Data Information and FAQs for Hospitals Participating in Initiative

NOTE: *Data process will vary depending on whether a hospital is using Oregon Maternal Data Center (OMDC) or not. The information and FAQs here apply to all hospitals participating in OPC initiatives unless noted.*

The goal of measurement in this initiative is to improve the safety of care using evidence-based practice. There are many nuances and critical thinking necessary during care and case review to ensure that the quality and safety of care is centered, not just achieving a specific measure target. The below information is intended to guide a consistent approach to measurement within a facility that focuses on learning from case review that can drive quality improvement. Measure targets are often set below 100% to account for the complexity of safe care, and each site should strive not only to know their unit's rate, but to understand the themes from case reviews to determine if there are opportunities to improve the care.

General Measure/Population Information

Both process measures include patients who have accurately measured acute onset severe hypertension that is persistent for 15 minutes or more. Specifically:

- For the purposes of this initiative's measurement, only patients who delivered (live or still birth at any gestation) during their hospital stay are included in measure.
    - Any episode during the delivery stay (before, during, after delivery) is considered ***NOTE:*** *While not included in measure for this initiative, sites should emphasize importance of timely treatment for all patients, including antepartum patients discharged home before delivery and/or postpartum transfers/ readmissions.*
- Severe hypertension is defined as either systolic ≥ 160 or diastolic ≥ 110
- Severe hypertension can be either new acute-onset or in patients with chronic hypertension who are developing superimposed preeclampsia with acutely worsening, difficult to control, severe hypertension

Frequently Asked Questions (FAQ)

A patient has both severe hypertension range BP readings and non-severe hypertension BP readings interspersed 15-60 minutes after their initial severe hypertension range BP reading. Does this still count as one persistent severe hypertension episode?

- Yes, if one or more severe hypertension range BP readings are taken within 15-60 minutes of the first severe hypertension reading, count as a persistent severe hypertension episode.

A patient has a severe range BP followed in 15 minutes by a less concerning but still high BP (145/95). Does this count as a persistent severe hypertension episode?

- This scenario does not require treatment but does indicate the need for frequent monitoring and observation.

Are manual BP measurements required/ recommended with BPs 140/90 or 160/110 mm Hg?

- Manual BP is the gold standard and encouraged, but automated equipment may also be used.
- Most important is to use the same position, same arm and the right sized cuff.
  NOTE: *Recommended position is sitting or semi-recumbent, and patient should not be repositioned to side in an effort to obtain a lower BP.*

Why not count pregnant and postpartum patients with severe hypertension who receive care outside of the birthing unit? What about patients who goes to the ICU during their delivery hospital stay?

- While every care location is important, the only cases that are tracked in the Oregon Maternal Data Center are deliveries.
- Whether using Oregon Maternal Data Center or not, it can be difficult to identify pregnant/ postpartum patients in other departments.
- Every effort should be made to review the BPs at each location through the delivery stay to identify quality/safety opportunities, including in the ICU. It is acknowledged, however, that this information is not always available and local work may first be necessary to address this gap.

How do I count a patient that has multiple episodes of severe hypertension during the delivery stay? Do I review treatment of every episode or just the first?

- For the purposes of this initiative, hospitals may approach this differently based on available resources and current status of quality improvement in this area.
    - Within the Oregon Maternal Data Center, teams will have access to guidance on reviewing every episode of acute hypertension and only noting timely treatment if all episodes are reviewed and receive timely treatment in 100% of episodes.
    - AIM documents reference the 2022 SMFM Special Statement on this quality metric that guides review of initial episode only, though acknowledges that this is recommended as a compromise to decrease the resource burden.
    - If possible, every episode should be reviewed to ensure timely treatment continues throughout the stay. If this is not possible, hospital teams should start with review of as many episodes as they can and at a minimum, the first episode. It is critical to ensure that both labor and delivery and postpartum units/ teams remain vigilant.
- It is important to clearly note that from a practice/ quality improvement lens, each episode represents a risk to the patient's health and must be recognized and treated. In most cases appropriate treatment includes the antihypertensive agents outlined in measure specifications.
- There may be a small number of cases that are appropriately managed through alternate oral medications. This can be noted within the chart abstraction tool for tracking documented rationale but will not be counted as meeting criteria for timely treatment (see below for more information).

What if the provider gives an order to delay/hold treatment after being notified about a persistent severe hypertension episode? Does this include delays for epidural placement/ other procedure?

- This does not meet the criteria for timely treatment of persistent severe hypertension.
- As noted above, the goal is to improve the quality and safety of care, not to just meet data/measure requirements. While clinical judgment is necessary and there are situations where deferred treatment may be clinically acceptable, these cases do not meet the criteria and should be reviewed by teams to understand opportunities.
    - Example of possible clinically appropriate deferral: A patient had multiple episodes of persistent severe hypertension in labor and immediate postpartum where they were treated with IV labetalol within 30minutes and achieved successful reduction in BP. They were started on oral medication following delivery without an episode of persistent severe hypertension again until 2 days postpartum when they had a BP of 162/ 90 and a follow up BP 15 minutes later of

162/ 89. They are not due for their oral medication for 30 minutes. The RN calls the OB provider who orders to have the oral medication given now (30 min early) and retake BP in 30 min. This is done and in 30 min, the BP of 150/85 is reported to the OB provider who updates vitals sign orders to ensure more frequent monitoring.
    - Example of inappropriate deferral: A patient had initial and repeat BP in 15 minutes of severe hypertension (165/ 110, 165/100). When notified, the OB provider tells the RN that they think the elevated BPs are related to increased family in room and patient anxiety and provides order to hold treatment and repeat BP in an hour after family has left.
- As noted above, targets less than 100% are often created to acknowledge that there may be situations where individualized care outside the recommendations is appropriate. However, each case is an opportunity for teams to reinforce the standard recommendations and why individualization is necessary in the specific case.

What if a repeat blood pressure is not taken following the severe range BP?

- This will be assumed as persistent and if not treated, must be noted as not meeting timely treatment criteria.
    - If patient was treated within 60 minutes, they have met timely treatment criteria.

Persistent acute onset severe hypertension is defined as confirmed for 15 minutes or more. What if the only repeat BP taken after the severe range BP is in less than 15 minutes?

- This is a situation where some clinical judgment must be used. The 15-minute window allows for sufficient time to confirm sustained BP that is independent of other causes. It is recognized that situations may vary, and a slightly earlier reading may be necessary and/or more frequent BPs are taken as part of observation. While not replacing the 15-minute window as the standard, it may be reasonable to accept a confirmatory BP taken earlier.
- It should be noted that while a repeat BP at 12 minutes may be accepted by an abstractor, this does not mean that a BP at 5 minutes should also be accepted. Acute onset severe hypertension is an emergency, and all care, including appropriate observation and repeat BP, are aimed at reducing risk to the patient.

What if a patient declines medication? Does that count as missed treatment?

- Shared decision making is important and if, after counseling, the patient declines the medication, this should be noted in the record and abstraction comments.

- This case will not meet the measure of timely treatment, as they did not receive treatment. This is another example as to why the timely treatment threshold is not 100%.
- This may be an opportunity to explore counseling opportunities that allow for informed decision making, especially if noted as a trend, while ultimately recognizing that the patient can decline recommended treatment.

Do scheduled blood pressure and symptoms check (scheduled within 3 days after discharge from their birth hospitalization) need to be in person?

- No, this can be scheduled to occur via phone/ tele-health as long as this check includes a BP assessment. If done via telehealth, this requires the patient to have a BP monitor/ cuff at home. Most importantly, there needs to be a plan for monitoring and responding if needed based on readings.

OMDC Specific Questions

I previously used a report that captured patients based on BP values, not diagnosis codes and notice that I am missing some patients on the OMDC list. Why is this, and how should I address it?

- While not perfect, the OMDC is able to gather a list of patients who may have experienced severe hypertension during their hospital stay based on ICD10 codes submitted by hospitals and do not have access to vital sign information.
- This will result in some patients who had persistent severe hypertension missing on the list of patients for chart review AND some patients who are on the list who did not have persistent severe hypertension.
- The most common difference from sites who have compared lists is that the OMDC will not have patients with gestational hypertension who experienced acute onset severe hypertension. If sites have access to reports based on BP criteria, continuing comparisons and reviewing cases for improvement opportunities will be valuable.
    - Gestational hypertension is not included on the list of ICD10 codes within MDC, as it is the largest group of patients with pregnancy related hypertension, and most do not have severe range blood pressures without being diagnosed with preeclampsia with severe features. Keeping these patients out of the MDC list balances chart abstraction burden and opportunity for quality/ safety learning. If patient has severe range blood pressures, coding opportunities may exist.

Why are there two questions to answer in the chart review section?

- As noted above, the OMDC list starts with cases that may have severe range BPs based on available ICD10 codes. The first question on chart abstraction screen asks whether the patient had confirmed severe range blood pressures (either systolic ≥ 160 or diastolic ≥ 110 that persisted 15minutes or more). The second question is to note whether this was treated within 60minutes of first severe blood pressure reading.
    - If the answer to the first question is no, the second question is not answered.

Can I build a supplemental data file to upload for this measure instead of manually reviewing chart?

- OMDC does allow supplemental files for this measure but also encourages teams that are working on this project to review each flagged patient record for at least a month, even if submitting supplemental file, to identify any opportunities that can only be learned through case review and may help improve care.

How do we handle cases, such as the one below? Specifically, a case with persistent severe hypertension that, when they are reviewed retrospectively, does not have any treatment documented but does spontaneously resolve within an hour of the first high blood pressure? We see these are considered in the numerator for timely treatment in an EMR dashboard we use, and it references the 2022 SMFM special statement.

Time	12:00 pm	12:15 pm	12:35 pm	12:55 pm
BP	165/110 (severe)	175/105 (severe)	159/105 (not severe)	155/109 (not severe)

While the SMFM outlines this to be included in numerator, we recommend use of the CMQCC definition that is used in the Oregon Maternal Data Center which would be looking for treatment based on the readings at 12:00pm and 12:15pm that meet the criteria for persistent severe hypertension. The rationale for this is that the risk associated with severe range blood pressures existed when the 12:15pm BP was obtained and there was no need--and potential risk-- in waiting to gather more readings to support treatment. As noted above in this document, the threshold is not 100%. If there were extenuating circumstances in individual cases such as these related to concerns about accuracy of readings or similar, while this case would fall out, it should not prevent a site from reaching their target rate of 80% or more timely treated.