



# Timely Treatment of Severe Hypertension (SHTN) Maternal Learning Collaborative (MLC)

## Measurement Strategy

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# Introduction

The Maternal Learning Collaborative (MLC) is designed to increase the rate of severe hypertensive episodes treated with a first line agent within 30-60 minutes among birthing people and reduce disparities in care for Black birthing people. Corresponding state-based pay-for-performance measures of severe maternal morbidity (SMM) and treatment of severe hypertension (SHTN) will be the primary outcome measure that the MLC is working to improve. The program sponsor has identified and defined a set of process-oriented and proxy outcome measures for the MLC's measurement strategy that will support hospitals throughout the improvement process.

The purpose of these MLC measures is to support teams in identifying if the changes they are making in their care process are having an impact in the short term. Therefore, attention has been paid to selecting measures that can be gathered and displayed more frequently and that reflect the impact of changes happening on the ground. The measures defined below are designed to be broadly applicable to MLC teams and may not represent all possible measures that can be gathered for a particular site to show impact of their work. Hospital teams are encouraged to identify additional measures unique to their systems to enable them to track the impact of their changes on the ground. These measures are intended for learning and not judgement of participating health systems; therefore, teams are encouraged to adapt the measures to their systems in ways that allow them to gather useful insight into the impact of their improvements.

This MLC measurement strategy document details the required measures that all participating teams will be expected to collect, along with frequency of collection, throughout the MLC. More frequent data collection will accelerate your improvement and help teams get the most benefit out of the MLC but is not tied to funds earned in the pay-for-performance program. Included in this document are the list of measures along with their operational definitions and guidance for data collection and reporting. The measures selected for inclusion in the MLC measurement strategy were based on existing literature, recommendations from an interprofessional panel of experts convened in 2022, and the results of a feasibility assessment performed by two local acute care hospitals and a community partner. As more teams begin to collect data, the MLC faculty will continuously revise the guidance around data collection to spread best practices and ameliorate challenges. Any revisions, suggestions, or best practice recommendations that lead to a new version of this document will be communicated to hospital teams.

## ADDRESSING DISPARITIES IN THE MLC

To identify disparities in healthcare delivery and patient outcomes by race and ethnicity, the program sponsor asks that each hospital strive to stratify each measure of the categories used in state-based reporting. Teams are encouraged to use the following stratifications of race/ethnicity to submit their results:

- ✔ Non-Hispanic Black
- ✔ Non-Hispanic White
- ✔ Hispanic
- ✔ Non-Hispanic Asian
- ✔ Other

# Reporting Measures

#	Measure	Definition	Reporting Frequency	Data Collection Guide
1	Treatment of Severe Hypertension	<p><b>Denominator:</b> Pregnant, birthing, and postpartum people with severe hypertension*, including those with preeclampsia, gestational, or chronic hypertension.</p> <p><b>Numerator:</b> Among the denominator, those who were treated within 60 minutes from first severe range blood pressure (BP) reading, assuming confirmation of persistent elevation through second reading.</p> <p>Note: Measure above aligns with <a href="#">Alliance for Innovation on Maternal Health (AIM) definition</a> as of June 2022.</p>	<p>Monthly if <math>\geq 5</math> eligible births/month</p> <p>Quarterly if <math>\leq 5</math> eligible births/month = quarterly</p> <p>Eligible: births that qualify for the denominator as outlined. Inclusive of all payers.</p>	<p><b>Leverage existing system data</b></p> <p>Using the data already collected in your system on timely care for all birthing people with SHTN, track the time of medication administration via EMR time stamps.</p> <p>If your system is already pulling this data for the QIP-NJ measure M007, you will need to provide a slightly different analysis. The MLC measure includes all pregnant and birthing people with SHTN and not only those covered by Medicaid.</p>

#	Measure	Definition	Reporting Frequency	Data Collection Guide
2	Timeliness of Triage	<p><b>Denominator:</b> All pregnant, birthing, and postpartum people from GA&gt;20 weeks to 7 days postpartum presenting at emergency department (ED) or labor and delivery (L&amp;D) for routine or emergent care.</p> <p><b>Numerator:</b> Those from the denominator who had their blood pressure taken within 10 minutes of arrival at ED or L&amp;D (whichever is the first point of contact).</p>	Monthly	<p><b>Leverage system data</b></p> <p>Use the data already in your system EMR related to arrival and BP readings for all pregnant, birthing, and postpartum people GA&gt;20 weeks to 7 days postpartum.</p> <p>This measure is inclusive of any pregnant, birthing, or postpartum patient regardless of payer and can be tracked in all facilities.</p> <p>If arrival time stamps aren't available, teams may explore manual documentation. For example, assigning a team member to track arrival times using a tally sheet where you place a patient ID sticker on the tally sheet, note arrival time and time of first BP, perhaps sampling 20 patient a day.</p>

#	Measure	Definition	Reporting Frequency	Data Collection Guide
3	Maternal Experience	This measure tracks whether patient experience data is being collected by your team. Teams are expected to review the results of the data collected to guide decision making in the plan-do-study-act (PDSA) testing of change process. Submit the number of patient experience surveys completed or the number of engagements with patient focus groups and consumer advisory boards that took place in the reporting month.	Monthly	<p><b>Option 1: Existing experience survey</b> Hospital teams who have an existing survey process to collect maternal experience are encouraged to continue to use that process. Explore if you can gather data specific to maternal patients and stratify by race, ethnicity, and language. Explore if your system has opted into using the optional equity questions in the survey and review those results. If your system has not opted into equity questions, consider advocating for this change.</p> <p><b>Option 2: New Jersey Maternal Experience Survey</b> Explore the use of the <a href="https://www.njpreterm.org/">New Jersey Maternal Experience Survey</a> in your hospital. The NJ MES is available at: <a href="https://www.njpreterm.org/">https://www.njpreterm.org/</a> as of June 2024.</p> <p><b>Option 3: Partner with community organizations to get feedback</b> Identify and connect with an existing community-based organization that support birthing people receiving care in your system. Explore how you can gather feedback on experience from birthing people connected to their programs and services. Focus on organizations that specifically support Black birthing people or who can help to gather experience feedback that reflects diverse patients.</p>

#	Measure	Definition	Reporting Frequency	Data Collection Guide
4	Discharge Education	<p><b>Denominator:</b> Pregnant and postpartum people with severe hypertension*, including those with preeclampsia, gestational, or chronic hypertension.</p> <p><b>Numerator:</b> Those among the denominator who have documentation of education related to self-management and when to return to hospital or seek post-discharge care.</p>	Monthly	<p><b>Option 1: Chart audit</b></p> <p>Review charts each month of birthing people who were identified to have SHTN and were discharged. Review the chart for evidence of participation in and reception of discharge education, including self-management and when to return to the hospital or seek post-discharge care.</p> <p><b>Option 2: Electronic medical record (EMR) report</b></p> <p>Design a report that can track the percentage of patients each month who have participated in and received post-discharge education.</p> <p>Note: Teams are encouraged to connect with patients and families to determine what strengths and opportunities exist in their current post-discharge education. If testing a follow-up process after discharge, systems should consider integrating questions to assess the quality of the post-discharge education experience and what areas for improvement exist.</p>

#	Measure	Definition	Reporting Frequency	Data Collection Guide
5	Postpartum Follow-Up Care	<p><b>Denominator:</b> Pregnant and postpartum people with severe hypertension*, including those with preeclampsia, gestational, or chronic hypertension.</p> <p><b>Numerator:</b> Those among the denominator who were seen by appropriate provider within 72 hours of discharge from hospital.</p>	Monthly	<p><b>Option 1: Track data from integrated system services</b></p> <p>Track follow-up for birthing people who receive post-discharge care from services within your system. When using this method, take note of what percentage of birthing people can be tracked in this way and what percentage are being missed due to receiving follow-up care elsewhere.</p> <p><b>Option 2: Nurse/system follow-up</b></p> <p>Track via nurse follow-up process after discharge, either through home visiting programs or hospital-based nurse follow-up programs.</p> <p><b>Option 3: Utilize health information exchange (HIE)</b></p> <p>Consider reviewing available HIE data sources to determine if your patient had a visit with a provider within the timeframe noted.</p>

#	Measure	Definition	Reporting Frequency	Data Collection Guide
6	Medications on Discharge	<p><b>Denominator:</b> All birthing people prescribed blood pressure medications after birth.</p> <p><b>Numerator:</b> Number of birthing people prescribed blood pressure medications after birth who have these medications in their possession at time of discharge.</p>	Monthly	<p><b>Option 1: Nurse/system follow-up</b></p> <p>Track via nurse follow-up process after discharge, either through home visiting programs or hospital-based nurse follow-up programs.</p> <p><b>Option 2: HIE report</b></p> <p>Consider reviewing available HIE data sources.</p> <p><b>Option 3: Build EMR data field</b></p> <p>Build capabilities in the EMR to track if birthing people have obtained or have plans to obtain the required medications at time of discharge. EMR modifications can often be time-consuming, so consider starting with a manual follow-up process if this capability does not yet exist and build in the EMR tracking ability over time.</p> <p><b>Option 4: Collaborate with insurance providers</b></p> <p>Insurance providers will have data related to claims that cover BP cuffs and medications. See if you can access data through the insurer to monitor these items. Start with the most common insurers in your population to see what might be feasible.</p>



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7	Home BP Cuff Access	<p><b>Denominator:</b> Pregnant and postpartum people with severe hypertension*, including those with preeclampsia, gestational or chronic hypertension.</p> <p><b>Numerator:</b> Those among the denominator who were prescribed blood pressure cuff and have item secured at time of discharge.</p>	Monthly	<p><b>Option 1: Nurse/system follow-up</b></p> <p>Track via nurse follow-up process after discharge, either through home visiting programs or hospital-based nurse follow-up programs.</p> <p><b>Option 2: HIE report</b></p> <p>Consider reviewing available HIE data sources.</p> <p><b>Option 3: Build EMR data field</b></p> <p>Build capabilities in the EMR to track if birthing people have obtained or have plans to obtain the required medications at time of discharge. EMR modifications can often be time-consuming, so consider starting with a manual follow-up process if this capability does not yet exist and build in the EMR tracking ability over time.</p> <p><b>Option 4: Collaborate with insurance providers</b></p> <p>Insurance providers will have data related to claims that cover BP cuffs and medications. See if you can access data through the insurer to monitor these items. Start with the most common insurers in your population to see what might be feasible.</p>

#	Measure	Definition	Reporting Frequency	Data Collection Guide
8	Clinician Education	<p><b>Denominator:</b> All nurses, delivering obstetricians, and midwives in the system.</p> <p><b>Numerator:</b> Number of nurses, obstetricians, and midwives that have completed (within the last two years) an education program on severe hypertension or preeclampsia that includes unit-standard protocols and measures.</p>	Quarterly	<p><b>Option 1: Existing education tracking</b></p> <p>Utilize the tracking already in place for existing process related to drills and education on bundle elements.</p> <p><b>Option 2: Integrate tracking into any new education programs created</b></p> <p>Ensure any new education program started related to care for SHTN tracks participation.</p> <p>This can be achieved by participation in drills. In line with TJC requirements, educational processes should be followed for existing workers and new employees.</p>

\*Severe hypertension can occur antepartum, intrapartum, or postpartum. Defined as two severe BP values, SBP $\geq$ 160 mmHg and/or DBP  $\geq$ 110 mmHg, measured 15-60 minutes apart. Severe values do not need to be consistent.

The clinical guidelines regarding SHTN are drawn from the following source: Society for Maternal-Fetal Medicine Special Statement: A quality metric for evaluating timely treatment of severe hypertension. Combs, C. Andrew et al. American Journal of Obstetrics & Gynecology, Volume 226, Issue 2, B2 - B9.

# Claims-Based Data Measure

*Honorary, not for monthly submission*

#	Measure	Definition	Reporting Frequency	Data Collection Guide
1	Severe Maternal Morbidity	<p><b>Denominator:</b> Number of birthing people with new onset severe range HTN. Limit to ICU admissions, transfusion of four or more units of packed cells, and eclampsia. See reference for SMM review recommendations.</p> <p><b>Numerator:</b> Number of birthing people with severe maternal morbidities, such as acute renal failure, acute respiratory distress syndrome (ARDS), pulmonary edema, and puerperal central nervous system (CNS) disorders (e.g., seizure, disseminated intravascular coagulation (DIC), ventilation, abruption).</p>	Annually	<p><b>Option 1: Leverage external data</b></p> <p>Review and report externally generated data on severe maternal morbidity that is provided to your system on a quarterly basis. Note that this data will likely be at least three months behind in terms of reporting. When using externally generated data, the definitions used to generate that data are acceptable for reporting purposes.</p> <p><b>Option 2: Charter review</b></p> <p>Review charts each month of patients who were diagnosed with SHTN GA &gt;20 weeks to 7 days postpartum. Review charts for severe maternal morbidities.</p>

**For help using this MLC measurement strategy or any questions please contact PCG today!**

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