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Staff Education Focused on Screening Patients for Depression Using the PHQ-9 Tool

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2025

Executive Summary: Staff Education Project

Staff Education Focused on Screening Patients for Depression Using the PHQ-9 Tool

by

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Summary

The doctor of nursing practice (DNP) project at a community health center (CHC) addressed a performance improvement measure related to the usability of the depression screening tool, Patient Health Questionnaire (PHQ-9), for patients 12 years and older. At CHC, the mental health providers underutilized this tool, leading to missed opportunities in identifying patients 12 years and older with depressive disorders. These missed opportunities may contribute to suboptimal patient treatment outcomes. The purpose of the staff educational program was to increase CHC staffs' understanding of the PHQ-9 screening tool for routine depression screening. Ten mental health providers participated in the program, completing a pretest, and 9 out of 10 completed the posttest. Descriptive analysis of the data revealed that prior to the education program, 10% of the participants had knowledge of the PHQ-9 and always utilized the screening tool. Findings from the postintervention indicated a marked improvement in staff knowledge of the PHQ-9 tool and the likelihood of utilization at initial and interval visits. The PHQ-9 education program enhanced staff's ability to identify and manage depression using standardized, evidence-based practice screening tool. The use of this tool may improve the quality of care and clinical decision making while also ensuring equitable screening across diverse patient populations**.** The education program may drive positive social change by advancing access and equity in mental health treatment with improved and more consistent screening using the PHQ-9.

Background

Health Resource Service Administration (HRSA), one of CHC's funding organizations and an agency in the U.S. Department of Health and Human Services, requires all federally qualified health care centers to submit a yearly report of the percentage of patients 12 years and older diagnosed with major depressive disorders or in remission to a uniform data system (UDS). HRSA uses these data to evaluate the highest performing agencies compared to similar practices under the same funding body. Although there are different screening tools used in mental health to capture depressive disorders or remission status, the PHQ-9 screening tool (also used by HRSA), is a valuable standardized tool for measuring depression severity and provides diagnostic capabilities for depressive disorders. However, at CHC, reports showed that there was a decrease in the utilization by clinical staff of the PHQ-9 screening tool at the initial and interval patient visits. Without consistency in the utilization of the PHQ-9 screening tool, the percentage of data for patients 12 years and older with depression and remission captured during the timepoint per HRSA was also be expected to be low. Siniscalchi et al. (2020) and O'Connor et al. (2016) shared that although depression is a common mental health disorder, it is not consistently screened for using a standardized screening tool such as the PHQ-9. Globally, about 280 million people have depression, and over 700 000 people die due to suicide every year, with suicide being the fourth leading cause of death in 15–29-year-olds (World Health Organization, 2023).

According to Sun et al. (2020), the PHQ-9 screening tool is an easy, quick, efficient, quantitative, and trustworthy method for determining the degree of depression. A review of the literature from the Walden University Library databases provided

information that facilitated the development of the content for the education program. A total of 11 (six quantitative, two qualitative, one meta-analysis, one systematic review and meta-analysis, and one cross-sectional) recently published scholarly articles were selected for this project from MEDLINE, PMC (PubMed central), Science Direct, Google Scholar, and Nursing Journals. The search terms included *PHQ-9 screening tool*, *depressive disorders*, *remission following treatment*, *utilization*, *mental health professional use of screening tools*; *staff education on PHQ-9*, *likelihood of utilization of PHQ-9 screening tool*, *survey on PHQ-9 screening tool utilization*, *systematic review of PHQ-9 screening tool utilization*, *knowledge*, *likelihood of using PHQ-9 screening tool*, and *barriers to PHQ-9 utilization*. Johns Hopkins Nursing Evidence-Based Practice enhanced the rating of the research articles. The Synthesis Process and Recommendations Tool was completed with six articles ranked as Level I evidence with strong overall quality.

Haddad et al. (2018), in a study on depression screening and treatment, found that validated instruments such as the PHQ-9 and other questionnaires significantly changed participants' understanding and attitudes toward depression. These researchers noted that training programs enhanced nurses' attitudes, knowledge, and abilities in identifying depression. In addition, Levis et al. (2019) validated the PHQ-9, stating its robust reliability, validity, and flexibility for patients with major depressive disorder in psychiatric facilities. In a systematic review, O'Connor et al. (2016) shared that the United States Preventive Services Task Force suggested screening adults for depression when staff-assisted depression care services were already in place to ensure accurate diagnosis, appropriate treatment, and follow-up. Furthermore, screening for depression

can be beneficial for pregnant and postpartum women as well as adults in general, particularly when it is paired with additional treatment supports such as care management, treatment protocols, and access to depression specialists (O'Connor et al., 2016). Additionally, there is good evidence that screening for depression can benefit adults in general. Okimat et al. (2022) looked at the differences between two types of depression screening methods for people with HIV and found that nonselective screening was better at identifying cases with a PHQ-9 score of 5 or higher.

At the CHC, utilizing the PHQ-9 tool regularly could have prevented missed data for HRSA's UDS monitoring system. This screening tool could also have promoted better treatment outcomes for patients. For example, Pfoh et al. (2020) found that a PHQ-9 depression screening program in primary care clinics significantly improved diagnosis and treatment rates within 90 days. Akechi et al. (2020) investigated the prevalence and determinants of exacerbated depression following antidepressant therapy in a multicenter randomized trial involving individuals with major depressive disorders and noted that the PHQ-9 scores helped in assessing worsening of depression from the baseline score following acute phase antidepressant therapy. Samples et al. (2020) examined depression screening practices in primary care environments, revealing that physicians employ selective screening based on patients' symptoms. Schaeffer and Jolles (2029) found that the National Quality Forum endorses initial depression screening and follow-up, but only seven states report this procedure. Overall, recommendations remain strong for other clinical settings to replicate the utilization of PHQ-9 screening tool at baseline and follow-up visits for early identification of depression and treatment and to note the

positive or negative outcomes of treatment to enhance treatment termination or modification.

Staff Education Project Development

This DNP project was an initiative designed for psychiatric providers at CHC. The project was reviewed and approved by the Institutional Review Board (IRB) of CHC with a waiver of the need to obtain informed consent from individual patients. Educational materials were developed to include objectives, teaching content via PowerPoint presentation (see Appendix A), as well as a pre/post multiple-choice questions (see Appendix B) designed to assess the understanding of the PHQ-9 platform, its current level of use at CHC, and factors that may be impacting its regular use for patient screening. The kickoff action plan review concluded with unanimous agreement that the educational objectives, content, outcomes, and assessment components effectively addressed the staff education program's goals. The plan was recognized as having strong potential to enhance staff's knowledge of the PHQ-9 screening tool and to increase its routine use in clinical practice. Following the approval of Walden University's ethics pledge, the implementation of the staff education program was reviewed and approved for presentation. The participants included 10 mental health providers, excluding me, the presenter. This program was presented during a monthly child psychiatry meeting during which 10 participants completed a preassessment test and nine completed a postpresentation assessment test. The educational sessions featured various learning activities including documentation steps and a case study that highlighted the gap in practice. To assess baseline knowledge and the usability of the PHQ-9 depression screening tool among clinical staff at CHC, I administered a

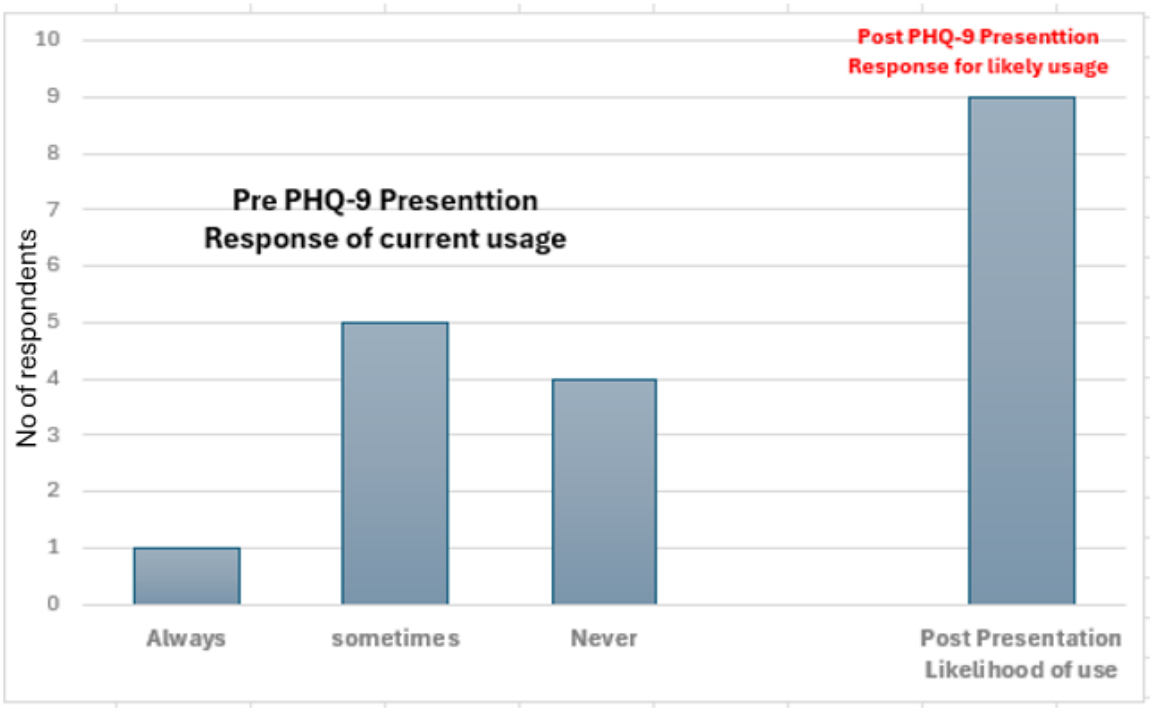
prepresentation survey to mental health providers. The objective was to determine current levels of familiarity, frequency of use, and perceived confidence in using the PHQ-9 during initial diagnostic assessments and follow-up visits for depression management. The method involved was descriptive analysis of data from the surveys.

Results

The preintervention survey revealed familiarity with the PHQ-9 tool but manifested significant variability in its consistent use. As depicted in the first three bars of Figure 1, prior to the education program, the usage patterns for initial patient visits showed that 40% of staff reported never using the PHQ-9 tool during initial assessments for depressive symptoms, 50% indicated occasional use, and 10% reported consistent use in their initial diagnostic protocol.

Figure 1

Pre/Post PHQ-9 Response Regarding PHQ-9 at CHC for Patient Intake in Depression Screening



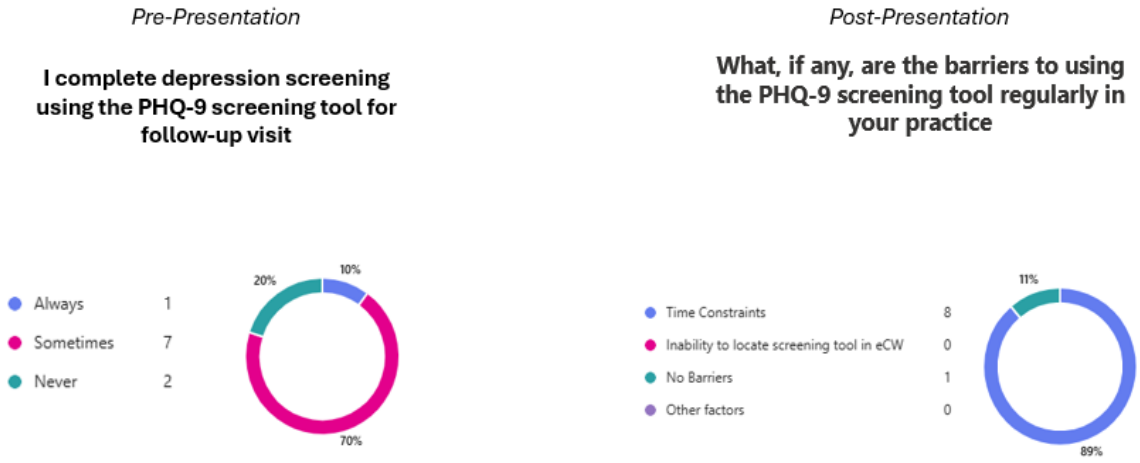
Note. $N = 10$ (preintervention survey) and $N = 9$ (postintervention survey).

Following the educational intervention, which included a PowerPoint presentation on the structure, scoring, and clinical relevance of the PHQ-9, postsurveys were collected from all participants. The postpresentation data demonstrated a marked improvement in knowledge and intended clinical practice. Key findings included 90% of respondents reported feeling confident in their ability to use the PHQ-9 tool following the presentation, and 90% of respondents (see Figure 1), indicating the presentation had improved their understanding of the tool's value and practical application. These respondents reported they were more likely to integrate the PHQ-9 into their clinical

workflow for initial assessments and follow-up depression management. Furthermore, anecdotal comments and open-ended responses revealed that participants found the presentation engaging and highly relevant to their work. Several clinicians expressed appreciation for the clarity of instruction on scoring, documentation, and the importance of the PHQ-9 in meeting clinical standards and federal reporting requirements. As shown in Figure 2, before the education program, the use of the tool in follow-up visits showed 10% of respondents reporting consistent use of PHQ-9 for monitoring treatment progress, 70% reporting occasional use, with 20% never using it during follow-up appointments.

Figure 2

Use of the PHQ-9 Tool in Follow-Up Appointments and Barriers Affecting Its Use



These findings underscore the need for targeted education to improve the uptake of standardized depression screening and monitoring procedures at the clinic. Findings also illustrate the importance of educational interventions in enhancing staff awareness of evidence-based practices for utilizing the PHQ-9 tool during initial and follow-up visits

to assist with early identification and management of depression while also supporting a crucial funding data collection requirement for CHC, mandated by funding agencies such as HRSA. One limitation of the results, however, is the limited sample size of the study, which may restrict the generalizability of the results.

Organizational Impact

This project and the study results may yield beneficial social outcomes for the CHC staff and the overall organization by enhancing knowledge and confidence in regular utilization of the PHQ-9 tool, leading to better overall outcomes, improved organization public standing, and funding possibilities. Implementing instructional programs can contribute to a comprehensive quality improvement campaign inside the company, with the objective of enhancing depression screening rates and overall care quality. The project holds significance beyond the local context because depression is among the most prevalent mental disorders impacting a substantial segment of the population around the world. Universal depression screening and enhanced staff proficiency in utilizing instruments such as the PHQ-9 regularly in practice may lead to improved health care outcomes on a broader scale. Meanwhile, integrating electronic health records with the PHQ-9 depression screening tool may automate the screening process, prompt patients to complete screenings before their visits with clinicians, and facilitate tracking of screening results over time.

Implications for Nursing Practice

This project also has implications for nursing practice. The research established a benchmark for optimal procedures and underscored the significance of evidence-based methodologies in health care. Moreover, the PHQ-9 is available in multiple languages,

which highlights the importance of diversity, equity, and inclusion by ensuring that all patients, regardless of background, have access to high-quality mental health screening and culturally competent care. Through regular screening, the PHQ-9 gives every patient the opportunity to have a life-changing moment as the staff ensures consistent, bias-free assessments to improve patient outcomes, such as preventing suicide and other medical comorbidities.

Recommendations

Participants made useful recommendations to further improve implementation and sustainability of PHQ-9 utilization. These included increasing patient visit duration to allow clinicians adequate time for depression screening; automated email reminders alerting staff when federally mandated PHQ-9 documentation is due; and delegating PHQ-9 administration to trained patient support staff or medical assistants, thereby reducing clinician burden and ensuring consistency in tool application. These suggestions reflect a pragmatic understanding of workflow constraints at CHC and should be considered for future quality improvement initiatives. Integrating these workflow enhancements may further reinforce routine PHQ-9 use, reduce documentation lapses, and support compliance with clinical and the annual UDS HRSA reporting compliance.

Conclusions

The PHQ-9 educational session proved to be an effective intervention for increasing knowledge, confidence, and intended use among clinical mental health providers at CHC. The presentation not only assessed prior gaps in understanding and inconsistent usage patterns but also fostered a strong commitment among staff to incorporate the tool more consistently in initial and follow-up appointments for patients

with depression. The PHQ-9 screening tool remains pivotal in identifying depression and monitoring treatment outcomes. Its consistent use can help ensure that valuable information is not overlooked during UDS monitoring, which may translate to better treatment results for all patients (Okimat et al., 2022). In addition, conducting monthly reviews of data performance and sending reminders about pending screenings using the PHQ-9 could enhance compliance with the organization's policy. The presentation served not only as an educational tool but also as a catalyst for systemic improvement in depression care within the clinic. Continued follow-up and support may help sustain this momentum and translate knowledge gains into long-term practice change.

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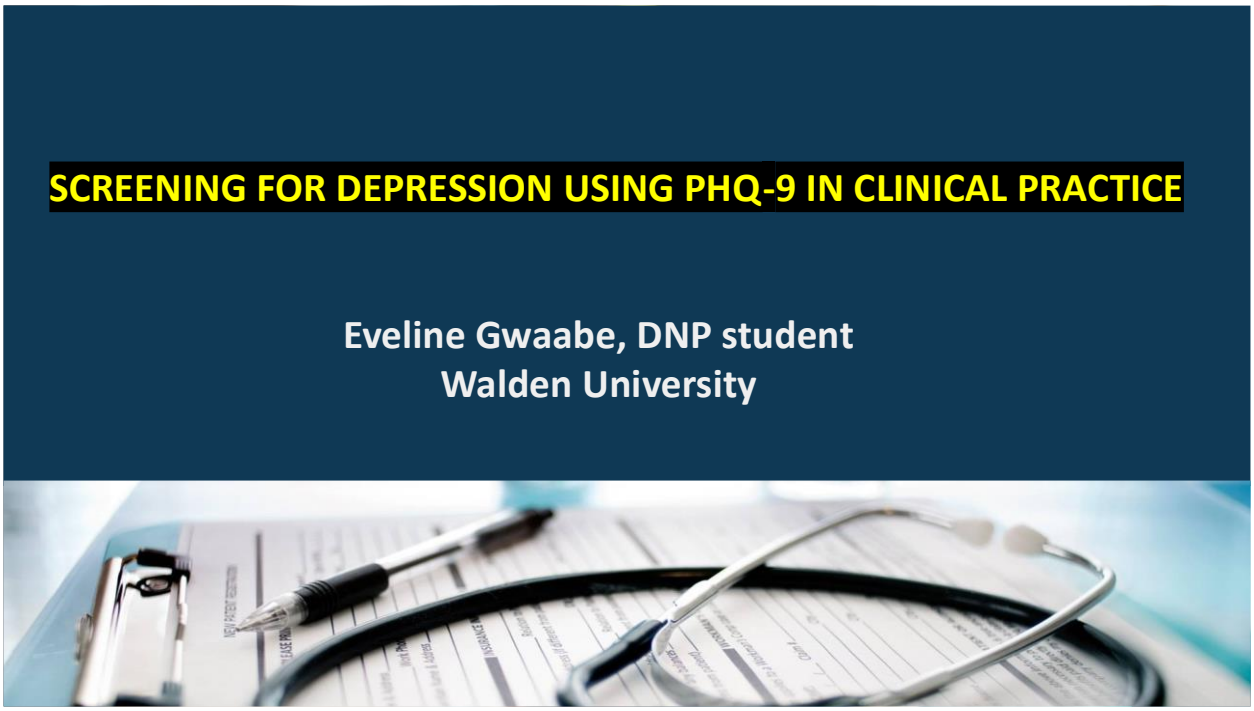
Appendix A: Slides From the Pre and Post PowerPoint PHQ-9 Staff Education Survey Program



AGENDA

OBJECTIVES

- Identify the prevalence and demographics related to patients with depression.
- Discuss the gap in current practice
- Discuss the PHQ-9, the scoring, and the interpretation of the PHQ-9 screening tool when used to screen patients for depression.
- Discuss the importance of the PHQ-9 screening tool for screening patients for depression
- Understand how to document a completed PHQ-9 screening in a Patient's chart following CHC's guidelines.
- Discuss some clinical relevance

Expected outcomes:

- Improve staff knowledge of the PHQ-9 screening tool for depression
- Improve the likelihood of using PHQ-9 screening tool regularly in practice

Prevalence & Demographics of Depression

- Although depression is a common mental health disorder, it is not consistently screened for using a standardized screening tool like PHQ-9 *(Siniscalchi et al., 2020; O'Connor et al., 2019).*

- Globally ~ 280 million people have depression.
- 50% more common among women than among men.

(WHO, 2023).

- 10% of pregnant and postpartum women experience depression *(WHO, 2023)*
- >700 000 people die due to suicide every year, with suicide is the fourth leading cause of death in 15–29-year-olds

(WHO, 2023).

- identification of depression and treatment, could improve quality of life, reduce suicide risk, and improve various medical disorders such diabetes, cardiovascular illnesses, cancer (*Siniscalchi et al., 2020; O'Connor,).*

Gap In Practice:

- Sub-optimal utilization of the patient health questionnaire (PHQ-9) screening tool by CHC staff.
- Inconsistent use of PHQ-9 at initial and interval visits has led to missed opportunities in identifying patients 12 years and older with depressive disorders (Major or persistent depressive disorder), including those in remission following treatment.
- Last year at CHC, there were ~90% missed follow-up re-screenings using the PHQ-9 tool.

What is PHQ-9?

Format

- A total of nine questions related to depressive symptoms.
- Reflected in the Diagnostic criteria for major depressive disorder (MDD) outlined in the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, fifth edition).
- It could be printed in different languages, such as Spanish, French, and possibly other languages.

Administration

- It can be self-administered by patients upon explanation or administered by trained staff or healthcare professionals.
- It can be completed by the patient prior to the visit or during the visit with the clinician.
- Clinicians can review the responses in approximately the same amount of time

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: _____

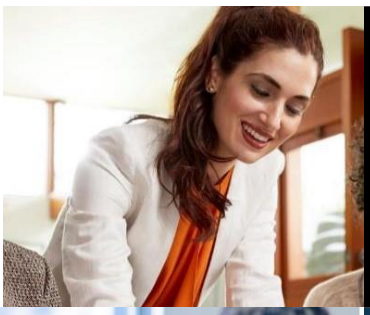
PHQ-9: Scoring and Interpretation

Scoring:

- Responses are rated on a four-point scale (from "Not at all" to "Nearly every day").
- Scores are summed to obtain a total score or numerical value ranging from 0 to 27.
- Higher scores indicate greater severity of depressive symptoms

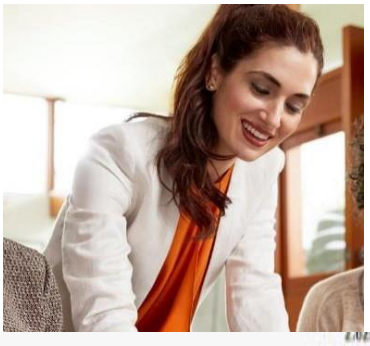
Interpretation:

- Total scores can be categorized as follows:
- 0-4: Minimal or no depression.
- 5-9: Mild depression.
- 10-14: Moderate depression.
- 15-19: Moderately severe depression.
- 20 or higher: Severe depression

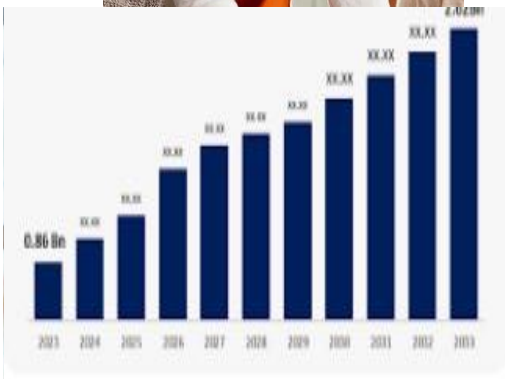


Why is Using PHQ-9 Important?

- Various healthcare practices use different screening tools based on preferences. However, the PHQ-9 is a validated standardized tool that is recommended by some health care funding bodies like HRSA to help compare the performance of their funded agencies in terms of the identification of depression and treatment outcomes (O'Connor et al., 2019; Levis et al., 2019; Sun et al., *2020)*.



Why is Using PHQ-9 Important? Continues.....

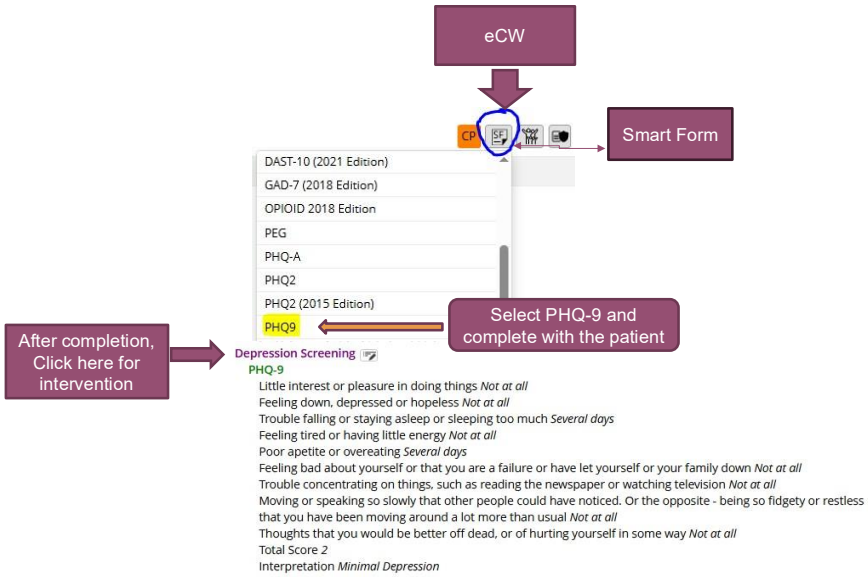


- At CHC, using PHQ-9 as a screening tool is important in data collection for the Uniform Data Set (UDS) reporting for HRSA (the funding body). PHQ-9 scores(quantitative values) enhance this UDS data collection and reporting each year.
- There is a 14-month window to report a follow-up score for patients with a positive PHQ-9 during the period that is reported to HRSA.

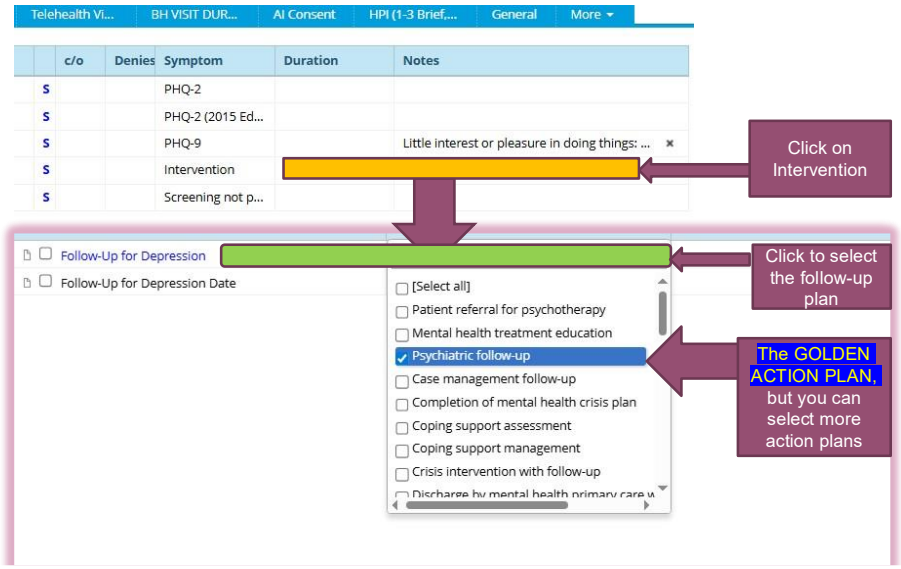
Why is Using PHQ-9 Important? Continues....

- Utilizing PHQ-9 tool regularly could prevent a missed data for UDS monitoring and promote a better treatment outcomes for the patients indiscriminately (Okimat et al., .2022)
- Allow for a more thorough and effective evaluation of depression and more effective therapy, hence reducing morbidity and death (*Samples et al, 2020*).

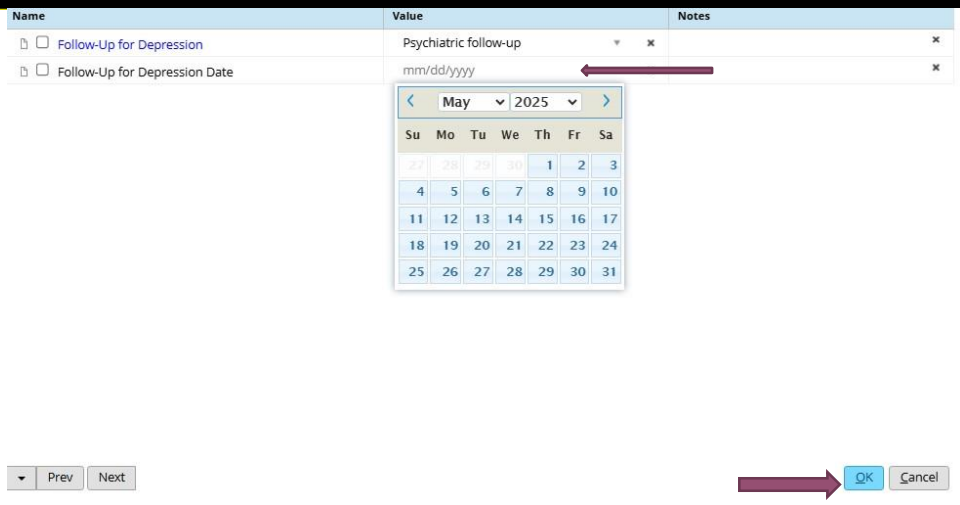
Data Capturing Process



Data Capturing: Continues…

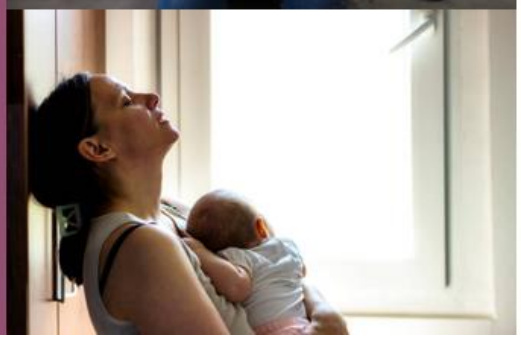


ONE MORE CLICK FOR TIME! ☺☺!



Clinical Relevance

- The United States Preventive Services Task Force (USPSTF) recommends screening of adults for depression using a standardized screening tool at baseline and follow-up (O'Connor et al., 2019).
- At CHC, the recommendation for screening patients 12 years and older for depression is at baseline and quarterly.
- Clinicians are not restricted from more frequent screening using the PHQ-9 tool.
- Depression is recognized as a serious mental and potentially debilitating condition that could negatively affect day-to-day activities, including a sense of doom(*WHO, 2023*)
- The PHQ-9 screening tool for depression does not replace clinical judgment.



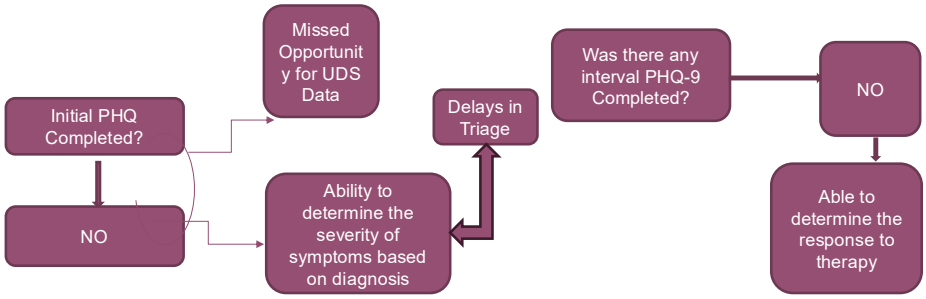
Clinical Judgement Alone Without PHQ-9 Tool

- LEADS TO MISSED OPPORTUNITIES IN IDENTIFYING PATIENTS WITH DEPRESSION
- CAUSES DELAYS IN TREATMENTS AND POOR CLINICAL OUTCOME/ QUALITY OF LIFE

- LOW PERFORMANCE OF THE AGENCY COMPARED WITH OTHER COMPETING AGENCIES
- POTENTIAL POOR REPUTATION AND LOSS OF FUNDING.

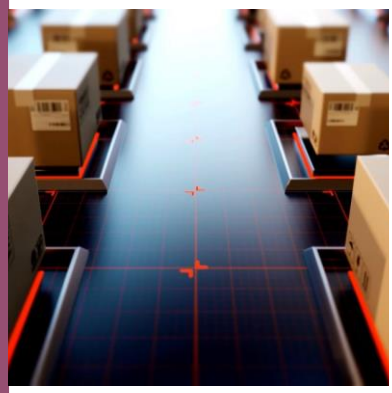
Interactive Case Study

A 14 Y/o diagnosed with GAD and **depressive disorder** had an initial visit in January 2025. The patient was referred for medication management in May 2025. Following this presentation, what was discovered, and what is the takeaway?



Barriers To The Utilization Of The PHQ-9 Screening Tool In Practice

- Time is identified as a huge constraint especially at CHC where the psychiatric providers have less amount of time to spend with the patients
- The lack of universal understanding of the PHQ-9 screening tool as the main evidence-based standardized screening tool to screen patients for depression at CHC for patients 12 years and older



Transitioning into Implementation:

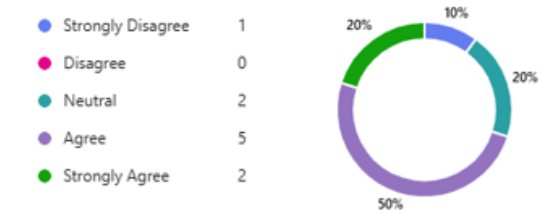
What is your role moving forward?

- As clinicians, we can make a difference.
- Foster continuous usability of the PHQ-9 screening tool at initial and follow-up visits.
- We want to ensure that a positive screen on Item 9 of the PHQ-9 is handled according to the agency's policies
- Ensure continuous documentation of completed assessments for data capturing

Appendix B: Detailed Pre/Post Staff Survey Results From PHQ-9 Education

Pre-Presentation

I am confident in my ability to administer the PHQ-9 screening tool.



Post-Presentation

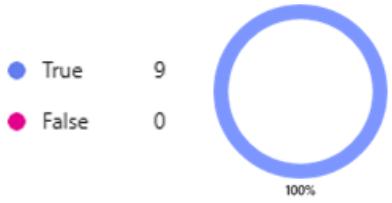
This education program has improved my knowledge of PHQ-9 screening tool

Pre-Presentation

I complete depression screening using the PHQ-9 screening tool for initial visits

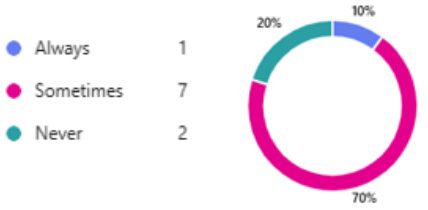
Post-Presentation

This staff education program has improved my likelihood of using PHQ-9 screening tool regularly in practice



Pre-Presentation

I complete depression screening using the PHQ-9 screening tool for follow-up visit

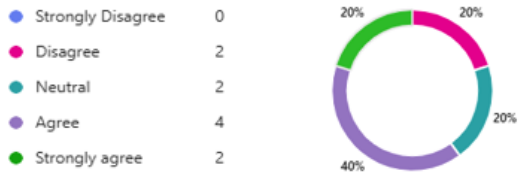


Post-Presentation

What, if any, are the barriers to using the PHQ-9 screening tool regularly in your practice

Additional Findings

At Community Health Center, I know how to document the completed PHQ-9 assessment in the patient's chart



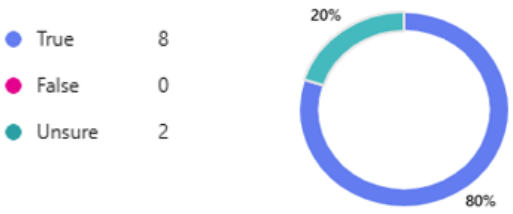
Recommendations

What resources or training would be helpful to sustain the usability of the PHQ-9 screening tool in practice?

regular reminders/ trainings like this one
reminders in ECW when it is due
Having support staff complete this instead of using our visit time to complete
If therapists can be more consistent doing it at intake/refferal that would be very helpful!
Automated reminders when patients are due, such as when it appears in the chief complaint
I think we have really helpful tools, i just need to use them!
increase visit time.
Ability to have the PHQ-9 completed prior to visits so that results can be discussed.

Pre-Presentation

Figure 1A
This staff education program could improve my knowledge & likelihood of using PHQ-9 screening tool regularly in practice



Post-Presentation

This education program has improved my knowledge of PHQ-9 screening tool