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Severe Hypertension in Pregnancy Patient Safety Bundle (2022)

Core Data Collection Plan
Version 1.0 June 2022



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Measurement Statement: Elements of AIM’s Severe Hypertension in Pregnancy patient safety bundle can be implemented across a diversity of care settings, including outpatient, urgent care, and inpatient obstetric and emergency settings. Measurement development and revisions for AIM’s Severe Hypertension in Pregnancy patient safety bundle focus on inpatient obstetric settings, with expansion of measurement to include emergency departments. Quality improvement measurement and best practices should be implemented across all settings that may provide care to pregnant and postpartum people with hypertensive disorders with appropriate modifications to data collection.

Outcome

Metric	Name	Description	Notes
O1	Severe Maternal Morbidity (excluding transfusion codes alone)	<p>Report N/D</p> <p>Denominator: All qualifying pregnant and postpartum people during their birth admission</p> <p>Numerator: Among the denominator, those who experienced severe maternal morbidity, excluding those who experienced transfusion alone</p>	Disaggregate by race and ethnicity, payor
O2	Severe Maternal Morbidity among People with Preeclampsia (excluding transfusion codes alone)	<p>Report N/D</p> <p>Denominator: All qualifying pregnant and postpartum people during their birth admission with preeclampsia</p> <p>Numerator: Among the denominator, those who experienced severe maternal morbidity, excluding those who experienced transfusion alone</p>	Disaggregate by race and ethnicity, payor

Process

Metric	Name	Description	Notes
P1	Timely Treatment of Persistent Severe Hypertension	<p>Report N/D</p> <p>Denominator: Pregnant and postpartum people with acute-onset severe hypertension that persists for 15 minutes or more, including those with preeclampsia, gestational or chronic hypertension</p> <p>Numerator: Among the denominator, those who were treated within 1 hour with IV Labetalol, IV Hydralazine, or PO Nifedipine. The 1 hour is measured from the first severe range BP reading, assuming confirmation of persistent elevation through a second reading.</p>	<ul style="list-style-type: none">• Disaggregate by race/ethnicity, payor• Full measurement specifications can be found in this SMFM Special Statement

Metric	Name	Description	Notes
P2	Scheduling of Postpartum Blood Pressure and Symptoms Checks	<p>P2A: Severe Hypertension During the Birth Admission Report N/D Denominator: Pregnant and postpartum people during their birth admission with acute-onset severe hypertension that persists for 15 minutes or more, including those with preeclampsia, gestational or chronic hypertension Numerator: Among the denominator, those who had a postpartum blood pressure and symptoms check scheduled to occur within 3 days after their birth hospitalization discharge date</p> <p>P2B: All Other Hypertensive Disorders During Pregnancy Report N/D Denominator: Pregnant and postpartum people during their birth admission with a documented diagnosis of preeclampsia, gestational or chronic hypertension, excluding those who experienced persistent severe hypertension during their birth admission (see P2A) Numerator: Among the denominator, those who had a postpartum blood pressure and symptoms check scheduled to occur within 7 days after their birth hospitalization discharge date</p>	<ul style="list-style-type: none"> • Disaggregate by race/ethnicity, payor • Exclude those who were transferred out of your facility prior to discharge • Blood pressure measurement and symptoms checks can be scheduled at any point during the 3- and 7-day time periods and do not necessarily require an in-person visit • Planning and considerations should be made for patients with weekend discharges and/or those with 3- and 7-day follow up periods that fall on the weekend. These patients should be included in the denominator as part of quality measurement • See ACOG Committee Opinion 736 on Optimizing Postpartum Care

Metric	Name	Description	Notes
P3	OB Provider Education	<p>P3A: Provider education on severe hypertension and preeclampsia Report estimate in 10% increments (round up) At the end of this reporting period, what cumulative proportion of delivering physicians and midwives has completed within the last two years an education program on Severe Hypertension/ Preeclampsia that includes the unit-standard protocols and measures?</p> <p>P3B: Provider education on respectful and equitable care Report estimate in 10% increments (round up) At the end of this reporting period, what cumulative proportion of OB providers has completed within the last 2 years the last 2 years an education program on respectful and equitable care?</p>	

Metric	Name	Description	Notes
P4	OB Nursing Education	<p>P4A: Nursing education on severe hypertension and preeclampsia Report estimate in 10% increments (round up) At the end of this reporting period, what cumulative proportion of OB nurses (including L&D and postpartum) has completed within the last two years an education program on Severe Hypertension/Preeclampsia that includes the unit-standard protocols and measures?</p> <p>P4B: Nursing education on respectful and equitable care Report estimate in 10% increments (round up) At the end of this reporting period, what cumulative proportion of OB nurses (including L&D and postpartum) has completed within the last 2 years an education program on respectful and equitable care?</p>	
P5	ED Provider & Nursing Education - Hypertension and Pregnancy	<p>Report estimate in 10% increments (round up) At the end of this reporting period, what cumulative proportion of clinical ED providers and nursing staff has completed within the last 2 years education on signs and symptoms of severe hypertension and preeclampsia in pregnant and postpartum people?</p>	

Metric	Name	Description	Notes
P6	Unit Drills	<p>Report # of drills and the drill topics</p> <p>P6a: Report integer At the end of this reporting period, how many OB drills (In Situ and/or Sim Lab) were performed on your unit for any maternal safety topic?</p> <p>P6b: Report TRUE/FALSE for the following drill topics: Hemorrhage, Severe Hypertension, Other At the end of this reporting period, what topics were covered in the OB drills?</p>	Ideally, drills related to severe hypertension will cover all sequelae, such as preeclampsia

Structure

Metric	Name	Description	Notes
S1	Patient Event Debriefs	Has your department established a standardized process to conduct debriefs with patients after a severe event?	<ul style="list-style-type: none"> • Include patient support networks during patient event debriefs, as requested • Severe events may include the The Joint Commission sentinel event definition, severe maternal morbidity, or fetal death
S2	Clinical Team Debriefs	Has your department established a system to perform regular formal debriefs with the clinical team after cases with major complications?	Major complications will be defined by each facility based on volume, with a minimum being The Joint Commission Severe Maternal Morbidity Criteria

Metric	Name	Description	Notes
S3	Multidisciplinary Case Reviews	Has your hospital established a process to perform multidisciplinary systems-level reviews on cases of severe maternal morbidity (including, at a minimum, birthing patients admitted to the ICU or who received ≥ 4 units RBC transfusions)?	For greatest impact, we suggest that in addition to the minimum instances for review defined in S3, hospital teams also implement missed opportunity reviews for key bundle process measures (e.g., instances in which acute onset severe hypertension was not treated within 1 hour) in both unit debriefs and multidisciplinary case reviews
S4	Unit Policy and Procedure	Does your hospital have a Severe HTN/ Preeclampsia policy and procedure (reviewed and updated in the last 2 years) that provides a unit-standard approach to: <ul style="list-style-type: none"> • S4A: Measuring blood pressure • S4B: Treatment of severe hypertension/preeclampsia, • S4C: The use of seizure prophylaxis, including treatment for overdose 	
S5	Patient Education Materials on Urgent Postpartum Warning Signs	Has your department developed/curated patient education materials on urgent postpartum warning signs that align with culturally and linguistically appropriate standards?	
S6	Emergency Department (ED) Screening for Current or Recent Pregnancy	Has your ED established or continued standardized verbal screening for current pregnancy and pregnancy in the past year as part of its triage process?	

Optional Process Measure: For the sake of streamlining the above project measurement strategy and due to it also being incorporated as a structure measure (see **S1 Patient Event Debriefs**), this measure has been included as optional but highly encouraged.

Optional

Metric	Name	Description	Notes
OP1	Patient Support After Persistent Severe Hypertension	<p>Report N/D</p> <p>Denominator: Pregnant and postpartum people with acute-onset severe hypertension that persists for 15 minutes or more, including those with preeclampsia, gestational or chronic hypertension</p> <p>Numerator: Among the denominator, those who received a verbal briefing on their persistent severe hypertension by their care team before discharge</p>	<ul style="list-style-type: none"> • Disaggregate by race and ethnicity, payor • The denominator criteria are established for the purposes of standardized data collection and reporting and are not meant to represent all instances in which a verbal briefing with a patient may be appropriate

AIM Severe Hypertension in Pregnancy ICD10 Codes List

Code	Long Description
O111	Pre-existing hypertension with pre-eclampsia, first trimester
O112	Pre-existing hypertension with pre-eclampsia, second trimester
O113	Pre-existing hypertension with pre-eclampsia, third trimester
O114	Pre-existing hypertension with pre-eclampsia, complicating childbirth
O115	Pre-existing hypertension with pre-eclampsia, complicating the puerperium
O119	Pre-existing hypertension with pre-eclampsia, unspecified trimester
O1410	Severe pre-eclampsia, unspecified trimester
O1412	Severe pre-eclampsia, second trimester
O1413	Severe pre-eclampsia, third trimester
O1414	Severe pre-eclampsia complicating childbirth
O1415	Severe pre-eclampsia, complicating the puerperium
O1420	HELLP syndrome (HELLP), unspecified trimester
O1422	HELLP syndrome (HELLP), second trimester
O1423	HELLP syndrome (HELLP), third trimester
O1424	HELLP syndrome (HELLP), complicating childbirth
O1425	HELLP syndrome (HELLP), complicating the puerperium
O1500	Eclampsia complicating pregnancy, unspecified trimester
O1502	Eclampsia complicating pregnancy, second trimester
O1503	Eclampsia complicating pregnancy, third trimester
O151	Eclampsia complicating labor
O152	Eclampsia complicating the puerperium
O159	Eclampsia, unspecified as to time period

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