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Depression Screening at a Mental Health Outpatient Clinic: A Quality Improvement Project

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DEPRESSION SCREENING AT A MENTAL HEALTH OUTPATIENT CLINIC

A QUALITY IMPROVEMENT PROJECT

by

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Renee Licorish, BSN, RN

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Abstract

Project Background: Depression is one of the most common mental health problems in the United States. Many individuals may seek treatment but go undiagnosed due to the lack of recognition by clinicians. Clinical guidelines recommend the use of a standardized depression screening tool within a clinician's evaluation process. The Patient Health Questionnaire 9 (PHQ-9) is such a tool and recommended for use in the outpatient care setting. **Aims of the Project:** To increase depression screening of clients at a hospital-based outpatient behavioral health clinic. **Purpose and Objectives:** Implementation of the PHQ-9 into the clinic's mental health assessment process to increase the rate of depression screening from 0% to 80%. To accomplish this objective the clinic's therapist were educated regarding national guidelines and recommendations. Depression screening using the PHQ-9 was completed on a weekly basis with documentation of clients scores in an Excel spreadsheet. **Results:** The final participant sample included 42 clients admitted to the outpatient clinic during the 4-week period. At the conclusion of the project a total of 120 PHQ-9s were administered and 97 were completed, resulting in an average of 78.8% overall therapist's administration rate for the PHQ-9. This rate increase was a significant improvement for the clinic. **Implications for Practice:** Consistent use of a standardized depression screening tool such as the PHQ-9 can facilitate identification, diagnosis and treatment of depression and aid in improving client outcomes.

Keywords: depression screening, adults, PHQ-9, recommendations, outpatient

The State of Depression

Depression is one of the most common mental health disorders in the United States (U.S.) with a prevalence of approximately 7% within the U.S. population (O'Connor E., Rossom R. C., Henninger, M., et al., 2016). Diagnosis of depression requires the presence of at least five or more attributable symptoms described in the *Diagnostic and Statistical Manual of Mental Disorders*, one of which must be a depressed mood or loss of interest or pleasure during a 2-week period (DSM-5, 2013). The onset of depression may occur at any age, but the average age of onset in the U.S. population is at 32 years old (O'Connor et al., 2016). Many individuals with depressive symptoms may seek treatment; however, depression may go undiagnosed and untreated due to the client's presentation or lack of clinician knowledge (O'Connor et al., 2016). Over 50% of clinicians do not recognize the signs and symptoms of depression this lack of recognition contributes to the number of individuals who go untreated each year (O'Connor et al., 2016). For those who are treated within a year of onset, 35.4% receive minimally adequate medication management due to the lack of ongoing depression screening to evaluate treatment efficacy (O'Connor et al., 2016).

The U.S. Preventive Services Task Force (USPSTF) in its 2016 position statement recommends that all adults including pregnant and postpartum women be screened for depression and receive behavioral health treatment if appropriate (Siu & the US Preventive Services Task Force, 2016). The USPSTF gives depression screening a grade of B, indicative that screening provides a net benefit of moderate to substantial improvements in client's outcome (Siu & the US Preventive Services Task Force, 2016). The USPSTF recommends the use of a depression screening tool such as the Patient Health Questionnaire-9 (PHQ-9) to identify major depressive symptoms in adults greater than 18 years of age (Siu et al., 2016).

The PHQ-9 is a reliable and valid depression screening tool, with an internal consistency ($\alpha = 0.87$) both pre- and post-treatment (Beard, Hsu, Rifkin, Busch, & Björgvinsson, 2016). The PHQ-9 is a positive predictor of depression symptoms due to its' sensitivity (0.83 – 0.93) and specificity (0.52 – 0.72) range based on patient scores of greater than or equal to 10 or 13 respectively (Beard et al., 2016). The PHQ-9 has proven validity in both the primary care and psychiatric setting with a cutoff score of greater than or equal to 13. A cutoff score of 13 or greater is primarily used in the psychiatric clinics due to the clinic specialization in services. Since the PHQ-9 is a client self-report measure, it was developed using a third through fifth-grade reading level for understandability (Smarr & Keefer, 2011).

Research has shown that providing some form of depression screening to help identify those clients at risk is a significant factor in improving diagnosis and treatment of depression. According to the 2010 U.S. National Ambulatory Medical Care Survey, depression screening was recorded for only 2.3% of visits in the outpatient settings (O'Connor et. al, 2016). From December 2013 to December 2014, only 4.1% of a total of 884,707 outpatient primary care visits (4.8% females and 3.1% males) received and completed depression screenings (Centers for Disease Control and Prevention, 2016). Despite national recommendations, depression screening continues to be a low priority for clinicians within the outpatient behavioral health community.

Statement of the Problem

The project site is a hospital-based outpatient behavioral health clinic and a subsidiary of the HCA (Hospital Corporation of America) hospital system. HCA's policy mandates that all behavioral health entities belonging to their corporation, implement the PHQ-9 standardized depression screening tool by January 2017 (Personal Communication, September 6, 2017).

Additionally, the policy calls for weekly depression screening for all clients receiving treatment at their clinics. The clinic had screening tools for suicide and alcohol use embedded within their electronic health record system. Regrettably, at the onset of this doctoral project the HCA's policy to standardize depression screening with the PHQ-9 had not been implemented as yet. Thereby, resulting in an overall depression screening rate using a standardized instrument at zero percent between all three therapists. Therefore, the use of the PHQ-9 on a weekly basis would not only suffice the HCA requirements but also provide the ability to track the progress of clients towards wellness and recovery.

Background and Significance

The Joint Commission recommends the use of a brief standardized, evidence-based screening tool to be completed by clients while waiting for their appointments such as the PHQ-9 (The Joint Commission, 2016). The U.S. Department of Veterans Affairs (2016) recommends the use of the PHQ-9 as a quantitative measure of symptom severity during treatment (Management of Major Depressive Disorder Working Group, 2016). The PHQ-9's reliability and validity is the reason that it is often the recommended tool of choice for the screening of depression in adults ages 18 to 65 years of age (Beard et al., 2016; Gelaye et al., 2014). Within the psychiatric setting, it is highly recommended that the use of a cutoff score of greater than 13 be used due to its sensitivity (0.86) and specificity (0.67) at that level to identify the severity of a depressive episode within that population (Inoue et al., 2012).

Depression has a significant impact on an individual's life and is attributed as the leading cause of Years of Life Lived with a Disability and the third leading cause of loss in the quality-adjusted life years of older adults (O'Connor, Rossom, Henninger, et al., 2016). Depression is associated with decreased work productivity and absenteeism, with an estimate of $23 billion in

lost productivity in the United States (O'Connor et al., 2016). Individuals with depression die at a younger age (71 years vs. 76 years) due to reduced compliance with their prescribed medical treatment and their lack of effective self-care (O'Connor et al., 2016). In a national longitudinal study of 1.8 million Medicaid discharged clients, approximately 2% of the 771,000 adults with mental health committed suicide within the first 90 days after an inpatient psychiatric stay (Olfson, Wall, Wang, Crystal, Liu, Gerhard & Blanco, 2016).

These findings support the importance of depression screening at behavioral health outpatient clinics, for recently discharged mental health clients who are at a higher risk for suicide compared to the general population (Hjorthøj, Madsen, Agerbo & Nordentoft, 2014). Despite national guideline recommendations for the use of a standardized diagnostic measure when evaluating responsiveness to depression treatment, clinicians are still hesitant about using screening tools in their evaluation process and rely more heavily on their clinical judgment and past experiences (Dowrick et al., 2009). Even though the reliability of the PHQ-9 has been proven through research to adequately measure clients' response during the course of depression treatment it is still not widely used (Lowe, Unutzer, Callahan, Perkins & Kroenke, 2004). Clinician's reluctance in the use of an effective depression screening tool also affects the identification of clients at risk for suicide and increases morbidity for those suffering from a mental health problem (O'Connor et al., 2016).

Clinic Assessment

The clinic is located in the South Texas Medical Center of San Antonio near HCA's main hospital system. The clinic's primary population during the time the project was implemented were White non-Hispanic, and Hispanic females (Figure 1). The clinic's structure resembles a triangle, with the group rooms, dining area, and therapist's offices along the sides and the office

manager's desk as the base. Group psychotherapy sessions are available at the clinic from Tuesday to Friday each week with chemical dependency psychotherapy also being offered in the late evenings.

The Practice Improvement Capacity Rating Scale tool (Appendix B) developed by the Robert Wood Johnson Foundation was used to assess the clinic's readiness for change (Aligning Forces for Quality, 2014). This tool identifies the readiness of an organization for the implementation of a QI program and how best to strategize resources. The tool consists of a series of questions that provide a range of scores; a score greater than 250 signifies that the practice is ready and capable of QI work (Aligning Forces for Quality, 2014).
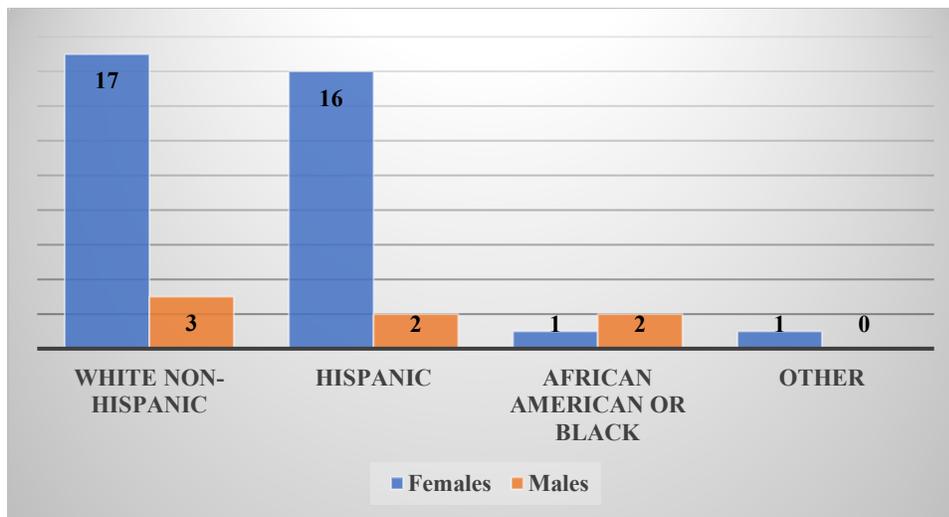
Figure 1. HCA's outpatient clinic population of those who attended psychotherapy during the 4-week project per ethnicity.

Seven out of the nine core staff completed and returned the Practice Improvement Capacity Rating Scale tool. An overall score of 205 was obtained by staff, suggesting that support was amenable for implementation of a QI project. However, the staff scores did not reflect their feedback regarding support and willingness towards participating in the change process.

Project Identification

The purpose of this doctoral nursing project's QI process was to implement the PHQ-9 depression screening tool as part of the clinic's assessment process while improving the identification of depression.

Project Objectives

- Improve screening for depression by implementing the PHQ-9 depression screening tool at the time of admission, weekly, and discharge.

- Develop a HealthStream PowerPoint online presentation for staff education on the significance of using the PHQ-9.

- Conduct staff training on the recommendations for the use of the PHQ-9 and the criteria for reporting and documentation at the clinic.

- Assess the weekly administration rate of the PHQ-9 by each of the clinic's therapist.

- Documentation of each client's score as to assess the completion rate of the PHQ-9.

Anticipated Outcomes

- By April 2018, increase depression screening and adherence rate of administering of the PHQ-9 from 0% to 80% per HCA quality guidelines.

- By March 2018, 100% staff compliance on completion of the PHQ-9 HealthStream training.

- By April 2018, an average weekly PHQ-9 administration rate from 0% to 60% by each therapist.

- By April 2018 an improvement in the completion rate of the PHQ-9s by the client's admitted to the psychotherapy group programs from 0% to 60%.

Evaluation Plan

The methods for evaluation of each anticipated outcomes included:

- Increasing depression screening and adherence from 0% to 85% per HCA quality guidelines will be evaluated by tracking the number of PHQ-9s used by each staff at the designated interval.

- Staff will print and submit their certificate of completion to provide a measure of compliance with PHQ-9 educational training.

- Documentation of the client's PHQ-9 scores into an Excel spreadsheet to assess client's completion rate of the PHQ-9.

<p align="center">Summary and Strength of the Evidence</p>

While researching the evidence, information was gathered from multiple resources including national guidelines, books, and peer-reviewed articles to support the implementation of the DNP project. Five of the resources were Level I, five Level II, three Level III, two Level IV, one Level V, and six Level VI. The literature reviewed showed there is evidence supporting the use of a validated depression screening tool to aid in the assessment and diagnosing of clients.

There are no set guidelines on how frequently a client should be screened for depression. Evidence supports screening when there are enhanced care programs available for clients with depression (Thombs & Ziegelstein, 2014). Depression screening is only one part of the treatment process, it aids in the identification of clients who are seeking treatment (Mojtabai, 2017). There should be careful consideration of the potential harm from the excessive use of depression screening tools; such as the over prescribing of antidepressants to clients, due to a first-time positive screening result (Thombs & Ziegelstein, 2014). Screening tools are to be used

as an aid for clinicians in their diagnosing, not as a sole diagnostic tool; together they will

decrease the instances of false-positive depression results (Mojtabai, 2017).

A validated depression screening tool such as the PHQ-9, whose internal reliability and

consistency metrics is able to measure the severity of symptoms due to its high sensitivity to

changes (Beard, Hsu, Rifkin, Busch, & Björgvinsson, 2016). The PHQ-9 is a reliable self-report

instrument that adequately measures the severe effects of depression and treatment outcomes

within the mental health population (Lowe et al., 2004). The PHQ-9 has shown accuracy in the

screening of a current depressive episode within a psychiatric setting at cutoff scores greater than

13 (Inoue et al., 2012). The measurability of the components of the PHQ-9 allows it to be used as

an effective clinical and research tool (Kroenke, Spitzer, & Williams, 2001). The PHQ-9 has also

been shown to be an effective instrument in identifying clients who are at risk for suicide (The

Joint Commission, 2016).

Organizational culture and readiness for change should be assessed first, prior to the use of

a tool such as the PHQ-9, as organizations with less favorable cultures tend to have greater

resistance and barriers towards change (Patterson Silver Wolf, Dulmus, Maguin, & Cristalli,

2014). Creating stakeholders allows staff to feel personally engaged and fosters a climate

sustainable for change (Patterson Silver Wolf et al., 2014). To implement and sustain change,

the use of appropriate strategies for adoption of a new evidence-based practice must include

available resources along with staff responsiveness (Williams, Glisson, Hemmelgarn, & Green,

2017). One such strategy is the education of staff regarding the evaluation and management of

depression is necessary, it improves motivation and supports implementation (Agency for

Healthcare Research and Quality, 2014). The U.S. Department of Veterans Affairs (2016)

recommendation is that the PHQ-9 should be used as a quantitative measure for initial treatment

planning, adherence to medication, psychotherapy, and monitoring during treatment. Once

implemented, and in use, integrated follow-up care is needed for continued improvement in

client's outcome; therefore, the importance of aftercare services for mental health patients is a

significant factor in the continuity of care (O'Connor et. al, 2014).

Method

Project Intervention

The project consisted of two phases; within these phases there was a pre-project chart

review, staff education, PHQ-9 implementation, and administration.

Phase I. A pre-project, retrospective chart review was conducted to gather client's

demographic data and frequency of depression screening. Forty-six charts were reviewed from

the IOP (intensive outpatient), PHP (partial hospitalization), and CD (chemical dependency)

psychotherapy programs. Based on these results a brief meeting with clinic personnel was

conducted to discuss findings and the implementation of the PHQ-9. A PowerPoint presentation

on the importance of depression screening in the mental health population and the use of the

PHQ-9 was developed. The education presentation provided information on national

recommendations for depression screening and documentation requirements for the clinic. This

PowerPoint presentation was then uploaded to HealthStream, which is a hospital-based staff

education system, and the staff was instructed on the completion deadline date of February 16th,

2018.

Phase II. HCA has its version of the PHQ-9 that has been disseminated to its facilities

(Appendix A). This version of the PHQ-9 was reproduced with a hospital print number and

placed as part of the admission packet. The clients completed a PHQ-9 on admission and then

weekly while attending the psychotherapy programs per HCA guidelines. The client's PHQ-9

scores were then recorded on an Excel data sheet that's stored on the clinic's internal encrypted

hard drive. The document was created for the clinic's director to provide data for the quarterly

QI hospital report. A second Excel data sheet with de-identified client's data was created for the

PHQ-9 administration rate and stored on the DNP student's password-protected laptop in a

locked office.

Each week the therapist would disseminate and collect the PHQ-9 during group sessions.

The client's scores were then entered into both the DNP student and the clinic's Excel

spreadsheet. The PHQ-9 was then placed into the client's charts as part of their permanent

medical record. Each therapist also documented their client's scores within their psychotherapy

notes in the EHR. All of the staff concerns were addressed during the project and changes were

made as needed. Post evaluation of the project was conducted to gather feedback on the use of

the PHQ-9 and to evaluate the measures and barriers that may affect sustainability.

Setting and Population.

The setting for this QI project was an outpatient behavioral health clinic providing group

therapy sessions in the form of IOP, CD, and PHP programs. Majority of the clients were insured

(Figure 2) and they received both group psychotherapy and medication management by a

psychiatrist while attending the program. Each program cycle is approximately 4-weeks with the

option of extending if approved by their insurance.
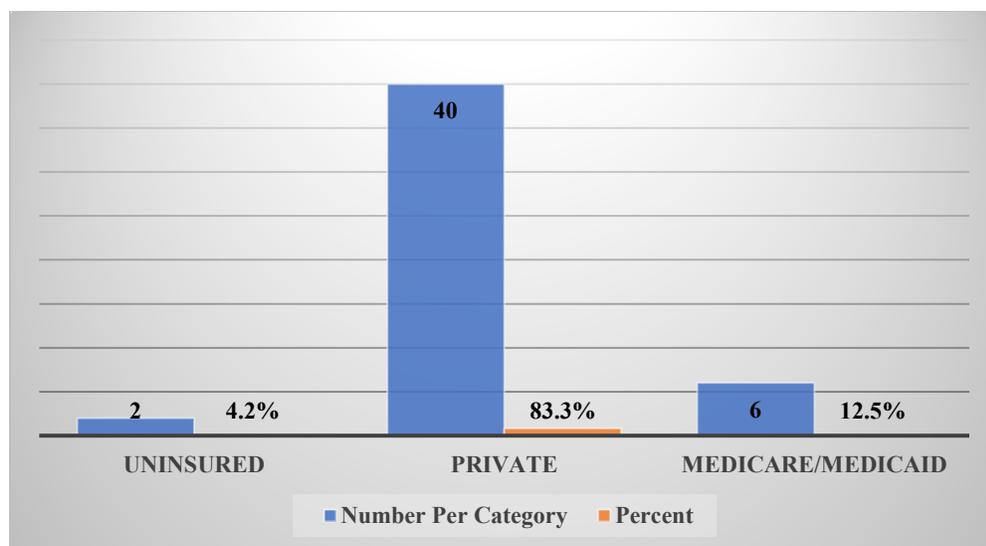
Figure 2. The clinic primarily accepts insured clients unlike the main HCA facility, referrals must be verified prior to starting the program due to not all insurance carriers provide mental health coverage.

The clients were referred to the clinic from either their physician's office or calling the crisis line or after being stabilized and discharged from the hospital. All clients were assessed by the clinic's licensed social worker to ensure that they met criteria for admission into the program. All programs were therapist-driven and supervised by the medical director who is a psychiatrist. Once admitted the clients received an initial psychiatric evaluation with two-week follow-ups by a psychiatrist or psychiatric nurse practitioner. Clients admitted to the program had to be self-sufficient, independent, and at least 18 years of age to participate, because completion of a coping strategies and tools workbook is a requirement. Average group membership ranged from three to 16 clients within the course cycle and admission primarily occurred on Wednesday.

Implementation.

The project was then implemented over a period of 4-weeks during which time 46 patients were admitted to the clinic. Inclusion criteria for participating in the project were clients admitted to the clinic's group psychotherapy programs during the timeframe. The final

participant sample was consisted of 42 individuals due to four individuals being discharged prior to the start of the project. The clients were screened with the PHQ-9 by each therapist on Fridays at the onset of the group psychotherapy session. Each therapist would place their stack of PHQ-9s at a designated area on the office manager's desk for the DNP student to review. The clients' results were then documented in the DNP's student de-identified Excel spreadsheet, the clinic's QI Excel spreadsheet and also by each therapist in their group psychotherapy note.

Barriers and Facilitators.

The staff identified the lack of clear communication regarding upcoming changes to organizational processes which affected how the information was received. Additionally, no designated QI team or active QI process have been implemented in the outpatient behavioral health clinics. Due to this lack of a QI team, the staff had no experience with the quality improvement process. This required the DNP student to not only do educational training with the staff on the rationale behind the DNP project but also on the QI process in general. Another barrier was the delay of the project start date by two weeks due to a mandatory staff training on the hospital's new evidence-based computer documentation system.

The willingness for change displayed by hospital QI officer, the clinic's director, and her staff towards implementation of the PHQ-9 facilitated change. The clinic director spearheaded all the key personnel contacts that were necessary for the DNP student to implement the project. The experience of the lead therapist regarding standardized mental health screening tools facilitated buy-in and support from the other clinic stakeholders. The office manager was critical in facilitating all requirements for acquiring client's data and the required clinic access. Finally, the input from the staff on ways to implement the project was constructive and incorporated into the project.

Ethical Concerns.

With every aspect of the project being considered, the ethical concerns addressed included the privacy and confidentiality of the client's psychiatric medical record. The QI project was approved by the University of the Incarnate Word Institutional Review Board before implementation. All client data was de-identified, encrypted and stored on a password-protected laptop and kept in a locked office. The DNP student completed certificate training on HIPAA (Health Insurance Portability and Accountability Act), and CITI (Collaborative Institutional Training Initiative).

Results

Forty two clients from three different therapy groups participated with the PHQ-9 administration over a 4-week timeframe. The project sample composed of primarily White, non-Hispanic females with a main diagnosis of major depressive disorder (Table 1).
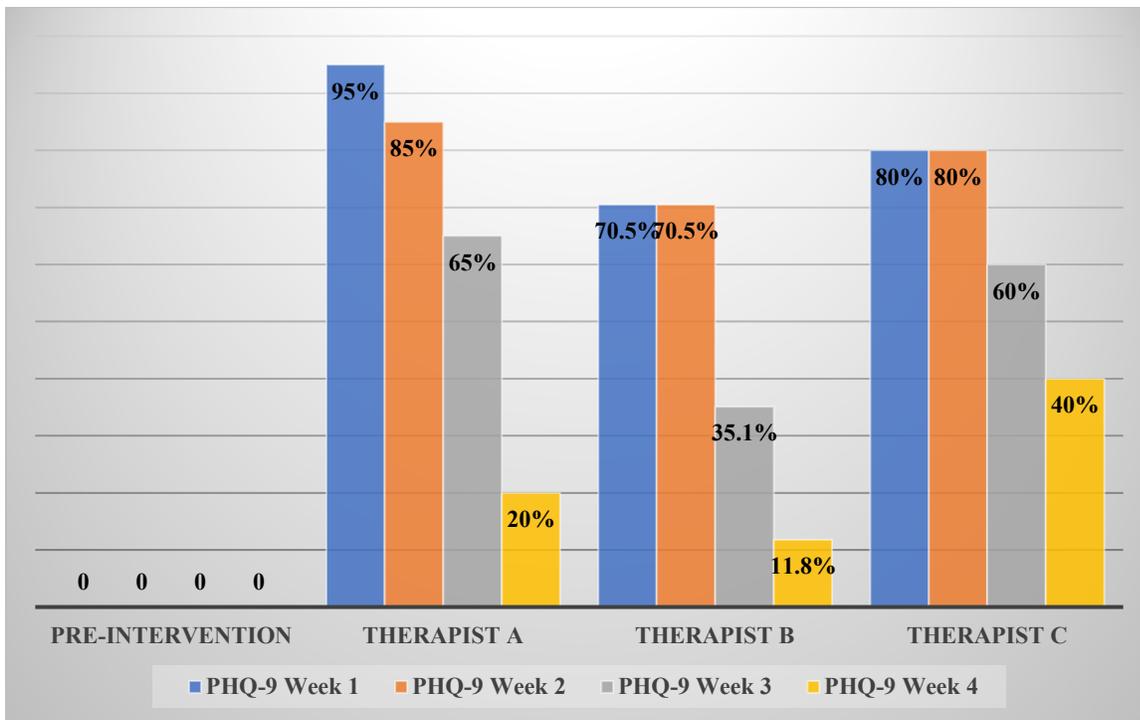

Figure 3. The PHQ-9 administration rate during the 4-week period declined due to attendance.

The project was conducted over a 4-week period during which 120 PHQ-9 screenings were administered by the three therapists. Of the 120 PHQ-9s, 97 were completed which gave the clinic an overall 78.8% administration improvement rate for the PHQ-9 (Table 2). The rate increase was a significant improvement for the clinic. The total number of clients for each group varied from therapist to therapist.

Table 1

Demographics for the Behavioral Health Outpatient Clinic

Demographic	Mean	Number of Clients
Age, mean ± SD (yr.)	41.6 ± 13.8	
Range	20 - 72	
Gender/Sex, n (%)		
Female		38 (82.6)
Ethnicity/Race, n (%)		
White, non-Hispanic		23 (50)
Black or African American		4 (8.7)
Hispanic		18 (39.1)
Asian		0 (0)
Other		1 (2.2)
Insurance, n (%)		
Uninsured		2 (4.3)
Private Insurance		38 (82.6)
Medicare/Medicaid		6 (13)
Client's Diagnoses, n (%		
Major Depressive Disorders		26 (56.5)
Bipolar Disorders		10 (21.7)
Schizophrenic Disorders		5 (10.9)
Substance Use Disorders		5 (10.9)

Therapist A had 20 clients within her group and had an average administration rate of 66.3% for the four weeks. Therapist B had a total of 17 clients with an average administration rate of 50%, while Therapist C only had five clients with a 65% average administration rate (Figure 3). The therapy groups were open groups which meant that clients could join, transfer or discharge from a group at any time during treatment. This resulted in 19.5% of clients being discharged from the program, 11.4% absent on the day that the PHQ-9 was administered, and 2.4% were late and did not complete the form (Table 2). The individual client's scores remained constant each week, those who scored high during week one were consistently high in the subsequent weeks. This trend had also been noticed for the individuals who scored low during week one. Another factor that affected the completion rate of the PHQ-9 was how stringent the therapist was with administration times (Figure 4).
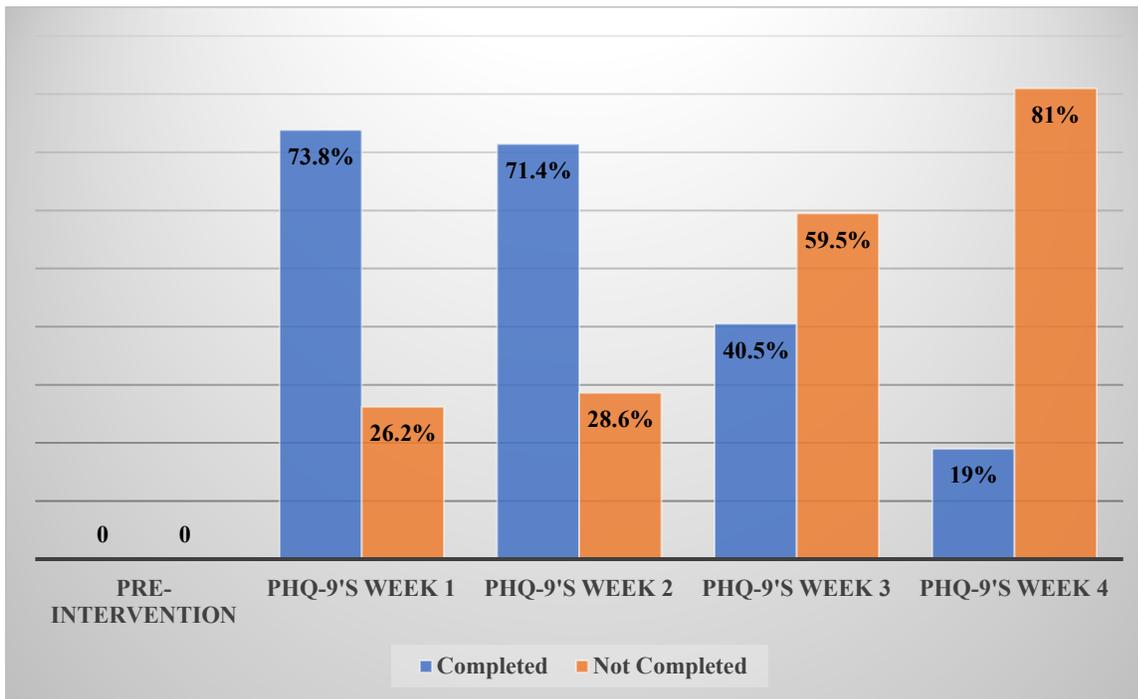
Figure 4. The PHQ-9 weekly completion rate was an inverse reflection of the administration rate, both were affected by the client's attendance.

The more austere a therapist was on administration times, (e.g., only at the start of the group, no exceptions for late arrival) the lower the completion rate for that group. Each therapist addressed their client individually regarding scores greater than 15 and assessed for any suicidal ideation or plan. For clients who reported suicidal ideation, plan or intent, the physician was notified and the client was then transferred via ambulance to the nearest hospital emergency room.

Table 2

PHQ-9 Completion Rate

	Total	Week 1 Mean (*SD*)	Week 2 Mean (*SD*)	Week 3 Mean (*SD*)	Week 4 Mean (*SD*)
n = 120					
PHQ-9	n = 97	n = 35	n = 33	n = 21	n = 8
Therapist A	53	19	17	13	4
IOP scores		16.7 ± 1.7 (7.4)	11.7 ± 1.7 (7.5)	8.1 ± 1.8 (8.1)	3.1 ± 1.6 (7.2)
Therapist B	31	12	12	5	2
PHP scores		8.5 ± 1.8 (7.3)	9.8 ± 2.0 (8.1)	3.6 ± 1.6 (6.5)	2.0 ± 1.4 (5.9)
Therapist C	13	4	4	3	2
CD scores		8.6 ± 4.8 (10.8)	6.6 ± 3.5 (7.7)	3.8 ± 2.6 (5.8)	0.6 ± 0.4 (0.9)
Attendance		0.8 ± 0.6 (0.4)	0.8 ± 0.1 (0.4)	0.5 ± 0.7 (0.5)	0.2 ± 0.1 (0.4)
Present		78.3%	76.1%	47.8%	17.4%
Absent		21.7%	15.2%	17.4%	13%
Discharged		0%	8.7%	26.1%	32.6%

Despite the efforts of the therapist, the completion rate had a steady decline after the second week of administration (Figure 5). The decline was due to the group attendance rate which was affected by a consistent increase in absences and discharges over the remaining weeks. The frequency of discharges had more of an impact on the client's completion rate than the absences. There was an average of seven absences each week; while the discharge rate maintained a steady increase, moving from only four clients during week one to 15 clients during week four, for a total of 31 discharges during the timeframe.

Discussion

Project Summary

The QI project had several successes to include the enthusiastic support from the clinic staff, despite the short training period. The PHQ-9 online HealthStream training that was developed for the clinic staff has become one of the requirements for new hires. The online training will also be used for the nurses at the inpatient psychiatric unit when it transitions to using the PHQ-9. The clinic staff had an impressive 100% completion rate, with each therapist turning in their certificate of completion before the start of the project. The implementation of the PHQ-9 at the outpatient clinic enabled the clinic to pass The Joint Commission accreditation survey during their March 2018 inspection. The clinic director was ecstatic to share the news of when the TJC inspector had asked if the clinic was using a standardized depression screening tool. The clinic director was able to produce the PHQ-9 and speak on its use within the clinic. The most important change was notably the increase in the depression screening rate due to the weekly compliance of administration by all three therapists.

The ease of use of the PHQ-9 by both the clients and the therapists was an important strength of this project. The documentation of the PHQ-9 scores by the therapists was not time-

consuming which aided in the facilitation of the implementation process. Therefore, it allowed

quick incorporation into their existing client assessment and daily therapy notes. Also, the

positive attitude of the clinic staff along with the fact that the use of the PHQ-9 is an HCA policy

has been a significant strength. The findings of this QI project are reflective of the results of

relevant research in the literature reviewed. These results confirm the use of a standardized

depression screening tool, as an effective aid in the assessment of a patient's current depressive

symptoms.

The findings show that the brevity of the PHQ-9 makes it a meaningful tool for detecting

client outcomes based on treatment. The findings are also consistent with clinician's feedback in

general literature on the use of standardized questionnaires. Even though all therapists agreed

that the PHQ-9 had not changed how they practice but instead became a tool for initiating

conversations on symptoms and coping strategies. This aligned with current research that

clinicians continue to rely highly on their prior experiences and clinical judgment for the

assessment of a client's symptoms, rather than a qualified tool (Dowrick et al., 2009).

Limitations

The open concept of the psychotherapy groups affected the number of participants during

the course of the project. The frequent admissions, discharges, and intergroup transfers inhibited

the continuous tracking of the same group of clients. The setting and sample size should not be

used as an indication that the PHQ-9 would be easily transitioned into an inpatient psychiatric

setting assessment system. The timeframe in which the project was conducted was insufficient

to produce an effective and diverse sample size that may be more indicative of the population the

clinic serves. During the literature review there were limited research on the use of the PHQ-9 in

mental health clinical settings.

Recommendations

      Future recommendations will be to conduct a qualitative study of the PHQ-9 within an inpatient psychiatric unit. Another would be to assess the efficacy of the use of the PHQ-9 in a psychotherapy group setting. Since clients are actively seeking counseling and their scores may be skewed indicating a false assessment of treatment quality and outcomes. Clinicians should abide by the national guidelines set forth by the USPSTF and TJC, along with the current research literature. Both guidelines emphasize the use of the PHQ-9 within the outpatient care setting as an assessment of client's depressive symptoms due to their infrequency of visits.

Implications for Practice

      The use of standardized tools in the assessment process has been proven to be effective in the overall treatment outcome of clients. The doctoral prepared nurse practitioner (DNP) brings that knowledge and skill of translating evidence into practice. The DNP would be able to assess the organization's culture for change and then incorporate the appropriate theoretical approach that's needed. The toolkit which the DNP brings into the workplace, not only enhances the environment but also has potential to improve client's clinical outcomes.

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Appendix A

HCA version of the PHQ-9

Severity Measure for Depression—Adult*

*Adapted from the Patient Health Questionnaire–9 (PHQ-9)

Name:_____Age:_____ Sex: Male ☐ Female ☐ Date:_____

Instructions: Over the last 7 days, 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	Clinician Use Item score
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	
				Total/Partial Raw Score:		
				Prorated Total Raw Score: (if 1-2 items left unanswered)		

Adapted from Patient Health Questionnaire—9 (PHQ-9) for research and evaluation purposes.

Appendix B

The Practice Improvement Capacity Rating Scale

Question	Weight	Criteria	Scripted Questions	Red (0 points)	Yellow (5 points)	Green (10 points)	Score	Comment
1	3	**Commitment: Senior Leadership: QI Champion/ sponsor** *Senior leadership: person or group that has responsibility for designation of time, finances, and resources* *(Physician, RN, office manager)*	Can you tell me about the commitment that senior leadership (the administration/ the practice) has made to the project? • Do you have a designated leader? • Is there a team that meets regularly? • In terms of time, finances, resources?	No designated leader for quality improvement *or* if designated, not actively engaged.	Leader designated for quality improvement work—however quality improvement team non-existent, *or* if exists, not meeting regularly to review project status/data.	Leader designated for quality improvement work and quality improvement team meets regularly to review project status/data and discuss improvement opportunities.		
2	3	**Commitment: Financial Resources**	IF NOT ANSWERED ABOVE: How do the leader and the QI team fit in QI work with their other responsibilities in the practice? • Are they paid for working on a QI project or is it volunteer work?	No time budgeted for QI activities. No specific funding to support QI activities.	Insufficient amount of FTE allocated for QI activities and/or limited/small amount of funding for QI activities.	Sufficient amount of dedicated FTE and funding allocated to QI activities.		
3	3	**Level of Physician Leader Support**	Do you have a physician leader who supports this effort? (Physician leader is one whom the other clinicians and staff look up to and identify as a leader.) • What is the relationship between this person and the QI team?	Physician leader has not been engaged in discussions regarding QI initiatives or has not yet confirmed their formal support.	Physician leader has confirmed their formal support of QI initiatives, but there are no regular meetings or interactions to discuss/review progress.	Physician leader demonstrates behaviors consistent with actively supporting QI efforts—this includes convening regular meetings with QI team leaders to review progress and help address issues/challenges.		
4	3	**Level of Practice Administrator Support**	Does your practice administrator or office manager support this effort? • How do they demonstrate this to the staff? (How does the staff know they support it?) • Do they meet with the QI team? • How do/will they help the QI team with this effort?	Practice administrator has not been engaged in discussions regarding QI initiatives or has not yet confirmed formal support.	Practice administrator has confirmed formal support of QI initiatives, but there are no regular meetings or interactions to discuss/review progress.	Practice administrator demonstrates behaviors consistent with actively supporting QI efforts—this includes convening regular meetings with QI team leaders to review progress and help address issues/challenges.		

5	3	Competing Priorities	Are there any changes that have occurred/are going to occur that may have an effect on this project? Are there any other projects the practice will be working on while this QI project is going on? • How do you see them affecting this QI project? • Do they overlap in terms of goals or data collection?	Currently converting to an EMR OR Significant staff turnover/changes OR # of QI projects competing for time of staff and resources OR Change in leadership expected or imminent OR Merger or acquisition anticipated in near future.	Modest competing priorities, such as end phase of EMR conversion OR Other QI projects, but winding down soon OR Relatively stable staff and leadership structure.	No significant competing priorities OR Significant issues/challenges impacting execution of QI activities AND Stable staff and leadership structure.
6	2	Communication	• Does the rest of the staff know about this effort? • How have you kept the staff up to date with the progress of other projects in the past? • How are you communicating the work being done by the QI team to the rest of the practice?	Project not discussed at regular staff meetings, limited knowledge among practice physicians/staff, no data/information posted or distributed	Some effort devoted to sharing project information and updates with practice physicians/staff	Project information and updates discussed with practice physicians and staff at regular practice meetings, data/information shared, input/feedback recruited. Data posted in visible place.
7	2	Access/Use of QI Infrastructure/ Resources Available in the Community	Does your practice participate in any community improvement efforts? Any EMR sponsored or trade industry sponsored improvement efforts?	No practice awareness of QI infrastructure or resources available in the community.	Some awareness of QI infrastructure and resources available, but not yet accessing/using.	Practice is accessing/using QI infrastructure/resources available in the community.

8	2	**Prior Experience Executing QI Projects**	Tell me about the improvement work your practice has done in the past • What kind of experience do the members of the QI team bring to the effort? • Do you keep a record of what you have tried and how it went? • How do you decide if what you try/ change is working? (You are looking for answers that indicate they use data to drive improvement.)	No identifiable improvement interventions pursued to date.	Improvement interventions pursued; but no formal QI method used (Model For Improvement, Lean, Six Sigma, etc.)	Previous improvement interventions pursued using formal QI method.
9	2	**QI team designated with appropriate representation**	Who is/will be on your QI team? Why?	No QI team in place OR Several team members identified for QI activities, but there is a lack of balance representing the testing to be done (e.g., no RN included on team for PCMH)	Team members identified for QI activities. Balanced representation of staff based on QI activity. No patient partner on QI team.	Team members identified for QI activities. Balanced representation of staff based on QI activity. Patient/parent part of the team.
10	2	**Reliability of data**	How reliable do you think your reports are? • Does the information seem accurate to you? • Do you compare your data to other practices or national benchmarks? • Is there someone who looks over the reports for accuracy? • Does the QI team review the reports?	No designated point person reviewing data for accuracy.	Point person designated, but no defined process for monitoring accuracy/timeliness of data.	Accuracy/timeliness of data monitored and addressed. Quality leadership person/team discusses data accuracy at regular intervals and identifies/pursues improvement opportunities.

11	2	Reliability of data collection	How reliable do you think your data are? • Do you think the data you need are reliably entered into the EMR with each encounter? • Is there a way to tell if they are? • Does everyone follow the same process for getting info/data into the EMR?	Data collection solely dependent on clinicians at time of encounter.	Redundancy built into data collection process. Point person designated, but no defined process for monitoring accuracy/timeliness of data entry.	Defined process for monitoring accuracy/timeliness of data entry. Quality leadership person/team discusses data collection process at regular intervals and identifies/pursues improvement opportunities.
12	2	External Payment Incentives from Commercial/ Governmental Payors Linked to the QI Project	Is the practice being paid to participate in an improvement effort other than MU? Are you being paid to report on or meet quality measures?	Not currently.	Currently being discussed by commercial/ governmental payors, but not yet in place.	Currently in place.
13	1	Meaningful Use	Where is your practice in terms of applying for meaningful use?	Not attested to meaningful use.	Meaningful use in design phase.	Meaningful use implemented and criteria met.
14	1	Source of IT support	What do you do when you need to add fields to collect data or run reports? • Do you do this in office? • Do you need to contact someone outside the office? • Does this arrangement meet your needs/the needs for the QI project and QI team?	No internal or external IT support available to the practice.	Internal or external IT support available to the practice, but not meeting needs of QI initiatives.	Internal or external IT support to the practice is meeting the needs of QI initiatives.

| 15 | 1 | Use of EMR/Registry/ Analytic Reporting Tool for Measurement/Data Reporting | What data will you be collecting for this project?

How do you plan to collect the data you will need for this project?

• Is the information currently collected in your EMR?
• Can you get reports based on the data from your EMR easily? | No EMR. | | EMR in place, but data fields linked to key measures not embedded, or related data reporting capabilities (EMR, registry, or other analytic tool) not yet in place. | EMR with data fields linked to key measures embedded, and data reporting capabilities in place. |

Total Score

Must-Pass Criteria Met   Yes / No

| Final Score—Circle level | Red: 0-99 | Yellow: 100-249 | Green: 250 or greater and *all must-pass criteria met* |

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