ALLIANCE FOR INNOVATION ON MATERNAL HEALTH

AIM Severe Hypertension in Pregnancy Data Transition Instructions & Summary of Revisions

Introduction

The purpose of this document is to aid in the data collection transition from the original Severe Hypertension in Pregnancy (SHTN) patient safety bundle (PSB) to the 2022 revised SHTN PSB. It will be useful to state teams and jurisdiction teams who are currently implementing AIM's original SHTN PSB or are planning to implement AIM's 2022 revised SHTN PSB.

This document contains details regarding AIM Data Center instructions and logistics for transitioning from the original to the revised SHTN PSB Data Collection Plan; frequently asked questions (FAQs) to support the data transition; as well as a summary of changes made to AIM's data collection plan as the SHTN PSB to aid in decision making. State and jurisdiction teams may refer to the revised Severe Hypertension in Pregnancy PSB Core Data Collection Plan as they review this document.

AIM Data Center Instructions and Logistics

Determine which of the scenarios below most closely reflects your state or jurisdiction team's bundle implementation and data collection progress and use the corresponding instructions to inform transition planning.

*My state or jurisdiction teams **has** collected data using AIM's **original** SHTN Data Collection Plan.*

1. Review the Summary of Changes table.
2. Prepare to transition to the revised metrics which will go live in the AIM Data Center on October 1, 2022. All dashboards in the AIM Data Center will be transitioned to the revised metrics at this time.
3. It is not necessary to collect data for all newly added metrics, but it is encouraged if feasible. If facility teams report data using the AIM Data Center, state and jurisdiction teams should determine which metrics their facility teams should continue to report data and communicate forthcoming AIM Data Center updates and instructions for data collection and reporting. Note that facility teams will be unable to report data on discontinued metrics for the reporting period beginning October 1, 2022.

4. Your historical data will continue to be available in the AIM Data Center.
    a. No original format data for the period beginning October 1, 2022, will be accepted. All dashboards in the AIM Data Center will be transitioned to the 2022 revised SHTN Data Collection Plan on October 1, 2022.
    b. If you have original format data for the period prior to October 1, 2022, you will continue to be able to enter it into the AIM Data Center.

*My state or jurisdiction team **has never** collected data using AIM's **original** SHTN Data Collection Plan.*

1. If your state or jurisdiction team has never collected data using the original SHTN Data Collection Plan, please use the revised SHTN Data Collection Plan for project planning. If using the AIM Data Center for facility team data collection and reporting, metrics for the revised SHTN Data Collection Plan will be available for the reporting period beginning October 1, 2022.
2. If your state team or PQC would like to begin collecting data sooner than the reporting period beginning October 1, 2022, and you have your own data collection system (e.g., REDCap), then AIM recommends using the revised metrics.

FAQs

When can facilities report their first period of data for revised HEM metrics in the AIM Data Center?

Facilities can report their first period of data for revised SHTN metrics for the reporting period beginning October 1, 2022.

My state team or jurisdiction team collected data based on AIM's original SHTN Data Collection Plan but never submitted this data to the AIM Data Center. How should I follow AIM's transition instructions?

Please follow the transition instructions identified for "My state team or PQC has collected data using AIM's original SHTN Data Collection Plan" above.

My state team or jurisdiction team wants to collect data for both the original and revised SHTN Data Collection Plans. Is this possible?

Yes, but with some caveats. Only the revised measures will be available to populate with data collected for the reporting period beginning October 1, 2022, forward. You may only enter pre-October 2022 original data into the AIM Data Center. You will need to track any original measures outside of the AIM Data Center for the reporting period beginning October 1, 2022, unless they are retained in the revised plan.

Optional SHTN metrics that can be added to revised SHTN dashboards include a process measure for patient support after persistent severe hypertension.

Please find these cross-referenced metrics outlined in more detail in the table below.

Summary of Changes

SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 1 (OLD)	SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 2 (NEW)	RATIONALE
OUTCOME MEASURES		
SEVERE MATERNAL MORBIDITY (O1)	**Removed**	SMM *with transfusions* was removed from the formal SMM algorithm, as coding for transfusions has data quality issues that affect reliability and validity. AIM updated its data collection plan to align with the SMM algorithm.
N/A	**Retained** **O1: Severe Maternal Morbidity (excluding transfusion codes alone)** **Denominator:** All qualifying pregnant and postpartum people during their birth admission **Numerator:** Among the denominator, those who experienced a severe maternal morbidity, excluding those who experienced transfusion alone	Originally O2
SEVERE MATERNAL MORBIDITY AMONG PEOPLE WITH HYPERTENSIVE DISORDERS (O3)	**Removed**	SMM *with transfusions* was removed from the formal SMM algorithm, as coding for transfusions has data quality issues that affect reliability and validity. AIM updated its data collection plan to align with the SMM algorithm.

SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 1 (OLD)	SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 2 (NEW)	RATIONALE
O2: Severe Maternal Morbidity Among People with Hypertensive Disorders (excluding transfusion codes alone) **Denominator:** All qualifying pregnant and postpartum people during their birth admission with hypertensive disorders **Numerator:** Among the denominator, those who experienced a severe maternal morbidity, excluding those who experienced transfusion alone	**Revised** **O2: Severe Maternal Morbidity Among People with Preeclampsia (excluding transfusion codes alone)** **Denominator:** All qualifying pregnant and postpartum people during their birth admission with preeclampsia **Numerator:** Among the denominator, those who experienced a severe maternal morbidity, excluding those who experienced transfusion alone	Originally O4 Language updated to more accurately reflect AIM's ICD-10 codes list used to subset the SMM denominator.
PROCESS MEASURES		
N/A	**Retained** **Timely Treatment of Persistent Severe Hypertension** **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 **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.	

SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 1 (OLD)	SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 2 (NEW)	RATIONALE
N/A	**Added** **Scheduling of Postpartum Blood Pressure and Symptoms Checks** **P2A: Severe Hypertension During the Birth Admission** **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 **P2B: All Other Hypertensive Disorders During Pregnancy** **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 P5A) **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	Timely postpartum follow up care for people with hypertensive disorders aligns with ACOG Committee Opinion 736 on Optimizing Postpartum Care and may help facilitate the timely recognition and treatment of hypertensive emergencies

SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 1 (OLD)	SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 2 (NEW)	RATIONALE
OB PROVIDER EDUCATION 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?	**Revised** **P3A: OB Provider Education on Severe Hypertension and Preeclampsia** 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? **P3B: OB Provider Education on Respectful and Equitable Care** At the end of this reporting period, what cumulative proportion of OB providers had received in the last 2 years an education program on respectful and equitable care?	Addition of respectful and equitable care (P2B).

SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 1 (OLD)	SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 2 (NEW)	RATIONALE
OB NURSING EDUCATION 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?	**Revised** **P4A: OB Nursing Education on Severe Hypertension and Preeclampsia** 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? **P4B: OB Nursing Education on Respectful and Equitable Care** At the end of this reporting period, what cumulative proportion of OB nurses (including L&D and postpartum) had received within the last 2 years an education program on respectful and equitable care?	Addition of respectful and equitable care (P2B).
N/A	**Added** **ED Provider and Nursing Education – Severe Hypertension in Pregnancy and Preeclampsia** At the end of this reporting period, what cumulative proportion of clinical ED providers and nursing staff has received within the last two years education on signs and symptoms of severe hypertension and preeclampsia in pregnant and postpartum people?	ED provider and nursing education on signs and symptoms of severe hypertension and preeclampsia in pregnant and postpartum people may help facilitate timely recognition and response to emergencies.

SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 1 (OLD)	SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 2 (NEW)	RATIONALE
N/A	**Retained** **Unit Drills (P6)** **P6A:** In this reporting period, how many OB drills (In Situ and/or Sim Lab) were performed on your unit for any maternal safety topic? **P6B:** In this reporting period, what topics were covered in the OB drills?	
STRUCTURE MEASURES		
PATIENT, FAMILY & STAFF SUPPORT (S1) **REPORT COMPLETION DATE** Has your hospital developed OB specific resources and protocols to support patients, family**,** and staff through major OB complications?	**Revised** **Patient Event Debriefs (S1)** Has your department established a standardized process to conduct debriefs with patients after a severe event?	Now specific to patients only. This will use the new Structure Measure Likert-type scale ranging from *1: Not started* to *5: Fully in place*. Details on this new measurement scale will be communicated separately.

SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 1 (OLD)	SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 2 (NEW)	RATIONALE
DEBRIEFS (S2) **REPORT START DATE** Has your hospital established a system in your hospital to perform regular formal debriefs after cases with major complications?	**Revised** **Clinical Team Debriefs (S2)** Has your department established a system to perform regular formal debriefs with the clinical team after cases with major complications?	Reworded for clarity, intent remains unchanged. This will use the new Structure Measure Likert-type scale ranging from *1: Not started* to *5: Fully in place*. Details on this new measurement scale will be communicated separately.
MULTIDISCIPLINARY CASE REVIEWS (S3) **REPORT START DATE** 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 receiving ≥ 4 units RBC transfusions?	**Revised** **Multidisciplinary Case Reviews (S3)** 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 receiving ≥ 4 units RBC transfusions)?	This will use the new Structure Measure Likert-type scale ranging from *1: Not started* to *5: Fully in place*. Details on this new measurement scale will be communicated separately.

SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 1 (OLD)	SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 2 (NEW)	RATIONALE
UNIT POLICY AND PROCEDURE (S5) **REPORT COMPLETION DATE** Does your hospital have a Severe HTN/Preeclampsia policy and procedure (reviewed and updated in the last 2-3 years) that provides a unit-standard approach to measuring blood pressure, treatment of Severe HTN/Preeclampsia, administration of Magnesium Sulfate, and treatment of Magnesium Sulfate overdose?	**Revised** **Unit Policies and Procedures (S4)** 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: • **S4A:** Measuring blood pressure, • **S4B**: Treatment of severe hypertension/preeclampsia • **S4C:** The use of seizure prophylaxis, including treatment overdose	This will use the new Structure Measure Likert-type scale ranging from *1: Not started* to *5: Fully in place*. Details on this new measurement scale will be communicated separately.
EHR INTEGRATION (S6)	**Removed**	No specific mention of EHR in bundle language. Also, non-specific**,** and difficult to assess on the aggregate level in a meaningful way.
	Added **Patient Education Materials on Urgent Postpartum Warning Signs (S5)** Has your department developed/curated patient education materials on urgent postpartum warning signs that align with culturally and linguistically appropriate standards?	This will use the new Structure Measure Likert-type scale ranging from *1: Not started* to *5: Fully in place*. Details on this new measurement scale will be communicated separately.

SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 1 (OLD)	SEVERE HYPERTENSION IN PREGNANCY BUNDLE VERSION 2 (NEW)	RATIONALE
	Added **Emergency Department (ED) Screening for Current or Recent Pregnancy (S6)** Has your ED established or continued standardized verbal screening for current pregnancy and pregnancy in the past year as part of its triage process?	This will use the new Structure Measure Likert-type scale ranging from *1: Not started* to *5: Fully in place*. Details on this new measurement scale will be communicated separately.

Additional questions? Contact the AIM Data Team at aimdatasupport@acog.org.