Education on the Ultra-Brief 2-Item Depression Screening Tool in the Jail Setting: A Quality Improvement Project

Jennifer T. McCormack

School of Nursing, Oregon Health & Science University

NURS 703B: DNP Project

Dr. MinKyoung Song, PhD, RN, FNP, FAHA

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Abstract

Background The rate of depression and suicide among individuals incarcerated in jails are significantly higher than the general population. Therefore, it is necessary to identify and diagnose depression among inmates so that they receive timely and appropriate care. The Ultra-Brief 2-Item Depression Screening Tool (UB2DS) has been validated to be used in the correctional setting. **Aim** This project aimed to increase the knowledge and the use of depression screenings by providing education on the UB2DS to clinicians in the mental health department of the jail. **Methods** An educational session was presented to 17 clinicians via MicroSoft Teams, and questionnaires on Qualtrics software were used to collect data before the intervention, immediately after the intervention, and 4 weeks after the intervention.

Results There were 17 respondents from the pre- and post-education questionnaires. The results identified an increase in knowledge of guidelines and use of the UB2DS and confidence in utilizing depression screenings. Anticipated challenges in implementing the UB2DS include time constraints, patient attitude and understanding, and lack of knowledge. There were 4 respondents from the 4-week post-intervention questionnaire. Results showed an increase in confidence when utilizing depression screenings and an increase in the rate at which the UB2DS was used. Time constraints was identified as a challenge in utilizing the depression screening.

Conclusion Overall, the educational session increased knowledge, confidence and use of depression screenings. Due to the limited number of responses on the 4-week post-intervention questionnaire, further work and replication is recommended.

Problem Description

There are over 1.9 million people incarcerated in United States' (U.S.) jails and prisons, which is far greater than any other country in the world (Sawyer & Wagner, 2024). In 2022, people were booked into local jails over 7 million times (Sawyer & Wagner, 2024). Approximately 31% of individuals in jail reported symptoms of major depression (Bronson & Berzofsky, 2017), as compared to 8.3% of the general U.S. adult population (U.S. Department of Health and Human Services, 2023). This discrepancy is concerning, as depression is the most significant risk factor for suicide among all contributing factors (Aaltonen et al., 2024). Suicide is the leading cause of death in U.S. jails, and suicide mortality rates in jail (short-term detention facilities) are three times higher than in prison (long-term detention facilities) or the general population (Cain & Ellison, 2024). In addition, the average timeframe from onset of depressive symptoms to diagnosis of depression is approximately 26 months (Al-Rousan et al., 2017). Despite the significantly elevated rates of depression and suicide among jail inmates, the jail setting often lacks the resources to effectively identify patients with depression. Thus, the identification of mental health needs is the first step in the process of providing appropriate mental health care to this vulnerable population.

There are a variety of depression screening tools that are highly utilized in the community mental health and acute hospital settings, but there are only a few that have been validated to use in the correctional setting (Proctor et al., 2021). In addition, due to the fast-paced and high-volume workflow that is common to the jail setting, some screening instruments are not compatible for this environment. A study by Proctor et al. (2021) demonstrated that the Ultra-Brief 2-Item Depression Screening Tool (UB2DS; refer to the tool in **Appendix B**) had reasonable sensitivity and specificity in screening for a major depressive episode in the jail. The goal of this quality improvement (QI) project is to provide education regarding the UB2DS to increase clinician knowledge of depression

screening, increase the use of depression screening, gather comprehensive feedback from clinicians, to enhance early detection and treatment of depression in this vulnerable population.

Available Knowledge

Multiple agencies have endorsed the use of depression screenings. The American Psychological Association (APA) developed two requirements for the identification of mental health needs in jail that includes staff observation and a validated screening tool (2016). In the study by Comartin et al. (2021), jail inmates identified through depression screening showed higher levels of symptoms compared to those identified through observation. The U.S. Preventive Services Task Force (USPSTF) recommends that the general adult population be screened for depression but does not provide guidelines for screening timing or intervals. The National Commission on Correctional Health Care (NCCHC) recommends that depression screening be performed on inmates upon booking (NCCHC, 2018).

Studies have shown that the most pervasive mental health concern among the jail population is depression (Fazel & Danesh, 2002; Green et al., 2005; Proctor & Hoffman, 2012; Proctor et al., 2019). Furthermore, jail detainees with a history of major depressive disorder have an increased risk of suicide (Proctor et al., 2021). The acute stress from loss of autonomy, forced isolation, and insecurities about prospects makes the jail population highly vulnerable to depression and suicide (Tripathy et al., 2022). Screening tools such as the Brief Jail Mental Health Screen (BJMHS), the Correctional Mental Health Screen (CMHS), the Patient Health Questionnaire Depression Scale (PHQ-9), and the Kessler Psychological Distress Scale-6 (K6), are effective in detecting depression but can be sensitive to false results and challenges.

Although the PHQ-9 is widely used in the community setting, it is susceptible to false positive results in the correctional setting due to specific environmental and stress-related factors

that can increase scores (Butcher et al., 2021). The BJMHS is a popular instrument used in jails, but it is susceptible to false negative results and has been shown to identify less than half of individuals with a mental health disorder (Kopak et al., 2022). The CMHS has been shown to produce high rates of false positive results, which can be challenging when used in large jail populations with limited resources (Simpson et al., 2022). The K6 also has limitations in that it inaccurately identifies patients without mental health concerns, which can lead to false positive results and the inefficient use of resources (Zeng, 2019).

Brief screening tools can be especially helpful in high-volume systems with fast-paced environments like the jail setting. Since the timeframe of incarceration is often uncertain, and there may be a limited amount of time in which to provide mental health care, it is important to accurately and efficiently identify those in need. The UB2DS utilizes two screening items that assess concentration and energy (Proctor et al., 2021). In the study by Proctor et al. (2021) with inmates at a county jail in rural North Carolina, the UB2DS demonstrated 76.6% specificity and 85.5% sensitivity in diagnostic accuracy of major depressive disorder.

Previously, a QI project conducted by Xiong (2024) at the same county jail proposed for this QI project implemented an educational session for ten clinicians at the local county jail in Northern California for a period of one month (Xiong, 2024). Ten clinicians completed the baseline questionnaire, and seven out of them provided consent to participate in the project. Six of the seven clinicians responded to the one-month follow-up questionnaire, and four participants agreed to a subsequent one-on-on interview. Results from this study showed that the use of UB2DS among participating clinicians increased from 30% to 50%. Qualitative data through clinician interviews showed that the UB2DS allowed for better detection of a major depressive episode, but clinicians reported that one month was not sufficient to fully integrate the screening tool into their practice

(Xiong, 2024). It was recommended that future projects include additional cohorts of clinicians to enhance understanding of the intervention's effects (Xiong, 2024).

Rationale

The root cause analysis and formulation of the cause-and-effect diagram (**Figure 1**) identified the absence of an implemented depression screening as a source of unaddressed mental health needs of the jail population. The lack of a depression screening tool among a population with high rates of depression contributes to the likelihood that depression remains untreated and risk of suicide. The study by Proctor et al. (2021) showed that the UB2DS was a tool with high specificity and sensitivity in the detection of a major depressive episode.

The IHI Model for Improvement (MFI) framework was utilized in the development, testing, and implementation of this project (Institute for Healthcare Improvement, n.d.a.). Specifically, the Plan-Do-Study-Act (PDSA) cycle was used to help facilitate the success of this project in reaching its aim. By studying the results of the prior QI project, challenges and desired outcomes were identified and a revised plan with a larger group of clinicians was implemented.

Specific Aims

As a first step toward addressing the underutilization of a designated depression screening tool, this QI project aimed to increase knowledge and use of the UB2DS among clinicians by providing educational sessions. It is expected that from February 4, 2025, through March 25, 2025, the use of the UB2DS tool by clinicians during mental health assessment will increase by up to 20%.

Context

The county jail in Northern California incarcerates approximately 2,800 individuals. All individuals within the jail have free access to a variety of psychiatric services including case

management, psychotropic medication evaluation, acute inpatient care, intensive outpatient services, discharge planning, and routine mental health assessments. Mental health services conduct approximately 3000 to 4000 visits per month. The mental health care team consists of unlicensed and licensed social workers, psychologists, psychiatrists, and psychiatric nurse practitioners. There are 110 clinicians (unlicensed and licensed social workers) currently working on the mental health team.

Intervention

Similar to Xiong's (2024) study, a one-hour educational session was delivered via Microsoft Teams using PowerPoint slides. The session focused on guidelines outlined by APA, NCCHC, and USPSTF, evidence-based practices, and use of the UB2DS. There were no modifications to the content of the presentation from Xiong's (2024) study, as feedback was not specifically requested. The educational session was provided three separate times, which differed from Xiong's (2024) study where it was offered once. Questionnaires, using a five-point Likert scale, were administered before the intervention, right after the intervention, and 4 weeks after the intervention. The questionnaires were offered electronically through Qualtrics, which differs from Xiong's (2024) study where the questionnaires given in a paper-and-pencil format. The questionnaires also included open-ended questions that addressed challenges in utilizing the UB2DS.

An email with a summary of the session, along with a copy of the presentation was emailed one day after the intervention. A reminder email to incorporate the UB2DS was sent out two weeks after the educational session. A 4-week post-intervention questionnaire was provided four weeks after the intervention to assess clinician perspectives and self-efficacy, as well as the frequency at which the screening tool was used. Due to a lower response rate than expected, a reminder to complete the questionnaire was emailed out in week 5 following the intervention.

Study of Intervention

To assess the impact of the intervention, questionnaires were utilized to measure clinician perceptions of the intervention prior to the intervention, immediately after the intervention, and four weeks after the intervention. The questionnaires measured clinician level of awareness in relation to depression screening, knowledge of guidelines and evidence-based practice, and degree of selfefficacy in implementing the screening tool. Increases in the average scores on the Likert scale questionnaires indicate that the intervention was effective. The 4-week post-intervention questionnaire assessed the frequency in which the screening tool was used and facilitators and barriers to utilizing the tool.

Measures

Pre-intervention measures included that rate of depression screenings performed, as well as the anticipated challenges in implementing depression screenings. Post-intervention measures assessed the degree of comprehension of the information presented and their attitudes toward incorporating depression screening (using UB2DS) into mental health assessments. The primary outcome measure for this project was the rate at which clinicians utilized the depression screening tool 4 weeks post-intervention. The process measure for this project was the number of clinicians who attended the educational session and filled out the post-education questionnaire. The balancing measure was the barriers clinicians met while implementing the UB2DS.

Analysis

Quantitative data via pre-, post-, and 4-week post-intervention questionnaires collected using QualtricsTM (Qualtrics, 2024) were analyzed using descriptive statistics and presented in bar graphs (see **Figures 1,2,3,4,5**). Qualitative data from open-ended responses were analyzed and organized by common themes.

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Ethical Considerations

Clinician participation in this project was voluntary, and informed consent was obtained from each clinician. Data were extracted from Qualtrics without any identifying information and downloaded to an encrypted flash drive. The project was approved by the Oregon Health & Science University Institutional Review Board. There were no conflicts of interests, no monetary compensation was provided to participants, no inherent risks or benefits were associated with participation in the study.

Results

Twenty-six clinicians were invited to a virtual educational session via email. Seventeen clinicians (approximately 65.4%) attended, all of whom completed both the pre- and post-education questionnaires. Four clinicians (~15.4%) completed the 4-week post-intervention questionnaire after it was emailed out four weeks after the intervention.

Findings from the Pre-Intervention Questionnaire

Approximately 59.0% of the clinicians (n=10 out of 17) reported that they had the necessary knowledge of guidelines for identifying depressive symptoms in the jail. About 35.0% of clinicians (n=6) reported that there was very limited time during clinical encounters to conduct a depression screening. Fifty-three percent of clinicians (n=9) reported that patients did want to participate in depression screening. Fifty-three percent of clinicians (n=9) were confident of when to use a screening tool, while 30.0% (n=5) were confident of knowing which screening tool to use. The majority of the clinicians (76.0%) reported that depression screenings were clinically relevant and helped provide better care (see **Figure 1**). Around 6% (n=1) of clinicians reported using a depression screening tool more than 75% of the time, 23.5% (n=4) reported using a tool 50% of the

time, 17.6% (n=3) using a tool 25% of the time and 52.9% (n=9) reported using a tool 5% of the time (See Figure 2).

Qualitative findings from the pre-intervention questionnaire regarding anticipated challenges in implementing the depression screening showed three prominent themes. First, clinicians (n=3) stated that patients may not want to engage in the questionnaire and may not understand questions asked. Second, clinicians (n=2) also reported concerns of time constraints to complete the UB2DS. Third, one participant reported limited knowledge of depression screening (see **Table 1**). To maintain participant anonymity, no demographic data were collected.

Findings from the Post-Intervention Questionnaire

After the educational session, 82% (n=14 out of 17) of clinicians reported knowing which depression screening to use, and 88% (n=15) reported knowing when to use the depression screening tool. Approximately 88% (n=15) of clinicians reported that the educational session helped them better understand the significance of utilizing the depression screening tool. Ninety-four percent (n=16) of clinicians reported that depression screenings were clinically relevant and helped provide better care on the post-education questionnaire. Ninety-four percent (n=16) of clinicians reported the recommended guidelines regarding the identification of depressive symptoms in the jail (see **Figure 3**). There were no qualitative suggestions or comments regarding improvements to the education session.

Findings from the 4-Week Post-Intervention Questionnaire

Seventy-five percent (n=3 out of 4) of clinicians reported that depression screenings were clinically relevant and provided better care, while 25% (n=1) was neutral. All clinicians (n=4) expressed confidence in knowing which depression screening tool to use and when to use it (see **Figure 4**). Over the last 4 weeks, 50% of clinicians (n=2) reported using the screening instrument

more than 50% of the time, 25% (n=1) reported using the screening instrument 25% of the time, and 25% (n=1) reported using the screening instrument more than 5% of the time (see **Figure 5**). One clinician denied having any challenges in implementing the screening instrument and stated "diagnosing/tracking depression is built into my practice." Another clinician reported "logistics time" as a challenge to utilizing the screening instrument but remarked that "with time and practice it would improve."

Discussion

Summary

The goal of this QI project was to deliver an online educational session to mental health clinicians at a county jail on implementing the UB2DS during mental health visits and to evaluate the intervention's effectiveness post-implementation. Overall, the findings indicated a positive effect of the intervention. Specifically, the use of the depression screening more than 50% of the time increased by more than 20% at 4 weeks post-intervention.

Interpretation

The comparison of pre- and post-intervention questionnaire findings showed that knowledge of the recommended guidelines increased from 59% to 94% after the educational session. The postintervention questionnaire showed an 18% increase in clinician perception of depression screening and its relevancy and provision of better care, as compared to the pre-intervention questionnaire. The comparison of pre- and post-intervention questionnaire showed a 35% increase in confidence of when to use a depression screening instrument and what screening instrument to use.

The rate at which clinicians utilized the depression screening instrument more than 50% of the time increased from 23.5% from the pre-intervention questionnaire to 50% on the 4-week post-intervention questionnaire. The utilization of the instrument more than 25% of the time increased

from 17.6% on the pre-intervention questionnaire to 25% on the 4-week post-intervention questionnaire. Confidence in knowing which screening instrument to use and when to use it increased from 88% on the post-intervention questionnaire to 100% on the 4-week post-intervention questionnaire. The 4-week post-intervention questionnaire showed that 75% of clinicians thought depression screenings were clinically beneficial and helped to provide better care, which is less than the 94% from the post-intervention questionnaire. However, due to the limited responses received from the 4-week post-intervention questionnaire, no true conclusions can be drawn.

The first theme from the qualitative findings of the pre-intervention questionnaire was patient understanding and attitude. Clinicians anticipated that patient insight and willingness to participate in the screening may be a challenge in implementing the screening. Future studies may want to explore this theme by asking if this was a challenge in the 4-week post-intervention questionnaire. The second theme was time constraints. The time constraints clinicians reported prior to the pre-education session may have stemmed from a lack of familiarity with the UB2DS or from feeling overstretched during tightly scheduled visits. The third theme was limited knowledge of depression screening, which was addressed during the educational session. There were no qualitative findings from the post-education questionnaire. The 4-week post-intervention findings showed that time constraints continue to be a challenge, as reported from one clinician's qualitative comment, but the same clinician also reported that it can be overcome through time and practice. Future studies may want to increase the timeframe of the study to longer than 4 weeks, which was not feasible in this QI project due to contractual limitations. Refresher educational sessions offered periodically throughout the timeframe may also be helpful in increasing engagement.

Limitations

The sample size of this study was relatively small, with 17 out of 26 clinicians invited to participate, which is approximately 65% of the intended sample size. Although this was more than double the same size in Xiong's (2024) study, it was lower than expected. Future studies should aim to invite a larger percentage of clinicians. This study encountered the same challenge as Xiong's (2024) study - a limited number of responses to the 4-week post-intervention questionnaire, which makes it more difficult to draw significant conclusions from the 4-week post-intervention data. This low response rate may be related to the 4-week time frame, which was cited as a limiting factor in the qualitative finding, and the number of reminders sent. Another limitation is potential clinician bias from discussions of the study from other clinicians who participated in the study the year prior. If clinicians in the previous study expressed skepticism or negative perceptions of the intervention or depression screening, it could have influenced the level of engagement in this study.

Conclusions

The implementation of this QI project reintroduced the validated screening tool to mental health services in the jail setting in California; thereby, bringing current practice closer to evidencebased care. Overall, the findings for this study are promising. The study showed that the educational session increased the rate at which clinicians performed the depression screening tool. Knowledge of guidelines and confidence in implementing the depression screening also increased after the educational session. However, due to the limited responses received in the 4-week post-intervention questionnaire, further work and replication are warranted.

References

- Aaltonen, K., Sund, R., Hakulinen, C., Pirkola, S., & Isometsä, E. (2024). Variations in suicide risk and risk factors after hospitalization for depression in Finland, 1996-2017. JAMA Psychiatry, 81(5), 506. https://doi.org/10.1001/jamapsychiatry.2023.5512
- Al-Rousan, T., Rubenstein, L., Sieleni, B., Deol, H., & Wallace, R. B. (2017). Inside the nation's largest mental health institution: A prevalence study in a state prison system. *BMC public health*, 17(1), 342. https://doi.org/10.1186/s12889-017-4257-0
- American Psychiatric Association. (2016). *Psychiatric services in correctional facilities* (3rd ed.). https://www.appi.org/psychiatric services in correctional facilities third edition
- Bronson, J., & Berzofsky, M. (2017). Indicators of mental health problems reported by prisoners and jail inmates, 2011-12. *Bureau of Justice Statistics*. <u>https://bjs.ojp.gov/content/pub/pdf/imhprpji1112.pdf</u>.
- Butcher, E., Packham, C., Williams, M., Miksza, J., Kaul, A., Khunti, K., & Morriss, R. (2021).
 Screening male prisoners for depression and anxiety with the PHQ-9 and gad-7 at NHS
 Healthcheck: Patterns of symptoms and caseness threshold. *BMC Psychiatry*, 21(1).
 https://doi.org/10.1186/s12888-021-03453-2
- Cain, C. M., & Ellison, J. M. (2022). Identifying individuals at risk of suicide and self-harm in jail. *Corrections*, 9(2), 151–166. https://doi.org/10.1080/23774657.2022.2031350
- Comartin, E. B., Milanovic, E., Nelson, V., & Kubiak, S. (2020). Mental health identification practices of jails: The unmet needs of the "silent" population. *American Journal of Community Psychology*, 67(1–2), 7–20. https://doi.org/10.1002/ajcp.12466
- Fazel, S., & Danesh, J. (2002). Serious mental disorder in 23000 prisoners: A systematic review of 62 surveys. Lancet, 359(9306), 545–550. <u>https://doi</u> .org/10.1016/S0140-6736(02)07740-1

- Green, B. L., Miranda, J., Daroowalla, A., & Siddique, J. (2005). Trauma exposure, mental health functioning, and program needs of women in jail.
 Crime & Delinquency, 51(1), 133–151. https://doi.org/10.1177/00111287 04267477
- Institute for Healthcare Improvement. (n.d.) *Model for Improvement: Forming the Team*. https://www.ihi.org/how-improve-model-improvement-forming-teamIHI
- Kopak, A. M., Singer, A. J., Ballenger, M., & Hoffmann, N. G. (2022). Revisiting the brief jail mental health screen in a rural jail sample. *Journal of Forensic Psychology Research and Practice*, 24(2), 157–169. https://doi.org/10.1080/24732850.2022.2083537
- National Commission on Correctional Health Care. (2018). *Standards for Health Services in Jails 2018*. National Commission on Correctional Health Care.
- Proctor, S. L., & Hoffmann, N. G. (2012). Identifying patterns of co-occurring substance use disorders and mental illness in a jail population. Addiction Research & Theory, 20(6), 492–503. https://doi.org/10.3109/16066359
 .2012.667853
- Proctor, S. L., Hoffmann, N. G., & Raggio, A. (2019). Prevalence of substance use disorders and psychiatric conditions among county jail inmates: Changes and stability over time. Criminal Justice and Behavior, 46(1), 24–41. https://doi.org/10.1177/0093854818796062
- Proctor, S. L., Hoffmann, N. G., & Kopak, A. M. (2021). An ultra-brief 2-item depression screening tool for correctional populations. *Journal of Correctional Health Care*, *27*(1), 36– 39. https://doi.org/10.1089/jchc.19.06.0049
- Qualtrics. (2024). Qualtrics. Retrieved from https://www.qualtrics.com/

- Sawyer, W., & Wagner, P. (2024, March 14). *Mass incarceration: The whole pie 2024*. Prison Policy Initiative. https://www.prisonpolicy.org/reports/pie2024.html.
- Simpson, A. I., Gerritsen, C., Maheandiran, M., Adamo, V., Vogel, T., Fulham, L., Kitt, T., Forrester, A., & Jones, R. M. (2022). A systematic review of reviews of correctional mental health services using the stair framework. *Frontiers in Psychiatry*, 12. https://doi.org/10.3389/fpsyt.2021.747202
- The US Preventive Services Task Force. (2023). Screening for Depression and Suicide Risk in Adults: US Preventive Services Task Force Recommendation Statement. *JAMA*, *329*(23), 2057-2067. https://doi.org/10.1001/jama.2023.9297
- Tripathy, S., Behera, D., Negi, S., Tripathy, I., & Behera, M. R. (2022). Burden of depression and its predictors among prisoners in a central jail of Odisha, India. *Indian Journal of Psychiatry*, 64(3), 295–300.

https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_668_21

U.S. Department of Health and Human Services. (2023). *Major depression*. National Institute of Mental Health. <u>https://www.nimh.nih.gov/health/statistics/major-</u>

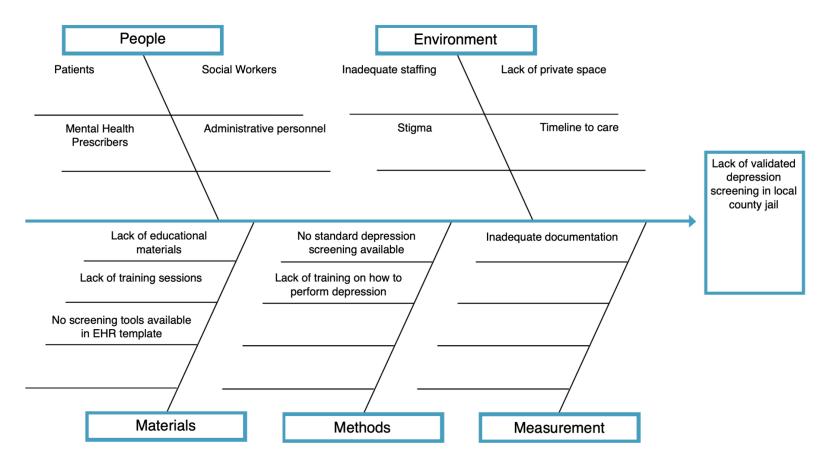
depression#:~:text=disorders%2C%20or%20medication.-

,Prevalence%20of%20Major%20Depressive%20Episode%20Among%20Adults,more)%20r aces%20(13.9%25).

- Xiong, L. (2024). Education on major depression screening in the jail system: A quality improvement project [Doctor of Nursing Practice, Oregon Health and Science University]. <u>https://digitalcollections.ohsu.edu/record/43311?ln=en&p=%28+%28subject%3A%28+%2</u> B+Quality+%2B+Improvement%29%29&v=pdf
- Zeng, Z. (2019). Jail inmates in 2017 (NCJ 251774). Bureau of Justice Statistics. <u>https://bjs.ojp.gov/content/pub/pdf/ji17.pd</u>

Appendix A

Cause and Effect Diagram



Appendix B

Ultra-Brief 2-Item Depression Screening (Proctor et al., 2021)

It is a two-item Yes or No screening questionnaire.

In the last two weeks:

- Did you have trouble thinking or concentrating?
- Did you have little energy or were easily fatigued most days?

The screening is positive when answering Yes to both questions.

Depression Screening in the Jail Setting

The purpose of this quality improvement (QI) project is to provide education on the Ultra-Brief 2-Item Depression Screening (UB2DS) so that staff can engage in evidence-based practice and adhere to recommended guidelines.

Pre-Intervention Questionnaire

Please select the <u>ONE response</u> that best reflects your perspective on utilizing the depression screening tool.

1) To what extent do you currently use a depression screening tool to aid in clinical decision making or assess depressive symptoms?

5	4	3	2	1
More than 95%	More than 75%	More than 50%	More than 25%	More than 5%
of the time	of the time	of the time	of the time	of the time

2) I have the necessary knowledge of the recommended guidelines regarding the identification of depressive symptoms in the jail.

5	4	3	2	1
Strongly agree	Agree	Neutral	Disagree	Strongly
				disagree

3) There is very limited time during the clinical encounter for utilizing depression screening tool.

5	4	3	2	1
Strongly	Agree	Neutral	Disagree	Strongly
Agree				Disagree

4) I feel that patients do not want to participate in screenings for depressive symptoms.

5	4	3	2	1
Strongly	Agree	Neutral	Disagree	Strongly
Agree				Disagree

5) I am confident when to use the depression screening tool.

5	4	3	2	1
Strongly	Agree	Neutral	Disagree	Strongly
Agree				Disagree

6) I am confident in knowing which depression screening tool to use.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly
				Disagree

7) I do feel that using depression screening is clinically relevant and helps provide better care.

5	4	3	2	1
Strongly	Agree	Neutral	Disagree	Strongly
Agree				Disagree

What challenges do you anticipate facing when implementing depression screening in your current practice?

Additional comments:

Thank you for your participation in this survey!

Appendix D

Post-Intervention Questionnaire

Please select the ONE response that reflects your perspective on utilizing the depression screening tool (the Ultra-Brief 2-Item Depression Screening [UB2DS]) after this educational session:

1) I am confident in knowing which depression screening tool to use.

54Strongly AgreeAgree	3 Neutral	2 Disagree	1 Strongly disagree
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2) I am confident when to use the depression screening tool.

5	4	3	2	1
Strongly	Agree	Neutral	Disagree	Strongly
Agree				Disagree

3) This education session helped me better understand the significance of utilizing the depression screening tool.

5	4	3	2	1
Strongly	Agree	Neutral	Disagree	Strongly
Agree				Disagree

4) I do feel that using depression screening is clinically relevant and helps provide better care.

5	4	3	2	1
Strongly agree	Agree	Neutral	Disagree	Strongly
				Disagree

5) I have the necessary knowledge of the recommended guidelines regarding the identification of depressive symptoms in the jail.

5	4	3	2	1
Strongly	Agree	Neutral	Disagree	Strongly
Agree				Disagree

Any additional comments or suggestions regarding the education session to help us improve future sessions?

Appendix E

4-Week Post-Intervention Questionnaire

Please select the ONE response best reflects your perspective in regard to the utilization of the depression screening tool one month after the educational session:

1) I do feel that using depression screenings are clinically relevant and help provide better care.

5	4	3	2	1
Strongly	Agree	Neutral	Disagree	Strongly
Agree				Disagree

2) Over the past month, to what extent did you use a depression screening tool to aid in clinical decision making or assess depressive symptoms?

5	4	3	2	1
More than 95%	More than 75%	More than 50%	More than 25%	More than 5%
of the time	of the time	of the time	of the time	of the time

3) I am confident in knowing which depression screening tool to use.

5	4	3	2	1
Strongly Agree	Agree	Neutral	Disagree	Strongly
				disagree

4) I am confident when to use the depression screening tool.

5	4	3	2	1
Strongly	Agree	Neutral	Disagree	Strongly
Agree				Disagree

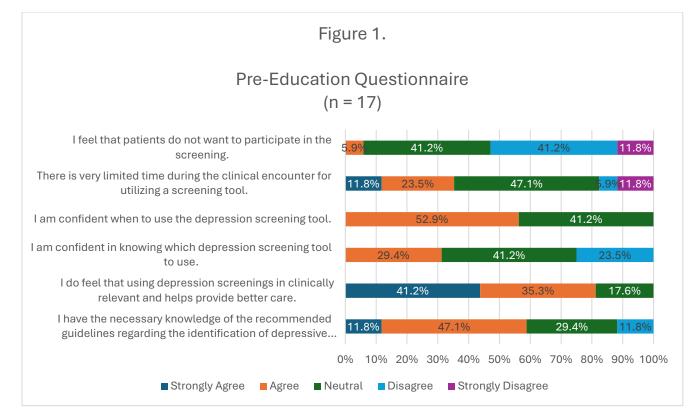
5) What is the most challenging part of utilizing the UB2DS during the clinical encounter?

Additional comments:

Thank you for your participation in this survey!

Appendix F

Pre-Intervention Questionnaire Graphs and Table



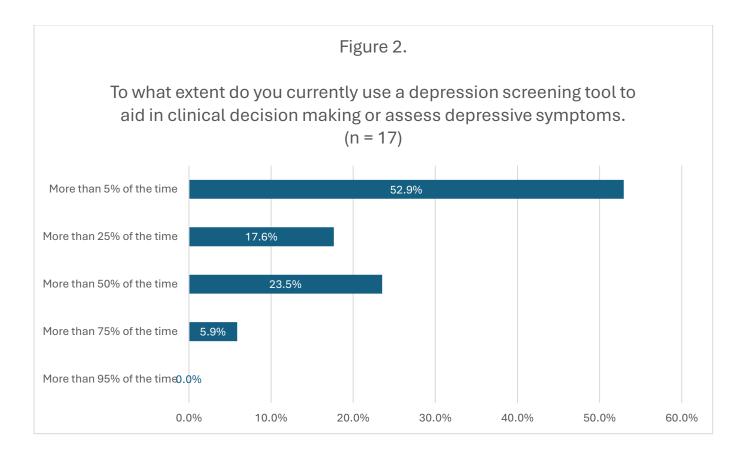
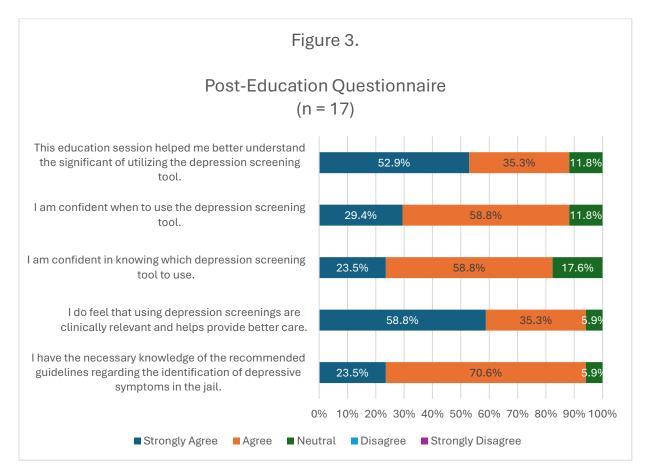


Table 1. Qualitative Findings from Pre-InterventionQuestionnaire (n=17)

Theme	Quote
Patient understanding and attitude	"Having common language that pt's will understand the screening tool, and possibly pts declining the tool unless it's required." "Patients not being compliant." "Pt's ability to engage in questions – low insight, difficulty discussing sxs."
Time constraints	"Sheer amount of questions already asked." "Limited time"
Limited knowledge of depression screening	"Knowledge of which screening to use and understanding results."

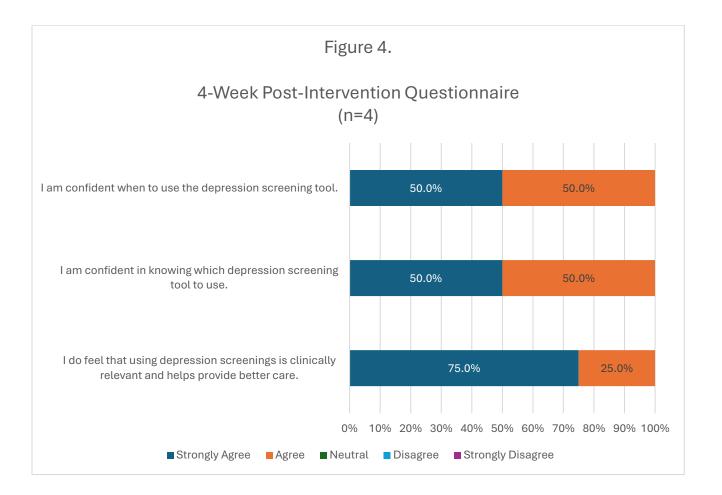
Appendix G

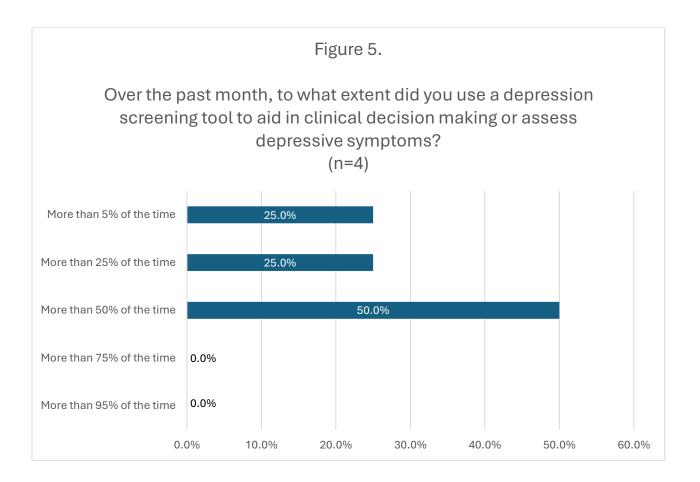
Post-Intervention Questionnaire Graph



Appendix H

4-Week Post-Intervention Questionnaire Graphs





Appendix I

OHSU IRB Exemption



NOT HUMAN RESEARCH

January 16, 2025

Dear Investigator:

On 1/16/2025, the IRB reviewed the following submission:

Title of Study:	Education on the Ultra-Brief 2-Item Depression
	Screening Tool in the Jail Setting: A Quality
	Improvement Project
Investigator:	Jennifer McCormack
IRB ID:	STUDY00028164
Funding:	None

The IRB determined that the proposed activity is not research involving human subjects. IRB review and approval is not required.

Certain changes to the research plan may affect this determination. Contact the IRB Office if your project changes and you have questions regarding the need for IRB oversight.

If this project involves the collection, use, or disclosure of Protected Health Information (PHI), you must comply with all applicable requirements under HIPAA. See the <u>HIPAA</u> and <u>Research website</u> and the <u>Information Privacy and Security website</u> for more information.

Sincerely,

The OHSU IRB Office

Appendix J

Letter of Support from Implementation Site

Letter of Support from Clinical Agency

Date: 11/26/2024

Dear Jennifer McCormack,

This letter confirms that I, Jason Roof, MD, allow Jennifer McCormack (OHSU Doctor of Nursing Practice Student) access to complete his/her DNP Final Project at our clinical site. The project will take place from approximately January 2024 to March 2024.

This letter summarizes the core elements of the project proposal, already reviewed by the DNP Project Preceptor and clinical liaison (if applicable):

- Project Site(s): Sacramento County Main Jail, 651 I Street, Sacramento, CA, 95817
- Project Plan:
 - Identified Clinical Problem: Symptoms of major depression are reported by inmates approximately four times more than the general population, with suicide mortality rates three times higher than prison or the general population. The county jail currently does not utilize a standardized depression screening tool. The objective of this study is to provide clinicians with education regarding the use of the UB2DS on inmates in the county jail.
 - Rationale: The UB2DS has demonstrated reasonable sensitivity and specificity in screening for major depression in the jail and takes 1-2 minutes to complete. The implementation of the validated depression screening tool will encourage evidence-based practice and meet APA recommendations.
 - Specific Aims: This project aims to provide education and training to mental health clinicians in implementing UB2DS and increase the use of a depression screening tool by 20%.
 - Methods/Interventions/Measures: This project will provide in-service training for a selected number of clinicians on the use of the UB2DS. Pre and post questionnaires will be utilized to assess barriers, attitudes, and feedback. The outcome measure is the percentage of time in which a clinician utilizes the screening tool.
 - Data Management: Clinician responses to questionnaires will be de-identified and stored in an encrypted flash drive.
 - Site(s) Support: Adult Correctional Mental Health (ACMH) will provide space to conduct the in-service. ACMH will assist in the selection of clinicians to participate in the project. ACMH leadership team has authorized and approved clinician participation and distribution of questionnaires.

During the project implementation and evaluation, Jennifer McCormack, will provide regular updates and communicate any necessary changes to the DNP Project Preceptor.

Our organization looks forward to working with this student to complete their DNP project. If we have any concerns related to this project, we will contact Jennifer McCormack and MinKyoung Song (student's DNP Project Chairperson).

Regards,

Signature

DNP Project Preceptor Jason Roof, MD, Medical Director jgroof@ucdavis.edu 916-874-8448 11/26/2026

Date Signed