



## *A PA PQC Initiative to Adopt the AIM Severe Hypertension and Racial/Ethnic Disparities Bundles*

### *What is AIM?*

On October 1, Pennsylvania became the 38<sup>th</sup> state to join the Alliance for Innovation on Maternal Health (AIM). AIM is a national data-driven maternal safety and quality improvement initiative that is funded by the Health Resources and Services Administration (HRSA) and operated by the American College of Obstetricians and Gynecologists (ACOG). AIM provides implementation support and data tracking assistance to participating states to support the adoption of AIM's patient safety bundles. AIM also enables states to track their success on improving maternal outcomes through AIM's national data center.

### *Which AIM Patient Safety Bundles Did PA Select?*

Through AIM, the PA PQC will be rolling out an integrated version of the [AIM Severe Hypertension in Pregnancy Bundle](#) and the [AIM Racial/Ethnic Disparities Bundle](#) as an action arm of the PA Maternal Mortality Review Committee (MMRC). The PA PQC AIM Planning Task Force integrated the two bundles, and the integrated version is called the [PA AIM Bundle](#).

The selection of the AIM Severe Hypertension bundle was informed by findings from analyses of hospital discharge data from the PA Health Care Cost Containment Council (PHC4), showing greater racial disparities for preeclampsia/eclampsia than for hemorrhage and a greater increase in eclampsia/preeclampsia rates among black women between 2015 and 2019 compared to the increases in hemorrhage rates.

This PA AIM initiative is meant to complement the other focus areas of the PA PQC: maternal OUD, NAS, access to immediate postpartum long-acting reversible contraception (LARC), and perinatal depression screening and follow-up.

### *How Does AIM Fit Into the PA PQC's Existing Goals and Initiatives?*

As an action arm of the PA MMRC, the PA PQC will have three initiatives in 2021:

- an expanded focus on maternal OUD, NAS, and contraceptive care, including access to immediate postpartum LARC;
- Moving on Maternal Depression (MOMD) to improve prenatal and postpartum depression screening and follow-up rates and reduce associated racial/ethnic disparities; and
- the PA AIM initiative to adopt the [PA AIM Bundle](#) to improve severe hypertension in pregnancy treatment and reduce associated racial/ethnic disparities.

### *Which PA PQC Birth Hospitals May Join the PA PQC AIM Initiative?*

Eligible birth hospitals include those who meet all three of the following criteria:

- are members of the PA PQC
- have completed, or are actively working on, at least one NAS or OUD quality improvement project, *OR* have documentation showing that the core SUD/OUN and NAS screening, diagnosis, and treatment components are already in place at the hospital
- have at least one improvement opportunity related to the AIM Severe Hypertension and Racial/Ethnic Disparities Bundles

### *What are the Objectives of the PA PQC AIM Initiative?*

The PA PQC anticipates that 15 PA PQC birth hospitals will participate in the PA AIM initiative. Among the participating AIM PA PQC hospitals, the PA PQC AIM initiative aims to:<sup>1</sup>

- Reduce the rate of severe maternal morbidity (SMM) among those with eclampsia/preeclampsia by 25% and reduce the racial/ethnic disparities for that measure by 25% by August 2022
- Increase the proportion of birthing patients with acute-onset severe hypertension who are treated within 60 minutes to 75% across races/ethnicities by August 2022

### *What is the Timeline and Scope of Work for the PA PQC's AIM Initiative?*

The PA PQC's AIM initiative was **announced** during the PA PQC's [December 16 Learning Session](#).

The PA PQC birth hospitals are invited to:

- express interest in participating in the PA PQC AIM initiative via this [survey](#),
- identify a multi-disciplinary quality improvement AIM team, and
- complete an [AIM Facility Readiness Assessment Tool](#) by March 1, 2021.

To complete the **onboarding process**, a Memorandum of Understanding (MOU) and Data Use Agreement (DUA) will then be completed in March 2021.

In April 2021, the participating PA PQC AIM hospitals will begin to implement the **PA AIM Bundle**. This quality improvement work will continue through August 2022. During this **implementation period**, the participating PA PQC AIM hospitals will:

- Further build out and structure their AIM quality improvement teams
- Hold quality improvement team meetings
- Develop protocols and quality improvements plans
- Organize trainings to rollout the improvements
- Make continuous improvements through quality improvement cycles
- Attend the PA PQC's Learning Sessions
- Submit a quarterly [AIM Survey](#) starting with January-March 2021 as the baseline period
- Submit numerators/denominators for the [AIM process measure—time to severe hypertension treatment](#)—on a quarterly basis and annually by race/ethnicity through the PA PQC Data Portal, starting with January-March 2021 as the baseline period for the quarterly submissions

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<sup>1</sup> The SMART objectives were informed by: (a) the required AIM measures; (b) the current results of the Severe Maternal Morbidity and Time to Severe Hypertension Treatment measures that the PA PQC hospitals have already submitted to the PA PQC Data Portal; and (c) the goals and results of the Illinois PQC's hypertension initiative.

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To support this implementation work, the PA PQC will connect AIM provider teams to their PA PQC coaches, incorporate AIM-related content into the [Learning Sessions and Quality Improvement Collaborative Meetings](#), post AIM-related [resources](#) on its website, and create an opportunity for the PA PQC AIM birth hospitals to apply for a **PA AIM Innovation Award**. The PA PQC will also submit de-identified hospital-level data to the AIM Data Portal for national benchmarking purposes.

There will be a **sustaining period** from September 2022 through August 2023. During this time, the participating PA PQC AIM hospitals will continue to submit the quarterly surveys and data to observe whether the improvements can be sustained over time.

Throughout the AIM initiative, the Pennsylvania Department of Health will analyze hospital discharge data from PHC4 to track the AIM outcome measures listed below on a quarterly basis. The first two measures will be tracked annually by race/ethnicity (NH white, NH black, Hispanic, and NH other). As a result, PA PQC hospitals will no longer be required to enter the Severe Maternal Morbidity outcome measure in the PA PQC Data Portal. However, the PA PQC AIM teams will be encouraged to continue to collect and report their own SMM data on a quarterly basis for more real-time feedback, especially if your PA PQC team has already put in place a system to track this outcome measure.

1. **Severe Maternal Morbidity**
  - Denominator: All mothers during their birth admission, excluding ectopics and miscarriages
  - Numerator: Among the denominator, all cases with any SMM code
2. **Severe Maternal Morbidity (excluding transfusion codes)**
  - Denominator: All mothers during their birth admission, excluding ectopics and miscarriages
  - Numerator: Among the denominator, all cases with any non-transfusion SMM code
3. **Severe Maternal Morbidity among Preeclampsia Cases**
  - Denominator: All mothers during their birth admission, excluding ectopics and miscarriages, with one of the following diagnosis codes: Severe Preeclampsia, Eclampsia, and Preeclampsia superimposed on pre-existing hypertension
  - Numerator: Among the denominator, cases with any SMM code
4. **Severe Maternal Morbidity (excluding transfusion codes) among Preeclampsia Cases**
  - Denominator: All mothers during their birth admission, excluding ectopics and miscarriages, with one of the following diagnosis codes: Severe Preeclampsia, Eclampsia, and Preeclampsia superimposed on pre-existing hypertension
  - Numerator: Among the denominator, all cases with any non-transfusion SMM code

### ***What is the PA AIM Innovation Award?***

The PA AIM Innovation Award will be announced in 2021, and the participating PA AIM birth hospitals will be eligible to apply. The financial award will go to a Level I or II birth hospital that has higher rates of severe hypertension and teams up with a Level III or IV birth hospital through the PA AIM initiative. The larger birth hospital will work with the smaller birth hospital to spread their AIM-related innovations to the smaller hospital and assist them with adopting the AIM Severe Hypertension in Pregnancy Bundle. The application, including the funding amount, will be announced in 2021.

### *Which Structure and Process Measures will the PA AIM Birth Hospitals Submit via the PA AIM Survey?*

The [PA AIM Survey](#) is designed to collect the following structure and process measures:

#### Structure Measures

- Has your hospital developed OB specific resources and protocols to support patients, family and staff through major OB complications? (Report Completion Date)
- Has your hospital established a system in your hospital to perform regular formal debriefs after cases with major complications? (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  $\geq$  4 units RBC transfusions? (Report Start 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? (Report Completion Date)
- \*Does your hospital engage diverse patient, family, and community advocates who can represent important community partnerships on quality and safety leadership teams? (Report Start Date)
- \*Has your hospital implemented quality improvement projects that target disparities in healthcare access, treatment, and outcomes related to SMM or hypertension? (Report Start Date)
- Were some of the recommended Severe HTN/Preeclampsia bundle processes (i.e. order sets, tracking tools) integrated into your hospital's Electronic Health Record system? (Report Completion Date)
- \*Has your hospital established a process to collect patient-reported feedback on respect or equitable care? (Report Start Date, Describe the Process, and Report the Frequency that Feedback is Collected)

#### Process Measures

- In this quarter, how many OB drills (In Situ and/or Sim Lab) were performed on your unit for any maternal safety topic? (Report # of Drills and the drill topics)
- In this quarter, what topics were covered in the OB drills? (Report # of Drills and the drill topics)
- 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? (Report estimate in 10% increments)
- 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? (Report estimate in 10% increments)
- \*At the end of this quarter, what cumulative proportion of staff have completed (within the last 2 years) an education program on racial disparities and their causes, implicit bias, anti-racism strategies, or cultural humility? (Report estimate in 10% increments, the Education Topics, and the Types of Trainers and Modalities)

*\*The structure and process measures with an asterisks were added by the PA AIM Planning Task Force due to the focus on reducing racial/ethnic disparities. All the other measures were created by AIM.*

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### ***Which Process Measures will the PA AIM Birth Hospitals Submit via the PA PQC Data Portal?***

The PA PQC AIM birth hospitals will be reporting the numerator and denominator to the PA PQC Data Portal for the following AIM process measure on a quarterly basis:

#### ***Time to Severe Hypertension Treatment***

- **Denominator:** Birthing patients with acute-onset severe hypertension that persists for 15 minutes or more, including those with preeclampsia, gestational or chronic hypertension
- **Numerator:** Among the denominator, birthing patients who were treated within 1 hour with IV Labetalol, IV Hydralazine, or PO Nifedipine.

This same process measure will also be reported by race/ethnicity (NH white, NH black, Hispanic, and NH Other) on an annual basis by the PA PQC AIM birth hospitals. Please [click here](#) for the measurement specifications.

### ***Questions***

For questions about the PA AIM initiative, please contact your PA PQC Coach or [papqc@whamglobal.org](mailto:papqc@whamglobal.org).

### ***Key Resources***

[PA AIM Webpage](#)

[PA AIM Bundle](#)

[PA AIM Hypertension Resources](#)

[PA AIM Health Equity Resources](#)

[PA AIM Measure Specifications and Survey](#)