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Staff Education Project Depression Screening Education

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College of Nursing

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Olayemi Ikhile

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2025

Executive Summary: Staff Education Project

Depression Screening Education

by

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Summary

The primary care setting is one of the most common settings where patients with depression present. Despite this, many primary care clinicians may not feel adequately equipped to diagnose and treat depression effectively. Increasing depression screening is one of the ways to improve the early detection and treatment of depression in primary care settings. This paper describes a staff education project on depression screening among nurses at a primary care health clinic in the South-Central area of the United States. The purpose of the project was to develop, implement, and evaluate a staff education program on depression screening. The goal was to improve staff knowledge of depression screening in the primary care setting. The project was developed using the analysis, design, development, implementation, and evaluation (ADDIE) framework.

A 10-question pretest and posttest questionnaire was administered, and the results were analyzed using the learning gain percentages formula. Feedback was also collected through a program evaluation survey to evaluate satisfaction with the program. Among the 10 participants, the score increased from $M = 6.9$ to $M = 7.8$, resulting in a learning gain of 25.0%. These outcomes suggest that the educational intervention slightly improved the staff's knowledge about depression screening. The project supports nursing practice by improving awareness and knowledge about screening for depression on all patients providing more equitable care, thus, promoting a positive social change. It is recommended that additional educational sessions be implemented with a different evaluation tool to measure knowledge gain.

Background

Depression is a leading cause of disability worldwide (Costantini et al., 2021). While it is estimated that 10–14% of patients in primary care have major depressive disorder, up to 50% of these patients remain undetected (Blackstone et al., 2022). The incidence of depression in young people escalated during the COVID-19 pandemic, with a 13.0% rise in individuals aged 18 to 24 years and a 9.8% rise in those aged 25 to 34 years. Altogether, the high lifetime prevalence of depression makes it a health crisis that should be addressed urgently (Simon et al., 2024). Depression can present with many different symptoms, and many patients with depression are more likely to go to their primary care provider to be seen for these symptoms.

Primary care providers play a crucial role in identifying and treating patients with depression, as they are often the first point of contact for individuals seeking help. Despite its prevalence, depression usually goes undiagnosed and untreated, leading to severe consequences for individuals and society. Providers can utilize early detection and treatment through the implementation of effective depression screening in primary care. (Richardson & Brahmbhatt, 2021).

Gap in Practice

Despite the established prevalence of depression in the primary care setting, the screening for depression continues to be under-screened. The U.S. Preventive Services Task Force (USPSTF) recommends routine depression screening for adults in primary care settings. Depression screening instruments like the Patient Health Questionnaire (PHQ), Geriatric Depression Scale (GDS), and Edinburgh Postnatal Depression (EPDS) are depression screening tools used in various age groups and postpartum and pregnant

individuals (USPSTF, 2023). The PHQ is one of the most widely used screening tools, consisting of nine questions that assess the presence and severity of depressive symptoms (Richardson & Brahmbhatt, 2021). However, many primary settings do not utilize the PHQ9 tool even when implemented. There is inconsistency in the implementation of depression screening protocols across primary care settings, leading to missed opportunities for early detection and intervention. Other challenges, such as the time constraints of primary care visits and lack of provider training in mental health assessment, may also contribute to underutilizing screening tools like the PHQ9 (Blackstone et al., 2022).

The project site has the PHQ2/9 tool readily available for primary care providers, but more utilization needs to be consistent. There is a need for additional training and education to ensure that providers and staff members feel confident in administering and interpreting the results of the PHQ9.

Project Purpose and Question

The purpose of the project was to develop, implement, and evaluate a staff education program on depression screening. The project question was as follows: Does the implementation of a staff education training program increase the knowledge of depression screening in a primary care setting? By answering this question on implementing a staff education training program, I aim to bridge the gap in practice by improving the rates of depression screening in primary care settings.

Evidence Supporting the Project Change and Gap in Practice

Current literature on the practice gap has continued to support that increasing education and training for primary care providers is crucial in improving the

identification and management of depression. More patients can promptly receive the care they need by equipping healthcare professionals with the tools they need to recognize and address mental health concerns (Blackstone et al., 2022; Richardson & Brahmbhatt, 2021). By providing education and training to primary care providers and other staff members, I hope to increase the detection rates of depression and ultimately improve the outcomes for individuals struggling with depression. Through these efforts, I aim to bridge the gap in practice and ensure that individuals receive the necessary support and care for their mental health concerns. This proactive approach can ultimately lead to earlier detection and intervention for individuals struggling with depression, ultimately improving their quality of life, and reducing the burden of untreated mental illness on society. By equipping healthcare providers with the knowledge and skills necessary for effective depression screening, I hope to contribute to a more holistic and compassionate healthcare system that prioritizes mental health alongside physical health.

The USPSTF has advised the screening of depression in general adult and perinatal populations. The task force's endorsement is based on strong evidence showing that increased screening for depression results in earlier detection and treatment, thereby enhancing patient outcomes (USPFT, 2023). In some other nations, like Canada and the United Kingdom, screening for depression is not advised because there is insufficient proof from trials that screening improves health outcomes and because of worries about resource consumption and adverse effects. In the United States, screening for depression is seen as a crucial step in improving mental health care and overall well-being (Nassar et al., 2022). With the prevalence of mental health issues on the rise, early detection through screening can lead to timely interventions and support for those in need. By following the

Task Force's recommendation, healthcare providers can better identify and address depression, ultimately reducing the burden of untreated mental illness in the population.

Further, there is strong evidence from systematic review research that the use of the PHQ-9 tool in the primary care setting is effective in accurately identifying individuals with depression and initiating appropriate treatment. Implementing routine depression screening using validated tools like the PHQ-9 can help healthcare providers tailor interventions and support for everyone, leading to improved outcomes and overall mental well-being. In essence, increased awareness and utilization of screening tools in primary care settings can play a significant role in improving mental health care and ultimately reducing the negative impact of untreated depression in society (Costantini et al., 2023).

Staff Education Project Development

Participants

Ten participants in this staff education project included a multidisciplinary group of healthcare professionals including certified medical assistants and a registered nurse, a physician, nurse practitioner, registered dietician, and a licensed therapist.

Procedures for Developing and Implementing the Staff Education

The project management process's initial steps in development included identifying the project's focus. I conducted a SWOT analysis to identify the project focus and assess the strengths, weaknesses, opportunities, and threats related to depression screening. The SWOT analysis results showed that the strength of the project site was that there was a screening tool that was already implemented; the weakness was the need for more consistency among staff members and providers on how to administer and

interpret the results. The SWOT analysis showed that there were opportunities for improvement in staff education and training in depression screening. The threat identified in the SWOT analysis was the potential for high staff turnover and lack of resources, which could impact the consistency and quality of screening procedures.

This analysis highlighted the need for staff education and training to address the inconsistency in depression screening tool utilization. I also performed an organizational assessment, which showed that the organization lacked clear protocols and guidelines for depression screening practices. The inconsistency in depression screening could lead to variability in the quality of care provided to patients seeking mental health support. To advance the process to the next stage, I needed endorsement from the stakeholders, which included site approval. Meeting with the stakeholders was crucial in gaining support and buy-in for the proposed changes in depression screening practices. I presented the purpose, outcomes, and project activities. I maintained the ethical standard. The stakeholders were receptive to the proposed changes and expressed their commitment to improving the quality of care for patients with depression. The following steps in the project management process involved developing a comprehensive training program that covers depression knowledge and depression screening.

The content was developed based on the results of a thorough literature review that included best practices in quality improvement, evidence-based practice, and nursing research that recommends that screening for depression increases the detection of depression in the primary care setting (Costantini et al., 2021; Habtamu et al., 2023). The project was implemented after obtaining site approval from the clinical site, completion of an ethics pledge with approval by Walden University for implementation, and

approval by the DNP committee faculty. The project site manager recruited participants via email and in-person meetings. The education training materials included an in-person 30-minute PowerPoint presentation at the project site (see Appendix A). The participants completed a pre- and post-questionnaire to assess learning gain.

Theoretical Framework

There are numerous instructional design models available for developing education programs. One of the most common is the ADDIE model. The theoretical framework of the ADDIE model provided a clear structure for developing the education program on depression screening in primary care settings. The analysis stage allowed for a thorough assessment to identify gaps in depression management in the primary practice site and to identify the educational needs of the staff for depression screening. In the design phase, specific learning objectives were established, and the content was organized to facilitate learning best. During development, the writer created the PowerPoint presentation slides, the pre/posttest questionnaires were created, and the PowerPoint presentation was organized in a way that would be engaging and informative. Implementation involved the actual delivery of the education program, and the participants were allowed to engage and ask questions, while evaluation allowed for the effect of the education program using the pre- and post-test questionnaire handout. Overall, the ADDIE model ensured that the education program was comprehensive, well-structured, and effective in meeting the needs of individuals and organizations seeking to address depression in primary care settings.

Collection and Analysis of Evidence

The collection and analysis of evidence in this staff education project was carried out to evaluate the effectiveness of the education intervention and its impact on clinical practice. The participants completed a pen-and-paper set of 10 multiple-choice questionnaires before and after the education program to assess their knowledge in identifying and understanding their role in screening for depression in a primary care setting. The knowledge questionnaires included 10 multiple-choice items worth 1 point each with a possible total score of 10 points (see Appendix B). The questionnaires were scored, and the results were reviewed with the participants. Through this process, I could track the participants' progress and identify any areas of improvement. By examining the results with the participants, I was able to provide individualized feedback and support, ultimately enhancing the quality of care provided in primary care settings. Further, I then organized the data collected into tables to further analyze the education program's effectiveness and identify any patterns or trends. This data can inform future interventions or adjustments to the screening protocol to better meet patients' needs.

Following the education program, each participant completed an evaluation using the Summative Program Evaluation Tool (see Appendix C). I created this survey to gather participants' opinions and experiences on the program, enabling them to evaluate its performance and pinpoint areas for improvement.

Evaluation Process

The pre- and post-test results were compared to assess the participant's level of knowledge. Data from the pretest and posttest questionnaires were calculated using normalized learning gain. The normalized learning gain is a descriptive statistical method

that measures the effectiveness of an educational course in promoting conceptual understanding and has become the standard measure for reporting scores on research-based concept inventories (McKagan et al., 2022). The formula for calculating a learning gain is (Post-Learning Score minus Pre-Learning Score) / (Maximum Score minus Pre-Learning Score) x 100.

The last question on the pre- and post-questionnaire evaluated the participant's perspective about the education program's impact on their understanding of their role in depression screening. The participants also completed a voluntary review of the educational intervention program to provide feedback on their experience and suggest areas for improvement. This feedback is crucial in ensuring that future educational interventions effectively meet the participants' needs and achieve the desired learning outcomes. This evaluation process can help inform the development of future educational interventions and improve the overall quality of the depression education module provided to staff in a primary care setting.

Results

Postimplementation Results

Ten people from various disciplines participated in the educational intervention. Data from the pretest and posttest questionnaires were analyzed using the following normalized learning gain of averages:

$$\frac{[(\text{post-test score}) - (\text{pre-test score})]}{(10 - \text{pre-test score}) \times 100}$$

Among the 10 participants, there was an overall increase found in the scores after the educational intervention. The mean test score on the pretest (M = 6.9) to posttest (M =

7.8) calculated 25.0% as the learning gain of averages (see Table 1). The minor improvement in posttest scores indicates that the nursing education program slightly enhanced their knowledge and understanding. Less than half of the participants' posttest scores showed an improvement.

Overall, the education program on depression screening was only slightly effective in increasing knowledge among staff members, with less than half of the participants showing improvement in their understanding of their role in screening for depression.

Table 1

*Pre and Post-Test Score Results**

ID	Pretest score	Pretest %	Posttest score	Posttest %	Learning gain %
1	8	80	7	70	-05.0
2	7	70	9	90	66.7
3	7	70	8	80	33.3
4	8	80	8	80	0.0
5	6	60	9	90	75.0
6	7	70	7	70	0.0
7	7	70	7	70	0.0
8	5	50	9	90	80.0
9	7	70	7	70	0.0
10	7	70	7	70	0.0
Mean score	6.9		7.8		25.0

Note. *There were 10 questions on the knowledge questionnaire. One point was given if the question was correctly answered, and the number of correctly answered questions was added.

Evaluation of the Staff Education Program

The 10-question Summative Program Evaluation Tool asked questions such as the content's quality and effectiveness, the information's clarity, and the overall impact on their knowledge and attitudes toward mental health. The feedback received from the survey was overwhelmingly positive, with many participants expressing appreciation for the valuable insights gained from the education module. Overall, the feedback survey provided valuable insights that can be used to refine further and enhance the mental health education program for future participants.

Impact on the Organization

The impact of the education module was immediate, as the participants gave feedback on their perspective of the education module. A majority agreed that the module provided them with valuable information and tools to better identify and support patients with depression. This has increased staff members' awareness and understanding of mental health issues, shifting the organizational culture. Additionally, the education module increased the knowledge that better screening practices for depression can lead to timely interventions, preventing potential safety issues such as worsening mental health conditions or suicidal ideation in patients.

Limitations and Impact on Project Results

Three limitations are apparent in this quality improvement program that impact the interpretation:

1. The sample size was small, which may not represent the larger population.
2. The knowledge pre- and post-test included several true and false questions. True and false questions provide a 50% chance of participants selecting the correct answer. Multiple-choice questions are a better measure.
3. The survey's immediate posttraining feedback often reflects participants' initial enthusiasm or positive impressions. Still, it does not measure whether the new skills or knowledge were retained or effectively applied in the long term. As a result, the project may overestimate the program's success if it does not account for potential declines in practice over time.
4. The survey questions were self-reported, which could introduce bias into the responses.

Despite these limitations, the overwhelmingly positive feedback suggests that participants received the mental health education program well.

Project Relevance Beyond Project Site

The relevance of this staff education program in a primary care setting extends beyond the immediate project site in several important ways. One of the key ways in which the relevance extends beyond the project site is through the potential for knowledge sharing and replication in other primary care settings. By successfully implementing and demonstrating the program's effectiveness in one site, it could be a model for others to adopt and adapt in their primary care practices. The need for early detection and intervention is critical in reducing the global burden of mental health disorders. Many healthcare systems struggle with effectively managing mental health issues, especially in primary care settings where depression often goes undiagnosed (Meredith et al., 2000). Additionally, the program's impact on improving mental health outcomes could have broader implications at the primary care setting level. Overall, the program's success can contribute to a larger conversation about the importance of mental health education and screening in healthcare settings.

Conclusions

Further Recommendations

The data collected from the pretest and posttest percentages and the individual scores and learning gains showed a slight gain in knowledge. Knowledge was increased in less than half of the participants, and the information on depression screening tools was well-received. The education should be repeated and include a different tool to measure knowledge.

Implications for Nursing Practice

Healthcare providers need to stay updated on the latest research and best practices in screening for depression to effectively identify and support those who may be struggling with their mental health. Moving forward, healthcare providers must continue prioritizing mental health education and screening to improve early detection and intervention efforts.

Implications for Positive Social Change, Diversity, Equity, and Inclusion

With increased awareness and training in primary care settings, more individuals suffering from depression can receive the help they need before their condition worsens. By consistently utilizing depression screening tools, we can work towards reducing the global burden of mental health disorders and improving the overall well-being of patients.

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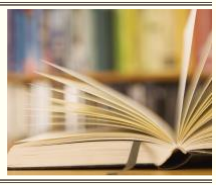
Appendix A: PowerPoint Presentation

STAFF EDUCATION TRAINING: DEPRESSION SCREENING IN PRIMARY CARE

Presented By
Olayemi Ikhile
Walden University
DNP Student



Learning Objectives

- By the end of the course, participant should be able to identify signs of depression.
- Participants will be able to identify the appropriate screening tool utilized in the primary care setting.
- Understand the importance of screening for depression in the primary care setting

Introduction

- Depression is the leading cause of disability worldwide (Costantini et al., 2021; Uomoto, 2023).
- Depression affects over 300 million people worldwide (Costantini et al., 2021).
- One in five people experiences depression throughout their lifetime (Costantini et al., 2021).
- Adolescent depression impacts around 10% of adolescents and has become even more prevalent among teenagers aged 12–17 in the United States. The prevalence of depression in this age group increased from 8.7% to 11.3% between 2005 and 2014 (Fallucco et al., 2019).
- The World Health Organization (WHO) states that the prevalence of depression in older adults is between 10% and 20% globally (Uomoto, 2023)

Depression Screening in Primary Care: Need Assessment

- Most depression patients are seen in the primary care setting (Habtamu et al., 2023); Pilipenko & Vivar-Ramon, 2023;).
- While older people account for only 12% of the total population, they represent roughly 18% of suicide cases and are less inclined to seek out specialized treatment for depression (Uomoto, 2023).
- Identifying patients with depression can be difficult for primary healthcare practitioners, as the disorder frequently manifests with other physical symptoms (Uomoto, 2023).
- Similarly, in teenagers, medical professionals hardly ever screen for adolescent depression because of insufficient PCP training in identifying and treating adolescent depression (Fallucco et al., 2019).

Depression Screening in Primary care: Diagnosis of Depression

- Symptoms must be present for at least two weeks for a diagnosis of major depressive disorder (MDD) to be made.
- Symptoms include persistent feelings of sadness or hopelessness, loss of interest in activities once enjoyed, changes in appetite or weight, sleep disturbances, fatigue, feelings of worthlessness or guilt, difficulty concentrating, and thoughts of death or suicide.

Depression Screening in Primary Care: Recommendations

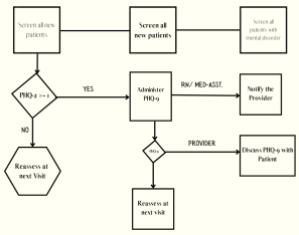
- The USPSTF recommends screening adults with depression in primary care settings to improve detection rates and reduce disease burden (Miller et al., 2021).
- The use of a screening tool may assist primary healthcare practitioners in improving the detection of depression in this setting (Uomoto 2023).
- The PHQ-2/9 is the most common depression screening tool (Pilipenko & Vivar-Ramon, 2023).
- Who to screen
  - PHQ-2/PHQ-9 administration has been indicated for all new patients (initial visit), current patients (annually), patients with MDD per problem list (every visit), prenatal patients (initial visit for prenatal care and once after 24 weeks and delivery).

How to Screen for Depression in the Primary Care Setting

- It is important for primary healthcare practitioners to be aware of these symptoms and to use screening tools such as the PHQ-2/PHQ-9 to accurately detect and diagnose depression in their patients.
- By identifying and treating depression early, healthcare providers can help improve patient outcomes and quality of life.
- Reading and rephrasing of PHQ-2/PHQ-9 items were common when utilizing both EMR and paper formats. This practice can adversely impact PHQ-2/PHQ-9 validity and lead to lower symptom identification.
- Self-administered PHQ2/9 is the best way to screen in a primary care setting.

PHQ-2/9 Tool

Depression Screening in Primary Care: Workflow



Appendix B: Pre/Post Questionnaire

Participant:

1. Which of the following is a sign of depression?
    A. Dancing
    B. Feeling sad
    C. Feeling hopeless in the last two weeks
    D. oversleeping
2. The most common depression screening tool is PHQ-9.
    A. True or
    B. False
3. Hypothetical Patient DJ, a 68-year-old, comes in to be seen at the clinic. He has complained of headaches and fatigue for a month. He also says he has not been sleeping well. Should this patient be screened for depression?
    A. Yes
    B. No
4. As medical staff, we should feel sympathetic towards patients who complain of depression or any mental illness.
    A. True
    B. False
5. Many individuals meeting the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V TR) criteria for depression may not seek treatment or go undiagnosed by their physicians.

A. True

B. False

6. Depression is a primary factor in disability, absenteeism from work, decreased or lost productivity, and higher healthcare costs.

    A. True

    B. False

7. The prevalence of depression is high in the primary care setting

    A. True

    B. False

8. The best way to administer the PHQ-9 is

    A. By the Provider

    B. By the Nurse

    C. By the Receptionist

    D. By the Patient

9. Who is responsible for interpreting and responding to PHQ-9 scores?

    A. Nurse or medical assistant

    B. Receptionist

    C. Nurse Manager

    D. The provider

10. I understand my role and responsibilities in screening patients for depression:

    A. Strongly Agree

    B. Agree

    C. Neutral

D. Disagree

E. Strongly Disagree

Answer Key

1. A

2. A

3. A

4. B

5. A

6. A

7. A

8. D

9. D

10. A

Appendix C: Staff Educational Program Feedback

1. Was the learning objective and outcome adequately presented?

Yes_____ No_____

2. Was the learning outcome met?

Yes_____ No_____

3. Was the delivery method effective? Are there aspects that could have been done differently?

_____

4. Which element of the presentation did you like the most?

_____

5. Were you satisfied with the quality of the content?

Yes_____ No_____

6. Please indicate your satisfaction with the presenter/speaker.

Very satisfied____ Satisfied ____ Neither Satisfied nor Dissatisfied_____

7. Did the content presented meet your expectations?

Yes_____ No_____

8. Did the staff education program meet your expectations?

Yes_____ No_____

9. Do you feel the staff education program met its goals?

Yes_____ No_____

10. Do you believe this staff education program had a direct impact on the facility?