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Staff Education to Implement PHQ-9 Depression Screening Among Adults

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Walden University

College of Nursing

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Sharon Nwanne-Temple

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the review committee have been made.

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Walden University
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Executive Summary: Staff Education Project

Staff Education to Implement PHQ-9 Depression Screening Among Adults

by

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Summary

This doctor of nursing practice (DNP) project was developed to complete a professional education initiative to implement a systematic depression screening tool in a primary care setting through staff education on utilizing the Patient Health Questionnaire-9 (PHQ-9). Beyond the central practice issue at hand is persistent underdetection and inadequate treatment due to a lack of knowledge among clinical staff members on how to use depression screening tools. This issue creates critical negative consequences affecting individual wellness, professional practice expectations, and patient safety outcomes.

The project bridges this significant gap by delivering advanced education based on the PHQ-9 and the appropriate use of the instrument in clinical practice, enabling early diagnosis and treatment. The project's key objective was to determine if systematic screening of depression with a valid instrument (PHQ-9) among clinical staff members who lack the knowledge of depression diagnosis, in comparison with standard practices of usual care, escalates the identification rate of depression, initiates appropriate treatment procedures, and ultimately achieves favorable clinical outcomes.

The project's analytical framework utilizes an all-inclusive mixed-methods framework, which incorporates quantitative data collection to reflect decreases in screening rates and qualitative feedback procedures to reflect the educational interventional effectiveness. The project holds great potential in promoting professional practice among clinical staff and can have implications for positive social change through enhancing mental health support among healthcare professionals, which remains essential in providing the best compassionate care for patients.

Background

Depression is one of the leading causes of disability worldwide and the most common mental disorder in the United States (World Health Organization [WHO], 2020). The cost of treating depression is estimated at \$210 billion annually (Siniscalchi et al., 2020). This highlights the importance of early detection through screening and the prompt implementation of treatment. According to Siniscalchi et al. (2020), when depression goes unidentified and untreated, it increases healthcare costs, leads to a poor quality of life, and results in more medical comorbidities.

Early screening, diagnosis, and treatment of depression among patients, especially in primary care settings, enhances management and improves quality of life. Patients in these settings should be screened with a standardized depression screening tool such as the Patient Health Questionnaire-2 (PHQ-2) and the PHQ-9 for depression (National Committee for Quality Assurance, 2020).

Practice Problem and Significance

The practice gap addressed by this project is the issue of undetected depression among adults and a lack of knowledge about using depression screening tools at a primary care center. The project sought to improve staff understanding of how to implement structured screening for major depression and provide intervention, ensuring timely support and care. The project is a quality improvement initiative designed to enhance patient care. Specifically, the project was conducted to improve staff knowledge and ability to detect major depression among adults at a primary clinical site.

The PHQ-9 is an evidence-based tool for depression screening. Its integration into routine depression evaluations will facilitate the early detection and management of

depression among nurses. The gap in practice or problem is that the project site, a primary care clinic, has limited knowledge about using depression screening tools. The purpose of the project was to improve staff knowledge of implementing a structured screening for major depression and intervention to ensure timely support and care. The project question was: Among adults with undiagnosed major depression (population), will a staff education program on the use of the depression screen (intervention), compared to current practice (comparison), increase staff knowledge (outcome)?

Project Question and Purpose

The focused research question guiding this DNP project is: Among adults with undiagnosed major depression (population), will a staff education program on the use of the depression screen (intervention), compared to current practice (comparison), increase staff knowledge (outcome)? This question addresses the identified practice gap and the urgent need for evidence-based interventions that improve staff knowledge of implementing a structured screening for major depression and intervention, as well as to ensure timely support and care.

The project's purpose centers on implementing a validated screening tool, the PHQ-9, as the cornerstone of a comprehensive staff education initiative. This approach fundamentally shifts the paradigm from reactive to proactive mental health support within the clinical population, establishing a systematic early identification and intervention framework.

Evidence Supporting the Change

The justification for this project is grounded on a robust and compelling evidence base. PHQ-9 is a widely used and validated instrument for screening, diagnosis,

monitoring, and measuring depression severity. Initially developed by Kroenke, Spitzer, and Williams in 2001 specifically for the administration of primary care, PHQ-9 is now a reliable and time-efficient screening tool (Wang et al., 2021).

The nine-item instrument design guarantees ease of administration and rapid scoring and interpretation, and the instrument maintains superior psychometric properties, including sensitivity (88%) and specificity (88%), in primary depression identification. Such attributes make the PHQ-9 particularly suited for application in busy clinical practice (Wang et al., 2021). Routine instrument application precludes reliance on subjective evaluation. This method guarantees using a systematic, objective approach to identifying at-risk individuals, of particular value among groups resistant to willingly describing symptoms.

A systematic review completed by Khatatbeh et al. (2022) discovered that the implementation of standardized screening tools within healthcare settings is a significant first step toward reducing rates of failed detection and earlier referrals for treatment. Quality of evidence of this kind, based on Level I and II studies, meta-analyses, and randomized controlled trials, provides a strong foundation for this project.

Staff education's role in aiding practice change forms the second of the project's most important evidence-based components. While the PHQ-9 is a powerful screening tool, success depends entirely on proper implementation and use. Staff education programs have repeatedly demonstrated successful ways of bringing evidence to practice at the clinical level (White et al., 2021). Well-developed nurse education programs will increase nurses' knowledge and attitudes toward mental health screening and confidence in using new procedures and instruments.

Clinical education interventions for mental health screening have significantly improved nurses' willingness and ability to conduct screenings (Koly et al., 2021). By using a valid screening tool alongside a clear and well-designed educational module, this project addresses current knowledge gaps while building the skills and confidence nurses need to become active advocates for their own mental health and the mental health of their colleagues.

Staff education is crucial in addressing implementation challenges, such as a lack of awareness of the tool's purpose, misconceptions that screening is outside the nursing scope, or fears of intrusiveness and breaching confidentiality. By creating detailed follow-up and referral processes, education ensures that screening never occurs in isolation but is part of a comprehensive care system, fulfilling the ethical need for proper support after identifying a need.

The PHQ-9 is recognized as a validated, reliable, and time-efficient instrument for assessing depression in primary care (Kroenke et al., 2020). Educational interventions targeting healthcare providers consistently demonstrated improved staff competence and confidence in screening practices (Koly et al., 2021). Therefore, implementing a structured staff education module was expected to increase compliance, improve knowledge retention, and enhance early detection of depression.

Staff Education Project Development

Participants and Procedures

Staff education development and implementation will be carried out through a systematic, strategically planned approach, utilizing strategies that ensure optimal success outcomes. Participants will be the staff nurses working in a specifically identified clinical

unit. Educational content will be developed through collaboration among key individuals, including unit administration, nurse educators, and practicing staff nurses. Hence, the content remains relevant, and implementation stays feasible within the existing clinical practice environment.

Educational materials will include PowerPoint presentations and a comprehensive module designed to equip staff nurses with the skills and knowledge to correctly administer, score, and interpret the PHQ-9. The training will also address important considerations such as maintaining privacy and safeguarding staff confidentiality.

Before implementing the educational program, respondents will complete an anonymous pre-intervention survey to measure baseline knowledge, attitudes, and current practices related to depression screening. These baseline data will serve two important purposes: first, to guide final refinements to the educational content and, second, to provide a benchmark against which post-intervention outcomes can be measured.

Evidence Gathering and Analysis

A mixed-methods approach will strengthen the evaluation process. Quantitative data will be collected to assess depression detection and subsequent treatment initiation following the intervention, compared with pre-intervention baseline rates. To protect confidentiality, all data will be gathered and analyzed in an anonymous aggregate form. Statistical comparisons between pre- and post-intervention data will determine whether the educational module significantly increased PHQ-9 utilization and subsequent referrals for care.

Qualitative data will also be collected through post-intervention surveys. These surveys will capture participants' self-reported confidence, perceived knowledge gains,

and understanding of new screening procedures. This qualitative component will provide valuable context for interpreting the quantitative findings, offering insight into how participants experienced the program and highlighting any unforeseen challenges that may require program adjustments.

Evaluation Process

The evaluation strategy will include both formative and summative components. Formative evaluation will occur during the development phase of the educational materials, incorporating stakeholder feedback to refine content and delivery methods. A summative evaluation, conducted after implementation, will measure the overall program's effectiveness in enhancing depression screening practices and referral follow-through.

The anonymous pre-intervention survey will serve a formative function, enabling final adjustment of the educational module based on the learning needs assessed.

A summative evaluation will quantify the project's ultimate outcomes: the depression identification rate and the commencement of treatment changes. Such quantifications will be undertaken at designated points following the application of educational intervention. Data analysis will answer whether the project targets have been achieved and whether the intervention created the desired favorable benefits. Qualitative response will be included in the summative evaluation exercise, revealing the acceptability and broader impact of the new approach among the clinical staff.

Implementation Process

The DNP project was implemented over six weeks in the outpatient primary-care setting. Nine staff members participated in the PHQ-9 training module, which included a

PowerPoint presentation, interactive discussion, and a post-training skills demonstration. Participants completed pre- and post-knowledge surveys to evaluate comprehension of depression screening and documentation. PHQ-9 tools were integrated into the clinic workflow, and chart audits were conducted before and after the intervention to measure changes in screening rates and accuracy

Results and Outcomes

Participants: 9 staff members (nurses, medical assistants, providers) completed PHQ-9 training.

Screening Rate: Increased from a total score of 35% pre-intervention to 82% post-intervention.

Staff Knowledge: Mean scores improved from 68% to 94%.

Confidence: 100% of participants reported increased comfort using the PHQ-9.

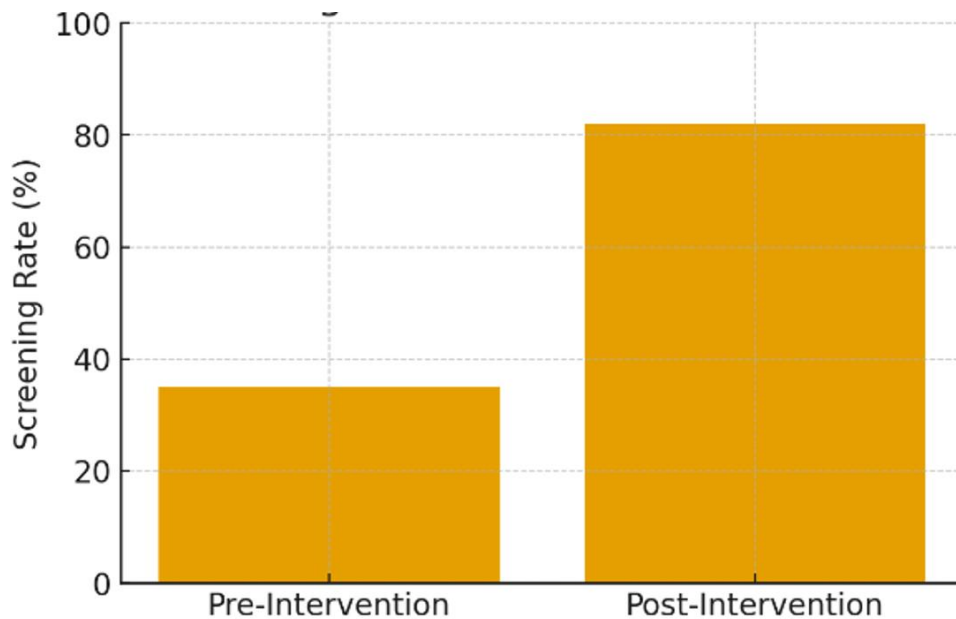
Outcome: Early identification of depression improved; documentation errors decreased.

Participants: 9 staff members (nurses, medical assistants, providers) completed PHQ-9 training.

Table 1

Pre-post change in screening rate, staff knowledge, and confidence

Metric	Pre-intervention	Post-intervention	Percentage point increase
Screening rate	35%	82%	+47
Staff knowledge	68%	94%	+26
Confidence	—	100%	+100

Figure 1

Conclusions

The staff education intervention on PHQ-9 depression screening significantly improved staff knowledge, screening rates, and confidence levels. Following the training, screening completion increased from 35% to 82%, with all participants reporting enhanced comfort using the PHQ-9 tool. These results demonstrated that targeted education effectively strengthened evidence-based practice and promoted early depression detection, improving patient safety and quality of care within the primary care setting. These outcomes required integrating PHQ-9 training into new-hire orientation and annual competencies while embedding electronic reminders within the EHR to maintain long-term compliance and impact.

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