Columbia-Suicide Severity Rating Scale (C-SSRS) Inpatient Perinatal Clinical Pathway

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Columbia-Suicide Severity Rating Scale (C-SSRS) Inpatient Perinatal Clinical Pathway

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NURS-670 Internship

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Table of Contents

Section I: Title and Abstract

Title ......................................................................................................................... 1
Abstract ................................................................................................................... 4

Section II: Introduction ......................................................................................... 6

Problem Description ............................................................................................. 7
Available Knowledge ............................................................................................ 9
PICOT Question ...................................................................................................... 9
Literature Review .................................................................................................. 10
Rationale ................................................................................................................. 12
Specific Project Aim .............................................................................................. 13

Section III: Methods

Context ................................................................................................................... 14
Intervention ........................................................................................................... 15
Study of the Intervention ...................................................................................... 16
Measures .............................................................................................................. 18
Ethical Considerations ........................................................................................ 19

Section IV: Results

Outcome Measure Results .................................................................................. 20

Section V: Discussion

Summary ................................................................................................................. 21
Conclusion .............................................................................................................. 21

Section VI: References ......................................................................................... 24
Section VII: Appendices

Appendix A. Columbia-Suicide Severity Rating Scale ........................................ 28
Appendix B. Mind-Body-Spirit Flyer ..................................................................... 29
Appendix C. Evaluation Table .............................................................................. 30
Appendix D. Columbia-Suicide Severity Rating Scale (C-SSRS) Clinical Pathway .... 34
Appendix E. SWOT Analysis .................................................................................. 35
Appendix F. Cost-Benefit Analysis ....................................................................... 36
Appendix G. Calm App PDSA ............................................................................. 37
Appendix H. Project Charter ................................................................................ 38
Appendix I. Statement of Non-Research Determination ....................................... 46
Appendix J. Outcomes Run Chart ....................................................................... 49
**Section I: Abstract**

**Problem:** The potential harm to women and infants due to untreated perinatal anxiety and mood disorders is both a patient safety and a public health concern. Studies show that mental health decline during the postpartum period is associated with increased morbidity and mortality for both the mother and infant. The project aim was to utilize the initial screening of perinatal patients using the Columbia-Suicide Severity Rating Scale (C-SSRS) as the baseline screening tool. The tool will help implement a standardized workflow for patients who screen low, moderate, or high, as this workflow had yet to be developed.

**Context:** In July 2019, the Joint Commission released new elements to their National Patient Safety Goal 15.01.01: Reduce the risk for suicide, which required suicide screening for all admitted patients. In August 2020, the hospital in this study screened all patients with the C-SSRS on admission. Even when hospitals screen patients for suicide or other mental health disturbances, a nationally accepted standard workflow for positive screens does not exist. This improvement project focused on creating a standardized workflow for perinatal patients who screened positive on the C-SSRS by implementing an inpatient clinical pathway.

**Interventions:** The primary intervention for this project was to create the inpatient clinical pathway for perinatal patients who screen positive on the C-SSRS. The initial step in the pathway was to ensure all positive patients had a social work consult, and those who scored moderate or severe also had an inpatient psychiatry referral. The secondary intervention was to ensure all patients received the Mind-Body-Spirit flyer containing outpatient resources for continued support when they are home.

**Measures:** To measure the success of the C-SSRS pathway, the team tracked all perinatal patients who screened positive on the C-SSRS. The outcome measure tracked the percentage of
patients who screened positive on the C-SSRS and had the interventions completed. The first process measure followed all positive C-SSRS patients against the number of social work consults placed and seen before discharge. The second measure tracked all patients who screened moderate or high, the psychiatry consult was initiated, and the patient was seen before discharge. The third process measure was the percent of postpartum nurses trained to use the C-SSRS clinical pathway. The incidence rate of inappropriate referrals to social work and psychiatry was used as the balancing measure.

**Results:** Of the perinatal patients who screened positive (low, moderate, high) on the C-SSRS, 100% had a social work referral and were seen before discharge. Of the patients who screened moderate or high, 100% had an inpatient psychiatry referral and were seen before discharge. The safety plan was not initiated on the one patient who screened high, as she was in active labor and the psychiatrist determined she was not actively suicidal. Education on the C-SSRS pathway was successful, with 95% of postpartum nurses receiving the instruction.

**Conclusions:** This project aimed to develop an inpatient clinical pathway to be used with 90% of perinatal patients who screened positive (low, moderate, high risk) on the C-SSRS. The hospital in this study was able to implement the C-SSRS pathway on the postpartum unit successfully.

**Keywords:** Columbia-Suicide Severity Rating Scale (C-SSRS), perinatal mental health, postpartum, screening tools
Section II: Introduction

Over 600,000 infants are born in the United States every year to mothers who suffer from perinatal depression (Postpartum Support International [PSI], 2021; Smith, 2012). Perinatal mental health concerns are gaining attention at national, regional, and local levels. With the added stress of the COVID-19 pandemic, mental health disparities have been recognized and have shed light on this often-overlooked patient population. According to Choi et al. (2020),

Clinicians and experts are raising concerns about the pandemic’s potential to cause far-reaching harm to the mental health of women and infants. During the pandemic, women are at increased risk for depression, anxiety, post-traumatic stress disorder, and suicidality precipitated by new pandemic-related stressors. (p. 410)

There are many missed opportunities to screen recently delivered mothers. When women are not screened for mood disorders and left untreated, severe clinical depression may develop for some women (Dennis & Doswell, 2013). In fact, “Perinatal mood and anxiety disorders are associated with increased risks of maternal and infant mortality and morbidity and are recognized as a significant patient safety issue” (Kendig et al., 2017, p. 272). Orsolini et al. (2016) noted, “Perinatal suicidality, which comprises completed suicides, suicide attempts, suicidal ideation, and thoughts of self-harm, is nowadays considered one of the leading causes of maternal mortality in the first 12 months postpartum” (p. 2).

The Columbia-Suicide Severity Rating Scale (C-SSRS) is a validated screening tool used to assess suicide risk (Columbia Lighthouse Project, 2016; see Appendix A). It is used by first response agencies, healthcare facilities, military installations, colleges and schools, and correctional facilities. This risk assessment tool was created to be a simple, easy-to-read and understand instrument using questions that anyone, including non-professional people, could use
to determine if someone has suicidal thoughts. The C-SSRS is considered universal, as it has been translated into over 100 languages and is suitable for use with any age group (Columbia Lighthouse Project, 2016). Using the C-SSRS on admission could assist the healthcare team in identifying at-risk perinatal patients, allowing for the implementation of patient-centered interventions and resources.

Prior to the COVID-19 pandemic, the World Health Organization projected that by 2020, depression would carry the highest disease burden of all health conditions in women (Dennis & Doswell, 2013). It is also suspected that 50% of women with perinatal mood and anxiety disorders (PMADs) are not identified (Accortt & Wong, 2017). When screening is implemented, there is still a gap in coordinating and providing interventions (PSI, 2021). PMAD interventions need to be created and inpatient clinical pathways solidified. Gaps in patient discharge planning and resources have long been identified (Sullivan Group, 2021). Implementing patient and family anticipatory teaching and resources should be standardized and dispersed to all applicable patients and their support persons.

**Problem Description**

Most hospital systems in the United States have not routinely used validated tools to screen pregnant and recently postpartum women (Long et al., 2019). When hospitals initiate screening for depression, mood disorders, or suicidal ideation, there is a lack of patient-centered interventions and resources. The hospital microsystem in this change in practice project integrates the Patient Health Questionnaire (PHQ-9) screening tool in prenatal appointments and routine pediatric appointments. Screening occurs at least twice during pregnancy and at well-baby appointments. The American Congress of Obstetricians and Gynecologists recommends screening with a validated tool for anxiety and depression symptoms at least once in pregnancy.

In July 2019, the Joint Commission (2021) released new elements to their National Patient Safety Goal (NPSG) 15.01.01: Reduce the risk for suicide, which required suicide screening for all admitted patients. As a result of the revised NPSG, the hospital in this study began screening patients with the C-SSRS in August 2020. From August 2020 through February 2021, data showed that 96% of patients were screened with the C-SSRS within 8 hours of admission. The postpartum unit, also known as the mother-baby microsystem, did not have a straightforward clinical pathway for positively screened patients.

In August 2019, the regional offices of the hospital system created a perinatal mental health (PMH) group to improve the mental health of pregnant and newly postpartum patients and formed a multi-professional and multi-medical center collaborative community of practice. The initial goal was to formulate a patient-centered local resource list that would be provided during discharge teaching. In July 2021, the revision of an established regional patient handout, titled the Mind-Body-Sprit flyer, was completed as one of the interventions implemented during the project (see Appendix B). The initial regional patient handout had some inaccurate phone numbers and was missing other local resources; thus, the team needed to revise before initial distribution. Once finalized, the flyer required a way for distribution, so that all patients would receive it and be educated on the contents.

Growing the local PMH team and using the interdisciplinary members for improvement projects was one way to improve communication and unite the team. The original project aim
was to decrease untreated PMAD symptoms in the patient, the newborn baby, and the entire family unit. After a gap analysis, it was found that before working on PMAD interventions, there was a need to improve upon a pre-established C-SSRS clinical pathway to identify those at risk of self-harm, establish a treatment algorithm, and ensure patients are provided support and resources.

**Available Knowledge**

**PICOT Question**

In postpartum women (P), how does using a screening tool to identify at-risk moms for postpartum mental disturbances (I), compared to those without the use of a screening tool (C), affect mood or psychiatric disturbance identification and treatment (O) within one year postpartum (T).

Multiple literature reviews were conducted throughout the planning and implementation phase of the project. Topics searched included screening and implementing interventions for perinatal mood disorders. The initial literature review conducted in February 2020 was followed up with ongoing research completed in July 2021. The evidence was reviewed using the following databases: Cochrane Database of Systematic Reviews, CINAHL Complete, Pub Med, MEDLINE, and AHRQ evidence reports. Keywords searched included *postpartum, mental illness, psychiatric disorders, mood disorders, reducing maternal symptoms, and screening tools.* Limitations were set to include English language, peer-reviewed research, and publication dates of 2015 to 2021. The Cochrane review was published in 2013 and was included due to the thoroughness of the study. Ten articles were retrieved with clinical significance to the PICOT question, and eight were selected for review.
Literature Review

The Johns Hopkins Nursing Evidence-Based Practice research and non-research evidence appraisal tools were selected to review the evidence (Dang & Dearholt, 2018). Three Level I A articles, one Level II B, one Level III B, one Level IV B, one Level V A, and one Level V B were selected to broaden the understanding of the problem and included in the evidence-based research table (see Appendix C).

The Cochrane review (Level I A) included 28 randomized controlled trials using both primary meta-analysis and fixed-effect meta-analysis to combine the study data with a sample size of 17,000 pregnant or newly postpartum women (Dennis & Doswell, 2013). This study showed that women who received a psychosocial or psychological intervention were significantly less likely to develop postpartum depression than those receiving standard care, with an average RR 0.78 and 95% confidence interval. The top three identified interventions were individualized postpartum home visits, peer-based telephone support, and interpersonal psychotherapy (Dennis & Doswell, 2013).

The next Level I A study by Long et al. (2019) included 25 systematic reviews and meta-analysis studies. This study revealed that screening for perinatal mood disorders is inconsistent and low among healthcare providers in the United States. Long et al. indicated that not only does screening need to be implemented, but referrals are needed as well.

Song et al. (2015) looked at 14 randomized control trials in a systematic review, and 13 of those studies were included in a meta-analysis (Level I A). Their results showed that the use of psychosocial interventions, such as stress management, proved to be an effective treatment for reducing symptoms of depression.
McCarter-Spaulding and Shea (2015) completed a quasi-experimental study including 240 women (rating Level II B), showing that educating women about postpartum depression symptoms while in the hospital did not decrease their symptoms.

Albaugh et al. (2018), in a retrospective descriptive study of 647 women (Level III B), provided information that only half of the women referred for mental health during their postpartum period attended their appointment.

Choi et al. (2020) provided practice guidelines and recommendations (Level IV B), pulling information from 17 organizations to address the COVID-19 pandemic and increasing concerns for mental health disturbances to rise.

A literature review by Accortt and Wong (2017) revealed that 19.2% of postpartum women experience depressive symptoms in the first 3 months postpartum (Level V B); therefore, routine screening with validated tools is necessary. They also identified that depression and anxiety rates are higher for women who experience an adverse perinatal complication or outcome, such as a baby in the neonatal intensive care unit (NICU), preterm birth, or maternal preeclampsia.

The final article chosen for review was a literature review and practice standards, including four studies (Level V B). Potter (2017) looked at universal screening for mood disorders for childbearing women and implications for practice. The researcher noted, “Ensuring universal screening and accurate diagnosis is just the first step; culturally competent, comprehensive, and effective treatment options must be available to all women” (Potter, 2017, p. 459).

Synthesizing the evidence revealed that the foundational perinatal mental health problem lacks consistent screening for mood disorders in this patient population. Even though many
organizations have established clinical guidelines, not all healthcare systems consistently use validated screening tools during the perinatal periods. After reviewing the PICOT question and evidence, it was determined that the hospital and microsystem in this improvement project was already consistently using these validated tools. Initially, the project focused on creating an inpatient PMAD clinical pathway with referrals, treatment options, and easily accessible resources. The PMAD pathway was too broad, so the PMH team decided to begin by creating the C-SSRS clinical pathway (see Appendix D). Those patients with self-harm thoughts are a smaller, more targeted group. Research has shown that the prevalence of suicidal ideation during the perinatal period ranges from 5% to 14% (Orsolini et al., 2016). Starting with a smaller patient population gave the team a tangible improvement project.

**Rationale**

Neuman (2017) systems model and McGonigal’s (2017) 4C change model constituted the project’s conceptual and systems model frameworks. Partnered together, the two models helped guide the evidenced-based practice change of initiating a clinical pathway for interventions and resources for at-risk moms.

Neuman (2017) systems model is a unique, open, systems-based perspective that focuses on wellness and the person as a whole and guides the nurse to see their client (the preferred term) in a holistic view. The sole purpose is not just for the individual, but also for groups, communities, organizations, and families. Betty Neuman developed her systems model in 1970 as a conceptual framework to help guide her students’ learning at the University of California Los Angeles. Since 1970, the Neuman systems model has continued to evolve and has become one of the top conceptual models used by nursing. Neuman’s model “focuses attention on the response of the client system to actual or potential environmental stressors, and the use of
primary, secondary, and tertiary nursing prevention interventions for retention, attainment, and maintenance of optimal client system wellness” (Neuman, 1996, p. 67). This resiliency encompasses physiological, psychological, sociocultural, developmental, and spiritual variables simultaneously, where optimal health encompasses total health attainable at one moment in time (Neuman, 2017).

Kotter’s well-respected change model was used as the foundation of the 4C model (McGonigal, 2017). This model can be the framework to tackle any evidence-based improvement project, from simple to complex. The first step in the model is to center, or create a clear focus, on the issue at hand. The second step is collaboration, or bringing the team together using straightforward communication tools. The third step of change uses tools, such as plan-do-study-act (PDSA), to make the change. The fourth and final step is to celebrate success. This model has been successful in other change initiatives in the postpartum unit of focus.

**Specific Project Aim**

This project aims to develop an inpatient clinical pathway to be used with 90% of perinatal patients who screen positive (low, moderate, high risk) on the C-SSRS by July 2021.
Section III: Methods

Context

The focus of the population is from the postpartum unit in a large medical center in Northern California with 60 licensed postpartum beds and an average monthly delivery volume of 550 babies. The Institute for Healthcare Improvement’s (IHI) microsystem assessment tool and the Dartmouth Institute’s microsystem assessment tool (IHI, 2003) were used to assess this microsystem in February 2021. The multidisciplinary team includes a nurse manager, 12 assistant nurse managers, 200 obstetrical doctors and midwives, six pediatricians, five licensed clinical social workers, and 130 staff nurses. The assessment identified that multidisciplinary work was needed surrounding perinatal mental health.

The hospital unit had good foundational work, beginning with screening using the C-SSRS with every admission since August 2020 (Columbia Lighthouse Project, 2016). In addition to the C-SSRS, abuse, AUDIT (alcohol use disorders identification test), mutuality/individual preferences, and mental health review of symptoms questions are all asked upon admission to labor and delivery. These tools are all validated for screening purposes, but no guidelines were in place for follow-up when patients screen positive.

SWOT Analysis

The PMH team conducted a SWOT (strengths, weaknesses, opportunities, and threats) analysis, showing that the strengths of this work outweigh the threats (see Appendix E). The project’s strengths were that the C-SSRS screening was a standard of practice, and social work referrals were already being placed for many patients with PMAD symptoms. Other potential strengths of the project were increasing communication and awareness of PMAD symptoms and improving patient outcomes. The potential weaknesses included staff resistance to change and
patients not being ready for intervention. Other potential weaknesses and threats could involve the impact on outpatient resources, with delays in outpatient appointments due to availability. Opportunities for this project could consist of spreading discovered best practices to other postpartum units, decreasing the stigma of PMAD, and identifying individuals with thoughts of self-harm. Early identification and intervention lead to better patient outcomes.

**Cost-Benefit Analysis**

The PMH team also completed a cost/benefit analysis (see Appendix F). The preliminary budget for the startup and continuation of the C-SSRS pathway is associated with employee salary and printing the Mind-Body-Spirit flyer. Utilizing established staff would mitigate any cost increase. Using an established 5-minute huddle message at the start of the shift by the assistant nurse manager and during the monthly staff meetings was the education method used. Nominal costs associated with the general use of resources could also be captured in the routine unit budget. The only additional procurement of resources necessary for the C-SSRS clinical pathway to succeed is printing the Mind-Body-Spirit flyer. The annual cost for this flyer at this medical center is $1,553.64. Patients placed on the C-SSRS clinical pathway could decrease long-term outpatient budgets. A report published by Mathematica estimated that untreated perinatal mental health disorders cost the United States $14.2 billion in 2017 (PSI, 2021).

Decreasing the risk of a mood disorder from turning into severe clinical depression and then self-harm could reduce outpatient and later inpatient mental health needs. According to Accortt and Wong (2017), “Depression increases health care costs and decreases productivity of women affected, as well as the well-being of their offspring” (p. 559).

**Intervention**
Focused interventions facilitate decreasing the adverse effects that PMADs can have on a patient and their family. These interventions begin upon admission by screening all patients with the C-SSRS. The primary intervention is triggering the social work and psychiatry consults, when indicated. Secondary preventative approaches, such as social support, stress reduction techniques, psychological therapies, cognitive behavioral therapy, or when indicated, pharmacological treatments (Accott & Wong, 2017), will be added in later. The final intervention is educating all postpartum nurses on using the new pathway.

**Study of the Intervention**

Measurement is key to the implementation success of any quality improvement project. The PMH team used several PDSA cycles looking for the best interventions for their microsystem. Evaluation of the C-SSRS pathway occurred daily with internal audits of Health Connect, the secure communication network, or the inpatient record. The auditor used the Suicide Risk Harvey Ball on the patient list to quickly assess all perinatal patient charts to determine if they had been screened with the C-SSRS tool on admission. Next, the auditor verified that those who screened positive had a social work referral and those who screened moderate or high also had a psychiatry referral. There was planned auditing for distribution of the Mind-Body-Spirit resource handout; however, the revised handout was not available until after the initial project implementation. According to McCarter-Spaulding and Shea (2015), “Limited nursing time during hospitalization may be better spent on implementing a mechanism for ensuring adequate follow-up after discharge for women at risk” (p. s59); therefore, future PDSA cycles will revolve around utilizing resources after discharge.

When the inpatient C-SSRS clinical pathway was created, many PDSA cycles were performed to help determine the next steps. The Mind-Body-Spirit resource list was updated by
the PMH team, and after the implementation period, the team trialed ways to make the
distribution meaningful. These were rapid-fire cycles based on the nurses’ verbal input. Initially,
they trialed having the flyer handed to the patient on admission; next, they trialed giving it to the
patient with the discharge instructions. The preliminary results showed that for sustainability, the
flyer should be placed in the admission packet, so that the admission and discharge nurses could
go over it with the patient and support persons. Having the flyer at the bedside on admission
made it easy for the nurse to pull it out and share it with the patient. Expecting that both the
admission and discharge nurse would go over the flyer increased the discussion rate and ensured
distribution to 100% of patients.

The group also conducted two PDSA cycles on downloading and using the Calm
application (app) with patients (see Appendix G). In the first 2-week trial, the selected
postpartum nurses assisted their patients with downloading the Calm app. The second 1-week
trial included asking the patient to use the app at least once during their hospitalization. The
Calm app is a stress management/relaxation tool that could assist in reducing symptoms of
depression. This app was vetted by the hospital system and is offered free for a year to members.
The Calm app PDSAs are still in progress, with favorable preliminary results. The Calm app
PDSA cycles had to be temporarily put on hold during the implementation period, as the free
link was temporarily disabled. The link was enabled after a short time, and the team has plans to
continue working on PDSAs using it.

Future PDSA cycles will involve the discharge nurse assisting the patient in signing up
for a class or support group before discharge. The group looked at other PMAD interventions,
such as instituting talking therapy utilizing the primary nurse or obstetric rounder to ask the
patient how their delivery went, and then listen to their perspective of the delivery experience. If
the conversation raised concerns that the patient had unresolved questions about the birth, they would call the nurse midwife (or another provider) and ask for a debrief. As this was subjective data, the group decided to hold off on the talk therapy and debrief PDSAs until after completing the C-SSRS project. In addition, the PMH team determined that the PDSA cycle of discharge calls, asking the patient about the Calm app and the Mind-Body-Spirit flyer, was currently unsustainable.

**Measures**

Four measures were created to assess the proper implementation of the C-SSRS pathway: three process measures, an outcome measure, and a balancing measure. An initial project charter was created in February 2021 surrounding perinatal mental health needs (see Appendix H) and was later updated to the narrower focus of the C-SSRS implementation. The outcome measure included the successful implementation of the C-SSRS pathway. To be considered successful, the team had to ensure that 90% of patients who screen positive (low, moderate, high risk) on the C-SSRS would have a social work referral placed, and 100% of those patients who screen moderate or high would have an inpatient psychiatry order placed and a safety plan initiated when high.

The first process measure was a social work referral triggered upon admission by a perinatal patient who screened low, moderate, or high on the C-SSRS. The future goal of the complete PMAD pathway will also include patients who screen positive on the abuse, AUDIT, mental health review of symptoms, and the outpatient PHQ-9 score of 10 or higher and patients with a traumatic delivery requiring a debrief, NICU admission, or fetal demise. The second process measure tracked all patients who screened moderate or high on the C-SSRS and had inpatient psychiatry referrals and visits before discharge. The third process measure was the
percent of postpartum nurses trained to initiate the C-SSRS clinical pathway, with a goal of 90% of nurses educated. The balancing measure was the incidence rate of inappropriate referrals to inpatient social work and psychiatry. The goal was not to miss any at-risk patients while using the resources already available.

Ethical Considerations

Enhancing maternal mental health is fundamental for decreasing clinical depression, thus reducing the burden of disease. According to Dennis and Doswell (2013), “There is a substantial body of evidence showing that maternal depression and subsequent poor maternal-infant interactions adversely affect the developing child” (p. 4). A project focused on improved mental health for perinatal patients and improved maternal and child health is ethically sound. The C-SSRS pathway will increase the postpartum nurses’ knowledge, skill, and attitudes surrounding perinatal mental health. Decreasing PMAD stigma will engage the frontline nurses and increase their job satisfaction.

This project aligns with the American Nurses Association’s (ANA) nine provisions of the Code of Ethics for Nurses. Provision 1 states, “The nurse practices with compassion and respect for the inherent dignity, worth, and unique attributes of every person” (ANA, 2015, para. 1). Provision 3 states, “The nurse promotes, advocates for, and protects the rights, health, and safety of the patient” (ANA, 2015, para. 3). Creating a safe environment for the patient, including identifying one’s suicide risk and other PMAD indicators, follows these provisions.

After review from the University of San Francisco faculty, this project was determined to qualify as an evidence-based change in practice project rather than a research project. When a project is a change in practice and not research, Institutional Review Board approval is not required. A statement of determination as a non-research project was approved (see Appendix I).
Section IV: Results

Outcome Measure Results

Preliminary data revealed that the PMH team was successful in the implementation of the C-SSRS pathway. Prior to implementation, only 50% of patients with a positive screen (low, moderate, high) on the C-SSRS had the correct interventions of social work and/or psychiatry referrals placed and seen before discharge. After implementation, 100% of patients who screened moderate and high had an inpatient social work and psychiatry order placed and were seen before discharge (see Appendix J). One patient screened high post-implementation, but was in active labor and cleared by the psychiatrist, so the additional safety plan was not initiated. There were no patients who scored low on the C-SSRS during the implementation period of June and July 2021. Ninety-five percent of postpartum nurses, subtracting those on a medical leave during implementation, were educated on the C-SSRS pathway during the huddle message and staff meetings.
Section V: Discussion

Summary

The PMH team successfully implemented the C-SSRS clinical pathway in June of 2021 on the postpartum unit. There were many lessons learned during the implementation period. The first lesson learned was that it is crucial to break down a project into smaller, more tangible pieces when initiating a change of such breadth. The evidence revealed that the hospital was already screening 96% of their patients with the C-SSRS, but needed improvement with referrals, treatment options, and resources. This improved workflow proved to be the foundation required before moving other perinatal mood disorder work forward.

Pulling together a multidisciplinary team to form a PMH group proved to be the first challenge encountered. With implementing a change in practice in such a busy postpartum department, there are many competing priorities. Key stakeholders needed to be included and kept informed of the work. Before the project initiation, there were no providers who wanted to head up the PMH group. The clinical nurse leader student was already an established leader on the unit as an assistant nurse manager for over 10 years. Using her influence, experience, and knowledge of the providers’ passions, she secured an OB/GYN physician and a certified nurse midwife for the team. Still, completing this group did take more time than anticipated. Once the group formed, there was buy-in from like-minded, passionate individuals. Even when not all team members could attend the meetings, email and one-on-one interactions moved the work forward.

Conclusion

The decline in perinatal mental health acute and long-term effects is an urgent public health issue in the United States (PSI, 2021). All postpartum Microsystems could benefit from
streamlining the inpatient pathway for PMADs, beginning with screening using the C-SSRS, to improve the mental health of this patient population. Kendig et al. (2017) reported,

When left untreated, perinatal mood and anxiety disorders can have profound adverse effects on women and their children, ranging from increased risk of poor adherence to medical care, exacerbation of medical conditions, loss of interpersonal and financial resources, smoking and substance use, suicide, and infanticide. Perinatal mood and anxiety disorders are associated with increased maternal and infant mortality and morbidity risks and are recognized as a significant patient safety issue. (p. 272)

Patient safety concerning mortality and morbidity is one implication for sustained practice improvement. In 2020, the hospital system in focus put out a Health Stream, an online educational training module, educating all frontline nursing staff on the new NPSG to reduce the risk for suicide and the corresponding implementation of the C-SSRS as their screening mode. Even with this education, many labor and delivery and postpartum staff members did not see this goal as a priority for their patient population. With a lengthy module not tailored to their needs, and due to the added stress of the COVID-19 pandemic, it did not get initiated in a viable way in 2020.

Improving PMAD and C-SSRS screening and using easy-to-follow inpatient clinical pathways that include referrals, treatment options, and easily accessible outpatient resources for discharge are simple ways to help this vulnerable population. When you make simple workflow changes easy to follow, they have built-in sustainability. Decreasing the risk of exacerbating PMAD symptoms, such as self-harm, by supporting families through early screening, treatment and resources supports and builds a healthy family dynamic.
Section VI: References


https://doi.org/10.1002/14651858.CD001134.pub3/full


http://www.ihi.org/resources/Pages/Tools/ClinicalMicrosystemAssessmentTool.aspx

https://www.jointcommission.org/resources/patient-safety-topics/suicide-prevention/

https://doi.org/10.1016/j.jogn.2017.01.001


https://doi.org/10.1007/s00737-018-0876-4


https://blog.thesullivangroup.com/best-practices-of-postpartum-discharge-teaching
Section VII: Appendices
Appendix A. Columbia-Suicide Severity Rating Scale

Please place a check mark in the box for the appropriate answers

<table>
<thead>
<tr>
<th>Please answer question 1 and 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask Questions 1 and 2</td>
</tr>
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</table>

1) **Have you wished you were dead or wished you could go to sleep and not wake up?**

2) **Have you actually had any thoughts of killing yourself?**

If YES to 2, ask questions 3, 4, 5, and 6. If NO to 2, go directly to question 6.

3) **Have you been thinking about how you might do this?**
   
   e.g. “I thought about taking an overdose but I never made a specific plan as to when where or how I would actually do it... and I would never go through with it.”

4) **Have you had these thoughts and had some intention of acting on them?**
   
   as opposed to “I have the thoughts but I definitely will not do anything about them.”

5) **Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?**

6) **Have you ever done anything, started to do anything, or prepared to do anything to end your life?**

   Examples: Collected pills, obtained a gun, gave away valuables, wrote a will or suicide note, took out pills but didn’t swallow any, held a gun but changed your mind or it was grabbed from your hand, went to the roof but didn’t jump; or actually took pills, tried to shoot yourself, cut yourself, tried to hang yourself, etc.

   If YES, ask: **Was this within the past 3 months?**
Appendix B. Mind-Body-Spirit Flyer
**Appendix C. Evaluation Table**

**PICOT Question:** In postpartum women (P), how does using a screening tool to identify at-risk moms for postpartum mental disturbances (I), compared to those without the use of a screening tool (C), affect mood or psychiatric disturbance identification and treatment (O) within 1 year postpartum (T).

<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Sample</th>
<th>Outcome/Feasibility</th>
<th>Evidence Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accortt, E. E., &amp; Wong, M. S. (2017). It is time for routine screening for perinatal mood and anxiety disorders in obstetrics and gynecology settings. <em>Obstetrical and Gynecological Survey</em>, 72(9), 553–568. <a href="https://doi.org/10.1097/ogx.000000000000477">https://doi.org/10.1097/ogx.000000000000477</a></td>
<td>Literature review</td>
<td>4,700 patients</td>
<td>Data revealed that 19.2% of postpartum women experience depressive symptoms in the first 3 months postpartum. Helpful in providing the 9 PHQ as a tool for assessment before discharge (after delivery).</td>
<td>V A</td>
</tr>
<tr>
<td>Study</td>
<td>Design</td>
<td>Sample</td>
<td>Outcome/Feasibility</td>
<td>Evidence Rating</td>
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<tr>
<td>Dennis, C. L., &amp; Doswell, T. (2013, February 28). Psychosocial and psychological interventions for preventing postpartum depression. <em>Cochrane Database of Systemic Reviews</em>. <a href="https://doi.org/10.1002/14651858.CD01134.pub3/full">https://doi.org/10.1002/14651858.CD01134.pub3/full</a></td>
<td>Retrospective analysis and primary meta-analysis and fixed-effect meta-analysis</td>
<td>17,000 women in 28 randomized controlled trials</td>
<td>Early identification of at-risk mothers contributed to decreased levels of postpartum depression. Guides the CNL in proposing interventions, including resources.</td>
<td>I A</td>
</tr>
<tr>
<td>Study</td>
<td>Design</td>
<td>Sample</td>
<td>Outcome/Feasibility</td>
<td>Evidence Rating</td>
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<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Potter, M. T. (2017). Nurse-led initiatives to implement universal screening for perinatal emotional complications. <em>Nursing for Women’s Health</em>, 21(6), 452–461. <a href="https://doi.org/10.1016/j.nwh.2017.10.010">https://doi.org/10.1016/j.nwh.2017.10.010</a></td>
<td>Literature review and practice standards</td>
<td>4 studies</td>
<td>The use of the Edinburgh Postnatal Depression Scale (EPDS) is the most common and reliable tool. The CNL looks at professional practice standards and utilizes AWHONN, ACOG, and American College of Nurse-Midwives position statements for screening to implement use.</td>
<td>V B</td>
</tr>
<tr>
<td>Study</td>
<td>Design</td>
<td>Sample</td>
<td>Outcome/Feasibility</td>
<td>Evidence Rating</td>
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<tr>
<td>----------------------------------------------------------------------</td>
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<td>---------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Song, J.-E., Kim, T., &amp; Ahn, J.-A. (2015). A systematic review of</td>
<td>Randomized controlled trials, systematic</td>
<td>14 RCTs in the systematic review, 13 studied</td>
<td>The use of psychosocial interventions (including stress management) proved to be</td>
<td>1A</td>
</tr>
<tr>
<td>psychosocial interventions for women with postpartum stress. Journal</td>
<td>review, and meta-analysis</td>
<td>included in a meta-analysis</td>
<td>effective in reducing symptoms of depression.</td>
<td></td>
</tr>
<tr>
<td>of Obstetric, Gynecologic &amp; Neonatal Nursing, 44(2), 183–192.</td>
<td></td>
<td></td>
<td>The CNL should include psychosocial programs in the postpartum plan of care.</td>
<td></td>
</tr>
<tr>
<td><a href="https://doi.org/10.1111/1552-6909.12541">https://doi.org/10.1111/1552-6909.12541</a></td>
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</tbody>
</table>
Appendix D. Columbia-Suicide Severity Rating Scale (C-SSRS) Clinical Pathway

Columbia-Suicide Severity Rating Scale (C-SSRS) Clinical Pathway
Mother Baby initial trial

Score pulled from Health Connect

### LOW RISK
Score: 1-2
- Passive or active ideation
- Non-specific
- No plan
- No current or history of suicidal behavior

- Nurse notifies provider

### MODERATE RISK
Score: 3
- Ideation with method
- No intent/plan
- History of suicidal behavior more than 3 months ago

- Nurse notifies provider
- Provider orders psychiatry consult
- Provider contacts psychiatrist on call between the hours of 8 am to 5pm
- Consider Patient Safety Precautions until psychiatry evaluation is completed

### HIGH RISK
Score: 4-6
- Active ideation with method/intent; with or without plan
- Suicidal ideation within the last 3 months

- Nurse notifies provider
- Provider orders psychiatry consult
- Provider contacts psychiatry
- Continuous Observation (1:1)
- RN implements Patient Safety Precautions per policy
- Patient Safety Precautions remain in place until seen and cleared by psychiatry

### LOW RISK
- L&D RN places SW consult
- L&D or MD RN helps patient download and use calm app
- MB RN goes over Mind-Body-Spirit resources with patient prior to discharge

### MODERATE RISK AND HIGH RISK
All of the low-risk bullets plus the following:
- Provider orders psychiatry consult and contacts psychiatry
- RN initiates safety precautions per policy
- Provider sends message to the patient’s primary outpatient provider
- Outpatient mental health referrals placed as necessary
- MB RN helps patient get signed up for an outpatient support group (work in progress)
Appendix E. SWOT Analysis

SWOT Analysis

**Strengths**
- C-SSRS screening established
- SW already active team members
- Increases communication about mental health
- Early identification could decrease symptoms of PMAD
- Improves patient outcomes

**Weaknesses**
- Staff could resist change
- Some patients might not be ready for interventions
- Potential delay in patient being seen by inpatient psych
- Might not have outpatient services available within reasonable time frame

**Threats**
- Nurses perceived as acting outside of their scope of practice
- Finding more patients needing interventions without enough outpatient resources

**Opportunities**
- Can be spread to other units
- Small size might aid change adaption
- Decreasing stigma of PMAD
Appendix F. Cost-Benefit Analysis

FTE Expense

160 staff, 5-minute education during the beginning of shift huddle and staff meetings. Clinical nurse leader (CNL) student time for the project. PMH team meetings included $86 per hour per RN. Other team members are exempt and work the meeting into their regularly scheduled shift.

Non-FTE Expense

Mind-Body-Spirit flyer $11.77 per pack of 50

For 550 (average delivery per month) cost is $129.47 per month or $1,553.64 per year

The total cost for the first year with FTE and Non-FTE expenses is $4,913.64

<table>
<thead>
<tr>
<th>FTE Expense</th>
<th>Startup</th>
<th>Annual Cost</th>
<th>Total Cost First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education during staff meeting</td>
<td>$0</td>
<td>$0</td>
<td>$0 (already in annual budget)</td>
</tr>
<tr>
<td>Education during huddle</td>
<td>$0</td>
<td>$0</td>
<td>$0 (already in annual budget)</td>
</tr>
<tr>
<td>CNL student time</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Committee meeting time: $86/hour per RN</td>
<td>3 RNs x 6 startup meetings = $1,548</td>
<td>3 RNs x 12 (monthly meetings) = $3,096.</td>
<td>$4,644</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-FTE Expense</th>
<th>Startup</th>
<th>Annual Cost</th>
<th>Total Cost First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mind-Body-Spirit Flyer</td>
<td>$129.47/month</td>
<td>$1,553.64</td>
<td>$1,553.64</td>
</tr>
<tr>
<td>Calm app</td>
<td>$0 - free to KP members for the first year</td>
<td>$0 for the first year</td>
<td>The annual cost for the patient after the first year is $69.99</td>
</tr>
</tbody>
</table>
Appendix G. Calm App PDSA

Calm App Job Aid

Step 1: Scan barcode with camera

STEP 2: Scroll down until you see the “Get Calm” button and click on it

Step 3: Log into KP.org

STEP 4: Download Calm app by selecting “Get”

Step 5: Enjoy app free for 1 year
Appendix H. Project Charter

Perinatal Columbia-Suicide Severity Rating Scale (C-SSRS) Clinical Pathway Charter

Project Charter: Inpatient Perinatal C-SSRS clinical pathway project charter.

Global Aim: To decrease symptoms of perinatal mood and anxiety disorders (PMAD) and increase women’s mental health, thus decreasing potential adverse effects on newborn babies and families.

Specific Aim: The aim of this project is to develop an inpatient clinical pathway to be used with 90% of perinatal patients who screen positive (low, moderate, high risk) on the Columbia-Suicide Severity Rating Scale (C-SSRS) by July of 2021.

Background:

Mental health, in particular perinatal mental health, is gaining attention, as the World Health Organization projected that by 2020, depression would carry the highest disease burden of all health conditions in women (Dennis & Doswell, 2013). There are many missed opportunities to screen inpatient perinatal patients. When patients are not screened for mood disorders or are screened and not treated, severe clinical depression can occur for some women (Dennis & Doswell, 2013). Accortt and Wong (2017) reported that “PPD (postpartum depression) is the most common complication associated with pregnancy and childbirth” (p. 554). It is also suspected, by self-reports, that 50% of persons with perinatal mood and anxiety disorders are not identified (Accortt & Wong, 2017). Even when screening is implemented, a gap can occur with identifying interventions during hospitalization and creating pathways for patients (Potter, 2017). These interventions would need to be made, and pathways solidified. Resources for discharge need to be identified, consolidated in a way that is easy to understand, and then shared with patients.
At-risk postpartum patients are those with PMAD, birth trauma, NICU admission, posttraumatic stress disorder, and socioeconomic risk factors. Many hospital systems in the United States do not consistently use the available validated tools to screen pregnant and recently postpartum women, even though the American College of Obstetricians and Gynecologists (ACOG) and other public health organizations have widely recommended it (Accortt & Wong, 2017). Even when hospitals initiate screening for depression or other mood disorders, there is still a lack of interventions and resources. The hospital that is the focus of this study integrates the Patient Health Questionnaire (PHQ-9) screening tool in prenatal appointments and routine newborn, pediatric appointments. While the screening rate is high, there is no standard of practice or clinical pathway for inpatient perinatal patients.

**Sponsors**

<table>
<thead>
<tr>
<th>Chief Nurse Executive</th>
<th>DR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director of Women’s and Children’s</td>
<td>MB</td>
</tr>
<tr>
<td>Chief of Obstetrics and Gynecology (OBGYN and CNM Chiefs)</td>
<td>JC &amp; MB</td>
</tr>
</tbody>
</table>

**Goals**

The purpose of this project is to decrease perinatal mood disorders from adversely affecting women and babies by:

1. Using current screening tools to identify at-risk patients consistently.
2. Creating and implementing a clinical pathway for nurses and providers to follow when a postpartum woman is identified as at-risk for perinatal mood disorders, beginning with the Columbia-Suicide Severity Rating Score.
3. Educating all staff on the new pathway.
# Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Data Source</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-SSRS workflow utilization</td>
<td>Chart review - Health Connect</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social work (SW) referral for low/moderate/high C-SSRS</td>
<td>SW referral inbox in Health Connect</td>
<td>90%</td>
</tr>
<tr>
<td>Psychiatry referral for moderate and high C-SSRS</td>
<td>Psychiatry note in Health Connect</td>
<td>100%</td>
</tr>
<tr>
<td>Percent of postpartum nurses trained to use C-SSRS workflow</td>
<td>Huddle message and staff meeting attendance</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Balancing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The incident rate of inappropriate referrals to inpatient SW and psychiatry MD</td>
<td>Health Connect</td>
<td>&lt;10% increase from baseline</td>
</tr>
</tbody>
</table>

## Team

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Lead</td>
<td>KS</td>
</tr>
<tr>
<td>MD and CNM Leads</td>
<td>KN &amp; LW-N</td>
</tr>
<tr>
<td>Social Work Lead</td>
<td>MD</td>
</tr>
<tr>
<td>RN Champions</td>
<td>JK, TG, KW, DF-G &amp; SC</td>
</tr>
<tr>
<td>Director of Women’s and Children’s</td>
<td>MB</td>
</tr>
<tr>
<td>MD Consultants</td>
<td>Dr. M, Dr. B, Dr. F</td>
</tr>
<tr>
<td>Maternity Services Clinical Nurse Leader</td>
<td>HC</td>
</tr>
<tr>
<td>Quality Nurse Consultant</td>
<td>RP</td>
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</tbody>
</table>

## Measurement Strategy

**Background (Global Aim):** To decrease symptoms of perinatal mood disorders and increase women’s mental health, thus decreasing potential adverse effects on newborn babies and families.
**Population Criteria:** Inpatient perinatal patients who screen mild, moderate, or high on the C-SSRS when admitted to the hospital.

**Data Collection Method:** Data will be obtained daily from the hospital obstetrical census in Health Connect and a report generated from the regional database.

**Data Definitions**

<table>
<thead>
<tr>
<th>Data Element</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHQ-9</td>
<td>Patient Health Questionnaire is the depression module of the DSM-IV (American Psychiatric Association for the classification of mental disorders).</td>
</tr>
<tr>
<td>C-SSRS</td>
<td>Columbia-Suicide Severity Rating Scale. Suicide risk: low risk (score 1-2, no immediate concern or intervention required), moderate risk (score 3, intervention needed), or high risk (score 4-6, intervention required).</td>
</tr>
<tr>
<td>RN training</td>
<td>Education for all labor and delivery and postpartum nurses on the C-SSRS workflow.</td>
</tr>
<tr>
<td>Social work referrals</td>
<td>Referrals to social work through the inbox in Health Connect.</td>
</tr>
</tbody>
</table>

**Measure Descriptions**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Measure Definition</th>
<th>Data Collection Source</th>
<th>Goal</th>
</tr>
</thead>
</table>
| Percent of social work (SW) referrals for positive C-SSRS screening | N = # of patients with SW referral (positive on C-SSRS)  
D = # of patients who screened positive on C-SSRS | Health Connect                  | 90%                           |
| Percent of psychiatry referrals for moderate or high C-SSRS screening | N = # of psychiatry referrals  
D = # of moderate and high C-SSRS patients | Health Connect                  | 90%                           |
| Percent of RNs trained on C-SSRS workflow                         | N = # of postpartum (PP) nurses trained on the C-SSRS workflow  
D = # of total PP nurses | Huddle and staff meeting attendance (sign off sheet) | 90%                           |

Key: N = numerator, D = denominator
Driver Diagram

<table>
<thead>
<tr>
<th>Aim</th>
<th>Primary Driver</th>
<th>Secondary Driver</th>
<th>Change Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase utilization of the new C-SSRS workflow from 0% to 90% by the end of July 2021</td>
<td>% of patients referred to SW for positive screen on C-SSRS</td>
<td>RN education/screening patients</td>
<td>Incorporate SW referrals into C-SSRS workflow</td>
</tr>
<tr>
<td></td>
<td>Education and training of all L&amp;D and PP RN’s on C-SSRS workflow</td>
<td>Mandatory Education</td>
<td>RN’s initiate SW referrals and follow C-SSRS workflow</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>RN’s educate the patients’ on the Mind-Body-Spirit resource flyer</td>
</tr>
</tbody>
</table>
Changes to test

1. When patients screen low, moderate, or high on C-SSRS have established workflow.
2. When patients are admitted with a prenatal diagnosis of a PMAD, have an established workflow.
3. When a baby goes to the NICU, have an established workflow.
4. MB RN helps patients download the Calm app for all at-risk patients.
5. Give all patients the Mind-Body-Spirit flyer before discharge.
6. Use a team engagement plan with a kickoff for morale and motivation.
## Project timeline

<table>
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<tr>
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<tbody>
<tr>
<td>Define the project</td>
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<tr>
<td>Develop the AIM</td>
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<tr>
<td>Review literature</td>
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<tr>
<td>Microsystem assessment</td>
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<td>Develop charter</td>
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<td>Create measurement, outcomes, processes, and balancing</td>
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<tr>
<td>Identify team and kickoff meeting</td>
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<tr>
<td>Identify changes to test</td>
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<tr>
<td>Driver diagram</td>
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<td>Complete charter</td>
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<td>Test changes</td>
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<tr>
<td>Train staff on workflows</td>
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<tr>
<td>Evaluation &amp; ongoing performance improvement</td>
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</table>
CNL Competencies

Clinical Nurse Leaders (CNLs) are “positioned in the microsystem and serve as leaders of teams who often identify process or system concerns and then work with interdisciplinary colleagues to implement evidence-based interventions to achieve improvement” (Harris et al., 2018, p. 313). While working in their microsystem, they embody several of the CNL competencies enacted by the American Association of Colleges of Nursing (AACN, 2007) in their white paper.

Many competencies will be leveraged to implement a pathway for intervention and resources for at-risk inpatient perinatal women. The CNL will act as an educator and team leader, helping to coordinate and collaborate with the entire microsystem. The CNL works as an outcomes manager by looking at the processes to drive ideal results (King et al., 2019). As a systems analyst, the CNL is positioned to utilize and evaluate quality measures in their microsystem (King et al., 2019). With this scope of practice, the CNL will make evidence-based changes in their microsystem.
Appendix I. Statement of Non-Research Determination

Student Name: __Kristin Schoen__________

Title of Project:
Columbia-Suicide Severity Rating Scale (C-SSRS) Inpatient Perinatal Clinical Pathway

Brief Description of Project:
Creating a clinical pathway for patients who screen positive (low, moderate, high risk) on the C-SSRS. Pathway will include using the validated screening tool to identify ‘at-risk’ postpartum patients. Using Health Connect we will audit all perinatal patients charts to ensure that all positive patients have a Social Work referral and are seen before discharge. The obstetric provider will contact inpatient Psych MD when needed (for moderate and high risk patients), and work with the primary RN to make sure the patient gets resources handout prior to discharge.

A) Aim Statement:
To use established mental health screening to identify suicidal postpartum patients and develop an inpatient clinical pathway that includes interventions and resources to be shared with 90% of these patients by July of 2021.

B) Description of Intervention:
Create an easy-to-use pathway for nurses and providers when postpartum patients screen positive on the C-SSRS. Have interventions and resources available for the patients.

C) How will this intervention change practice?
Earlier and consistent detection of at-risk, or suicidal, patients provides additional support and treatment. Up to date list of resources available for all postpartum patients, consistently given to those who screen positive.
D) **Outcome measurements:**

- All patients that screen positive on the C-SSRS will be put on the C-SSRS pathway.

- Social Work referrals will be entered into HealthConnect (by the primary nurse) when patients screen positive on the C-SSRS pathway.

- Social Work and the Obstetrical provider determine which patients the inpatient Psych MD needs to see (based off of guidelines to be determined).

- All positive C-SSRS patients receive resource handout before discharge.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: ([http://answers.hhs.gov/ohrp/categories/1569](http://answers.hhs.gov/ohrp/categories/1569))

- [X] This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

- [ ] This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

> **EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST** *

**Instructions: Answer YES or NO to each of the following statements:**

<table>
<thead>
<tr>
<th>Project Title: Columbia-Suicide Severity Rating Scale (C-SSRS) Inpatient Perinatal Clinical Pathway</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>The aim of the project is to improve the process or delivery of care with established/accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The specific aim is to improve performance on a specific service or program and is <strong>a part of usual care</strong>. ALL participants will receive standard of care.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project is <strong>NOT</strong> designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does <strong>NOT</strong> follow a protocol that overrides clinical decision-making.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does <strong>NOT</strong> develop paradigms or untested methods or new untested standards.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.

The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.

The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.

The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/or patients.

If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: “This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board.”

**ANSWER KEY:** If the answer to ALL of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is NO, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.*

**STUDENT NAME (Please print):**

Kristin Schoen

Signature of Student: [Signature]

DATE 4/7/2021

**SUPERVISING FACULTY MEMBER NAME (Please print):**

Liesel Buchner

DATE 4/11/2021
Appendix J. Outcomes Run Chart

Columbia-Suicide Severity Rating Scale Pre and Post Implementation of the Inpatient Perinatal Clinical Pathway

C-SSRS Screening and Interventions, Pre-Implementation

C-SSRS Screening and Interventions, Post-Implementation