

Maternal Hypertension Initiative Charter

ALPQC HTN Project Team		
Project Lead	Dr. Brian Brocato	brianbrocato@uabmc.edu
Project Manager	Evelyn Coronado-Guillaumet	eguillaumet@uab.edu
Other Team Members	Rosemary Blackmon	rblackmon@alaha.org
	Carol Snowden	csnowden@alaha.org
	Main contact email	info@alpqc.org
Project Kick-Off: June 30, 2022		

Problem Statement

Hypertensive disorders of pregnancy (HDPs) are among the leading causes of severe maternal morbidity and mortality in the United States and Alabama and have been on the rise in recent years. HDPs are preventable if caught and treated appropriately. Although updated guidelines are available through ACOG, AIM, and APEC, screening for and timely treatment of HDP does not occur consistently across labor and delivery units.

Rationale

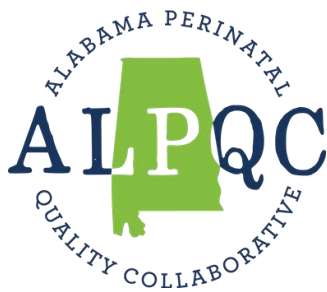
Pregnant and postpartum patients arrive at hospitals for routine, urgent, and emergency pregnancy-related care. These interactions are critical times to ensure that patients are screened for HDP and that appropriate responses are initiated. Conducting quality improvement (QI) initiatives to educate staff, update protocols, and improve rates of screening and timely treatment will contribute to improved quality and safety of care and lead to reduced severe maternal morbidity (SMM).

Expected Outcomes and Benefits

We expect this project will lead to improvements in readiness, recognition, response, respectful care, and systems learning related to the management of severe hypertension in pregnancy, with the ultimate outcome of decreasing rates of SMM and maternal mortality. Beyond improvements in maternal safety, reducing the burden of HDP has the potential to reduce healthcare costs, as found in a 2012 U.S. study that reported preeclampsia costs an estimated \$1 billion nationally within the first 12 months of delivery.

Project Description

The Maternal Hypertension (HTN) Initiative will implement the [Alliance for Innovation on Maternal Health \(AIM\) Severe Hypertension in Pregnancy Bundle](#). This initiative will help participating hospital teams make breakthrough improvements in patient safety through a redesign of processes to standardize evidence-based tools and guidelines related to severe HTN in pregnancy. This includes developing and implementing protocols and practices related to identification, management, and safe discharge of pregnant/postpartum patients with severe HTN. Hospitals will implement this initiative alongside peer Alabama birthing hospitals. Monthly webinars will cover different components of the bundle; we will review progress toward goals and learn from hospitals sharing successes and challenges. Hospitals will engage in cycles of testing and implementation of changes that led to improvements. Please see expectations for participation on page four of this document. See the **HTN Getting Started Kit** (under “Key Documents” at alpqc.org/initiatives/htn) for first steps to get started with the Initiative.



Project Aim

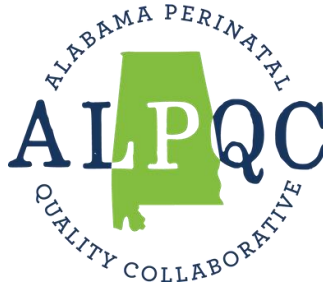
The aim of the Maternal Hypertension Initiative is to reduce by 20% the rate of severe maternal morbidity (SMM) in pregnant and postpartum patients with preeclampsia/eclampsia in participating facilities by September 2023.

Our key goals are to:

- Increase by 20% the proportion of pregnant/postpartum women with persistent severe HTN who received treatment within 60 minutes with antihypertensive medication.
- Increase the proportion of patients receiving preeclampsia education prior to discharge to 90%.
- Increase the proportion of patients discharged with an appointment scheduled for follow-up within seven days to 90%.
- Narrow the Black-White inequity gap in SMM among patients with preeclampsia/eclampsia.

These are the measures we will use to monitor progress toward our aim:

Structure Measures	The measures we want to use to track clinical protocols and organization.
	<ol style="list-style-type: none"> 1. Develop evidence-based Severe HTN/Preeclampsia policy and procedure that provides a unit-standard approach to identification and management of Severe HTN/Preeclampsia. 2. Establish a system to perform regular formal debriefs after cases with major complications. 3. Establish standardized process to conduct debriefs with patients after severe events. 4. Perform multidisciplinary systems-level reviews on all cases of SMM (including women admitted to the ICU, receiving ≥4 units RBC transfusions, or diagnosed with a VTE). 5. Develop patient education materials on urgent PP signs culturally and linguistically appropriate. 6. ED established standardized verbal triage screening for current pregnancy/pregnancy in past year.
Process Measures	The measures that will tell us if the system is performing as planned to affect the outcome measure.
	<ol style="list-style-type: none"> 1. Timely treatment of persistent severe hypertension. 2. Patient discharged with a postpartum BP and symptoms check scheduled to occur within seven days for all women with persistent severe HTN. 3. Education to patients and families on the signs and symptoms of severe HTN/preeclampsia during hospitalization and after discharge. 4. Role-specific education for all OB nurses and providers on severe HTN/preeclampsia. 5. ED provider and nursing education on severe HTN/preeclampsia in pregnant/postpartum 6. Conduct drills to determine system issues as part of ongoing QI efforts.
Outcome Measures	The measures we ultimately want to affect as a result of this project.
	<ol style="list-style-type: none"> 1. Number of patients with persistent severe hypertension. 2. Severe maternal morbidity (excluding transfusion codes). 3. Severe maternal morbidity among people with Preeclampsia (excluding transfusion codes).
Data Reporting	
Baseline months: April, May, June, July 2022	▶ Baseline due August 31, 2022.
Prospective Initiative data: Monthly starting August 2022	▶ Due 30 days after end of month on last day of month. First month due Sep 30, 2022 (For August 1-31, 2022)
Quarterly data: Calendar quarters	▶ Due at the end of the quarter (Jul-Sep due Sep 30)



Framework

This initiative takes the structure of an Institute for Healthcare Improvement's (IHI) Breakthrough Series Collaborative. A Breakthrough Series (BTS) Collaborative is a systematic approach to health care quality improvement in which organizations test and measure practice innovations and share their experiences in an effort to accelerate learning and widespread implementation of best practices. Participating in a Collaborative is an excellent foundational tool to creating long-term success, helping hospitals accelerate work that is underway and plan for meaningful progress over time.

Teams will embark on this project with other Alabama birthing hospitals focused on the same aim and objectives. We will achieve our aim via engaging in iterative cycles of testing and implementation of changes in the [Maternal HTN Toolkit](#), along the way measuring progress toward meeting our goals, and sharing lessons learned with various forms of support. The overall framework of the collaborative is as follows:

Learning Sessions

Learning Sessions are in-person or virtual meetings bringing together participating hospital teams and expert faculty to exchange ideas in real time. Faculty experts present a vision for ideal care and specific changes, based on the Change Package (Toolkit), that when applied locally will significantly improve the hospital's performance. The teams also learn the [Model for Improvement](#), which enables them to test these powerful change ideas locally by conducting [Plan-Do-Study-Act \(PDSA\) cycles](#)—PDSAs are a tool to help hospitals test changes in a way that helps them reflect on, learn from, and refine a change before successfully implementing it in their unit.

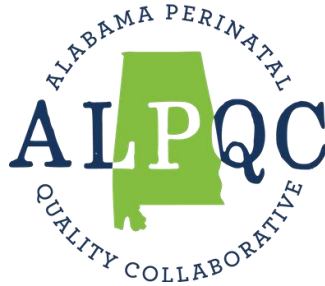
During learning sessions, team members also learn from one another as they share successes, barriers, and lessons learned during the learning sessions.

Action Periods

Between Learning Sessions, participating hospitals will engage in Action Periods that provide the time for maximal learning—this is when teams implement changes and receive support from ALPQC and peers. The goals of the Action Periods are to support teams in their improvement work, build collaboration and shared learning, and assess collaboration and progress.

Actions Periods will include the following:

- *PDSA Cycles*: Teams implement site-specific tests of change that align with the HTN Collaborative's aim and their team's chosen aim.
- *All-Teams Conference Calls*: Hospital teams are to participate in monthly, one-hour calls on different change topics related to the work. These calls are led by ALPQC project faculty and feature opportunities for team learning and highlighting successes and lessons learned in the collaborative.
- *Monthly Reporting*: ALPQC developed a monthly reporting system, including assessment using a 0-5 scale, to collect and review progress on implementation tasks from each hospital, reflect on lessons learned during that month, and plan for the next month. The ALPQC team will review each report submitted by teams to provide feedback.



Expectations for participation in the HTN Collaborative:

The ALPQC Team will:

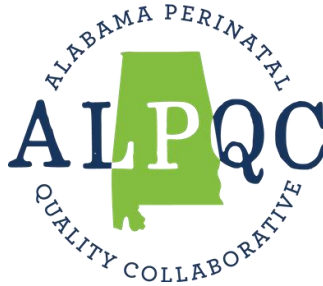
- Include a project lead, improvement advisor and coordinator, data portal resources, and faculty who have expertise in the subject matter and improvement methods.
- Provide information on Maternal HTN, application of evidence-based practices to improve care, and quality improvement methods for structure, process, and outcome improvement.
- Provide guidance, feedback, and resources to teams throughout the course of the project.
- Facilitate communication to keep teams connected to the ALPQC team and each other.

Participating Hospitals Expectations:

- Form your hospital team consisting of at least one physician champion, one nurse champion, one pharmacy champion, and a data champion (someone with access to medical charts).
- Set an aim and a 30-60-90-Day Plan for your team related to the Collaborative's aim stated above.
- Actively participate in learning sessions, monthly action period calls and coaching calls to share learning and results with your peers and the ALPQC team.
- Conduct tests of change (PDSA cycles) in alignment with your aim and your 30-60-90 Day Plan. After successful testing and adaptation of changes tested, implement changes in your unit. Report PDSAs to ALPQC.
- Complete pre-work activities as applicable to prepare for the learning sessions and action periods, including reviewing the Getting Started Kit and completing activities inside the kit (found on our website www.alpqc.org/initiatives/htn under "Key Documents").
- Report data measures and narratives monthly and quarterly for the duration of the project.

Alabama is a member of the [Alliance for Innovation on Maternal Health \(AIM\)](#) at the American Congress of Obstetricians and Gynecologists, a national program working to reduce severe maternal morbidity and mortality. By participating, hospitals agree de-identified versions of their data may be shared with the AIM program. The information will be used to provide national benchmarking of de-identified measures and evaluate the ALPQC's initiative.

Aggregate, de-identified data may be presented or published and shared with other participating hospitals and the larger perinatal community for the purposes of group learning and progress updates.



Opportunities for Spread

In the work of IHI and other states over many years, some important lessons have emerged about promoting and sustaining the spread of improvement over time, including:

- The development of an explicit tracking plan so senior leaders can quickly assess the progress made during spread of the changes, and readily intervene to help when the spread plan is not performing as planned
- The development of a spread infrastructure (training, communication methods, reviews of progress)
- The assessment of groups and individuals for readiness to adapt and adopt the changes before deployment
- The expectation that other sites will want to customize the changes
- Senior leaders decide on the level of desired spread (the number of areas to which applicable changes are spread) and establish a schedule for spread (the tempo and order of spread)
- Senior leaders make the work visible and give it high priority

The strategy for rapid spread within participating hospitals is an integral part of the collaborative that is fueled by participating hospitals documented successes, engages senior leaders, and allows for local adaptation and customization.