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Implementing the Depression Screening Tool PHQ-9 in the Annual Wellness Exam of Concierge Family Medicine

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Eric Iglesias

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Abstract

Background: Depression has been one of the most common mental health disorders that our population faces but is underdiagnosed and undertreated. Primary care providers are often the first line of defense in detecting depression. Because of this, implementing a depression screening tool in a primary care setting will improve holistic management of care and improve quality of life. **Project Aim:** The aim of this project was to increase the number of clients who are evaluated for depression by using the PHQ-9 screening tool during their annual wellness exam and initiate treatment according to the Veteran's Affairs/Department of Defense Depression Treatment Guidelines. **Methods:** The project took place at a concierge medicine family practice with no current depression assessment tool in place. It involved the clients, medical assistant performing the screening, and the provider. The provider reviewed the PHQ-9 score and implemented the appropriate treatment based on the guideline for each of the five categories ranging from continued reassessment to medication initiation or adjustment and referral to a specialist. **Results:** Out of a total of 47 patients screened, 10 of them (21%) required at least a follow-up, and 2 out of these 10 were referred for a higher level of treatment with a counselor. **Implications:** The implication for practice is to ensure all clients are screened for depression as part of the holistic management of care. Use of the PHQ-9 tool in primary care can lead to early identification and treatment for this overwhelming condition which can improve health outcomes overall.

Keywords: depression, PHQ-9, Concierge medicine, MDVIP

Implementing the Depression Screening Tool PHQ-9 in the Annual Wellness Exam of Concierge Family Medicine

Mental health conditions such as depression are becoming an easier topic for discussion, especially since it is openly discussed on avenues such as social media, movies, shows, and even by some of our favorite athletes. However, even though depression is more of an acceptable topic than in previous times Stephenson (2019) states that depression is still underdiagnosed and not appropriately treated. The National Institute of Mental Health (NIMH) states that depression is the most common mental health disease and as a nation, over 20 million individuals have suffered at least one episode of depression in the year 2019. It can be assumed that the number of individuals who have suffered or are suffering from depression is higher since the Covid-19 pandemic began. One assumption as to why this is the case, is because of the fear that COVID brought to everyone, as well as socially limiting events which caused isolation, working from home and loss of income. A recent study found that two out of five (40%) individuals had some sort of anxiety or depressive episode since the pandemic began (Stephenson, 2021).

The U.S. Preventive Services Task Force recommends screening for depression in the general adult population (Healthy People, 2020). Primary care providers are typically the first, and at times the only provider who an individual will see for some sort of care. Because primary care providers can be the first line of defense against depression, the focus and importance of a depression screening tool being put into action is necessary. Though it is not as high as one would expect it to be, 75% of adults and 64% of adult Americans over the age of 30 see a primary care provider, meaning there is room to improve the poor statistics regarding depression (Fong, 2021).

It is well-documented that depression can lead to a barrage of symptoms. Some of the symptoms associated with depression are anger, weight loss or weight gain, sadness, anxiety, difficulty concentrating, hopelessness, and suicidal ideation or attempt of suicide (Kato et al., 2018). The National Bureau of Economic Research reports that people who have been diagnosed with a mental illness such as depression at some point in life consume 69% of the nation's alcohol and 84% of the nation's cocaine (Smith, 2020). For these statistical numbers to improve, more individuals need to be screened for depression. A good starting point would be in the primary care setting since 64% of adults over 30 years of age have a primary care physician (Carroll, 2019). Because of this statistic, there should not be a reason to skip screening patients for depression since it is such a disabling diagnosis in our population and country. The World Health Organization (2021) states that depression is the leading cause of disability worldwide and a major contributor to the global burden of disease. Due to the nationwide shortage of mental health providers, it falls on the PCPs to address this undertreated and underdiagnosed condition.

Organizational Assessment

Agency Members

The physical building where this project was implemented was new as of 2022 but the provider has been practicing family medicine for the better part of 35 years in this same city. He recently moved buildings to match the vision he had for his practice which focuses on more one-on-one patient care. To achieve this, a concierge program has been adapted and implemented called Medical Doctor Very Important Patient which the preferred abbreviation is MDVIP. The concierge portion of the practice is also new with the provider decreasing from over 3,000 patients to less than 1,000. The reason for the drop in patients is due in part to the drop in certain

insurance companies covered as well as the premium the patients must pay to be a part of the new practice.

This medical doctor has been the sole provider of the practice since it opened over 30 years ago but in the past they have considered hiring other providers and are not opposed to the idea. There are, however, four medical assistants and an office manager who help facilitate the daily work of the practice. There is one registered nurse (RN), but this RN currently only assists with intravenous therapy treatments and does not assist in the annual wellness exam or evaluation of the patient. The medical assistants as well as the office manager have been working for this doctor for over 15 years.

Facility by the Numbers

Currently, this practice sees anywhere from 15 to 30 patients a day. This varies depending on the services that they seek. Some of the clients seek other services that do not require the doctor's assessment or evaluation. Some of these services include IV therapy, infrared sauna, hyperbaric chamber, cryotherapy, and laser treatments. These services/treatments are private pay only and they do not have to be a patient of the doctor to use them. The doctor's goal was to see no more than 12 total patients a day which comes out to 60 patients a week. Normally, two out of the twelve patients are there for the Annual Wellness Exam while the remaining patients could be there for a follow-up, a nurse visit, or a last-minute appointment to see the provider for something acute like medication change, or illness, or something along those lines. This allows the provider enough time to spend with the patient, evaluate their care and treatment, and answer any questions that they may have. It is also an expectation of the concierge service that they follow for the provider sees less than 15 patients a day.

Facility, Population, Processes

The facility itself is newly built as of 2022 and is in an area of town that is considered the medical center of the city. It is a free-standing building with a few other buildings within proximity. It is a two-story building with the IV therapy portion of the practice being upstairs and the remaining services being downstairs. There is not a waiting room as patients are greeted and seen by the staff upon entry and taken directly into a room for either their elective service or for evaluation before seeing the doctor.

Because the practice has undergone a dramatic change from regular family medicine with over 3,000 patients to concierge medicine with 1,000 patients, the population has shifted. The current clients at the practice are all adults 18 years of age or older. It is not gender specific though roughly 60% of his patients are females. The practice treats patients over the age of 17 years of age but 1,645 of the 2,000 patients (82%) are over the age of 30 with most of the patients falling between the ages of 38 to 64. Of these 2,000 clients, 774 are White and 678 are of Hispanic descent. Out of the remaining 548 clients, 312 are Black or African American and the rest are Asian or Pacific Islander. The most common diagnosis that this provider covers are elevated blood pressure, diabetes, high cholesterol, and hormonal imbalances such as testosterone replacement.

Concierge Medicine

Concierge Medicine or VIP providers is a new method of seeing a provider as well as a provider treating a patient. This method is growing in popularity due to its perks and benefits. The patients feel more in touch with their care as they are invested monetarily due to the fee it costs as well as the added time they have with their provider. One reason concierge medicine is fast growing is due to the improvement in wait times in the primary care setting. The provider

that practices concierge medicine has a cap on how many patients they treat. The average family practice provider has over 3,000 patients while a concierge family practice provider can have no more than 1000 patients in their care. This enables the provider to be more involved in the care and treatment of their patients. Another benefit is the access a patient might have to their provider that extends past their appointment time. There are a few programs that are considered concierge medicine but the one being used by the facility this project took place in is called MDVIP as described above. MDVIP has over 1,000 providers nationwide as well as over 365,000 patients who see a provider using this method. The basic concept of concierge medicine is for a patient to pay a fee to not only have more access to their provider but also to have certain perks in their care such as more in-depth exams and treatment options. Sometimes the patients are considered clients and these titles can be used interchangeably. The clients of MDVIP pay a total of $1,800 a year or $150 a month to fall under the concierge portion of the practice. These are the clients the provider sees. With this membership, the client receives the annual wellness exam and a follow-up visit two weeks after the annual exam to review results such as labs, and tests and go over any questions or concerns of the patient. There are other aspects to membership such as 24/7 access to the provider through a generated system where the provider has fifteen minutes to respond to the client's request.

Concierge medicine has proven to be effective in a variety of areas such as improvement in patient care, satisfaction, and overall well-being. Because the provider has more in-depth results from the exams performed, the care and treatment given is specialized to that patient making this a perfect opportunity to provide a more holistic approach by including a focus on mental health/wellness with the annual exam. A clear con to this concept is that due to the added

out of pocket cost to see a provider that falls under concierge medicine, not many people can afford this kind of care.

Need for Depression Assessment

As respectable and admirable a facility this is, one can see how a client who is having a mental health crisis can potentially be skipped, missed, or simply not seen. Though they are a great facility, patients are still being missed when it comes to evaluating them for mental health illness such as depression. The annual wellness exam covers a large variety of topics such as respiratory health, sexual health, sleep index, EKG, labs, nutrition and ongoing wellness evaluation but it does not cover mental health examinations or screenings. Because there is no set standard on treating mental health in a family practice aside from what the providers in that clinic feel is appropriate, many areas within this topic are not properly addressed. Having spoken with the medical director as well as the nurse and medical assistant, implementing the PHQ-9 screening tool during the already scheduled annual wellness assessment is something they were open to implementing. The PHQ-9 has been a well-studied and researched screening tool, as it is used to detect a variety of mental health conditions such as major depression (Levis et al., 2019). The staff was already familiar with this screening tool but reeducating them to the purpose as well as the recommended treatment of action based on the result was needed. Though there are no real statistics that have been developed or researched at this facility, the consensus from staff and clients was that there are limited resources for mental health disorders and the ones in place are broad and not client specific. With only one medical provider available, the depression screening tool assisted this need by setting up better protection for the clients.

Evidence

Depression is one of the most common mental illnesses in America. An estimated 21 million or 8.4% of the American population had at least one major depressive episode and lifetime prevalence is higher (National Institute of Health, 2022). Depression can negatively affect one's life and is a leading cause of disability on top of it being associated with higher mortality (American Psychiatric Association, 2019). Despite the prevalence and impact of this condition, a high number of cases are underdiagnosed and untreated (Kato et al., 2018). It has been recommended that individuals be screened for depression regardless of if they or their medical provider believe they have signs or symptoms of depression. In its 2009 and 2016 recommendations, the U.S. Preventive Services Task Force recommended screening for major depressive disorders in the general adult population, "regardless of whether they or their health care provider are aware that they have symptoms" (Kato et al., 2018). As prevalent as depression is and as much research as there is on depression, it is estimated that less than 5% of the adult population is screened for depression (Kato et al., 2018). This same data suggests that screening for this is not a frequent practice regardless of specialty. Because depressed individuals typically present with somatic symptoms, misdiagnosis of depression can occur. Ignoring this is also likely due to the individual focusing more on their somatic symptoms such as headaches, pains, digestive problems (nausea, constipation, or bowel problems). The provider could be focused more on these symptoms instead of what the actual underlying condition is.

Screening Tools

There are over 10 different kinds of depression screening tools to be used such as the Beck Depression Inventory, The Hamilton Depression Rating Scale, Beck Hopelessness Scale, Children's Depression Rating Scale, and Montgomery-Asberg Depression Rating Scale. All

these instruments to detect depression have been used in the studies that served as the evidence base of the systematic reviews that undergird the guideline recommendations. The PHQ-9 has the highest specificity among adults with 94% as well as being the most used depression screening tool (Maurer, 2012). “These instruments include both interview and self-report measures and may be used to screen, diagnose and/or track treatment outcomes” (Maurer, 2012). Each screening tool has been demonstrated to be valid and reliable, and most are available at no cost. A potential barrier to some of these tools is that they are not quick. For example, the Center for Epidemiologic Studies Depression Scale and the Hamilton Depression Rating Scale take approximately twenty minutes to complete and receive feedback (Maurer, 2012). The Montgomery-Asberg Depression Rating Scale is a 10-item screening tool that takes over thirty minutes to complete (Sajatovic, 2015). Another obstacle that the clinician and patient may face is that the number of questions asked can range from single digits all the way to 43 such as the Reminiscence Functions Scale. These are considered obstacles because implementing a screening tool that is time consuming might create doubt in implementing it in already busy primary care facilities. Many of the instruments are scored on points that lead to one falling in a certain category and this is where the treatment or recommendation is addressed such as the PHQ-9. The PHQ-9 has a 61% sensitivity and 94% specificity in adults. Making it a quick, yet effective screening tool that can be used in the primary care setting as advised by the U.S. Preventive Service Task Force (Maurer, 2012).

The Veteran’s Affair and Department of Defense guidelines help address the treatment recommended for the patient depending on which category the patient falls into post administration of the PHQ-9 screening tool. Under the section *Recommendation for Treatment* the categories and treatment advised is discussed. Overall, the PHQ-9 uses the Diagnostic and

Statistical Manual of Mental Disorders (DSM-IV) signs and symptoms to determine its' treatment recommendations. The DSM-IV is the handbook for mental health professionals and diagnostic criteria to follow (APA, 2022).

Plan

The plan was to incorporate the depression screening PHQ-9 into the annual wellness checks for a better picture of what the clients' mental state is. Then use the results to appropriately implement the treatment recommended by the Veteran's Affairs/Department of Defense (VA/DoD) Depression Treatment guidelines (Health Quality VA, 2016). The annual wellness exam covered a large variety of topics such as the Epworth Sleep Index, labs and EKG, Spirometry testing, vision and hearing exams, nutrition, Sexual Function Screening, and even ongoing wellness coaching. The one area it did not touch on was the mental side of health. If this topic is not brought up by the client or the doctor it can be missed or forgotten. Implementing the PHQ-9 screening during the initial visit of the annual wellness exam will allow for more wholesome and complete care. The collection of data for the annual wellness exam is gathered by the medical assistant as this is more of where the questions are asked, and the labs/tests are collected. The follow-up visit with the provider is done 2 weeks after the initial exam. By this time, the results from any test or lab collected will be in. The overall goal is to increase the number of clients being screened for depression to 100% from 0% of the concierge portion of the practice. If screenings are not in place, how can depression, being the problem that it is in our society, be addressed?

Education

To make this possible, educating the staff was of importance. All the staff members, including the provider, have been educated and are on board with this implementation. This was

done in two parts with each part taking 2 hours. The first was meeting with the doctor to discuss this implementation as well as the treatment recommendations. Once the doctor approved and agreed to proceed, the rest of the staff was gathered and training as well as educating of the process was done in a group setting all at once. They were all open to this concept and adding it to the wellness. One of the medical assistants mentioned that she herself was diagnosed with MDD after detection was done through the PHQ-9 at a doctor's visit a few years back, giving her support for this. The main resources needed were evidence of how depression is affecting our population as well as the PHQ-9 questionnaire and the VA/DOD guidelines for treatment recommendations. The PHQ-9 was completed in paper form until it is scanned over the client's medical records. A blank PHQ-9 questionnaire form is placed in the patient's chart prior to their arrival. This is normally done the day prior. In this chart all the tests and exams are collected during the pre-assessment to then show the provider who sees the patient at a later date (approximately 2 weeks later) for follow-up and result notification unless the PHQ-9 results indicate immediate intervention. At this point the MA notifies the provider who will implement the recommended treatment based on the VA/DOD guidelines. Once the form is in the electronic medical records, the paper form will be disposed of using a third-party paper shredding company.

The provider was made aware that the client's results may need treatment and the guidelines for what is recommended are set forth by the VA/DOD. This part of the project is where the change needs to be performed by the provider as they are the only ones able to implement the treatment. The criterion for treatment is clear but it is the provider who makes the decision on what treatment the client will be provided with.

The nurses/medical assistants performing the assessment are a crucial part of the educational process due to being the ones asking the questions as well as being advocates for the client. This has been communicated with them to ensure there is transparency as to the expectations for this project.

Recommendation for Treatment

According to the American Psychiatric Association, the patient health questionnaire (PHQ-9), incorporates DSM-IV depression criteria with other leading major depressive symptoms into a brief self-report tool often used for screening and diagnosis, as well as selecting and monitoring treatment (He et al., 2019) (see Appendix A). The PHQ-9 will allow the patient to fall under one of five categories. With these categories, symptoms of depression play a part as well. The Veterans Affairs Department and the Department of Defense (VA/DOD) use the DSM IV diagnosis criteria for diagnosing and symptoms of this diagnosis. The DSM IV depression symptoms are depressed mood or irritability, decrease interest or pleasure, weight change greater than 5%, change in sleep, change in activity, fatigue or loss of energy, guilt/worthlessness, concentration diminished, and suicidality (He et al., 2019)

The first category is titled *None* and is a score between 1-4 (see Appendix B). This category does not meet criteria for a diagnosis of depression and no treatment is needed. It also presents with less than two DSM IV depression symptoms. A score of 5-9 symbolizes *Mild Depression Symptoms* and the treatment for this would be to repeat the PHQ-9 at a follow up within 2 weeks of the original PHQ-9. The follow-up visit does not have to be adjusted to a closer date and can be done within 1 year of their initial PHQ-9. As far as symptoms go, less than five symptoms could be present. Mild Major Depression is categorized by a score of 10-14 along with five to six symptoms of depression. The proposed treatment action is to consider

counseling with a therapist to assist in expressing their concerns/issues. Though it does not specify how many sessions or how often, this can be determined by the therapist based on the need seen. The other two forms of treatment are follow-up visit and/or pharmacotherapy. Pharmacotherapy can be done on the follow-up visit or during the initial visit. Moderate Major Depression (15-19 and six to seven symptoms) and Severe Major Depression (20-27 with more than seven symptoms) have similar treatment plans. Both require immediate initiation of pharmacotherapy and psychotherapy. If the patient is already taking medications for depression, either adjustment in dose or addition/substitution of medications should be considered. If severe impairment and/or suicide risk is present, then collaborative management such as expedited referral to a mental health specialist should be considered. Another consideration would be inpatient hospitalization that will also include collaborating providers (Healthquality, 2016).

During the annual wellness exam, the client will be provided with the PHQ-9 as part of the assessment and asked questions that pertain to the screening tool. Based on the results, the nurse/MA will determine what the next step is (see Appendix B). If the client does not fall under any of the categories that require treatment or follow-up, then nothing is done aside from putting this information in the client's medical chart.

If a client has a score higher than 9 requiring immediate notification of the provider to implement treatment, then the provider was notified during the pre-assessment appointment. This allows the provider to initiate treatment as soon as possible if needed. The annual wellness exam includes a follow-up with the provider 2 weeks from the initial appointment. If a client falls under the PHQ-9 category that requires a follow-up in 2 weeks, then this follow-up is already built into the program, and this includes the reevaluation for depression. The referral for a psychiatric provider is handled by the doctor. There are two psychiatrists' offices that the

provider partners within the same city. One is the preferred option due to there being two psychiatric nurse practitioners as well as one psychiatrist, making openings to see a provider faster. Once the doctor decides to refer the patient to the mental health provider, one of the medical assistants in the office calls over for availability with the patient in the room to lock in a date that will work.

If a client is suicidal or homicidal, this clinic has set a protocol in place prior to this project implementation of contacting a mental health officer to have them evaluated for immediate transfer to either the emergency room or a psychiatric facility. While waiting for the officer, the patient is taken to a safe room where all wires are removed, and a nurse will sit with this patient till the officer arrives. If family is there, they can also be in the room as support.

Barriers

The barriers in this organization center on that of educating staff who administered the questionnaire to the importance of understanding the administration of this screening tool. This facility can be busy at times making this added tool seem unnecessary. Education focused on the importance of this screening. It might be tempting to play down the results in an already busy clinic to cut down time, but this identifies serious conditions being masked as most depressed patients typically present with somatic complaints. When the staff understand the reason for this implementation and are on board, we should see a stronger team approach that will enable accurate findings and improve patient outcomes.

Another organizational barrier that exists is that there is only one current registered nurse on staff. There are four medical assistants (MA) who have all been working with this provider for at least 10 years. This could create a barrier in that the scope of practice of a registered nurse is different than that of MA though the screening tool itself can be performed by any level of

healthcare staff. Because the provider is physically present during regular business hours, the barrier of accessibility to the clients' during afterhours is one that might need reevaluation in the future. Currently, there is the option of having the doctor available 24/7 as part of the membership. Due to the provider always being on call, this barrier might not be as challenging as it seems.

Ethical Consideration

As mentioned earlier, due to proper handling personal information, the screening tool results are on a need-to-know basis. With multiple staff members in the practice, ethical considerations center on patient privacy. The nurse or medical assistant providing the screening tool and the doctor implementing treatment will be the only ones to know the findings. Their names, location, profession, or any pertinent information of the clients' will not be shared during this project. This will also include any of the staff members' names, the facility, the doctor involved or any information that might lead to their identity unveiling. The current EMR being used needs both a username and a password as well as permission from administration to access any patient information. This allows privacy to be securely protected.

No patient will be compensated for their participation as this will be a part of their annual wellness assessment. The cost of their membership will not be increased due to this additional screening, nor will the visits from the provider. Any treatment being implemented based on the results of their PHQ-9 screening will be the responsibility of the patient; though they may use their insurance to potentially cover some or any additional costs. The patient might be responsible for covering the cost of added medications if their insurance will not cover it. The patient can decline the medication if they choose not to pay for it. If this occurs to patients during the project being implemented, a section will be noted where the information will be collected

and displayed. A patient also has the right to refuse any treatment recommended by the provider and this will also be documented in the client's EMR.

This quality improvement project has been submitted and approved by the University of the Incarnate Word Internal Review Board and the School of Health Professions as non-research.

Evaluation Plan

Outcome 1: Ensure all clients are being screened 100% of the time. Currently, no mental health (depression) screening tool is in place. Obviously, the percentage of clients being screened for depression during their visit is at zero percent. To get this percentage to 100 percent, all clients need to be screened during their annual wellness exam by the medical assistants. This data was collected and put into a data collection form on Excel (see Appendix C).

Outcome 2: All staff and providers will be educated on the new screening plan by the end of February. Educate all members of the provider team and medical staff of the new plan for assessing and monitoring depression symptoms.

Outcome 3: Initiate treatment for depression as per the VA/DOD guidelines for all patients who screen positive. If screened positive, the providers will follow the Department of Defense/Veterans Affairs (DoD/VA) depression initiation treatment recommendations (see Appendix B). The higher the patient's screening scores the more intensive the treatment becomes (from only continuing therapy on a regular basis to daily therapy and 1-2 medications to hospitalization, depending on the severity). This data was captured based on the scores from the PHQ-9 results.

Results

The actual screening of patients during this project took a total of 9 weeks. The provider saw a total of 47 patients who fell under the concierge portion of the medical practice. Over half

of the patients were males (26), while the remaining 21 were females. Out of the 47 patients, 22 of them were White, 17 were Hispanic, and 8 were African American. Age groups were put into three groups. The first were from 18 to 30 years old, which accounted for 12%. The second group fell in the 31 to 45 (31%) age category while the last group were those 46 and older which were the biggest group with accounted for 55% of the total patients screened.

Outcome 1: Ensure all MDVIP clients are being screened 100% of the time during their Annual Wellness Exam.

All (100%) of the (47) patients seen under the MDVIP model of the practice were screened during their Annual Wellness Exam achieving the goal of this outcome. Other patients were seen in the practice but for other reasons, thus not qualifying for the PHQ-9 screening at the time of their visit.

Outcome 2: All staff and providers will be educated on the new screening plan by the end of February.

The staff members, as well as the medical provider, were all educated about this project, the PHQ-9 implementation, and what to do with the results within that visit based on the recommended criteria. The recommended criteria were also taught, and all questions were answered.

Outcome 3: Initiate treatment for depression as per the VA/DOD guidelines for all patients who screen positive.

Out of the 47 patients screened, 10 of the patients (21%) scored above the criteria of no treatment or recommendations, meaning that use of guidelines to determine a treatment intervention was required for 10 out of the 47 (21%) screened patients. Additionally, eight out of these ten patients scored between five to nine and the remaining two scored between 10 to 14.

The recommendations for a score that fell in the mild category (five to nine) were all seen for a follow-up 2 weeks later per the guidelines and rescreened using the PHQ-9 model again. Three out of the eight no longer fell in the mild category due to their score being lower than five at reassessment. The main reason for the decrease in score is their improvement in their sleep that resulted in this question being a score of "0." The five other patients still fell in the mild category and the clinician determined upon further evaluation their score had to do with poor sleep quality or little energy and not depression. No further treatment was warranted at that time.

Two out of the 10 patients scored in the moderate category (10-14). This category recommends treatments such as counseling. Both patients were referred to counseling per the recommendations.

Discussion

We saw a total of 47 patients who were screened and evaluated as described. 10 out of those 47 tested in the range that needed further evaluation. Eight were in the mild category and they were re-evaluated 2 weeks later at their already scheduled follow-up. The main reason we wanted the screening tool to be done at the initial annual wellness exam was for the already built-in follow-up 2 weeks later. This allowed eight out of the 10 patients who screened positive to be followed up with in a timely manner as per the VA/DOD guidelines. This prevented having to add the patient to an already tight schedule and limited potential hiccups with this category (mild). But more importantly, this built-in follow-up ensures that the patient gets the care needed to evaluate their safety and treatment needs in a timely manner and likely faster than they could get in to see a specialist. As it turned out, upon further discussion and evaluation, the provider noted that the mild risk scores were more likely attributed to a poor sleep pattern rather than depression. Thus, no further treatment was warranted at that time. However, since sleep is part of

the scale assessment, it is recommended that they are rescreened on a regular basis as part of their plan of care.

The remaining two patients who were positive and fell under the moderate category were referred to counseling during that visit. The counseling sessions for these individuals took place at another facility where they were seen by a mental health counselor. One of the patients was seen the week after their initial Annual Wellness Exam and the one was scheduled 2 weeks post the PHQ-9 results.

Implementing the intervention was fully supported by the provider due to it being studied and researched by the VA/DOD. The provider has had some connection with the VA in his career and is fond of the way medicine and research are used for improvement in care. Another success to the intervention was that the recommendation for the category “mild” is to have a repeat PHQ-9 and a follow-up 2 weeks from the initial screening. Because part of the MDVIP Annual Wellness exam incorporates a follow-up for results and review 2 weeks from the initial exam, we did not have to figure out any sort of new format and scheduling was unaffected. Both of these were “wins” for the project and great facilitators towards its success.

The most important difficulty in the implementation of the intervention was referring patients to counselors or therapists which is the recommendation in the category “moderate” under which two patients fell after their initial assessment. It seemed that because of the high demand for mental health providers such as counselors and therapists, appointments were a minimum of 4 weeks away. Though the VA/DOD does not specifically address the time frame of when one would need to see a counselor or therapist after scoring in the moderate category, one would not want to delay this intervention. Because MDVIP has the 2 week follow-up already in the program, this would be of immense benefit to the patient scoring in the “moderate” category

if the referral to the counselor or therapist is not achieved or if the appointment is far out. The 2 week follow-up will ensure that the patient is at least being seen by a medical provider to ensure that their potential depression has not worsened and if so, it can be addressed right away. This validates the need for a proper collaborative agreement or adding a PMHNP to this clinic or any clinic providing this kind of screening service.

The project's strengths were the efficiency of administering this screening tool and how easy it was to be implemented into the annual wellness exam as well as the simplicity of the questions. It took between three to 5 minutes to ask the nine questions. Another strength of the project were the treatment recommendations. Though none of the patients scored above a 13 or moderate category, it was simple to understand the recommendation and how it gradually increased as opposed to an immediate increase in treatment from one category to the next. The staff and the provider bought in to this project after recognizing the need for it and agreed to implement it.

Limitations

One of the main limitations surrounding this project is that the PHQ-9 screening questions and the results were not a part of the electronic health records (EHR). They were done on paper form and then manually inputted into the patient's electronic records. Though the results ended up being put into the EHR, having the paper form could lead to a potential privacy breach or loss of data. Without its inclusion initially it is possible that the form could be lost before scanned into the record and paper forms are harder to share across various providers/institutions. Thus, resulting in difficulties coordinating care appropriately.

Another limitation was the size of the sample. We had 47 total patients screened in the time allotted for the project to be performed. One downside to concierge medicine from our

perspective is that there are not a lot of patients being seen daily as this is part of the selling point of concierge medicine. The results lined up with the research and evidence, but it would have been beneficial to have had a larger sample size. At the same time, the model allows for more integrated holistic care with a smaller number of patients, which is what helps make the implementation and use of the PHQ-9 tool such a great asset in concierge medicine models.

Because this family practice served the middle to upper class, individuals within the lower income population class were not accounted for in the results. If all income class groups were to be measured and screened, would the results still be the same or would there be a change in results based on income groups. This project may not be as easily replicated in other types of clinic models.

Recommendations

In order for the continuation of the intervention to keep running efficiently, partnering with a specific psychiatric provider, clinic, or team would be of high recommendation. Having an interdisciplinary team that involves mental health providers and counselors will positively affect this process and the intervention phase. The PHQ-9 score places individuals in one of five categories. Three out of the five categories require a mental health provider, counselor, therapist, or a combination of these. Being that this is the case, if the facility can partner with such specialists, not only will there be a possibility for a smoother treatment intervention, but the outcome of the patient can improve as well.

Another recommendation would be to implement the PHQ-9 questionnaire and the patient response into the patient's EMR and skip the paper form portion of the project. MDVIP would have to add this to their software in order to make this possible. The obstacles to making this possible might be bigger than what is feasible initially but providing the information to

MDVIP could lead to a review into implementing this into their wellness exam. This would expand the understanding of its use across multiple clinics in a broader region, and thus expand the holistic care being provided. In time this will impact a much larger volume of patients and improve their quality of life.

Implications for Practice

Though the sample number of this project is not impressive, the results line up with the information and research that has been done such, over 20 million Americans suffering at least 1 episode of depression in 2019 (NIMH, 2019). The results of this project indicate that this sort of simple, yet effective screening tool can be successful if implemented not just in the primary care setting but in any other type of medical setting where an assessment of some sort is being performed.

The doctoral prepared nurse practitioner has a similar role to the medical doctor had in the intervention process for this project. It takes a licensed provider of higher education to assess, develop, coordinate, and implement a project of this nature. The advanced provider can then initiate and monitor the recommended treatment based on the results of the screening and based on the published treatment guidelines. A doctoral prepared nurse is trained to recognize the need for this type of project and is ready to collaborate with members of the healthcare team to improve the care of his/her patients. A registered nurse or those with a lesser certification are unable to implement the intervention due to this being out of their scope of practice and the liability that comes with it. This can show the healthcare community how a doctoral prepared nurse practitioner's role in healthcare management can not only alleviate the need for more medical providers but improve patient outcomes which is ultimately the goal in healthcare.

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Appendix A

PHQ-9 Depression Screening Tool Questionnaire

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

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

FOR OFFICE CODING 0 + _____ + _____ + _____

=Total Score: _____

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

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

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Appendix B

Proposed Treatment Action

Proposed Treatment Action by PHQ 9 Score

PHQ-9 Score	Depression Severity	Proposed Treatment Actions
0-4	Non – Minimal	None
5-9	Mild	Watchful waiting; repeat PHQ 9 at follow-up
10-14	Moderate	Review treatment plan if not improving in past 4 weeks; Consider discussion of additional support such as pharmacotherapy
15-19	Moderately Severe	Consider adjusting treatment plan and/or frequency of sessions; Discuss additional supports such as pharmacotherapy; For SonderMind Anytime Messaging clients, consider converting from asynchronous to synchronous therapy channels
20-27	Severe	Adjust treatment plan; focused assessment of safety plan and pharmacotherapy evaluation/ re-evaluation; If emergent then refer to higher level of care; Likely Not a candidate for asynchronous/text therapy

(Patient Health Questionnaire, 2020)