MI AIM Data Abstraction Frequently Asked Questions (FAQs)

General Questions

Are the "Total" staff the number of staff on the unit or the number who have privileges/are employed?

- Total staff are the number of staff who have privileges (physicians) or are employed (nurses).
- Number of staff who completed education would be those staff who attended an educational session within that month.

  Example: In October 2020, I had 5 physicians attend an educational event on hemorrhage.

  - *OB Physician/Midwives Total (Staff with Privileges) = 13*
  - *HEM - # OB Physician/Midwives Complete Education on Hemorrhage = 5*
- The purpose of this is to capture how many staff are being educated on the various bundles over time. Previously, only a percentage was provided, so we were unable to see how many providers were completing education related to hemorrhage, hypertension, and sepsis.

Note: Residents should not be included in the physician count.

Are there data deadlines for the collaborative?

- Yes, a detailed table providing data abstraction deadlines may be found on the MI AIM Data Abstraction page. Additional deadlines for the annual structure survey and attestation survey may be found on the commitment form and in the designation criteria.

How many cases should I be abstracting each month?

- Review of 20 randomly selected deliveries with a mix of 10 vaginal births and 10 c-sections per bundle per month. This means you may abstract up to 60 cases per month across the three bundles.
  - If less than 10 of either category (vaginal birth or c-section), include 20 births at random to fulfill the sample size of 20.
  - If less than 20 cases total for the month, include all cases.

National AIM's data collection plan says to report education completed within the last 2 years. Why is MI AIM collecting this information monthly?

- National AIM requests education data based on a rolling two-year period. MI AIM collects data monthly to help participating birthing hospitals understand how frequently education on various maternal health topics (hemorrhage, hypertension, sepsis, respectful care, etc.) is taking place within their facility. Participants will enter monthly totals in KeyMetrics. These will be aggregated and reported to National AIM on a rolling two-year period.

What if I have no data for a particular measure when entering monthly process measures?

- Please enter 0 in the numerator and denominator to denote you have no data for that month. Leaving data entry boxes blank may indicate you did not complete data submission for that month.

Updated January 2026

What if no staff (Physician/Midwives or Nurses) completed education that month?

- Please enter 0 for Total (Active) Staff and Number of Staff who completed education. A rate will not be calculated, and you will not be penalized for missing these fields when scored at the end of the program year for data submission.

What is the definition of a drill?

- Clinical drills provide an individual with experience and instruction in delivering direct patient care. Unit-based drills are an effective way to familiarize every team member with the entire safety bundle and the new management plan. Drills serve multiple purposes, including review and imprinting of the protocol, identification of correctable systems issues, and practice of important team-related skills; in addition, drills have been shown to improve outcomes. Post-drill debriefings provide an invaluable opportunity to learn from the experience, specifically to reinforce areas of the drill that went well, discuss areas in need of improvement, share lessons learned, and highlight systems issues to allow for concrete planning for potential solutions. Debriefs after drills model the process for debriefs that should occur after actual patient safety events. Drills may also be combined with practicing infrequently used technical skills using simple aids. We encourage participants to review National AIM's Obstetric Drill Program Manual for details on conducting unit drills.

What qualifies as education/training on Respectful Care?

- Hospital-based programs on unconscious and/or implicit bias count toward these metrics. Additionally, respectful care may be learned via MI AIM webinars, the MDHHS Maternal and Infant Health website, and/or any internal education hosted by your Labor and Delivery Department.

Obstetric Hemorrhage Bundle

What is considered the recovery period?

- Use your hospitals parameters for recovery post birth. Most have reported this is the two hours following birth.

What is the definition for quantitative blood loss (QBL)?

- The percentage of deliveries audited that had measurement of blood loss from birth through the recovery period using quantitative and cumulative techniques. More information about the importance of using QBL techniques may be found here: QBL in Obstetric Hemorrhage.

What information is required to report patient support after obstetric hemorrhage?

- The AIM Data Collection Plan mentions a verbal briefing before discharge from the hospital, which is all that is required to qualify in the numerator. CMQCC's publication on Improving Health Care Response to Obstetric Hemorrhage provides more information on how to best support patients and providers through this discussion. Information on debriefs starts on page 146.

When should the pre- and post-partum risk assessments be completed?

- From a clinical standpoint, the hemorrhage risk assessments should be done as often as clinically warranted. Minimally, assessments should be done at the time of admission and repeated during active labor with each shift change and/or change of primary nurse and on transfer to postpartum care.

- For MI AIM Data, abstractors should be auditing screenings for completion of a risk assessment at least once from time of admission to time of birth AND at time of transfer to postpartum.

Severe Hypertension Bundle

Each patient may have several instances of severe range hypertension during their stay – how do you interpret all of these events and what gets included into the data?

- You will review each patient that has two severe range blood pressures within 15 minutes, evaluate the time to treat, and then include just the FIRST instance of two elevated blood pressures in the numerator and denominator for KeyMetrics reporting. Please see additional examples below:

    - One qualifying elevated blood pressure, 2nd qualifying elevated blood pressure done at 14 min, then repeated 1 minute later (now 15 min from the 1st) and the blood pressure is now normal. No treatment given. Can this case be excluded?
        - This case should still be included. It is not a hard rule to make sure that the blood pressures are exactly 15 minutes apart. If you have 2 consecutive elevated pressures in any given timeframe, they should be looked at closely for treatment.

    - One qualifying elevated blood pressure, 2nd qualifying elevated blood pressure done at 17 minutes. Proper treatment is given. Ten minutes after the treatment given, blood pressure is now normal. Does this case still fail given that the time frame between the two pressures was 17 minutes instead of 15 minutes?
        - If you have two severe range blood pressures, then treatment should be provided regardless of it being 14 minutes, 17 minutes, or 20 minutes. The patient has had two readings that are showing persistent hypertension.

    - Should elevated blood pressures taken within 5 minutes or less of each other be excluded?
        - Generally, yes, assuming that a repeat is taken in 15 minutes that is either not severe range or is treated with antihypertensive medication.

    - How should cases with poor blood pressure readings be handled?
        - Cases with poor blood pressure readings should be reviewed carefully. A reading with notes such as, “patient arm bent”, “patient shaking after surgery”, “inappropriate blood pressure cuff”, etc. are generally excluded. Accurate blood pressures are important for appropriately treating severe range hypertension.

How should my hospital interpret the denominator to include “all birthing patients”?

- The denominator includes "birthing patients with acute-onset severe hypertension that persists for 15 minutes or more, including those with preeclampsia, gestational or chronic hypertension".
- When reporting timely treatment, please only include instances that occurred in OB Triage, Labor and Delivery, or Post-Partum during the delivery hospitalization.

How should I obtain a list to audit for timely treatment of hypertension?

- The best way to make sure you capture 100% of your hospital's hypertension patients is to work with your Information Technology/Electronic Medical Record team to create a list to audit based off the blood pressure criteria. This way you can assure you have all patients included and none are missing from the potential of inaccurate coding. ICD-10 codes could potentially miss patients who should be included because providers can sometimes be reluctant to "classify" a patient as being hypertensive or preeclamptic.

Which data collection method is expected for the numerator?

- **Medication treatment within 60 mins only (emphasized in the AIM bundle)**

  OR
- **Also include patients who self-resolve *without medication* within 60mins as specified by SMFM. This seemed to be an unknown specification to others when discussing it at our regional meeting leading to the realization that we are possibly collecting data differently**.

    - We should not be including those who self-resolve without medication within 60 minutes because the goal of this measurement is to document if we are responding to the severe BPs in a timely fashion. Those that are self-resolved are beyond our control and those should not be included in the denominator.
    - If patient has two severe blood pressure readings 15 minutes apart, then this counts as persistent severe and if they receive treatment then they will also be placed in the numerator.
    - If patient had one severe and then no other severe blood pressure readings, then they do not count as persistent severe acute and should not even be in the denominator.

For the denominator, are we to include postpartum patients up to 42 days, treated in the ED or readmitted?

- Yes, with regards to postpartum, we should be referring to the cases up to 42 days. We may not capture all these cases especially as patients tend to follow-up at different institutions and may present to the ER versus OB triage. Usually, most cases of postpartum hypertension will tend to develop most commonly in the first week after delivery but still we must abide by the 42-day postpartum time period.

How should I obtain a list to audit for postpartum blood pressure and symptoms check following pregnancy?

P2A – Scheduling of Postpartum Blood Pressure and Symptoms Checks: Severe Hypertension During the Birth Admission

- This measure should have the same denominator as P1 Timely Treatment of Persistent Severe Hypertension. Information on determining this denominator can be found in the SMFM Special Statement.

- Blood pressure measurement and symptoms checks can be scheduled at any point during the 3-day time period and do not necessarily require an in-person visit.

    - National AIM leadership emphasized that there should be an appointment scheduled to meet the metric, and it is not acceptable to put the task solely on the patient at time of discharge. Understanding there are challenges with tracking appointments due to the variance in EHRs, hospitals are encouraged to develop their own process with their providers to assure there has been an effort by the offices to ensure appointments are made/kept. A virtual appointment is considered adequate.

        - Please note a kept appointment meets the metric 100%. If an appointment has been advised but not scheduled and there is a tracking process to assure that the primary OB office or discharging provider assisted patient in scheduling, that would also qualify.

- Exclude those who were transferred out of your facility prior to discharge.
- Planning and considerations should be made for patients with weekend discharges and/or those with 3-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 for rationale on the timing of postpartum symptoms checks.

P2B – Scheduling of Postpartum Blood Pressure and Symptoms Checks – All Other Hypertensive Disorders of Pregnancy

- The denominator can be determined by identifying the following ICD-10 codes or diagnoses by the time of discharge and, among these codes, excluding those who meet criteria for persistent severe hypertension: O10.xx, O11.xx, O13.xx, O14.xx, O15.xx.
- Blood pressure measurement and symptoms checks can be scheduled at any point during the 7-day time periods and do not necessarily require an in-person visit.
    - National AIM leadership emphasized that there should be an appointment scheduled to meet the metric, and it is not acceptable to put the task solely on the patient at time of discharge. Understanding there are challenges with tracking appointments due to the variance in EHRs, hospitals are encouraged to develop their own process with their providers to assure there has been an effort by the offices to ensure appointments are made/kept. A virtual appointment is considered adequate.
        - Please note a kept appointment meets the metric 100%. If an appointment has been advised but not scheduled and there is a tracking process to assure that the primary OB office or discharging provider assisted patient in scheduling, that would also qualify.
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How should my hospital properly document scheduled follow-up for 3- and 7-day visits?

- Best practice is to have the discharge planner speak with the patient and communicate the need for a 3- or 7-day follow-up visit depending on current severe blood pressure or history of severe hypertension. The discharge planner may then request the patient contact their OB provider to schedule an appointment within the specified timeframe. Prior to discharge, the nurse will document the date and time of the follow-up appointment in the patient's discharge instructions that will serve as a reminder for the patient as well as the documentation needed for abstraction.

Maternal Sepsis Bundle

Note: MI AIM transitioned to the Sepsis in Obstetric Care AIM bundle in January 2024. The collaborative maintained several of the original Michigan Maternal Sepsis patient safety bundle specific protocols. View details on the MI AIM Sepsis Bundle Supplemental to see what is being captured beyond the National AIM requirements.

Do we pick a random sample of 20 cases out of the total monthly admissions to verify if a sepsis screening was completed upon admission?

- Yes, the intent of the screening metric is to see if hospitals are completing a serious infection screening on all patients coming to the labor and delivery unit regardless of whether they were positive for sepsis. Each site should review a list of all patients admitted to the unit that month and randomly select 20 charts to see how many of those patients received a screening. ICD-10 codes are not needed to identify this population since it should come from all admissions to the unit.

Does the list of 20 cases to be screened for sepsis start with all patients that are positive for sepsis?

- No, the initial list will include all patients to complete a serious infection screening. The antibiotics and fluids metrics will only look at those patients who were positive for sepsis and labs will look at any patient who screened positive for a serious infection.

How many cases will I end up reviewing per month for the sepsis bundle?

  - Abstractors will end up randomly reviewing at least 20 charts per month for the serious infection screening. Birthing hospitals will also review any positive infection patients to validate sepsis with end organ injury. The reason abstractors will review over 20 cases in total is because there may be some positive cases previously reviewed in the initial screening list that will later be reviewed for antibiotics, fluids, and labs.
  - *Patients with confirmed sepsis have an infection with end organ injury. There is an incidence of maternal sepsis in 1:500 to 1:1000 patients with a mortality rate of 10-25%.*

If a patient is positive for COVID-19, are they included for MI AIM Sepsis as Core Measures excludes for COVID-19?

- Patients with COVID-19 as the source of sepsis are excluded.

Is there a defined timeline during the pregnancy or after as a guide to follow when screening for maternal sepsis?

- Per the CMQCC toolkit, maternal sepsis includes ALL cases of pregnancy regardless of gestational age or outcome of pregnancy (i.e., spontaneous or elective abortion, intrauterine fetal demise, or term pregnancy) up to 42 days (six weeks post-partum).

IV Fluids: Is the 30ml/kg based on the actual body weight on admission or can the ideal body weight, if documented, be used?

- The 30ml/kg is for ideal body weight.

My facility had 20 patients to review for screening but we did not have any confirmed sepsis patients for the month. How should I enter the data in KeyMetrics?

- Please enter your numerator and denominator counts for the sepsis screening measure (P4-SEP).
- You may enter 0's for the remaining numerators and denominator for the antibiotics (P5-SEP), fluids (P6-SEP), and labs (P7-SEP) measures. More information about the sepsis bundle may be found on the **MI AIM Website.**

Within the random sample of 20 cases for the sepsis screening, are we to pull these charts based on the ICD-10 codes?

- ICD-10 codes will not be needed to review the list of patients who received a serious infection screening (all labor and delivery patients) or confirmation labs (positive serious infection screening numerator).
- The remaining metrics (antibiotics and fluids) are slightly different because we want to identify the compliance rate for only patients who were positive for sepsis. Abstractors would use the ICD-10 codes to pull a list of patients who had sepsis and then randomly review at least 20 charts to check compliance for antibiotics and fluids**.**

For program year 2025, what data entry changes occurred due to the new serious infection screening criteria to identify sepsis with end organ injury (MI AIM Sepsis Bundle Supplemental)?

- SCREENING: Serious infection screening for all labor and delivery patients (all birthing populations).
  (NUM) # of patients screened for serious infection
  (DENOM) # of patients audited
  No change from previous abstraction besides sepsis verbiage to serious infection. All labor and delivery patients are screened for infection.

- ANTIBIOTICS: Abstracting patient chart using ICD-10 sepsis codes
  (NUM) # of patients with appropriate antibiotics administered within one (1) hour of sepsis diagnosis (if more than one is ordered, all must be given within one hour)
  (DENOM) # of patients audited
  No change from previous abstraction.

- FLUIDS: Abstracting patient chart using ICD-10 sepsis codes
  (NUM) # of patients administered fluids at 30 ml/kg within three (3) hours of sepsis diagnosis
  (DENOM) # of patients audited
  No change from previous abstraction.

- LABS: Positive serious infection screening numerator for all labor and delivery patients
  (NUM) # of patients who had sepsis confirmation labs sent and resulted
  (DENOM) # of patients audited
  Change from previous abstraction methodology. Labs for all patients with a positive screening to assess for sepsis with end organ injury. This population does not necessarily have sepsis, there is a positive screen for possible sepsis. Labs will confirm.

For the Sepsis measures:

- General note: We encourage hospitals to adapt to their own hospital obstetric protocols and procedures for their working environment (their currently used sepsis screening tools, antibiotics according to antibiogram, etc.). We suggest in absence of that, that the CMQCC toolkit and high-quality publications such as: : Society for Maternal-Fetal Medicine (SMFM); Society for Maternal-Fetal Medicine Consult Series #67: Maternal sepsis. AND Sepsis and Septic Shock During Pregnancy and Postpartum provide examples of evidence-based practice.

Are there specific labs that are being counted as compliant for sepsis confirmation labs?

- As a part of the CMQCC toolkit, we recommend a complete blood count, comprehensive metabolic panel, and a lactic acid along with a bedside evaluation to evaluate for end organ injury.

Are there specific antibiotics that should be counted as compliant?

- The antibiotics should be specific for the most likely pathogen for that type of infection. If the source is not known and infection is highly suspected, then broad spectrum antibiotics are recommended. If a resource is needed, the CMQCC toolkit has a table for appropriate antibiotics for every type of infection. These other resources also have appropriate antibiotics listed: Society for Maternal-Fetal Medicine (SMFM); Society for Maternal-Fetal Medicine Consult Series #67: Maternal sepsis. AND Sepsis and Septic Shock During Pregnancy and Postpartum.

When does the 1-hour clock start?

- We are hoping to keep this consistent with the data you are already pulling for the CMS SEP-1 measure. In that case, time zero would be the first episode of hypotension (defined by SEP-1 parameters). If this is not applicable (no hypotension occurred), then the time of diagnosis would be acceptable.

How are points allocated if you don't have any sepsis patients for the year?

- Per our MI AIM leadership discussion, hospitals without sepsis cases will use percentage points instead of overall points to determine their level of participation and deduct the 6 points from the denominator, so they are not penalized for having zero cases. For example, if they meet all the other points across the entire scorecard but have no cases of sepsis, then they will have 94 points in their denominator. If they met all 94 points, then they will have 94/94 points and have 100% participation and have the highest distinction awarded.

What constitutes a positive serious infection screen?

- A positive serious infection screen has two different ways of being identified: 1) through routine screening of vital signs meeting screening criteria; or 2) through a patient showing signs of an infection and meeting screening criteria (as shown in the flowchart from CMQCC). Screening criteria can be what your hospital currently uses for screening for sepsis. If you don't currently have a screening system, we recommend either CMQCC serious infection screen or any of the other screening criteria shown in this article.

Why do we need to check labs on patients with just chorioamnionitis?

- Only patients who have **chorioamnionitis *and* trigger a serious infection screening warning system** (e.g., CMQCC Serious Infection Screen, Maternal Early Warning Trigger Tool/System) should undergo bedside clinical evaluation and laboratory assessment for end-organ injury. Patients with significantly abnormal pulse or respiratory rates are likely to be seriously ill and need further evaluation. Please refer to the CMQCC flowchart for recommended evaluation. Chorioamnionitis occurs in approximately 2–5% of deliveries, and only a subset of these patients will trigger a screening alert—meaning this approach targets a relatively small, high-risk group.

  Maternal deaths and severe maternal morbidity from sepsis are driven primarily by **delayed recognition.** There is no single diagnostic test for sepsis; early identification depends on active surveillance and prompt treatment. Nationally, chorioamnionitis and postpartum endometritis are the most common causes of maternal sepsis. In Michigan, sepsis has remained one of the top three causes of maternal death since statewide reporting began, without meaningful improvement. Given the persistent burden and lack of progress, a change in approach is necessary.

  Protocolized care has been shown to save maternal lives. Standardized bundles for hemorrhage and hypertension have significantly reduced morbidity and mortality from those conditions. We propose applying the same principle to maternal sepsis.

  This approach mirrors how we evaluate patients at risk for preeclampsia. For example, patients with gestational hypertension or elevated blood pressure undergo laboratory assessment for end-organ injury, including a complete blood count, comprehensive metabolic panel, and urine protein testing. They are at risk for preeclampsia, so they have assessment for end organ injury.

  Similarly, patients with chorioamnionitis are at increased risk for sepsis and should be evaluated for end-organ injury. For laboratory evaluation, we recommend ordering a **complete blood count, comprehensive metabolic panel** for those who trigger the serious infection screening tools.