

PERINATAL DEPRESSION SCREENING IN INPATIENT CARE

Presentation by **Allyson Pennington, DNPc, APRN FNP-BC CCRN**

March 18th, 2025

BACKGROUND

Perinatal depression (PD) refers to depression that occurs during pregnancy or within the first year after childbirth. It encompasses both **prenatal depression** (during pregnancy) and **postpartum depression** (after childbirth). Perinatal depression can affect mothers, fathers, and even adoptive parents.

Untreated perinatal depression can lead to:

- Lack in Energy & Loss of Interest
- Persistent Sadness, Hopelessness, or Emptiness
- Irritability & Agitation
- Thoughts of Self-Harm or Suicide



**1 IN 7 PATIENTS EXPERIENCING A PREGNANCY
DEVELOP PERINATAL DEPRESSION**

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INTRODUCTION TO INPATIENT



Reasons to Admit to Inpatient..

Labor and Delivery
Pregnancy Complications
Scheduled Procedures
Complications with the Baby
Maternal Health Concerns
Emergencies



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PROBLEMS

Antepartum patients presenting with complications are not receiving typical prenatal care. While inpatient, patients are not following their regular routines - which puts them at higher risk for developing perinatal depression.

Skewed Prenatal Care

Prenatal Care includes medical and emotional interventions and surveillance to monitor the pregnancy. When transferring obstetric care from outpatient to inpatient, a lot of screening protocols and recommendations are not utilized..

Heightened Risk Factors

*Difficult or traumatic birth
Little or not support from family, friends, or partners
Stressful life events, financial and relationship problems
Premature delivery or admission to the neonatal intensive care*

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NATIONAL GUIDELINES



American College of Obstetricians and Gynecologists

ACOG recommends that screening for perinatal depression and anxiety occur at the initial prenatal visit, later in pregnancy, and at postpartum visits using a standardized, validated instrument.

United States Preventive Services Task Force

The USPSTF recommends screening for depression in adults, including pregnant and postpartum women.

American Academy of Pediatrics

The American Academy of Pediatrics (AAP) recommends that pediatricians screen mothers for postpartum depression (PPD) at the infant's 1, 2, 4, and 6-month well child (WC) visits.

PICOT

In antepartum patients admitted to the hospital, does the use of the EPDS screening tool throughout admission allow healthcare workers to identify and facilitate frequent follow-up and treatment for patients at risk for developing perinatal depression?



LITERATURE REVIEW

*Literature search performed with the Boolean
Search phrase, ("perinatal mood disorder
screening AND inpatient") AND Depression
AND ("Screening Tools" OR "Screening Tool")*

PubMed: 31

Scopus: 26

Web of Science: 10

CINAHL: 7

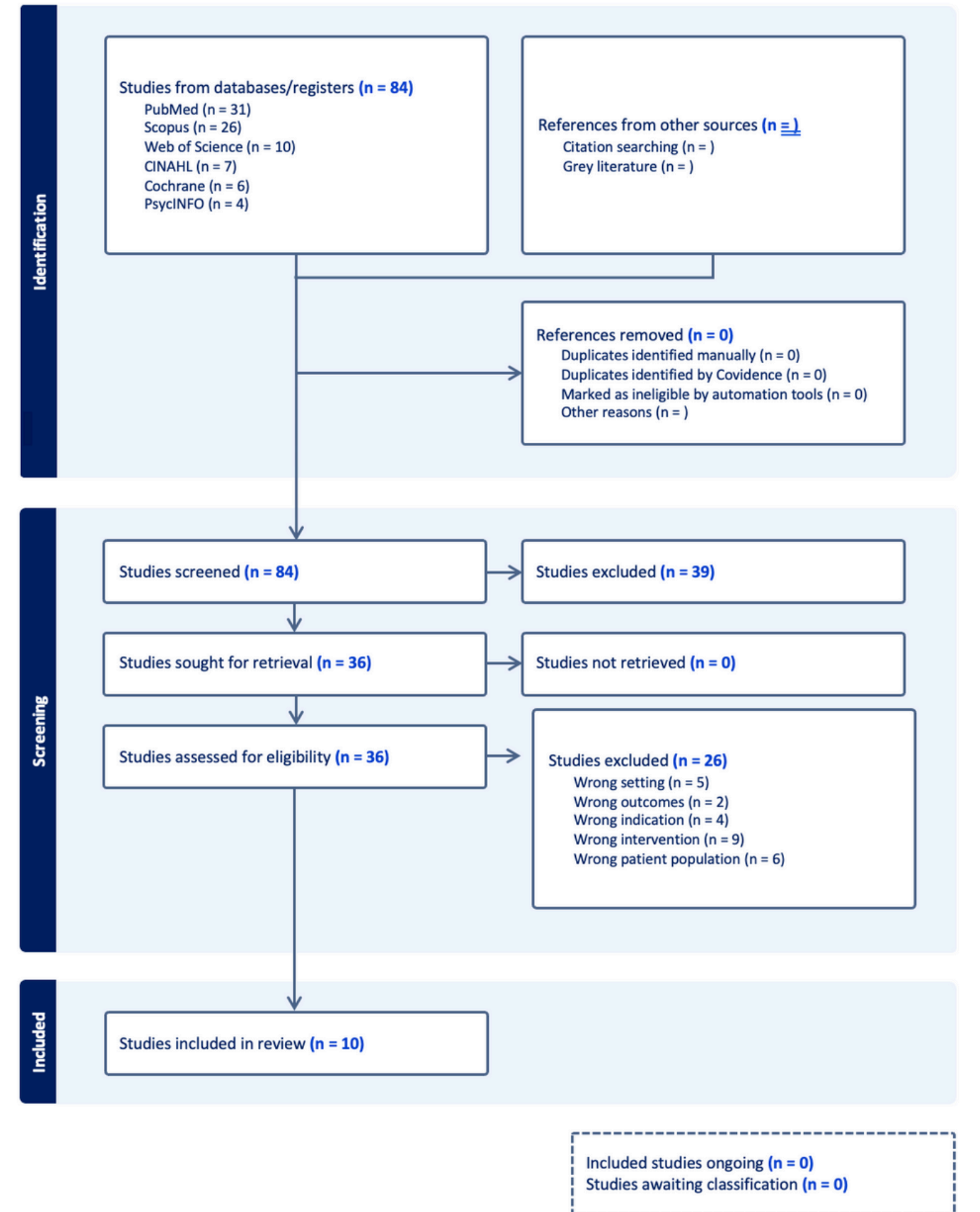
Cochrane: 6

PsycINFO: 4

PRISMA DIAGRAM

**Preferred Reporting Items
for Systematic Reviews and Meta-
Analyses.**

Perinatal Mood Disorder Screening



SYNTHESIS

All articles analyzed **recommended** using a validated screening tool during the prenatal and postnatal period



EPDS

The EPDS is a 10-item self-report questionnaire specifically designed to screen for symptoms of depression in the perinatal period. It focuses on feelings of sadness, anxiety, guilt, and suicidal thoughts, among other symptoms. It has been validated for the use in the perinatal population and has been found to be sensitive and specific in detecting postpartum depression.

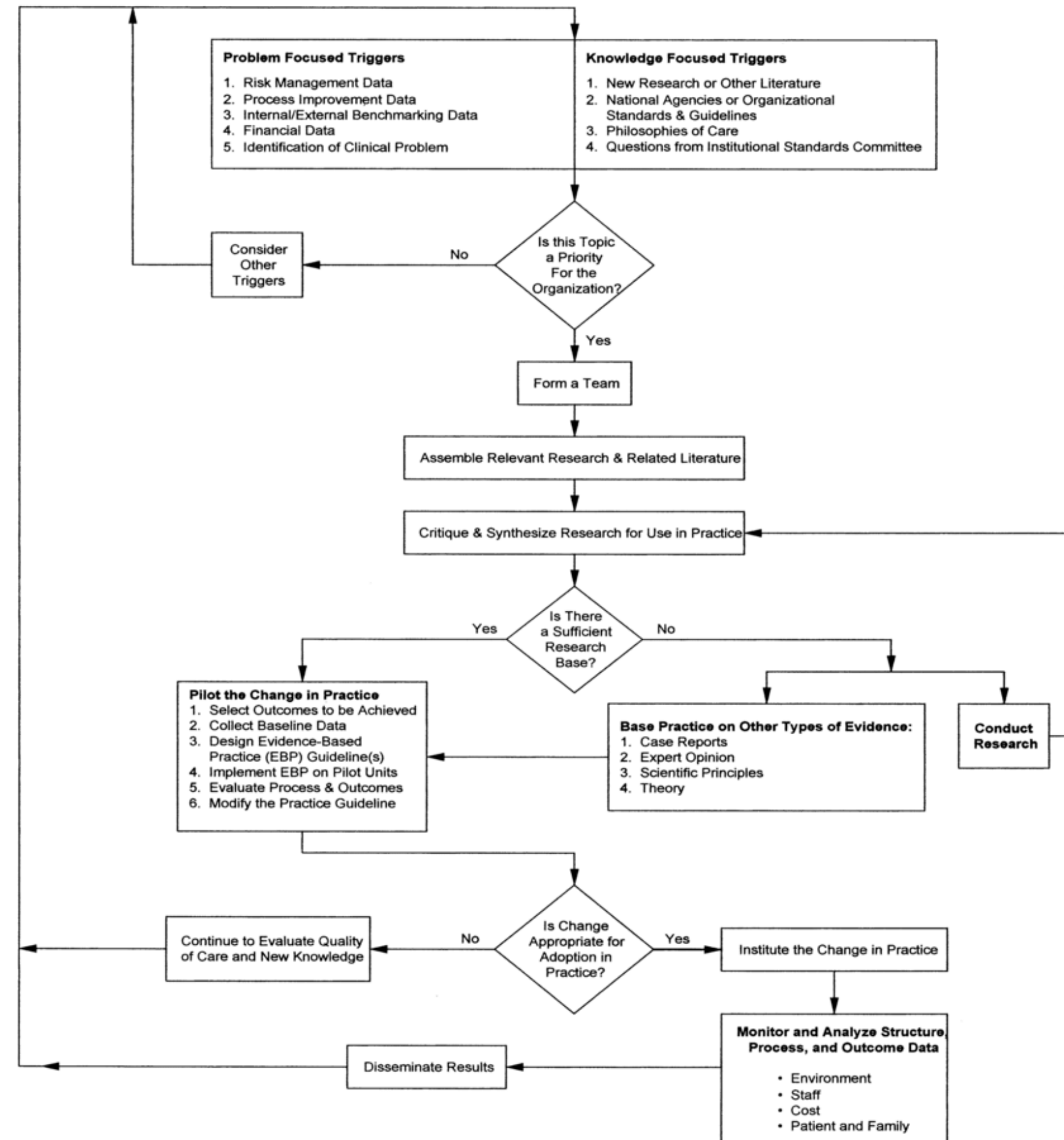
PHQ-9

PHQ is a broader screening tool that measures symptoms of depression and anxiety across a range of populations, including perinatal period. It consists of 9 questions that assess symptoms of depression and has been validated for the use in primary care settings.

EVIDENCE BASED PROJECT DESIGN



The Iowa Model of Evidence-Based Practice to Promote Quality Care

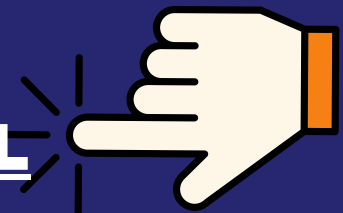


◇ = a decision point

IOWA MODEL

- Identifying an issue or opportunity,
- Stating the purpose,
- Forming a team,
- Assembling, appraising, and synthesizing the body of evidence,
- Designing and piloting the practice change,
- Integrating and sustaining the practice change, and.
- Dissemination.

IOWA MODEL





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SETTING

Integrated academic medical center that includes a level 1 trauma center, a level IV NICU, the first NCI-designated Comprehensive Cancer Center, and Nationally Recognized Children's and Women's hospital

Among the top 100 hospitals and health systems with great women's health programs. (Becker's Review)

Consistently recognized as one of the Best Maternity Hospitals in the United States (Newsweek)



FORMING A TEAM

Medical Professionals

- *Obstetrics and Gynecology Department: Director of Labor and Delivery and Antepartum divisions*
- *Medical and Nursing Providers*

Academic Professionals

- *Doctorate of Nursing Practice Advisor and Second Reader*
- *Electronic Medical Record Liaison*
- *Medical Librarian and Statistician*

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PRACTICE CHANGE



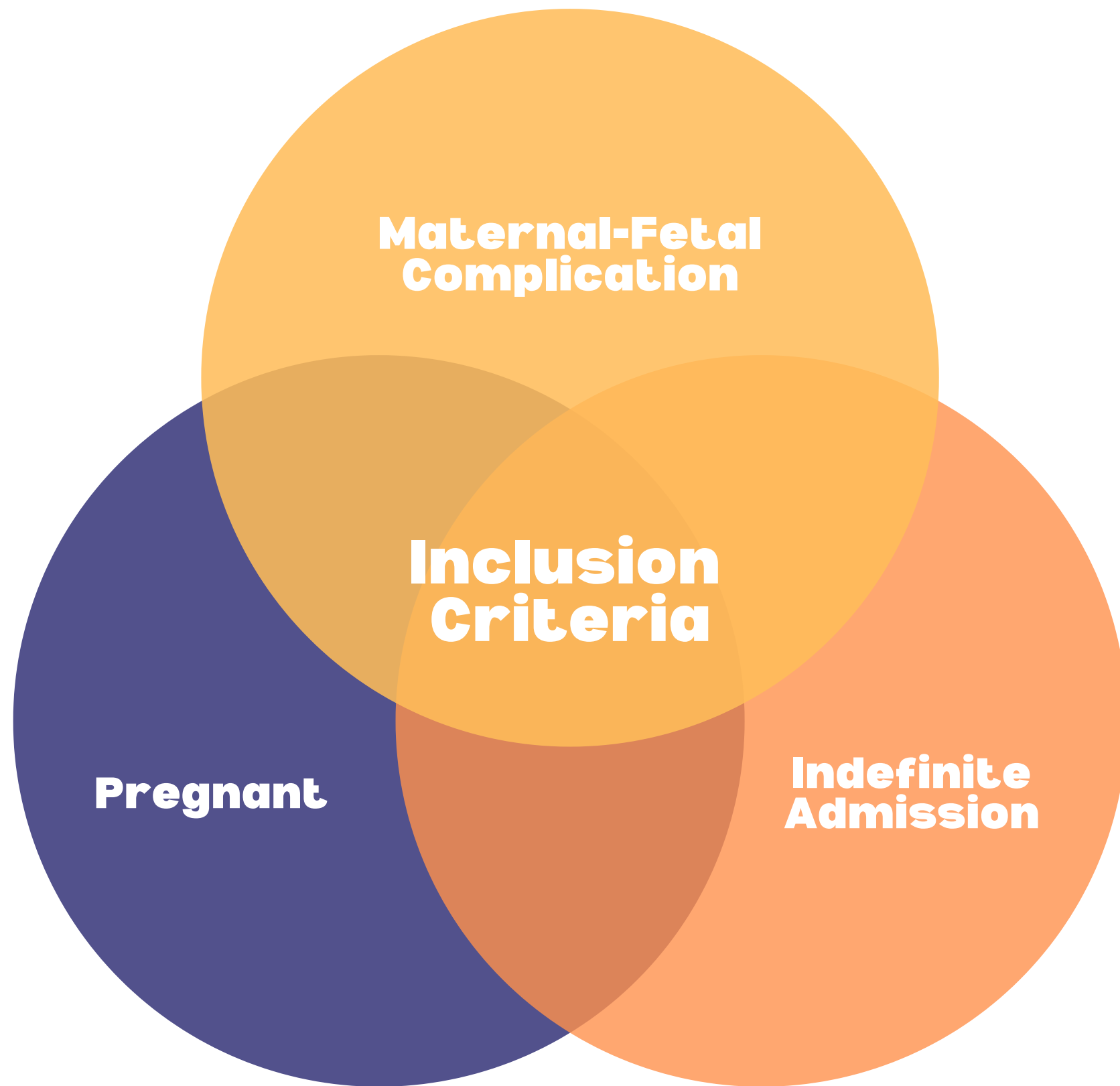
This academic center screens for perinatal mood disorders during routine prenatal care at the 28th week gestation visit, there is no current protocol in place for screening when patients are admitted to the hospital

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PROJECT PURPOSE



The purpose of this project is to create awareness and support for patients that are admitted to the hospital until delivery. Including a perinatal depression screening tool throughout admission will allow providers and medical professionals opportunity to facilitate treatment and provide additional therapy services during the patient's stay.

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POPULATION

- Patients that are pregnant
- Patients with a maternal-fetal complication or receiving an indefinite admission
- Indefinite Admission: Receiving a new gestational age range goal to remain pregnant until delivery or continuing to stay inpatient until delivery

Exclusion Criteria: Admitted for routine delivery or expected shortened hospital stay

Edinburgh Postnatal Depression Scale¹ (EPDS)

Name: _____ Address: _____
Your Date of Birth: _____
Baby's Date of Birth: _____ Phone: _____

As you are pregnant or have recently had a baby, we would like to know how you are feeling. Please check the answer that comes closest to how you have felt **IN THE PAST 7 DAYS**, not just how you feel today.

Here is an example, already completed.

I have felt happy:

- ☐ Yes, all the time
☒ Yes, most of the time This would mean: "I have felt happy most of the time" during the past week.
☐ No, not very often Please complete the other questions in the same way.
☐ No, not at all

In the past 7 days:

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. I have been able to laugh and see the funny side of things:
<input type="checkbox"/> As much as I always could
<input type="checkbox"/> Not quite so much now
<input type="checkbox"/> Definitely not so much now
<input type="checkbox"/> Not at all | *6. Things have been getting on top of me
<input type="checkbox"/> Yes, most of the time I haven't been able to cope at all
<input type="checkbox"/> Yes, sometimes I haven't been coping as well as usual
<input type="checkbox"/> No, most of the time I have coped quite well
<input type="checkbox"/> No, I have been coping as well as ever |
| 2. I have looked forward with enjoyment to things:
<input type="checkbox"/> As much as I ever did
<input type="checkbox"/> Rather less than I used to
<input type="checkbox"/> Definitely less than I used to
<input type="checkbox"/> Hardly at all | *7. I have been so unhappy that I have had difficulty sleeping:
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, sometimes
<input type="checkbox"/> Not very often
<input type="checkbox"/> No, not at all |
| *3. I have blamed myself unnecessarily when things went wrong:
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, some of the time
<input type="checkbox"/> Not very often
<input type="checkbox"/> No, never | *8. I have felt sad or miserable:
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, quite often
<input type="checkbox"/> Not very often
<input type="checkbox"/> No, not at all |
| 4. I have been anxious or worried for no good reason:
<input type="checkbox"/> No, not at all
<input type="checkbox"/> Hardly ever
<input type="checkbox"/> Yes, sometimes
<input type="checkbox"/> Yes, very often | *9. I have been so unhappy that I have been crying:
<input type="checkbox"/> Yes, most of the time
<input type="checkbox"/> Yes, quite often
<input type="checkbox"/> Only occasionally
<input type="checkbox"/> No, never |
| *5. I have felt scared or panicky for no very good reason:
<input type="checkbox"/> Yes, quite a lot
<input type="checkbox"/> Yes, sometimes
<input type="checkbox"/> No, not much
<input type="checkbox"/> No, not at all | *10. The thought of harming myself has occurred to me:
<input type="checkbox"/> Yes, quite often
<input type="checkbox"/> Sometimes
<input type="checkbox"/> Hardly ever
<input type="checkbox"/> Never |

Administered/Reviewed by _____ Date _____

¹Source: Cox, J.L., Holden, J.M., and Sagovsky, R. 1987. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *British Journal of Psychiatry* 150:782-786.

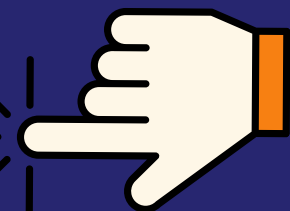
²Source: K.L. Wisner, B. L. Parry, C. M. Plontek, Postpartum Depression N Engl J Med vol. 347, No 3, July 18, 2002, 194-199

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PRIMARY INSTRUMENT

- Screening tool to identify major depression in pregnant and postpartum women
- 10-Questions
- Self-Administered
- Validated in multiple languages
 - English, Spanish, Arabic, Chinese, Dari, Farsi, Korean, Etc
- Cut-off value of 13 or higher maximized combined sensitivity and specificity

EPDS Accuracy



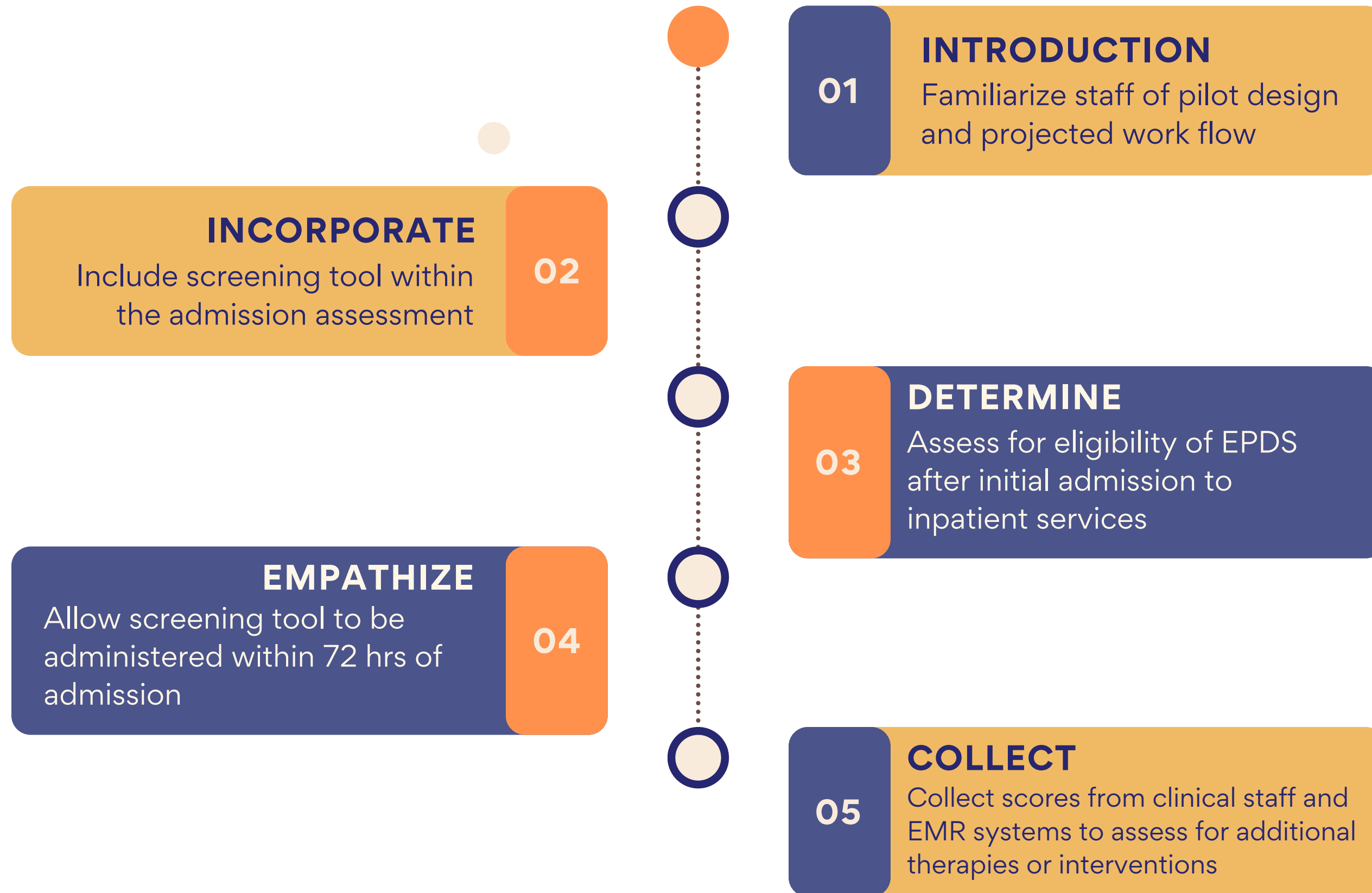


INTRODUCTION

Attend morning nursing huddles and board rounds to speak on design and expectations

Individual and group education on administering screening tool and process flow for nursing staff

DESIGN



***IF INDEFINITE ADMISSION IS LONGER THAN A WEEK, THEN REPEAT EPDS SCORING EVERY SEVEN DAYS**



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DATA COLLECTION

- 10 weeks of data collection
 - August 26th, 2024 - October 28th, 2024
- De-identified Data
- Trending EPDS scores throughout admission if applicable
- Tangible screening forms provided and kept at the charge nurse station for analysis
- Official screening tool results reported using the electronic medical record

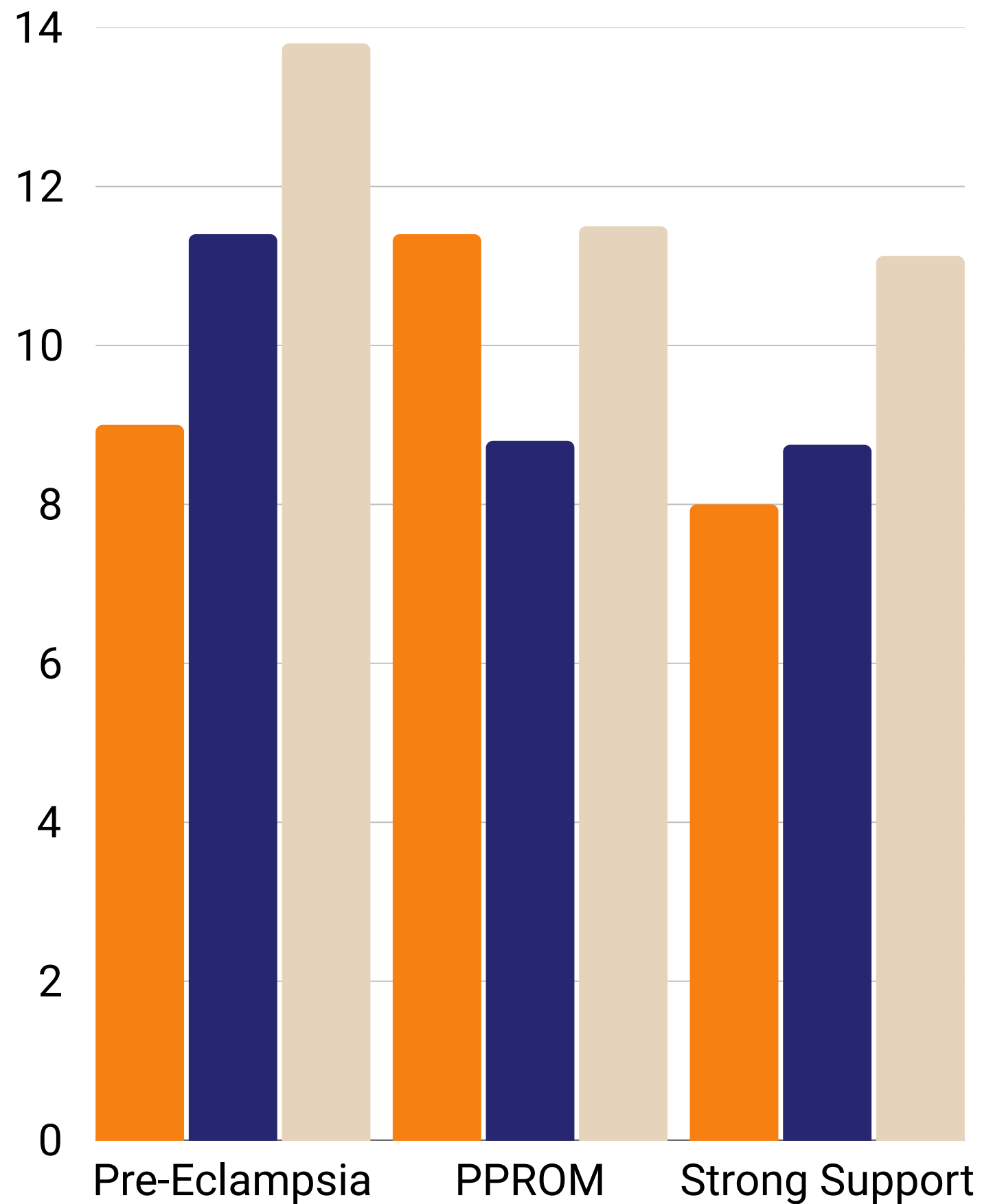




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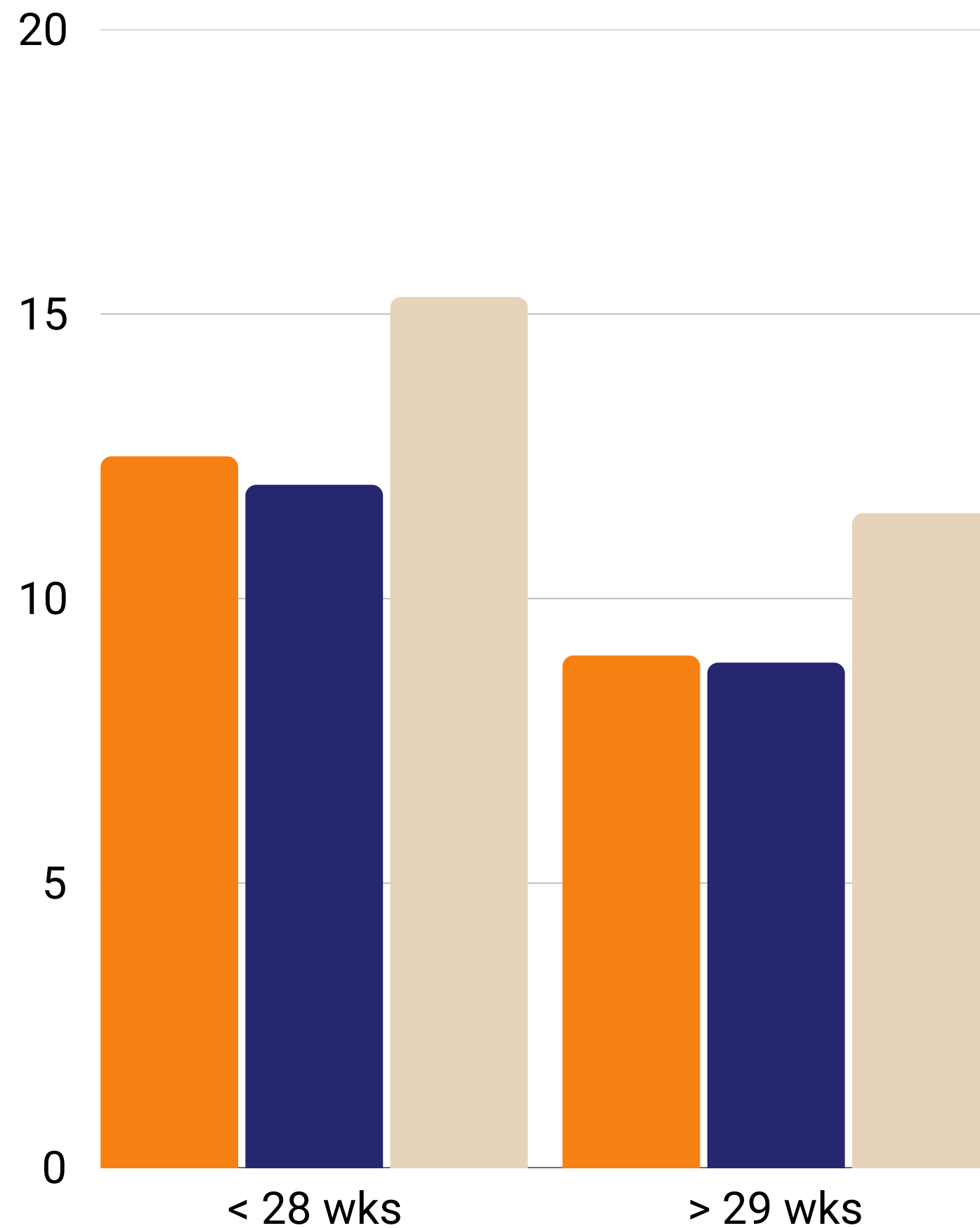
DATA ANALYSIS

- Retrospective Chart Review
 - Patients will score negative or positive based off the cut off of 13
- How many patients were correctly screened based off inclusion/exclusion criteria?
- How many patients had care plans adjusted based off of results and what were they?
 - Therapies, Social Work, Psychiatric, etc.
- Correlate the patient's negative or positive result with length of admission and reason for admission
- All de-identified data will be exported and analyzed with descriptive statistics



DATA ANALYSIS

- Orange: Average Initial EPDS Score
- Blue: Average Repeat EPDS Score (+7 days)
- Tan: Average EPDS scoring at 2-3 week postpartum visit
- Pre-Eclampsia EPDS scoring increased with increased length of stay
- Premature-Prelabor rupture of membranes EPDS score has DECREASED with length of stay
- Strong Support Systems AND living within one hour of UVA scored <11 for initial EPDS screen



DATA ANALYSIS

- Orange: Average Initial EPDS Score
- Blue: Average Repeat EPDS Score (+7 days)
- Tan: Average EPDS scoring at 2-3 week postpartum visit
- Lower gestational age on admission correlated with higher EPDS score. Patients that were in earlier stages of their pregnancy were more likely to have perinatal mood disorders than those with later gestational ages

ETHICAL PRINCIPLES

Beneficence

- *The promotion of good and an obligation of the medical team to act for the benefit of the patient*
- *Implentation of screening allows potential treatment and care plans to be altered for the patient's benefit*

Autonomy

- *The right to self-determination and providing adequate information to allow patients to make their own decisions based on their beliefs and values*
- *Allowing patients to have options for treatment plans for depression. (SW, PT, OT, medications, etc)*

SUSTAINABILITY

Strengths:

- *Implementation of current guidelines that are nationally supported*
- *Minimal adjustment to current work flow with no delay in patient care*
- *Promotes early recognition of perinatal mood disorders and implementation of additional interventions*
- *EPDS available in multiple languages*

Limitations:

- *Self-Reporting from Patients*
- *Limited Sample Size for EBP Pilot*

Nursing Practice Implications

- *Mental Health Awareness and Prevention*
- *Streamline therapy services and management*
- *Recognizing Maternal Mood Disorders*

Financial Considerations

*No foreseen expenses for design.
Cost may be considered for types of
implementations provided to reduce risk of
perinatal mood disorders*

PRICE OF PRACTICE CHANGE

Untreated Depression

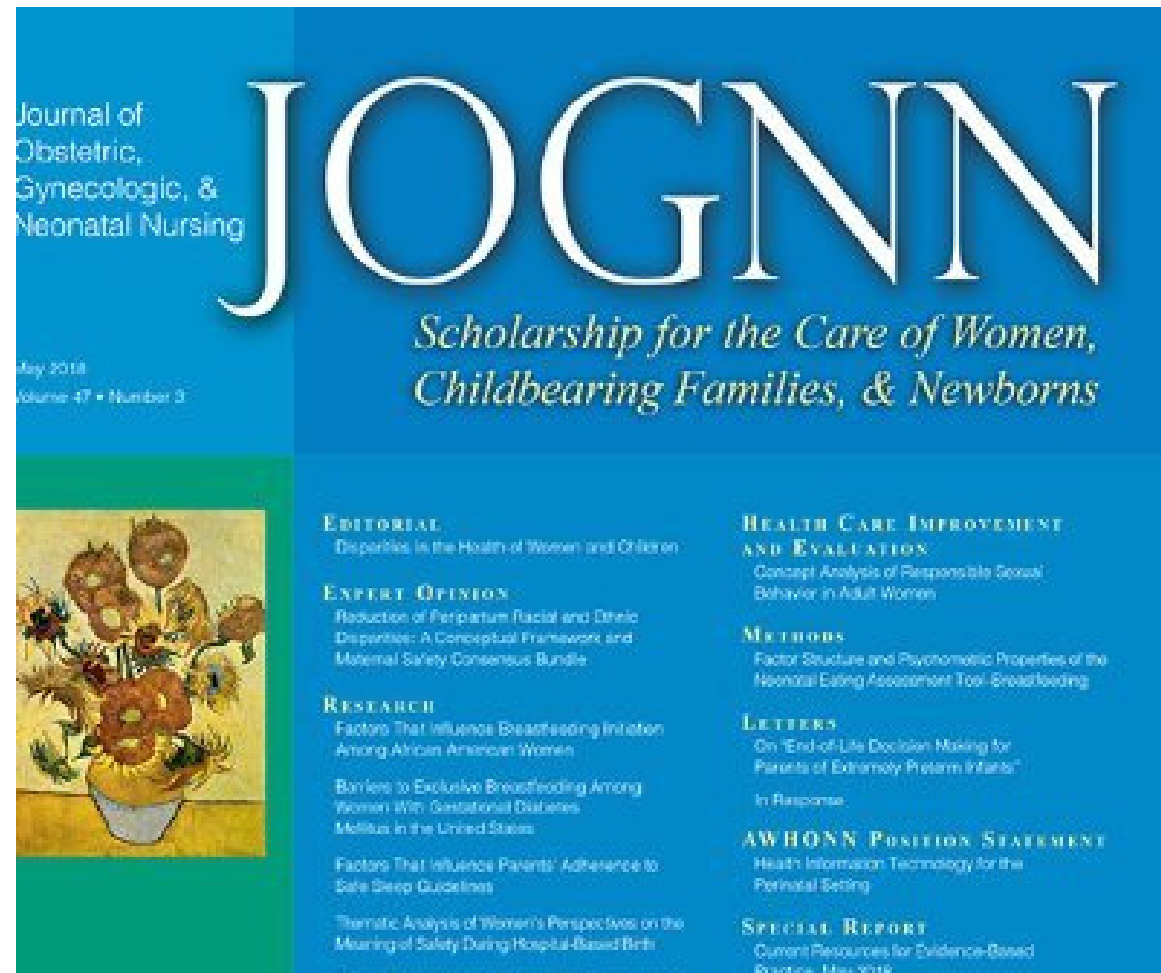
- *Increased risk of preterm labor and reduced birth weight*
- *Children born to women with untreated perinatal depression may experience poorer growth, increased risk of infection, altered stress response, and more difficult temperaments.*
- *Decreased bonding and increase the risk of emotional, cognitive, and behavioral problems in the child*

*Cost of untreated PMDs
for the 2017 birth cohort
in the **United States**,
projected from conception
to 5 years postpartum,
was about **\$14.0 billion**.*

(Luca, et al, 2020)

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DISSEMINATION



AWHONN

PROMOTING THE HEALTH OF
WOMEN AND NEWBORNS

Submit an abstract to the
Journal of Obstetric,
Gynecologic, & Neonatal
Nursing (**JOGNN**)

Present at the Association of
Women's Health, Obstetric and
Neonatal Nurses (**AWHONN**)
conference in June of 2025

THANK YOU SO MUCH!

Presentation by **Allyson Pennington, DNPc RN CCRN**

PERINATAL MOOD DISORDERS: IMPLEMENTING THE EDINBURGH POSTNATAL DEPRESSION SCALE SCREENING FOR ANTEPARTUM PATIENTS WITH MATERNAL-FETAL COMPLICATIONS

Presentation by **Allyson Pennington, DNPc APRN FNP-BC CCRN**

SPECIAL THANK YOU



DR. EVANS

PHD, RN, WHNP-BC
SECOND READER



DR. QUATRARA

DNP, RN, CMSRN, ACNS-BC
DNP ADVISOR



UVA OBGYN

OBGYN, MFMS, UROGYN
PRACTICE/FACULTY MENTOR[S]

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