# Introducing A Patient-Centered Approach to Improving Treatment Outcomes for Mentally Ill

Patients with Chronic Medical Conditions

By

Vania Lorvanis-Gore

**Bradley University** 

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#### Abstract

Nursing is a challenging profession because nurses have to ensure positive outcomes across diverse patient populations. Nurses often find it difficult to plan and implement care provisions in patients suffering from mental health problems. Although mental health disorders have an organic basis that requires pharmacotherapy and psychotherapy, patient-centered care (PCC) could play a significant role in improving quality of care parameters and health outcomes across the concerned stakeholders. The concept of Patient-Centered care (PCC) was developed as part of the efforts to improve the efficiency and quality of health care services. This approach underlines the corporations in health between healthcare professionals and patients, but give preferences and value to patients, while promoting flexibility in healthcare services delivery. The present quality improvement showed that appropriate training on patient-centered care and mental health illnesses in professional nurses could significantly improve nurse-patient behavior and positive health outcomes. The quality improvement endorses that professional training on patient-centered care and evidence-based knowledge on mental illness benefits health care organizations as well as nurses in improving service delivery for patients who have mental illness in skilled nursing organizations.

Keywords: training, patient-centered care, mental illness, nurses, elderly, outcomes

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#### **Chapter I: Introduction**

In the United States, one in five adults experience mental illness (National Institute of Mental Illness, 2017). The degree of mental illness varies from moderate to severe and can be classified as any mental illness (AMI) which includes all mental illnesses. Severe mental illness (SMI) is a subset of AMI resulting in debilitating functional impairment that interferes with care for self. People affected with AMI live with mild to moderate functional impairment which causes mental, behavioral, and emotional disturbances.

Consequently, they face an increased risk of having chronic medical conditions (National Institute of Mental Illness, 2017). In the U.S. adults living with mental illness die of treatable medical conditions at a higher rate than adults without mental illness (National Institute of Mental Illness, 2017). There is an increasing prevalence of mental illness in the population over age 50 years and older experiencing AMI (National Institute of Mental Illness, 2017).

Most common mental illnesses affecting this population are anxiety, cognitive impairment such as dementia or Alzheimer's disease, and mood disorders such as depression and bipolar disorder. Mental illness negatively impacts health, leading to the progression of medical conditions such as diabetes mellitus, heart disease, and cancer (Office of Disease Prevention and Health Promotion, 2019). Management of medical conditions takes place in a variety of settings such as hospitals, skilled nursing facilities (SNF), long-term care facilities (LTC), and at home with family. For short-term management of medical conditions and post-surgical interventions, patients are frequently sent to skilled nursing facilities from the hospital for continuity of care.

Skilled nursing facility (SNF) nurses' have described transitioning patients who have mental illness into their new environment due to behavioral disturbances as challenging (Gilmore-Bykovskyi, 2017). The transition into the SNF is stressful for the patient and nurse who feels ill-equipped, understaffed, and under-resourced to manage patients with high-level needs of care, thus contributing to negative attitudes (Gilmore-Bykovskyi, Roberts, King, Kennelty, & Kind, 2017). The growing population of mentally ill patients in SNFs needs competent nurses who understand behavioral disturbances associated with mental illness and the aging process to provide adequate care for this population.

A nurse to patient relationship is important to quality nursing care and facilitates positive patient experiences. Therefore, nurses should not hold negative attitudes towards patients; it can negatively impact nursing care, patient experience, and treatment outcome (Hanson, 2014). Knowledge deficits about mental illness and associated symptoms contribute to poor communication, stigma, and result in inadequate nursing care. Nurses negative attitudes contribute to increased behavioral disturbances in the patient, the risk for fall, and increased stress in both nurse and patient (Gilmore-Bykovskyi et al., 2017). The literature reports that a lack of knowledge negatively affects nurses' attitudes and that negative attitudes are a historical problem stemming from stigma, suggesting that improvement will enhance patient care (Hanson, 2014).

Due to the complexity of caring for older adults with mental illness that have chronic conditions and an expanding population into SNFs, this population would benefit from nurses implementing the Patient-Centered Care model (PCC). Patient-Centered Care incorporates the practice of showing empathy to the emotional needs of patients and ongoing staff development to refine the patient-centered approach to care (Burshnic, Douglas, & Baker, 2018). The Institute of

Medicine has defined patient-centered care as "care that is respectful of and responsive to individual patient preferences, needs, and values" (Greene et al., 2012, para. 5). There are six prominent domains of PCC: holistic or whole-person care, respect and value, choice, dignity, self-determination, and purposeful living (Kogan, Wilber, & Mosqueda, 2016).

# **Background and Significance**

Mental illness is a disorder involving disturbances of thoughts, and actions that affect Americans as young as 18 years old, through older adulthood (Substance Abuse and Mental Health Services Administration, 2016). According to the Substance Abuse and Mental Health Services Administration (2016), research by the National Survey on Drug Use and Health (NSDUH) revealed roughly 40 million people have been afflicted with some form of mental illness, and nearly 10 million Americans have suffered a debilitating mental illness (Hedden, Kennet, Lipari, Medley, & Tice, 2015). This data suggests that mental illness is prevalent among older adults aged 50 years and older. The most common cause of disability is mental illness, and roughly 40,000 Americans died prematurely as a result of mental illness (Centers for Disease Control and Prevention, 2011).

According to the U.S. Census Bureau (2016), the global population increased to seven billion people in 2012, of those people 562 million (or 8.0 percent) were aged 65 years and over. Three years later, the older population rose by 55 million, and the proportion of the older population reached 8.5 percent of the total population. This population is projected to double by the year 2050, increasing the demand for competent nurses skilled on the aging population (Hanson, 2014). Nurses will be the primary caretakers of older patients and will need knowledge of this aging population to provide adequate care (Hanson, 2014). Caring for the older population can be complicated by behavior disturbances and multiple morbidities. Several

research studies found a direct correlation between mental disorders and physical health requiring more health resource consumption (Jolles, Haynes-Maslow, Roberts, & Dusetzina, 2015).

Post-acute services provided within SNFs are meant to provide rehabilitative care or recovery outside of the hospital on a short-term basis averaging 30 days. Patients admitted in an SNF with mental illness who display behavioral disturbances require a higher level of care for safety precautions. The registered professional nurses' function is to obtain new patient information such as medical condition, social information, medications, dietary needs, and activity ability to create a plan of care. The nurse reports patient information to the advanced practitioner who oversees the care. Patients admitted in an SNF with mental illness who display behavioral disturbances require a higher level of care for safety precautions. Behavioral disturbances pose several negative consequences such as falls, injury to other patients or staff, staff anxiety, increased staffing needs/care costs, and rehospitalization or transfers to a different SNF (Gilmore-Bykovskyi et al., 2017). The high level of care required by patients with mental illness and chronic conditions places challenging demands on the nurse.

Transitioning older patients with mental illness into the SNF from the hospital for nursing care requires consideration of cognitive, medical, and mental aspects for an adequate care plan to support total patient needs (Burshnic et al., 2018). Skilled nursing facilities manage patients from a conventional approach. However, the complexities of a patient with mental illness and chronic medical conditions require a patient-centered approach to care.

Nurses' attitudes are fundamental in quality patient care and outcome, moreover, attitudes may predict a person's behavior (Burshnic et al., 2018). Nurses' attitudes towards patients' aggressive behaviors influence how nurses' respond to such behaviors. Negative

attitudes have an impact on how care is delivered. This care can be inadequate, making the older person feel invisible and a drain on the economy (Hanson, 2014). Some factors contribute to nurses' negative attitudes towards patients with mental illness, such as stigma, stereotyping older people with poor health, and culture. Systemic factors which may contribute to nurses' negative attitudes are time constraints, insufficient resources/staffing, and the expectancy to provide care for heavy patient assignment (Hanson, 2014). Changing the perceived negative attitudes of registered nurses can reduce stigma.

Ihalainen-Tamlander, Vähäniemi, Löyttyniemi, Suominen, & Välimäki (2016, para. 2) describe stigma as attitudes consisting of stereotypes, prejudices and discriminative behaviors stating "an example of a stereotype is the belief that a particular group of unwell people, such as people with mental illness, are dangerous and responsible for their sickness. Prejudice comes into play when one agrees with a stereotype and responds emotionally, such as being fearful of all people with mental illness." The features of the PCC model can enhance the physical and mental health of patients, moreover, develop a closer working relationship between staff and patients.

Patient-centered care can produce positive outcomes for persons with mental illness that include decreased behavioral disturbance, reduced need for psychotropic medication and improved moods (Burshnic et al., 2018). Five key concept features of patient-centered care are: 1) respect, 2) care and coordination, 3) information, communication, and education, 4) comfort, and 5) family input (American Nurses Association, 2014).

Registered nurses at the SNF can help to improve patient health outcomes related to mental illness and chronic conditions with the use of Patient-Centered Care model. Nurses' are responsible for assisting in the coordination of care, assessments, evaluations, medication

administration, and education. The caregiver team that works with registered nurses to provide patient care are licensed practical nurses who share similar tasks as the registered nurse and certified nurses' aides — licensed practical nurses assist in assessing, monitoring, medication administration, and reporting findings to a registered nurse. Additionally, the registered nurse or licensed practical nurse will work with one to two certified nurse's aides who assist with activities of daily living, feeding, group activities, and reporting to licensed practical nurse or registered nurse.

It is important for this project to be implemented to educate registered nurses on the benefits of a PCC model for mental health issues that lead to deterioration of care. The PCC model can guide registered nurses by educating on how to reduce stigma which creates barriers to care, tailoring treatment specifically to patients' needs, and treat the client's needs while providing nursing care.

#### **Needs Assessment**

A discussion with the licensed social worker, nurse supervisor, registered nurse, licensed practical nurse, and certified nurse aides took place at the skilled nursing facility to assess knowledge of older adult patients who have mental illness and behavior disturbances. This discussion revealed that such staff who worked directly with patients such as registered nurse, licensed practical nurse, and certified nursing assistant felt they were not prepared to care for patients with behavioral disturbances, that staffing was insufficient to care for the many patients who required constant observation, and that there was fear of injury to staff. Registered Nurses held negative attitudes about working with patients who had mental illness and believed providing care for these patients made their assignments more difficult (Appendix A). This information showed lack of understanding interacting with patients who have behavioral

disturbances, increased the need for training on effective and therapeutic communication between staff and from staff to patients, insufficient staff, and high staff turnover. The fishbone diagram represents the cause and effect of negative nurse attitudes that cause stigma, stress, burn-out, and poor patient outcomes (Appendix B). There is great need to improve nurses' attitudes in order to improve patient care, quality of treatment, and address the disparity in this population through educating registered nurses (Greene et al., 2012). Methods to achieve patient-centered care incorporate approaches to accomplish effective communication, partnership, and health promotion (Constand, MacDermid, Dal Bello-Haas, & Law, 2014).

The gap analysis identified there is a lack of knowledge which is a factor that contributes to nurses' negative attitudes (Appendix C). The registered nurses are experiencing a significant increase in the number of patients admitted to the rehabilitation department with mental illness who require more care and observation for safety. Nurses feel overwhelmed with tasks such as admitting and discharging patients, medication administration, and treatments/dressing changes. Often, supplies are unavailable sending the nurse on a time-consuming search. When patients have behavior disturbances, they are at an even greater risk for injury, thus requiring a one-to-one. If staffing is insufficient, the registered nurse is left to manage the assignment without extra assistance.

Introducing a patient-centered approach to improving nurse attitudes can improve staff to patient relationship and treatment outcomes for mentally ill patients with chronic medical conditions. The proposed project would address perceived negative nurse attitudes, the lack of training and education on the handling of mentally ill patients, and the gap in knowledge regarding benefits of a patient-centered approach to care.

#### **SWOT Analysis**

A SWOT analysis was completed to assess strengths, weaknesses, opportunities, and threats to the project intervention. The strengths identified were support for staff, staff appreciation gifts, luncheons and an education classroom. The site granted permission for assessment test to be used with participants related to education program. Weaknesses identified were high staff turnaround, poor communication, gaps in knowledge, lack of nursing expertise, and poor processes and systems. The opportunities were the ability of nurses to change perceptions and attitudes via education on PCC. The threats including completing the project in the three-month time frame.

#### Congruence with an organizational strategic plan

The skilled nursing facility's environment strives to provide excellence through collaborating with staff and family to ensure satisfaction, safety, and quality patient care (Nunn, 2016). The organization's mission emphasized the well-being of the patient population and delivering compassionate care. A focus on staff education and workplace improvement aligned with the project aim to produce positive attitudes in registered nurses.

#### **Problem Statement**

Nurses' negative attitudes in the work environment negatively impact nursing care leaving an already vulnerable population to be discriminated against or neglected. Patients with mental disorders and co-occurring chronic illness are the strongest reasons for poor patient health outcomes which increase mortality.

# **Project Aim**

This project was conducted to produce positive attitudes in registered nurses when working with patients who have mental illness and chronic medical conditions in the SNF.

Educating registered nurses on how to use a patient-centered approach to care when working with older adults who have mental disorders in the SNF can provide guidance for an effective experience to help produce positive attitudes. The aim of this project was met by developing an education program concerning the patient-centered approach to patient care. The objective was measured by assessment of the staff's understanding of education provided.

# **Clinical PICOT Question**

In registered nurses working in a skilled nursing facility, does education on Patient-Centered Care model compared to standard care improve perceived negative attitudes towards older patients who have a mental illness?

#### **Synthesis of Evidence**

A literature search and synthesis of evidence was completed to determine if education on Patient-Centered Care model compared to standard care improve perceived negative attitudes towards older patients who have a mental illness. The success of PCC to change perceived negative attitudes and improve outcomes is acknowledged throughout these articles.

#### **Search Process**

The literature search strategy used a keyword search through databases CINAHL, PubMed, Wiley online library, and ProQuest. Keywords used were "mental illness in skilled nursing homes," yielded 4,627 results, "patient-centered care in skilled nursing" yielded 4,250 results, and stigma in nursing yielded 8,182 results; search parameters were for literature in the English language from 2010 to 2019. The search for relevant literature included nurses and an elderly adult population. The full list of keywords developed in the initial search was searched to expand the databases used. Finally, the reference list of identified articles was searched for relevant references. Twenty articles were selected of qualitative studies and critically appraised

using an evidence evaluation table to determine the impact of interventions. Articles ranged in levels of evidence from level I through level III with five systemic reviews.

# **Knowledge Deficits**

Knowledge deficits regarding mental illness and its associated symptoms contribute to poor communication, stigma, and result in inadequate nursing care (Gilmore-Bykovskyi et al., 2017; Ihalainen-Tamlander et al., 2016). Giandinoto & Edwards (2014) suggested that although educated, nurses in environments such as skilled nursing facilities are presented with challenges related to providing complex care for patients with co-occurring physical and mental illness. Those challenges did not absolve nurses from stigmatizing attitudes towards patients with mental illness. When nurses know patient background before transitioning into the SNF as well as knowledge of how to deal with the patient, there was less stress on the nurse, less stress on the patient, and prioritizing care for the patient was enhanced. These studies confirm that educating nurses could improve nursing care thus reducing ignorance of mental illness and stigma (Gilmore-Bykovski et al., 2017; Gustavon et al., 2018; King et al., 2018; Kogan et al., 2016; Loeb et al., 2012).

#### **PCC in SNF**

Burshnic et al. (2018) found that ongoing staff development refines the patient-centered approach to care. The Patient-Centered Care model is widely accepted and increasingly adopted among healthcare entities in the United States. The objective of PCC, cores on caring for the whole person and not just the disease, focusing on remaining emotional and cognitive abilities. Ihalainen-Tamlander et al. (2016) also reported that when PCC model is utilized, it can improve nurses' attitudes regarding patients with mental illness, improve barriers related to providing adequate patient care to knowledgeably identify with mental health conditions and their physical

manifestations thus, improving quality of life for this population. These studies support implementing PCC in the skilled nursing facility benefits the nurses, patients, and organization by teaching nurses how to approach the patient holistically with empathy and understanding from an evidence-based practice approach.

Providing education to registered nurses at the SNF about the use of the Patient-Centered Care model can improve knowledge deficits and perceived negative attitudes related to caring for patients with mental illness. The PCC model focuses on the patient's values, beliefs, and preferences considering overall health and well-being in the care plan and implementation of all activities related to care. When the PCC model is utilized, it can improve nurses' attitudes regarding patients with mental illness, improve barriers related to providing adequate patient care to knowledgeably identify with mental health conditions and their physical manifestations thus, improving quality of life for this population (Ihalainen-Tamlander et al., 2016).

To overcome barriers to improving patient care in health care organizations, an assessment of attitudes and perceptions of health caregivers can determine stigma within a clinical care environment (Ihalainen-Tamlander et al., 2016). Solutions to those barriers can be corrected by implementing a patient-centered approach for delivery to an aging population with multimorbidity and mental illness. Patient-centered care significantly improves workforce in the nursing environment and treatment outcome for the aging population (Kogan, Wilber, & Mosqueda, 2016; Loeb et al., 2012; Luxford, Safran, & Delba, 2011).

#### **Growing Need**

A rapidly increasing aging population also has a prevalence of psychiatric disorders combined with chronic medical conditions. This population is in need of knowledgeable nurses to provide patient-centered care with the purpose of creating a social and physical environment

to promote best practice and maintain positive health outcomes (Boyd & Lucas, 2014; Jolles et al, 2015; Hanson, 2014; The American Geriatrics Society Expert Panel on Person-Centered Care, 2015).

#### **PCC Success**

The success of PCC implementation is dependent upon support from leadership. Nursing knowledge must be guided by leaders' knowledge of patient-centered care and support for communication throughout all disciplines and staff development with an evidence-based educational program incorporating mental illness. (Gilmore-Bykovski et al., 2017; Greene, Tuzzio, & Cherkin, 2012; Ehlman et al., 2018; Constand et al., 2014; Poitra, 2018; Willemse et al., 2015).

#### **Analysis of Evidence**

The goal of patient-centered care was to guide nurses in their approach to caring for patients with mental illness and medical conditions. Patient-centered care will provide empathetic understanding of how to enhance interpersonal communication and interaction with this patient population. The evidence concluded there was an overall reduction in nurses' negative attitudes, nurse burnout, and job turnover when staff implemented patient-centered care for patients who had mental illness and chronic medical conditions. Patient-centered care education should include five distinct dimensions to enhance the quality of nursing care delivery:

1) Biopsychosocial 2) Patient as a unique individual 3) Sharing of power 4) Therapeutic alliance and 5) Nurse-patient communication (Flagg, 2015).

Patient-Centered Care incorporates the practice of showing empathy to the emotional needs of patients and ongoing staff development to refine the patient-centered approach to care (Burshnic et al., 2018). Patient-Centered Care model can address the identified problem as its

core is on caring for the whole person and not just the disease, also focusing on remaining emotional and cognitive abilities (Burshnic et al., 2018).

#### **Theoretical Framework**

The Promoting Action on Research in Health Sciences (PARiHS) framework is an explanatory framework developed to guide implementation of evidence-based health care interventions and examines the connections of its three key elements in an evaluative manner to determine successful implementation. Determination of successful implementation is based on the interplay of elements: evidence, context, and facilitation (Stetler, Damschroder, Helfrich, & Hagedorn, 2011).

For this project, the PARiHS framework promotes evaluation of improving nurses perceived negative attitudes towards older patients who have mental illness with PCC utilizing evidence-based practice to address attitudes and behaviors that affect physical health. This PARiHS framework was used to guide the interventions used to provide education to nurses about PCC for successful implementation through an evaluative process of the evidence-based characteristics of PCC, include the research articles and published guidelines regarding PCC, and clinical preferences and perceptions, and characteristics of PCC. The element of contextual readiness will evaluate leadership support, culture, and nurses openness to change from their current standard care, to PCC, and lastly, the evaluation of facilitation which examines the role of the facilitator such as purpose, skills and attributes, expectations and activities related to elements and (Stetler, Damschroder, Helfrich, & Hagedorn, 2011).

#### **Chapter II: Methodology**

#### **Project Design**

This is an evidence-based practice initiative utilizing the PARiHS model to implement the utilization of Patient-Centered Care education to nurses at a SNF. The project aimed to produce positive attitudes in registered nurses by teaching nurses about a patient-centered care model for interacting with patients who have mental illness and associated behaviors. The PARiHS model guided implementation to inform the operationalization of the facilitation element. The element of facilitation will clarify, assess, measure, implement, and review. To guide evaluation, the PARiHS model will inform data collection and analysis to identify factors that had the most significant influence on success and failure of implementation. Evaluation will also inform continuous improvement and modification of tools to be used with PARiHS (Stetler, Damschroder, Helfrich, & Hagedorn, 2011).

The timeline for this project will be twelve weeks. The goal is that through the education and PCC concepts for managing patients with behavior disturbances, that nurses' negative attitudes will be reduced.

#### **Setting**

A skilled nursing facility centered in a rural country with a 30-bed rehabilitation division was selected for its admissions of many patients who have chronic medical conditions and various types of mental illness such as depression, bipolar disorder, or neurocognitive disorder. The average age of patients is between 45 years old to 80 years old. Patients have lost some level of their activities of daily living and require rehabilitation to regain or maintain function. Average length of stay on the rehabilitation unit is 30 days. Nursing care is provided 24 hours,

seven days a week and admissions are accepted from hospitals in the area. The educational setting is a classroom with an overhead projector, three computers, and a television.

#### **Population**

The nursing staff caring for patients comprise of licensed professionals such as three registered nurses and six licensed practical nurses ages ranging from 22 years to 47 years.

Nursing staff work 12-hour shifts, licensed practical nurses and registered nurses are responsible for assessing, monitoring, providing prescribed medications and skin treatments to patients. A Staff Development Coordinator Registered Nurse and Unit Manager will participate in PCC education to sustain the evidence-based practice initiative.

#### **Tools and Instruments**

The web based Mentally III People Implicit Association Test (IAT) will be used to assess unconscious reactions to persons with mental illness (Nosek, 2011). The Implicit Association Test (IAT) method, was developed by researcher Dr. Anthony Greenwald to examine attitudes, preferences, and beliefs related to mental health issues (Mannis-James, 2015). During the IAT procedure participants' response times are assessed regarding implicit attitudes about a topic. The traditional IAT is created with a series of permutations of matching tasks which participants are asked to complete as quickly as possible. There are three tasks to complete: a brief questionnaire, matching tasks that are separated into blocks: practice blocks, which prepare participants to respond to matching tasks through hand-eye coordination repetition and test blocks, which are scored. The test takes approximately 10 minutes to complete (Appendix D)

(Mannis-James, 2015). The Implicit Attitude Test generator implements the survey based IAT technique where the test can be customized to create a statement of consent and customized to create a Mentally III People implicit measures test. It is then copy/pasted into Qualtrics, an

online software that will run the IAT via hypertext markup language (HTML) and JavaScript that functions to create reaction-time tasks for web browsers to develop a web-based IAT. The result of these actions creates a seven-block interactive IAT that counterbalances left/right starting positions of targets and categories to "assess the degree to which target pairs and categories are mentally associated" (Carpenter, 2018, page 5). Only the DNP student will have access to login details where IAT data and assessment results are protected from the employer and stored within the online profile created by DNP student. Privacy and security are maintained through encryption.

"Explicit attitudes are those that are consciously held and able to be reported to researchers. Implicit attitudes, by contrast, operate below the level of full conscious awareness and may remain invisible to study participants themselves" (Mannis-James, 2015, para. 3). The IAT can be used after education intervention as a posttest to gain knowledge and understanding of implicit bias. Individual participant scores are averaged to create a standardized difference score (D-score) to indicate response time to questions asked (Carpenter, 2018).

The data collected from this tool are a latency measure of two classification tasks of speeds, strengths and automatic associations to determine how that association influences performance (Greenwald, Banaji, & Nosek, 2003). The mean latency obtained from participant IAT's will be analyzed using a Qualtrics web-based software tool used to run IAT (Carpenter T. P., 2018). Qualtrics runs via JavaScript and hypertext markup language (HTML), a system for tagging text files to create electronic documents which contains connections to other pages called hyperlinks (Rouse, 2019).

Permission to use IAT or stimuli from the Project Implicit creators is not needed for education purposes, only citation (Greenwald, Banaji, & Nosek, 2003). "Although more reliable

than many 'implicit' procedures, test-retest for the IAT reliability remains low by self-report standards" and as such will not be used as a pretest (Carpenter, 2018, p. 7). The developers of the IAT make clear that this tool is used to "develop awareness of one's own and others' automatic preferences and beliefs" (Project Implicit, 2019, para. 7), and does not provide a diagnosis of mental illness, nor is it used to determine one's 'true' attitudes or feelings. It should be explained to participants that the results received from the test are not static but can vary depending on a variety of factors" (Project Implicit, 2019, para. 5).

The web-based Mentally Ill People Implicit Association Test is an established tool which meets validity and reliability standards, "research to date suggests that IAT effects largely reflect personal, rather than cultural or group attitudes, which supports construct validity of the IAT as measuring personally held implicit attitudes (Mannis-James, 2015)." Several research studies provided substantiation to support the validity of IAT which demonstrated acceptable psychometric properties. The nearly identical results of D-scores support the IAT's reliability (Carpenter, 2018). The IAT is suitable for nursing research to detect implicit attitudes that are more subconscious and not reported on self-report measures unlike explicit attitudes (Mannis-James, 2015).

#### **Project Plan**

The PARiHS theoretical framework reflects the project plan as an evidence-based practice education on the efficacy of the patient-centered care approach to improve perceived negative attitudes. The interventions were chosen to reflect the elements of the PARiHS theoretical framework. It will provide the DNP student an opportunity to try and produce positive attitudes in registered nurses using evidence-based practice in caring for mentally ill patients with underlying chronic conditions. Education offered to Registered Nurses was

required in the facility and highlighted the key algorithms addressing the changes in how to care for patients with mental illness (Table 1). Teaching methods took into consideration different learning styles to incorporate lecture and discussion, case scenarios, simulation, written material, web-based instruction, and a Power Point presentation entitled: *Workplace Improvement:*Introducing A Patient-Centered Approach to Care (Appendix E).

Objectives: By the end of the education, participants will be able to:

- 1.) Identify symptoms and risks associated with mental illness which contribute to increased health risks.
- 2.) Understand how complications and prevention may affect change.
- 3.) Apply evidence-based interventions to manage behaviors associated with mental illness in patients with chronic conditions.
- 4.) Recognize patients with behavior disturbances and refer to appropriate collaborating provider.

Education was delivered for 60 minutes through multiple interactions with the DNP student. The timeline of the education program was a total of twelve weeks (Appendix F). The first phase was four weeks of training period to include education related to mental illness, stigma, and PCC. The second phase was four weeks of implementing lessons learned in the training period and related education. In the final phase, consent was read and explained to nurses who participated as 'anonymous voluntary' in the web-based assessment test. One week was allotted to administer the post education IAT on the desktop computer in the education classroom at the SNF with the DNP student present. Each participant was tested separately and viewed results of their post education IAT. The final three weeks was used for review and

analysis. Evaluation forms were administered to participants for feedback on education and training (Appendix G).

# **Stages of Education and Activities**

#### Week one:

Content Outline – Definition of mental illness, symptoms include changes in feelings, loss of interest in activities previously enjoyed, change in sleep habits, lack of energy, withdrawn/irritable, emotional, changes in weight/appetite. Risk factors include genes, biology, environment, and lifestyle. Duration: 25 minutes.

Teaching Method – Describe mental illness with Power Point, discuss common mental illnesses and encounters based on experience in the workplace. Duration: 20 minutes.

Evaluation – Participants state three symptoms on risk factors. Duration: 15 minutes.

#### Week two:

Content Outline: Lecture on mental illness complications and effects on physical health and behavior. Discuss how nurses' attitudes impact nursing care and outcomes, stigma of mental illness and how complications linked to mental illness include social isolation, self-harm or harm to others, heart disease and other medical conditions. *Duration: 35 minutes*.

*Teaching Method:* Discuss complications of mental illness with Power Point, discuss prevention, discuss case scenarios with Power Point. *Duration: 15 minutes*.

Evaluation: Participants reiterate basic complications of mental illness. Duration: 10 minutes.

#### Week three:

Content Outline: Definition of PCC, discussion of PCC key concepts. Duration: 20 minutes.

*Teaching Method:* Describe PCC and benefits, explain key concepts with Power Point and lecture. Print handouts of five key concepts of PCC. *Duration: 25 minutes*.

Evaluation: Participants state key concepts of PCC. Duration: 15 minutes.

#### Week four:

Content Outline: Lecture on behavior disturbances and how to recognize changes in behavior that warrant referral to collaborating provider. *Duration: 25 minutes*.

*Teaching Method:* Use Power Point to discuss behavior disturbances, demonstrate behavior disturbances through simulation and discussion. *Duration: 25 minutes*.

Evaluation: Participant state one way in which his/her attitude can affect patient behavior and or outlook related to care. Duration: 10 minutes.

#### Week five through Week eight:

Content Outline: Nurses will utilize knowledge and skills from training period in the clinical setting with their patients during their work shift.

*Teaching Method:* Training period concluded; participants will apply learning from previous four weeks in the clinical setting.

Evaluation: Participants report improved attitudes and experience.

#### Week nine:

Content Outline: Consent will be read and explained to nurses who will participate as 'anonymous voluntary' in the web-based assessment test. Each participant will take the post education IAT separately on the desktop computer in the education classroom at the SNF with the DNP student present. The participant will have an opportunity to view results of their post education IAT. Thank nurses for their participation, conclude education program.

#### Week ten through twelve:

Content Outline: Review results of IAT, analysis, share education program finding with facility leaders.

Table 1.

**Project Implementation Outline Tasks** 

	Week 1-2	Week 3-4	Week 5-9	Week 10-12
RN's Education on Mental Illness, Stigma, PCC	X	X		
RN's Training on PCC		X	X	
Post Education IAT			X	
Results and Conclusion				X

After the intervention, sustainability will occur by the staff development coordinator and unit manager who will continue training and education to new and existing staff with the evidence-based interventions at the SNF. Supervising staff will evaluate progress and determine areas needing improvement to further sustain PCC. Outcomes of program evaluation will be shared with the administrator, director of nursing, and stakeholders in a meeting. After program success is obtained, stakeholder support is key for continued success. The program will have continued support from participants to prevent barriers to treatment.

# **Data Analysis**

Aggregate data was analyzed by downloading the R-package which functions to program language for statistical computing and graphics. It supports direct code execution which it received from the IAT generator. The R-package breaks down the data into four variables representing practical or critical versions of the compatible or incompatible blocks (Carpenter, Kouril, Pogacar, & Pullig, 2019). The R-package compared IAT scores to determine if D-scores were associated with less negative implicit attitudes towards patients with mental illness. The R-

package will also perform a one-sample *t*-test to quickly disclose whether IAT *D*-scores significantly differ from zero to determine if there is implicit bias/association present (Carpenter, 2018). The results of analysis will be displayed on a histogram to show if there is less negative implicit attitudes towards patients with mental illness after education and training was provided.

#### Institutional Review Board/or Ethical Issues

In order to comply with ethical guidelines, prior to initiation of this evidence-based practice project, an approval from Bradley University's Committee on the Use of Human Subjects in Research (CUHSR) was obtained for the protection of human subjects (Appendix H). This author completed Social and Behavioral online modules with regards to protection of human subjects (Appendix J-K). Participants were given informed consent prior to assessment, explained that their participation was voluntary, can be withdrawn at any time, and that their results will not be shared with other participants or employer (Appendix L). The statement of consent was provided online prior to start of IAT through a secured encrypted website created by the developers of the IAT where no participant data or identifiers are stored in the online cloud. The online test protects users' privacy with strict anonymity and results may only be viewed and shared with each participant individually. The IAT took place on the desktop computer in the education classroom at the SNF with the DNP student present.

# Chapter III: Organizational Assessment and Cost-Effectiveness Analysis Organizational Assessment

The current state of the organization was the perception of negative attitudes from nurses caring for patients with mental illness and chronic medical conditions in the SNF rehabilitation department. There was a need to improve the rehabilitation department nurses' perceptions and attitudes utilizing PCC for patients with mental illness within the quality improvement period.

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The organization was ready for change and there was support from leadership and interdisciplinary staff such as the physical therapy department who help support and maintain patient's physical strength. The occupational therapy department provide safety devices for comfort and ambulation. The director of the skilled nursing facility hired a Staff Development Coordinator (SDC) registered nurse and an additional unit manager for the rehabilitation department. The new supervisors will sustain the feasibility of the project by maintaining training and evaluation. Their involvement will increase the conformity of key elements of PCC. Personnel required for collaborative support and implementation of this program are: Staff Development Coordinator and unit manager registered nurses who will encourage RN staff participation in the EBP education program. The DNP student will facilitate the program function and have oversight of the education of staff. Overall, organization assessment is critical for the project because it exhausts all the deliverables required for the project, thereby facilitating a smooth transition from the planning to project implementation.

#### **Cost Factors**

Costs associated with project implementation were minimal such as paper, printer ink for handouts, fliers, and food for the meetings. The educational classroom was available at no cost, and there was no additional cost to the organization for the RN staff participation, since the EBP education program was conducted during scheduled work time. The detailed budget plan implemented for the project in (Appendix I).

# **Budget Justification**

**Total Costs of DNP Scholarly Program = \$600** 

Key Personnel \$1,308

Other Direct Costs \$300

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Funding justification details roles and responsibilities of each position:

# **Key Personnel \$1,308**

1. *DNP student*:

(1) DNP student used education classroom, computers, and projector. Student

worked 40 hours on program development, coordination, oversee functions of

project, explaining post-assessment, provide training and education over the

course of three months.

Salary: In-Kind

2. Registered Nurse salary: \$900

(3) Registered Nurses participated in EBP education program for staff

development over the course of three months.

Salary: \$900 = (\$25 per/hour x 12 weeks)

3. Staff Development Coordinator: \$ 408

(1) Staff Development Coordinator participated in the EBP education program for

staff development over the course of three months.

Salary: \$408 = (\$34 per/hour x 12weeks)

#### Other Direct Costs \$300

1. Paper/Printing ink: \$100

Paper was used for project supply. Printing ink was used to create flyers and

handouts throughout the program.

2. Food/Beverages: \$200

Food was purchased for the staff participation at meetings.

#### **Chapter IV: Results**

# **Analysis of Implementation Process**

The project intervention centered around PCC was initiated October 2019 lasting 12 weeks and completed December 2019 with participants completing an IAT. The original timeline scheduled for implementation was scheduled for May 2019, see Appendix F. Patient-Centered Care incorporates the practice of showing empathy to the emotional needs of patients and ongoing staff development to refine the patient-centered approach to care (Burshnic, Douglas, & Baker, 2018). Patient-centered care education and implementation activities included five distinct dimensions to enhance the quality of nursing care delivery: 1) Biopsychosocial 2) Treating the patient as a unique individual 3) Sharing of power 4) Therapeutic alliance and 5) Nurse-patient communication (Flagg, 2015). The implementation of PCC and education on mental illness went according to plan with all participants present. During week four, one additional day for training was added to accommodate participants who could not be present due to factors unforeseen. However, it did not disrupt the timeline of tasks to be completed in time for the IAT. The web based Mentally Ill People Implicit Association Test (IAT) was administered to assess unconscious reactions to persons with mental illness (Nosek, 2011) after education and training on mental illness and PCC was provided. Time spent with the small group to achieve the project objectives created confidence, a pleasant environment and pleasant relationship which motivated participants to immerse themselves in the activities (Thomas, 2016). Lessons learned during the implementation phase of activities is that there may be periods unforeseen or unplanned events which may affect participation and could possibly change the timeline for actual implementation. In the initial steps of intervention, participants anticipated the education and were eager to implement PCC as an approach to better understand

mental illness and its associated behavioral symptoms. The small group met in the organization room and were provided with hot breakfast and beverages. The purpose of the meeting was reiterated for clarification. Evidence related to PCC model was provided to participants as well as review sheet of common mental illnesses staff come in contact with for reference.

# **Analysis of Project Outcome Data**

In recapping the needs assessment, here is what was gained for the takeaway; Nurses expressed negative attitudes about working with patients who have mental illness due to the difficulties with assignments. Nurses felt unprepared to care for patients with behavioral disturbances, insufficient staffing to manage 1:1, and staff feared being injured by patients. The needs assessment revealed a lack of understanding interacting with patients who have behavioral disturbances, an increased need for training on effective and therapeutic communication between staff and patients, insufficient staff, and high staff turnover.

A total of three participants attended the education and training sessions on mental illness and PCC implementation and completed a five item Mental Illness Implicit Association Test. A qualitative design was used to explicate the process of Mental Illness education and PCC implementation. Quantitative data was used to describe the outcome of the IAT implementation process. Through the elements of the PARiHS framework (Table 2), a structured approach was taken to evaluate PCC implementation over a 12-week period and qualitative interviews of key staff at the initiation was used to identify barriers and facilitators.

Table 2.

PARIHS Element/Sub-Element	Identified Facilitators	Identified Barriers
(I) Evidence and Evidence Based Pract	ice (EBP) Characteristics	
Research and published PCC guidelines	Published studies and guidelines support overall benefits for staff development and improving perceived negative attitudes	Lack of evidence in SNF setting
Clinical experience and perceptions	Motivation for change with PCC, education, and training on mental illness; staff report excitement about leadership support; staff report feeling support and more knowledgeable about patients with mental illness	Perception that intervention is not sustainable; perceived lack of time
Local practice information	Adherence to PCC and management support for collaborative relationships; weekly huddle to discuss PCC model; mental illness review sheet available for staff	Limited budget for equipment; staff fear being injured by patients; direct care staff inconsistent for weekly huddle to discuss PCC model
Characteristics of EBP implementation	No cost; education required by organization; support for PCC increases staff morale	Staff to patient ratio; small sample size
(II) Contextual Readiness		
Leadership support	Organizational, management, and nurse leadership support; staff inclusion in planning, staff development coordinator hired to lead/support staff	PCC success dependent on leadership support for direct care staff to sustain
Culture	Encourage therapeutic alliance; encourage nurse-patient relationship; share power with patient	Physical layout; noise; lack of equipment; lack of communication
Evaluation	Future monitoring of psychotropic medication; access to PCC model online; collaboration with IT	Inconsistent documentation; limited accountability for documentation
Receptivity to targeted innovation	Staff open to change; education room available; access to computers	Limited staff; insufficient equipment
(III) Facilitation		
Role/purpose of facilitator	Task-focused – provides help and support to achieve a specific goal; support implementation of PCC	Lack of authority for facilitator
Expectations and responsibilities	Pleasant environment created with meals and interaction; role playing and feedback; plan created for sustainability; communication with leadership on progress of implementation	Intense support required for facilitator required for staffing engagement
Skills/attributes of facilitators	Feasibility to incorporate PCC into unit, receptive to staff feedback	Facilitator preoccupied with multiple task implementation; dependent on SDC

A total of three participants attended the education and training sessions on mental illness and PCC implementation and completed a five item Mental Illness Implicit Association Test.

The data analyzed interview questions, and IAT D-scores of the three participants. The IAT was modified with five blocks as opposed to the typical seven blocks of the original IAT created by

Greenwald. Blocks 1 and 2 are learning blocks - Block 3 is a test block - Block 4 is a learning block but with reversed order - Block 5 is ta testing block. The scoring algorithms in Table 3 are based on Greenwald, Nosek, and Banaji (2003), GNB. In the table below, R package was used to clean and analyze the data. The data was put in a tidier table to make analysis easy in CSV format. D-scores are standardized values for mean differences between Block 5 – Mentally Ill/Positive & Physically Ill/Negative (incompatible block) and Block 3 – Physically Ill/Positive & Mentally Ill/Negative as the compatible block. The expectation is that people would take more time on Block 5 as opposed to Block 3 hence, we would expect more positive scores. Less time spent indicate negative scores meaning that there are negative implicit attitudes towards patients with mental illness after education and training was provided. Here it is assumed that Block 5 is the incompatible while block 3 is the compatible group.

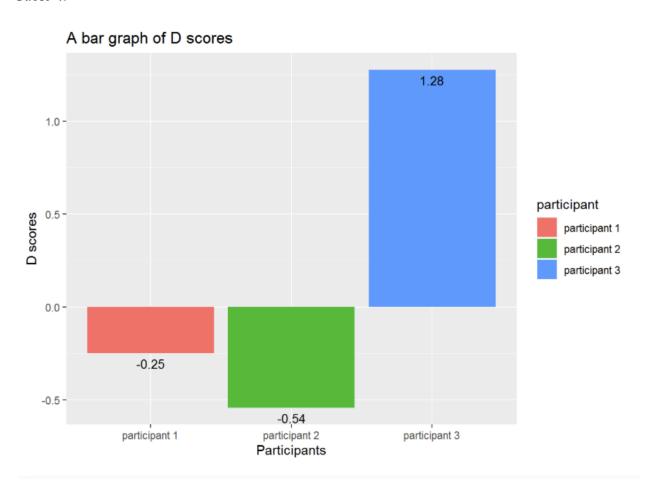
Table 3.

#### All Data

participant	Block	Trial 1 stimulus presented	Trial 1Response(True/ False)	Trial 1 Reaction time	Trial 2 stimulus presented	Trial 2Response(True/ False)	Trial 2 Reaction time	Trial 3 stimulus presented	Trial 3Response(True/ False)	Trial 3 Reaction time	Trial 4 stimulus presented	Trial 4Response(True/ False)	Trial 4 Reaction time	Block Time
participant	Block	Bipolar	1	8032	Schizophrenia	1	1469	Dementia	0	3430	COPD	1	1658	14589
participant	Block	Aggressive	1	1900	Safe	1	1187	Aggressive	1	1287	Bad	1	1003	5377
participant	Block	Cerebral Palsy	1	2691	Bipolar	1	1275	Safe	1	1688	Cerebral Palsy	1	2864	8518
participant	Block	Depression	1	1602	Cerebral Palsy	1	1328	Heart Disease	1	1261	Cancer	1	1283	5474
participant	Block	Safe	1	1675	Good	1	1159	COPD	0	5824	Harmless	0	4435	13093
participant	Block	Bipolar	1	1866	Heart Disease	1	3134	Bipolar	1	952	Schizophrenia	1	2943	8895
participant	Block	Gentle	1	2033	Bad	1	1055	Gentle	1	810	Violent	1	864	4762
participant	Block	Gentle	1	2087	Bipolar	1	1907	Gentle	1	1793	Depression	1	2031	7818
participant	Block	Cerebral Palsy	1	5926	Cancer	1	5034	Heart Disease	1	3025	Bipolar	1	1148	15133
participant	Block	Heart Disease	1	1578	Cancer	1	1814	Violent	1	1454	Schizophrenia	1	2352	7198
participant	Block	COPD	1	1333	Cancer	1	1052	Cerebral Palsy	1	905	COPD	1	644	3934
participant	Block	Bad	1	1089	Harmless	0	1642	Bad	1	996	Safe	1	1964	5691
participant	Block	Bad	1	1519	Depression	1	1337	Harmless	1	940	Schizophrenia	1	1867	5663
participant	Block	Schizophrenia	0	3278	COPD	1	1060	Schizophrenia	1	1179	Dementia	1	1470	6987
participant	Block	Unsafe	0	1963	Bipolar	1	2713	Cerebral Palsy	1	1275	Bad	1	5873	11824

A bar graph in Table 4 depicts the D-scores for each participant. The results indicate that more time was spent on Block 5 than on Block 3. Participant 3 had a positive D-score spending more time on Block 5 which could indicate there was a positive attitude about mental illness but participant 1 and participant 2 scores were negative meaning more time was spent on Block 3 which could indicate negative attitude about mental illness. A one-sample t-test to disclose whether IAT D-scores significantly differ from zero was insignificant (t = 0.28745, df = 2, p-value = 0.8008) meaning that there was no implicit bias/association. If a test is not significant, it does not mean there is zero effect, it simply means the effect is there, but it is not sufficient. The t-test here mean there is not enough evidence to say that there is a negative implicit bias.

Table 4.



Participant evaluation forms were provided to key staff for their self-reported evaluation of the overall education and activity. The data was collected by use of an ordinal Likert scale ranging from 1=strongly agree, 2=agree, 3=neutral, 4= disagree, 5=strongly disagree. There were six items tested on the three individual key participants based on *behavior disturbances*, *symptoms and risks, complications and its effects, evidence-based intervention, teaching technique, and expertise of facilitator*. Analysis for all the variables were completed in R package tibble chart. The responses were positive, i.e. either agreed or strongly agreed, there were no neutral responses or disagreements (Table 5.1)

Table 5.1

Likert Scale Responses

## #	#	A tibble: 9 x 4			
## #	#	Groups: Variables [6]			
##		Variables	rating	n	perc
##		<chr></chr>	<chr></chr>	<int></int>	<chr></chr>
## 1	1	behaviour.disturbance	Strongly agree	3	100%
## 2	2	Complicationseffects	Agree	2	67.0%
## 3	3	Complicationseffects	Strongly agree	1	33.0%
## 4	4	evidence.based.interventions	Agree	1	33.0%
## 5	5	evidence.based.interventions	Strongly agree	2	67.0%
## 6	6	Expertise	strongly agree	3	100%
## -	7	symptoms.risks	Agree	1	33.0%
## 8	8	symptoms.risks	Strongly agree	2	67.0%
## 9	9	teaching.techniques	Strongly agree	3	100%

Analysis of the six items of the evaluation form was also completed in R package on a tibble chart (Table 5.2). Results for *behavior disturbance*, *expertise of facilitator*, *evidence-based intervention*, and *teaching techniques* average rating was 5 out of 5. All the respondents strongly agreed that they could recognize behavior disturbances and refer to the appropriate

appropriate teaching techniques. The average rating on *complication and its effects on physical health and behavior disturbances* scored 4.33 out of 5. This high score indicates that most respondents agreed that they now understand. The average rating on *evidence-based interventions* was 4.66 out of 5, it was also a high score indicating that most people strongly agreed that they can apply evidence-based interventions and manage behaviors associated to mental illness. For *symptoms and risks*, the average rating is 4.66 out of 5, which indicate that most respondents strongly agreed that they understand symptoms and risks associated with mental illness which contribute to increased health risks.

Table 5.2

Analysis of Responses

## #	A tibble: 6 x 7						
##	Variables	n	min	mean	median	sd	max
##	<chr></chr>	<int></int>	<dbl></dbl>	<dbl></dbl>	<dbl></dbl>	<dbl></dbl>	<dbl></dbl>
## 1	behaviour.disturbance	3	5	5	5	0	5
## 2	Complicationseffects	3	4	4.33	4	0.577	5
## 3	evidence.based.interventions	3	4	4.67	5	0.577	5
## 4	Expertise	3	5	5	5	0	5
## 5	symptomsrisks	3	4	4.67	5	0.577	5
## 6	teaching. techniques	3	5	5	5	0	5

**Chapter V: Discussion** 

Implementation of the education on PCC and training on mental illness and its associated symptoms will be examined through the PARiHS elements of evidence, context, and facilitation.

#### **Evidence**

The current quality improvement findings were complemented with staff perceptions and clinical skills to broaden the sources of evidence as part of the implementation process. Previous

studies on PCC were not numerous in the setting of a SNF and that the new education and training would be temporary. Injury from mentally unstable patients was a concern from staff who believed the uncertainty of patient reactions raised their anxiety. Staff believed working near patients who had a co-occurring mental illness and/or behavior disturbance was frightening, and this was related to knowledge deficits. Knowledge deficits regarding mental illness and its associated symptoms contribute to poor communication, stigma, and result in inadequate nursing care (Gilmore-Bykovskyi et al., 2017; Ihalainen-Tamlander et al., 2016). Research suggests that when nurses had more information related to patient background before transitioning into the SNF as well as knowledge of how to deal with the patient, there was less stress on the nurse, less stress on the patient, and prioritizing care for the patient was enhanced (Gilmore-Bykovski et al., 2017; Gustavon et al., 2018; King et al., 2018; Kogan et al., 2016; Loeb et al., 2012).

Results of the current quality improvement confirmed findings from other studies that PCC is beneficial in improving perceived negative attitudes from staff and improving staff development. Management was supportive of staff during the education and training which created a cooperative work environment. When management provide support for staff, it creates motivation and high morale and adherence to evidence-based teachings. Participants reported they had a renewed motivation with the education and training on mental illness and PCC. In addition, PCC requires continued management support to be sustainable for continued improvement of perceived negative attitudes, improved collaboration, and treatment outcomes. The current quality improvement on education and training on PCC and mental illness was implemented at no cost to the participants or organization.

#### **Context**

In the current quality improvement, the DNP student identified the Rehabilitation unit's readiness for PCC and mental illness education and training through interview results, SWOT analysis, and through the implementation process experiences in the PARiHS elements to construct a comprehensive view of barriers and facilitation (Table 2). In the current quality improvement, barriers related to outcome measures identified that staff felt unprepared to care for patients with behavioral disturbances as well as insufficient staffing to manage one-to-one for patients. Implementation of PCC is dependent on support from leadership. Management support for communication and staff development with knowledge and evidence-based educational programs incorporating mental illness must be directed by knowledge of PCC (Gilmore-Bykovski et al., 2017; Greene, Tuzzio, & Cherkin, 2012; Ehlman et al., 2018; Constand et al., 2014; Poitra, 2018; Willemse et al., 2015). In this current quality improvement, management was involved in providing role modeling for participants and during training, there was an opportunity for role paly. There is need to create opportunities for increasing patient0centered care. Interpersonal, clinical, and structural dimensions must be present and integrated to make patient-centered care part of the culture of care (Greene, Tuzzio, & Cherkin, 2012). PCC and mental illness are supported by the Rehabilitation unit's culture change.

#### **Facilitation**

In the current quality improvement, the external facilitator manages the education and training program, engaged staff participants, leadership, obtained staff input, and offered feedback to management and training for participants. Staff were compliant meeting once a week for PCC and mental illness education and training. Participants benefited from specified education and multi-modal implementation strategies. There was intense support required for

facilitator and for staffing engagement. Changing the organizational culture from a 'provider focus to a patient focus' and the length of time it takes to shift toward such a focus are the principal barriers against transforming delivery for patient-centered care (Luxford, Safran, & Delbanco, 2011). In the current quality improvement, staff were provided a participation evaluation form. Self-report was used to measure PCC evidence-based intervention, understanding of symptoms and risks, teaching techniques, complication effects, and expertise of topic (Appendix G).

The implementation of the project was found to be successful in meeting the objectives identifying symptoms and risks associated with mental illness, recognizing patients with behavior disturbances, understanding how complications and prevention may affect change, and applying evidence-based interventions to manage behaviors.

# **Summary of Findings**

The quality improvement project was conducted to investigate if the PCC model and basic understanding of mental illness education would have an impact on changing perceived negative attitudes of RN's working in a SNF. The patient-centered care model has been successful across a wide array of clinical settings, including mental health nursing. Nurses are entrusted in ensuring safe and quality healthcare across diverse patient populations, including patients suffering from mental illness. However, the lack of appropriate awareness of mental illness across the elderly, as well as the key facets of patient care in nurses, deteriorates outcomes in mental health patients. The findings obtained from this quality improvement are presented in Table 2. display that the outcome proposes a multilevel process that outlines the potential facilitators and barriers to quality measurement. The present quality improvement showed that the tailored education program on patient-centered care and awareness of mental illness

significantly improved the perception of registered nurses on patients suffering from mental disorders. There was a significant improvement in a nurse-patient relationship which in turn can improve health outcomes in mental health patients.

The major success that was evident was the clinical and behavioral outcomes in the concerned stakeholders. The findings revealed that improving the knowledge of skilled nurses through quality improvement and training could help bridge the identified barriers of the evidence and evidence-based practice characteristics. Educating, training, leadership support, and motivating the staff could help improve the perceived negative attitudes of staff when caring for patients who have chronic medical conditions with mental illness. The findings also identify the need to improve the staff to patient ratio and train staff using the PCC in order to enhance staff morale. Furthermore, the quality improvement identifies the need to organize leadership training or support for the health care staff because it is a major determinant in the success of the PCC.

To address the problem of lack of communication and equipment, nurse-patient relationship, and therapeutic alliance need to be encouraged. Findings from this quality improvement also revealed the need to incorporate PCC into various health care units of the organization to help enhance the service delivery. This could be achieved by creating a conducive environment and avenue for feedback in order to improve the system. The outlined potential facilitators from the quality improvement findings show the importance of the PCC model in producing positive attitudes in registered nurses working with patients who have mental illness and chronic medical conditions in the SNF. The use of PCC model should not be adopted by the health care organization alone but should be incorporated into all units because it will provide guidance for an effective experience to help produce positive attitudes. In this quality

improvement, the PCC model is identified as a system to enhance the morale of the nurses because it entails leadership support.

## **b.** Limitations or Deviations from Project Plan

There are several limitations of this quality improvement which are; small sample size, project design, and limited generalizability of findings. In a large organization with a standard rehabilitation unit, the chances of having unsupportive staff may affect the success of the PCC model. Also, the sample size population is small as it contains only three registered nurses. There is a need to sample opinions from a wider range of populations from a different location because the quality improvement also focuses only on the rehabilitation unit of a skilled nursing facility. Furthermore, the timeline or quality improvement period is short (12 weeks), there is a need to validate the findings using a larger organization as a case study to reduce any form of bias in the quality improvement outcome.

### **Implications**

Sampling a large population from different health care organizations, cultural background, age, financial status could help validate the result obtained from the small population sampled. However, this project is of great importance to nursing because it has identified ways or strategies to improve or change nurses' negative attitudes in the work environment because a positive attitude from nurses to patients will help prevent discrimination against an already vulnerable population thereby reducing mortality. There must be periodic evaluation of the model for future improvement. The health policy or regulatory issues related to this project involve patient-nurse interpersonal relations, behavioral and attitudinal conduct of skilled nurses and other medical personal working in the mental health care organization. The recommendations made from this quality improvement will help policymakers in the decision-

making process to help improve the quality of health care service delivery. This quality improvement has shown that to improve the quality of health care for patients with mental illness, it involves coordination across disciplines, leveraging of resources from health care systems and payer, and formed teamwork. There is a need to provide input on the choice of measures and their implementation by providers and health care systems. To achieve this, the establishment of an evidence base process is important for quality measures through practice guidelines. This measure must be tested for validity and reliability in order to be sure of its quality. The measure to be adopted must be endorsed by the stakeholders, providers, system leaders, and professional organizations. The adopted measure must be used in routine practices and aligning measures across multiple settings such as social services or primary care. Lastly, choose or set up a monitoring group that will continue to provide strategies on how to improve the measure using the feedback received or based on the outcome of the evaluation. First, stakeholders, providers, and health care systems need to provide input on the choice of measures and their implementation. The steps to be taken include establishing an evidence base for quality measures through practice guidelines, operationalizing guidelines into quality measures that have a numerator and denominator based on data easily captured from health care settings, testing quality measures for their reliability and validity, finalizing measures based on endorsement from stakeholders, providers and system leaders as well as professional organizations, adopting the measures for use in routine practice, aligning measures across multiple settings, and finally, identifying a group to "own" the measures that will continually monitor and provide strategies to incorporate quality improvement where necessary. The findings and suggestions from the population sample can be used to make a recommendation to

improve the quality of health care services that extend to patients who have mental illness. This recommendation is applicable to health care in general.

## **Chapter VI: Conclusion**

# a. Value of the Project

The outcome and recommendation made from this project is of great importance in improving the rehabilitation unit of skilled nursing health care service by outlining strategies on how to change nurses' negative attitudes towards patients through the Patient-Centered Care model (PCC). Successful implementation of this model will help reduce premature death of Americans whose cause of death is as a result of mental illness.

#### **b. DNP Essentials**

Upon implementation of the model and completion of the project, the quality improvement articulates the DNP Essentials I, II, IV, V, and VI.

**Essential I**: Scientific underpinning for practice

Essential II: Organizational and system leadership for quality improvement and system thinking

Essential IV: Information system/Technology and patient care technology for the improvement
and transformation of health care

Essential V: Healthcare policy for advocacy in health care

**Essential VI:** Interprofessional collaboration for improving patient and population health outcomes Sources: (AACN, 2006).

Upon implementation of the model and completion of the project, the present quality improvement articulates the Doctor of Nursing Practice essential II; which involve organizational and systems leadership for system thinking and quality improvement. The preparation of organizational and system leadership enhances the patient care outcomes and healthcare delivery.

Skills in this area prepares DNP students with expertise in facilitating organization-wide changes and identifying system issues in practice delivery. Another DNP essential articulated in this quality improvement is the development of healthcare policy for advocacy in health care. This essential shows the significance of nurses' involvement in policy formulation and decision-making processes in the rehabilitation unit of the skilled nursing facility. The DNP graduate understands the correlation between policy and practice. The DNP essentials related or valuable to this quality improvement is the interprofessional collaboration for improving population health outcomes and patient. The nurses usually function as collaborators with other professions and participate in the work of the team.

#### c. Plan for Dissemination

At the end of the thesis write-up, findings and recommendations from this quality improvement will be disseminated to the health care organization or the general public through a poster presentation at local/regional/national conferences, podium presentations, and presentations to health care organization. Lastly, a full manuscript will be prepared from this quality improvement and submitted for publication in a peer-review journal.

## d. Attainment of Personal and Professional Goals

Personal goals that I have attained during the DNP project was acquiring a role that would allow me to utilize the knowledge attained from implementing this project. I gained a level of confidence which came with a skill set that such a project could provide. Using evidence-based finding to guide clinical practice as well as develop and conduct a quality improvement project are skills that benefit me in my current role as a nurse leader and contributor to improved outcomes. Professionally, I was able to hone my communication, organizational and leadership skills. The process taught me how to organize information to begin and execute a quality

improvement DNP project. My leadership role was supported by the various requirements of the project such as comparing, investigating, and utilizing evidence to support my claims and findings.

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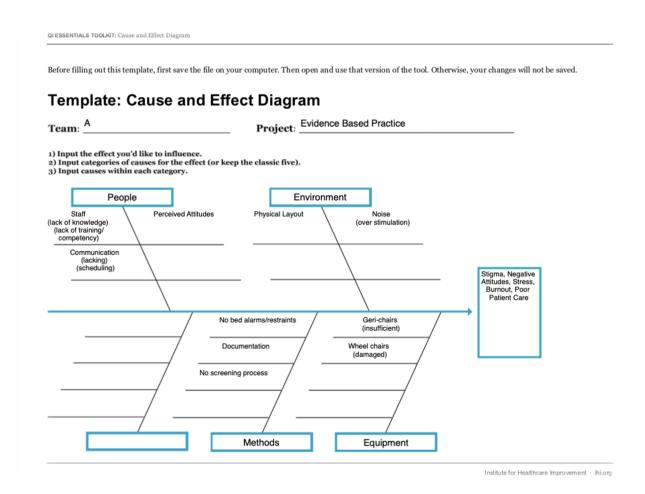
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# Appendix A

## PARTICIPANT INTERVIEW GUIDE

- 1. Do you feel qualified/prepared to care for patients with behavior disturbances?
- 2. How do you manage patients who display behavioral disturbances?
- 3. Do patients with mental illness make you feel unsafe?
- 4. Are you open/receptive to an education and training program on mental illness and its associated symptoms for workplace improvement?
- 5. How did you feel when you learned about the project for your rehabilitation unit?
- 6. What were your suggestions when you learned of the evidence-based practice of patient-centered care (PCC) compared to the organizations standard practice?

# Appendix B



### Appendix C

# Gap analysis:

The current state of the organization: Nurses' negative attitudes towards caring for patients with mental illness and chronic medical condition in the skilled nursing facility rehabilitation department. Where we want the rehabilitation department to be is to improve nurses' perceptions and attitudes regarding patients with mental illness within three months.

Gap: lack of knowledge

Why is there a gap? The literature reports that a lack of knowledge negatively affects nurses' attitudes, and that negative attitudes are a historical problem stemming from stigma, suggesting that improvement will enhance patient care (Hanson, 2014). Some factors that contribute to nurses' negative attitudes towards patients with mental illness are stigma, stereotyping older people with poor health, and culture. Systemic factors which may contribute to nurses' negative attitudes are time constraints, insufficient resources/staffing, and the expectancy to provide care for heavy patient assignment. The registered nurses are experiencing a significant increase in the number of patients admitted to the rehabilitation department with mental illness. Patients with mental illness require more care and observation for safety. Nurses feel overwhelmed to with tasks such as admitting and discharging patients, medication administration, and treatments/dressing changes. Often times, supplies are unavailable sending the nurse to go in search which may take up more time. When patients who have mental illness have behavior disturbances, they are at an even greater risk for injury, thus requiring a one-toone. If staffing is insufficient, the registered nurse is left to manage the assignment without extra assistance.

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To close the gap: PCC, cores on caring for the whole person and not just the disease, focusing on remaining emotional and cognitive abilities (Burshnic, 2018). PCC, cores on caring for the whole person and not just the disease, focusing on remaining emotional and cognitive abilities (Burshnic, 2018). There is a tremendous gap in practice and need for PCC practices in outpatient care, especially in community-based services (Kogan, Wilber, & Mosqueda, 2016). Patient Centered Care incorporates the practice of showing empathy to the emotional needs of patients and ongoing staff development to refine the patient centered approach to care (Burshnic, 2018). The Institute of Medicine has defined patient-centered care as "care that is respectful of and responsive to individual patient preferences, needs, and values" (Greene, 2012). The six most-prominent domains of PCC are holistic or whole-person care, respect and value, choice, dignity, self-determination, and purposeful living (Kogan, Wilber, & Mosqueda, 2016).

Providing education to registered nurses at the SNF using the Patient-Centered Care model can improve knowledge deficits and perceived attitudes related to caring for patients with mental illness.

# **SWOT Analysis:**

Strengths:

Support for staff

Staff appreciation gifts/luncheons

Weakness:

Poor communication

Gaps in knowledge and expertise

Processes and systems

Opportunities:

Ongoing education for nurses

Changing nurses perceived attitudes

Educate all team members

Threats:

Patients' needs change

**Environmental Factors** 

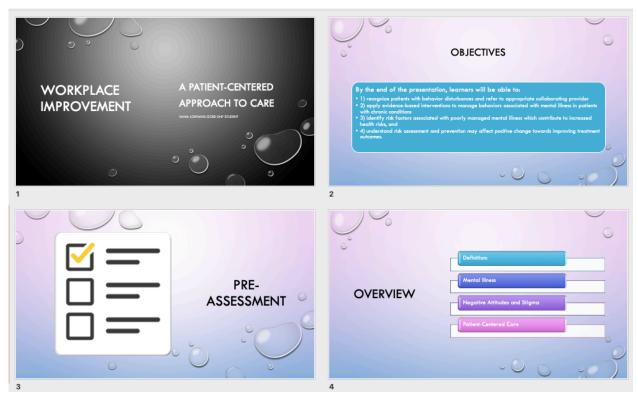
## **Organizational Readiness:**

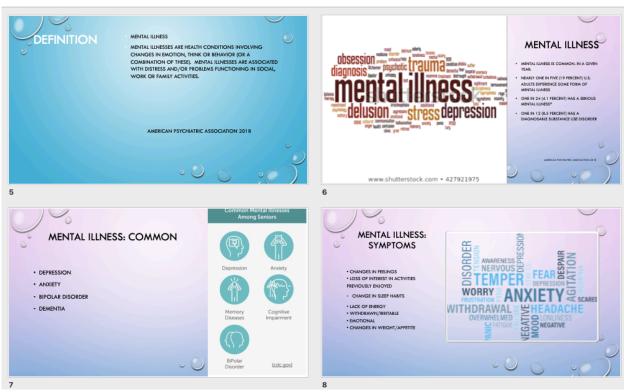
I believe the organization is ready to implement my Evidence Based Project because. The current administrator has been working with the staff development coordinator getting employees ready by holding staff meetings to hear and address concerns. A Staff Development Co-Ordinator was hired, along with two other strong leaders for the LTC department and Sub-Acute Rehabilitation side. The new management team held monthly meetings to discuss changes that were necessary to develop staff skills, improve customer service and employee-patient interaction. The staff are motivated and welcome needed changes to boost morale and create an efficient workday.

# Appendix D

Mental Illness IAT https://implicit.harvard.edu/implicit/user/pimh/selectastudy.html

# Appendix E

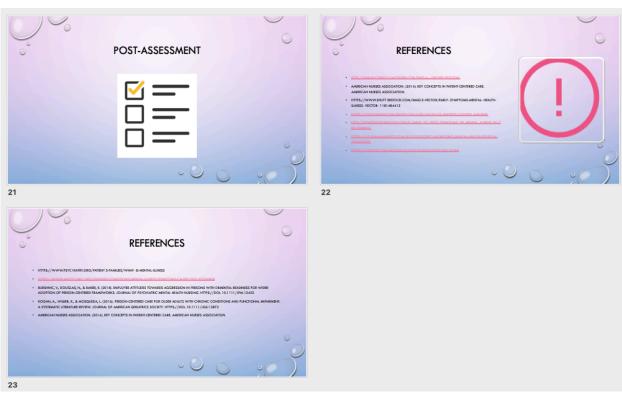




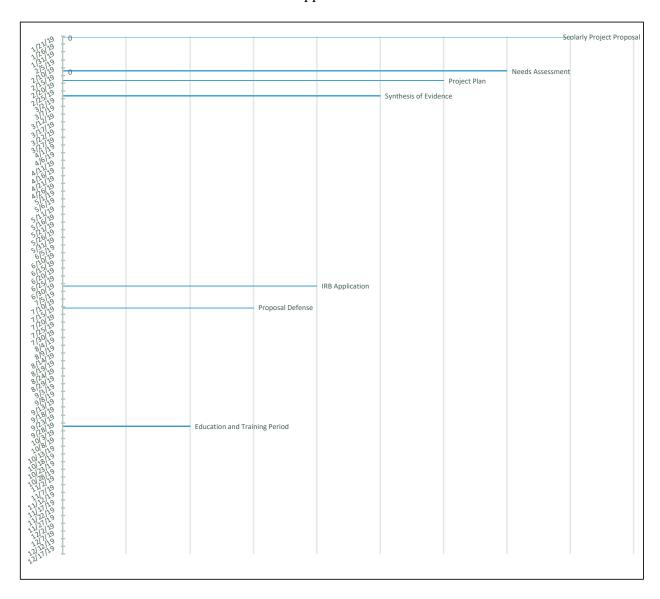








# Appendix F



# Appendix G

# PARTICIPANT EVALUATION FORM

EDUCATIONAL ACTIVITY TITLE: Workplace Improvement: Introducing A Patient-Centered Approach to Care.

PRESENTER: Vania Lorvanis

I am now able to:	Strongly	Agree	Neutral	Disagree	Strongly
	Agree				Disagree
Understand					
symptoms and risks					
associated with					
mental illness which					
contribute to					
increased health					
risks.					
Understand mental					
illness					
complications and					
effects on physical					
health and behavior.					
Apply evidence-					
based interventions					
to manage behaviors					
associated with					
mental illness.					
Recognize patients					
with behavior					
disturbances and					
refer to appropriate					
collaborating					
provider.					
The presenter used					
appropriate teaching					
techniques.					
The presenter					
showed expertise.					
Comments:					

### Appendix H

45-19



DATE: 15 July 2019

TO: Vania Lorvanis-Gore, Judith Walloch

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

STUDY TITLE: Introducing a patient centered approach to improving treatment outcomes for

mentally ill patients with chronic medical conditions

CUHSR #:

SUBMISSION TYPE: Initial Review

ACTION: Approved
APPROVAL DATE: 15 July 2019
REVIEW TYPE: Quality Assurance

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

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

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

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

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

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

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

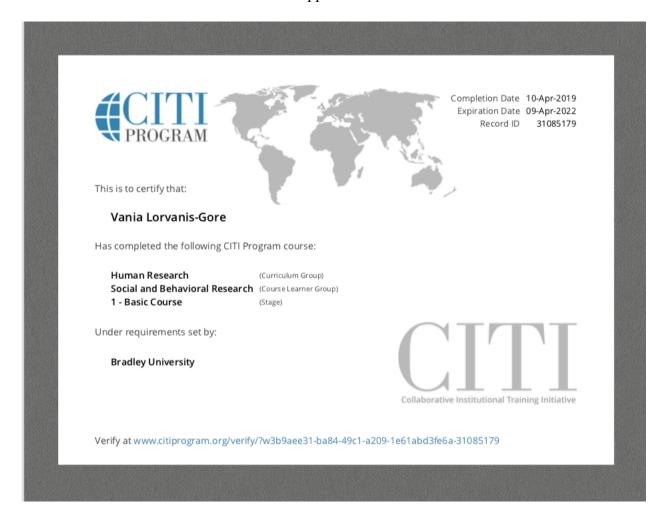
This email will serve as your written notice that the study is approved unless a more formal letter is needed. You can request a formal letter from the CUHSR secretary in the Office of Sponsored Programs.

# Appendix I

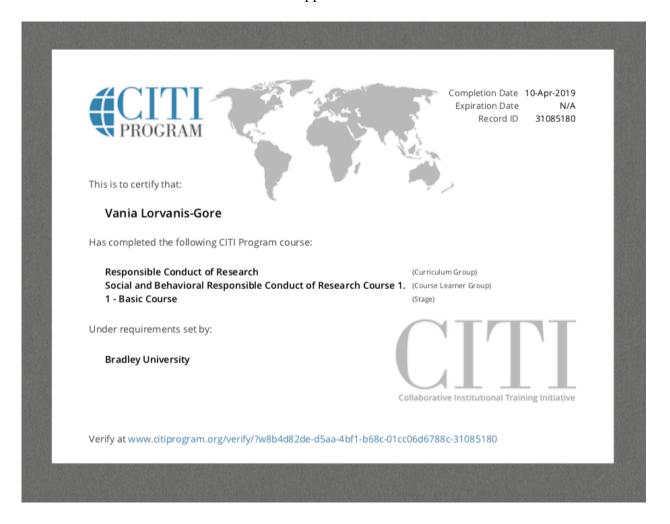
# Project Budget Plan

Item Description	Student	Facility	Total
Instructor-DNP FNP Student	\$0	\$0	\$0
RN's (Salary)	\$0	\$900	\$900
Staff Development Coordinator (Salary)	\$0	\$408	\$408
Paper/Printing Ink (Direct Cost)	\$100	\$0	\$100
Food/Beverages (Direct Cost)	\$200	\$0	\$200
Total Cost	\$300	\$1,308	\$1,608

# Appendix J



# Appendix K



# Appendix L

Informed Consent: Welcome to my "Mentally Ill People" implicit measure test. Your feedback is important. You will be asked to complete 3 tasks within a brief 10-minute period. The tasks require you to sort words into categories as quickly as you can. The purpose of this test is to help me understand what people subconsciously think about mental illness and provide an opportunity for an educational experience to create knowledge and understanding of one's own spontaneous preferences. It should be noted that the results do not provide a diagnosis of mental illness, nor is it used to determine your exact attitudes or feelings as results vary from each person and depend on a variety of reasons (Project Implicit, 2019). I do not anticipate any risks to you participating in this test. You are not obligated to answer all questions and may withdraw participation at any time. The results of this test are strictly confidential, and your participation is voluntary. Your results will only be shared with you and there will be no identifying information to connect you with the results.

Your typed name will s	erve as a signature to	proceed
<i>J</i> 1	<i>-</i>	