented, person-centered, and trauma-informed nursing, all of which took into consideration the individual needs of PLWMHDs and promoted safer outcomes. In doing so, I recognized how adoption of those approaches, partnered with the health care providers and PLWMHDs, improved service delivery in mental health facilities and built a culture of trust and respect.

The multisensory room is intended to address a local gap seen in practice at the practicum site. In this section, I restate the practice-focused question, address the sources of evidence, provided analysis and synthesis, and end with a summary.

Practice-Focused Question

The practice-focused question asked: Can the development of an evidence-based practice guideline help guide health care providers in the development of a multisensory room as an alternative to seclusion? The development of the EBP guideline for the projected multisensory room was intended to support a practice change that would help the health care providers at the practicum site to make sound decisions related to a patient safety issue. The purpose of this DNP project was to develop the EBP guideline for the projected multisensory room at the practicum site. Development of the EBP guideline was done with the use of the AGREE II model to systematically develop statements that aligned with practice and assisted the health care providers in making appropriate decisions, specific to maladaptive behavioral management for PLWMHDs.

I developed the EBP guideline in this DNP project by using the evidence supported by the Agree II model domains as a standard for assessing the methodological quality of the practice guideline. To ensure the usability and transferability of the EBP guideline, I had the expert panel members at the practicum site evaluate the content of the EBP guideline against the domains of the AGREE II model.

Sources of Evidence

The following online databases were explored for articles published between January 2012 and June 2017 to gather the most current reviews: CINAHL Plus with Full

Text, MEDLINE with full text, PsycINFO, SocINDEX, and the Walden University library. This ensured that the literature reviewed was current and relevant to the topic. Key search terms used during the review of the literature were *aggression, agitation, maladaptive behaviors, mental health disorders, seclusion, seclusion reduction,* and *sensory modulation*. At the end of the database searches, CINAHL Plus with Full Text netted 126 articles that could be narrowed down to 10, according to relevance. Medline with Full text captured 297 articles, which were also narrowed down to 10, according to relevance. Several duplicates were removed during this search. PsycINFO captured 82 articles that were narrowed down to five, according to relevance. SocINDEX captured 250 articles, which were also narrowed down to five, according to relevance. The 30 selected articles were graded as follows: five (Level 1), five (Level 2), five (Level 3), and 15 (Level 5). The purpose of this evidence search was to close a consequential gap seen in practice at the practicum site.

The collection and analysis of the evidence generated for this DNP project was, then, assessed with the use of Melnyk and Fineout-Overholt's (2011) rating system, which is an appropriate way to address the practice-focused question. The AGREE II model was used to develop the EBP guideline for the projected multisensory room. The copyright notice for the AGREE instrument stated that it can be reproduced for educational purposes, quality improvement programs, and for the critical appraisal of clinical practice guidelines (Brouwers et al., 2010). Therefore, no written permission was needed to use the AGREE II tool; however, in order to appraise the reliability of the

AGREE II instrument, there should be more than one appraiser after the development of the EBP guideline (Agree Research Trust, 2013).

The AGREE II instrument consists of 23 appraisal criteria items organized into six quality domains, with each capturing a unique dimension of the guideline's quality. One item from each domain was used and rated on a 4-point scale from *strongly agree* (1) to *strongly disagree* (4) in order to assess the EBP guideline. The participants rating the items from each domain were the advisory committee members from the program planning team at the practicum site. This team consisted of the following 14 members: one inpatient director, two attending physicians, one nurse practitioner, two RN managers, one nurse educator, two social workers, one recreational therapist, one occupational therapist, two clinical registered professional nurses, and one mental health aide. The advisory committee members used the items listed in Table 3 to assess the validity and reliability of the EBP guideline, using the AGREE II six quality domains. Table 4 shows the result of using the anonymous questionnaire based on the quality domains. Table 5 shows the methodology employed in using the six domains of the AGREE II model. Figure 1 is a depiction of the results achieved with the anonymous questionnaire.

Table 3

Anonymous Questionnaire for the EBP Guideline Using the AGREE II Six Domains

	1 Strongly Agree	2 Agree	3 Disagree	4 Strongly Disagree
Domain 1: Scope & Purpose The target users to whom the EBP guideline is meant for were specifically described?	o	o	o	o
Domain 2: Stakeholders' Involvement Were the target users of the EBP guideline clearly defined?	o	o	o	o
Domain 3: Rigor of Development Were systematic methods used to search for the evidence and helped with the development of the EBP guideline?	o	o	o	o
Domain 4: Clarity of Presentation Were the recommendations specific and unambiguous in the EBP guideline?	o	o	o	o
Domain 5: Applicability Were potential organizational barriers addressed in the EBP guideline and were they all discussed?	o	o	o	o
Domain 6: Editorial Independence Was the guideline editorially independent from the funding body?	o	o	o	o

Note. From "Appraisal of Guidelines for Research and Evaluation II," by the AGREE Research Trust (2013). Reprinted with permission.

Table 4

Results of the Questionnaire for EBP Guideline Using AGREE II Six Domains

Domains	Strongly Agree	Agree
Domain 1: Scope & Purpose	13	1
Domain 2: Stakeholders' Involvement	12	2
Domain 3: Rigor of Development	12	2
Domain 4: Clarity of Presentation	13	1
Domain 5: Applicability	13	1
Domain 6: Editorial Independence	11	3

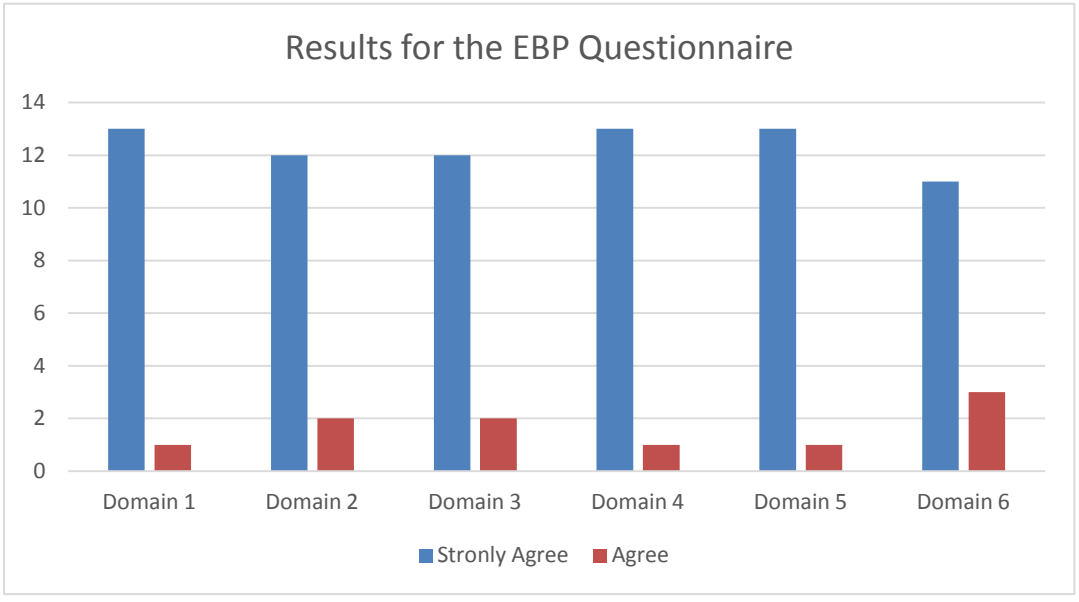

Figure 1. A visual representation of the results of the anonymous questionnaire.

Table 5

Methodology Using the Six Domains of the AGREE II Model

Agree II Six Domains	Application to the EBP Guideline
Domain 1: Scope and purpose The patients to whom the guideline was meant to apply were specifically described (3).	The EBP guideline for the multisensory room applied to all the PLWMHDS on the inpatient mental health unit where the multisensory will be implemented (3).
Domain 2: Stakeholder Involvement The target users of the guideline were clearly defined (6).	The evidence was summarized and synthesized to make the recommendations on the standard uses for the multisensory room (6).
Domain 3: Rigor of development Systematic methods were used to search for the evidence (8).	Online data base sources and the Walden University library located 30 articles which were published from 2012 to 2017 (8).
Domain 4: Clarity of presentation unambiguous (15).	Based on feedback from the 14 committee members on the AGREE II six domains, the recommendations supported the use of the EBP guideline for the multisensory room (15).
Domain 5: Applicability The potential organizational barriers in applying the recommendations have been discussed (19)	No barriers would impact the use of the EBP guideline for the multisensory room (19).
Domain 6: Editorial Independence The guideline was editorially independent from the funding body.	No funding was needed for the EBP guideline development (22).

Validity and Reliability of the EBP Guideline

The 14 members of the advisory committee assessed the validity and reliability of the EBP guideline. This assessment was done with the use of the AGREE II instrument's six quality domains in the form of an anonymous questionnaire. The 4-point scale in the questionnaire was used to measure the extent to which a criterion has been fulfilled in the development of the EBP guideline for the multisensory room.

Domain 1: Scope and Purpose assessed the overall aim of the EBP guideline to determine if it is specific to the clinical question and the targeted population.

Domain 2: Stakeholders' Involvement focused on the views of the intended users and assessed if individuals from all the different professional groups were involved. The postseclusion interview forms were used to gather evidence on the PLWMHDs' views of seclusion and the need for a change.

Domain 3: Rigor of Development was related to the process used to gather and synthesize the evidence and to show that systematic reviews were used to search for the evidence. It also considered how those methods were used during the formulation of the EBP guideline and included safety benefits, risks, and adverse effects.

Domain 4: Clarity of Presentation addressed the language and the format of the EBP guideline. The opinions of the advisory committee members, key recommendations, and any conflict of interests related to the clarity and presentation of the EBP guideline were taken into account..

Domain 5: Applicability was used to address organizational behavior related to application of the EBP guideline and to assess if the EBP guideline key criteria were applicable for future monitoring and auditing purposes.

Domain 6: Editorial Independence assessed the independence of the recommendations made in the EBP guideline in order to determine if they were independent of the funding body. It also helped to determine if the interests of the advisory committee members were without conflict of interest.

Analysis and Synthesis

I used the AGREE II instrument's six quality domains in the form of a survey for the analysis and synthesis of the EBP guideline. The survey was done over 3 days by the expert panel using a number-tracking systems. The number-tracking system entailed choosing a number randomly from one to 14 from an open envelope. Each panel member wrote his or her chosen number on the survey form before completion, which ensured that none of the panel members did the survey twice. Each expert panel member was told to place the completed form into the survey collection box, located in the nursing conference room. Excel was used for analyzing the collected survey questionnaire forms, and a graph was developed to show the results (see Figure 1). This graph provided feedback on the content of the EBP guideline (see Appendix B) from the expert panel, and it provided data for a future qualitative attribute. The EBP guideline supported the operating procedures for use in the multisensory room (see Appendix C).

Summary

The results of applying the AGREE II instrument's six quality domains to the EBP guideline development were assessed with Excel, which contributed to the data collection for this DNP project. The Agree II model is an international collaboration of researchers and policy makers who strive to improve quality and effectiveness of clinical practice guidelines by establishing a shared framework for development, reporting, and assessment (Agree Research Trust, 2013).

This DNP project is still a work in progress at the practicum site. It is a systemwide change for the department of inpatient psychiatry. The project goal was the development of the EBP guideline for the projected multisensory room. IRB approval was achieved; no human subjects are involved in this project. Once the EBP guideline had been developed, it was presented to the department of inpatient psychiatry for review and discussion by the advisory committee team members. Revisions to the EBP guideline were made at that time. Seclusion reduction remains a goal of the department of inpatient psychiatry at the practicum site, and the projected multisensory room is a tool intended to help with this process.

Section 4: Findings and Recommendations

Introduction

This doctoral project was concerned with improving the quality of care for PLWMHDs in the management of maladaptive behaviors seen within that population. The local problem for this DNP project was the lack of an EBP guideline for the implementation of a projected multisensory room at the practicum site. The multisensory room was a projected seclusion-reduction tool suggested by the department of mental health to promote safety in the management of maladaptive behaviors seen in PLWMHDs. The gap-in-practice was the lack of an EBP guideline for the projected multisensory room at the practicum site. This gap resulted in the prevalent use of seclusion, poor clinical outcomes, and higher cost of care for the department of inpatient psychiatry at the practicum site.

In 2015, the NYC department of mental health suggested to the department of inpatient psychiatry at the practicum site the use of a multisensory room as an alternative to seclusion. Wale, Belkin, and Moon (2011) reported that the reduction of seclusion has been given national priority by the U.S. government, the Joint Commission, CMC, and patient advocacy groups. The practice-focused question for this DNP project asked: Can the development of an EBP guideline help guide health care providers in the development of a multisensory room as an alternative to seclusion for PLWMHDS?

The purpose of this DNP project was to adopt an evidence-based alternative in the form of a multisensory room as a reliable tool to reduce the use of seclusion at the practicum site. The EBP guideline ensured that the eight defining principles for the

development of a clinical guideline, as outlined by the Walden University College of Health Sciences School of Nursing (n.d.), were followed. The AGREE II model was used with this DNP project to provide a systematic method with inclusion and exclusion criteria for searching the literature and for grading the strength of the evidence.

Sources of Evidence and Analytical Strategies

The sources of evidence came from online databases that were explored with respect to publications from January 2012 through June 2017 to obtain the most current reviews on multisensory rooms. Online sources such as CINAHL Plus with Full Test, MEDLINE with full text, PsycINFO, SocINDEX, and the Walden University library supported the data gathered and were relevant to the DNP topic. The goal of the department of inpatient psychiatry was to meet the needs of a special population by reducing the use of seclusion through instituting an alternative approach.

The purpose of this DNP project was to use current, relevant, and updated evidence related to the use of a projected multisensory room and to align this with the practice-focused research question. The analysis of the evidence showed that a multisensory room was emerging as a best-practice alternative for seclusion.

Additional Analytical Strategies

Two institutional analytical strategies were also used to reduce the use of seclusion at the practicum site's department of inpatient psychiatry after the 2015 NYC department of mental health survey. These two analytical strategies were important and became graded systems of alternatives prior to the implementation of the projected comfort room. The first analytical strategy was a culture-change training course, given to

all health care practitioners and security personnel at the practicum site. This was to inform them on how communication factors, once modified, created safer patient outcomes. Post the culture training course, all seclusion episodes were analyzed quarterly with the use of data transparency for each of the inpatient units. At the end of the years 2016 and 2017, changes were seen in comparison to the year 2015 in that the total episodes of seclusion had decreased annually (see Table 6).

Table 6

Total Number of Seclusions per Year for the Practicum Site

Year	Number of Secluded Episodes
2015	32
2016	20
2017	15

Another analytical strategy was a seclusion-reduction workshop given to all health care practitioners and security personnel at the practicum site. The aim of this workshop was better to manage agitated patients and crisis situations on the inpatient units and to decrease the use of seclusion. It incorporated strategies, interventions, and lessons learned from the past to bring about a practice change. Topics included in that workshop were concrete de-escalation techniques and culture, as well as system and practice changes.

The goal of this workshop was safely to manage behaviors seen in PLWMHDs and to support them in a more recovery-oriented system. At the end of the workshop, the defining focus was on mental health changes that supported the safe recovery of maladaptive behaviors seen in PLWMHDs. These two analytical strategies helped to decrease the use of seclusion for PLWMHDs and complemented the support for the projected multisensory room at the practicum site. The success of those transparent changes were acknowledged by the stakeholders, leaders, the health care practitioners, and the hospital security personnel, all of whom showed leadership qualities and commitment to an organizational change for a special population.

Findings and Implications

In October of 2015, leadership efforts were made to decrease the prevalent use of seclusion at the practicum site. The implementation of a multisensory room was chosen as an emerging best-practice tool for this effort. At this writing, the multisensory room is still in the planning stages at the practicum site, but progress has been made by purchasing some of the sensory modulation tools, which will be used in the area, such as weighted blankets, a rocking chair, stress balls, and more. However, the first site chosen for the multisensory room was located next to the seclusion area, and during a mock survey done in October 2017 by private consultants, the stakeholders were told that the location of the room was inappropriate and could defeat the goal expected from a multisensory room. Prior to this consultation in October 2017, the advisory committee team members had brought this point to the attention of the unit manager, but it had never been addressed further until it resurfaced in October 2017. A new room was then

assigned for the projected multisensory room and approved when the consultants revisited in December 2017. The findings and synthesis of the evidence showed that the location of a multisensory room was important to the PLWMHDs' recovery. The seclusion room must incorporate equipment suitable for use by both men and women from different cultures. According to Sutton and Nicholson (2011), sensory modulation interventions involve the deliberate use of activities, behavioral strategies, specific equipment, and modification of the physical and social environment to assist with the regulation of an individual's sensory experiences.

Unanticipated Limitations or Outcomes

There were some unanticipated limitations to this DNP project due to the fact that the multisensory room was a projected tool for future use at the practicum site, which prevented this DNP student from gathering outcome data on the evidence related to the use and impact of the projected multisensory room by the PLWMHDs who exhibited maladaptive behaviors. Another limitation was the inability to assess the health care practitioners' perspectives on using the projected multisensory room as a new tool for managing maladaptive behaviors seen in PLWMHDs. A further unanticipated outcome was the inability to assess the PLWMHDs' willingness to use a sensory modulation tool as a de-escalation technique prior to their escalation of maladaptive behaviors.

Implications Resulting From the Findings

The implication resulting from the findings of the literature review showed that a sensory approach such as a multisensory room remained an emerging best-practice tool for seclusion reduction. However, evidence could not be collected to show if the

projected sensory modulation tool of a multisensory room would have an impact on the rates of seclusion at the practicum site because implementation of the multisensory was still in the future.

Individual Level

The literature review indicated that individuals such as the PLWMHDs found the use of a sensory modulation tool in the form of a multisensory room a better alternative to seclusion for managing maladaptive behaviors. They saw it as a voluntary action on their part and not as something being done to them such as the use of seclusion because it was a tool that gave them an opportunity to manage their own maladaptive behaviors.

Community Level

The implication for the community was that mental illness affected the quality of life for PLWMHDs. PLWMHDs have psychological disorders that can affect their families, caregivers, and communities. The burden of caring for PLWMHDs often falls to family members, caregivers, and society. During the initial assessment of PLWMHDs at the practicum site, many of the families and caregivers reported episodes of violence that led to the current hospitalization. The multisensory room was a projected tool related to safety for behavioral management in PLWMHDs, and its use was not isolated to acute hospital settings, but was applicable to any environment such as in the homes of PLWMHDs.

Institutional Level

At the health care facility's level, seclusion was a disruption in the workflow for the health care practitioners on the inpatient psychiatric units because it required frequent

monitoring by trained staff, and it was costly to the department of inpatient psychiatry. However, a safer alternative in the form of a multisensory was welcomed by the department of inpatient psychiatric because it would decrease their cost and give the PLWMHDs an opportunity to self-regulate their maladaptive behaviors.

System Level

The health care facility was an open system being monitored by the New York City Mental Health Department, the Joint Commission, CMS, and several patient advocacy groups with respect to how PLWMHDs were treated on inpatient units. All secluded events were documented as data for reporting and for quality improvement initiatives. The multisensory room was an initiative projected to improve safety, better outcomes, and improvement in the patients' satisfaction survey scores at the practicum site.

Potential Implications for Positive Social Change

In New York State, seclusion reduction remains a priority because it is associated with a treatment failure for PLWMHDs. The use of safer options to manage maladaptive behaviors seen in PLWMHDs was not only a local problem, but also a national priority in the United States. One such option to bring about a positive social change was the use of a sensory modulation approach in the form of a multisensory room.

Recommendations

The findings of this DNP project confirmed that there was a gap-in-practice at the practicum site. The proposed solution to this gap-in-practice was the use of a sensory modulation tool in the form of a multisensory room to decrease the use of seclusion. The

multisensory room at the practicum site remains a work in progress at the time of this writing, but the EBP guideline has been developed and, once implemented, the multisensory room will be the first in the health care facility's continuum-of-care system. The health care facility could then use the data collected from the use of the multisensory room to measure safety outcomes for the PLWMHDs.

I recommend the use of the EBP guideline for the projected multisensory room because it promotes safety and transparency in care, and it can be revised based on further recommendations. It will allow the stakeholders to benchmark the feedback obtained from the HCAHPS scores and the Press Ganey's patient-satisfaction survey questions (Patients' Voice, n.d.) related to the use of a safer alternative, and it will comply with the New York State regulatory guidelines and standards of care for a special population. In 2015, the health care facility's goal was to decrease the use of seclusion, using a culture change that entailed not only the projected multisensory room, but other alternatives to decrease the use of seclusion. The results of these seclusion reduction efforts over the past 3 years at the practicum site are shown in Table 6.

Strength and Limitations of the Project

Strengths of the DNP Project

The strength of this DNP project was the ongoing involvement of the leadership and expert panel members at the practicum site, who had made a commitment to create an organizational change related to the use of a seclusion alternative. Other strengths included the two alternative strategies that preceded the multisensory room, which were used to promote a culture of safety. These two strategies were the culture training course

and the seclusion-reduction workshop, each of which built upon lessons learned in the past and promoted the aim for sustaining safety on the inpatient mental health units. The progress reports for the projected multisensory room was also a strength because the advisory committee team and the expert panel members routinely shared updates with the shareholders, leaders, unit managers, mental health directors, security, and the health care practitioners at the practicum site.

Limitations of the DNP Project

The limitations of this DNP project were the lack of measurable data related to the outcomes for the PLWMHDs who potentially will be using the multisensory room. There was no formal training program developed for the health care practitioners regarding the underlying theories and principles for using a sensory modulation tool because the multisensory room was still a projected alternative at the practicum site. The EBP guideline for the sensory modulation alternative to seclusion could not be taught and used by the service providers until the multisensory room was completed at the practicum site.

Section 5: Dissemination Plan

According to Zaccagnini and White (2011), there are two purposes to disseminating the results of a DNP project, which are, first, to report the results of the project to the stakeholders and leaders and, second, to share them with other professionals in similar settings. The information and data obtained in this DNP project will be disseminated to the institution experiencing the gap-in-practice through four different venues: three at the practicum site and one at an outside venue.

The first venue would be reporting the findings to the stakeholders, leaders, and the advisory committee team members. The advisory committee team consisted of 14 expert panel members, who were the following persons: one inpatient director, two attending physicians, one nurse practitioner, two RN managers, one nurse educator, two social workers, one recreational therapist, one occupational therapist, two clinical registered professional nurses, and one mental health aide. All advisory committee team members will benefit from the findings because the information provided to them will be current and could be used to plan future educational sessions that demonstrate the need for the projected multisensory room.

The second venue will be a presentation of the findings for the projected multisensory room to the health care practitioners during the monthly staff meetings held on the three inpatient units. The third venue will be a poster presentation at the annual Center for Research, Nursing, and Education (CRNE) at the practicum site. The fourth venue will be a presentation of the DNP project at the annual American Psychiatric Nursing Association (APNA) conference through a poster presentation or as a break-out

session presentation. Another option for dissemination of this DNP project would be to submit an abstract to a scholarly journal for a potential article publication. Publishing this DNP project in a scholarly journal would allow for broader dissemination and would inform others beyond the scope of nursing.

The information obtained from doing this DNP project is relevant to other venues besides the profession of nursing such as educational institutions and other professional venues that are seeking an alternative to seclusion. This DNP topic has several other audiences such as policy makers, public health advocates, and regulatory agencies and is applicable for presentation at a variety of conferences related to safety and quality improvement (QI) initiatives.

Analysis of Self

This DNP project gave me the opportunity to use clinical scholarship to support a practice change. It provided me with opportunities to teach others and become an agent of change. I gained new knowledge on how to analyze a gap seen in practice, using outcome measures. I learned that practice changes were not only important for their end product, but that, along the way, each interventional strategy used was actually a building block that supported and defined the need for a system change.

As an advanced practice nurse working with PLWMHDs, I was able to use my clinical expertise in that area to become a pioneer by being chosen to develop the EBP guideline for the projected multisensory room. In my review of the literature I choose the most current best evidence found on this DNP topic and analyzed it in order to make the best decisions regarding safety for a special population. The data that I analyzed for this

DNP project helped me to educate others working with PLWMHDs and led to my new role at the practicum site as the future multisensory room nurse/educator.

The practicum site has a continuum of health care facilities that have other inpatient mental health units. My plan is to become a project manager in the future, after the multisensory has been implemented, and to share the knowledge that I have gained from the development of EBP guideline for the multisensory room with others. My aim is to promote a change in culture seen by decreasing the use of seclusion throughout the continuum sites. One valuable insight I have gained through this project was the realization that the projected multisensory room was not an isolated tool or the only tool to promote a decrease in the use of seclusion at the practicum site, but that there were other EBP strategies that impacted progress and improvement in this area.

Summary

This DNP project was a quality improvement project that addressed the lack of a safe alternative to seclusion for PLWMHDs. Seclusion reduction is not only a national priority but also an international one. The project outlined the gap-in-practice seen at the practicum site and the need for a safer alternative. The goal of this DNP project was to develop the EBP guideline for the projected multisensory room. Safety is the optimal outcome for all patients in order to achieve better treatment outcomes.

The health care facility that facilitated this DNP project has a Behavioral Health Care System that is committed to improving mental and emotional health of PLWMHDs. It strives to provide outstanding in- and outpatient services for all age groups. Its goal is to integrate clinical care, leading-edge science, and education to deliver newer models of

treatment that support large-scale infrastructures. The Behavioral Health Care System strives to provide PLWMHDs with unparalleled mental health services by advancing the field of mental health care.

In order to meet its accreditation needs, the Behavioral Health Care System at the practicum site has undergone regular reviews and audits that validated state, federal, and local contexts. These reviews and audits were related to delivery of care and clinical and administrative standards for managing PLWMHDs. These variables were used to benchmark the Behavioral Health Care System's performance; they allowed it to set goals for ongoing improvement in the department of inpatient psychiatry.

The Hospital Consumer Assessment of Healthcare Providers and Systems Survey (HCAHPS, n.d.) was developed by CMS as a national standardized survey tool. The data collection methodology used in the HCAHPS survey measured the patients' perspectives of their hospital stay. HCAHPS is used at the practicum site by the department of inpatient psychiatry; it has captured the PLWMHDs' perspectives of their hospital stay and produced comparable data for future improvements.

The HCAHPS scores for the department of inpatient psychiatry showed the high rate of dissatisfaction related to seclusion and restraint for PLWMHDs. Therefore, the EBP guideline for the projected multisensory room was developed to help the health care facility meet HCAHPS's benchmark standards for the department of inpatient psychiatry and to facilitate reimbursement standards set by CMS for mental health services as well. My role at this time is to continue to educate others in promoting safety, evaluate the

EBP guideline once the multisensory room has been implemented, and plan for dissemination of the findings.

References

Agency for Healthcare Research and Quality. (n.d.). *How will you manage change?* Retrieved December 12, 2107, from http://www.ahrq.gov

Agree Research Trust. (2013). *Agree II Instrument.* Retrieved from http://www.agreetrust.org

American Association of Colleges of Nursing. (2006). *The essential of doctoral education for advancing nursing practice*. Retrieved from http://www.aacn.nche.edu/publications/position/DNP Essentials.pdf

American Health Care Research & Quality. (n.d.). *Quality indicators.* Retrieved August 12, 2016, from http://www.qualityindicators.ahrq.gov

American Hospital Association. (n.d.). *IPF prospective payment system: FY 2015 final rule*. Retrieved September 5, 2016, from http://www.aha.org

American Nursing Association. (2012). *Reduction of restraint and seclusion in health care settings.* Retrieved from http://www.nursing world.org

American Nursing Association. (2014). *Position statement.* Retrieved from http://www.nursing world.org

American Psychiatric Nurses Association. (2014). *APNA's position the use of seclusion and restraint.* Retrieved from http://www.apna.org

Ash, D., Suetani, S., Nair, J., & Halpin, M. (2015). Recovery-based services in a psychiatric intensive care unit—the consumer perspective. *Australasian Psychiatry, 23*(5), 5245–527. doi:10.1177/1039856215593397

Bjorkdahl, A., Perseius, K. I., Samuelsson, M., & Lindberg, M. H. (2016). Sensory rooms in psychiatric inpatient care: Staff experiences. *International Journal of Mental Health Nursing.* doi:10.1111/inm.12205

Boumans, C. E., Walvoort, S. J., Egger, J. I., & Hutschemakers, G. J. (2015). The methodical work approach and the reduction in the use of seclusion: How did it work? *The Psychiatric Quarterly, 86*(1), 15–17. doi:10.1007/s11126-014-9321-7

Brouwers, M. C., Kerkvliet, K., & Spithoff, K. (2016). The AGREE reporting checklist: A tool to improve reporting of clinical practice guidelines. *British Medical Journal, 352*(i1152). Retrieved from http://dx.doi.org/10.1136/bmj.i1152

Brouwers, M., Kho, M. F., Browman, G. P., Burgers, J. S., Cluzeau, F., Feder, G., . . . & Zitzelsberger, I. (2010). AGREE II: Advancing guideline development, reporting and evaluation in health care. *Canadian Medical Association Journal,182*, E8395–842. doi:10.1503/090449

Bullock, R., McKenna, B., Kelly, T., Furness, T., & Tacey, M. (2014). When reduction strategies are put in place and mental health consumers are still secluded: An analysis of clinical and social demographic characteristics. *International Journal of Mental Health Nursing, 23*(6), 5065–512. doi:10.11linm.12078

Centers for Disease Control and Prevention. (2016). *Data and publications-mental health-CDC.* Retrieved from https://www.cdc.gov

Centers for Medicare and Medicaid Services. (2016). *CMS hospital r & s conditions of participation (cops) 2016*. Retrieved from http://www.themha.org

Crisis Prevention Institute. (n.d.). *Crisis prevention intervention.* Retrieved May 8, 2016, from http://www.cpi.com

Cummings, K. S., Grandfield, S. A., & Coldwell, C. M. (2010). Caring with comfort rooms: Reducing seclusion and restraint use in psychiatric facilities. *Journal of Psychological Nursing and Mental Health Services, 48*(6). doi:10.3928/02793693695-20100303.02

Ezeobele, I. E., Malecha, A. T., Mock, A., Mackey-Godine, A., & Hughes, M. (2014). Patients' lived seclusion experience in acute psychiatric hospital in the United States: A qualitative study. *Journal of Psychiatric Mental Health Nursing, 21*(4), 3035–312. doi:10.1111/jpm.12097

Fisher, K. (2016). Inpatient violence. *Psychiatric Clinics, 39*(4), 5675–577. Retrieved from http://dx.doi.org/10.1016/j.psc.2016.07.005

Happell, B., & Harrow, A. (2010). Nurses' attitudes to the use of seclusion: A review of the literature. *Mental Health Nursing, 19*(3), 165–168. doi:10.111/j.1447.0349.2019.00669.x

Healthy People 2020. (n.d.). *National mental health services survey*. Retrieved January 12, 2017, from http://www.healthypeople.gov

Hospital Consumer Assessment of Healthcare Providers and Systems. (n.d.). HCAHPS hospital survey. Retrieved January 10, 2017 from http://www.hcahpsonline.org

Institute of Medicine. (2011a). *Clinical practice guidelines we can trust*. Washington, DC: The National Academics Press.

Institute of Medicine. (2011b). *Crossing the quality chasm: A new health system for the 21st century*. Retrieved from https://nationalacadamies.org

Joint Commission. (2016). *Addressing disruptive and inappropriate behaviors*. Retrieved from https://www.jointcommission.org

Klein, D. E., Woods, D. D., & Klein, G. (2016). Can we trust best practices? Six cognitive challenges of evidence-based approaches. *Journal of Cognitive Engineering and Decision Making*, (10), 2445–254. Retrieved from https://doi.org/10.1177/1555343416637520

Knox, D. K., & Holloman, G. H. Jr. (2012). Use and avoidance of seclusion and restraint: Consensus statement of the American association for emergency psychiatry project BETA seclusion and restraint workgroup. *Western Journal of Emergency Medicine, 13*(1), 355–40.

Kuosmanen, L., Makkonen, P., Lehtila, H., & Salminen, H. (2015). Seclusion experienced by mental health professionals. *Journal of Psychiatry and Mental Health Nursing, 22*(5), 3335–336. doi:10.1111/jpm.12224

Larue, C., Dumais, A., Boyer, R., Goulet, M. H., Bonin, J. P., & Baba, N. (2013). The experience of seclusion and restraint in psychiatric settings: Perspectives of patients. *Issues in Mental Health Nursing, 34*(5), 3175–324. doi:10.3109/01612840.2012.753558

LaVela, S. L., Etingen, B., Hill, J. N., & Miskevics, S. (2016). Patient perceptions of the environment of care in which their health care is delivered. *Herd, 9*(3), 315–46. doi:10.1177/1937586715610577

Mann-Poll, P. S., Smit, A., Koekkoek, B., & Hutschemaekers, G. (2015). Seclusion as a necessary vs. an appropriate intervention: A vignette study among mental health nurses. *Journal of Psychiatry and Mental Health Nursing, 22*(4), 2265–233. doi:10.1111/jpm.12176

Melnyk, B. M. (2010). Evidence-based practice, step by step: The seven steps of evidence-based practice. *American Journal of Nursing, 110*(1), 515–53. doi:10.1097/01.NAJ.0000366056.06605.d2

Melnyk, B. M., & Fineout-Overholt, E. (2011). *Evidence-based practice in nursing and health care: A guide to best practice.* Philadelphia, PA: Lippincott, Williams & Wilkins.

Melnyk, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2010). Evidence-based practice, step by step: Asking the clinical question: A key step in evidence-based practice. *American Journal of Nursing*, *110*(3), 585–61. doi:10.1097/01.NAJ.0000368959.11129.79.

Menneau-Cote, J., & Morin, D. (2014). Restraint and seclusion: The perspective of service users and staff members. *JARID, 27*(5), 447–457. doi:10.1111/jar.12069

Mental Health America. (n.d.). *Mental health, depression, anxiety, wellness and family.* Retrieved November 13, 2016, from http://www.mentalhealthamerica.net

Moran, K., Burson, R., & Conrad, D. (2013). *The doctor of nursing practice scholarly project: A framework for success.* Burlington, MA: Jones & Bartlett Learning.

National Association of State Mental Health Program Directors. (n.d.). *Promoting alternatives to seclusion and restraint through trauma-informed practice.* Retrieved August 10, 2016, from http://www.nasmpd.org

New York State Department of Health. (n.d.). *Hospitals in New York State.* Retrieved June 15, 2016, from http://www.health.ny.gov/facilities/hospital

New York State Office of Mental Health. (2009). *Comfort rooms*. Retrieved from https://www.omh.ny.gov

New York State Office of Mental Health. (2014*). Patient care patient management: Seclusion and restraint.* Retrieved from http://www.omh.ny.gov/omhweb/policymanual.oc701.pdf

Niedzielski, O. K., Rodin, G., Emmerson, D., Rutgers, J., & Sellen, K. M. (2016). Exploring sensory experiences and personalization in an inpatient residential hospice setting. *American Journal of Hospice and Palliative Care*, *33*(7), 684–690. doi:10.1177/1049909115624398

Olsson, H., & Schon, U. K. (2016). Reducing violence in forensic care—How does it resemble the domains of a recovery-oriented care? *Journal of Mental Health, 25*(6), 506–511.

OpenClinical. (n.d.). *Clinical practice guidelines*. Retrieved August 16, 2016, from http://www.openclinical.org

OT-Innovations. (n.d.). *Occupational therapy*. Retrieved November 21, 2016, from http://www.ot-innovations.com

Patients' Voice. (n.d.). *Improve patient satisfaction, HCAHPS scores, and Press Ganey scores*. Retrieved from https://www.patientsvoice.com

Sambrano, R., & Cox, L. (2013). I sang amazing grace for about 3 hours that day: Understanding indigenous Australians' experience of seclusion. *International Journal of Mental Health Nursing, 22*(6), 522–531. doi:10.1111/inm.12015

Scanlan, J. N., & Novak, T. (2015). Sensory approaches in mental health: A scoping review. *Australian Occupational Therapy Journal, 62*(5), 277–285. doi:10.1111/1440-1630.12224

Scheuermann, B., Peterson, R., & Ryan, J. B. (2015). Professional practice and ethical issues related to physical restraint and seclusion in schools. *Journal of Disability Policy Studies, 27*(2), 86–95. Retrieved from https://doi.org/10/1177/1044207315604366

Singleton, J. K. (2017). Evidence-based practice beliefs in doctor of nursing practice students. *Worldviews on Evidence Based Nursing.* doi:10.1111/wvn.1228P6

Sivak, K. (2012). *Implementation of comfort rooms to reduce seclusion, restraint use, in addition, acting-out behaviors*. Retrieved from http://www.ncbi.nhm.nih.gov/pubmed/22439145

Steinert, T., Noorthoorn, E. O., & Mulder, C. L. (2014). The uses of coercive interventions were seen in mental health care systems in Germany and in the Netherlands: A comparison of the developments in two neighborhood countries. *Frontiers in Public Health.* doi:10.3389/fpubh.2014.00141

Stevens, K. (2013). The impact of evidence-based practice in nursing and the next big ideas. OJIN, (18), 2. doi:10.3912/OJIN.VolSNo02Man04

Substance Abuse & Mental Health Services Administration. (2010). Promoting alternatives to the use of seclusion and restraint. Retrieved from http://www.samhsa.gov

Substance Abuse & Mental Health Services Administration. (2014). Building the behavioral health workforce. Retrieved from http://www.samhsa.gov

Sutton, D., & *Nicholson,* E. (2011). *Sensory modulation in acute mental health wards: A qualitative study of staff and service user perspectives*. Auckland, New Zealand: Te Pou o Te Whakaaro Nui. Retrieved from http://aut.researchgateway.ac.nz/bitstream/handle/10292/4312/Sutton%20sensory%20modulation%2

Volkmar, F. R. (2012). *Encyclopedia of autism spectrum disorder*. New York, NY: Springer Science and Business media. doi:10.1007/978-1-4419-1698-3

Walden University College of Health Sciences School of Nursing. (n.d.). *Clinical practice guideline development: Doctor of nurse practice scholarly project*. Retrieved July 12, 2016, from http://www.waldenu.edu

Walden University. (2017). *Manual for clinical practice guideline development. Doctor of nursing practice scholarly project.* Retrieved from http://www.waldenu.edu

Wale, J. B., Belkin, G. S., & Moon, R. (2011). Reducing the use of seclusion and restraint in psychiatric emergency and adult inpatient services: Improved patient-centered care. *The Permanente Journal, 15*(2), 57–62.

West, M., Melvin, G., McNamara, F., & Gordon, M. (2017). An evaluation of the use and efficacy of a sensory room within an adolescent psychiatric inpatient unit. *Australian Occupational Therapy Journal.* doi:10.1111/1440-1630.12358

Wieman, D. A., Camacho-Gonsalves, T., Huckshorn, K. A., & Leff, S. (2014). Multisite study of an evidence-based practice to reduce seclusion and restraint in psychiatric inpatient facilities. *Psychiatric Series, 65*(3), 345–351. doi:10.1176/appi.ps.201300210

Wiglesworth, S., & Farnworth, L. (2016). An exploration on the use of a sensory room in a forensic mental health setting: Staff and patient perspectives. *Occupational Therapy International, 23*(3), 255–264. doi:10.1002/oti.1428

Wisdom, J. P., Wenger, D., Robertson, D., Van Bramer, J., & Sederer, L. I. (2015). The New York State office of mental health positive alternatives to restraint and seclusion project. *Psychiatry Services, 66*(8), 851–866. doi:10.1176/appi.ps.201400279

Zaccagnini, M. E., & White, K. W. (2011). *The doctor of nursing practice essentials: A new model for advanced practice nursing.* Sudbury, MA: Jones & Bartlett.

Appendix A: Site Approval Document

APPENDIX A: SITE APPROVAL DOCUMENTATION FOR CPGD DOCTORAL PROJECT

Partner Site
Contact Information
Date : 11/29/18 PATRICIA GREEN, RN

The doctoral student, [Insert Student Name], is involved in developing updated Clinical Practice Guidelines for our organization, and is therefore approved to collect questionnaire data from expert panelists (staff members) in support of that effort, in addition to analyzing internal, de-identified site records that I deem appropriate to release for this doctoral project. This approval to use our organization's data pertains only to this doctoral project and not to the student's future scholarly projects or research (which would need a separate request for approval).

I understand that, as per DNP program requirements, the student will publish a scholarly report of the development of these Clinical Practice Guidelines in ProQuest as a doctoral capstone (with site and individual identifiers withheld), as per the following ethical standards:

a. In all reports (including drafts shared with peers and faculty members), the student is required to maintain confidentiality by removing names and key pieces of evidence/data that might disclose the organization's identity or an individual's identity or inappropriately divulge proprietary details. It is up to the organization to choose if the project should be publicized.
b. The student will be responsible for complying with our organization's policies and requirements regarding data collection (including the need for the site IRB review/approval, if applicable).
c. Via a Disclosure to Expert Panelists Form (which is similar to a consent form but doesn't need to be signed), the student will describe to panelists how the data will be used in the doctoral project and how the stakeholders' integrity and privacy will be protected.

I confirm that I am authorized to approve these activities in this setting.

Signed,

Authorization Official Name

Title

Appendix B: EBP Guideline for the Multisensory Room

Objective: To develop the EBP guideline for the projected multisensory room at the practicum site located in xxxx.

Scope: The EBP guideline is applicable for use on the inpatient mental unit where the projected multisensory room would be located.

Method: A formative group of 14 expert panel members assessed the EBP guideline and provided feedback on the content using the AGREE II six quality domains.

Participants: Fourteen expert panel members assessed the EBP guideline.

Results: The EBP guideline was found to be safe and was recommended for use by the expert panel members at the practicum site.

Keywords: *multisensory room, sensory modulation, environment, equipment, communication, reality orientation, relaxation* and *self-organization.*

The EBP Guideline for Using the Multisensory Room

The multisensory room is a supportive therapeutic space where people living with mental health disorders (PLWMHDs) could calm themselves in an environment conducive to relaxation. PLWMHDs are to be made aware of the multisensory room upon admission.

The multisensory room is a tool designed to help with the goal for seclusion reduction in the department of inpatient psychiatry.

All health care providers working on the inpatient units must be trained in the guiding principles for using the multisensory room.

All health care providers must be trained to use the staff-operated safety alarm system located in the room.

The guiding principles are seen in the operating procedures manual for using the multisensory room.

The operating procedures were developed using the most current evidence seen in the review of the literature.

The operating procedures were externally reviewed and approved by a team of expert panel members.

The operating procedures are the key criteria for monitoring and analyzing data on a seclusion alternative that would inform practice and justify a basis for the change.

The operating procedures are specific to safety outcomes and align with the mission and vision of the health care facility's behavioral health system.

Collection of data from the use of the multisensory room would be obtained using a postmultisensory-room-use feedback form.

All data collected from the post multisensory feedback forms would be used as a quality indicator measurement tool related to safety and desired outcomes.

All data collected would be posted quarterly on all of the inpatient mental health units and used for benchmarking quality performance in the department of inpatient psychiatry.

Appendix C: Operating Procedures for Using the Multisensory Room

The Multisensory room is a sensory modulation tool with equipment and activities for use by the PLWMHDs. It is used for self-organization, relaxation, sensory awareness, communication, reality orientation, trauma reduction, calming, and soothing of self. The procedures for using the multisensory room are the following:

A. It is never to be used as a containment process for the PLWMHDs.

B. It is to be offered as a therapeutic 30-minutes session for PLWMHDs before the onset of aggressive and uncontrolled behaviors.

C. It is to be used on a voluntary basis upon request by the PLWMHDs.

D. Upon the suggestion of the health care providers, it can be offered as a means for assisting the PLWMHDs to manage agitation before escalation.

E. Only one person may use the multisensory space for the designated time frame of 30 minutes per therapeutic session.

F. All PLWMHDs using the multisensory room may choose to leave that area at any time.

G. Only a trained health care providers using direct visual observation can supervise the PLWMHDs during a therapeutic session in the multisensory room.

H. Multisensory room use must be documented on a log sheet and kept in a secured area.

I. Health care providers must use the protocols that are in place to assure cleanliness of all multisensory room equipment.

J. When the room is not in use, it must be kept locked at all times.

Appendix D: Copyright and Reproduction

This document is the product of an international collaboration. It may be reproduced and used for educational purposes, quality assurance programs, and critical appraisal of guidelines. It may not be used for commercial purposes or product marketing. Approved non-English language versions of the AGREE II Instrument must be used where available. Offers of assistance in translation into other languages are welcome, provided they conform to the protocol set out by The AGREE Research Trust.

DISCLAIMER. The AGREE II Instrument is a generic tool designed primarily to help guideline developers and users assess the methodological quality of guidelines. The authors do not take responsibility for the improper use of the AGREE II Instrument.