

PDSA #1

**SARASOTA MEMORIAL HOSPITAL
MAIN CAMPUS**

DRIVER 1: READINESS

Driver Impacted 1B:

Ensure rapid access to severe hypertension medication

PDSA#	1
FACILITATOR	Nurse Driven
LOCATION	OBECC, LD, MBU, Women's & Pediatric's Unit
DATES of TEST	Implemented Nurse Driven Protocol for OB Severe Hypertension, August 2022
TESTING POPULATION	All OB Patients
ESTIMATED NUMBER IMPACTED	January- 40 patients presented with severe range BP's and 37 of them received treatment on time. February- 28 patients presented with severe range BP's and all 28 received treatment and on time.
TEST DESCRIPTION	Any 2 severe Blood Pressure readings (Systolic BP ≥ 160 mmHg and/or Diastolic ≥ 100 mmHg) within the hour, the severe hypertension protocol is initiated by the nurse.

WHAT WORKED WELL

- All staff completed a mandatory HealthStream prior to implementation of new order set and process
- Education email sent to staff (image A)
- Real time education with staff from leadership and at unit shift huddles
- Easy access to place orders in emar for “Nurse Driven Protocol” (image B)
- Quick selection of requested orders (image C)
- 1st line medication given by nurse PRIOR to calling OB to ensure prompt treatment of severe hypertension
- 1st line medication (Oral Nifedipine) is loaded in Pyxis on unit floors
- “Tear Off” pad with instructions for ease of tracking times, calls, effects, etc (image D)

IMAGE A:

Education email sent to all staff to inform them of the new OB severe hypertension order set and process.

OB HYPERTENSION SEVERE ORDER SET **IS LIVE!**

PLEASE BEGIN USING IN THE OBECC AND ON THE FLOOR



- work through the meds starting with first line
- call the patient's provider within 20 minutes of med administration
- if you struggle to get ahold of the provider within 10 minutes of calling, go up the chain of command
- if you encounter issues working through the protocol with guidance from the provider, please escalate concerns to OB Leadership

IMAGE B: Order Set in emar

Requested By: ☐ Me ☒ Other: Johnson, Casey Source: 4.Protocol Order [Allergy Details](#)

Date: Time:

Session
Type: Reason:

Manual Entry Searching for ...

Order	Cost	Rating
OB Hemorrhage Order Set		
OB HIV Medication (OB Antibiotics)		
OB Hospitalists Admit/Bridge Orders		
OB Hyperemesis Order Set		
OB HYPERTENSION		
OB HYPERTENSION SEVERE Protocol ** USE FOR BLOOD PRESSURE - SYSTOLIC GREATER THAN OR EQUAL TO 160mmHg and/or DIASTOLIC GREATER THAN OR EQUAL TO 100mmHg**		
OB Intrapartum Cervidil/Cytotec Orders (OB Intrapartum Dinoprostone/Misoprostol Orders)		
OB Intrapartum Dinoprostone/Misoprostol Orders		
OB Intrapartum ERAS C-Section		

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IMAGE C: Quick selection of order set variables

OB HYPERTENSION SEVERE Protocol [14 orders of 14 are selected]

Deselect ALL Orders
Click Button to RIGHT to Deselect ALL Orders=>

PATIENT CARE

Patient Care - General

Order	Comments/Instructions
- Blood Pressure Monitoring - 2 item(s)	
<input checked="" type="checkbox"/> Patient Care General Assessment	Confirm with second blood pressure 5 minutes from initial blood pressure.
<input checked="" type="checkbox"/> Patient Care General Assessment	Obtain BP q10 minutes during administration of Antihypertensives Medications. Continue if SBP greater or equal to 160mmHg or DBP greater than or equal to...
- Patient Care - General - 4 item(s)	
<input checked="" type="checkbox"/> Seizure Precautions	Nursing to verify oxygen and suction at bedside and working; side rails upright and padded.
<input checked="" type="checkbox"/> IV Access	
<input checked="" type="checkbox"/> Patient Care General Treatment	Place EKG leads on patient if utilizing Labetalol.
<input checked="" type="checkbox"/> Call Me	Call provider within 20 minutes of initiating BP medications.

PHARMACY

Pharmacy - Anti-hypertension Meds

Order	Priority	Dose	Dose	UOM	Route	Frequency	Special Instructions	Comments
- Pharmacy - 8 item(s)								
<input checked="" type="checkbox"/> NIFEdipine 10mg Cap	STAT	10		mg	PO	ONCE		First Line: 1st Dose.
<input checked="" type="checkbox"/> NIFEdipine 20mg Cap	STAT	20		mg	PO	ONCE		First Line: 2nd dose. May administer 20 minutes after prior dose.
<input checked="" type="checkbox"/> NIFEdipine 20mg Cap	STAT	20		mg	PO	ONCE		First Line: 3rd Dose. May administer 20 minutes after prior dose.
<input checked="" type="checkbox"/> Labetalol Injection	STAT		20	mg	IV	ONCE	Hold for HR less than 60.	Second Line: 1st Dose. May administer 20 minutes after 3rd dose of nifedipine...
<input checked="" type="checkbox"/> Labetalol Injection	STAT		40	mg	IV	ONCE	Hold for HR less than 60.	Second Line: 2nd Dose. May administer 10 minutes after prior dose...
<input checked="" type="checkbox"/> Labetalol Injection 5 mg/mL	STAT		80	mg	IV	ONCE	Hold for HR less than 60.	Second Line: 3rd Dose. May administer 10 minutes after prior dose...
<input checked="" type="checkbox"/> hydrALAZINE Inj	STAT		5	mg	IV	ONCE		Third Line: 1st Dose. May administer 10 minutes after 3rd dose of labetalol...
<input checked="" type="checkbox"/> hydrALAZINE Inj	STAT		10	mg	IV	ONCE		Third Line: 1st Dose. May administer 10 minutes after prior dose...

IMAGE D: “Tear Off” pad for nurse tracking

Severe Hypertensive Emergency: START Date/Time _____

FIRST: Nifedepine PO Every 20 minutes	SECOND: Labetalol IV (over 2 minutes) Every 10 minutes	THIRD: Hydralazine IV (over 2 minutes) Every 20 minutes
Initial: 10mg, Date/Time <input type="text"/>	Initial: 20mg, Date/Time <input type="text"/>	Initial: 5-10 mg, Date/Time <input type="text"/>
Second: 20 mg, Date/Time <input type="text"/>	Second: 40 mg, Date/Time <input type="text"/>	Second: 10 mg, Date/Time <input type="text"/>
Third: 20mg, Date/Time <input type="text"/>	Third: 80mg, Date/Time <input type="text"/>	

***Patient needs to be on cardiac monitor**

WHAT DIDN'T WORK

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Situation arose where new providers questioned the practice of the nurse administering PO Nifedipine before making a call to the physician

RESPONSE:

- Discuss the protocol and reasoning
- Encourage conversation with medical staff
- Ensure communication is appropriate

WHAT DID WE LEARN THAT WAS UNEXPECTED

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ISSUE:

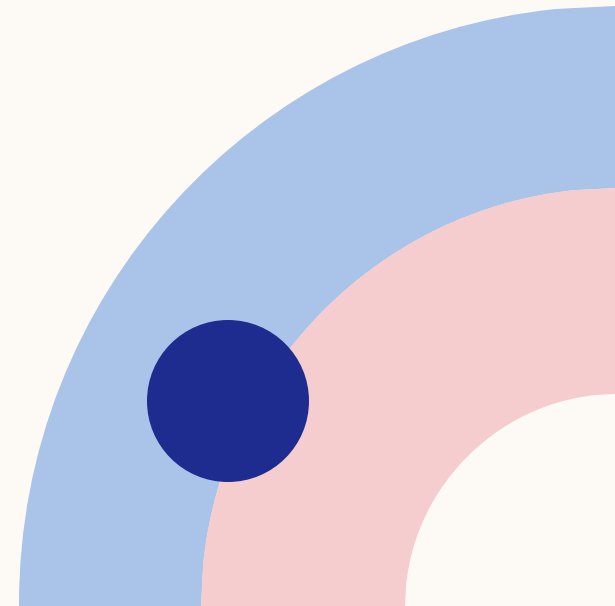
- Nurses were nervous at first to administer the 1st line medication PRIOR to calling the provider

RESPONSE:

- Continued education and assurance with staff
- Discussions on need for timely treatment and rationale of the “why”
- Assure staff that the protocol has been approved by all providers

NEXT STEPS

- Continued staff education
- Continued provider education
- Providing quicker recognition and treatment of severe hypertension
- Continued patient education for home medications
- Implementation of blood pressure cuff distribution and patient education on use upon discharge
- Plan of care following discharge



THANK YOU