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PHQ-2 Workflow in an Urgent Care

By: Ashley Thiessen

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Abstract

The purpose of this quality improvement project was to implement the use of the PHQ-2 and PHQ-9 questionnaire in a rural urgent care setting. The project implementation began with a provider training on depression screening with a pre- and post-presentation survey, a seven-week implementation, and a post-implementation survey. The PHQ-2 workflow provided a stepwise process for patients entering the urgent care who were 18 and older without a primary care provider. The patients were provided a PHQ-2 depression screening tool with a PHQ-9 questionnaire following a positive PHQ-2, were appropriately diagnosed with depression, and referred to social work for further follow-up. The results of the pre- and post-presentation survey showed an increase in awareness of mental health being a concern in an urgent care and confidence to connect patients to mental health resources. The results of the process and outcome measures showed 24% of the 165 qualifying patients completed a PHQ-2 questionnaire. A total of 10% of the completed PHQ-2 questionnaires were positive. Seventy five percent of the positive PHQ-2 questionnaires had a completed PHQ-9, and one PHQ-9 had a score of 10 or more. Two depression diagnoses were made seven-weeks prior to implementation and two diagnoses were missed post implementation. The one PHQ-9 score greater than 10 had a referral to a social worker for follow-up. Lastly, the post-implementation survey showed an increase in mental health awareness and confidence in connecting the patient to mental health resources, 67% were satisfied and 33% were strongly satisfied with the PHQ-2 workflow. Common themes on how to improve the workflow were to make sure the PHQ-2 and PHQ-9 questionnaire was completed during patient rooming prior to the provider patient assessment and to provide more education on counseling resources. Recommendations include expanding the inclusion criteria to patients 13 and older and who have a primary care provider.

PHQ-2 Workflow in an Urgent Care

Many individuals in rural areas experience challenges in access to care, particularly around mental health. Evidence from researchers suggest the implementation of mental health assessment questionnaires have a high specificity and sensitivity to diagnosing an individual with depression (Levis et al., 2020). The Doctor of Nursing practice (DNP) student sought to develop and implement a quality improvement project using the Patient Health Questionnaire-2 (PHQ-2) in a rural Oregon urgent care clinic to improve the screening for depression and access to mental health resources.

Clinical Problem

Depression is a wide-spread mental health illness affecting many communities. Clinical depression is a treatable illness and more than 80% of all people with depression can be successfully treated with medicine, psychotherapy, or a combination of both (Mental Health America, n.d.). Primary care providers can potentially miss depression diagnoses due to a lack of mental health screenings incorporated into their practice or because the patient lacks a primary care provider. The lack of a primary care provider can significantly increase the chance of a missed depression diagnosis; leading to missed treatments or a lack of offered resources. Therefore, mental health screenings should be incorporated into all points of health care.

Background and Significance

America has an increasing number of individuals with depression and needed support. According to the National Institute of Health (NIH), nearly one in five adults in the United States (U.S.) live with a mental illness, which is a total of 51.5 million in 2019 (National Institute of Mental Health, 2021). A total of 8.6 million adults received mental health treatment who were diagnosed with a severe mental illness (National Institute of Mental

Health, 2021). Out of millions with adult mental illness, 17.3 million in the United States had at least one major depressive episode; the highest prevalence being in individuals between the ages of 18-25 (National Institute of Mental Health, 2019). However, 65% of adults who suffered a major depressive episode received treatment (National Institute of Mental Health, 2019).

According to the Centers for Disease Control and Prevention (CDC) (2021), around 47,511 deaths occur each year due to suicide. Also, individuals aged 65 and older account for 20% of all suicide deaths in the United States and 38% believe depression is a health problem (Mental Health American, n.d.). This means 62% of individuals 65 and older do not believe depression is a health problem (Mental Health American, n.d). According to Arroll et al. (2010), due to a lack of mental health screening, family physicians miss at least 50% of cases of major depression. Almost 7% of all consultations in primary care are for depression (Mitchell et al., 2016). The National Ambulatory Medical Care Survey in 2018 showed that only 51.2% of patient visits were made to primary care (CDC, 2021). Also, just under half of the visits are being made to other sources such as emergency care, surgical, hospital, etc. (National Ambulatory Medical Care Survey, 2018). Therefore, if patients are not being seen by a primary care provider, then they are being missed for depression screenings. National Institute of Health (NIH) states “it is estimated that in the U.S., around two-thirds of all cases of depression are undiagnosed,” resulting in significantly diminished quality of life and workplace productivity (Williams et al., 2017, p. 633). Depression often goes undiagnosed and is a leading cause of disability globally, costing around \$233 billion (Williams et al., 2017).

In a rural county in Oregon, a 2016 analysis showed a shortage of mental health

providers and a slightly higher than average age-adjusted rate of depression; about 26.6% of individuals have been diagnosed with depression compared to the 24.8% in Oregon (Columbia Memorial Hospital & Providence Seaside Hospital, 2016). The Community Health Survey reported that low-income, Medicaid or uninsured individuals were more likely to experience symptoms of depression (Columbia Memorial Hospital & Providence Seaside Hospital, 2016). The primary barrier for individuals receiving mental health services in this rural county is the lack of information for where to go and lack of a primary care provider (Columbia Memorial Hospital & Providence Seaside Hospital, 2016). Around 8% of those who needed behavioral health services felt they were unable to receive all the mental care they needed, and the others received services from their primary care provider (Columbia Memorial Hospital & Providence Seaside Hospital, 2016). Therefore, the rural county in Oregon has shown a need of mental health services and better access to care.

The most commonly used tools to help in the diagnosis of depression are the PHQ-2 and Patient Health Questionnaire-9 (PHQ-9) (American Psychological Association, 2020). The PHQ-2 is comprised of the first two items of the PHQ-9, which asks to what degree the individual has experienced little pleasure in doing things and a depressed mood or anhedonia over the past two weeks (American Psychological Association, 2020). The PHQ-2 cannot establish a final diagnosis of depression or monitor for depression severity, but screen for depression (American Psychological Association, 2020). After a PHQ-2 is determined positive, individuals are further evaluated with a PHQ-9, which is often used in primary care settings (American Psychological Association, 2020). Few studies have implemented a PHQ-2 or PHQ-9 in an urgent care setting.

Aims and Purpose

The purpose of this quality improvement project is to implement the use of the PHQ-2 and PHQ-9 questionnaire in a rural urgent care setting. The facility benefit for participating in this quality improvement project is to better support patients without a primary care provider utilizing urgent care and emergency services, which are high-cost resources, for mental health related challenges. Identifying this population upstream will better support mental health, promote holistic care, and ultimately support the organization by being a better steward of resources. Therefore, to provide better care for the individuals coming into an urgent care clinic, providers needed to be educated on how to implement a PHQ-2 to diagnose depression; especially, for patients reliant on urgent or emergency services. Implementing a screening tool such as the PHQ-2 and a follow up PHQ-9 helps in the identification of depression and allow providers a tool to provide needed resources for the patient.

Theoretical Framework for the Practice Change

The theoretical framework chosen to support the quality improvement project with the implementation of a PHQ-2 in an urgent care is the Donabedian theoretical framework (Donabedian, 1988). Donabedian evaluated the quality of healthcare using the concept of input, process, and output or in other terms: structure, process, and outcome (Panteli et al., 2019). The structure includes material, intellectual, and human resources (Panteli et al., 2019). For this project, the material resources (facilities, capital, equipment, etc.) included the urgent care, access to computers; the intellectual resources (medical knowledge, information systems) are access to the electronic health record-EPIC, and the use of the PHQ-2. Lastly, the human resources or healthcare professionals, include the physician assistants, nurse practitioners, receptionists, and social workers. The Donabedian concept of process in the healthcare setting encompasses what is being done for patients receiving care (Panteli et al., 2019). The process

with project implementation is to consider how the patients are being screened for depression and receiving care and support afterwards. Finally, the outcome describes the effects of healthcare on the health status of patients and populations (Panteli et al., 2019); this includes the provider education session influence on mental health awareness and identification of depression. The Donabedian framework offers an evaluation framework supporting systematic inquiry into health services (Garner et al., 2014). The structure, process, and outcome components of the model are interdependent and influenced by one another (Gardner et al., 2014). Therefore, when assessing the outcomes of a quality improvement project, the results or outcome measures are influenced by the components within the structure and process of the organization (Gardner et al., 2014). When analyzing the structure, the contextual features to support successful implementation of a quality improvement project include looking at how the physical environment of the urgent care setting affected implementation of the PHQ-2 workflow.

Review of Literature: Evidence for Practice Change

The CINAHL, PubMed, and Google Scholar search engines were used for the following research. The limitations included: research between 2002 to 2021, peer reviewed, and English only. The following key words were used: mental health, depression screening, mental illness, mental health screening, PHQ-2, PHQ-9, Patient Health Questionnaire-2, Patient Health Questionnaire-9, and urgent care. Seven important themes were found in the literature for implementing depression screening which included: importance of depression screening, screening for depression in an urgent care, how to provide patients with a depression screening, depression screening tools, importance of using a combined PHQ-2 and PHQ-9 approach, interdisciplinary approach and role in follow-up, and surveying providers for sustainability.

Importance of Depression Screening

The U.S. Preventive Services Task Force (USPSTF) explains that screening improves the accurate identification of adult patients with depression in primary care settings (Sui & USPSTF, 2016). Benefits of early detection and intervention or treatment can improve clinical outcomes such as reduction or remission of depression symptoms (Sui & USPSTF, 2016). Also, the USPSTF found evidence that treatment of adults and older adults with depression identified through screening in primary care settings using antidepressants and therapy decreases morbidity (Sui & USPSTF, 2016). American Family Physicians states 45-90% of patients with depression have only somatic symptoms and some patients will report nonspecific symptoms of depression (Maurer & Darnall, 2012). Nonspecific symptoms of depression include: abdominal pain, back pain, change in weight or appetite, constipation, fatigue, headache, insomnia or hypersomnia, joint pain, neck pain, and weakness (Maurer & Darnall, 2012). Also, depression screening in adults 18 years and older among the general population is recommended, since prevalence of depression rates vary by sex, age, race, ethnicity, education, marital status, geographic location, and employment status (Sui & USPSTF, 2016).

Screening for Depression in Urgent Care

According to Scott et al. (2021), mental health problems comprise of 11% of all calls to emergency ambulance services. Some patients have discussed negative experiences with general practitioners and mental health services, which led to an individual's use of emergency or urgent care services (Hedayioglu et al., 2020). Individuals experiencing mental illness have difficulties accessing timely ambulatory mental health services and tend to have an overreliance on emergency services for non-emergent problems (Sunderji et al., 2015). Urgent care services can provide short-term treatment in an outpatient setting for acute mental health needs by bridging

the gap between community-based services, emergency department, or inpatient services (Sunderji et al., 2015). Accessing urgent cares are more cost-effective than emergency services and are more likely to provide continuing stabilization for mental health illnesses (Hedayioglu et al., 2020; Sunderji et al., 2015).

How to Provide Patients with a Depression Screening

According to American Academy of Family Physicians, the depression screening tool can be provided in multiple ways (Savory & O’Gurek, 2016). Rooming staff can enter the information into the electronic health record from a preprinted copy of the screening tool (Savory & O’Gurek, 2016; Fuchs et al., 2015). Another option is to ask the patients the questions in the room and enter the results into the electronic health record (Savory & O’Gurek, 2016). However, this may be more time consuming and depression screening tools such as the PHQ-2 have been studied as a self-survey, not a verbal survey (Savory & O’Gurek, 2016). Lastly, patients can complete the depression screening tool before the office visit through the organizations online patient portal (Savory & O’Gurek, 2016). Often, providers have patients complete the depression screening tool during Annual Wellness or gynecological visits, to ensure the screening is completed at least once a year (Savory & O’Gurek, 2016).

Depression Screening Tools

An urgent care setting requires individuals to work and manage patient’s medical, surgical, social, and mental health presentations. Depression screening questionnaires are used to identify patients with depression (Levis et al., 2020). Multiple depression screenings can be used include: PHQ-2, PHQ-9, 15-item Geriatric Depression Scale, five-item Geriatric Depression Scale, Hospital Anxiety and Depression Scales (HADS) in adults, and the Edinburgh

Postnatal Depression Scale in postpartum and pregnant women (Maurer & Darnall, 2012; Sui & USPSTF, 2016).

One strategy to determine a depression diagnosis is to administer a PHQ-2, consisting of two items (depressed mood and anhedonia) from the PHQ-9 as a prescreen prior to administering the remaining PHQ-9 items when the PHQ-2 screen score is greater than three (Fuchs et al., 2015; Kroenke et al., 2003; Levis et al., 2020). Using a PHQ-2 is the first step in the screening process and has demonstrated strong validity and high sensitivity for detecting major depression (Fuchs et al., 2015; Kroenke et al., 2003). Mitchell et al. (2016), showed the PHQ-2 even had a greater specificity than the PHQ-9 linear method. Also, the PHQ-2 can detect patients with a PHQ-9 diagnosis of depression (Arrieta et al., 2017). A PHQ-9 is the most common instrument used for depression screening for depression or to monitor treatment; the tool has a 61% sensitivity and 94% specificity for mood disorders in adults (Maurer & Darnall, 2012).

The 30-item and 15-item Geriatric Depression Scales have a sensitivity of 74-100% and a specificity of 53-98% in adults 65 years and older (Maurer & Darnall, 2012). The five-item Geriatric Depression Scale has a sensitivity of 97% and a specificity of 85% for depression in older adults (Maurer & Darnall, 2012). HADS is a seven itemed tool used to identify anxiety disorders and depression among patients in nonpsychiatric hospital clinics; the sensitivity was 0.70 and specificity was 0.9 (Bjellan et al., 2002). The Edinburgh Postnatal Depression Scale showed a sensitivity of 80.0% and a specificity of 87.0% for the general population and the diagnosis of major depressive disorder (Matijasevich et al., 2014). Out of all the mentioned depression screening tools the American Geriatrics Society recommends the use of a PHQ-2 for initial screening with a subsequent PHQ-9 if positive (Maurer & Darnall, 2012).

Importance of Using a Combined PHQ-2 and PHQ-9 Approach

According to a meta-analysis conducted by Levis et al. (2020), studies with a semi-structured interview showed a sensitivity and specificity of the PHQ-2 score of two or more were 0.91 (95% CI, 0.88-0.94) and 0.67 (95% CI, 0.64-0.71); for scores of three or more the sensitivity and specificity were 0.72 (95% CI, 0.67-0.77) and 0.85 (95% CI, 0.10-0.28). Another study showed the PHQ-2 (using a cutoff of three or more) had a sensitivity of 80.0% and specificity of 86.9% (Arrieta et al., 2017). However, the PHQ-9 is still the preferred instrument for definitively diagnosing depressive disorders or to assess depression outcomes in response to current treatments (Kroenke et al., 2003). Therefore, utilizing both the PHQ-2 in combination with the PHQ-9 when there is a positive PHQ-2 has shown greater sensitivity and specificity (Levis et al., 2020; Mitchell et al., 2016).

Interdisciplinary Approach and Role in Follow-up

According to the Sui and USPSTF (2016), the benefits of combining depression screening with adequate support systems can improve clinical outcomes in patients, such as a reduction or remission of depression symptoms. An adequate system in place is defined as “having systems and clinical staff to ensure that patients are screened and, if they screen positive, are appropriately diagnosed and treated with evidence-based care or referred to a setting that can provide the necessary care” (Sui & USPSTF, 2016, p. 383). Sunderji et al. (2015) found many programs providing brief episodes of care included more than just risk assessment, needs assessment, and diagnostic clarification, such as safety planning, triaging patient needs, building coping skills, distress tolerance, self-care, referrals to community supports or professional care, and patient or family psychoeducation. Structural aspects to providing psychiatric care programs included a multidisciplinary approach from social workers, psychiatrists, nurses, or

psychologists, but literature is lacking on how roles were defined and negotiated (Sunderji et al., 2015). Savory and O’Gurek (2016) explain that providers need to document at least one of the following for patients with a positive depression screening: additional evaluation for depression, suicide risk assessment, referral to a practitioner who is qualified to diagnose and treat depression, pharmacological interventions, and other interventions or follow up for the diagnosis or treatment of depression.

Sui and USPSTF (2016) state the lowest level of effective support included a designated nurse to alert providers of a positive depression screening and included a protocol to facilitate a referral to evidence-based behavioral treatment. The highest level of effective support for depression screening included a staff and clinician training workshop, clinician manual, monthly training lectures, academic detailing, materials for clinicians, staff, and patients, an initial visit with a nurse specialist for assessment, education, and discussion of patient preferences and goals, a visit from trained nurse specialists for follow-up assessment and ongoing support for medication adherence, a visit with a trained therapist for cognitive behavioral treatment, and reduced copayment for patients referred to psychotherapy (Sui & USPSTF, 2016). Using an interdisciplinary team-based approach for self-management support and care coordination is effective in the management of depression (Savory & O’Gurek, 2016; Sui & USPSTF, 2016). Based on the following research, patient support through an interdisciplinary team and multicomponent approach to depression can strengthen self-care and follow through for treatment.

Surveying Providers for Sustainability

According to Fuchs et al. (2015), determining the extent of the providers use of depression screening tools to guide treatment is critical. Many constraints can occur for the lack

of implementation in the clinic setting such as time and “other things taking precedence” (Fuchs et al., 2015, p. 23). Fuchs et al. (2015) studied how often the providers viewed the result of a PHQ-2 which showed, “11% indicated...they viewed the results at “almost all visits,” 39% viewed the results at “most visits,” and 27% “sometimes” viewed the results” (p. 23). Also, the providers preferred to use their clinical judgment to refer to mental health or initiate a change in medication; therefore, a PHQ-9 was not always used in response to a positive PHQ-2 (Fuchs et al., 2015). However, this approach lacks standardization and can lead to untreated or undiagnosed depression. As Mitchell et al. (2016) state, precisely diagnosing depression can be challenging because providers often overestimate or underestimate levels of distress for their patients resulting in false-positive or false-negative diagnoses.

Methods for Implementation

Based on the review of the literature, recommendations for the implementation plan included the chosen population, distribution of the PHQ-2 and PHQ-9, the combined PHQ-2 and PHQ-9 approach, interdisciplinary team approach, staff training, and provider surveys. Recommendations for the implementation plan were also influenced by the conducted microsystems assessment of the urgent care. To see a description of the urgent care, see Appendix A:

1. **Chosen Population:** As Sui and USPSTF (2016) state the depression screening tool should be provided to all individuals and not limited by cultural, ethnicity, gender, or socioeconomic status. Therefore, this project was implemented with individuals who were 18 and older without a primary care provider. Individuals without a primary care provider may be considered a limitation to the project;

however, this population was chosen based on the complexity and vulnerability of the group.

2. **Distribution of PHQ-2 and PHQ-9:** Patient relation representatives can pass a prepared screening tool to the patient to complete before seeing the provider, medical assistants or registered nurses should be designated to take the completed questionnaire from the patient, enter the data into the electronic health record, and alert providers of any positive screening tools (Fuchs et al., 2015; Savory & O’Gurek, 2016). Therefore, for this project, the patient relation representatives gave a pre-printed copy of the PHQ-2 and PHQ-9 questionnaire to the patient to ensure the time for rooming a patient was not increased for the medical assistants. Since the urgent care patient population does not make appointments and accepts walk-in for in-person provider visits, providing the depression screening tool prior to their arrival is not possible, but can be provided at check-in and completed while in the waiting room. See Appendix B for the PHQ-2 and PHQ-9 Questionnaire.
3. **Combined PHQ-2 and PHQ-9 Approach:** An integrated approach for the questionnaires increases sensitivity and specificity for depression diagnoses and screening response to active treatments (Arrieta et al., 2017). Research showed that other screening tools were often specialty focused and the PHQ-2 and PHQ-9 were effective questionnaires for the general population (Fuchs et al., 2015; Kroenke et al., 2003; Levis et al., 2020; Sui & USPSTF, 2016). Use of a combined PHQ-2 and PHQ-9 questionnaire when the PHQ-2 results in a positive was implemented.

4. **Interdisciplinary Team Approach:** As Savory and O’Gurek (2016) mentioned, adequate support means the medical assistant is alerting the provider about a positive depression screening and the provider is making a referral to a social worker who will help the patient access resources such as behavioral treatment. An interdisciplinary approach was provided with the incorporation of a social worker for patients with a score of 10 or more on a PHQ-9 questionnaire or the patient is experiencing suicidal ideation. The social worker’s responsibility is to help the patient access resources to a primary care provider, counseling, and treatment while assessing the patient barriers.
5. **Staff Training:** According to Savory and O’Gurek (2016), staff and clinician training provides effective support for appropriately diagnosing depression and ensuring patients are treated using evidence-based research. For documentation with a positive depression screen, providers also must document a referral to a provider who is qualified to diagnose and treat depression or follow-up with the patient for the diagnosis and treatment (Savor & O’Gurek, 2016). A PowerPoint presentation and education session and resources for treatment of depression was incorporated into the implementation of the project to increase the providers knowledge, comfort with diagnosing and treating patients, and what to document in each patient note with a positive depression screening. The DNP student conducted in-person training for the medical assistant and patient relation representative staff for project implementation. The training included how to document patient scores within the electronic health record, what were each

person's responsibilities, why the depression screening was being implemented, and a step by step walk through of the PHQ-2 workflow.

6. **Surveying Providers:** Providers perspectives on the PHQ-2 and PHQ-9 questionnaire are necessary to understand how often the providers are using the tools to make diagnoses and to understand why the tool is not being used (Fuchs et al., 2015). To sustain the continuation of a PHQ-2 and PHQ-9 questionnaire, the integration of the provider survey was to assess satisfaction, understanding, awareness of the current mental health concerns within the community, and confidence in providing resources. See Appendix C for Pre and Post Presentation Survey and Appendix D for Post-Implementation Survey.

Implementation

Implementation began with the creation of an implementation team; this included the nurse manager, two nurse practitioner champions, the DNP student, and a social worker. Collectively this team created buy-in with the stakeholders and helped conduct the implementation of the project. The next step in the project implementation was an email to all six providers in the urgent care to request voluntary participation in the improvement project that included an attached informed consent and a brief description of the project (See Appendix E for Informed Consent). A total of five providers signed consent forms to voluntarily participate. The nurse manager sent out an email with a Teams meeting to all providers for an education session. Before the education was implemented, a survey was sent out via email asking two key questions about mental health awareness in the urgent care population and provider confidence in offering mental health resources. The education session was a 15 minute PowerPoint presentation including: mental health and depression statistics, specific and non-specific

symptoms of depression, what was being implemented, what a PHQ-2 was, why a PHQ-2 was being implemented and its benefits, a walk-through of the PHQ-2 Workflow (See Appendix F for the PHQ-2 Workflow), the responsibilities of the providers, documentation requirements for positive screenings, and three documents that can help in diagnosing depression and how to prescribe medication if appropriate. The presentation was recorded on Teams and sent out to all providers for those that could not attend the meeting. Once the education session was completed, providers who could not attend were given one week to watch the recorded Teams meeting, complete the pre- and post-presentation surveys, and ask questions. Post education participants were asked to again participate in a survey asking the same two questions about mental health awareness in the urgent care population and providers confidence in offering mental health resources.

Then the patient relation representatives, medical assistants, registered nurses, and social work staff were provided an email about the project with their responsibilities, all documents included from the provider presentation, and the Teams recording. An in-person visit was conducted over three days to verify every medical assistant and registered nurse understood how to document the PHQ-2 and PHQ-9 within the electronic health system, was able to verbalize their responsibilities within the project, and answer any questions. Prior to implementation, providers were also educated in person how to review the PHQ-2 and PHQ-9 scores, talk with the patients, and determine if a referral to the social worker was needed.

The quality improvement project implementation lasted seven-weeks. Through this time, the DNP student was available on site between one to four times each week to answer questions and to assess implementation. Multiple times during the first week of implementation, patient relation representatives, medical assistants, and registered nurses missed handing out the PHQ-2

and PHQ-9 questionnaires form to patients. Therefore, the implementation team discussed a solution with stakeholders to apply notecards that read, “Does the patient have a PCP? Have they completed a PHQ-2?” to all computers at the patient relation representative’s desk, medical assistant’s or registered nurse’s desks, providers desks, and in all patient assessment rooms. After the seven-week implementation, the providers were sent a post-implementation survey. The survey used a Likert scale assessing how satisfied providers were with the PHQ-2 workflow, how confident the providers were in connecting patients with appropriate mental health resources, and the provider’s awareness of mental health concern in the urgent care population. Also, the survey assessed the providers opinion with an open-ended question that enables them to provide suggestions for improving the PHQ-2 workflow process. See Appendix G for the GANTT Chart.

Evaluation Plan

This project included three key process measure, which focused on collecting specific data over the seven-weeks of implementation:

The three process measures included collecting data to determine:

1. If the PHQ-2 was completed for patients without a primary care provider.
2. If the PHQ-9 was completed after a patient scored three or greater on the PHQ-2.
3. If the provider called a social worker after a patient received a 10 or more on the PHQ-9.

These measures evaluated whether the PHQ-2 and PHQ-9 are being given to the patients upon arrival and evaluated whether a crucial step in the PHQ-2 workflow has been implemented for the patient’s ability to receive needed resources. These process measures evaluated the consistency of care provided. To assess whether a PHQ-2 and a PHQ-9 was completed, the DNP student entered the electronic health record to the patient list and viewed the PHQ-2 and PHQ-9

scores. The DNP student marked whether the PHQ-2 and PHQ-9 tools were completed for the patients without a primary care provider. To assess the social worker was called for a PHQ-9 score of 10 or more, the DNP student reviewed the PHQ-9 scores in the electronic health record and the provider notes for comments stating they called or referred the patient to a social worker.

The five key outcome measures include:

1. **Survey Data: Mental Health Awareness.** Collecting survey data for pre-presentation, post-presentation, and post-implementation, which measured the provider's perception of mental health concern in the population. Question: Do you agree mental health is a concern in the urgent care population?
2. **Survey Data: Provider Confidence.** Collecting survey data for pre-presentation, post-presentation, and post-implementation, which measured the provider's confidence in connecting patients to mental health resources. Question: Do you agree or are you satisfied with your confidence in connecting patients with appropriate mental health resources?
3. **Depression Diagnoses.** Collecting data for the seven-weeks of pre-implementation depression diagnoses made by providers and seven-weeks post-implementation of the PHQ-2 workflow.
4. **Survey Data: Provider Satisfaction.** Collecting survey data post-implementation, the provider's satisfaction in the PHQ-2 workflow implementation. Question: How satisfied are you with the PHQ-2 workflow?
5. **Survey Data: Provider Suggestions.** Collecting survey data post-implementation for the provider's suggestions for future use of the PHQ-2 workflow. Question: What are your suggestions for improving this workflow process?

Questions about mental health awareness and provider's perception in the ability to provide resources, and the satisfaction of the PHQ-2 workflow was administered using Microsoft Forms on the University of Portland's secure drive for the implementation of the quality improvement project. Prior to and after the education session with the providers on how to use the PHQ-2 workflow and presentation of mental health, the providers perceptions were assessed on the concern of mental health and their ability to connect patients to mental health resources. To assess number of diagnoses of depression made by the provider, the DNP student assessed the provider chart notes for patients who had a score of five or higher on a PHQ-9 showing a diagnosis of depression. No patient or provider information was used to assess the diagnosis of depression. In addition, providers were able to offer suggestions for the improvement of the workflow process and help with sustainability of the practice change. The overall goal was to identify an increase in depression screenings, increase in provider awareness of mental health needs, offer patients resources, and assess provider satisfaction of the workflow to understand sustainability of these mental health assessments.

Data Analysis

The implementation project included three points of data analysis for the process measures and five points of data analysis for the outcome measures. The process measures were evaluated using descriptive statistics to assess the consistency in providing the PHQ-2, PHQ-9, and calling a social worker after the patient scores 10 or more from the PHQ-9 mental health assessment at the end of the seven-weeks. The pre- and post-presentation survey used a Likert Scale to analyze ordinal data to measure providers awareness of mental health as a concern for the urgent care population and providers confidence in providing mental health resources. A comparison of the pre and post data for the education session was conducted to evaluate the

changes in perception and confidence of the providers. Descriptive statistics was used for the comparison of the pre and post implementation of depression diagnoses. A Likert Scale was used for the measuring of the mental health awareness, confidence in providing mental health resources, and satisfaction in the use of the PHQ-2 workflow in the post-implementation survey. Also, in measuring the mental health awareness and confidence in providing mental health resources multiple times throughout the quality improvement project shows how the providers perceptions change throughout the project. Lastly, a qualitative thematic analysis was performed for the question “What are your suggestions for improving this workflow process?” at the end of the seven-weeks of implementation.

Results

At total of five out of six providers consented to participate in the quality improvement project. The total number of patients 18 and older seen in the urgent care was 718; 616 patients over 18 with a primary care provider and 165 patients over 18 without a primary care provider. About 27% of patients lacked a primary care provider (See Appendix H for Descriptive Statistics for the Process and Outcome Measures). The following includes a description of the results for the process and outcome measures for the quality improvement project.

Process Measures

PHQ-2 Questionnaires Completed

A total of 40 PHQ-2 questionnaires were completed out of 165 (See Appendix I for the PHQ-2 Questionnaire Scores). This equates to approximately 24% PHQ-2 questionnaires were completed, and 125 questionnaires were missed throughout the seven-weeks. Out of the 40 completed PHQ-2 questionnaires, only four were positive with a score of three or more, equaling 10% of the PHQ-2 questionnaires.

PHQ-9 Questionnaires Completed

A total of three out of the four or 75% of the PHQ-9 questionnaires were completed. One was not completed due to a patient refusal, which was documented in the chart. Only one PHQ-9 questionnaire had a score of 10 or more out of the three completed questionnaires. The scores of the PHQ-9 questionnaires were 4, 8, and 13.

Social Worker Referrals

For the one PHQ-9 score of 13, a social worker referral occurred. The chart note stated the provider forwarded their note to a social worker due to limited in-person visit availability.

Outcome Measures

See Appendix J for the Pre and Post Presentation Survey scores. See Appendix K for the Post-Implementation Survey scores.

Survey Data: Mental Health Awareness

For the pre-presentation survey, there were a total of four out of five responses from participating providers to the Likert Question: “Mental health is a concern in the urgent care population,” 50% selected agree and 50% selected strongly agree with this statement. The post-presentation survey had three responses, 67% strongly agreed and 33% agreed. Three responded to the post-implementation survey as well and 100% strongly agreed.

Survey Data: Provider Confidence

For the second Likert Question: “I am confident in my ability to connect the patient to mental health resources,” three out five providers responded to the pre-presentation survey, 33% answered neutral, 33% agreed, and 33% disagreed. The post-presentation survey had three responses, 67% agreed and 33% were neutral. A total of three responses occurred for the post-implementation survey, 67% were satisfied and 33% were strongly satisfied.

Depression Diagnoses

When collecting seven-weeks of pre-implementation data, two depression diagnoses were made in the pre-implementation data. With the scores of 8 and 13 on the PHQ-9, there were two potential opportunities for a provider to diagnose depression. No diagnoses for depression were in either of the patient's charts. Therefore, two depression diagnoses were missed by providers.

Survey Data: Provider Satisfaction

The post-implementation survey had three responses from providers. The Likert Question: "I am satisfied with the PHQ-2 workflow," 33% were neither satisfied nor dissatisfied and 67% were satisfied.

Survey Data: Provider Suggestions

The last question of the post-implementation survey was a written response question: "What are your suggestions for improving this workflow process?" The three providers responded: "Needs to be an expectation the MA's do when they room the pts if hasn't been done in a 1 yr like primary care," "More emphasis at the check-in point for patients to complete the PHQ2/PHQ9. I think in the course of patient care, it just got forgotten whereas ever," and "More robust SSW / counseling resources."

Discussion

Overall, the quality improvement project was successfully implemented. The following is a discussion of the process and outcome measure results and influences.

Process Measures

PHQ-2 Questionnaires Completed

Patient relation representatives and medical assistants mentioned frequently they were forgetting to hand out the PHQ-2 and PHQ-9 questionnaires. Verbal responses to why the

questionnaire was forgotten was that “it shouldn’t be my responsibility alone.” To encourage everyone to take responsibility in assessing if the patient qualified to take the questionnaire a suggestion to put notecards on all computers, in provider offices, patient relation representative computers, medical assistant computers, and the patient exam room computers was made by a staff member. The notecards helped encourage all staff to make sure the patient completed the PHQ-2 questionnaire. Since about 24% of the patients completed a PHQ-2 questionnaire, this number may have been influenced because the number of times the same patient visited the urgent care and completed a PHQ-2 questionnaire was not measured. If patients refused to take the questionnaire, medical assistants were encouraged to record patient refusal in a comment on the electronic health record. Patient refusal for completing the questionnaires could have been forgotten, as the DNP student did not evaluate how many times the patient relation representatives offered the questionnaires.

PHQ-9 Questionnaires Completed

Three out of the four PHQ-9 questionnaires were completed when four positive PHQ-2 questionnaires were obtained; however, the patient relation representative remembered to give the questionnaire during patient check-in and the medical assistant documented the patient refusal to complete all the PHQ-9 questionnaire. The medical assistant wrote a comment after filling in the data the patient agreed to answer from the PHQ-9. One factor that may have influenced the results of the PHQ-2 and PHQ-9 questionnaires was that medical assistants sometimes gave the questionnaires verbally instead of in a handout. This was due to the patient speaking a different language, or the medical assistant realized the patient did not receive a handout from the patient relation representative and wanted to save time. The PHQ-2 and PHQ-9 questionnaires were made to be self-administered and not administered verbally (Savory &

O’Gurek, 2016).

Social Worker Referrals

The critical score of 13 on the PHQ-9 included a note with the provider chart that contact was attempted with social work and the social work team was sent the provider patient note. Due to short staffing of social workers at the organization, urgent care provider notes were sent to the social work team to follow-up with the patient for treatment if social workers were unavailable to meet patients at the in-person visit. One of the reasons the social work team was incorporated into the quality improvement project was to provide patients with mental health resources. Social workers were asked to assess patient barriers to creating primary care provider appointments. Some barriers to be assessed included: difficulty accessing transportation to an appointment, lack of insurance coverage or difficulty paying for appointments with a provider, and issues establishing care with a primary care provider within the next two weeks to one month. Some primary care providers within the facility were not accepting new patients for eight months. Often, providers and social workers were required to look outside of the organization for a primary care provider available appointment.

Outcome Measures

Survey Data: Mental Health Awareness and Provider Confidence

When comparing the answers of the pre- and post-presentation survey prior to the PHQ-2 workflow implementation, there was an increase in awareness of mental health being a concern in urgent care. An increase in confidence level for providing patients with mental health resources was seen in the comparison of the pre- and post-presentation surveys. The education session given to the providers was effective in increasing both awareness and confidence, meaning the education had an impact on the providers and encouraged them to implement a

depression screening. Since one of the five providers did not respond to pre-presentation survey and two providers did not complete the survey for the post-presentation survey, this may be due to time constraints during the workday or technological issues which occurred with initial access during the presentation. There was an increase in satisfaction to the question about confidence in connecting patients to resources and agreement that awareness to mental health is an issue in urgent care. The improvement in these scores from the post-presentation survey suggest that after implementing the PHQ-2 workflow, the providers started to better recognize the issue within the community and after using the workflow their confidence in referring patients to social work or other resources helped improve their confidence.

Depression Diagnoses

Even though in the seven-weeks prior to implementation, two patients were provided a depression diagnosis; neither of these diagnoses included a depression screening tool, referral to social work, or a follow-up plan for a change in treatment. A screening tool is used to assist providers in diagnosing depression and assessing if a current treatment is effective. Two opportunities were missed for a depression diagnosis post implementation; however, providers were encouraged, but not required to give a depression diagnosis to every patient based on the PHQ-9 score. The diagnosis of depression is based on provider clinical decision making from assessment and the conversation with the patient while using the PHQ-9 score as support for their treatment plan.

Survey Data: Provider Satisfaction and Suggestions

Asking the provider's satisfaction with the workflow and their suggestions for improvement were included to assess sustainability of the practice change and buy-in from providers. The provider scores for the satisfaction of the workflow were mostly positive. Two

common themes were present in the suggestions for improving the PHQ-2 workflow. The first theme was that the PHQ-2 and PHQ-9 questionnaire need to be completed prior to the provider seeing the patient, and the second theme was to provide more education towards counseling resources for patients. The interest of these providers in changing the PHQ-2 workflow suggest an interest in continuing the practice change.

Limitations

Five limitations or challenges occurred in this project. The first limitation for the project was the sample size of the providers available to provide an opinion. The project included five providers due to provider availability within the urgent care. The urgent care employed six providers; however, one provider was on family leave and unable to participate in the project. Implementing this project through all the organization's urgent cares within Oregon would improve the sample size and influence results. Secondly, a limitation was observed when Spanish speaking patients who declined an interpreter for the PHQ-2 and PHQ-9 questionnaires due to preferences for using a family member to translate and give the questionnaire verbally. Thirdly, staff educated and encouraged patients to complete the PHQ-2 and PHQ-9 questionnaires; however, some patients declined to fill out the forms; therefore, some questionnaires were left incomplete or not completed at all. Fourthly, a limitation brought up early in the implementation stage was for individuals traveling from different states or countries and the difficulty in offering access to mental health resources across state or country lines. Lastly, the fifth limitation is the resource availability for primary care providers or mental health resources within the area related to recent staffing changes and the population being in a rural community.

Lessons Learned

Firstly, a lesson learned from this experience was the importance to include a medical assistant and a patient relation representative in the implementation team. Surprisingly, push back for the project did not occur with the providers, but the medical assistants and patient relation representatives. Secondly, in-person training and meetings are more effective than online or self-trainings because the consensus from all staff during check-ins were that they deleted all emails related to the project prior to reading. Thirdly, maintaining a presence at the urgent care became an important factor in the implementation process, this helped the staff remember the project implementation. Fourthly, since multiple staff continued forgetting to provide the patient a PHQ-2 and PHQ-9 questionnaire, flexibility with these challenges and listening to staff ideas to increase compliance became an important learning factor. Lastly, ensuring clear timelines was a lesson learned since the practice change start date was unclear; this occurred as a result for needed changes to the implementation team due to staffing difficulties.

Conclusion

To maintain sustainability of the PHQ-2 workflow in the urgent care, incorporating suggestions offered by the providers such as change to the workflow could increase buy-in for future use. One idea is to have the medical assistants offer the PHQ-2 and PHQ-9 questionnaires to patients who have not completed a depression screening within the last year. Also, the providers wanted more education on available mental health resources; therefore, incorporating a presentation from the social workers could increase their knowledge. A major implication for increasing depression screenings in an urgent care is that all providers have a workflow readily available to implement for patients coming into the urgent care in need of treatment or resources

for depression. The questionnaires can inform the providers practice and guide them to appropriate referrals for the patients. From observation, the practice change encouraged providers to offer advice on available primary care providers to all patients and educate patients about the importance of a primary care provider. Suggested next steps for this project would be to expand the age range for the PHQ-2 and PHQ-9 questionnaire to all patients entering the clinic aged 13 and older to provide better consistency of implementation. Lastly, to improve depression screening throughout Oregon, the PHQ-2 and PHQ-9 questionnaire should be incorporated into more urgent cares to provide holistic patient treatment.

References

- American Psychological Association. (2020). Patient health questionnaire (PHQ-9 & PHQ-2). Retrieved from <https://www.apa.org/pi/about/publications/caregivers/practice-settings/assessment/tools/patient-health>
- Arrieta, J., Aguerrebere, M., Raviola, G., Flores, H., Elliott, P., Espinosa, A., Reyes, A., Ortiz-Panozo, E., Rodriguez-Gutierrez, E. G., Mukherjee, J., Palazuelos, D., & Franke, M. F. (2017). Validity and utility of the patient health questionnaire (PHQ)-2 and PHQ-9 for screening and diagnosis of depression in rural Chiapas, Mexico: A cross-sectional study. *Journal of Clinical Psychology, 73*(9), 1076–1090. doi:10.1002/jclp.22390
- Arroll, B., Goodyear-Smith, F., Crengle, S., Gunn, J., Kerse, N., Fishman, T., Falloon, K., & Hatcher, S. (2010). Validation of PHQ-2 and PHQ-9 to screen for major depression in the primary care population. *Annals of Family Medicine, 8*(4), 348–353. doi:10.1370/afm.1139
- Bjelland, I., Dahl, A. A., Haug, T. T., & Neckelmann, D. (2002). The validity of the hospital anxiety and depression scale: An updated literature review. *Journal of Psychosomatic Research, 52*(2), 69–77. doi:10.1016/S0022-3999(01)00296-3
- Centers for Disease Control and Prevention. (2021). National center for health statistics: Ambulatory care use and physician office visits. Retrieved from <https://www.cdc.gov/nchs/fastats/physician-visits.htm>
- Centers for Disease Control and Prevention. (2021). National center for health statistics: Depression. Retrieved from <https://www.cdc.gov/nchs/fastats/depression.htm>
- Columbia Memorial Hospital & Providence Seaside Hospital. (2016). Clatsop County, Oregon 2016 community health needs assessment. Retrieved from [2016_CHNA.pdf](#)

[\(\[columbiamemorial.org\]\(http://columbiamemorial.org\)\)](http://columbiamemorial.org)

Donabedian, A. (1988). The quality of care: How can it be assessed? *JAMA*, *260*(12), 1743-1748.

Levis, B., Sun, Y., He, C., Wu, Y., Krishnan, A., Bhandari, P. M., Neupane, D., Imran, M., Brehaut, E., Negeri, Z., Fischer, F. H., Benedetti, A., & Thombs, B. D. (2020). Accuracy of the PHQ-2 alone and in combination with the PHQ-9 for screening to detect major depression: Systematic review and meta-analysis. *JAMA: Journal of the American Medical Association*, *323*(22), 2290–2300. doi:10.1001/jama.2020.6504

Fuchs, C. H., Haradhvala, N., Hubley, S., Nash, J. M., Keller, M. B., Ashley, D., Weisberg, R. B., & Uebelacker, L. A. (2015). Physician actions following a positive PHQ-2: Implications for the implementation of depression screening in family medicine practice. *Families, Systems, & Health*, *33*(1), 18–27. doi:10.1037/fsh0000089

Gardner, G., Gardner, A., & O'Connell, J. (2014). Using the Donabedian framework to examine the quality and safety of nursing service innovation. *Journal of Clinical Nursing (John Wiley & Sons, Inc.)*, *23*(1–2), 145–155. doi:10.1111/jocn.12146

Hedayioglu, J., Whibley, J., Bottle, L., & Sackree, A. (2020). Managing the needs of frequent attenders of urgent care services: A case management approach. *Emergency Nurse: The Journal of the RCN Accident and Emergency Nursing Association*, *28*(3), 16–23. doi:10.7748/en.2020.e1998

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2003). The patient health questionnaire-2: Validity of a two-item depression screener. *Medical Care*, *41*(11), 1284–1292. doi:10.1097/01.MLR.0000093487.78664.3C

Panteli, D., Quentin, W., & Busse, R. (2019). Understanding healthcare quality strategies: A

five-lens framework. In R. Busse, N. Klazinga, D. Panteli (Eds.), *Improving healthcare quality in Europe: Characteristics, effectiveness and implementation of different strategies*. Copenhagen (Denmark). Retrieved from:

<https://www.ncbi.nlm.nih.gov/books/NBK549261/>

Matijasevich, A., Munhoz, T.N., Tavares, B.F., Barbosa, A., da Silva, D. M., Abitante, M. S.,

Dall’Agnol, T. A., & Santos, I. S. (2014). Validation of the Edinburgh postnatal depression scale (EPDS) for screening of major depressive episode among adults from the general population. *BMC Psychiatry*, 14(284), 1-9. doi:10.1186/s12888-014-0284-x

Meyers, D.C., Durlak, J.A., & Wandersman, A. (2012). The quality implementation framework: A synthesis of critical steps in the implementation process. *American Journal Community Psychology*, 50(3-4), 462-480.

Mental Health America. (n.d.). Depression in older adults: More facts. Retrieved from

<https://www.mhanational.org/depression-older-adults-more-facts>

Mitchell, A. J., Yadegarfar, M., Gill, J., & Stubbs, B. (2016). Case finding and screening clinical utility of the patient health questionnaire (PHQ-9 and PHQ-2) for depression in primary care: A diagnostic meta-analysis of 40 studies. *BJPsych Open*, 2(2), 127–138.

Maurer, D. M., & Darnall, C. R. (2012). Screening for depression. *American Family Physician*, 85(2), 139-144.

National Institute of Mental Health. (2019). Major depression. Retrieved from

<https://www.nimh.nih.gov/health/statistics/major-depression.shtml>

National Institute of Mental Health. (2021). Mental illness. Retrieved from

<https://www.nimh.nih.gov/health/statistics/mental-illness.shtml>

Savoy, M., & O’Gurek, D. (2016). Screening your adult patients for depression. *Family*

Practice Management, 23(2), 16-20.

<https://www.aafp.org/fpm/2016/0300/p16.html#fpm20160300p16-ut1>

- Scott, J., Fidler, G., Monk, D., Flynn, D., & Heavey, E. (2021). Exploring the potential for social prescribing in pre-hospital emergency and urgent care: A qualitative study. *Health & Social Care in the Community*, 29(3), 654–663. doi:10.1111/hsc.13337
- Staples, L. G., Dear, B. F., Gandy, M., Fogliati, V., Fogliati, R., Karin, E., Nielsens, O., & Titov, N. (2019). Psychometric properties and clinical utility of brief measures of depression, anxiety, and general distress: The PHQ-2, GAD-2, and K-6. *General Hospital Psychiatry*, 56, 13–18. doi:10.1016/j.genhosppsych.2018.11.003
- Sui, A. L., & U.S. Preventive Services Task Force [USPSTF]. (2016). Depression in adults: Screening. *JAMA*, 315(4), 380-387. doi:10.1001/jama.2015.18392
- Sunderji, N., de Bibiana, J. T., & Stergiopoulos, V. (2015). Urgent psychiatric services: A scoping review. *Canadian Journal of Psychiatry*, 60(9), 393–402. doi:10.1177/070674371506000904
- Williams, S. Z., Chung, G. S., & Muennig, P. A. (2017). Undiagnosed depression: A community diagnosis. *SSM - population health*, 3, 633–638. doi:10.1016/j.ssmph.2017.07.012

Appendix A

Microsystem Assessment of the Urgent Care

The following is a microsystem assessment of the urgent care where the DNP project took place. The microsystem assessment was conducted over a month-long period of time.

Patients

The urgent care received patients with a variety of issues ranging from acute to chronic conditions. The most frequent diagnoses include urinary tract infections, sexually transmitted diseases, racing heart, anxiety, sleeping difficulties, COVID related symptoms, pain related issues, lacerations, alcoholism or drug addictions, and fractures. Patients received no mental health or anxiety screenings. The urgent care receives differing number of patients every day, often ranging between 25 to 50 patients. Patient complaints range from inability to sleep at night to palpitations or chest pain related to a mental health issue. The main mental health diagnosis being anxiety. Also, multiple patients arriving to the urgent care have no primary care provider or have not seen a primary care provider in two years.

Professionals

In a day there are usually two to three providers working, but occasional providers work alone. About five or six medical assistants work in the organization, usually one to two works alongside the providers in a day. One to two nurses are usually floating between the COVID tent outside, wound care appointments, or primary care. Lastly the organization hires two patient relation representatives to work the receptionist desk to check in the patients coming into urgent care. A total of five patient relation representatives works within the organization. The urgent care has a total of four nurse practitioners, one physician assistant, and two physicians working as locums to help fill in positions a couple of times a month. Providers see anywhere between

seven patients in one day to over 50 patients. There is a medical director of the urgent care and a clinic manager. A social worker is available on call, working in the emergency department and is available to the urgent care. The social worker is often called into the urgent care to help find patient resources such as drug rehabilitation programs or to talk to patients about mental health related issues that arise. The social worker has voiced concerns that the urgent care is not screening patients for depression and lacking patient mental health assessments. The clinic manager is concerned about most providers not feeling comfortable ordering medications for anxiety and depression because this requires follow-up care. Primary care providers in the family practice next to the urgent care are using a PHQ-9 to assess mental health status of their patients. The registered nurses within the hospital and Emergency Department are conducting a mental health assessment, using a suicide risk assessment.

Process

The patient wait time can differ daily because the only scheduled appointments for the urgent care are wound care dressing changes conducted by a registered nurse. Wait time can depend on the day and number of patients coming to the urgent care and the length of time can change depending on patient diagnostics needed. All other patient visits are walk-ins or telephone visits. The patient relation representatives confirm and update information for the patient when they arrive such as insurance, primary care provider, address, emergency contact, reason for coming to the urgent care, and telephone number. The medical assistants take the patients weight, vital signs, and ask questions about what they came in for to give a brief report to the providers. If patients come in for chest pain or pressure, patients are triaged immediately and seen by a provider. If the patient is experiencing an emergency, they are triaged and directed to the emergency department via wheelchair next door. If patients come into the clinic with

symptoms of COVID, they are sent out to their cars and required to call into the urgent care clinic and wait for providers to contact them. A provider contacts the patients in the cars and completes a dotphrase for COVID patients in EPIC, the electronic health record.

Patterns

The urgent care conducts monthly meetings via Teams to discuss updates for practice improvements and patient safety concerns. Policy or practice changes are also updated regularly through email. Providers occasionally make telephone calls for COVID screening, so providers can assess whether the patient needs to be swabbed at the tent or if they can come into the clinic for in person care. If the patient has a primary care provider within the organization, a registered nurse can take the telephone visit for the urgent care providers. Other phone calls can include questions from patients that cannot be answered by the medical assistants, consultation with the emergency department physician, or discussions with the clinic manager about policies. Other interruptions disrupting the flow of patient assessments and wait times is when the providers send the patient to x-ray and are waiting for the results to come back to confirm a diagnosis. Occasionally, there is a delay in patient care due to missing supplies or lack of supplies. In one week, the DNP student noticed at least 12 instances where supplies were missing or there was an issue with ordering the wrong supplies. Usually, the supplies missing were needles used for injecting lidocaine into a laceration, straight catheters for a urine sample, or swabs for culture. Two patients in a two-week assessment of the urgent care were needed to be sent to the emergency department where assessment for further treatment or hospitalization was required. The urgent care is not able to place intravenous catheters; therefore, if patients require more invasive care or are needing intravenous pain medicine, then they are required to be taken in a wheelchair to the emergency department.

A. Purpose: Why does your practice exist?										
Site Name: Seaside Immediate Care Facility			Site Contact:			Date:				
Practice Manager: Lisa Simpson			MD Lead:			Nurse Lead:				
B. Know Your Patients: Take a close look into your practice, create a "high-level" picture of the PATIENT POPULATION that you serve. Who are they? What resources do they use? How do the patients view the care they receive?										
Est. Age Distribution of Patients:		%		List Your Top 10 Diagnoses/Conditions			Top Referrals (e.g. GI Cardiology)		Patient Satisfaction Scores	
Birth-10 years		5		1. UTI			6. Laceration		Experience via phone	
11-18 years		8		2. Fracture			7. Anxiety		Length of time to get your appointment	
19-45 years		20		3. COVID			8. Gout		Saw who patient wanted to see	
46-64 years		30		4. Alcoholism/Drug use			9. Constipation		Satisfaction with personal manner	
65-79 years		18		5. STD			10. Pain		Time spent with person today	
80 + years		19		Patients who are frequent users of your practice and their reasons for seeking frequent interactions and visits			Other Clinical microsystems you interact with regularly as you provide care for patients (e.g. OR, VNA)		Pt Population Census: Do these numbers change by season? (Y/N)	
% Females									Patients seen in a day	
Est. # (unique) pts. in Practice				Disenrolling patients in last month		Encounters per provider per year		Out of Practice Visits		
Disease Specific Health Outcomes, pg 24				Condition Sensitive Hospital Rate		Emergency Room Visit Rate				
Diabetes HgA1c =										
Hypertension B/P =										
LDL <100 =										
*Complete "Through the Eyes of Your Patient", pg 9										
C. Know Your Professionals: Use the following template to create a comprehensive picture of your practice. Who does what and when? Is the right person doing the right activity? Are roles being optimized? Are all roles who contribute to the patient experience listed? What hours are you open for business? How many and what is the duration of your appointment types? How many exam rooms do you currently have? What is the morale of your staff?										
Current Staff	FTEs	Comment/Function	3rd Next Available		Cycle Time	Days of Operation	Hours			
Enter names below totals Use separate sheet if needed			PE	Follow-up	Range	Monday	7am-7pm			
MD Total	1					Tuesday	7am-7pm			
						Wednesday	7am-7pm			
						Thursday	7am-7pm			
						Friday	7am-7pm			
						Saturday	7am-7pm			
NP/PAs Total	6					Sunday	7am-7pm			
						Do you offer the following? Check all that apply.				
						<input type="checkbox"/>	Group Visit			
						<input checked="" type="checkbox"/>	E-mail			
						<input checked="" type="checkbox"/>	Web site			
						<input type="checkbox"/>	RN Clinics			
						<input checked="" type="checkbox"/>	Phone Follow-up			
						<input checked="" type="checkbox"/>	Phone Care Management			
						<input type="checkbox"/>	Disease Registries			
						<input checked="" type="checkbox"/>	Protocols/Guidelines			
						Appoint. Type	Duration	Comment:		
						Problem Focused	25min			
Others:	4					Staff Satisfaction Scores				
Do you use Float Pool?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	How stressful is the practice?		% Not Satisfied						
Do you use On-Call?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Would you recommend it as a good place to work?		% Strongly Agree						
*Each staff member should complete the Personal Skills Assessment and "The Activity Survey", pgs 13-15										
D. Know Your Processes: How do things get done in the microsystem? Who does what? What are the step-by-step processes? How long does the care process take? Where are the delays? What are the "between" microsystems hand-offs?										
1. Track cycle time for patients from the time they check in until they leave the office using the Patient Cycle Time Tool. List ranges of time per provider on this table, pg 16/17										
2. Complete the Core and Supporting Process Assessment Tool, pg 18										
E. Know Your Patterns: What patterns are present but not acknowledged in your microsystem? What is the leadership and social pattern? How often does the microsystem meet to discuss patient care? Are patients and families involved? What are your results and outcomes?										
• Does every member of the practice meet regularly as a team?			• Do the members of the practice regularly review and discuss safety and reliability			• What have you successfully changed?				
						• What are you most proud of?				

Appendix B

PHQ-2 and PHQ-9 Questionnaire

Providence values holistic care, which includes mind and body. The following is to assess an individual’s mental health.

Patient Health Questionnaire-2 (PHQ-2)

Over the last 2 weeks, how often have you been bothered by any of the following problems?	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

Please calculate your score: _____ + _____ + _____ + _____ = _____

If your score is 3 or more, please turn page over and complete next questionnaire.

PATIENT HEALTH QUESTIONNAIRE (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 figety 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	0	1	2	3

Appendix C

Pre and Post Presentation Survey

How much do you agree with the following statement?

How much do you agree with the following statement?	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
Mental Health is a concern in the urgent care population					
I am confident in my ability to connect the patient to mental health resources.					

Appendix D

Post-Implementation Survey

How satisfied do you feel with the following:	Very Unsatisfied	Unsatisfied	Neutral	Satisfied	Very Satisfied
1. How satisfied are you with the PHQ-2 workflow?					
2. Confidence in connecting patient with appropriate mental health resources?					
How much do you agree with the following statement?	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
3. Mental Health is a concern in the urgent care population					

4. What are your suggestions for improving this workflow process?

Appendix E

Informed Consent

Informed Consent PHQ-2 Workflow in Urgent Care

You are invited to participate in a quality improvement project conducted by Doctor of Nursing Practice (DNP) Ashley Thiessen, from the UNIVERSITY OF PORTLAND School of Nursing.

I would appreciate your assistance pertaining to a quality improvement project aimed to improve the care provided to individuals in the urgent care. The purpose is to provide education to providers about need for mental health screening in the urgent care for patients who lack access to a primary care provider. Through education, the goal is to improve assessment of patients for depression using a PHQ-2 assessment tool upon arrival at the urgent care to better provide resources and treatment to the patient. This education session is designed to enhance provider understanding of the mental health assessment tools available to them. Your feedback is a valuable part in helping to determining the impact of education on project outcomes.

If you agree to participate in this quality improvement project, you will be asked to:

- Participate in a 15-minute education session led by DNP student Ashley Thiessen
- Complete a short survey before and after the education session assess training
- Complete a short survey after implementation of the screening tool to assess workflow implementation

Responses will be anonymous; your name will not appear anywhere on the survey. Completing and returning the questionnaire constitutes as your consent to participate. Choosing not to participate in the study does not exclude you from participating in the education session.

Some of the benefits of participating in this quality improvement project will be to support the mental health and holistic care of all patients in this clinic. The risks of the project are minimal. Providers participating in the quality improvement project may be uncomfortable with addressing mental health concerns and following a new workflow process. Providers experiencing a concerning or uncomfortable situation will send the DNP student and clinic manager an email.

It is important for you to know that your participation is entirely voluntary. You do not have to participate and you can stop your participation at any time.

Data will be analyzed at the group level. All data will remain anonymous, data will be stored on a secure cloud through the University of Portland, using Word and Excel. Anonymous group data will be presented to project advisor, clinic manager, and DNP students.

Your participation is voluntary. Your decision whether or not to participate will not affect your relationship with Providence or University of Portland. If you decide to participate, you are free to withdraw your consent and discontinue participation at any time.

If you have any questions about the study, please feel free to contact Ashley Thiessen, (503) 984-8339, thiessen14@up.edu or Dr. Anjie Raber 503-943-7847, rabera@up.edu

You will be offered a copy of this form to keep.

Your signature indicates that you have read and understand the information provided above, that you willingly agree to participate, that you may withdraw your consent at any time and discontinue participation without penalty, that you will receive a copy of this form, and that you are not waiving any legal claims.

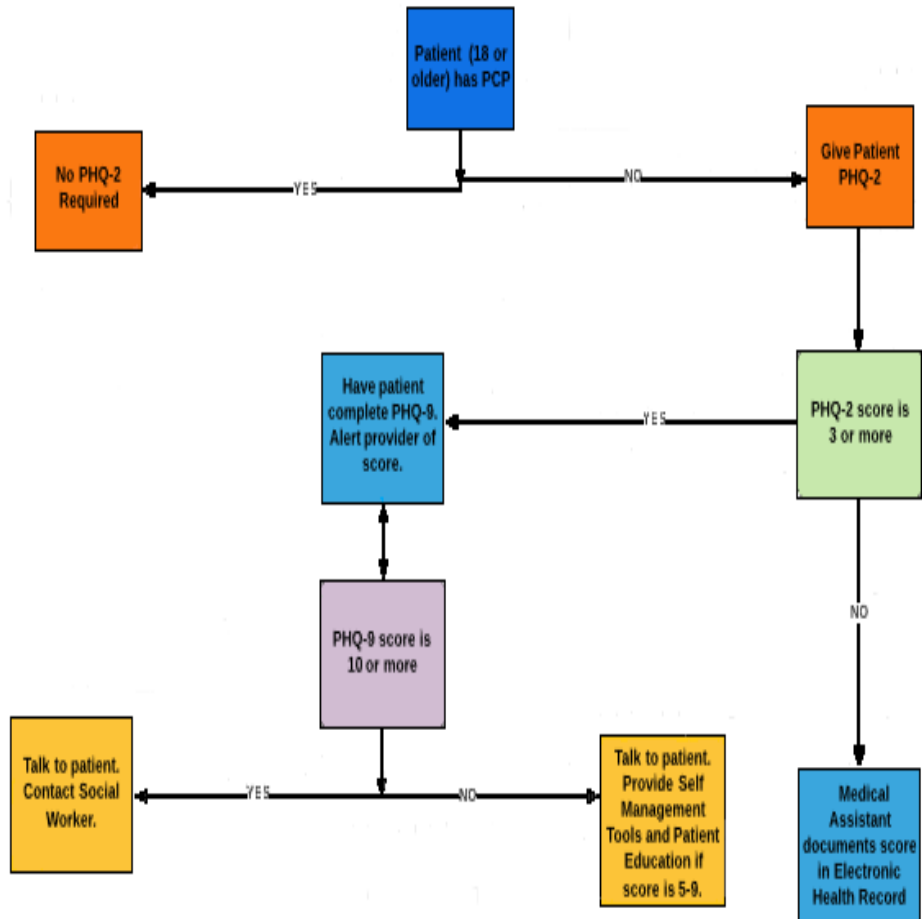
Signature _____

Date _____

Appendix F

PHQ-2 Workflow

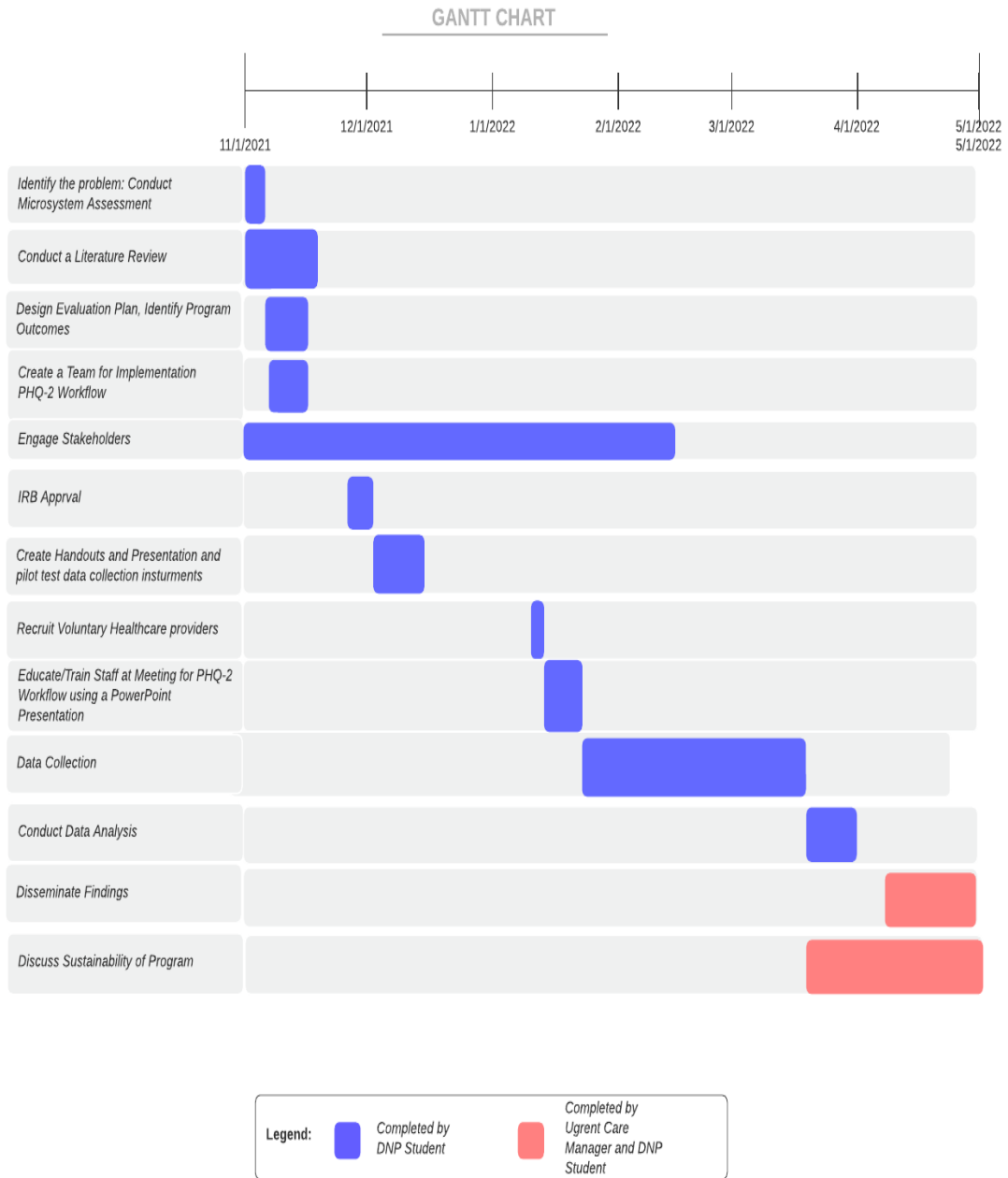
PHQ-2 Workflow



- Diagnosis:
 - 5-9: Mild Depression
 - 10-14: Major Depressive Disorder Mild
 - 15-19: Major Depressive Disorder Moderate Severe
 - 20-27: Severe Depression
- Call Social Worker and Send to Emergency Department if patient has Suicide Ideation and/or a plan

Appendix G

GANTT Chart



Appendix H

Descriptive Statistics for the Process and Outcome Measures

Process and Outcome Measures	Total:
Number of Patients with a PCP over 18	616
Number of Patients without a PCP over 18	165
Number of PHQ-2 Questionnaires Completed	40
Number of PHQ-2 Questionnaires with a 3 or more	4
Number of PHQ-9 Questionnaires Completed	3
Number of PHQ-9 with a score 10 or more	1
Number of Depression Diagnoses	0
Number of times a Social Worker was Called with a PHQ-9 score 10 or more	1

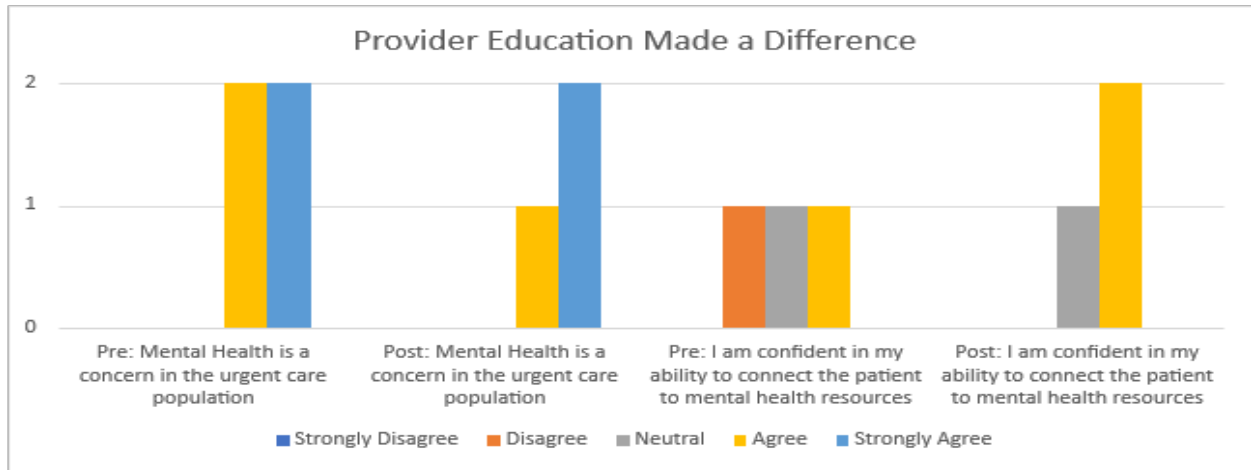
Appendix I

PHQ-2 Questionnaire Scores

Possible Scores	Number of PHQ-2 Scores
0	29
1	3
2	4
3	2
4	2
5	0
6	0

Appendix J

Pre and Post Presentation Survey Comparison



Appendix K

Post-Implementation Survey

