

# How We are Doing

Implementation of the Aim Hypertension Bundle

# Just a reminder



## READINESS

### *Every Unit*

- Standards for early warning signs, diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia (include order sets and algorithms)
- Unit education on protocols, unit-based drills (with post-drill debriefs)
- Process for timely triage and evaluation of pregnant and postpartum women with hypertension including ED and outpatient areas
- Rapid access to medications used for severe hypertension/eclampsia: Medications should be stocked and immediately available on L&D and in other areas where patients may be treated. Include brief guide for administration and dosage.
- System plan for escalation, obtaining appropriate consultation, and maternal transport, as needed



## RECOGNITION & PREVENTION

### *Every Patient*

- Standard protocol for measurement and assessment of BP and urine protein for all pregnant and postpartum women
- Standard response to maternal early warning signs including listening to and investigating patient symptoms and assessment of labs (e.g. CBC with platelets, AST and ALT)
- Facility-wide standards for educating prenatal and postpartum women on signs and symptoms of hypertension and preeclampsia

## RESPONSE

*Every case of severe hypertension/preeclampsia*


- Facility-wide standard protocols with checklists and escalation policies for management and treatment of:
  - Severe hypertension
  - Eclampsia, seizure prophylaxis, and magnesium over-dosage
  - Postpartum presentation of severe hypertension/preeclampsia
- Minimum requirements for protocol:
  - Notification of physician or primary care provider if systolic BP  $\geq$  160 or diastolic BP  $\geq$  110 for two measurements within 15 minutes
  - After the second elevated reading, treatment should be initiated ASAP (preferably within 60 minutes of verification)
  - Includes onset and duration of magnesium sulfate therapy

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  - Notification of physician or primary care provider if systolic BP  $\geq$  160 or diastolic BP  $\geq$  110 for two measurements within 15 minutes
  - After the second elevated reading, treatment should be initiated ASAP (preferably within 60 minutes of verification)
  - Includes onset and duration of magnesium sulfate therapy
  - Includes escalation measures for those unresponsive to standard treatment
  - Describes manner and verification of follow-up within 7 to 14 days postpartum
  - Describe postpartum patient education for women with preeclampsia
- Support plan for patients, families, and staff for ICU admissions and serious complications of severe hypertension

A solid blue square icon.

## REPORTING/SYSTEMS LEARNING

*Every unit*

- Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities
  - Multidisciplinary review of all severe hypertension/eclampsia cases admitted to ICU for systems issues
  - Monitor outcomes and process metrics
- 
- A large, light orange decorative shape at the bottom of the slide, consisting of a wide horizontal base that tapers to a point on the right side.

# What we have done recently



# Chart Reviews

- 12-16 cases per month that meet criteria for review
- 10-14 that meet criteria
- 1-2 fall outs
  - Waiting on orders
  - Procedural
  - Recent administration of medications



- Update the Admin Instructions within all OB Hypertension medications so the Diastolic Blood Pressure (DBP) notification references 110.
  - If no Intravenous access: give nifedipine 20 mg, orally.
  - If Intravenous access present: give labetalol or hydralazine.
- Remove the 'red' banner for acute cocaine and amphetamines being a contraindication for labetalol use

# Integration into the EMR

## OB NAVIGATORS

[Pre-Procedure](#)
[View MAR](#)
[Validate Data by Device](#)
[Immunization Activity](#)
[OB Hemorrhage](#)
[Protocols](#)
[Disposition](#)
[Perinatal Testing](#)
[Notify Provider](#)

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[Admission](#)
[Antepartum](#)
[Labor](#)
[IntraUterine](#)
[Preeclamp-Mag](#)
[Postpartum](#)

**Communication**

**Specimen Collect**  
Current value: Unit Collect

**FYI Flags**  
General

**PPH Protocol**

**OB Hemorrhage Toolkit**

**OB Hypertension Summary**

**Triple I EOS Toolkit**

**OB Bladder Algorithm for Labor patients**

**OB Bladder Algorithm for PP patients**

**OB MEWT Protocol**

**OB MFTI Protocol**

**OB MFTI Toolkit**

**OB Columar Insulin Toolkit**

**Release Orders & Held Orders** [Release Orders](#)

Held orders on file.

**ment Team** [Chat With All Active Members](#)

Name	Relationship	Specialty	Contact
ance, MD	Attending	--	907-222-9930
comwicaree, RN	Registered Nurse	Registered Nurse	

# Update OB Hypertension - Screenshots

▼ Vasoactives

If no IV access, order nifedipine 20 mg orally  
If IV access present, order labetalol or hydralazine

Updated Banner & Removal of a Red Banner

labetalol (TRANDATE) 5 mg/mL injection - ONE TIME PRN

labetalol (TRANDATE) 5 mg/mL injection 20 mg

20 mg, Intravenous, ONCE PRN, SBP greater than or equal to 160 or DBP greater than or equal to 110 for initial treatment of maternal hypertension per protocol, Starting Today at 1215, For 1 dose  
Begin continuous fetal monitoring if undelivered and fetus is viable. If severe BP persist for 15 min or more, give labetalol 20 mg IV over 2 min. Notify OB provider for additional orders. Repeat BP in 10 min. Acute cocaine and amphetamine use (including methamphetamine) is a contraindication for labetalol use.  
Labor and Delivery, Sign and Hold

# MEWT

Status	OB MEWT
PP C/S	0
PP C/S	0
PP Vag	0
PP Vag	0
PP C/S	0
PP Vag	0
PP Vag	0
PP Vag	0
PP C/S	1
PP Vag	0
PP C/S	0
PP C/S	0

## Row Information

Vital Signs	2	1	0	1	2
Heart Rate	<40	40-49	50-109	110-130	>130
Respiratory Rate	<10		11-23	24-30	>30
Systolic BP		<=79	80-159	>=160	
Diastolic BP		<=44	45-104	>=105	
Oxygen Saturation	<90	90-94	>=95		
Temp		<=36	36.1-38.9		>=39
FHR			<=160	>160	

**Provider Notification Parameters**  
 (Does not trigger MEWT)  
 Follow notification guidelines outlined in EPIC/standard

**Step 1: Maternal Assessment**  
 Temp, Pulse Ox, HR, RR, BP

**Normal Assessment**  
 (No abnormal triggers)  
 STOP here and continue to monitor

Abnormal

Normal

MEWT

**2 Moderate Triggers Present**

Temperature	≤36.0
O <sub>2</sub> Saturation	90-94%
Maternal HR	110-130 or 40-49
Respiratory Rate	24-30
Systolic BP	≥160 or <80
Diastolic BP	≥105 or <45
Fetal Heart Rate	>160 (infection pathway only)

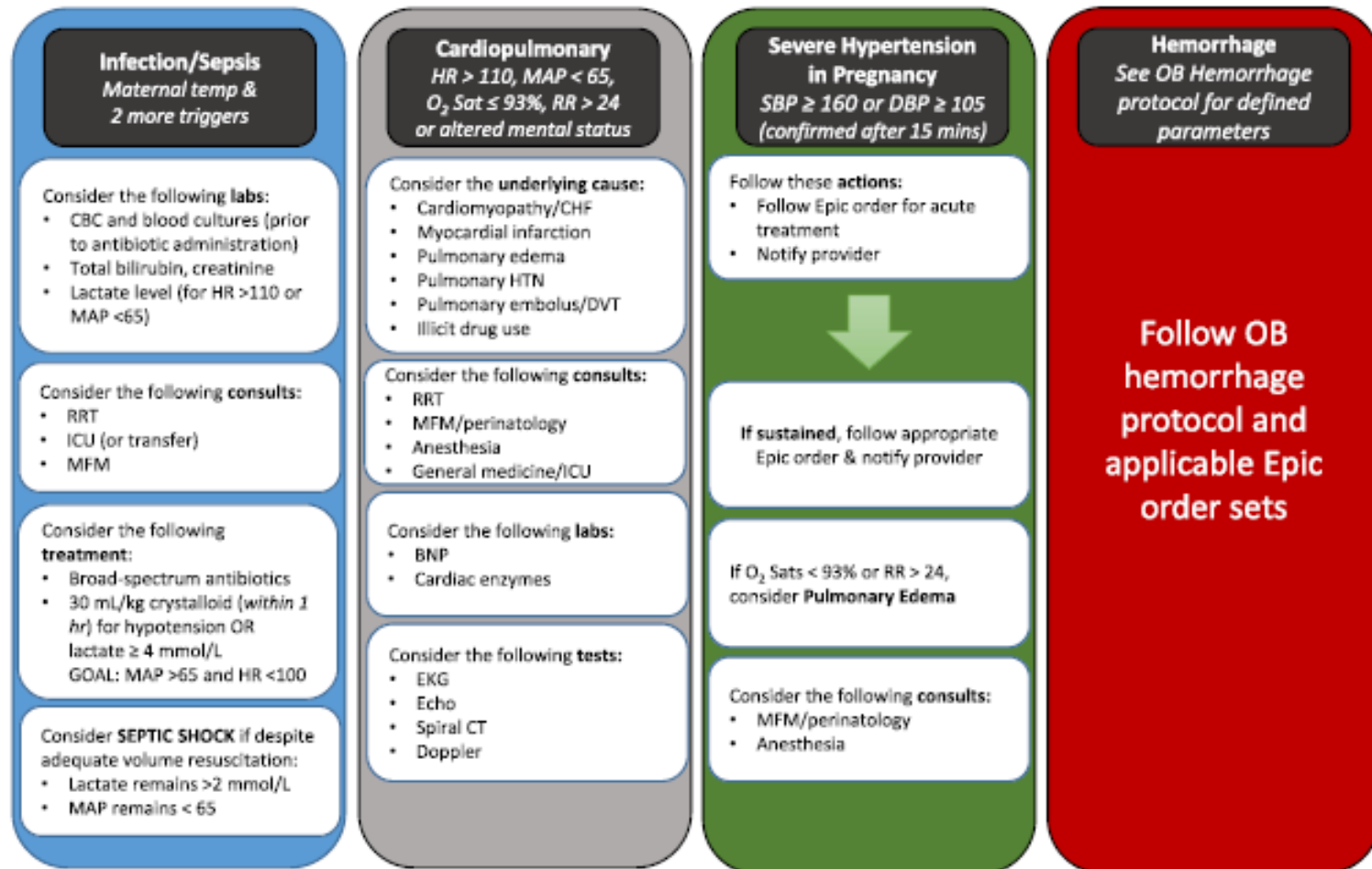
**1 Severe Trigger Present**

Temperature	≥39.0
O <sub>2</sub> Saturation	<90%
Maternal Heart Rate	>130 or <40
Respiratory Rate	>30 or <10
Other	Nurse clinically uncomfortable with patient

MEWT

**Confirmed (Sustained for 20min):**  
 ACTION: REQUEST BEDSIDE PROVIDER EVALUATION\*

**Step 2:**  
**Review triggers and consider below clinical pathways (consider overlap)**







# Current PDSA...Post event debriefs


- Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities

# PDSA 1

- Plan

- √ Create Critical Debrief Form
- √ Educate Charge Nurses about the form
- √ Create binders with forms and instructions
- √ Collect forms for 30 days
- √ Use information to make immediate changes

- **Do**
  - √ Convene 4 bedside nurses to evaluate the incidents and select 2-3 for presentation
  - √ Hold quarterly M & M on selected cases
- **Study/Act**
  - Pending

Completed by: _____	 <b>PROVIDENCE</b> Alaska Medical Center Patient Sticker
Date of Incident: _____	
Time of Incident: _____	
Unit where the event occurred: _____	

**\*\*\*Not Part of the Medical Record\*\*\***

\*\* Protected by AS 18.23.030 & AS 18.23.070(5)\*\*

Type of Incident (check all that apply)	Staff Involved/Role
Neonatal Resuscitation <input type="checkbox"/>	
Post Partum Hemorrhage <input type="checkbox"/>	
HTN Emergency <input type="checkbox"/>	
Transfer to Higher Level of Care <input type="checkbox"/>	
Delivery Complication <input type="checkbox"/>	
Prolonged second stage of labor <input type="checkbox"/>	
Other _____ <input type="checkbox"/>	

Event Description - Include as much detail as you can. If you need more space for writing, you can attach a blank piece of paper with written description.

What Went Well	Yes	No	What Could Have Gone Better
Communication with Providers	<input type="checkbox"/>	<input type="checkbox"/>	
Communication with other Departments	<input type="checkbox"/>	<input type="checkbox"/>	
Communication with Staff	<input type="checkbox"/>	<input type="checkbox"/>	
Equipment/Supplies	<input type="checkbox"/>	<input type="checkbox"/>	
Staffing	<input type="checkbox"/>	<input type="checkbox"/>	
Policies and Protocols	<input type="checkbox"/>	<input type="checkbox"/>	
Epic Documentation	<input type="checkbox"/>	<input type="checkbox"/>	
Medications	<input type="checkbox"/>	<input type="checkbox"/>	
Other _____			

Suggestions for Improvement
<input type="checkbox"/> UOR <input type="checkbox"/> Notify the Manager on Call (if needed) <input type="checkbox"/> Debrief completed

**Place Completed form in binder at Charge Nurse Station**



# Future PDSA

- Emergency Department Protocols
- OB Triage Nurse Initiated Orders