



Gathering the Rural OB Workforce in WI GROW-WI ECHO Program

How to Join:

<https://iecho.org/public/program/PRGM17425658124325CC96FHKX3>

For attendance purposes, please text the code **PEHROZ** to **608-260-7097**.

Session Date: April 22, 2025

Facilitator: Jillian Landeck, MD

	Topic	Presenter
Case Presentation	Undiagnosed pregnancy presents for delivery	Rachel Hartline, MD, FM OB, Upland Hills Health, Dodgeville, WI
Educational Presentation	Substance Use in Pregnancy and Neonatal Withdrawal Syndromes	Rachel Hartline, MD, FM OB, Upland Hills Health, Dodgeville, WI Jillian Landeck, MD, FM OB UW Dept of Family Medicine and Community Health

Agenda:

7:30 – 7:35 AM – Welcome and Introductions

-Text-in your attendance, even if you do not plan to claim Continuing Education credits.

7:35 – 8:00 AM – Case Presentation

8:00 – 8:30 AM – Educational Presentation

Continuing Education Credits:

To claim CE credit, **you must complete the evaluation form after each session.**

ICEP will email you a link to the evaluation form after texting in for attendance.

**GROW-WI ECHO (Gathering the Rural OB Workforce in WI)
2025-2026
Substance Use in Pregnancy and Neonatal Withdrawal Syndromes
April 22, 2025
Rachel Hartline, MD; Jillian Landeck, MD**

Provided by the University of Wisconsin–Madison Interprofessional Continuing Education Partnership (ICEP)

Intended Audience:

MD/DO, RN, APRN, Physician Assistants, Certified Nurse Midwives, Students

Objectives:

1. Demonstrate perinatal and newborn impact of substance use in pregnancy
2. Evaluate potential options for management of substance use in pregnancy
3. Explain neonatal withdrawal symptoms and diagnosis

Policy on Disclosure

It is the policy of the University of Wisconsin–Madison Interprofessional Continuing Education Partnership (ICEP) to identify, mitigate and disclose all relevant financial relationships with ineligible companies* held by the speakers/presenters, authors, planners, and other persons who may influence the content of this accredited continuing education (CE). In addition, speakers, presenters, and authors must disclose any planned discussion of unlabeled/unapproved uses of drugs or devices during their presentation. For this accredited continuing education activity, all relevant financial relationships have been mitigated and detailed disclosures are listed below.

** **Ineligible companies** are those whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients. The ACCME does not consider providers of clinical service directly to patients to be ineligible companies.*

Name	Role	Financial Relationship Disclosures	Discussion of unlabeled/unapproved uses of drugs/devices in presentation	COI completion date
Jillian Landeck, MD	Presenter	No relevant financial relationships with ineligible companies to disclose.	No	4/4/2025
Rachel Hartline, MD	Presenter	No relevant financial relationships with ineligible companies to disclose.	No	4/15/2025
Jillian Landeck, MD	RSS Chair	No relevant financial relationships with ineligible companies to disclose.	NA	3/25/2025
Jenny White	RSS Coordinator	No relevant financial relationships with ineligible companies to disclose.	NA	3/27/2025
Korina Bauer, RN, CPM, LM	Planner	No relevant financial relationships with ineligible companies to disclose.	NA	3/25/2025
Bonnie Brown, MD	Planner	No relevant financial relationships with ineligible companies to disclose.	NA	4/8/2025
Jensena Carlson, MD	Planner	No relevant financial relationships with ineligible companies to disclose.	NA	3/27/2025
Lee Dresang, MD	Planner	No relevant financial relationships with ineligible companies to disclose.	NA	4/17/2025
Rachel Hartline, MD	Planner	No relevant financial relationships with ineligible companies to disclose.	NA	4/15/2025
Ryan Luellwitz, DO	Planner	No relevant financial relationships with ineligible companies to disclose.	NA	3/26/2025
Rebecca Pfaff, MD	Planner	No relevant financial relationships with ineligible companies to disclose.	NA	4/6/2025
Allegra Ponshock, MD	Planner	No relevant financial relationships with ineligible companies to disclose.	NA	3/29/2025
Ryan Spencer, MD	Planner	No relevant financial relationships with ineligible companies to disclose.	NA	3/31/2025
Shannan Stephens, MD	Planner	No relevant financial relationships with ineligible companies to disclose.	NA	4/10/2025

Accreditation Statement



In support of improving patient care, the University of Wisconsin–Madison ICEP is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

Credit Designation Statements

The University of Wisconsin-Madison ICEP designates this live activity for a maximum of 1.0 *AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The University of Wisconsin–Madison ICEP designates this live activity for a maximum of 1.0 ANCC contact hour(s).

The University of Wisconsin–Madison ICEP, as a member of the University Professional & Continuing Education Association (UPCEA), authorizes this program for 0.1 CEUs or 1.0 hour.

Welcome!

We will get started shortly.

Feel free to share your name, title, and/or organization in the chat.

G R O W - W I
GATHERING THE RURAL OB WORKFORCE IN WI



Accreditation Information

Accreditation Statement

In support of improving patient care, the University of Wisconsin–Madison ICEP is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.



Credit Designation Statements

American Medical Association (AMA)

The University of Wisconsin–Madison ICEP designates this live activity for a maximum of 1 *AMA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

American Nurses Credentialing Center (ANCC)

The University of Wisconsin–Madison ICEP designates this live activity for a maximum of 1 ANCC contact hour.

Continuing Education Units

The University of Wisconsin–Madison ICEP, as a member of the University Professional & Continuing Education Association (UPCEA), authorizes this program for 0.1 continuing education units (CEUs) or 1 hour.

G R O W – W I
GATHERING THE RURAL OB WORKFORCE IN WI



Disclosures

Policy on Faculty and Sponsor Disclosure

- It is the policy of the University of Wisconsin–Madison Interprofessional Continuing Education Partnership (ICEP) to identify, mitigate and disclose all relevant financial relationships with ineligible companies* held by the speakers/presenters, authors, planners, and other persons who may influence content of this accredited continuing education (CE). In addition, speakers, presenters and authors must disclose any planned discussion of unlabeled/unapproved uses of drugs or devices during their presentation. For this accredited continuing education activity, all relevant financial relationships have been mitigated and detailed disclosures are listed below.

* Ineligible companies are those whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients. The ACCME does not consider providers of clinical service directly to patients to be ineligible companies.

- The planning committee has no conflicts of interest to disclose.

Attendance

- For attendance purposes please text the code **PEHROZ** to 608-260-7097.
- Please text for attendance, **even if you are *not* claiming** continuing education credit.

Continuing Ed Credit

To receive continuing education credit:

1. Log your attendance (as above)
 - Create an ICEP account if you don't already have one.
2. Fill out the session evaluation form to receive credit – **REQUIRED for credit.**
 - A link to the evaluation will be sent after you text the code.

**Continuing Education Units with the Midwifery Education Accreditation Council are coming!

Planning Team



Korina Bauer, RN, CPM, LM – WI
Guild of Midwives, Iola, WI



Bonnie Brown, MD – UW
DFMCH



Jensena Carlson, MD – UW
DFMCH



Lee Dresang, MD – UW DFMCH



Rachel Hartline, MD* – FMOB,
Upland Hills Health, Dodgeville,
WI



Jillian Landeck, MD* – UW
DFMCH



Ryan Luellwitz, MD – UW OB
GYN



Rebecca Pfaff, MD – FMOB,
Forks Community Hosp, Forks,
WA



Allegra Ponshock, MD* – FMOB,
Mile Bluff Med Ctr, Mauston, WI



Ryan Spencer, MD – UW OB
GYN



Shannan Stephens, MD –
Gundersen OB GYN, La Crosse,
WI



Jenny White* – UW DFMCH

*Thanks to Gretchen Spicer,
CPM, LM for her contributions
to planning

* Core Facilitation Team

G R O W – W I
GATHERING THE RURAL OB WORKFORCE IN WI



Friendly Reminders

- Video appreciated
- Use chat function to ask questions or raise hand if able
- Mute microphone when not speaking
- Maintain confidentiality, no PHI
- Didactic will be recorded
- Mission is to empower those working in rural settings
- Our diversity of perspectives, specialties, practice scopes are our strength
- **"Coming together is a beginning. Keeping together is progress. Working together is success." - Henry Ford**

Announcements

Please join us next month!

Tuesday May 27th, 7:30-8:30AM

Scope of Practice of Licensed Midwives in WI

- Korina Bauer, RN, CPM, LM, Co-President of Wisconsin Guild of Midwives



G R O W - W I
GATHERING THE RURAL OB WORKFORCE IN WI



Interested in sharing a case?

Email jennifer.white@fammed.wisc.edu

- Slide template shared, 10 min for details of case
- Priority to cases from rural and resource-limited settings
- No PHI
- Include on CV as a state presentation

A Review of a Harrowing Obstetric and Newborn Case

Rachel Hartline

Upland Hills Health

April 22, 2025

Disclosures & Disclaimers

- No relevant financial disclosures
 - Rachel is an ALSO instructor and thinks it is great
 - We think obstetric care and substance use care are both critically important
-
- **PATIENT RELATIONSHIP DISCLAIMER**
 - PLEASE NOTE that Project ECHO® case consultations do not create or otherwise establish a provider-patient relationship between any clinician and any patient whose case is being presented in a Project ECHO® setting.

Case Introduction

- One-liner (including age, G&Ps, GA if applicable):
 - call from the ER: 37 year old female with presenting with abdominal pain is pregnant—unsure gestation, maybe 22 weeks—with a bulging amniotic sac on sterile speculum exam
- Primary question for discussion:
 - What are considerations for an undiagnosed pregnancy presenting in labor in a rural setting?

Obstetrical/Prenatal History:

- chili dog → n/v and abdominal pain 3-4 d ago
- worsening crampy pain, now severe, BLQ with radiation to her back
- limited PO and UOP today with recurrent n/v x 4
- no other urinary or bowel sx
- LMP one month ago, was normal from the 4th-8th, typically she has light periods every month

Past Medical History:

- ADHD, not on meds
- Very limited past interaction with healthcare system

Exam:

T: 97.4 °F (36.3 °C)

HR: 99

RR: 24

BP: 148/75

O2: 98 %

Pertinent initial exam:

- Tearful; tachycardic
- Abdominal: protuberant, firm, nontender, decreased BS
- GU exam - sterile speculum - amniotic sac membrane noted
- FH → well above umbilicus
- Doptones quite audible and easily traced

Labs & Imaging:

COVID neg

CBC with 16.6 WBC with L shift

CMP remarkable for alk phos 214

Urine HCG +

Quant 6027

Normal lipase

u/a + for 40 ketones, small bili, 30 protein

Blood type B+

Bedside US by ED: appears >20 weeks gestation

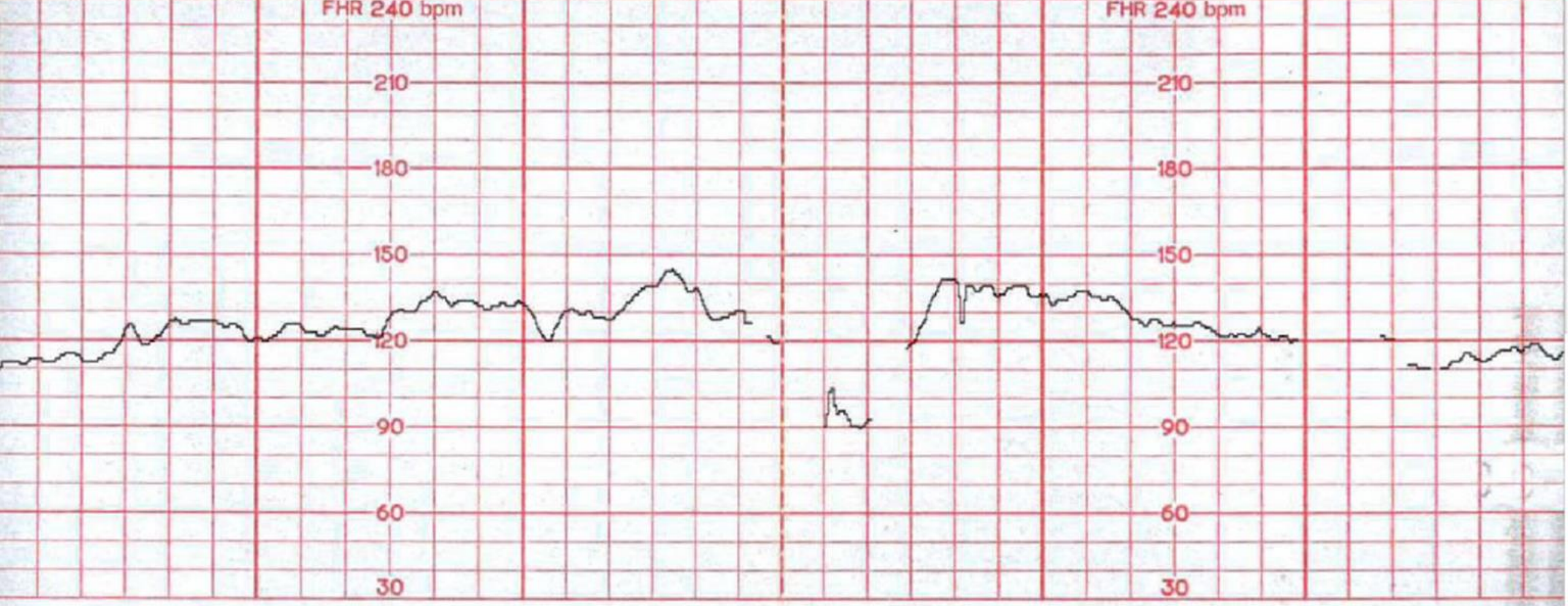
- u/s tech arrives, limited measurements consistent with 34-35 weeks
- Breech position
- Pt increasingly uncomfortable and pushy
- FP hospitalist partner checked patient and complete → OR staff notified to come for potential section

Proposed diagnoses/management plan:

- Vaginal Breech delivery vs C/S

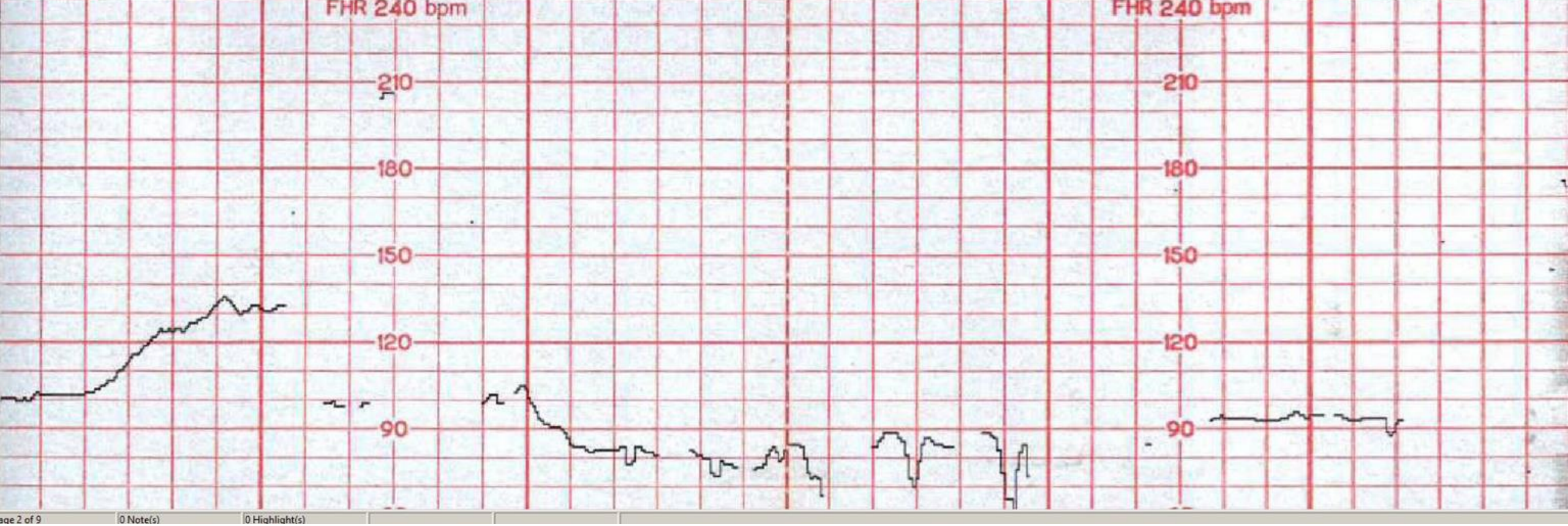
CAREFUL Mnemonic for Breech Delivery

- Check presentation, dilation, and cord
- **A**wait umbilicus
- **R**otate for arms
- **E**nter for Mauriceau-Smellie-Veit (MSV) maneuver
- **F**lex the fetal head
- Back **U**p (sacrum anterior)
- **L**ift baby onto mother



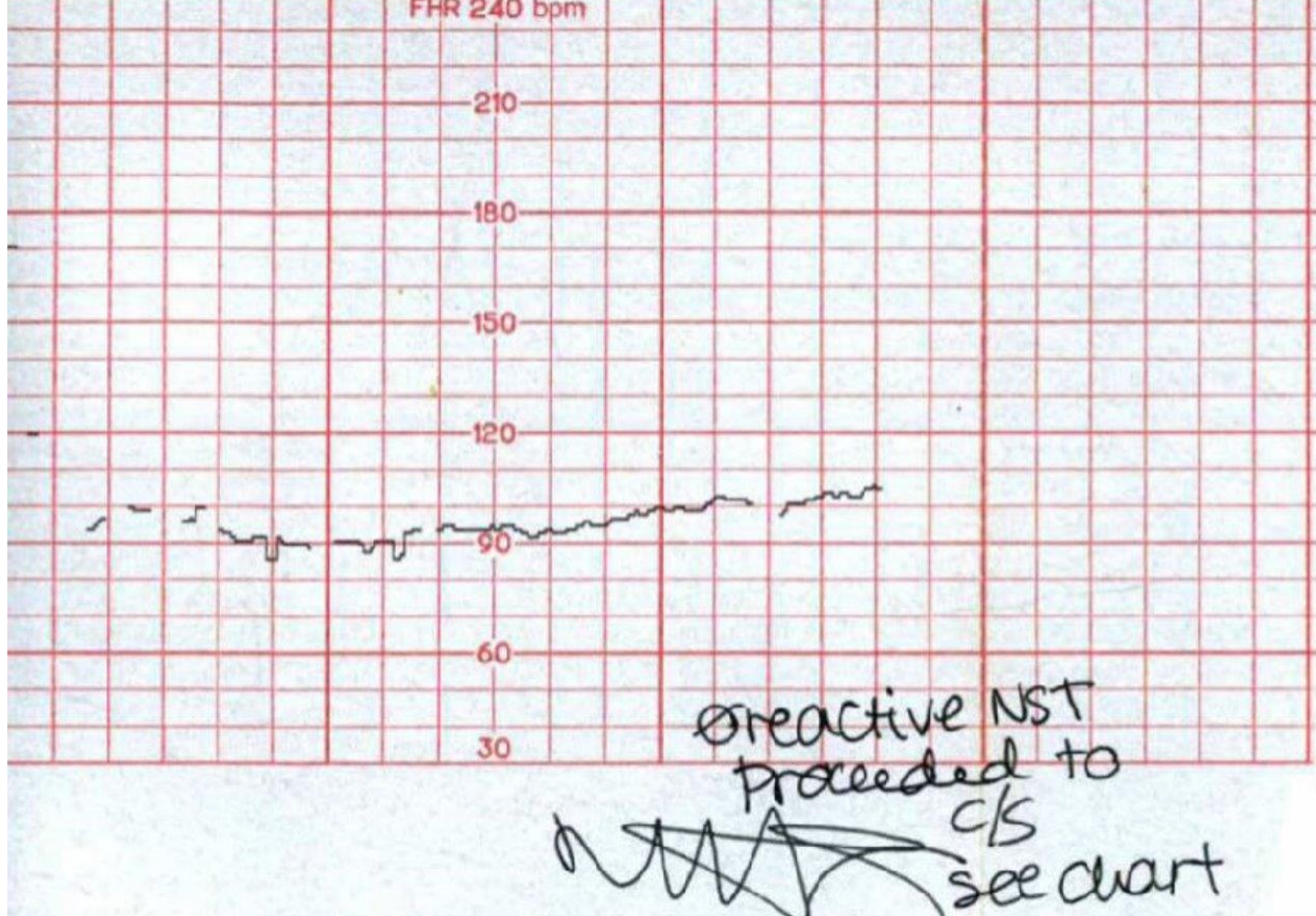
G R O W - W I
GATHERING THE RURAL OB WORKFORCE IN WI





G R O W - W I
GATHERING THE RURAL OB WORKFORCE IN WI





Social History

- Endorsed occasional and fairly recent cocaine use
- Tobacco (chewing)
- THC
- Some alcohol use during pregnancy
- Denied other substances

Amphetamines Screen Urine NEGATIVE	NEGATIVE
Barbiturates Screen Urine NEGATIVE	NEGATIVE
Benzodiazepine Urine NEGATIVE	NEGATIVE
Buprenorphine Urine NEGATIVE	NEGATIVE
Cocaine Screen Urine NEGATIVE	POSITIVE !
Methamphetamine Screen Urine NEGATIVE	NEGATIVE
Methadone Screen Urine NEGATIVE	NEGATIVE
Opiates Urine NEGATIVE	POSITIVE !
Comment: Hydrocodone can cross react and ca with this test method	
Oxycodone Urine NEGATIVE	NEGATIVE
Phencyclidine Screen Urine NEGATIVE	NEGATIVE
Propoxyphene Urine NEGATIVE	NEGATIVE
Cannabinoids Screen Urine NEGATIVE	POSITIVE !
Tricyclic Antidepressants Urine NEGATIVE	NEGATIVE

Timeline/L&D details:

- Tight abdominal muscles and somewhat smaller uterus
- Foley not placed prior to procedure
- Upper back and shoulder presented upon hysterotomy
- Attempts to elevated fetal breech from maternal pelvis initially unsuccessful due to low station
- Subsequently attempted to flex head out of uterine fundus, again without success
- Returned to elevation of breech and legs delivered, followed by breech, and arms
- Head stuck in clamped down uterus→ gentle traction on jaw/face and incision widened with success

Timeline/L&D details:

- Anesthesia aware of crash section 2126
- Spinal in 2128
- Procedure start 2132
- Uterine incision 2137
- Delivery 2142

- Deep vaginal extension
- No bladder injury
- KUB for crash without counts, negative

- 4 lb 15 oz
- Apgars: 2, 2, 4, 5
- Ballard 36 weeks
- 2 vessel cord
- Placental pathology:
 - Mild focal acute chorio and small infarction

Resuscitation details:

2142 delivery.

No spontaneous respirations→ ventilated by RT

Upon arriving at warmer HR 60s, then 40s→ compression started (OB RN star of resuscitation-your nurses are your greatest resource)

UVC placed by ER physician but unfortunately lost

UVC replaced by FP hospitalist

Intubated by ER doc and confirmed by CRNA subsequently On XR high and pulled back. Epi prepped but HR improving so not given

Given 2 cc NS bolus→ d10 @4 cc/h

Total 14 min CPR– 11 min prior to intubation and 3 min after

2152 infant responsive

2156 pulse 100

Approx 2225 NICU transport arrived (45 min of life)

Outcomes

- Mom
 - Transferred to Meriter the next morning
 - Etonorgesterel arm implant placed prior to discharge
 - R sided rib pain worse with movement or UE weightbearing has continued but improved since delivery. Remained on gabapentin 300 TID for several months.
 - CPS followed for additional monitoring and support
 - No ongoing concerns about parenting or safety related to substance use
- Baby
 - Medflight to Meriter
 - Urine and meconium tox consistent with mother's UDS
 - Normal head u/s
 - Extubated to RA on DOL #2
 - 7 day NICU stay
 - Now 3 years old, healthy, lost to f/u but meeting milestones as of last visit

Key learning points:

- Thank you to a fabulous team
- Communication:
 - Initial call information→anchoring vs. switching gears
 - OR and newborn staff on hand vs. decision for section
 - Discussion regarding urgency
- Need to think about transfer needs early on
 - Notification of transfer NICU team- who, when, additional updates
- Strategies for management of entrapped head
 - Use of nitrous
 - Repositioning

System issues/Areas for Improvement:

- Safety
 - Placement of foley when transferring to OR
 - Prepping OR and deciding which OR
 - Clarification of Crash
 - Color system with incision-to-decision target time
 - Checklist
 - Avoiding delays in moving to OR after consent signed

Open Discussion

Substance Use in Pregnancy and Neonatal Opioid Withdrawal Syndrome

Rachel Hartline and Jillian Landeck

April 22, 2025

Disclosures

- No Disclosures

Objectives

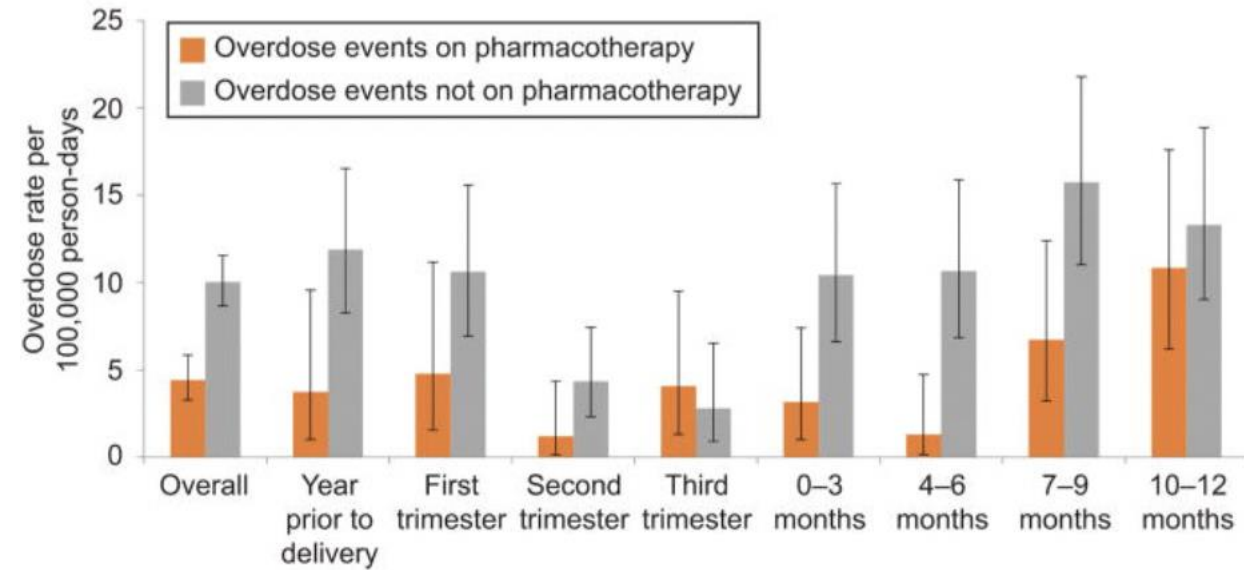
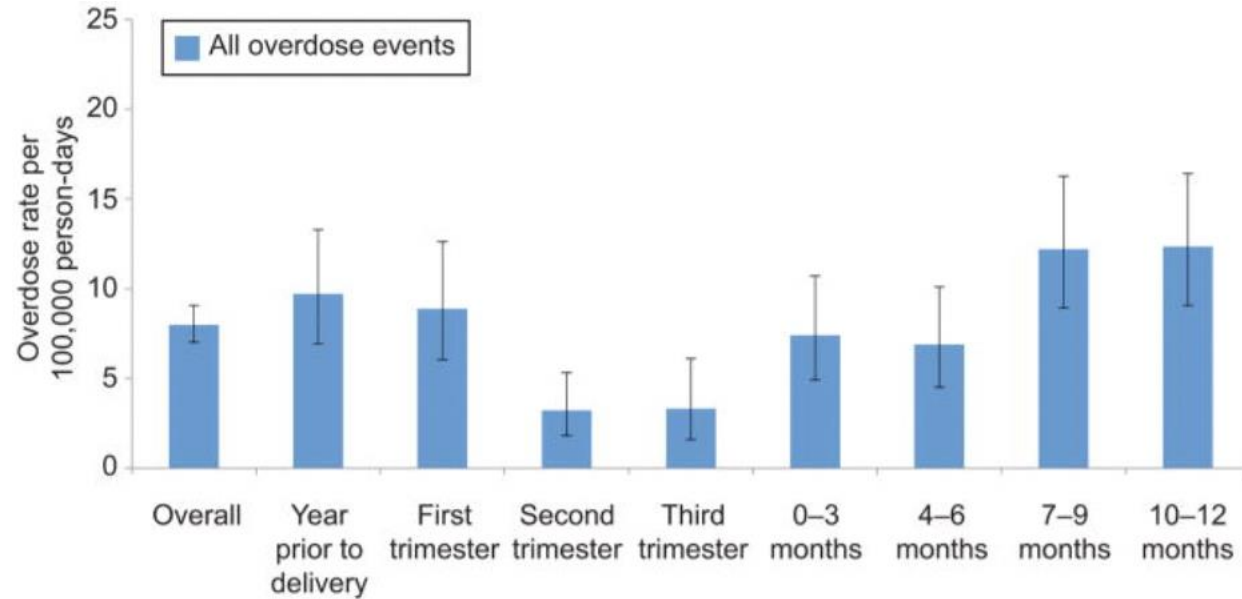
1. Demonstrate perinatal and newborn impact of substance use in pregnancy
2. Evaluate potential options for management of substance use in pregnancy
3. Explain neonatal withdrawal symptoms and diagnosis

Substance Use In Pregnancy

Most common substance: ETOH>nicotine>THC depending on source.

- THC most common “illicit” substance
- If harder substances, usually accompanied by these three as well
 - Our patient not atypical since she had cocaine and questionable opiates.
- Older patients more likely to consume ETOH during pregnancy.
- ACOG recommends using a validated screening tool universally at first prenatal visit
- If positive brief intervention (motivational interview) and referral to treatment
- Make sure to screen for and treat comorbid mental illness

Overdose accounts for 1/3 of pregnancy-associated deaths in WI



Screening Tools

- Your biggest ally is creating a non-judgmental environment that makes mother feel safe sharing her struggles with you
- Shifting from “Why would someone who uses drugs get pregnant?” to “Substance use is common. How can we support someone who uses drugs when they get pregnant?”
- Words Matter
- Helpful to use a validated screening tool that standardizes verbiage and addresses concerns around use of information

Physician: _____
 Patient Name: _____
 Date Of Birth: _____
 Address: _____
 Patient's Phone #: _____

Parents	Did either of you use drugs or alcohol during pregnancy?
Partner	Does your partner use drugs or alcohol?
	Is your partner using drugs or alcohol now?
	Have you ever been with a partner who used drugs or alcohol?
Past	Does your partner use drugs or alcohol?
Pregnancy	Have you ever used drugs or alcohol during pregnancy?
	Have you ever used drugs or alcohol during pregnancy?
	Have you lost a baby due to drug or alcohol use?
Pregnancy	In the month before pregnancy, how many cigarettes did you smoke?
Pregnancy	In the month before pregnancy, how much wine/beer did you drink?

© NTI Upstream 2015. Sam

Follow-up Questions to 4Ps

- Sometimes a woman feels better or to relax?
 - Talk things over with someone
 - Smoke cigarettes?
 - Smoke marijuana or hashish?
 - Have a drink of beer or wine?
 - Take some type of drug?
- And last month, about how often did you drink?
 ☐ Did not drink
- During the month before pregnancy, did you use any drug?
 ☐ Did not use any drug
- During the month before pregnancy, did you use any drug?
 ☐ Did not use any drug
- And last month, about how often did you use any drug?
 ☐ Did not use any drug
- And last month, about how often did you use any drug?
 ☐ Did not use any drug
- And last month, about how often did you use any drug?
 ☐ Did not use any drug

Intervention and Referrals

- Referral
- ☐ Brief Intervention
 - ☐ Domestic Violence
 - ☐ Tobacco Cessation
 - ☐ Substance Abuse Treatment
 - ☐ Mental Health
 - ☐ Other, Specify: _____

Introduction (Please read to patient)

Hi, I'm _____, nice to meet you. I'm here to help me give you better medical care and other drugs. Some of the substances I will ask you about are alcohol, marijuana, hashish, drugs, and other drugs. But I will only recommend prescribed. I'll also ask you about other drugs.

Instructions: For each substance, if you used it at least once monthly in the past year, put a mark in the box.

NIDA Quick Screen Question:

In the past year, how often have you used the following substances?

- Alcohol**
 - For men, 5 or more drinks per week
 - For women, 4 or more drinks per week
- Tobacco Products**
- Prescription Drugs for Non-Medical Reasons**
- Illegal Drugs**

- If the patient says "NO" for all substances, the screen is **complete**.

- ☐ Yes ☐ No
- ☐ Yes ☐ No
- ☐ Yes ☐ No
- ☐ Yes ☐ No

Circle: MD RN MSW LPN NP MA RD BCS, Screening Site: _____

The CRAFFT Screening Questions - Appendix A

Please answer all questions honestly; your answers will be kept confidential.

Part A

During the PAST 12 MONTHS, did you:

- Drink any alcohol (more than a few sips)?
- Smoke any marijuana or hashish?
- Use anything else to get high?

"Anything else" includes illegal drugs, over the counter and prescription drugs, and things that you sniff or "huff".

No

Yes

If you answered NO to ALL (A1, A2, A3) answer only B1 below, then STOP.

If you answered YES to ANY (A1, to A3) answer B1 to B6 below.

Part B

- Have you ever ridden in a **CAR** driven by someone (including yourself) who was "high" or had been using alcohol or drugs?
- Do you ever use alcohol or drugs to **RELAX**, feel better about yourself, or fit in?
- Do you ever use alcohol or drugs while you are by yourself, or **ALONE**?
- Do you ever **FORGET** things you did while using alcohol or drugs?
- Do your **FAMILY** or **FRIENDS** ever tell you that you should cut down on your drinking or drug use?
- Have you ever gotten into **TROUBLE** while you were using alcohol or drugs?

No

Yes



Risks of Use

- NOT teratogenic
 - Growth restriction
 - preE
 - Abruptio
 - Preterm birth
 - PPRM
 - PPH
 - Neonatal withdrawal
 - Postnatal growth issues
 - SIDS
 - Neurobehavioral problems
- Opioids→ primarily related to peaks and troughs and periodic withdrawal
 - Cocaine→ HTN and increased cardiovascular toxicity
 - THC→ strongest evidence for growth concerns and neurobehavioral issues
 - Alcohol→ FAS
 - Tobacco→ vasculopathy of placenta
 - Difficult to separate from other social factors

Principles for Treatment

- Weigh risks vs. benefits and consider maternal factors and health
- Connect with behavioral support (but don't withhold MOUD if pt refuses)
- Open and honest communication with patient and shared decision-making

Pharmacotherapy Options

- Opioid agonist (buprenorphine or methadone) MOUD is standard of care
 - Most dangerous physiologically and for relapse is opioid withdrawal
 - More engagement with care
 - Maybe slightly better outcomes with bup than methadone
- Gabapentin
 - May increase risk of growth restriction and preterm birth

Stimulant use disorder pharmacotherapy

- Treatment of co-occurring ADHD can reduce illicit stimulant use
- Topiramate contraindicated due to teratogenesis and cleft palate risk
- Bupropion
 - May increase miscarriage rate
 - May decrease birth weight
 - Greater risk at >300 mg/day
 - Risks similar or greater with untreated mental health and substance use
 - Consider stopping if preE develops due to lowering seizure threshold
- Mirtazapine
 - Caution regarding usual side effects (weight gain, sedation)

Testing Methods

Urine

Meconium- gold standard

Umbilical cord sampling – increase in use

- need to obtain consent
- Get confirmatory testing with GC/MS on immunoassay results

Contraception

Reproductive coercion is real

Critical to ensure patients have a choice about their reproductive plans

Unintended pregnancy

- 50% in general population
- 86% in patients receiving treatment for OUD

Neonatal Abstinence Syndrome (NAS)/Neonatal Opioid Withdrawal Syndrome (NOWS)

Typically opioids however SSRIs, nicotine, ETOH, benzos capable of producing sx

Presentation:

- sleep/wake cycle disturbance
- Easily overstimulated ie by feeding, talking, eye contact
- Hypertonicity, tremor, jitters
- Tachypnea, diarrhea, gas, vomiting, lack of suck/swallow coordination
- Autonomic dysfunction ie yawning, sweating, sneezing

Differential diagnosis

- Seizure
 - severe NAS vs hypoglycemia vs anoxic brain injury, electrolyte abnormality ie Ca^{++}
- Irritability/agitation
 - NAS vs sepsis
- Jitters/tremor
 - NAS vs hyperthyroidism

History/Workup:

- hx GDM or maternal thyroid disorder, prolonged deceleration(s) or shoulder dystocia
- CBC, electrolyte panel, glucose, vitals

Timeline for symptom onset

Dependent on substance:

Longer half life substance -->more time until manifestation of sx :

- Methadone, buprenorphine 24-72h, last up to 5 days
- SSRIs vary- 24-48h
- Short acting opiates, benzos typically within 24h, last up to 3 days
- Fentanyl can be more variable (12h-72h) and more severe depending on frequency of exposure

Finnegan scoring system

- Requires unswaddling
- Some symptoms may not be exclusive to NOWS (e.g. hyperactive moro reflex, frequent yawning, nasal stuffiness, sneezing, etc.)
- Concern re: overestimation of needs for pharmacologic treatment
- For infants >37 wks

Name: _____

Nursing instructions:

1. If infant scores >8, rescore in one hour.
2. Notify clinician if two scores, one hour apart, >8.
3. Give medication as prescribed by clinician every three to four hours. Do not exceed four hours in dosing.
4. All opioid-exposed infants are monitored and scored for a minimum of 96 hours before discharge.

Categories	Score	Morphine (morphine sulfate oral solution 0.4 mg/mL)
0	0 to 8	0.00 mg
I	9 to 12	0.04 mg
II	13 to 16	0.08 mg
III	17 to 20	0.12 mg
IV	21 to 24	0.16 mg
V	≥25	0.20 mg

Signs and symptoms	Score	Date/time											
Excessive cry	2 to 3												
Sleep <1 hour after feeding	3												
Sleep <2 hours after feeding	2												
Sleep <3 hours after feeding	1												
Hyperactive Moro reflex	1												
Markedly hyperactive Moro reflex	2												
Mild tremors: Disturbed	1												
Moderate-severe tremors: Disturbed	2												
Mild tremors: Undisturbed	1												
Moderate-severe tremors: Undisturbed	2												
Increased muscle tone	1 to 2												
Excoriation (specific area)	1 to 2												
Generalized seizure	8												
Fever >37.2°C	1												
Frequent yawning (>3 to 4 times)	1												
Sweating	1												
Nasal stuffiness	1												
Sneezing	1												
Tachypnea (respiratory rate >60/minute)	2												
Poor feeding	2												
Vomiting	2												
Loose stools	2												
Failure to thrive (weight gain ≥10% below birth weight)	2												
Excessive irritability	1 to 3												
Total score													
Initials													

Morphine sulfate solution (0.4 mg/mL) dosing schedule:

Time morphine													
Dose morphine (in mg)													
Route													
Initials													

Eat Sleep Console

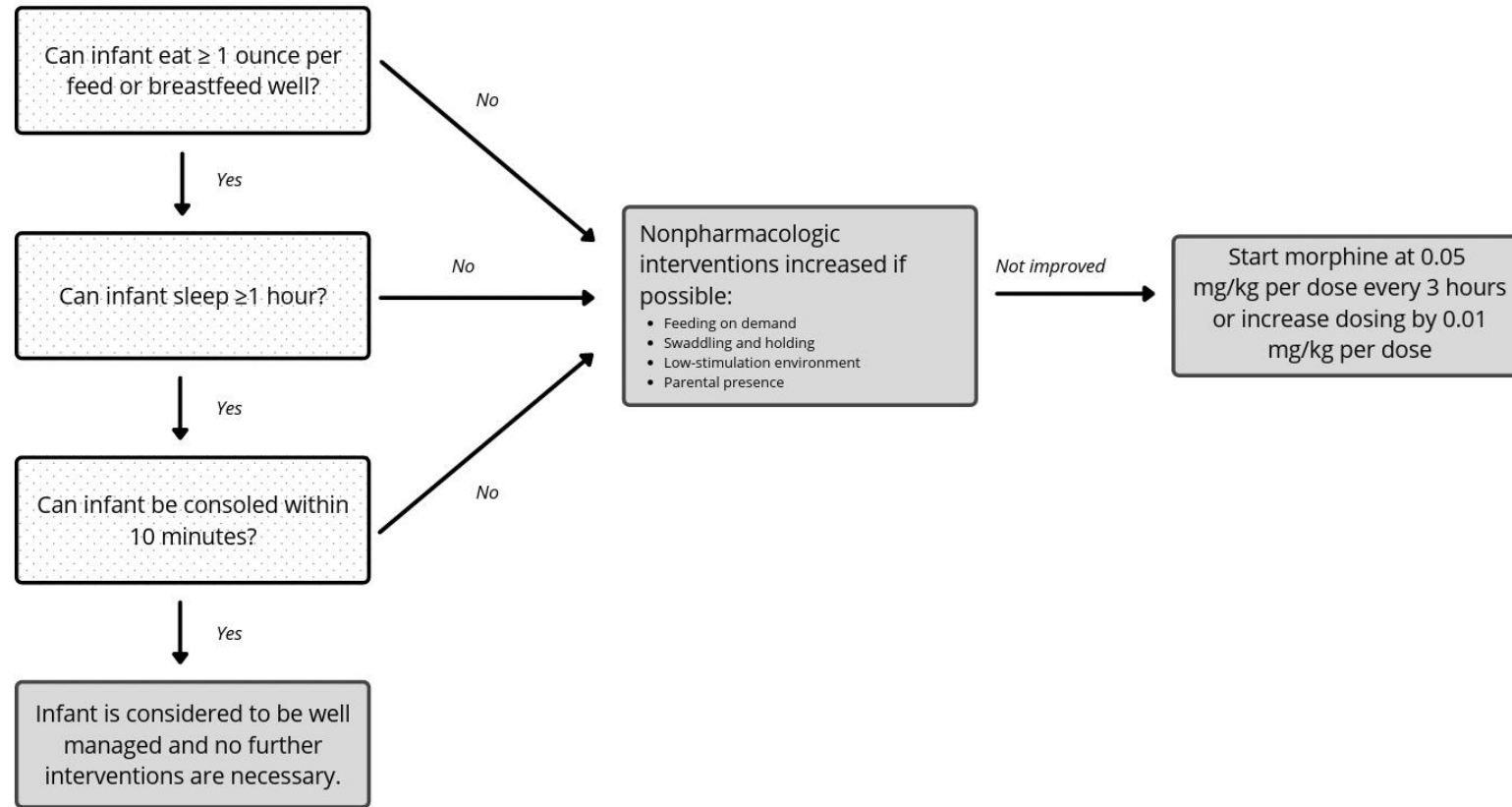
Less complex scoring
with functional milestones and focus on
parental involvement

Assess q3-4h
If >4 doses morphine/24h-->NICU

Monitor 3d with short acting opioids
5d with methadone and bup

ECS-NOW trial

- Decreased LOS (mean - 8.2 vs 14.9d)
- Reduced pharmacologic tx (19.% vs 52%)
- No increase in adverse outcomes (16.1% vs 15.8%)



2021 CPQCC Maternal Substance Exposure webinar

G R O W - W I
GATHERING THE RURAL OB WORKFORCE IN WI



CPS and Criminal Legal considerations

- WI ACT 292 “unborn child has certain basic needs ... to be free from physical harm due to the habitual lack of self control of the expectant mothers”
 - Could apply to lots of things (marathon running, eating too much sugar if GDM)
 - Allows the state to take physical custody of pregnant person and assigns lawyer to fetus but not the pregnant person, can force the person into addiction treatment, psychiatric hospitalization or even jail.
 - Enforced differentially across WI, 1200 women investigated yearly.
 - Permissive, no required reporting for positive toxicology or history of use
- ACOG: “Seeking OB-GYN care should not expose a woman to criminal or civil penalties, such as involuntary commitment, loss of custody of her children or loss of housing”
- CPS referral: should not be routine, consider for active substance use with safety related concerns
- Focus on engagement above all else, referral to resources

Resources

WI Association for Perinatal Care SUD Initiative <https://wiperinatal.org>

California Perinatal Quality Care Collaborative: <https://nastoolkit.org/>

California Bridge Buprenorphine Quick Start in Pregnancy:

<https://bridgetotreatment.org/resource/buprenorphine-quick-start-in-pregnancy/>

SAHMSA Clinical Guidance ([Clinical Guidance for Treating Pregnant and Parenting Women With Opioid Use Disorder and Their Infants \(samhsa.gov\)](https://www.samhsa.gov/clinical-guidance/treating-pregnant-parenting-women-opioid-use-disorder))

Academy of Perinatal Harm Reduction: www.perinatalharmreduction.org

National Harm Reduction Coalition Resource Center: www.harmreduction.org

UW Addiction Consultation Hotline:

Madison Area
Providers Call:
608-263-3260

Statewide
Providers Call:
1-800-472-0111



*The Consult Line is available weekdays from
8 a.m. to 5 p.m.*

G R O W - W I
GATHERING THE RURAL OB WORKFORCE IN WI




A great resource!

Join us for GROW-WI on June 24 to hear more!



 877-296-9049

 theperiscopeproject@mcw.edu

Available Monday – Friday from 8am – 4pm CST, excluding holidays.

Provider to provider perinatal psychiatric tele-consultations within 30 minutes.

E-mails returned within one business day.

G R O W – W I
GATHERING THE RURAL OB WORKFORCE IN WI



WISAM WEBINAR

WHERE EMPATHY AND EVIDENCE MEET:

Empowering Providers to Recognize and Manage Perinatal Substance Use

MAY 1, 2025 | 12:15 PM

Panelists: Elizabeth Hovis, MD, Charles Schauburger, MD, and Sreevalli Atluru, MD

Moderators: Ritu Bhatnagar, MD, MPH and Ezra Lyon, MD



G R O W - W I
GATHERING THE RURAL OB WORKFORCE IN WI



References

- Wisconsin Maternal Mortality Review Team Recommendations: 2020 Pregnancy-Associated Deaths, 2024
- Heil et al. Unintended pregnancy in Opioid abusing women. J Subst Abuse Treatment. 2011.
- Schiff et al. Fatal and Nonfatal Overdose Among Pregnant and Postpartum Women in Massachusetts. Obstet Gynecol. 2018
- Hovis. Substance Use Disorders in the Perinatal Patient. <https://the-periscope-project.org/education-modules/> accessed 2024.

THANK YOU! Questions?

Attendance

- For attendance purposes please text the code **PEHROZ** to 608-260-7097.
- Please text for attendance, **even if you are *not* claiming** continuing education credit.

Continuing Ed Credit

To receive continuing education credit:

1. Log your attendance (as above)
 - Create an ICEP account if you don't already have one.
2. Fill out the session evaluation form to receive credit – **REQUIRED for credit.**
 - A link to the evaluation will be sent after you text the code.

**Continuing Education Units with the Midwifery Education Accreditation Council are coming!