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Depression Screening: Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners

Erica Cohen-Hammond

DEPRESSION SCREENING: IMPROVING CLINICAL OUTCOMES EDUCATING FUTURE ACUTE CARE NURSE PRACTITIONERS

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Erica Cohen-Hammond

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by

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APPROVED BY

_____

Corvette V. Yacoob DNP, ARNP, FNP-BC
Chairperson, DNP Project Committee

_____

Claudette R. Chin PhD, ARNP
Member, DNP Project Committee

_____

Terri Rocafort MSN, ARNP-C
Director NP and DNP Specialization

_____

John McFadden, PhD, CRNA
Dean, College of Nursing and Health Sciences

Abstract

Background: Depression is the most common type of mental illness in the United States (U.S.), affecting over 26% of the adult population. There is an underutilization of the PHQ-9 screening tool for depression in the primary care setting and in the specialty care areas. It is important for new providers in this area to understand and be aware of the correct and appropriate screening methods required when they are screening their patients for depression.

Purpose: The purpose of this project was to educate future acute care nurse practitioners working in specialty care areas on the current depression screening guidelines for adults 18 to 64.

Theoretical Framework: The chronic care model was the theoretical framework utilized for this project.

Methods: An educational intervention on how to utilize the current PHQ-9 depression screening tool and the DSM-5 functional impairment criteria was developed to educate future acute care nurse practitioners. There was an evaluation of how effective the educational intervention was to promote increased awareness and the use of the screening tools.

Results: The data were collected from a convenience sample of 35 participants who had the educational intervention on "Depression Screening." Twenty-nine of the 35 participants (82.8%) completed the education evaluation anonymously on SurveyMonkey. One hundred percent of the participants showed knowledge acquisition by understanding the importance of screening for depression and promoting the use of the PHQ-9 in practice. The vast majority, (96.5%) of the evaluation participants, reported

that they intend to apply the knowledge and skills they have learned in their area of practice now and as a licensed acute care nurse practitioner.

Conclusions: The overall responses to this educational intervention research project indicated that this group of future acute care nurse practitioners will be using the PHQ -9 in the specialty care areas of practice.

ACKNOWLEDGMENTS

This research project would not be possible without the love, support, and encouragement I have received from my husband Conrad, my late daughter Dante, and my son Javan. "To GOD be the glory, great things he has done." This journey was very long and difficult; we have experienced medical emergencies, psychological emergencies and even the death of Dante. However, I persevered knowing that "I can do all things through Christ who strengthens me" (Philippians 4:13).

To Dr. Yacoob, who unselfishly decided to become my chairperson in the last 6 months of this project, who believed that I could restructure and revise this work and get it to IRB in 8 weeks, my sincerest appreciation. My gratitude to Dr. Chin who has patiently waited for my work to get to her, and then she skillfully instructed me and guided me on the rigorous process of this project. Dr. LePage, I thank her so much for reviewing my IRB documents in less than 24 hours after we discovered that it was lost via email. Special thanks to Professor Rocafort, Professor Morton and Dr. Leal: They assisted me in the implementation phase of this research project.

DEDICATION

This scholarly project is dedicated to my mother Sonia Haughton, my daughter Dante Arisa Cohen, and to all the wonderful people in the world who have lived with mental illnesses or who are still living with mental illnesses. My mother has been living with depression since she was 7 years old. She has her fair share of periods of long exacerbation of depression and long periods of remission of depression as well. She has graciously thanked her parents for seeking medical care when she was a little girl living on the island of Jamaica. Mama indicated:

> My parents were approached by several persons in our community, who told them that my depression was caused by witchcraft and that they needed to take me to a bush doctor instead of the medical doctor. My parents knew that medical care was the best for me, and they continued with what they knew.

My daughter Dante Arisa Cohen passed away suddenly on November 1, 2014 at the age of 23 post-operatively while I was completing this scholarly project. Dante had congenital disorders that affected her physiologically and psychologically; she too had depression. Despite all of Dante`s ailments, she followed all the recommendations of her medical doctors, her psychiatrist, and her psychologist on how to live with depression. Dante was a prolific writer who captured the true essence of her struggles with her medical disorders. She wrote in an essay for her college English class: “Being successful is not giving up no matter the circumstances!”

In memory of my maternal and paternal grandparents who understood depression and knew that depression required the continued support of family. They collaborated with my parents, my aunts (especially Mrs. Audrey Thomas-Robathom), and uncles and created a plan for my life that led to this doctoral degree.

Mrs. Beatrice Dixon (Aunt Bea) and Mr. Willesly Dixon (Papa)

Mrs. Lillian Haughton (Granny) and Mr. Eugene Haughton (Dada)

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SECTION ONE

NATURE OF THE PROJECT AND PROBLEM IDENTIFICATION

For centuries, mental illnesses such as depression have been some of society`s most difficult issues to comprehend and manage medically and psychologically. Depression continues to be the most common type of mental illness in the United States of America. According to the Centers for Disease Control and Prevention (2012), "by the year 2020, depression will be the second cause of disability throughout the world, trailing only ischemic heart disease" (p. 1). The National Institute of Mental Health (2013) reported:

> Each year about 6.7% of U.S adults experience major depressive disorder. Women are 70% more likely than men to experience depression during their lifetime. Non-Hispanic Blacks are 40% less likely than non-Hispanic Whites to experience depression during their lifetime. The average age of onset is 32 years old. Additionally 3.3% of 18 years old have experienced a seriously debilitating depressive disorder.

The World Health Organization (2012) reported "every 40 seconds somebody dies from suicide. More than half of the suicide is committed by people below the ages of 45 years" (p. 1). Severe depression is one of the major causes of suicide. Yackel, McKennan, and Fox-Deise (2010) explained that Luoma, Martin, and Pearson (2002) examined 40 studies concerning the rates of patients who had contact with primary care providers before they committed suicide. They found that approximately 45% of patients who committed suicide had contact with a primary care provider within 1 month of the

actual suicide… (p. S59). It is crucial that health care providers are competent in the early detection and timely treatment of depression in their patients.

Overview of Depression

Depression is one of several mood disorders marked by the loss of interest or pleasure in living. Disorders linked to depression include dysthymia, major depressive disorder, schizoaffective disorders, bipolar disorders, and mood disorders. Depression is most likely caused by a combination of genetic, biological, medical, environmental, and psychological factors (Longo et al., 2012). According to McCance, Huether, Brashers, and Rote (2010), mood disorder is intertwined with susceptible genes and influences from the environment. Stress factors and a dysfunctional serotonin (5-HT) system appear to elevate the risk of depression. Individuals with major depression commonly have elevated levels of the stress hormone cortisol. Persons with neuroendocrine abnormalities involving thyroid hormones are also found to have depression. Individuals with a low level of brain monoamine neurotransmitter are found to have depression, while those with a high level of monoamine are linked to mania (McCance et al., 2010). The genetic causes of depression have been linked to loci on chromosomes 18 and 22 to bipolar disorder and schizophrenia (McCance et al., 2010). Depression affects women, children, and men in all socioeconomic groups.

Clinical Presentation of Depression

McCance et al. (2010) listed the symptoms of depression as follows:

- Depressed or irritable mood
- Loss of interests and pleasure
- Significant weight gain or weight loss greater than 5% in a month

- Insomnia or hypersomnia
- Psychomotor agitation or retardation
- Fatigue or loss of energy
- Feelings of worthlessness or excessive guilt
- Poor concentration or indecisiveness
- Recent thoughts of death or suicide

McCance et al. (2010) listed the symptoms of manic episode as the following:

- Elevated mood
- Irritable mood
- Inflated self-esteem
- Decreased need for sleep
- Excessive talking
- Racing/crowded thoughts
- Distractibility
- Increase in goal-directed activity
- Excessive risky activities

Treatment of Depression

Depression treatment is based on the severity of the illness. The approaches to the treatment of depression are psychotherapy, pharmacotherapy, or a combination of both. Mitchell et al. (2013) indicated that depression treatments depend on the degree of the condition. If the initial presentation is mild to moderate, an antidepressant, psychotherapy, or both are prescribed. If the presenting symptoms of depression are

severe or chronic, the initial recommendation is to treat the condition with antidepressants and psychotherapy.

Since depression is one of the most common mental illnesses in the United States, depression screening is essential. Health care providers inadvertently cause harm to patients when proper screening for depression is not conducted in the specialty care areas. The deficiency in screening is a significant problem in health care. This scholarly inquiry will be a resource for health care providers screening for depression.

Background of the Project

The U.S. Preventive Service Task Force (USPSTF) and the Institute for Clinical System Improvement (ICSI) (2013) recommended, "Screening adults for depression when staff-assisted support systems are in place for accurate diagnosis, effective treatment, and follow-up." In other words, patients must be screened for depression in all areas of care as defined, when the staff is trained to assist in the screening process and with all the aspects of patients' treatment. These aspects of treatment include handing out the Patient Health Questionnaire-9 (PHQ-9) tool when the patients visit the office and assisting the patients to get to a psychiatrist or psychotherapist when needed. Health care providers should also help patients find immediate mental health care if they report thoughts of suicide.

The PHQ-2 and the PHQ-9 (Kroenke & Spitzer, 2002) were developed to screen patients for depression and measure the severity of depression. The PHQ-2 includes two sets of questions, while the PHQ-9 has nine questions. The PHQ-9 is half the length of many other depression measures. Kroenke and Spitzer (2002) stated, "The PHQ-9 is thus

a dual-purpose instrument that, with the same nine items, can establish provisional depressive disorder diagnoses as well as grade depressive symptom severity." (p. 1)

At the end of the diagnostic portion of the PHQ-9, the developers of this instrument added the question, "How difficult have these problems made it for you to work, take care of things at home, or get along with other people?" On the questionnaire, Kroenke and Spitzer (2002) concluded, "this single item is an excellent global rating of functional impairment and has been shown to correlate strongly with a number of quality of life, functional status, and health care usage measures" (p. 2).

Mitchell et al.'s (2013) guideline on Adult Depression in Primary Care for the Institute for Clinical Systems Improvement provides practitioners with an update including a translation of the PHQ-9 depression scores into practice based on Diagnostic and Statistical Manual of Mental Disorders Fifth Edition **(**DSM-5) criteria for major depressive episode. The DSM-5 criteria for major depressive episode articulate that a patient must have a total of five symptoms for at least two weeks. One of the symptoms must be depressed mood or loss of interest (Mitchell et al., 2013, para. 1). The patients who are diagnosed with major depressive episode are treated with a comprehensive treatment approach. The comprehensive treatment includes the patients in the decision making process of their depression care.

The symptoms for major depressive episode are:

1. Depressed mood
2. Marked diminished interest of pleasure in all or almost all activities
3. Significant (>5% body weight) weight loss or gain, or increase or decrease in appetite

4. Insomnia or hypersomnia
5. Psychomotor agitation or retardation
6. Fatigue or loss of energy
7. Feeling of worthlessness or inappropriate guilt
8. Diminished concentration or indecisiveness
9. Recurrent thoughts of death or suicide

There are four categories of depression treatment linked to DSM-5 criteria; they include subclinical, mild major depression, moderate major depression, and severe major depression.

Subclinical Depression

Patients with 1 to 4 of the DSM-5 nine symptoms are considered to have minimal functional impairment. If they score 5 to 9 out of 27 possible points from the PHQ-9 score, they are categorized to have the intensity of subclinical symptoms. The treatment for these patients includes instructing them to call their health care provider if their thoughts become disorganized.

Initially, when the patients are diagnosed with depression, the health care providers must educate their patients about depression. The patient education should include the cause, symptoms, and the natural history of major depression. The options for treatment and the process of finding the best treatment for the depressed individual is also included in the patient education, as well as the length of treatment with instructions on how to monitor themselves for symptoms and side effects of the treatments. A follow-up protocol on how to call the office for appointments and constant communication with their caregivers is a part of the depressed patients' education (Mitchell et al., 2013)

The prescription for patients with depression should emphasize physical activity that is pleasurable to the patients, such as walking alone or walking in a group. The goal of physical activity is 30 minutes of moderate-intensity aerobic exercise, three to five times a week (Mitchell et al, 2013). Depressed patients are encouraged to increase their daily participation in pleasant activities (Mitchell et al, 2013). Finally, if there is no improvement after one or more months of the aforementioned treatments, the health care provider should consider a referral to behavioral health for evaluation, and consider the patient for persistent depressive disorder.

Mild Major Depression

Patients are categorized as functionally impaired if they have less than 5 of the 9 DSM-5 symptoms. In addition, these patients' PHQ-9 score for depression question #1 (over the last 2 weeks, how often have you been bothered by little interest or pleasure in doing things?) or depression question #2 (over the last 2 weeks, how often have you been bothered by feeling down, depressed, or hopeless?) must score a 2 or greater, which means they have the symptoms for more than half the days or that they have the symptoms nearly every day (Mitchell et al., 2013).

Furthermore, these patients have a PHQ-9 total score between 10 and 14, which means that they have the intensity of mild major depression. They must be treated with pharmacotherapy, psychotherapy, or both; education; physical activity; and behavioral activation. They must also consider weekly contact with the health care providers to ensure that they are active in their self-care responsibilities. Self-care responsibilities include the patients' participation in taking their own medications and performing pleasurable activities along with physical activities. It could take the patients 8 to 12

weeks to accomplish all their self-care responsibilities in the beginning, followed by monthly office visits thereafter (Mitchell et al., 2013).

Moderate Major Depression

Patients are categorized as functionally impaired if they have five of the nine symptoms from the DSM-5 checklist. In addition, these patients PHQ-9 score for depression question #1 (over the last 2 weeks, how often have you been bothered by little interest or pleasure in doing things?) or depression question #2 (over the last 2 weeks, how often have you been bothered by feeling down, depressed, or hopeless?) must score a 2 or greater, which means they have the symptoms for more than half the days or that they have the symptoms nearly every day (Mitchell et al., 2013).

Patients with a PHQ-9 total score of 15 to 19 have the intensity of moderate major depression. They must be treated with pharmacotherapy, psychotherapy, or both; education; physical activity; and behavioral activation. These patients should also consider weekly contact with the health care providers to ensure that they are active in their self-care responsibilities. It could take these patients 8 to 12 weeks to accomplish all their self-care responsibilities in the beginning. Then, once the patients are engaging in their self-care responsibilities, their health care providers will schedule them for office visits at a minimum every 2 to 4 weeks (Mitchell et al., 2013).

Severe Major Depression

Patients are categorized as marked functional impairment with motor agitation if they have 5 or more of the 9 symptoms from the DSM-5 checklist and answer yes to depression question #1 (over the last 2 weeks, how often have you been bothered by little interest or pleasure in doing things?) or if they answer to depression question #2 (over the

last 2 weeks, how often have you been bothered by feeling down, depressed, or hopeless?). These patients' PHQ-9 scores for depression question #1 or depression question #2 must score a 2 or greater, which means they have the symptoms for more than half the days or that they have the symptoms nearly every day (Mitchell et al., 2013).

In addition to these patients having marked functional impairment with motor agitation, they have a PHQ-9 total score of 20 or more. These patients have the intensity of severe major depression. They must be treated with pharmacotherapy and psychotherapy when the patient is able to participate. These patients should also get educational instructions on the depression treatment, symptoms, and side effects as well as prescriptions on physical activity and behavioral activation as mentioned earlier. It is vital that once these patients are screened and a diagnosis of severe major depression is given to them that weekly office visits are scheduled until the PHQ-9 scores are less than 20. Then, once the patients are engaged in self-care responsibilities, their office visits shift to every 2 to 4 weeks until symptoms are less severe (Mitchell et al., 2013).

The American Psychiatric Association (2013) has included bereavement in the depression screening in the new DSM-5 edition. "The language in the criteria for Major Depressive Disorder (MDD) is to help differentiate between normal bereavement associated with a significant loss and a diagnosis of a mental disorder. The misconception that grief symptoms are identical to those of MDD will be addressed by the new DSM- 5" (American Psychiatric Association, 2013, p. 1).

APA (2013) further stated:

> DSM-5 is to provide an accurate diagnosis for people who need professional help and no diagnosis for those who do not. The text in DSM-5 seeks to clarify that the normal and expected response to a significant loss may resemble a depressive episode. The presence of symptoms such as feelings of worthlessness, suicidal ideas (as distinct from wanting to join a deceased love one), and impairment of overall function suggest the presence of major depression, in addition to the normal response to significant loss. (p. 2)

The Centers for Medicare and Medicaid Services (2011) supported the screening for depression in primary care and specialty care areas. It included the use of specific screening for adolescents ages 12 to 18 years and adults. CMS' (2011) Decision Memo for Screening for Depression in Adults indicated the following:

> The Centers for Medicare & Medicaid Services (CMS) has determined that the evidence is adequate to conclude that screening for depression in adults, which is recommended with a grade B by the U. S Preventive Services Task Force (USPSTF), is reasonable and necessary for the prevention or early detection of illness or disability and is appropriate for individuals entitled to benefits under Part A or enrolled under Part B. (p. 1)

Despite the detailed recommendations on screening for depression in primary care, the literature suggests that practitioners are not utilizing a single standardized tool for depression screening. Practitioners are using several screening tools for depression.

In a quantitative study conducted by Lofti, Flyckt, Krakau, Martensson, and Nilsson (2010), 287 patients from the Primary Healthcare Center of Vaxholm, Sweden were screened by their general practitioners using three different tools to detect depression among patients in primary care. The tools were the Montgomery-

Asberg Depression Rating Scale (MADRS), Montgomery-Asberg Depression Rating Scale Self-Administered (MADRS-S), and the Prime-MD. The purpose of the study was twofold. First, the researchers screened the primary health care patients who had psychiatric diagnoses for depression. During the screening process, the patients were asked to state their sex and age as well. Next, the researchers used a diagnostic interview to determine the patients severity of depression (Lofti et al., 2010, p .422). The researchers used descriptive statistics to analyze the clinical and socio-demographic variables. They used means, medians, ranges, and frequencies. They used the Kruskal Wallis non-parametric test to compare the differences between patient groups according to their MADR-S scores because there were skewed distributions and ordinal data in the study. The conclusion is that $p < 0.05$, which they considered statistically significant (Lofti et al., 2010).

Lofti et al. (2010) concluded that patients in primary health care with psychiatric morbidity are likely to have major depression, yet there is a high probability that these patients will go undetected for depression. The screening for this study lasted 10 to 15 minutes for each patient; then, a diagnostic tool was used to get a more accurate diagnosis for depression in primary health care. The authors commented that there are several reasons for undetected depression such as the limited time that practitioners get to see their patients. Another reason that depression goes undetected could be a lack of awareness of its symptoms among the patients and a lack of knowledge among the health care providers. The recommendations from the study are: Primary health providers must be aware that patients with complaints of anxiety and somatic symptoms are frequently present as depression. This form of depression is treatable and usually goes in remission. Patients with co-morbidities should be clues to prompt to general practitioners to screen

for depression. Lofti et al. (2010) also recommended, "education of the public, continued education of medical professionals and attention to organizational issues may also be needed in order to improve the detection rates of depression" (p. 425).

Christensen, Sokolowski, and Olesen (2011) performed a cross-sectional exploratory study with a random sample of 50 primary care practices in Denmark. There were 737 participants. The purpose of the study was to compare the effectiveness of case findings versus risk screening for depression to assess whether general practitioners take into account the major depression inventory (MDI) rating when making their diagnoses of depression and identify at-risk groups in need of special attention.

The MDI has 12 questions with a 0 to 50 possible score; a 4-point Likert scale was used to assess the severity of depression. The MDI tool has a sensitivity of 87% and a specificity of 67%. The data were analyzed with STATA version 10. The researchers used prevalence ratios (PRs) with 95% confidence intervals (CI 95%) as a measure of association. The depression prevalence was more than 20% in this study. The researchers did not use the odds ratio, since this would overestimate the association. They used generalized linear models (GLM) along with log link for Bernoulli family. Whenever the GLM analyses did not converge using the Bernoulli family due to the high depression prevalence, the Poisson regression was used by the researchers (Christensen et al., 2011).

The researchers reported that only 77 of the 440 invited general practitioners participated in this study and 737 of patients participated in the study. Patients with other mental health disorders, history of depression, familial predisposition, or chronic pain and

refugees or immigrants had a high risk of prevalence of depression. Depression was under-diagnosed by 37 of the 77 general practitioners who participated in the study. In this study, 42% of the patients were not screened by the general practitioners because they did not suspect that they were depressed. However, when the researchers screened the patients, they were found to have depression. It is very important that practitioners are knowledgeable about effective tools for depression screening. This finding emphasizes that using multiple tools used to detect for depression simultaneously is a waste of time and effort.

Problem Statement

Screening for depression will help to prevent the disease or improve the prognosis of depression in patients. This intervention of early diagnosing and early treatment will ultimately increase better clinical outcomes in depression. It is very important that health care providers complete depression screening properly. There are some patients with depression who can be cured, and some patients with depression who will be in remission with the proper care. Early treatment of depression decreases the probability that the patient will commit suicide. The problem is that acute care nurse practitioners and other health care providers are underutilizing the PHQ-9 screening tool that is available when screening adults ages 18-64 for depression.

Purpose of the Project

The purpose of this DNP scholarly project was twofold. First, it focused on educating acute care nurse practitioner students on depression screening in specialty care areas by increasing their awareness as to the importance of using the correct screening tool the PHQ-9 questionnaire and the DSM-5 functional impairment tools. In addition,

the project aimed to evaluate the effectiveness of the educational intervention on depression screening in specialty care areas. This Doctor of Nursing Practice scholar hopes to promote optimal patient care outcomes with this educational intervention by encouraging the use of evidence-based practice. The VA/DoD Clinical Practice Guidelines for the management of Major Depressive Disorder Tool and Kit training assisted the current and future Acute Care Nurse Practitioners in depression screening to reduce practice variation and increase effective care decisions for the patients with depression.

Definitions of Key Terms Used in this Study

Depression

Depression is one of several mood disorders marked by the loss of interest or pleasure in living (Longo et al., 2012).

Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5)

The DSM-5 is the standard nomenclature of emotional illness used by health care practitioners. The DSM-5 is published by the American Psychiatric Association (2013).

Patient Health Questionnaire Two (PHQ-2)

This questionnaire is the first 2 items of the Patient Health Questionnaire-Nine. This is the brief depression screener, with each item carrying a score between 0 and 3 (Kroenke & Spitzer, 2002).

Patient Health Questionnaire Nine (PHQ-9)

This nine-item Patient Health Questionnaire depression scale is a dual-purpose instrument that, with the same nine items can establish provisional depressive disorder diagnoses as well as grade depressive symptoms severity (Kroenke & Spitzer, 2002).

The Department of Veterans Affairs (VA)/ Department of Defense (DoD) Clinical Practice Guidelines for Major Depressive Disorder. VA/DoD CPG for MDD-

This resource provides evidence-based information on assessment, diagnosis, and treatment for major depressive disorder that can be used in the primary care and specialty care areas (The Department of Veterans Affairs [VA]/Department of Defense [DoD], 2012).

Project Objectives

The project objectives were as follows:

- Educate future acute care nurse practitioners on the importance of screening adults' ages 18 to 64 for depression in specialty care areas.
- Utilize the PHQ-9 screening tool and DSM-5 criteria as the standardized evidence-based practice tools for screening adults' ages 18- 64 for depression.
- Evaluate education intervention.

Outcome Measures

After viewing the PowerPoint presentation of the educational intervention, the future acute care nurse practitioners will have a better understanding of the PHQ-9 screening tool and the DSM-5 criteria as evidenced by the responses on the evaluation tool on SurveyMonkey. The future acute care nurse practitioners will be able to assess, diagnose and treat patients with depression.

1. Understand the importance of screening patients in specialty care areas as evidenced by the responses on the evaluation tool on SurveyMonkey.

2. Be able to use the tools as an aid to provide appropriate treatment methods for their patients as evidenced by the responses on the evaluation tool on SurveyMonkey.
3. Promote increased utilization of the screening tools as a standardized means of assessing adults ages 18-64 for depression in specialty care areas as evidenced by the responses on the evaluation tool SurveyMonkey.

Project Question

Will an educational intervention for future acute care nurse practitioners increase the use of the PHQ-9 screening tool and increase patients' optimal outcome in depression screening?

Theoretical Framework

The theoretical framework that is consistent with this project is the chronic care model (TCCM). Wagner et al. (2001) created the CCM in 2001. TCCM is "a synthesis of evidence-based system changes intended as a guide to quality improvement and disease management activities" (Wagner et al., 2001, para. 13). According to Wagner et al. (2001), the TCCM was used in a large national program funded by the Robert Wood Johnson Foundation to help large numbers of health plans and provider groups. The developers of the TCCM worked closely with groups that served low-income populations for the improvement of their care of the chronically ill (Wagner et al., 2001). This model connects the individual, the community, and the health care system through a "series of interaction" whether telephonically or face to face. It gives patients autonomy and guides them into "improved self-management" of their diseases, which leads to the optimal patient outcome.

This model has six components that will assist the future acute care nurse practitioners to provide depression screening and treatment for their patients in the specialty care areas. These include:

1. Organizational Support: Organizational support at the level of gaining access to the acute care nurse practitioner students will be needed to impart the knowledge on how to screen for depression among patients' ages 18 to 64 in the specialty care setting. Currently, this is not a part of the acute care nurse practitioners' program. The future acute care nurse practitioner must be taught that they will need the support of the organization they work with to get resources. Resources such as EHR will effectively document the care and outcomes in depression treatment of their patients.
2. Enhancing Self-Management: Encourage future acute care nurse practitioners to assist patients to plan and succeed in achievable goals. The DNP scholar will instruct the future acute care nurse practitioners to print and use the pamphlet provided by the VA/DOD CPG for MDD titled "DEPRESSION Fast Facts."
3. Practice Design: Adopt the PHQ-9 and DSM-5 criteria for major depressive episode instrument in the specialty care areas.
4. Decision Support: Have ready access to treatment protocols for patients with depression, plus have a close relationship with mental health specialist who will be there to manage the complex cases.
5. Information Technology: Use electronic medical records to keep accurate,

easily accessible data on patients with depression and measure the clinical outcomes for remission or exacerbation.

6. Community Linkage: Future acute care nurse practitioners will learn to use resources such as a social worker to assist in finding their patients housing, domestic violence shelters, and financial institutions.

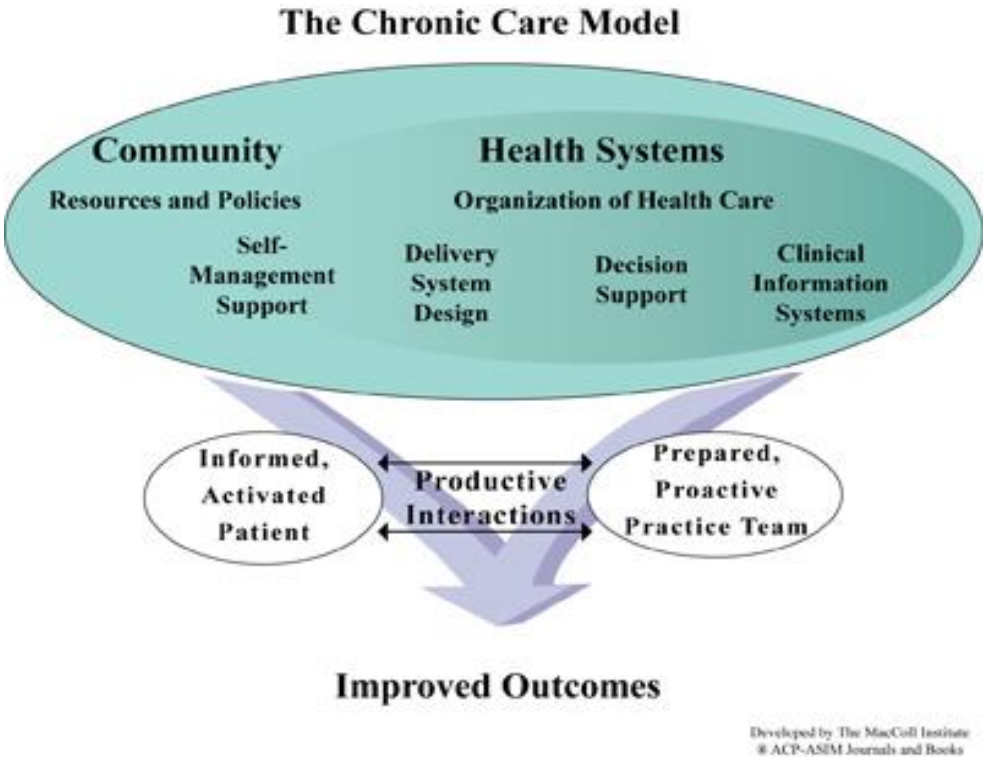

Figure 1. The chronic care model (American College of Physicians, 2014).

Significance of the Problem to Nursing

The significance of depression screening in specialty care areas to nursing is multifold. This DNP scholar informed acute care nurse practitioner students at Barry University that their patients in the specialty areas with co-morbidities such as cardiovascular disease, diabetes, and chronic pain must be screened for depression. This awareness will be imparted to future acute care nurse practitioners nationally and globally

so that they can assist in screening for depression as well as the management of depression. Nurses will play an essential role as care managers for the depressed patients. They can assist by making follow-up calls to the patients, assessing the severity of depression, providing education about depression to the depressed patients, and offering emotional support to the patients and their families.

The DNP Essentials

This DNP scholarly project addressed all DNP Essentials: 1, 2, 3, 4, 5, 6, 7, and 8. These eight DNP Essentials for this project will assist prospective DNP in their DNP competencies for their scholarly inquiries

Essential I

Essential 1 involves the scientific underpinnings for practice. The DNP Essential 1 competency for this scholarly project is the integration of the psychosocial instrument, the PHQ-9, for the screening of depression in specialty care areas. The scientific methods will be used to evaluate and synthesize research articles to arrive at solutions for depression screening. These strategies may influence new practice approaches for depression screening.

Essential II

Essential II is organizational and systems leadership for quality improvement and system think. The chronic care model will be helping this DNP scholar to develop and evaluate the educational intervention for future acute care nurse practitioners. Educating this group of nurse practitioners will be the start to educating all acute care nurse practitioners on how to screen for depression in the specialty care areas. In the long term, this screening will become a part of quality health care measures and patient safety for

patients with depression. Economically, screening yearly is reimbursable and treating patients with depression will decrease the nation's economic burden. As noted throughout this chapter, the salient scientific common knowledge is the treatment of depression, which decreases calling off from work, and ultimately increases productivity and decreases rates of suicide (Mitchell et al., 2013).

Essential III

Essential III entails the clinical scholarship and analytical methods for evidence-based practice. The competency for DNP Essential III involves the use of analytical methods to critically appraise existing literature on depression screening and determine that the use of the PHQ-9 for screening and evaluating of the severity of depression has an internal reliability of (a = .89). The instrument is reliable; the alpha coefficient is greater than 0.80. Currently, this tool/instrument is recommended by current practice guidelines to be used for the improvement in practice and patient outcomes. The use of the TCCM will help to guide the project into the optimal outcome for the patients, the community, and the health care system. This DNP scholar will disseminate the tool to future acute care nurse practitioners who will be provided with educational sessions on how to use the tool for depression screening.

Essential IV

Essential IV is information systems/technology and patient care technology for the improvement and transformation of health care. In order for the acute care nurse practitioners to excel, they must familiarize themselves with the meaningful use. Every 1 to 2 years, there is an updated version of the meaningful use on the Centers for Medicare and Medicaid Services' website. Meaningful use is the participation of health care

providers signing up with Medicare and Medicaid to receive funding to implement electronic health record technology in their practices. There are three proposed stages of implementation. With the implementation of the program, the providers are required to show how they are using EHR every year. This process will help to measure health care outcomes, improve health care delivery, and reduce health care cost. The Clinical Quality Measures for Adults 2014 has the CMS eMeasure ID and CQM number: CMS2v1 and NQF 0418; the CQM title and description are Preventive Care and Screening: Screening for Clinical Depression and Follow-up Plan.

Essential V

Essential V is health care policy for advocacy in health care. The World Health Organization (WHO) has depression as one of their major concerns addressed by Mental Health Gap Action Programme (mh GAP). The WHO stated in 2012:

> The Programme aims to help countries increase services for people with mental, neurological and substance use disorder, through care provided by health workers who are not specialist in mental health. The Programme is emphatic that proper care, psychosocial assistance, and medications tens of millions of people with mental disorders, including depression, could begin to live normal lives—even where resources are scarce (para. 2).

As a nursing leader in training, the DNP scholar is bringing this global problem to the attention of future acute care nurse practitioners. This awareness, which includes an educational intervention, will influence the acute care professors to consider the DNP scholar as a guest speaker to teach this content to each cohort at universities across the United States and globally.

Essential VI

Essential VI is the interprofessional collaboration for improving patient population health outcomes. This DNP scholar will communicate skillfully with the future acute care nurse practitioners about the educational project of depression screening along with the practice guidelines. It will improve patients' outcomes with depression by achieving the goal of remission in majority of the patients. When patients are in remission from depression, they will, more than likely, be able to better live quality lives. The competent DNP working with different groups of health care providers will add benefit to the depressed patients.

Essential VII

Essential VII is clinical prevention and population health for improving the nation's health. The DNP focuses on all levels of prevention for the depressed patient as well as health promotion. The DNP will use the chronic care model (TCCM) as a concept map to address the individuals', the community's, and the heath care system's needs. The TCCM will help patients and their families receive the best care and assist health care providers in the proper delivery of health care. The screening and treatment of depression decreases morbidity and mortality.

Essential VIII

Essential VIII is advance nursing practice. In advance nursing practice, this DNP scholar's contribution is a compilation of all eight essentials and using them to improve advance nursing practice and the nursing profession. The scholarly proposal to implement an educational intervention in depression screening using the most efficient tool is a competency that depicts my professional growth. The use of the chronic care

model as a theoretical guide helps in sustaining a healthy relationship with the patients, their family, the community, and the health systems. The DNP scholar is contributing to the body of the nursing profession by mentoring other nurses to be great intensive care nurses and as future leaders.

Significance of the Project

This project will have the potential impact on nursing practice, health care outcomes, health care delivery, and health care policy. The significance of depression screening education for future acute care nurse practitioners will help them to practice at a higher level than other members of the health care team who render care to patients with depression. The knowledge they acquire will help them to have better health care outcomes in their patients with depression. Health care delivery of depression care will be simple, yet it will be very effective. Health care policy will be changed to use the PHQ-9 as the standardized tool for depression screening in patients 18 to 64 years of age.

Nursing Practice

Health care providers who screen their patients for depression will be using all levels of health promotion and disease prevention. The DNP scholar will disseminate the findings that use of the PHQ-9 instrument as the standard instrument for depression screening in non-pregnant adults from 18 years old to 64 years old. This screening instrument has the updated version of the Diagnostic and Statistical Manual of Mental Disorder, Fifth Edition (DSM-5). It is imperative that providers know that the "Major Depression Disorder and Bereavement Exclusion" has been removed from DSM-5. The sample population of future acute care nurse practitioners will be able to utilize the

current PHQ-9 depression screening tool, which includes the DSM-5 functional impairment criteria in the specialty care areas.

Health Care Outcomes

This DNP scholarly project may impact health care outcomes by assisting health care providers in finding new cases of depression that will be treated promptly, meaning the progression and the complications of depression will be lessened. The DNP scholar will ensure that health care providers will not just screen their patients for depression, but that they have resources in place to achieve improved clinical outcomes. The educational portion of this project will give the acute care nurse practitioner students the tools to improve the health care outcome for depression. The future acute care nurse practitioners can also impact the health care outcome measurement of depression screening in the specialty care areas through practice improvement projects. The DNP scholar will promote the use of the PHQ-9 as a dual-purpose instrument among the future acute care nurse practitioners: The PHQ-9 screens for depression and grade depressive symptoms severity and then measures the improvement of depression by a decrease of 5 points or more on the PHQ-9 tool.

Health Care Delivery

This DNP scholarly project may impact health care delivery by closing the gap for depression screening. The future acute care nurse practitioners will deliver depression care through the comprehensive clinical practice guidelines of the VA/DoD for MDD. This clinical practice guideline encompasses the Healthy People 2020 Mental Health and Mental Disorders goals: “To improve mental health through prevention and by ensuring access to appropriate, quality mental health services” (U.S. Department of

Health and Human Services, 2014). Depression care will be delivered efficiently and appropriately to the patients. A simple yet thorough process will be adapted into practice. Health care reform will be of great assistance to the underserved population, and the overall mental health care will improve in the U.S.

Health Care Policy

This DNP scholarly project may impact changes in health care policy as health care providers may consult the DNP scholar for the training of health care professionals for screening and diagnosing patients with depression. The DNP scholar foresees that there will be an inclusion of mental health rotation/practicum under the direct teachings of mental health specialists in academia. Health care policy will also be impacted by the institution of the standardized depression screening among non-pregnant adults between 18 years old and 64 years old.

Section Summary

This section discussed the background of depression and identified the gap in depression screening in the areas of specialty care. The problem statement and the research question are included in this section as well. The section content embodies the purpose of this scholarly project to close the gap in depression screening in specialty care areas. The conceptual framework applicable to depression screening is the chronic care model, which combines organizational support, enhanced self-management, practice design, information technology, and community linkage to improve depression outcomes. The eight DNP Essentials were addressed and tailored to depression screening. The significance of the project and the potential impact it will have on specialty care areas,

health care outcomes, health care delivery, and health care policy were discussed in this section as well.

SECTION TWO

REVIEW OF THE LITERATURE

The purpose of this DNP scholarly project was to educate future acute care nurse practitioners working in specialty care areas to utilize the standardized screening tools and criteria when screening their patients for depression. A search of relevant literature across disciplines was conducted to further explore depression screening in specialty care areas. Two search engines were used: one through Barry University's library website and one through Google Scholar. The research databases that were used to conduct the literature search were the Cumulative Index to Nursing and Allied Health Literature (CINAHL), PsychINFO, and Google Scholar. The key words used to conduct the search were depression screening in primary care and specialty care. Citations were limited English between years 2010 to 2014 so that the latest studies and clinical guidelines on this concept would be included in this scholarly inquiry. Nine of the research articles explored a combination of nine different screening and diagnostic tools used globally. One of the research articles explained why clinicians were not using the screening tools.

There is a need for a concise psychosocial instrument that screens and diagnoses patients in the specialty care areas for depression. This literature review will discuss the numerous psychosocial instruments used for depression screening, the correlation between chronic illnesses and depression, and one instrument that screens and diagnose depression. There is one instrument that screens and diagnoses depression, and this instrument is the DNP's phenomena of interest.

Psychosocial Screening Instruments

A review of the literature suggests that there are many different kinds of psychosocial instruments for depression screening (Christensen et al. 2011; Katon et al., 2010; Lofti et al., 2010). However, it is evident that as a result a variety of screening tools that are available, there is still a deficit in depression screening. A retrospective quantitative study by Lofti et al. (2010) included 287 patients at the Primary Health Care Center of Vaxholm, Sweden. Participants were 18 years old and older. The purpose of the study was to analyze the occurrence and severity of depression, as well as gender, age, and psychiatric co-morbidity with previously undetected depression using a screening questionnaire followed by a diagnostic interview for detecting depression among the patients visiting primary health care.

The researchers used three different tools to detect depression among these participants: the Montgomery-Asberg Depression Rating Scale (MADRS), Montgomery-Asberg Depression Rating Scale Self-administered (MADRS-S), and the Prime-MD. The MADRS-S included nine out of the 10 of the items on the MADRS. The rating was done on a 4-point Likert scale from 0 to 3 with possible half points that meant "*apparent sadness*." The total scores ranged from 0 to 27. MADRS-S is equivalent to Beck Depression Inventory (BDI) but focuses on the core depressive symptoms. Patients were asked to rate their symptoms' severity over the previous 3 days. Patients who scored 12 or more were invited to do the diagnostic interview.

Patients with anxiety disorder had 57% of the psychiatric co-morbidity. Somatic disorders are known for frequent presentation of depression in primary health care with 39.3% of the patients had somatic disorders. In patients with somatic depression,

symptoms are less severe than major depressive disorder. When the Montgomery-Asberg Depression Rating Scale Self-administered MADRS-S screening was conducted, 45 patients out of 221 patients reported moderate depression. Patients with moderate depression represented 20.4% of the population. Then, another 15 patients out of 221 patients reported major depression when they used MADRS-S. This represented a 6.8% of the population.

In addition to the Montgomery-Asberg Depression Rating Scale Self-administered screening, the Prime-MD diagnostic interview was performed and 31 patients participated. Twenty-eight patients were diagnosed with major depression, which represented 12.7% of this population. Seventeen patients were diagnosed with moderate depression, which represented 7.7% of the population, and 11 patients were diagnosed with mild depression, which represented 5% of the population. The two-stage opportunistic screening with the MADRS-S and the Prime-MD lasted 10 to 15 minutes. In this study, it was evident that screening must be coupled with a diagnostic tool to get a more accurate diagnosis of depression in primary care.

Christensen et al. (2011) conducted a cross-sectional exploratory, quantitative study with a randomized sample of 50 primary care practices in Denmark with 737 participants. The purpose of the study was to compare the effectiveness of case findings versus risk screening for depression. The study also assessed whether general practitioners take into account the Major Depression Inventory (MDI) rating when making their diagnoses of depression and identify at-risk groups in need of special attention. The general practitioners chose their patients for depression screening from an at-risk group, or from a group of patients that they had clinical suspicion of depression, or

from both of those groups of patients. The types of group or groups were recorded before the patients completed the MDI. A 4-point Likert scale was used.

The study had several key findings. First, patients with other mental health disorders, history of depression, familial predisposition, chronic pain, and refugee or immigrant status had a high risk for prevalence of depression. There is an increased risk for severe depression in patients with other mental health disorders. The Major Depression Inventory (MDI) is a useful diagnostic tool with a sensitivity of 87% and a specificity of 67% in patients with chronic illnesses. Health care providers must pay close attention to this population and use a more specific tool such as the PHQ-9 as the evidence-based practice recommends.

Ostergaard et al. (2010) conducted a large quantitative, cross-sectional design study with 8,879 patients as participants and 3,896 general practitioners as participants. The inclusion criteria required patients to be at least 16 years old, living in Finland, Norway, Denmark, and Sweden. The starting age for the participants in Denmark was 18. The patients consulted with their general practitioners on one of three preselected target days of September 16-18, 2001. The sample sizes of patients for each country were: Denmark (n = 4,543), Finland (n = 1,224), Norway (n = 1,764), and Sweden (n = 1,348). A total of 3,896 GPs participated in this study. Denmark had the largest group of participants with n = 3,500, Finland with n = 103, Norway with n = 141, and Sweden with n = 152.

Ostergaard et al. (2010) reported that their purpose for this study was to examine the general practitioners' diagnostic capability in relation to major depressive episode (MDE) and to evaluate whether patients rated as "psychiatric cases" by their general practitioner were likely to suffer from MDE. Consequently, these patients

were qualified for systematic diagnostic screening. The GPs screened for MDE by having the patients complete the depression screening. The general practitioners used a mental disorder scale questionnaire. The question was "Does the patient suffer from one of the following mental disorders? Major depressive episodes (MDE) generalized anxiety disorder, (GAD), other anxiety disorders, panic disorder, substance dependence, or acute stress." The doctors looked at the depression screening questionnaire (DSQ) that the patients completed. The questionnaire was an 11-item tool with a 3-point scale. MDE diagnosis by questionnaire used the Clinical Global Impression-Severity Scale (CG1-S). The CGI-S question for the general practitioners was: "In your clinical judgment, how severely does the patient suffer from MDE/GAD/ other anxiety disorder?" There were six levels for the rating: A 1 meant that the patient was not ill at all. A 2 meant that the patient had a borderline case of depression. A 3 meant that the patient had mild depression. A 4 meant that the patient had moderate depression. A 5 meant that the patient was very ill with depression, and a 6 meant that the patient was extremely ill with depression.

The authors found that the recognition rates of major depressive episode (MDE) in Denmark, Finland, Sweden, and Norway were equal to that of other European and North American countries. They concluded that primary care patients received a false positive diagnosis of depression by their general practitioners in all of the four countries. In Denmark, the general practitioners diagnosed 12.4% of their patients for depression when they did not have depression. In Finland, the general practitioners diagnosed 16.4% of their patients for depression when they did not have depression. In Sweden, the general practitioners diagnosed 15.3% of their patients with depression when they did not have depression. The general practitioners in Norway also diagnosed 25.2% of their

patients with depression when they did not have depression. GPs recognized the major depressive episode in 56-75% of the cases, while they recognized up to seven (92%) of patients were recognized as "psychiatric cases." The authors defined psychiatric caseness as patients who the general practitioners gave a score of 3 or more on any of the Clinical Global Impression - Severity Scale (CGI-S), relating to MDE and GAD and other anxiety disorders (Ostergaard et al., 2010, p. 212).

This large study highlighted the difficulty in screening patients for depression using a long questionnaire. The questionnaire was used to tested the instincts of general practitioners and examined the Gps diagnostic capability.

There is a 25% to 50% possibility that patients who have moderate to severe depression will be missed in the primary care population. Patients with moderate to severe depression who go unrecognized can lead to decreased productivity at work because they are too sick to work, so they call off sick frequently. Then, they become unemployed, which then leads to financial burdens on their families and themselves, which can lead to the patients' attempt to treat themselves with street drugs, and/or alcohol. Then, as this cycle repeats itself, the patient become tired of living this way and attempts suicide or actually takes his or her life.

The use of a shorter screening tool for depression is recommended for depression screening in specialty and primary care. In a study conducted by Arroll et al. (2010), the researchers reported data from one out of a three-armed randomized control trial to support the use of the PHQ-2 and the PHQ-9 questionnaires in primary care. The researchers added the use of the Computerized Composite International Diagnostic

Interview (CIDI) for the standard of reference. The study was conducted in Auckland, New Zealand in family practices between 2006 and 2009. The sample size was 2,642 patients, ages 16 and over with an inclusion criteria that they spoke English. Patients were excluded from this trial if they had brain injury, dementia, terminal illness, or intoxication.

The subjects were assigned randomly into three groups. One group of the subjects received the PHQ-9 questionnaire, the other group of subjects received the PHQ-2 questionnaire with help, and the third group was the control group. The control group received no screening; it only had questions about the participants' demographic information. The Centre for Evidence Based Medicine calculator on the University of Toronto website was used for all the statistical analysis of this study. The validity of sensitivities and the specificities for the PHQ-2 and PHQ-9 were analyzed.

The key findings in the study were the PHQ-2 questionnaire detected the most cases of depression when the PHQ-2 scores were 2 or higher. The PHQ-9 test with a score of 10 or higher detected more major depressed patients than the originally described PHQ-9 scores of 15 or higher that detected major depression.
Arroll et al. (2010) concluded that when patients receive PHQ-2 scores of 2 or more, they should be asked to complete the PHQ-9 questionnaire. Patients who complete the PHQ-9 questionnaire will have a better chance of detecting depression.

The assortment of depression screening tools that are being used by health care providers is evidence that the newer screening tool that is recommended by the ICIS Health Care Guideline for Adult Depression in Primary Care is not being used. Ostergaard et al. (2010) pointed out that "when the GPs read the answers to the patients'

questionnaires … their diagnosing of MDE was more accurate" (p. 214). Although this screening tool was not the recommended tool by guidelines, their findings support a tool that is used consistently. Depression screening guidelines need to be known in specialty care areas just like the other body systems guidelines are known. There is an emphasis for health care providers to stay current with the new guidelines for all other systems in 2015, such as the cardiovascular system (JNC-8) and nephrology. The DNP scholar will educate the acute care nurse practitioner students on the Institute for Clinical Systems Improvement Health Care Guideline for Adult Depression in Primary Care. This education program will include instructing them on the new Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5) criteria for major depressive episode as listed in Section One. This study will fill the gap in depression screening in the specialty care areas.

Chronic Illnesses and Depression

Researchers have gathered numerous data that chronic illnesses and depression are interrelated. The relationship between chronic illnesses and depression is so astounding, yet a majority of primary care providers fail to screen and treat their chronically ill patients for depression. The American Diabetes Association (2014) Standard of Medical Care in Diabetes recommends that primary care providers "…routinely screen for psychosocial problems such as depression, anxiety, eating disorder and cognitive impairment" (p. S32).

According to Schade, Grootheest, and Smith (2013), "Depression and HIV have a reciprocal relationship: with depressive symptoms, there is an increased risk of getting HIV, and with HIV there is an increased risk of depressive symptoms" (p. 10).

Finding ways to assist health care providers in screening for depression among their chronically ill patients has been difficult. Patients who are chronically ill are prone to depression. Health care providers must be reminded that patients with other diagnoses of mental illnesses and a history of depression have a high risk for severe depression. Patients with severe depression are at risk of committing suicide. Therefore, all patients with chronic illnesses must be screened for depression by their health care providers.

Katon et al. (2010) conducted a single-blind, randomized controlled trial with 214 participants with poorly controlled diabetes, coronary heart disease, or both coexisting depression. The purpose of the study was to determine whether primary care-based, care-management intervention for multiple conditions would improve medical outcomes and depression scores among patients with major depression and poorly controlled diabetes, coronary heart disease, or both. The researchers used the electronic medical record (EMR) to identify patients with the diagnoses of diabetes, coronary heart disease, or both using the ICD-9 codes. They looked at patients with who had one or more measures of poor disease control within the previous 12 months. The inclusion criteria were for patients who spoke English, ambulated, and planned to enroll in a HMO for 12 months. Participants also had to have a blood pressure above 140/90 mm hg times 2, a low-density lipoprotein cholesterol level above 130 mg per deciliter or greater than 3.4 mill-moll per liter, or a glycated hemoglobin level of 8.5 or higher.

In addition, Katon et al. (2010) administered the PHQ-2 questionnaire to the patients by mail or by telephone. Participants who completed the PHQ-2 questionnaire with a score of 3 or more were asked by the researchers to complete the PHQ-9 questionnaire; if the score was 10 or greater, then the patients were included in the trial. The eligible patients for the trial completed a baseline interview and gave

oral consent for laboratory tests before an in-person test visit. While the patients were at the in-person test visit, they were given the written informed consents.

The authors found no significant difference between the groups in sticking to the recommended diet and exercise for at least 2 days per week. Participants in the intervention group had greater overall improvement in the 12 months with the variables. The researchers used the *t*-test, an inferential statistical procedure, to analyze the data between the groups to determine whether there was a significant difference. The results were highly significant with the *p* values of $p < 0.01$. The *p* values were $p < 0.001$ with antidepressant meds, anti-hypertensive medications, better quality of life and a greater satisfaction with the care of diabetes, coronary artery disease, and depression care. Patients in the intervention group had more than one adjustment of insulin ($p = .006$) over the 12 months of study. The patients with diabetes, had a 1% or more decrease in the Glycated hemoglobin level at the 12-month follow-up. The patients with hypertension had a decrease in their systolic blood pressure by 10 mm hg or more at the 12-month follow-up.

Katon et al. (2010) reported that even though the results of BP, LDL cholesterol, and glycated hemoglobin were modest, they believed that there might have been a decrease in macro-vascular and micro-vascular disease. The researchers recommend that patients who received collaborated medical and psychological care will have improved medical and depression outcomes.

The studies in this section are strong scientific evidence that support the purpose of this scholarly project. They offer strong scientific knowledge that patients with chronic illnesses are at high risk for depression, and health care providers are urged to screen and treat it. Patients with chronic illnesses and depression must he treated as a whole unit,

treating their minds, their bodies, and their souls. The future acute care nurse practitioners will be an asset in the specialty care areas when they embrace the concepts of the chronic care model.

One Instrument to Screen and Diagnose Depression

The adaptation of the use of one psychosocial instrument to screen patients for depression and diagnose the severity of depression among 18-year-old to 64-year-old patients in specialty care areas will improve patients' outcomes, and health care delivery will improve as well. The PHQ-2 and the PHQ-9 (Kroenke & Spitzer, 2002) were developed to screen patients for depression and measure the severity of depression. They consist of two sets of questions. The first two questions of the PHQ-9 are the questions for the PHQ-2. The nine items question used together is the PHQ-9.

The PHQ-9 is half the length of many other depression measures. The Primary Care Evaluation of Mental Disorders (PRIME-MD) was an instrument developed and validated in the 1990s to diagnose mental disorders of depression, anxiety, somatoform, alcohol abuse, and eating disorders. The screening process was long, with 27 questions. If a patient screened positive for any of the disorders, then additional questions would be asked by the clinician in order to get a diagnosis (Kroenke, Spitzer, & Williams, 1999). This screening process for depression took approximately 30 minutes.

The length of the survey was a problem in the medical community, and the researchers developed a shorter self-administered version of the PRIME-MD and checked its validity in two large of 3,000 participants in each study (Kroenke et al. 1999). They used the validity test to analyze the data, and they also tested for sensitivity and specificity of the instruments. Kroenke and Spitzer (2002) stated "the PHQ-9 is thus a

dual-purpose instrument that, with the same nine items can establish provisional depressive disorder diagnoses as well as grade depressive symptom severity" (p. 1). At the end of the diagnostic portion of the PHQ-9, the developers added an item asking patients who checked off any problems on the questionnaire the following: "How difficult have these problems made it for you to do work, take care of things at home, or get along with other people?" Kroenke and Spitzer (2002) concluded, "this single item is an excellent global rating of functional impairment and has been shown to correlate strongly with a number of quality of life, functional status, and health care usage measures" (p. 2).

Similarly, in another study conducted by Klein, Ciotoli, and Chung (2011), a primary care depression initiative analysis was performed in a large urban university health center. This study was a retrospective analysis. The sample population was N = 3713 of college students ages 19 to 62 years of age. The researchers used the two-purposed PHQ-9 depression screening to conduct the study. The data analysis was done by SPSS v 15.0, and descriptive statistics were used to summarize demographic characteristics.

The authors found 224 patients to have clinical significant depressive symptoms. Those participants scored a 10 or greater on the PHQ-9 questionnaire. One hundred and forty-four of the participants were found to have moderate depressive symptoms. Fifty-five of the participants in this study were found to have moderately severe depressive symptoms. Twenty-five of the participants in this study were found to have severe major depressive symptoms. A total of 5.8% of the male participants and 2.8% of the female participants were found to have severe major depression. The chi-square analysis

severity of depression and sex was significant X^2 (3, N = 224) =16.95, p < . 01. The regression analysis revealed that only degree-seeking status was a significant predictor of clinical significant depressive symptoms. Undergraduates were at a higher risk to have clinical significant depressive symptoms (CSD) with an odd ratio of 1.89 (95% confidence interval 1.3, 2.8. with p < .05).

Klein et al.'s (2011) analysis supported the feasibility and utility of implementing systematic depression screening in primary care among college students who are at a significant risk for depression and suicidal behavior. The two-step screening system was easily accepted by students and the clinical staff. The test was administered in less than 5 minutes while the patient was waiting to see the provider. For students who were on the watch and wait list and for the general population, follow-up phone calls must be incorporated into the plan of care.

Moreover, a nurse-facilitated depression screening program in an Army primary care clinic was conducted by Yackel et al. (2010). Their problem statement incorporated the concept of depression screening in primary care using the PHQ-2 questionnaire for screening and the PHQ-9 questionnaire to assess their patients severity of depression. They supported that "patients with depression who present to primary care clinics have a greater chance of responding to treatment and recovery if health care providers screen for depression …" (Yackel et al., 2010, p. 1). The *t*-test was used to analyze the data.

The researchers found the roles of nurses in the process of screening for depression has yet to be delineated. Thus, their evidence-based practice project was designed to develop, implement, and evaluate a standardized nursing procedure to improve the screening of family members for depression at a military family practice

clinic located on a U.S Army infantry post in Hawaii. The study was about the development, implementation, and evaluation of the efficacy of a systematic depression screening process to increase the identification of depression in family members of active duty soldiers. Yackel et al. (2010) based the project on the Veterans Administration/Department of Defense Behavioral Health Clinical Practice Guideline (VA/DOD BHCPG, 2002), for screening and treatment of depression as the depression management program (DMP) to guide practice change.

The literature review for this study identified studies evaluating the efficacy of screening for depression in primary care and specialty care areas with methodological approaches to screening. All variables were included in the literature review. The literature review was not current; the majority of reviewed articles were written between 1995 and 2005, except for one article from 2007. Despite the literature review not being current, the content was appropriate and relevant to the problem statement.

Yackel et al. (2010) indicated that although the literature supported the efficacy of DMPs that include screening for depression, the USPSTF (2004) found insufficient evidence to recommend against screening for risk of suicide by primary care clinicians or specialty clinicians. The gap in the literature was noted by "the absence in this clinic of systematic method to screen family members of deployed soldiers for depression and the inability to estimate rates of depression in this clinical population were the problem-focused triggers for this project" (Yackel et al., 2010. p. S58). It is very likely that this current study will provide additional information in educating acute care nurse practitioner students on the screening and treatment of depression screening the specialty care areas.

The overall design of the Yackel et al. (2010) study was a quasi-experimental design. No randomization of the individuals was performed here. The design was a good match with the problem statement and the purpose of the study. The protection of human subjects was not applicable to this project. This was a part of screening for health promotion by USPSTF (U.S. Preventive Service Task Force).

The sample was identified as all men and women over 18 years of age who could read, write, and communicate in English. The subjects had the characteristics needed to answer the questions. They fit in the inclusion category of the subjects. The instruments used in the study were the Patient Health Questionnaire depression module (PHQ-9) and a two-item version of the PHQ depression module called the PHQ-2. The procedure was realistic; the researchers incorporated the depression questionnaire seamlessly into the greeting and vital signs phase of the patient-nurse encounter. The primary care providers administered the short depression questionnaire consistently with family members of active duty soldiers.

The instruments were administered in one or two steps. Step 1 used the PHQ-2 depression questionnaire. If a negative response was given in Step 1, then the test ended. If a positive response was given in Step 1, then PHQ-9 suicide question was added. If the suicide question was denied, then a depression handout that listed behavioral support services, location of clinics, and contact numbers was provided. The patient then received a follow-up appointment in 1 to 2 weeks with his or her health care provider to discuss assessment and treatment of depression. Then, the patient's appointment continued in the primary care setting. A patient who answered positively to the PHQ-9 suicide question is a "red flag;" questions are referred immediately to a mental health

professional for further evaluation, and the depression screening is documented in the medical electronic record.

Data were analyzed using some descriptive statistics that looked at measures of dispersion in time variance and time range when performing the depression questionnaire. Then, the Likert scale was used as a part of the depression questionnaire as an evaluation tool for the research team. The *t*-test was used to analyze the data for patients "pre-practice change and post-practice change." Although the researchers did not point out the names of the statistical tests used, it is clearly seen in their descriptions of data analysis that they used the *t*-test.

The outcomes of the study listed four measurements of success with the implementation of the evidence-based practice (EBP) decision algorithm. The four measures of success were: number of patients diagnosed with depression, satisfaction of providers and nurses, compliance in documentation, and time-motion evaluation of the patient screening process.

The ICD-9 code of 311.0 was examined before and after the practice change. After three months of practice change, 130 patients were given ICD-9 code of 311.0 each month, which meant there were 30 more patients who received the ICD-9 code of 311.0 each month. Then, there were an additional 10 patients a month after 1 year of the practice change, making the number of patients given the ICD-9 code of 311.0 to 140. The satisfaction of providers and nurses were reported at 3 months and 12 months. At 3 months, 45% of providers and 64% of nurses strongly agreed that the implementation of the depression screening enhances the quality of care in family practice clinic. The satisfaction of the providers and nurses at 12 months revealed that 54% of the providers

and 95% of the nurses strongly agreed that screening for depression enhanced the quality of care.

The chart audits evaluated staff compliance in documenting the process of screening for depression. In the first 3 months, 26 of 30 patients' charts reviewed and showed 87% of documentation of depression screening. Seven patients' charts out of the 26 charts revealed that patients reported positive anhedonia with suicidal ideation. In 6 months after practice change, 29 out of the 30 patients charts audited showed that 97% of patients were screened for depression. Ten (33%) out of the 29 charts revealed that patients reported anhedonia without suicidal ideation. Compliance in reporting suicidal ideation could not be measured since there was no case of ideation identified in the chart audits.

Time-motion was the length of time it took the nurses to screen the patients for depression in the army primary care. In the first month, the screening process for depression took 5 to 30 minutes for each screening. As a result of the variation of screening time, a standardized process on how to complete tasks was created. All data were entered in the examination room instead of returning to the team center. The screening process time was then decreased to less than 7 minutes per patient.
One year after the practice change, 10 providers reported 36 patients who had suicidal ideation; these patients would not have otherwise been detected.

The researchers concluded that the findings supported the importance of having a nurse-facilitated program to screen for depression in the ambulatory health care settings. In the study, 33% to 40% of participants were diagnosed with depression.

The findings make sense as they relate to the problem for this DNP project. The limitations noted were the lack of information from the audited charts in the first year on patients with suicidal ideation. This information could be important data in the specialty care areas. The results can be generalized to other populations, such as the civilian population. The limited information on suicidal ideation in specialty health care setting has major impact on generalizability of the findings during the study. However, 10 providers reported 36 patients who reported suicidal ideation 1 year after the practice change is paramount in saying that depression screening can decrease the number of suicides in patients who are seen by their health care providers. The implications for practice and research are noted. The decision algorithm for nurses is a great tool for nurses to use in other areas of care. Within the all health care settings, nurses can be instrumental in depression screening. Ninety-five percent of nurses and 54% of providers strongly agreed that depression screening enhanced the quality of life in the participants.

The PowerPoint presentation of this scholarly project was based on the one instrument to screen and treat depression in the specialty care. The VA/DoD gave the DNP scholar the permission to use the Clinical Practice Guideline for management of Major Depressive Disorder Tool kit for training the students. The PHQ-2 and the PHQ-9 are scientifically valid and reliable instruments to detect depression. The scientific knowledge that the DNP scholar acquired during this scholarly project will be shared with future acute care nurse practitioners for the advancement of the nursing profession.

Section Summary

This section presented a review of the studies that have been conducted by various researchers on the use of numerous instruments for the screening of depression in health

care. During this process, the review of literature uncovered the intertwining of chronic illnesses and depression. The literature thus supports the problem statement. The problem is that acute care nurse practitioners and other health care providers are underutilizing the screening tools available when screening adults ages 18-64 for depression.

The screening for depression using a valid instrument is the second step in the levels of prevention in epidemiology. Here, the new case will be treated promptly, and the progression of the complications of depression will be lessened. Since screening is the second step in the three levels of prevention, mental health education and mental health promotion are the responsibility of advanced practice nurses (APNs) nationally.

SECTION THREE

PROJECT METHODS

Project Design

The purpose of this DNP scholarly project was twofold. First, it aimed to educate future acute care nurse practitioners on depression screening in specialty care areas by increasing their awareness as to the importance of using the correct screening tools. The correct screening tools are the PHQ-9 questionnaire and the DSM-5 functional impairment tools. In addition, the study strove to evaluate the effectiveness of the educational intervention on depression screening in those settings. It was imperative that future acute care nurse practitioners were educated on depression screening in specialty care areas. It is proven that at least 50% of the patients with depression are unrecognized by their primary care provider (Arroll et al., 2010). Hence since 50% of the patients with depression are being missed by primary care providers, the acute care nurse practitioners must screen the acutely ill patients for depression in the specialty care areas and treat them as the current clinical practice guideline recommends.

Therefore, the future acute care nurse practitioners must be current on assessing, diagnosing, and treating depression so that this population will be treated in the specialty care areas. Acute care nurse practitioners must be aware that depression is one of the most common mental illnesses, and under-treatment of the illness increases health care cost and even premature death among this population (Katon et al., 2010). This project will help to improve consistency in treatment methods and the utilization of the PHQ-9 tool that screens for depression and monitor the effectiveness of treatment.

Key Concepts

The key concepts of this project were to:

1. Educate future acute care nurse practitioners working in specialty care areas on the current depression screening guidelines for adults ages 18-64.
2. Promote increase utilization of the current screening tools, thereby promoting early diagnosis and treatment for patients experiencing depression in the specialty care areas.

Project Phases

Phase One

The goal of phase one was to educate future acute care nurse practitioners on the importance of screening adults ages 18-64 for depression in specialty care areas. This first intervention was to implement a comprehensive depression screening teaching session. Two educational sessions were proposed to be held: one 90-minute teaching session for two acute care nurse practitioner classes. Only one educational session was held due to time constraints of the class. There was a maximum limit of 50 participants for the session. The Doctor of Nursing Practice scholar met with the future Acute Care Nurse Practitioners and instructed them on the contents of the VA/DoD Clinical Practice Guideline for Management of Major Depressive Disorder Toolkit Training. The contents of clinical practice guideline included vital information on how to reduce current practice variation in depression screening and improve outcome measures in this disease process. The educational session took place at Barry University. The educational session took place on July 8, 2015; the actual date and time was announced via the flyers, once the professor of that class, the participants, and the researcher decided upon the date and time.

Recruitment Procedures

A letter was submitted to Terri Rocafort MSN, ARNP-C Director NP and DNP Specialization, College of Nursing and Health Sciences at Barry University to acquire access to the acute care nurse practitioners students in Barry University`s program. The chronic care model theoretical framework was the DNP scholar's guide to implement this project and increase the acute care nurse practitioner students' knowledge on depression screening. The allotted time for this phase was 4 weeks. The letter included the explanation of the project and time period for completing the educational session and the evaluation of the intervention. The inclusion criteria were in the letter as well. A telephone number and an email address are included for those who were interested. Once access was gained, a letter of invitation was sent electronically to the professors who were teaching the acute care nurse practitioner classes during the summer 2015 semester. The purpose of this letter was for the professors and the researcher to agree upon a mutual date and time in which the educational intervention would be performed in each acute care nurse practitioner classroom. Once interested participants contacted the DNP scholar, a mutual date and time for the participant and the researcher was arranged.

Individuals who met the inclusion criteria were asked to complete the evaluation of the educational intervention online via SurveyMonkey in the time allotted for the educational session and evaluation of the intervention. The future acute care nurse practitioners completed the evaluation called: An evaluation called the PHQ-9 questionnaire and the DSM-5 functional impairment depression screening for specialty care areas. The participants for the educational intervention were given a cover letter.

The educational intervention was face to face, and confidentiality could not be guaranteed in a group setting.

Phase Two

Phase two sought to utilize the PHQ-9 screening tool guided by the DSM-5 criteria as the standardized evidence-based practice tools for screening adults ages 18-64 for depression. This DNP scholar instructed future acute care nurse practitioners at Barry University on how to use the screening tools. The instructions included the VA/DoD Clinical Practice Guideline (CPG) for Management of the Major Depressive Disorder (MDD) and the Clinical Support Toolkit (MDD Tool Kit) Clinical Training Manual. The future acute care nurse practitioners learned the first two questions of the PHQ-9 are called the PHQ-2, which is an efficient and succinct way to determine if further assessment for depression is required. The Patient Health Questionnaire Two (PHQ-2) is a brief screener, with each item carrying a score between 0 and 3. The future acute care nurse practitioners will be able to refer to the other seven questions if the patient depression screening score is 3 or more. They will assess the severity of their patients' depression by asking the seven remaining questions on the PHQ-9. See Appendix B for the PHQ-9 instrument.

The first question was "Over the past 2 weeks, have you felt down, depressed, or hopeless?" The responses to both questions were: not at all, several days, more than half the days, and nearly every day. The second question is "Over the past 2 weeks, have you felt little or no interest or pleasure in doing things?" The Patient Health Questionnaire (PHQ-9) has been validated for the measuring of depression severity.

The five-point rule in using the PHQ-9 make it is easy to compute: A score of 5 to 9 is mild depression. This score range calls for watchful waiting and repeating the PHQ-9 at a follow-up appointment. A score of 10 to 14 points is moderate depression. Individuals scoring in this range require a treatment plan for moderate depression, counseling, follow-up, and/or pharmacotherapy. A score of 15 to 19 is moderately severe depression. Individuals with these scores require immediate initiation of pharmacotherapy and/or psychotherapy for moderately severe depression. A score of 20 to 27 is severe depression. Severe depression requires immediate initiation of pharmacotherapy and if severe impairment or poor response to therapy, expedited referral to a mental health specialist for psychotherapy and/or collaborative management. A rise by five points in scores on the PHQ-9 indicates a worsening in depression and a decrease by five points indicates an improvement in depression. The phase two projected time-line took 4 weeks. This phase was performed on the same day when phase one was completed with the group.

Phase Three

Phase three evaluated the educational intervention for future acute care nurse practitioners. The creation of the educational intervention used the DNP scholar`s knowledge of depression through research and the VA/DoD Clinical Practice Guideline (CPG) for Management of the Major Depressive Disorder (MDD) and Clinical Support Toolkit (MDD Tool Kit) Clinical Training Manual, which can be seen in Appendix D. The future acute care nurse practitioners demonstrated that they understood the PHQ-9 screening tool and the DSM-5, which is in Appendix A, by their participation in the clinical kit training manual vignettes. As they participated in the vignettes, they knew

how to use the tools as an aid to provide appropriate treatment methods for their patients. The educational intervention on how to use these tools was completed using a PowerPoint presentation.

The evaluation of the educational program was performed by the future acute care nurse practitioners on the same day of the educational sessions. The students who met the inclusion criteria performed the evaluation on the PHQ-9 questionnaire and DSM-5 functional impairment criteria. Each participant's consent to be in this project was strictly voluntary and if the participant declined to participate or chose to drop out at any time during the project, there were no adverse effects.

There were no known risks of involvement in this project**.** The participant could skip any question he or she did not want to answer. Although there were no direct benefits to the participant, participation in this study helped our understanding in the area of improving depression screening in specialty care area**.** When the participant decided to participate in the scholarly project, he or she was asked to do the following: Answer the questions for the evaluation of the educational program. The evaluation was estimated to take no more than 20 minutes to complete. Each participant was provided with a comprehensive description of the evaluation, in the form of a cover letter. The cover letter included the project purpose and what to expect online via SurveyMonkey. They were assured that as a research participant, information they provide will be anonymous. SurveyMonkey.com allows researchers to suppress the delivery of IP addresses during the downloading of data, and in this project, no IP address will be delivered to the researcher/DNP scholar. However, SurveyMonkey.com does collect IP addresses for its own purposes. If the participant had concerns about this, he or she

should have reviewed the privacy policy of SurveyMonkey.com before starting the survey.

Phase three's projected timeline was 3 months from the date of IRB approval to conduct the DNP scholarly project. The participants were provided with cover letters that included the link to SurveyMonkey. They were asked to follow the link to the survey or to copy and paste the address into the browser of their personal laptops, as this is a requirement for all nurse practitioner students of Barry University. The participants were asked to do the evaluation in class after the DNP scholar has departed. This ensured that there were not any face-to-face contacts with the participants in this phase. See Appendix F for the educational evaluation as it appeared on SurveyMonkey. The total length of the study took 110 minutes.

Setting

This DNP scholarly project was conducted using a convenience sample in the lecture room at Barry University in acute care nurse practitioners class. Permission to carry out the study was secured from the Institutional Review Board of Barry University and the Director of Nurse Practitioners and Doctor of Nursing Practice Specialization.

Inclusion Criteria

The participants had to be English-speaking acute care nurse practitioner students currently enrolled at Barry University during summer 2015.

Exclusion Criteria

This project excluded any non-English speaking students or students not enrolled in the summer 2015 semester. In addition, all non-acute care nurse practitioner students currently enrolled at Barry University were excluded.

Ethical Consideration/Protection of Human Subjects

The acute care nurse practitioner students' human rights were protected as this DNP scholar worked on the project. Participants were informed of the title of the project: *Depression Screening: Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners.* All guidelines established by Barry University's Institutional Review Board were followed. Since the participants were acute care nurse practitioner students, they were instructed that the answers on the evaluation would not be used against them in anyway; there would be no disciplinary action, no effect on grades, no loss of employment, no loss of their reputation, and no loss of their financial benefits. The participants' identity could not be guaranteed to be confidential in a group setting since the educational intervention was face to face. Anonymity of the responses was assured via the use of SurveyMonkey. Findings of the study were presented using group averages. No one was identified by name. Data storage of this project will be kept in the DNP scholar`s home office in a locked file cabinet indefinitely.

Resources

There was an estimated amount of funds that the DNP scholar needed to implement this DNP scholarly project. The DNP scholar needed resources in finance, technology, and human assistance.

Table 1

Budget

Item	Cost
Stationery	$500
Travel Expenses	$500
Editor	$300
Statistician	$000
Refreshment/Lunch/Dinner	$800
Binding Cost	$150
SurveyMonkey Subscription	$700
Estimated Total Cost of Project	$2950

Outcome Measures

This project's data were analyzed using descriptive statistical analysis. This method quantitatively described the main features of the information gathered. The information from SurveyMonkey was used to evaluate the effectiveness of the intervention. The information gathered was used to validate increased use of the tools, promote better patient outcomes, improve the standards of practice, and improve the ease of using the screening tools after the intervention. The outcomes measures of this project were selected based on the literature review that highlighted the problem acute

care nurse practitioners and other health care providers are underutilizing the PHQ-9 screening tool available when screening adults ages 18-64 for depression.

Section Summary

This section discussed the purpose of this project, which was to educate future acute care nurse practitioners and increase their awareness as to the importance of using the PHQ-9 questionnaire and DSM-5 functional impairment tools in specialty care areas. In addition, the project focused on evaluating future acute care nurse practitioners' knowledge on the use of the PHQ-9 questionnaire and the DSM-5 functional impairment criteria depression screening tools in adults' ages 18 to 64 in specialty care. Effective depression screening using the PHQ-9 and DSM-5 criteria are composed of simple steps that the future acute care nurse practitioners will use to improve patients` outcome. Following the steps of screening using the tools above will provide appropriate treatment methods and promote increased utilization of the screening tool as a standardized means of assessing adults ages 18 to 64 for depression in specialty care areas.

The future acute care nurse practitioners will be delivering care to the acutely ill and the chronically ill patients who are at high risk for depression or who already have depression. They will be equipped to treat them or refer them to a mental health specialist successfully. The educational intervention and the program evaluation will be done on the same day. These interventions will assist in closing the educational gap in depression screening and treatment of patients according to their severity of depression.

SECTION FOUR

RESULTS AND DISCUSSION

The problem is that acute care nurse practitioners and other health care providers are underutilizing the PHQ-9 screening tool that is available when screening adults ages 18-64 for depression. The purpose of this DNP scholarly project focused on educating acute care nurse practitioner students on depression screening in specialty care areas to increase their awareness about the importance of using the correct screening tool, including the PHQ-9 questionnaire and the DSM-5 functional impairment tools. In addition, the project aimed to evaluate the effectiveness of the educational intervention on depression screening in specialty care areas. This section analyzes the findings of the evaluation of the project objectives of the educational intervention on depression screening in specialty care areas. The contributions of this DNP scholarly project to nursing practice, health care outcomes, health care delivery, and health care policy are discussed. The Doctor of Nursing Practice Essentials and recommendations for future projects are also highlighted. The DNP scholar used the chronic care model (TCCM) to guide the educational intervention. One educational session was held at Barry University. The educational session covered the background and pathophysiology of depression, the clinical presentations of depression, description of the PHQ-2 and the PHQ-9 screening tool, the PHQ-9 assessment tool and the VA/DoD CPG for MDD for the screening of depression. This educational intervention was selected for these future acute care nurses practitioners based on current practice guidelines to utilize and treat the patients affected with depression.

During this educational intervention session, these future acute care nurse practitioners were reminded that 50% of the patients with depression are missed by their primary care physicians (Arroll et al., 2010). Furthermore, they were encouraged to be prudent acute care nurse practitioners in the delivery of care to the acutely ill, the critically ill, and the complex chronically ill patients by screening and treating them for depression with the knowledge that 50% of the missed patients with depression will be in their care. Moreover, they are required to follow the current clinical guidelines to treat the depressed patients if they know that the patients will continue with frequent follow-ups with their primary care physicians. However, if the patients' depression screening points are 10 or greater and they do not have a primary physician, then the acute care practitioner is required to refer the patient to a mental health specialist.

Findings of the Project

Data were collected from a convenience sample of 29 participants. There were 35 future acute care nurse practitioners who attended the educational session. However, only 29 of the future acute care nurse practitioners evaluated the educational intervention. The sample size for this scholarly project was 29 participants. Twenty-nine (82.8%) of the participants completed the educational evaluation on SurveyMonkey. The outcomes that were identified for this DNP scholarly project were selected based on the problem that the DNP scholar discovered during the literature review process. The outcome measures included that the future acute care nurse practitioners will (a) have a better understanding of the PHQ-9 screening tool and the DSM-5 criteria as evidenced by the responses on the evaluation tool on SurveyMonkey; (b) understand the importance of screening patients in specialty care areas as evidenced by the responses on the evaluation

tool on SurveyMonkey; (c) use the tools as an aid to provide appropriate treatment methods for their patients as evidenced by the responses on the evaluation tool on SurveyMonkey.; and (d) promote increased utilization of the screening tools as a standardized means of assessing adults ages 18-64 for depression in specialty care areas, as evidenced by the responses on the evaluation tool on SurveyMonkey.

The DNP scholarly project objectives were met: The DNP scholar educated 35 future acute care nurse practitioners on the importance of screening adults 18 to 64 for depression in specialty care areas, and 29 of the participants reported that they will utilize the PHQ-9 screening tool and DSM-5 criteria. After implementing the educational intervention on *Depression Screening: Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners*, the DNP scholar analyzed the results of the educational evaluation. The first outcome measure was captured by the following statement presented on the educational evaluation for the future acute care nurse practitioners: "After completing this educational session on Depression Screening in the Specialty Areas, I am able to: have a better understanding of the PHQ-9 screening tool and the DSM-5 criteria." Twenty-eight out of 29 of the participants answered "Yes" in their responses on SurveyMonkey, resulting in 96.5% of the sample acquiring knowledge. One participant skipped question 1 on the evaluation and zero participant answered "No" (see Figure 2**)**.

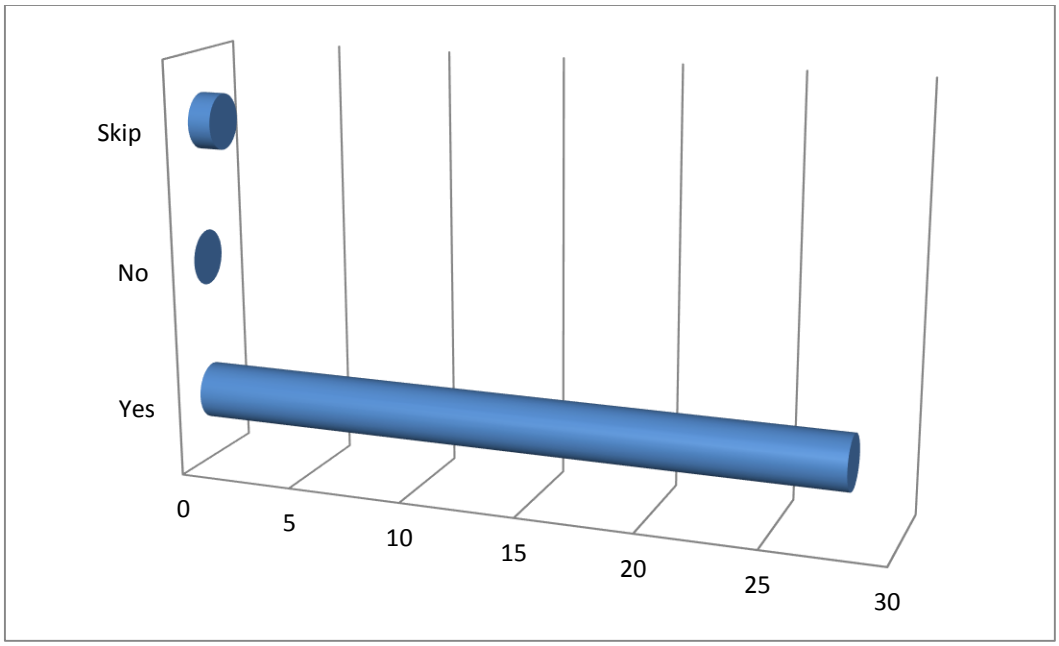

Figure 2. Participants` knowledge acquisition results.

The second outcome measure was captured by following statement presented on the educational evaluation for future acute care nurse practitioners: "After completing this educational session on Depression Screening in the Specialty Areas, every adult patient ages 18 to 64 should be screened for depression at least yearly, or if there is a change in the medical and/or mental health status in the specialty care areas using the PHQ-9 in the specialty care areas using the PHQ-9 and DSM-5 criteria." The participants who consistently responded to the question that captured this outcome measure reported they understood the importance of screening patients in specialty care areas as evidence by 29 out of 29 of them answering "Yes "to their evaluation, making it important to 100% of the participants (see Figure 3).

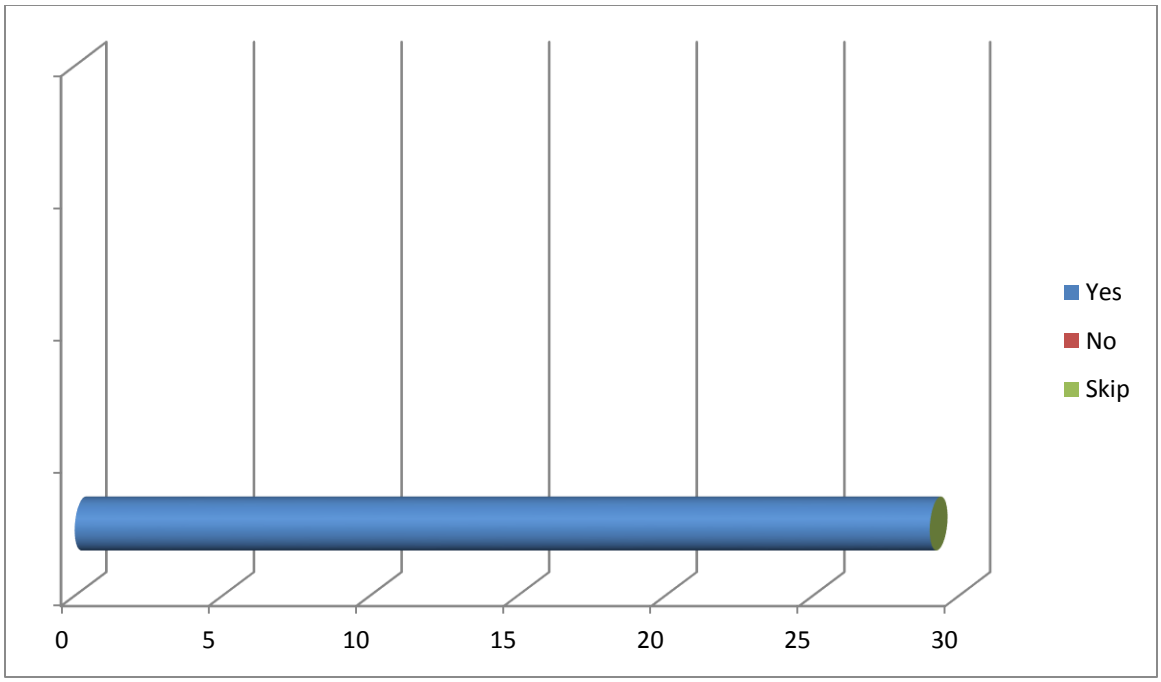

Figure 3. Depression screening is important 100% of the time to the participants.

The third outcome measure was captured by following statement presented on the educational evaluation for the acute care nurse practitioner, "After completing this educational session on Depression Screening in the Specialty Areas, I intend to apply the knowledge and skills I have learned to my practice now and when I am a licensed acute care nurse practitioner?" This outcome was to determine whether participants would be able to use the tools as an aid to provide appropriate treatment methods to their patients. The results indicated that 28 out of 29 participants answered "Yes" and 1 out of 29 answering "No" on the evaluation. This outcome measure yielded that 96.55% of the participants intended to apply the knowledge and skills they have learned to their practice now and when they are licensed as acute care nurse practitioners. Only 3.45% of the participants reported no intention to apply the knowledge and skills learned in their practice or as licensed ACNP (see Figure 4**).**

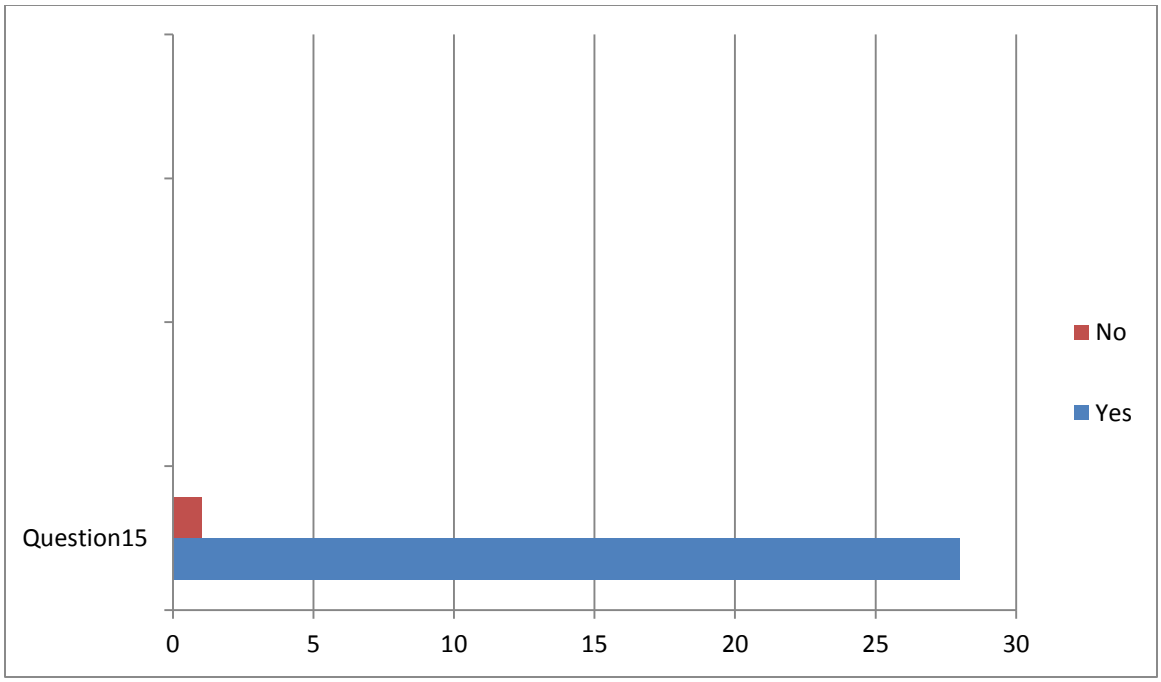

Figure 4. Twenty-eight participants will use the tools provided as an aide to treat depression.

The fourth outcome measure was addressed by the statement, "After completing this educational session on Depression Screening in the Specialty Areas, I will promote increased utilization of the PHQ-9 and DSM-5 criteria as a standardized mean of screening non-pregnant adults 18-64 in the specialty care areas" on question number 16 of the educational evaluation. All (100%) of the participants who evaluated the program (29 out of 29) said they will promote increased utilization of the screening tools as a standard means of assessing adults ages 18- 64 for depression in specialty care areas. The DNP scholar used the measures of central tendency to find the mean of the overall responses. Essentially, the average number of participants who responded with "Yes" responses were 28.75 participants; 99.1 percent of the responses were "Yes" (see Figure 5).

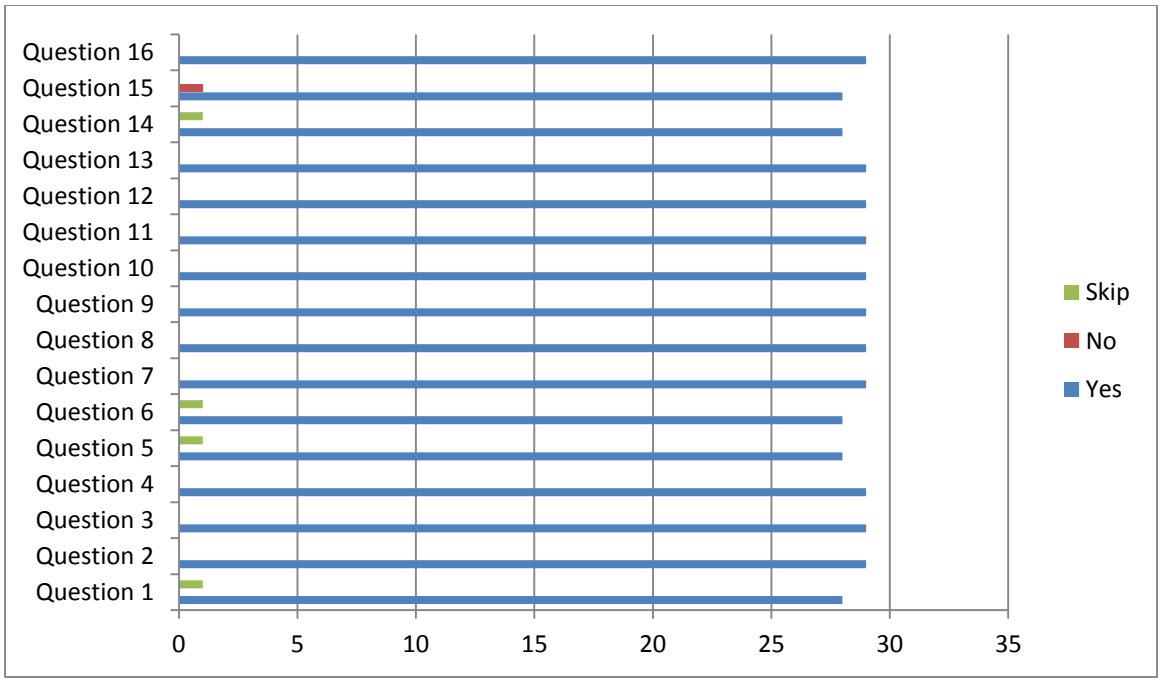

Figure 5. The participants overall responses to the educational evaluation survey.

Discussion of Findings

This DNP scholarly project was conducted to educate acute care nurse practitioners on depression screening in specialty care areas and increase their awareness as to the importance of using the correct screening tool the PHQ-9 questionnaire and the DSM-5 functional impairment tools. The chronic care model (TCCM) was the theoretical framework that satisfied the composition and the delivery of this scholarly project to the future acute care nurse practitioners. The six components of the theoretical framework are organizational support, enhanced self-management, practice design, decision support, technology, and community linkage. These mechanisms served as the bridge in providing depression screening and treatment for the patients in the specialty care areas.

The first component of the TCCM, organizational support, was gained from the approval of Barry University Institutional Review Board granting access to the future

acute care nurse practitioners. Secondly, knowledge was imparted on how to screen for depression among patients ages 18 to 64. The second component of TCCM, enhanced self-management, was achieved through the adoption of the pamphlet provided the VA/DoD for MDD titled "Depression Fast Facts." Instructions were given to participants on how to download directly from this source and incorporate usage of this pamphlet in their practice. The third component of TCCM, practice design changes, was accomplished via the 100% reception rate reported by the participants that they will promote increase utilization of the PHQ-9 and DSM-5 criteria as a standardized mean of screening non-pregnant adults 18 to 64 in the specialty care areas. The fourth component of TCCM, decision support, included providing the current treatment guidelines for depression to the future acute care nurse practitioners. The fifth component of TCCM, information technology, was met by the use of electronic medical records that are in use now; hence, the clinical outcome of patients' remission or exacerbation can be measured. The sixth component of TCCM, community linkage, was met as a part of the educational implementation for future acute care nurse practitioners to use all the resources that are available such as using the current free and affordable depression medication lists and social worker to assist with all of the social issues of the depressed patients.

The overall responses to the DNP scholarly project outcomes indicated that this group of future acute care nurse practitioners will be using the PHQ-9 in the specialty care areas of practice. However, there was one participant who indicated that he or she does not intend to apply the knowledge and skills learned now or when he or she is licensed acute care nurse practitioner. Nonetheless, 96.5% of the group will use what they have learned in practice.

Strengths and Limitations of the Project

The design of educational intervention for *Depression Screening: Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners* was based on the current clinical practice guidelines of the Institute for Clinical Systems Improvement and the Veteran Administration and Department of Defense. The overall strengths of this project were substantiated by the positive responses on the scholarly project evaluation as mentioned in the findings of the project section. Consequently, the results of the evaluation are applicable to all acute care nurse practitioners and thus meet the requirement of generalizability. All acute care nurse practitioners who receive the education on how to screen and treat patients with depression can do so effectively.

The overall weakness of the project was the lack of open-ended questions after each closed-ended question. With open-ended questions, the DNP scholar could have elicited a response from the participant (3.5%) who has no intention of using the knowledge and skills acquired in the educational intervention. However, it is the DNP scholar's hope that standardization of the use of the PHQ-9 tool will get this participant and the group of health care providers that are represented in this research project to follow the majority of health care providers. This 3.5% is confounding, and the DNP scholar did not request an explanation for any "no" responses. An explanation may have captured the reason for the answer.

Implications for Practice

The implications for nursing practice are that this DNP scholarly project imparted education to the future acute care nurse practitioners in the specialty setting on depression screening and treatment. Health care providers know that if their patients are depressed

and they are not treated for depression, then all the other treatments will be to no avail. No depression treatment for the acutely on chronically ill patient is equivalent to treating a patient for hypokalemia every day without checking the patient serum for hypomagnesemia. If hypomagnesemia is not treated, a patient`s hypokalemia will never be corrected, and the patient will prematurely have ectopic beats that will lead to cardiac arrest. Similarly, patients with major depression who are not treated can suffer myocardial infarction or cardiovascular mortality. The educational intervention information was formulated for evidence-based practice. The participants reported that their knowledge was enhanced on the topic of depression screening in the specialty area. They reported that the educational content of the project presented current practice guidelines for depression screening. Thus, this competency of enhancing the knowledge of the future acute care nurse practitioners was upheld to the "scope and standards of practice." The future acute care nurse practitioners are expected to use these evidence-based research findings to broaden the nursing practice in the specialty care areas.

Implications for Health Care Outcomes

Implications for health care outcomes are the DNP scholarly project contributed to the increased awareness among the 29 participants who responded at 100% to the correct screening tool: The PHQ-9 questionnaire and the DSM-5 functional impairment, designed for adult patients ages 18 to 64, should be screened for depression at least yearly, or if there is a change in the medical and/or mental health status in the specialty care areas using the PHQ-9 and DSM criteria. As the practice of the depression screening becomes a natural part of the management of patient care among acute care nurse practitioners, health care outcomes will improve in patients with acute depression,

chronic depression, and depression caused by chronic illnesses. The chronic care model (TCCM) will assist in guiding the nurse practitioners to impart the knowledge and resources patients will need for "improved self-management of their diseases and depression;" in turn, patients will have optimal outcome putting their depression in remission and managing their chronic illnesses. The interdisciplinary team of health care providers and mental health specialists working seamlessly together is the ultimate inter-professional collaboration for a mentally healthy world.

Implications for Health Care Delivery

The 29 future acute care nurse practitioners participants, as they manage the care of the acutely ill patients and the patients who are acutely ill with chronic illnesses as well, will use the vehicle of depression screening and treatment if needed in the specialty care setting. The future acute care nurse practitioners will communicate the treatment plan to the patients and their patients' primary care providers, if they have one; this way, the patients will have continuity of care in the outpatient setting. During the discharge planning for the patient, the acute care nurse practitioners may order for case management to assist the patient in finding mental health services. If the patient requires immediate mental health referral, then the acute care nurse practitioners will refer the patient or the acute care nurse practitioner and a physician will initiate the Baker Act. The pamphlets given to the future acute care nurse practitioners on "Depression Facts" for their patients and "VA/DoD - Depression Practice Guideline Provider Care Card" are tools that will assist in the health care delivery of their patients and help in the maintenance of their illnesses, which will eventually lead to an overall improvement in the nation`s health.

Implications for Health Care Policy

This DNP scholarly project may have contributed to a minor change in the course policy at Barry University. Barry University Institutional Review Board granted the DNP scholar classroom time to implement the educational intervention on depression screening. An inclusion of mental health theory in the acute care nurse practitioners program is a reflection of a change in health care policy at the level of academic institution. In the future, the DNP scholar hopes that the Robert Wood Johnson Health Care Policy Fellows will be incorporated into the acute care nurse practitioners programs. As health care fellows, the acute care nurse practitioners will be able to make changes in depression screening and other health issues.

Doctor of Nurse Practice (DNP) Essentials

The Doctor of Nursing Practice education is the conclusive degree in nursing practice. This DNP scholarly project demonstrated the DNP scholar`s competency in combining scientific knowledge with clinical knowledge and the translation of the evidence-based knowledge into nursing practice (American Association of Colleges of Nursing [AACN], 2006).

Essential 1

Essential 1: Scientific Underpinnings for Practice involved the gathering and synthesizing of scientific information for nursing practice. This DNP essential led the DNP scholar to three themes, which were important in the integration of the literature review of depression screening. The three themes were numerous psychological instruments used for depression screening, the correlation between chronic illnesses and depression, and one instrument that screens and diagnoses depression. The DNP

scholarly project incorporated the one instrument that screens and diagnoses depression in the specialty care areas. The scientific evidence supported the use of PHQ-9 as the one instrument that screens and diagnoses depression. The participants responded 100% to "Yes" option regarding the statement, "I will promote increase utilization of the PHQ-9 and DSM-5 criteria as a standardized mean of screening non-pregnant adults 18 to 64 in the specialty areas" (Cohen-Hammond, 2015). The 100% responses by the participants meant that this DNP scholarly project was successful.

Essential II

Essential II: Organizational and System Leadership for Quality Improvement and System Thinking. The DNP scholar's level of knowledge in organizational and system leadership is important to improve patients' outcome and health care outcomes. Doctoral level knowledge and skills in this area are consistent with nursing and health care goals to eliminate health disparities and promote safety and excellence in practice (AACN, 2006). The DNP scholar demonstrated a level of competency in organizational and system leadership by the incorporation of the chronic care model (TCCM) as the theoretical framework used to develop and evaluate the educational interventions for future acute care nurse practitioners on depression screening in the specialty care. The DNP scholar ensured accountability among the participants for quality of health care and patient safety among patients with depression in specialty care as evidenced by the results of the participants' evaluation. All (100%) of the participants indicated in their responses to survey question number 4, which stated "Depression screening used in the specialty care areas will benefit their patients through early screening which improve patients outcome" (Cohen-Hammond, 2015). The clinical outcome of patients diagnosed and treated for

depression in the future will be cost effective for the patients and the health care system, and it will decrease the nation's economic burden.

Essential III

Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice. Clinical scholarship and analytic methods are the attestation of quality of the Doctor of Nurse Practice degree. As cited by the AACN (2006), "Nursing practice epitomizes the scholarship of application through position where the sciences, human caring and human needs meet the new understandings emerge." The DNP scholar met the competency of clinical scholarship and analytic methods by the critical appraisal of the literature that existed on depression screening and determined that the PHQ-9 screening and evaluation tool was a reliable instrument for this scholarly project. The DNP scholar disseminated the screening tool to the future acute care nurse practitioners and conducted an educational session on how to use the tool for depression screening in the specialty care areas.

Essential IV

Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care. The DNP scholar's ability was used in information systems/technology to support and improve patient care and health care systems and provide leadership within health care systems and/or academic settings (AACN, 2006). The DNP scholarly project design incorporated the content of the scientific inquiry with the evidence-based content and presented the educational information to the future acute care nurse practitioners through a PowerPoint presentation. The primary resource used for the educational intervention was the

VA/DOD CPG for MDD (2012). The DNP scholar's technical skills were demonstrated through the development and the execution of the evaluation questionnaire on Survey Monkey. The Survey Monkey's questionnaire responses were analyzed, and the results were communicated in this section of the project's results.

Essential V

Essential V: Health Care Policy for Advocacy in Health Care. The DNP scholar assumed the leadership role on the behalf of the patients with depression and the future acute care nurse practitioners. The DNP scholar advocated for the patients with depression by addressing social justice, equity, and the ethical treatment of the depressed patients in specialty care in this project. Advocacy for the patients with depression and other mental illnesses could be seen in the video shown to the participants. The World Health Organization produced the video in 2009; the title of the video was *Introduction to Mental Health.* This video contributed to the success of the educational intervention of this project.

Essential VI

Essential VI: Interprofessional Collaboration for Improving Patients and Population Health Outcomes. The DNP scholar communicated effectively with the future acute care nurse practitioners through the implementation of VA DoD CPG for MDD in the specialty care areas of practice. The DNP scholar successfully met the competency in team leadership and reinforced the concept of intra-professional and inter-professional with the future acute care nurse practitioners to collaborate with all of the members of the health care team.

Essential VII

Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health. The goal of Healthy People 2020 specific to mental health and mental disorders is to improve mental health through prevention and by ensuring access to appropriate, quality mental health services (U.S. Department of Health and Human Services, 2014). The DNP scholar mastered the competency of clinical prevention and population health of the nation by the recognition of the under-utilization of the PHQ-9 screening tool through an exhaustive literature review, an analysis of the epidemiological, bio-statistical, and environmental causes of depression. The themes that emerged during the literature review were synthesized, and the problem statement was created. The DNP scholar problem statement echoed essential VII: The problem is that acute care nurse practitioners and other health care providers are under-utilizing the PHQ-9 screening tool that is available when screening adults ages 18 to 64 for depression. This scholarly project's main focus was on the secondary level of prevention and health promotion.

Essential VIII

Essential VIII: Advance Nursing Practice. This DNP scholarly project was conducted as a comprehensive assessment, diagnosis, and treatment of depression in the specialty care areas. The DNP scholar designed, implemented, and evaluated an educational intervention that was based on nursing sciences and other sciences. This educational intervention: *Depression Screening: Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners* guided and supported the nurses who are future acute care nurse practitioners to achieve excellence in nursing practice by screening for depression. As the future acute care nurse practitioners learned how to screen for

depression, they refined their assessment skills and used evidence-based practice to treat their patients and evaluate the treatment of depression. The project demonstrated advanced levels of clinical judgment through the independent creation of a 16-item questionnaire on Survey Monkey for the evaluation of the educational intervention for the future acute care nurse practitioners.

Recommendations for Future Projects

Future consideration should be placed on adding the educational information on *Depression Screening: Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners* to the acute care nurse practitioners course at Barry University. In addition, further DNP scholarly projects are warranted to measure the clinical outcome of depression screening, depression treatment, depression remissions, and depression exacerbations of the patients in the specialty care areas who will receive care from acute care nurse practitioners.

Summary

This section discussed the problem statement of this DNP scholarly project: Acute care nurse practitioners and other health care providers are underutilizing the PHQ-9 screening tool that is available to screen adults ages 18-64 for depression. The findings of the project documented that education on how to screen and treat for depression in the specialty care area was well received by future acute care nurse practitioners. This DNP scholarly project was conducted to educate future acute care nurse practitioners working in the specialty area on the current depression screening guidelines for adults 18 to 64. It also strove to increase their awareness of the importance of using the correct screening tools: the PHQ-9 questionnaire and the DSM-5 Functional impairment tool. The

discussion of the findings of the project was included, and the expected and the unexpected findings were discussed. The implications for practice, health care outcomes, health care delivery, and health care policy were linked to the DNP Essentials. A descriptive analysis was used to report the results of the evaluation of the educational intervention.

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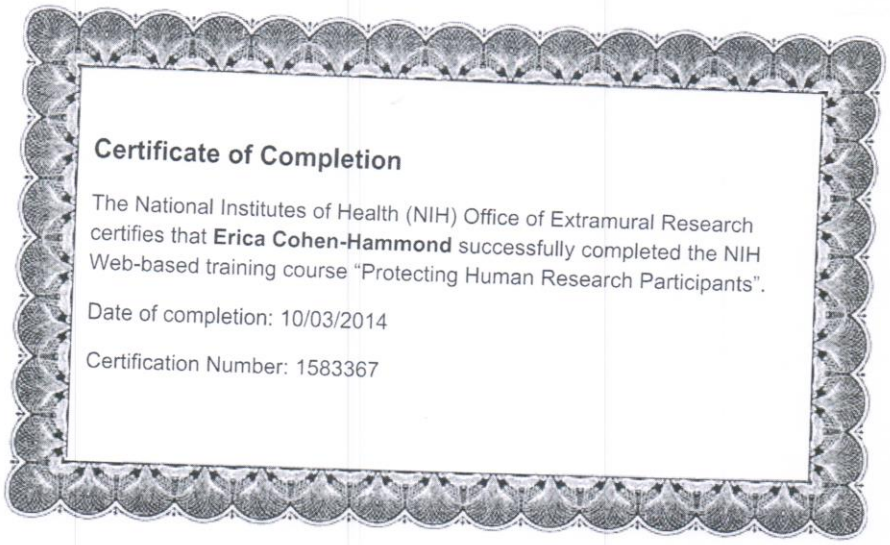
APPENDIX A

BARRY UNIVERSITY

DNP PROJECT COMMITTEE MEMBERSHIP FORM AND IRB LETTERS



Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Erica Cohen-Hammond** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 10/03/2014

Certification Number: 1583367

Barry University
Division of Academic Affairs

Institutional Review Board
1600 NE 2nd Avenue, Miami, FL 33161
P: 305.899.3020 or 1.800.756.6000 ext. 3020
F: 305.899.2026
www.barry.edu

Research with Human Subjects
Protocol Review

Date:	April 21, 2015
Protocol Number:	150414
Title	Depression Screening in Specialty Care: Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners
Meeting Date:	April 15, 2015
Researcher Name: Address:	Ms. Erica Cohen-Hammond [redacted]
Faculty Sponsor:	Dr. Corvette Yacoob Nursing

Dear Ms. Cohen-Hammond:

On behalf of the Barry University Institutional Review Board (IRB), I have verified that the specific changes requested by the IRB have been made. Therefore, I have granted final approval for this study as exempt from further review.

As principal investigator of this protocol, it is your responsibility to make sure that this study is conducted as approved by the IRB. Any modifications to the protocol or consent form, initiated by you or by the sponsor, will require prior approval, which you may request by completing a protocol modification form.

It is a condition of this approval that you report promptly to the IRB any serious, unanticipated adverse events experienced by participants in the course of this research, whether or not they are directly related to the study protocol. These adverse events include, but may not be limited to, any experience that is fatal or immediately life-threatening, is permanently disabling, requires (or prolongs) inpatient hospitalization, or is a congenital anomaly cancer or overdose.

The approval granted expires on May 11, 2016. Should you wish to maintain this protocol in an active status beyond that date, you will need to provide the IRB with and IRB Application for Continuing Review (Progress Report) summarizing study results to date.

Approved by Barry University IRB

Date:

Signature

Barry University
Cover Letter

Dear Research Participant:

Your participation in a research project is requested. The title of the study Depression Screening in Specialty Care: Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners. The research is being conducted by Erica Cohen-Hammond BSN, RN, a student in the Doctorate of Nursing Practice program from the College of Health Science, Division of Nursing department at Barry University, and is seeking information that will be useful in the field of nursing practice. The aims of the research have two elements: 1. To educate Acute Nurse Practitioners students on depression screening in specialty care area, by increasing their awareness as to the importance of using the correct screening tool the PHQ-9 questionnaire and the DSM-5 functional impairment tools. 2. To evaluate the effectiveness of the educational intervention on depression screening in those settings. In accordance with these aims, the following procedures will be used: If you decide to participate in this research project, please be present for the educational session on depression screening which will take approximately 90 minutes. Then, follow the link below and complete the educational intervention evaluation on SurveyMonkey, it should take no more than twenty minutes to complete. The total length of this study will be 110 minutes. (90 minutes- educational intervention and 20 minutes of survey). Simply follow this link, or copy and paste the address into your personal laptop browser to participate:

https://www.surveymonkey.com/r/DepressionScreeningInSpecialtyCare

We anticipate the number of participants to be 70 Future Acute Care Nurse Practitioners.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on your grades, employment, reputation, or financial benefits.

The risks of involvement are no known risks. You can skip any questions you do not want to answer. Although there are no direct benefits to you, your participation in this study may help our understanding in the area of improving depression screening in specialty care.

The participants' identity cannot be guaranteed to be confidential in a group setting since the educational intervention is face to face. Anonymity of the responses is assured via the use of SurveyMonkey. Findings of the study will be published using group averages. No one will be identified by name. Data storage of this project will be kept in the DNP scholar's home office in a locked file cabinet indefinitely.

By completing this evaluation you have shown your agreement to participate in the study. If you have any questions or concerns regarding the study or your participation in the study, you may contact me Erica Cohen-Hammond, by phone at [redacted] my supervisor, Dr. Corvelle Yacoub, by phone at [redacted] or the Institutional Review Board point of contact, Barbara Cook, at [redacted]

Thank you for your participation.

Sincerely,

Erica Cohen-Hammond BSN, RN.

Erica Cohen-Hammond

[redacted]

[redacted]

Terri Rocafort MSN, ARNP-C

Director NP and DNP Specialization

Barry University College of Health Science, Division of Nursing

11300 NE 2nd Avenue, Miami Shores, FL 33161

Dear Mrs. Rocafort:

I am writing to request your permission to perform educational interventions in the classrooms at Barry University for Future Acute Care Nurse Practitioners. I have attached the Barry University cover letter that will make up the body of this email. The letter includes a link to SurveyMonkey website for the students to evaluate the educational intervention. Your assistance to grant me permission will be greatly appreciated.

Sincerely,

Erica Cohen-Hammond, BSN, RN

Erica Cohen-Hammond

[redacted]

[redacted]

May 15, 2015

Delia Leal PhD, MSN-ACNP-BC, CCRN

Assistant Professor

Barry University College of Health Science, Division of Nursing

[redacted]

Dear Dr. Leal:

I am writing to request a one time 110 minutes of your class time with your Acute Care Nurse Practitioner Students to participate in a Doctor of Nursing Practice Research Project. The research project is titled "Depression Screening : Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners." The project requires volunteers to attend a 90 minutes educational program on depression screening and then to complete a 20 minutes on- line SurveyMonkey evaluation. They will not provide any names on the survey.

I am approved by the Barry University Institutional Board and Professor Terri Rocafort MSN, ARNP-C and Director NP and DNP Specialization to proceed with this project this semester summer 2015. I have attached the Barry University cover letter that will make up the body of this email. The letter includes a link to SurveyMonkey website for the students to evaluate the educational intervention. Also attached are the flyer and the letter of approval to proceed by Professor Teri Rocafort. Your assistance to grant me a date during this semester will be greatly appreciated.

Sincerely,

Erica Cohen- Hammond, BSN, RN.

Barry University
Cover Letter

Dear Research Participant:

Your participation in a research project is requested. The title of the study Depression Screening: Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners. The research is being conducted by Erica Cohen-Hammond BSN, RN, a student in the Doctorate of Nursing Practice program from the College of Health Science, Division of Nursing department at Barry University, and is seeking information that will be useful in the field of nursing practice. The aims of the research have two elements: 1. To educate acute care nurse practitioners students on depression screening in specialty care area, by increasing their awareness as to the importance of using the correct screening tool the PHQ-9 questionnaire and the DSM-5 functional impairment tools. 2. To evaluate the effectiveness of the educational intervention on depression screening in those settings. In accordance with these aims, the following procedures will be used: If you decide to participate in this research project, please be present for the educational session on depression screening which will take approximately 90 minutes. Then, follow the link below and complete the educational intervention evaluation on SurveyMonkey, it should take no more than twenty minutes to complete. The total length of this study will be 110 minutes. Simply follow this link, or copy and paste the address into your personal laptop browser to participate:

https://www.surveymonkey.com/s/DepressionScreeninginSpecialtyCare

We anticipate the number of participants to be 70 Future Acute Care Nurse Practitioners.

Your consent to be a research participant is strictly voluntary and should you decline to participate or should you choose to drop out at any time during the study, there will be no adverse effects on your grades, employment, reputation, or financial benefits.

The risks of involvement are no known risks. You can skip any questions you do not want to answer. Although there are no direct benefits to you, your participation in this study may help our understanding in the area of improving depression screening in specialty care.

The participants' identity cannot be guaranteed to be confidential in a group setting since the educational intervention is face to face. Anonymity of the responses is assured via the use of SurveyMonkey. Findings of the study will be published using group averages. No one will be identified by name. Data storage of this project will be kept in the DNP scholar`s home office in a locked file cabinet indefinitely.

By completing this evaluation you have shown your agreement to participate in the study.

If you have any questions or concerns regarding the study or your participation in the study, you may contact me Erica Cohen-Hammond, by phone at [redacted], my supervisor, Dr. Corvette Yacoob, by phone at [redacted], or the Institutional Review Board point of contact, Barbara Cook, at [redacted].

Thank you for your participation.

Sincerely,

Erica Cohen-Hammond BSN, RN.

You are invited to Participate in a Doctor of Nursing Practice Project

"Depression Screening: Improving Clinical Outcomes Educating Future Acute Care Nurse Practitioners."

The project requires volunteers to attend a 90-minute educational program on depression screening and then to complete a 20 minutes on-line SurveyMonkey evaluation. The total length of the study will be 110 minutes. You will not provide your name on the survey.

WHO CAN PARTICIPATE: English-speaking, Acute Care Nurse Practitioner students currently enrolled

in the ACGN Nursing Program at Barry University during Summer 2015

DATE & TIME: 7/8/2015 at 5:30 p.m.

Location : Barry University Wiegand 254

If you are willing to participate and have any questions about this project please contact

Erica Cohen-Hammond BSN, RN
[redacted]
DNP Student in the College of Nursing and Health Sciences at Barry University
Or Chairperson Corvette Yacoob DNP, ARNP, FNP-BC [redacted] or
Barbara Cook, Institutional Review Board point of contact: [redacted]

APPENDIX B

BARRY UNIVERSITY

PATIENT HEALTH QUESTIONNAIRE -9 (PHQ-9)

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? *(Use "✔" to indicate your answer)*	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING 0 + _____ + _____ + _____

=Total Score: _____

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
☐	☐	☐	☐

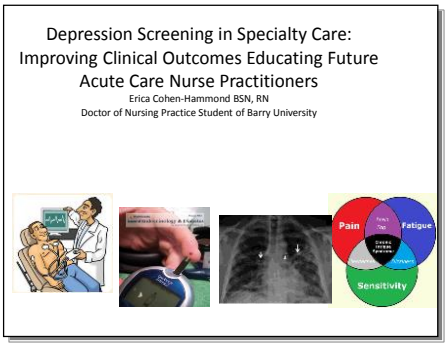
APPENDIX C

BARRY UNIVERSITY

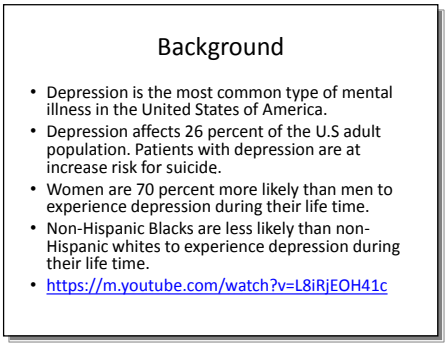
DEPRESSION SCREENING: IMPROVING CLINICAL OUTCOMES

EDUCATING FUTURE ACUTE CARE NURSE PRACTITIONERS

Slide 1



Slide 2



Slide 3

Background

- Depression is a significant independent risk factor for both myocardial infarction and cardiovascular mortality.
- It is very important that providers are up-to date on the assessment, diagnosis and treatment of behavioral health conditions, such as depression.

Slide 4

Pathophysiology of Depression

- Depression- one of the several mood disorder marked by the loss of interest or pleasure in living.
- Disorders linked to depression include dysthymia, major depressive disorder, schizoaffective disorder, bipolar disorder and mood disorder.
- Depression is most likely caused by a combination of genetic, biological, medical, environmental and psychological factors.

Slide 5

Pathophysiology of Depression

- Mood disorder is intertwined with susceptible genes and influences from the environment.
- Stress factors and a dysfunctional serotonin (5-HT) system appear to elevate the risk of depression.
- Patients with major depression commonly have elevated levels of stress hormone cortisol.
- Neuroendocrine abnormalities involving thyroid hormone links with depression.

Slide 6

Depression Clinical Presentation

- Depressed or irritable mood
- Loss of interests and pleasure
- Significant weight gain or weight loss greater than 5 % in a month.
- Insomnia or hypersomnia
- Psychomotor agitation or retardation
- Fatigue or loss of energy
- Feeling of worthlessness or excessive guilt
- Poor concentration or indecisiveness
- Recent thoughts of death or suicide

Slide 7

Symptoms of Manic Episode

- Elevated mood
- Irritable mood
- Inflated self-esteem
- Decrease need to sleep
- Excessive talking
- Racing/crowed thoughts
- Distractibility
- Increase in goal-directed activity
- Excessive risky activities

Slide 8

The PHQ-2 Depression Screening Tool

PATIENT HEALTH QUESTIONNAIRE 2 (PHQ - 2)

Over the past two weeks, how often have you been bothered by either of the following problems?

A) Little interest or pleasure in doing things. (0-3)
B) Feeling down, depressed, or hopeless. (0-3)

Not at all	Several days	More than half the days	Nearly every day
0	1	2	3

Patients with a score of 3 or greater should be followed up with PHQ-9.

Score	% Prob. of MDD	% Prob. of Any Depressive Disorder
1	15.4%	30.9%
2	21.1%	40.3%
3	38.4%	76.1%
4	45.5%	81.2%
5	56.4%	84.8%
6	78.6%	92.9%

Slide 9

The PHQ-2 Depression Screening Tool

- The PHQ-2 is a short, two question depression screening tool that is recommended to be given annually to all patients seen in primary care setting or specialty care areas .
- The purpose of this tool is to screen for depression in order to make a quick determination of whether further assessment is necessary .
- Administration and scoring takes < 1 minute and can be done by medical professional or can be handed to patients by administrative staff.

Slide 10

The PHQ-2 Depression Screening Tool

- Patients who score >3 on the PHQ-2 should be followed up with the PHQ-9 or if the health care provider has other reasons to conduct a more in-depth depression assessment.

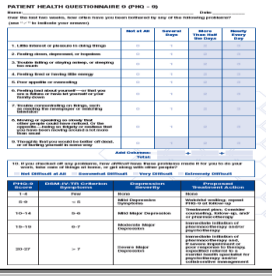
Slide 11

PHQ-9 Assessment Tool

- The PHQ-9 consists of nine questions addressing the frequency of depressive symptoms experienced by the patient
- Administration and scoring time takes approximately five minutes and can be done by any medical professional
- The PHQ-9 includes a guide for interpretation with proposed treatment actions by level of severity
- The PHQ-9 can be used with DSM- 5 diagnostic criteria to assist in the diagnosis of MDD

Slide 12

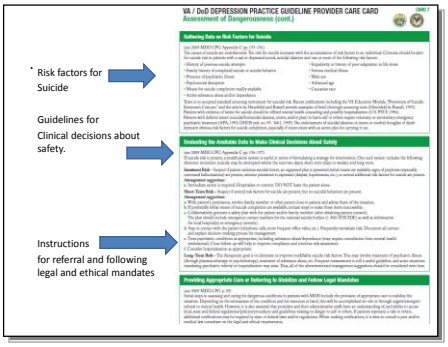
PHQ-9 Assessment Tool



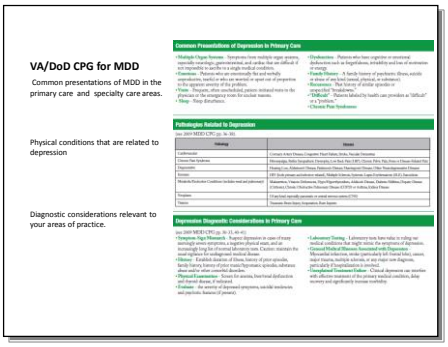
Slide 13

VA/DoD CPG for MDD

Slide 14



Slide 15



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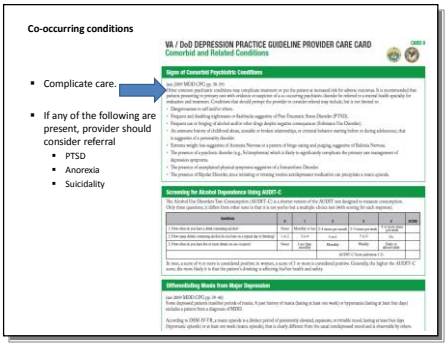


Slide 17

VA/DoD CPG for MDD and AUDIT-C

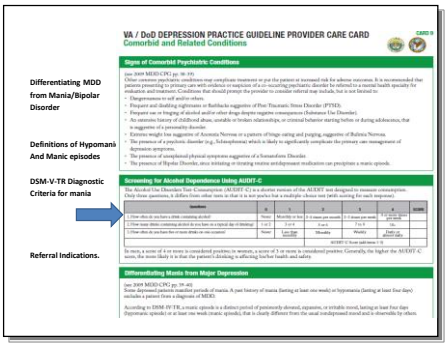
Scoring AUDIT-C

Question	0 points	1 point	2 points	3 points	4 points
1. How often did you have a drink containing alcohol in the past year?	☐ Never	☐ Monthly or less	☐ 2 to 4 times per month	☐ 2 to 3 times per week	☐ 4 or more times per week
2. On days in the past year when you drank alcohol how many drinks did you typically drink?	☐ 1 or 2	☐ 3 or 4	☐ 5 to 6	☐ 7 to 9	☐ 10 or more
3. How often do you have 6 or more drinks on an occasion in the past year?	☐ Never	☐ Less than Monthly	☐ Monthly	☐ Weekly	☐ Daily or almost daily

When the Audit-C is administered by self-report add a "0 drinks" response option to question #2 (0 points based on validations studies). In addition, it is valid to input responses of 0 points to questions #2-3 for patients who indicate "never" in response to question #1 (past year non-drinkers).

The minimum score (for non-drinkers) is 0 and the maximum possible score is 12. **Consider a screen positive for unhealthy alcohol use if AUDIT-C score is ≥ 4 points for men OR ≥ 3 points for women.**

Slide 18



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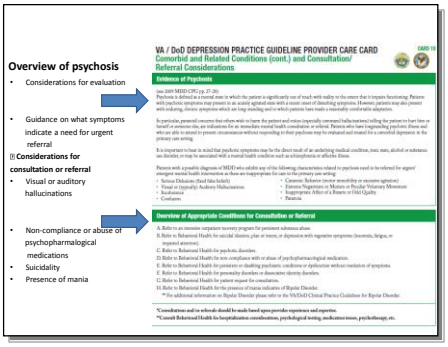

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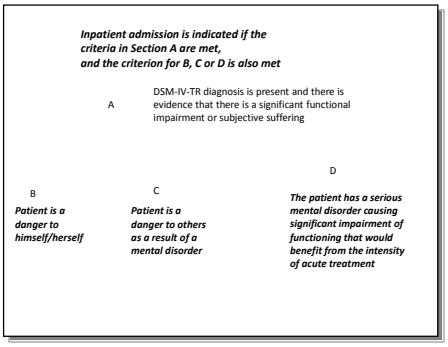

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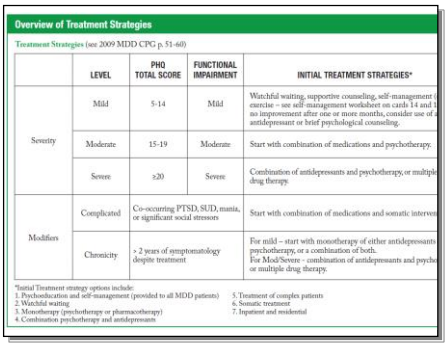


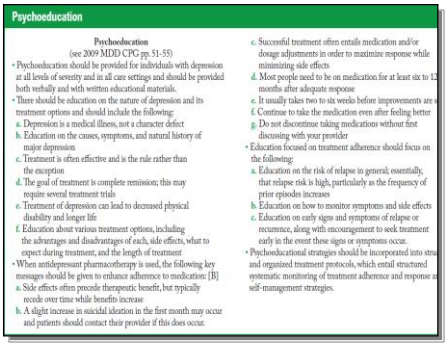
Overview of Treatment Strategies

Treatment Strategies (see 2009 MDD CPG p. 51-60)

	LEVEL	PHQ TOTAL SCORE	FUNCTIONAL IMPAIRMENT	INITIAL TREATMENT STRATEGIES*
Severity	Mild	5-14	Mild	Watchful waiting, supportive counseling, self-management (exercise – use self-management worksheet on cards 14 and 1 no improvement after one or more months, consider use of a antidepressant or brief psychological counseling.
	Moderate	15-19	Moderate	Start with combination of medications and psychotherapy.
	Severe	≥20	Severe	Combination of antidepressants and psychotherapy, or multiple drug therapy.
Modifiers	Complicated	Co-occurring PTSD, SUD, mania, or significant social stressors		Start with combination of medications and somatic interven
	Chronicity	> 2 years of symptomatology despite treatment		For mild – start with monotherapy of either antidepressants psychotherapy, or a combination of both. For Mod/Severe – combination of antidepressants and psych or multiple drug therapy.

*Initial Treatment strategy options include:
1. Psychoeducation and self-management (provided to all MDD patients)
2. Watchful waiting
3. Monotherapy (psychotherapy or pharmacotherapy)
4. Combination psychotherapy and antidepressants
5. Treatment of complex patients
6. Somatic treatment
7. Inpatient and residential

Slide 22

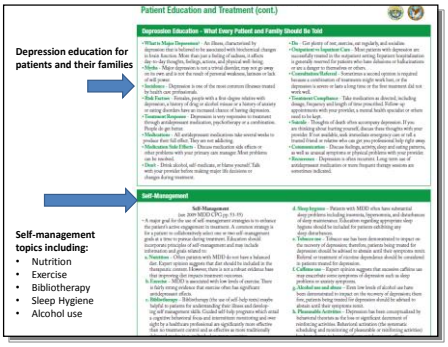


Psychoeducation

Psychoeducation
(see 2009 MDD CPG pp. 51-55)

- Psychoeducation should be provided for individuals with depression at all levels of severity and in all care settings and should be provided both verbally and with written educational materials.
- There should be education on the nature of depression and its treatment options and should include the following:
  a. Depression is a medical illness, not a character defect
  b. Education on the causes, symptoms, and natural history of major depression
  c. Treatment is often effective and is the rule rather than the exception
  d. The goal of treatment is complete remission; this may require several treatment trials
  e. Treatment of depression can lead to decreased physical disability and longer life
  f. Education about various treatment options, including the advantages and disadvantages of each, side effects, what to expect during treatment, and the length of treatment
- When antidepressant pharmacotherapy is used, the following key messages should be given to enhance adherence to medications: [B]
  a. Side effects often precede therapeutic benefit, but typically recede over time while benefits increase
  b. A slight increase in suicidal ideation in the first month may occur and patients should contact their provider if this does occur.
  c. Successful treatment often entails medication and/or dosage adjustments in order to maximize response while minimizing side effects
  d. Most people need to be on medication for at least six to 12 months after adequate response
  e. It usually takes two to six weeks before improvements are s
  f. Continue to take the medication even after feeling better
  g. Do not discontinue taking medications without first discussing with your provider
- Education focused on treatment adherence should focus on the following:
  a. Education on the risk of relapse in general; essentially, that relapse risk is high, particularly as the frequency of prior episodes increases
  b. Education on how to monitor symptoms and side effects
  c. Education on early signs and symptoms of relapse or recurrence, along with encouragement to seek treatment early in the event those signs or symptoms occur.
- Psychoeducational strategies should be incorporated into stru and organized treatment protocols, which entail structured systematic monitoring of treatment adherence and response a self-management strategies.

Slide 23



Patient Education and Treatment (cont.)

Depression education for patients and their families

Depression Education – What Every Patient and Family Should Be Told

Self-management topics including:

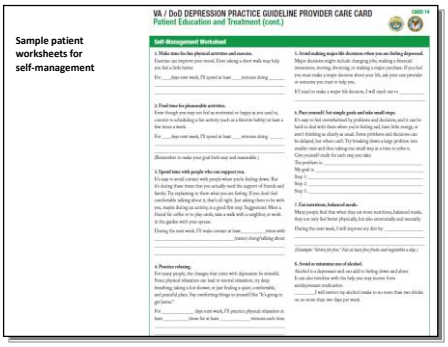
- Nutrition
- Exercise
- Bibliotherapy
- Sleep Hygiene
- Alcohol use

Self-Management

Self-Management
(see 2009 MDD CPG pp. 51-55)

Slide 24

Sample patient worksheets for self-management


VA / DoD DEPRESSION PRACTICE GUIDELINE PROVIDER CARE CARD

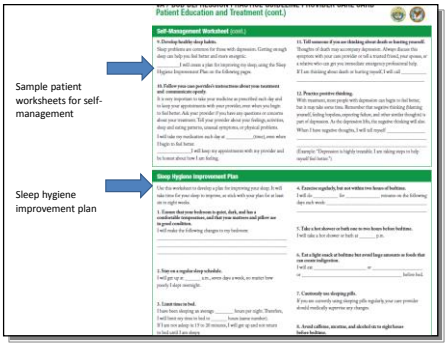
Patient Education and Treatment (cont.)

Self-Management Worksheet

Slide 25

Sample patient worksheets for self-management

Sleep hygiene improvement plan


Patient Education and Treatment (cont.)

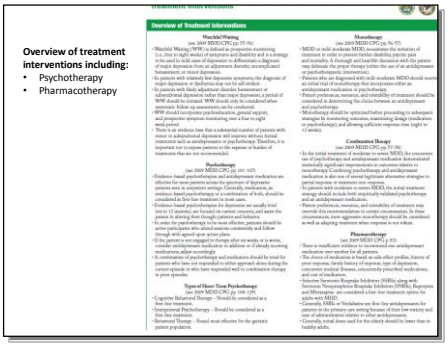
Self-Management Worksheet (cont.)

Sleep Hygiene Improvement Plan

Slide 26

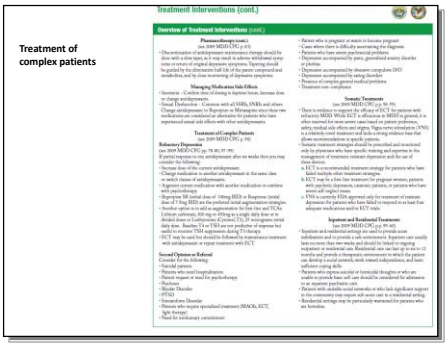
Overview of treatment interventions including:

- Psychotherapy
- Pharmacotherapy


Overview of Treatment Interventions

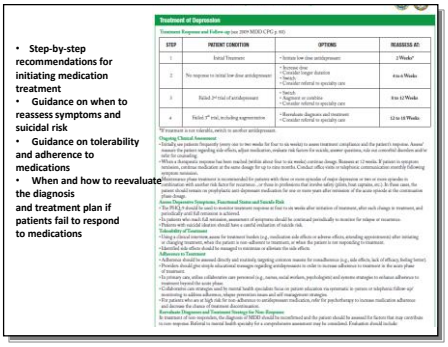
Slide 27

Treatment of complex patients



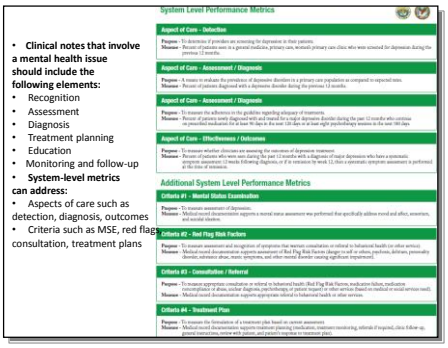
Slide 28

- **Step-by-step recommendations for initiating medication treatment**
- **Guidance on when to reassess symptoms and suicidal risk**
- **Guidance on tolerability and adherence to medications**
- **When and how to reevaluate the diagnosis and treatment plan if patients fail to respond to medications**



Slide 29

- **Clinical notes that involve a mental health issue should include the following elements:**
- Recognition
- Assessment
- Diagnosis
- Treatment planning
- Education
- Monitoring and follow-up
- **System-level metrics can address:**
- Aspects of care such as detection, diagnosis, outcomes
- Criteria such as MSE, red flags, consultation, treatment plans



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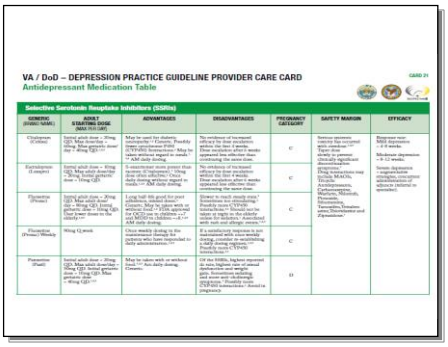


VA / DoD – DEPRESSION PRACTICE GUIDELINE PROVIDER CARE CARD

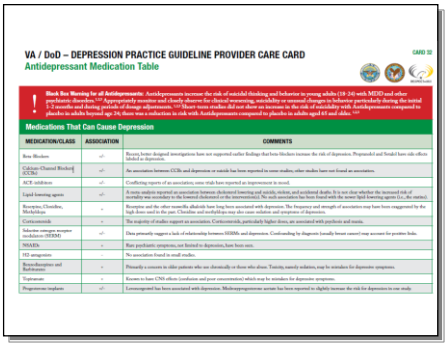
Antidepressant Medication Table

CARD 31

Selective Serotonin Reuptake Inhibitors (SSRIs)

GENERIC (TRADE) NAME	DOSE / STARTING DOSE (MAX FDA LIMIT)	ADVANTAGES	DISADVANTAGES	PREGNANCY CATEGORY	SAFETY MARGIN	EFFICACY
Citalopram (Celexa)	Initial adult dose = 20mg QD. Max dose/day = 40mg. Max geriatric dose/ day = 40mg QD.[1,2,3]	May be used for diabetic neuropathy.[1] Generic. Possibly QTc/TdP interaction.[1] May be taken with or without food.[1] Once daily dosing.	No evidence of increased efficacy for dose escalation within the first 4 weeks.[1] Dose escalation after 2 weeks appeared less effective than continuing the same dose.[1]	C	Serious ventricular arrhythmia has occurred with citalopram overdose.[1] Caution should be exercised in patients with significant electrolyte disturbances (hypokalemia, hypomagnesemia).[1] Drug interactions may include MAOIs, Pimozide, Antidepressants, Carbamazepine, Cimetidine, Ketoconazole, Nefazodone, Quinidine, Ritonavir, Sumatriptan, Tramadol, Trazodone, Tricyclics, Venlafaxine, Warfarin, Zolmitriptan.[1]	Response rate: MDD, depression = 4–8 weeks.[1] Remission of depression = 8–12 weeks.[1] Generalized anxiety disorder, panic disorder, obsessive-compulsive disorder = 12 weeks or longer.[1] Social anxiety disorder = 10–12 weeks.[1] Posttraumatic stress disorder = 12 weeks.[1] Premature ejaculation = as needed.[1] Generic depression – augmentation strategies, concurrent medications, and referrals (inferred to specialist).
Escitalopram (Lexapro)	Initial adult dose = 10mg QD. Max adult dose/day = 20mg. Initial geriatric dose = 5mg QD. Max geriatric dose = 10mg QD.[1,2,3]	It is unnecessary more potent than racemic (Citalopram).[1] 10mg dose often effective.[1] Once daily dosing.[1] Generic.[1] Possibly QTc/TdP interaction.[1] May be taken with or without food.[1]	No evidence of increased efficacy for dose escalation within the first 4 weeks.[1] Dose escalation after 2 weeks appeared less effective than continuing the same dose.[1]	C		
Fluoxetine (Prozac)	Initial adult dose = 20mg QD. Max adult dose/day = 80mg QD. Initial geriatric dose = 10mg QD. Dose lower dose in the elderly.[1,2,3] Long half-life good for poor adherence, missed dose.[1] Generic. May be taken with or without food.[1] 10mg dose for OCD (use in children >=7 yrs) and MDD in children >=8 yrs.[1,2,3] AM only dosing.	Slower to reach steady state.[1] Long half-life.[1] Possibly more CYP450 interactions.[1] Should be taken at night in the elderly (due to delirium / Associated with rash and allergic events.)[1,2,3]	C		
Fluoxetine (Prozac) Weekly	90mg Q week.	Once weekly dosing in the maintenance phase for patients who have responded to daily administration.[1,2,3]	If a satisfactory response is not achieved after 4 weeks of dosing, consider re-establishing daily fluoxetine dosing.[1] Possibly more CYP450 interactions.[1,2,3]	C		
Paroxetine (Paxil)	Initial adult dose = 20mg QD. Max adult dose/day = 50mg QD. Initial geriatric dose = 10mg QD. Max geriatric dose = 40mg QD.[1,2,3]	May be taken with or without food.[1] Once daily dosing.[1] Generic.[1]	Of the SSRIs, highest reported incidence of sexual dysfunction and weight gain. Interactions including Cimetidine, Digoxin, Phenothiazines.[1] Possibly more interactions.[1] Avoid in pregnancy.[1,2,3]	D		

Slide 31



VA / DoD – DEPRESSION PRACTICE GUIDELINE PROVIDER CARE CARD

Antidepressant Medication Table

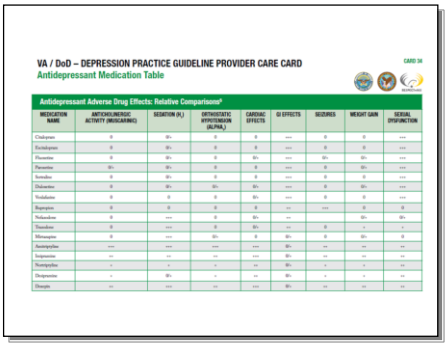
CARD 32

Black Box Warning for all Antidepressants: Antidepressants increase the risk of suicidal thinking and behavior in young adults (18–24) with MDD and other psychiatric disorders.[1,2,3] Appropriately monitor and closely observe for clinical worsening, suicidality or unusual changes in behavior, particularly during the initial 1–2 months and during periods of dosage adjustments.[1,2,3] Short-term studies did not show an increase in the risk of suicidality with Antidepressants compared to placebo in adults beyond age 24; there was a reduction in risk with Antidepressants compared to placebo in adults aged 65 and older.[1,2,3]

Medications That Can Cause Depression

MEDICATION/CLASS	ASSOCIATION	COMMENTS
Beta Blockers	+/-	Recent, better designed investigations have not supported earlier findings that beta blockers increase the risk of depression. Propranolol and Sotalol have side effects labeled as depression.
Calcium-Channel Blockers (CCBs)	+/-	An association between CCBs and depression or suicide has been reported in some studies; other studies have not found an association.
ACE inhibitors	+/-	Conflicting reports of an association; some trials have reported an improvement in mood.
Lipid-lowering agents	+/-	A meta-analysis reported an association between cholesterol-lowering and suicide, violent, and accidental deaths. It is not clear whether the increased risk of mortality was secondary to the lowered cholesterol or the intervention(s). No such association has been found with the newer lipid-lowering agents (i.e., the statins).
Reserpine, Clonidine, Methyldopa	+	Reserpine and the other rauwolfia alkaloids have long been associated with depression. The frequency and strength of associations may have been exaggerated by the high doses used in the past. Clonidine and methyldopa may also cause sedation and symptoms of depression.
Corticosteroids	+	The majority of studies support an association. Corticosteroids, particularly higher doses, are associated with psychosis and mania.
Selective estrogen receptor modulators (SERM)	+/-	Data primarily suggest a lack of relationship between SERMs and depression. Confounding by diagnosis (usually breast cancer) may account for positive links.
NSAIDs	+	Rare psychiatric symptoms, not limited to depression, have been seen.
H2 antagonists	-	No association found in small studies.
Benzodiazepines and Barbiturates	+	Primarily a concern in older patients who are chronically or those who abuse. Toxicity, namely sedation, may be mistaken for depressive symptoms.
Topiramate	+	Known to have CNS effects (confusion and poor concentration) which may be mistaken for depressive symptoms.
Progesterone implants	+/-	Levonorgestrel has been associated with depression. Medroxyprogesterone acetate has been reported to slightly increase the risk for depression in one study.

Slide 32



VA / DoD – DEPRESSION PRACTICE GUIDELINE PROVIDER CARE CARD

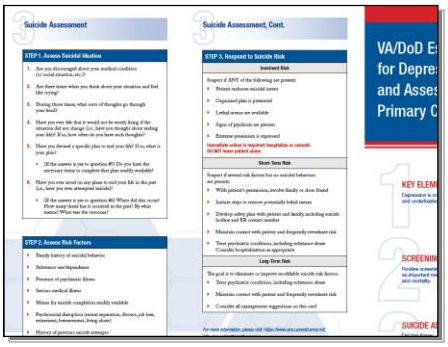
Antidepressant Medication Table

CARD 34

Antidepressant Adverse Drug Effects: Relative Comparisons[2]

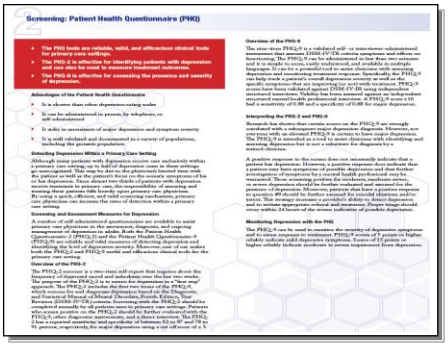
MEDICATION NAME	ANTICHOLINERGIC ACTIVITY (MUSCARINIC)	SEDATION (H1)	ORTHOSTATIC HYPOTENSION (ALPHA1)	CARDIAC EFFECTS	GI EFFECTS	SEIZURES	WEIGHT GAIN	SEXUAL DYSFUNCTION
Citalopram	0	0/+	0	0	+/-	0	0	+/-
Escitalopram	0	0/+	0	0	+/-	0	0	+/-
Fluoxetine	0	0/+	0	0/+	+/-	0/+	0/+	+/-
Paroxetine	0/+	0/+	0	0	+/-	0	0/+	+/-
Sertraline	0	0/+	0	0	+/-	0	0	+/-
Duloxetine	0	0/+	0/+	0/+	+/-	0	0/+	+/-
Venlafaxine	0	0	0	0/+	+/-	0	0	+/-
Bupropion	0	0	0	0	-/-	-/-	0	0
Nefazodone	0	+/-	0	0/+	+/-		0/+	0/+
Trazodone	0	+/-	0	0/+	+/-	0	+	+
Mirtazapine	0	+/-	0/+	0	0/+	0	0/+	0
Amitriptyline	+/-	+/-	+/-	+/-	0/+	+/-	+/-	+/-
Imipramine	+/-	+/-	+/-	+/-	0/+	+/-	+/-	+/-
Nortriptyline	+	+	+	+/-	0/+	+	+	+/-
Desipramine	+	0/+	+	+/-	0/+	+	+	+/-
Doxepin	+/-	+/-	+/-	+/-	0/+	+/-	+/-	+/-

Slide 33



Key elements of MDD CPG
Suicide assessment
The patient health questionnaires

Slide 34



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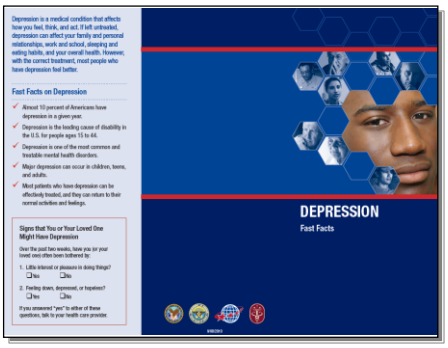
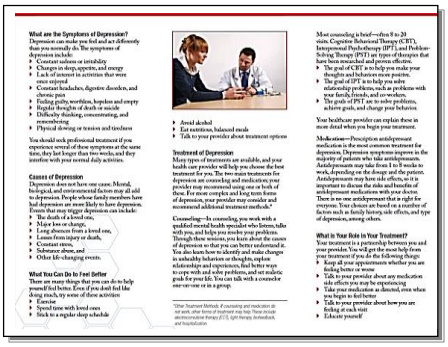
VA/DoD CPG for MDD
Key elements of MDD CPG
Suicide assessment
The patient health questionnaires

Slide 35



Fast facts, symptoms, causes, helpful activities, treatments, medications, patient and provider roles in treatment.

Slide 36



What are the Symptoms of Depression?

Depression can make you feel and act differently than you normally do. The symptoms of depression include:

- Constant sadness or irritability
- Changes in sleep, appetite, and energy
- Lack of interest in activities that were once enjoyed
- Constant headaches, digestive disorders, and chronic pain
- Feeling guilty, worthless, hopeless and empty
- Regular thoughts of death or suicide
- Difficulty thinking, concentrating, and remembering
- Physical slowing or tension and tiredness

You should seek professional treatment if you experience several of these symptoms at the same time, they last longer than two weeks, and they interfere with your normal daily activities.

Causes of Depression

Depression does not have one cause. Mental, biological, and environmental factors may all add to depression. People whose family members have had depression are more likely to have depression. Events that may trigger depression can include:

- The death of a loved one,
- Major loss or change,
- Long absences from a loved one,
- Losses from injury or death,
- Constant stress,
- Substance abuse, and
- Other life-changing events.

What You Can Do to Feel Better

There are many things that you can do to help yourself feel better. Even if you don't feel like doing much, try some of these activities:

- Exercise
- Spend time with loved ones
- Stick to a regular sleep schedule
- Avoid alcohol
- Eat nutritious, balanced meals
- Talk to your provider about treatment options

Treatment of Depression

Many types of treatments are available, and your health care provider will help you choose the best treatment for you. The two main treatments for depression are counseling and medication; your provider may recommend using one or both of these. For more complex and long term forms of depression, your provider may consider and recommend additional treatment methods.*

Counseling—In counseling, you work with a qualified mental health specialist who listens, talks with you, and helps you resolve your problems. Through these sessions, you learn about the causes of depression so that you can better understand it. You also learn how to identify and make changes in unhealthy behaviors or thoughts, explore relationships and experiences, find better ways to cope with and solve problems, and set realistic goals for your life. You can talk with a counselor one-on-one or in a group.

*Other Treatment Methods. If counseling and medication do not work, other forms of treatment may help. These include electroconvulsive therapy (ECT), light therapy, biofeedback, and hospitalization.

Most counseling is brief—often 8 to 20 visits. Cognitive Behavioral Therapy (CBT), Interpersonal Psychotherapy (IPT), and Problem-Solving Therapy (PST) are three techniques that have been researched and proven effective.

- The goal of CBT is to help you make your thoughts and behaviors more positive.
- The goal of IPT is to help you solve relationship problems, such as problems with your family, friends, and co-workers.
- The goals of PST are to solve problems, achieve goals, and change your behavior.

Your healthcare provider can explain these in more detail when you begin your treatment.

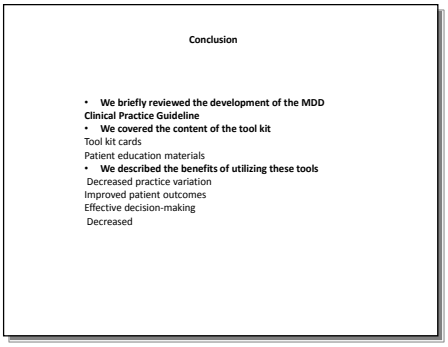
Medications—Prescription antidepressant medication is the most common treatment for depression. Depression symptoms improve in the majority of patients who take antidepressants. Antidepressants may take from 1 to 8 weeks to work, depending on the dosage and the patient. Antidepressants may have side effects, so it is important to discuss the risks and benefits of antidepressant medications with your doctor. There is no one antidepressant that is right for everyone. Your choices are based on a number of factors such as family history, side effects, and type of depression, among others.

What is Your Role in Your Treatment?

Your treatment is a partnership between you and your provider. You will get the most help from your treatment if you do the following things:

- Keep all your appointments whether you are feeling better or worse
- Talk to your provider about any medication side effects you may be experiencing
- Take your medication as directed, even when you begin to feel better
- Talk to your provider about how you are feeling at each visit
- Educate yourself

Slide 37



Conclusion

- **We briefly reviewed the development of the MDD Clinical Practice Guideline**
- **We covered the content of the tool kit**

Tool kit cards
Patient education materials

- **We described the benefits of utilizing these tools**

Decreased practice variation
Improved patient outcomes
Effective decision-making
Decreased

Fast Facts, symptoms, causes, helpful activities, treatments, medications, patient and provider roles in treatment.

APPENDIX D

BARRY UNIVERSITY

APPROVAL LETTER TO USE THE CHRONIC CARE MODEL

Re: permission request

Cohen-Hammond, Erica (Barry Student)

Sat 9/13/2014 12:25 PM

Sent Items

To: permissions <[redacted]>;

Helen,

Thank you for granting me the permission the use the aforementioned model.

Sincerely,

Erica Cohen- Hammond.

Sent from my iPhone

On Sep 12, 2014, at 1:08 PM, "permissions" <[redacted] wrote:

Erica,

You have permission to use the figure at no charge for your doctoral degree proposal.

Thank you,

Helen

Helen Canavan

[redacted]

[redacted]

>>> "Cohen-Hammond, Erica (Barry Student)" [redacted]

[redacted]> 9/11/2014 6:26 PM >>>

Hi Helen,

Yes , I am writing my proposal to use: Model for improvement of chronic illness care, in my scholarly inquiry. It is not a thesis, however it is for a doctoral degree as I mentioned. Please let me know as soon as possible if the permission is granted.

Thank you for your help. Please feel free to call me at 561-603-4228 if you have any questions.

Sincerely

Erica Cohen- Hammond

Sent from my iPhone

On Sep 11, 2014, at 3:10 PM, "permissions" <[redacted] wrote:

Erica,

Just to confirm, the model for improvement of chronic care from our Effective Clinical Practice journal will be used as part of your thesis?

Thanks,

Helen

Helen Canavan

[redacted]

[redacted] 9/4/2014 2:34 PM >>>

FirstName=Erica

Volume=

Translating=No

Format=Print

email=[redacted]

ArticleTitle=Depression screening in primary care

PageCount=57

Website=

Recipients=

Author=

AreYouAuthor=Yes

Phone=5617925926

WordCount=

YearPublished=2014

AdditionalComments=

BookTitle=Effective Clinical Practice" Chronic Disease Management: What Will It Take To Improve Care for Chronic Ilness?"

Address=14846 Orange Blvd

City=Loxahatchee

State=FLORIDA

Title=Mrs.

ArticleFirstAuthor=Erica Cohen-Hammond

Zip=33470

LastName=Cohen-Hammond

Company=Barry University

OtherUse=I am a Doctor of Nursing Practice student at Barry University. I propose to use the Model for improvement of chronic illness care as my theoretical framework in assisting primary care providers to screen and care effectively for their patients with depression.

InformationAboutUse=Other

LinkAccess=

Country=United States

PageNumbers=13-14

Illustrations=Figure 1. Model for improvement of chronic illness care

Languages=

APPENDIX E

BARRY UNIVERSITY

SCREENING FOR DEPRESSION IN ADULTS CLINICAL SUMMARY OF U.S. PREVENTIVE SERVICE TASK FORCE RECOMENDATION

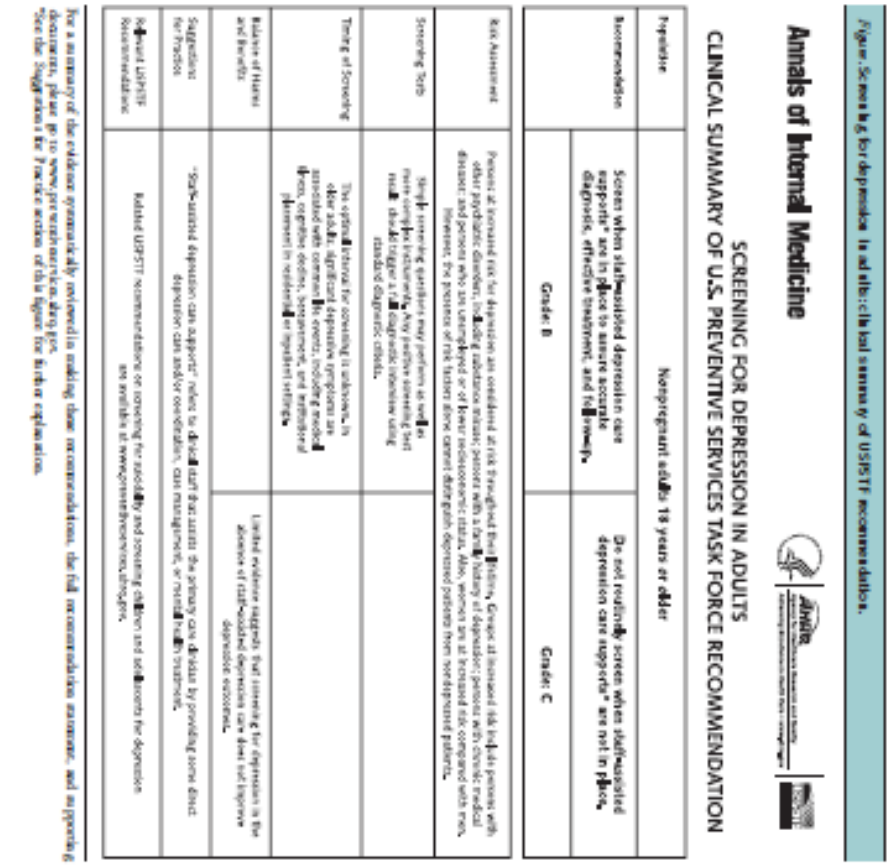


Figure. Screening for depression in adults: clinical summary of USPSTF recommendation.

Annals of Internal Medicine

SCREENING FOR DEPRESSION IN ADULTS
CLINICAL SUMMARY OF U.S. PREVENTIVE SERVICES TASK FORCE RECOMMENDATION

Population	Nonpregnant adults 18 years or older	
Recommendation	Screens when staff-assisted depression care supports* are in place to assure accurate diagnosis, effective treatment, and follow-up.	Do not routinely screen when staff-assisted depression care supports* are not in place.
	Grade: B	Grade: C

Risk Assessment	Persons at increased risk for depression are considered at risk throughout their lifetime. Groups at increased risk include persons with other psychiatric disorders, including substance abuse; persons with a family history of depression; persons with chronic medical diseases; and persons who are unemployed or of lower socioeconomic status. Also, women are at increased risk compared with men. However, the presence of risk factors alone cannot distinguish depressed patients from nondepressed patients.
Screening Tests	Simple screening questions may perform as well as more complex instruments. Any positive screening test must be followed up with a diagnostic interview using standard diagnostic criteria.
Timing of Screening	The optimal interval for screening in unknown. In older adults, significant depressive symptoms are associated with common life events, including medical illness, cognitive decline, bereavement, and institutional placement in residential or inpatient settings.
Balance of Harms and Benefits	Limited evidence suggests that screening for depression in the absence of staff-assisted depression care does not improve depression outcomes.
Suggestions for Practice	"Staff-assisted depression care supports" refers to clinical staff that assists the primary care clinician by providing some direct depression care and/or coordination, case management, or mental health treatment.
Relevant USPSTF Recommendations	Related USPSTF recommendations on screening for suicidality and screening children and adolescents for depression are available at www.preventiveservices.ahrq.gov.

For a summary of the evidence systematically reviewed in making these recommendations, the full recommendation statement, and supporting documents, please go to www.preventiveservices.ahrq.gov.
*See the Staff-Assisted Depression Care Supports for Practice section of this figure for further explanation.

APPENDIX F

BARRY UNIVERSITY

EDUCATIONAL EVALUATION ON HOW TO SCREEN FOR DEPRESSION

USING THE PHQ-9 AND DSM-5 CRITERIA

DEPRESSION SCREENING IN SPECIALTY CARE: IMPROVING CLINICAL OUTCOMES EDUCATING FUTURE ACUTE NURSE PRACTITIONERS.

Educational Evaluation on How to Screen for Depression Using the PHQ-9 and DSM-5 Criteria

Direction: Please fill in the responses that best represent your opinion. The Doctor of Nurse Practice scholar greatly appreciates and thanks you for supplying the information needed. Information you submit will be considered confidential.

After completing this educational session on Depression Screening in the Specialty Care Areas, I am able to:

1. Discuss the shortest screening instrument for depression in adults to 18 to 64 in the specialty care areas.

- Yes
- No

2. Discuss that every adult patients ages 18 to 64 should be screened for depression at least yearly, or if

there is a change in the medical and/or mental health status in the specialty care areas using the PHQ-9 and DSM-5 criteria.

- Yes
- No

3. Describe the pathophysiology of depression.

- Yes
- No

4. Explain how depression screening used in the specialty care areas will benefit my patients through early screening which improve patients' outcome.

- Yes
- No

5. Recognize the symptoms of depression in your specialty care areas patients.

- Yes
- No

6. Describe the PHQ-9 Depression severity and proposed treatment actions using the 5 points rule: This will aid in providing the appropriate treatment methods.

- Yes
- No

7. Explain when a patient answers "yes" to " over the past 2 weeks I have been bothered by thoughts that
I will be better off dead or hurting self in some way?" Must probe on the intentions of suicide and plans to carry it out. It is an EMERGENCY and the health care provider must get them to a psych-facility.

- Yes
- No

8. Describe the PHQ-9 and the patient`s global impression of symptoms-rated impairment and how it is
associated with both psychiatric symptoms severity as well as multiple measures of impairment and health related quality of life.

- Yes
- No

9. Discuss ways to engage patients and other health care providers in screening for depression in the
specialty care areas.

- Yes
- No

10. The educational content of this project was presented in a well-organized and clearly written manner.

- Yes
- No

11. The educational content of this project was presented in a fair, unbiased and balanced manner.

Yes

No

12. The educational content of this project presented current practice guidelines for depression screening.

Yes

No

13. The educational content of this project was relevant to my professional practice or interests.

Yes

No

14. The educational content of this project expanded my knowledge and enhanced my skills related to the depression screening in the specialty care areas.

Yes

No

15. I intend to apply the knowledge and skills I have learned to my practice now and when I am a licensed Acute Nurse Practitioner.

Yes

No

16. I will promote increased utilization of the PHQ-9 and DSM-5 criteria as a standardized mean of screening non-pregnant adults 18 to 64 in the specialty care areas.

- Yes
- No

Submit

APPENDIX G

BARRY UNIVERSITY

PERMISSION LETTERS

Barry University
College of Nursing and Health Sciences

11300 NE 2nd Avenue, Miami, FL 33161
P: 305.899.3000 or 1.800.756.6429 ext. 3000
F: 305.899.3956
www.barry.edu

May 14, 2015

Dear Erica Cohen-Hammond;

You have permission to perform an educational intervention in the classroom at Barry University. You have permission to conduct this educational intervention with the future Acute Care Nurse Practitioner students. You may contact the acute care nurse practitioner students via email and provide the invitation letter.

Sincerely,

Terri Rocafort MSN, ANP-BC
Director NP/DNP Specializations
Barry University
Miami Shores, Florida 33161

VITA

Dr. Erica Cohen-Hammond DNP, RN

14846 Orange Boulevard

Loxahatchee, FL 33470

561-603-4228

ericacohenhammond@gmail.com

Education

Degree	Date	Major
Doctorate in Nursing Practice Practitioner	2015	Acute Care Nurse
Barry University, Miami Shores, FL		
Bachelor of Nursing Science	2005	Nursing
South University, West Palm Beach, FL		

Professional Licensure

Registered Nurse

Professional Experience

Position	Organization	Dates
RN in ICU/CCU	Wellington Regional Medical Center	2008 - 2014
RN in CVICU	Aventura Hospital and Plantation General	2007 -2008
RN in CVICU	Delray Medical Center	2006-2007
RN Director of Restorative Nursing	Harbour's Edge Health Center	2003-2006

Honors and Awards	**Dates**
Most Outstanding Mathematics Student	2001 - 2002
Vice President of ALD Honor Society	2002 - 2003
President of South University Student Nurse Association	2004 - 2005
Lifetime Member of Delta Epsilon Iota Academic Honor Society	2014 - Present

Scholarly Activities

Doctor of Nursing Practice Scholarly Project: At Barry University "Depression Screening: Improving Clinical outcomes Educating Future Acute Care Nurse Practitioners." The project was successfully defended on 8/27/2015.

Professional Memberships

American Nurse Association

Florida Nurse Association

American Association of Nurse Practitioners

Community Service	**Dates**
Health Educator at Davidic Covenant Ministries	Currently
Board Member of the Board of Education in Boynton Beach, FL	2004
Neighborhood President- Ridgewood, Boynton Beach, FL	2003 - 2006