Maternal Learning Collaborative (MLC) Charter

Quality Improvement Program – New Jersey (QIP-NJ)

Last Update: July 2022

The contents of this Charter are for New Jersey (NJ) acute care hospitals participating in QIP-NJ.

The Charter provides the rationale and program details of the MLC.

PUBLIC CONSULTING GROUP

NJ Health New Jersey Department of Health

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GLOSSARY OF TERMS

Abbreviation	Definition
AIM	Alliance for Innovation on Maternal Health
ACOG	American College of Obstetricians and Gynecologists
BP	Blood Pressure
BTS	Breakthrough Series
CBO	Community Based Organization
CDC	Federal Centers for Disease Control and Prevention
CQO	Chief Quality Officer
CMS	Centers for Medicare & Medicaid Services
COVID-19	2019 Novel Coronavirus
CTM-3	3-Item Care Transitions Measure
Databook	QIP-NJ Measurement Specifications and Submission Guidelines
DHS	Department of Human Services
DOH	Department of Health

ED	Emergency Department
EHR	Electronic Health Record
HTN	Hypertension
IHI	Institute for Healthcare Improvement
IT	Information Technology
L&D	Labor & Delivery
MD	Doctor of Medicine
MLC	Maternal Learning Collaborative
MY	Measurement Year
NIS	National Inpatient Sample
OBGYN	Obstetrician-Gynecologist
PDSA	Plan, Do, Study, Act
PQC	Perinatal Quality Collaborative
QIP-NJ	Quality Improvement Program - New Jersey
SVP	Senior Vice President
SHTN	Severe Hypertension
SMM	Severe Maternal Morbidity

OVERVIEW

WHAT IS QIP-NJ?

QIP-NJ

QIP-NJ is being administered by DOH in partnership with the DHS as a Medicaid pay-for-performance initiative open to all acute care hospitals in the state. The focus of QIP-NJ is to advance statewide improvement in maternal health and behavioral health. To encourage service delivery improvement, hospitals earn QIP-NJ incentive payments by achieving performance targets on maternal health and behavioral health quality measures.[i] Designed as a multi-year initiative, QIP-NJ began on July 1, 2021, with a behavioral health-focused Learning Collaborative running from September 2021-September 2022, and the MLC beginning in October 2022. The QIP-NJ MLC is designed to support hospitals working to achieve QIP-NJ's improvement goals.[ii]

The remainder of this Charter describes the state's scheduled MLC.

New Jersey State Leadership & Policy Initiatives in Maternal Health

NJ state leaders, inclusive of the Murphy Administration, have prioritized the improvement of maternal and infant health outcomes among NJ birthing people and infants. In 2019, First Lady of NJ, Tammy Murphy, officially launched "Nurture NJ" as a statewide, 11-year initiative committed to addressing inequity in maternal and infant health outcomes for Black birthing people, and to reducing overall maternal and infant mortality and morbidity in the state.

NJ state leaders have developed a strategic plan, outlining recommendations at the state, county, and local levels aimed at creating comprehensive, continuous, and high-quality maternal care services for all birthing people.[iii]

Nurture NJ has three primary objectives

(1) Ensure all women are healthy and have access to care before pregnancy.
(2) Build a safe, high-quality, equitable system of care and services for all women during prenatal, labor and delivery, and post-partum care.
(3) Ensure supportive community environments and contexts during every other period of a woman's life so that the conditions and opportunities for health are always available.

To combat the impacts of the COVID-19 pandemic, NJ State leadership expanded programs and services that benefitted the maternal and child health population. Since 2020, NJ has expanded childcare access through increased subsidies and decreased co-pays, increasing funding for family planning, deployment of an implicit bias initiative, and expanded access to doula services. With these focused improvements, the state acknowledges that there are continued opportunities to improve the health and wellbeing of birthing people. [iii]

According to the Nurture NJ strategic plan, NJ has the fourth highest maternal mortality rate out of the 50 states. [iii] Figure 1 (below) shows the rate of pregnancy-associated deaths by race per 100,000 births in NJ over a 2-year period. In 2018, the maternal mortality rate for Black birthing people in NJ was nearly twice the rate of all birthing people. Nationally, the pregnancy-associated mortality rate in 2018 for Black birthing people (37.3 per 100,000 live births) was 2.5 times the rate for White birthing people (14.9 per 100,000 live births). According to CDC statistics (Figure 2), in 2020 the national rate of maternal mortality reached 55.3 per 100,000 live births for Black birthing people[iv] and 19.1 per 100,000 live births for White birthing people. Figure 3 shows SMM per 10,000 delivery hospitalizations over the course of 9 years in NJ. Morbidity rates have increased for almost all birthing people, but the rates for Black birthing people demonstrate particularly sharp increases, especially between 2016-2018. As the graphs illustrate, Black birthing people are disproportionately affected and are consistently well above the national and state averages year-to-year in NJ.

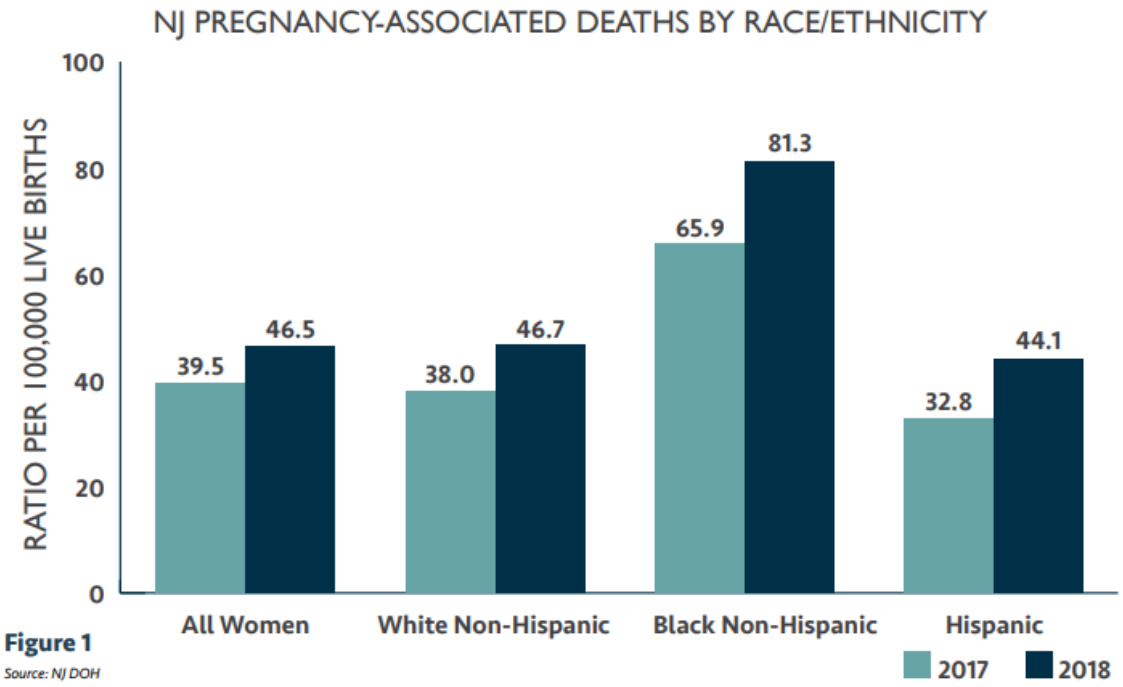
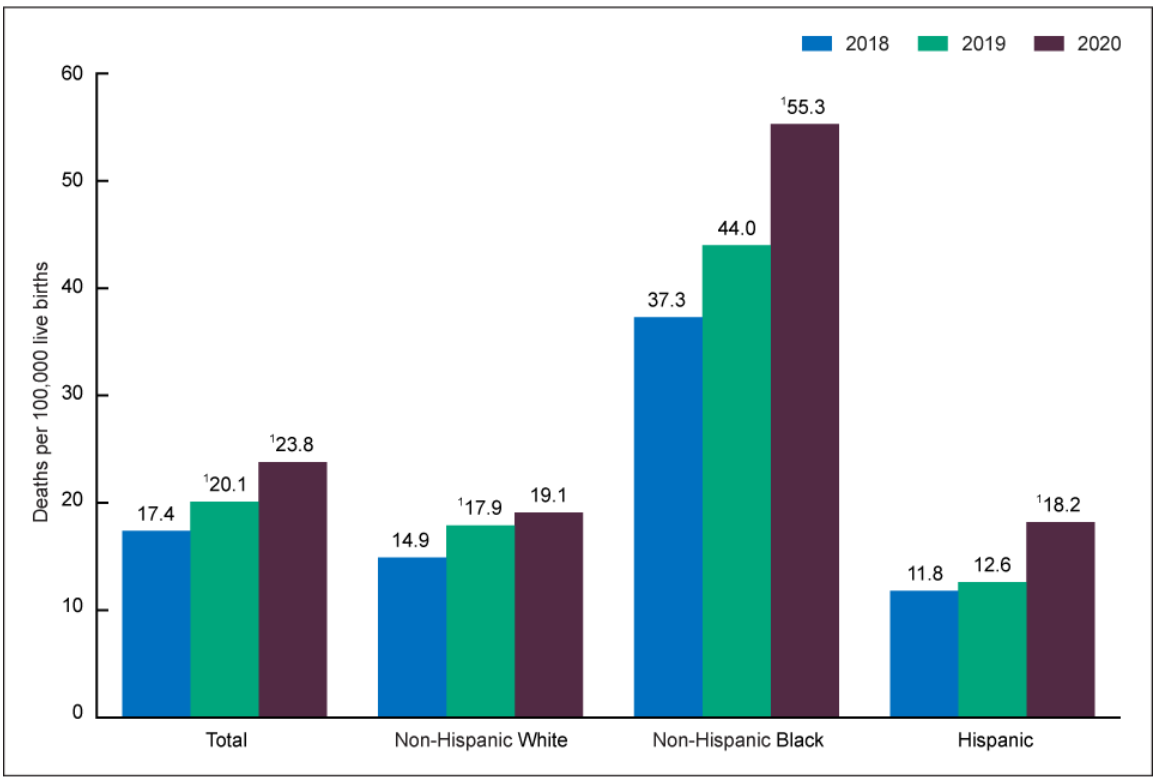


FIGURE 1. PREGNANCY-ASSOCIATED DEATHS BY RACE/ETHNICITY IN NJ



[1]Statistically significant increase in rate from previous year ($p < 0.05$).
NOTE: Race groups are single race.
SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.

FIGURE 2. MATERNAL MORTALITY RATES BY RACE/ETHNICITY (NATIONALLY)

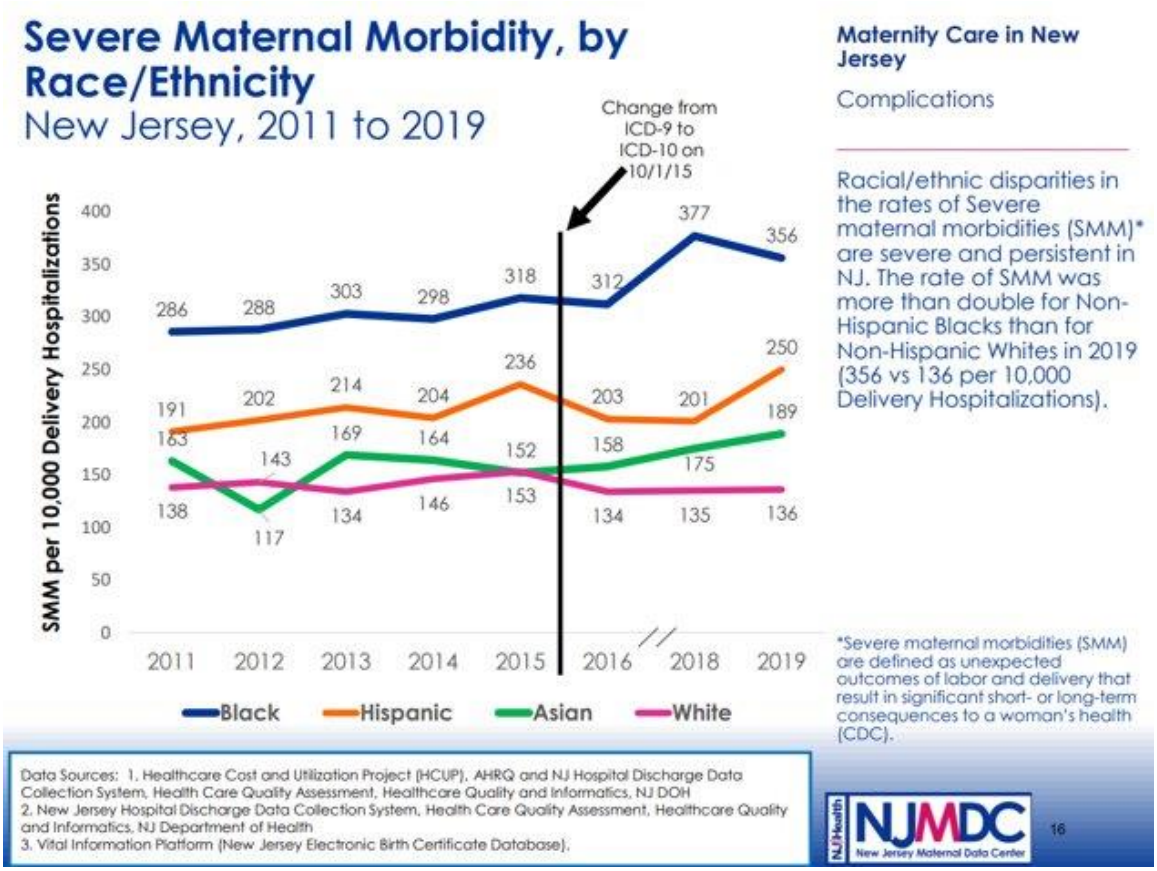


FIGURE 3. SEVERE MATERNAL MORBIDITY BY RACE/ETHNICITY IN NJ

WHAT IS THE QIP-NJ MATERNAL LEARNING COLLABORATIVE?

To support hospitals in their effort to improve care for NJ's maternal health population, DOH, in partnership with PCG, has designed a data-driven MLC. The MLC is based on a proven model from the Institute for Healthcare Improvement (IHI), called the BTS Collaborative. Success within QIP-NJ will require a multi-faceted approach involving the entire system of maternal health care; therefore, the MLC will target hospital L&D units and EDs as priority settings to test changes for improvements in care processes and outcomes for the maternal Medicaid population.

The primary focus of the MLC is to improve the treatment of SHTN among birthing people with a focus on identifying and addressing racial disparities and inequities for Black birthing people. The MLC is explained in detail in Parts 3-8 of this Charter.

THE OPPORTUNITY TO IMPROVE CARE IN NJ (PROBLEM STATEMENT)

Based on the existing statistics and the stated focus of the Nurture NJ initiative, there is an opportunity to improve NJ maternal care delivery and the racial disparities that exist within this care. As the graphs in the preceding section show, Black birthing people are at higher risk of death and SMM during pregnancy compared to birthing people of other races. Understanding where disparities in care exist in preeclampsia and SHTN diagnoses and treatment is the first step to identifying a path for improvement in these areas.

PREECLAMPSIA AND RACIAL INEQUITIES

Preeclampsia is defined as an episode of persistent high blood pressure which develops during pregnancy or the postpartum period. Many birthing people affected by preeclampsia will deliver healthy babies and recover, but some birthing people experience complications that can affect their own health and the health of their child. The national rate of preeclampsia in mothers is estimated to affect 3-5% of all pregnancies, and disproportionately affects Black birthing people.[v] The Agency for Healthcare Research and Quality has found that the rate of preeclampsia and eclampsia for Black birthing people is 61% higher than the rate of preeclampsia/eclampsia in White birthing people. Furthermore, this rate is 50% higher than the rate of preeclampsia/eclampsia in all birthing people. A 2014 study with data from the NIS found that among 177,000 deliveries, 4.7% of the delivering mothers had cases of preeclampsia. In these deliveries, Black birthing people experienced 1.6 times the rate of preeclampsia (69.8 per 1,000 deliveries) compared to their White counterparts (43.3 per 1,000 deliveries) 69.8 of every 1,000 deliveries from Black birthing people had episodes of preeclampsia, compared to 43.3 episodes per 1,000 deliveries in White birthing people, 46.8 episodes per 1,000 deliveries in Hispanic birthing people, 28.8 episodes per 1,000 deliveries in Asian or Pacific Islanders, and 46.6 episodes per 1,000 for all birthing people.[vi] Preeclampsia also puts Black birthing people at a higher risk of other episodes of SMM. In a study comparing non-Hispanic Black birthing people to non-Hispanic White birthing people, Hispanic birthing people, and all other birthing people, it was found that Black birthing people had a higher rate of stroke (17.1 vs 6.5, 12.7, and 9.3 per 10,000 deliveries, respectively) and pulmonary edema or heart failure (56.2 vs 32.7, 30.2, and 38.4 per 10,000 deliveries, respectively).[vii] These statistics show the severe threat that preeclampsia poses to Black mothers and their infants, which puts them at greater risk for SHTN.

SHTN and Racial Inequities

Preeclampsia/eclampsia has been heavily linked to SHTN[*], another condition that has a disproportionate impact on Black birthing people. Hypertensive disorders of pregnancy are a leading cause of maternal morbidity and mortality. ACOG has recommended that patients with hypertensive disorders of pregnancy be evaluated within 3-5 days after delivery and again 7-10 days postpartum (earlier if persistent symptoms), but many providers have not been able to achieve that standard due to a lack of prioritization and awareness of hypertensive risks.[viii] Throughout the past few decades, chronic HTN has steadily risen throughout the United States, with the rate increasing by 6% each year. This increase has disproportionately affected Black birthing people, with Black birthing people having more than double the prevalence of HTN than White birthing people (1.24% to 0.53%).[ix] According to recent data taken from the NJ State Health

[*]SHTN is defined as the occurrence of blood pressure readings (systolic pressure) of 160 millimeters of mercury (mm Hg) or higher or a bottom number (diastolic pressure) of 110 mm Hg or higher, measured on two occasions at least four hours apart. [viii]

Assessment Data, there is still a large discrepancy in HTN percentages when comparing Black birthing people to other races in NJ. In Figure 4 (below), the percentage for Black birthing people remains significantly above the average HTN percentage, with a peak of 20 percent in 2018, despite Black birthing people only being responsible for 14 percent of births in 2018, 13.9% in 2019, and 13.6% in 2020[xii], again underlining the increased need for a focus on this population.

Additionally, Black birthing people who delivered at high Black-serving hospitals[†] often have the highest risk of poor outcomes. One study found that birthing people who delivered in high and medium Black-serving hospitals had elevated rates of SMM rates compared with those in low Black-serving hospitals in unadjusted (29.4 and 19.4 vs 12.2 per 1000 deliveries, respectively; P < .001) and adjusted analyses (17.3 and 16.5 vs 13.5 per 1000 deliveries, respectively; P < .001). [x] Pregnancy induced HTN affects Black birthing people to a much greater extent than the general birthing population.

In the state of NJ, racial inequities in SHTN diagnoses are pervasive among the maternal population. Black mothers in NJ routinely have a higher rate of HTN than mothers of other races. Over the three-year sample depicted in Figure 4, the relative rates of gestational HTN among mothers in NJ remained the significantly above the average amongst all races (10.1%)[xi], showing the increased risk that Black mothers in NJ (and in the country as a whole) are at for this condition. Studies have shown that there is a strong correlation between racial demographics and quality of care provided, and the state has identified that institutional and structural change is needed to fully achieve the goals of its Nurture NJ strategic plan. This highlights the need for improved treatment of SHTN for Black birthing mothers to improve these outcomes.

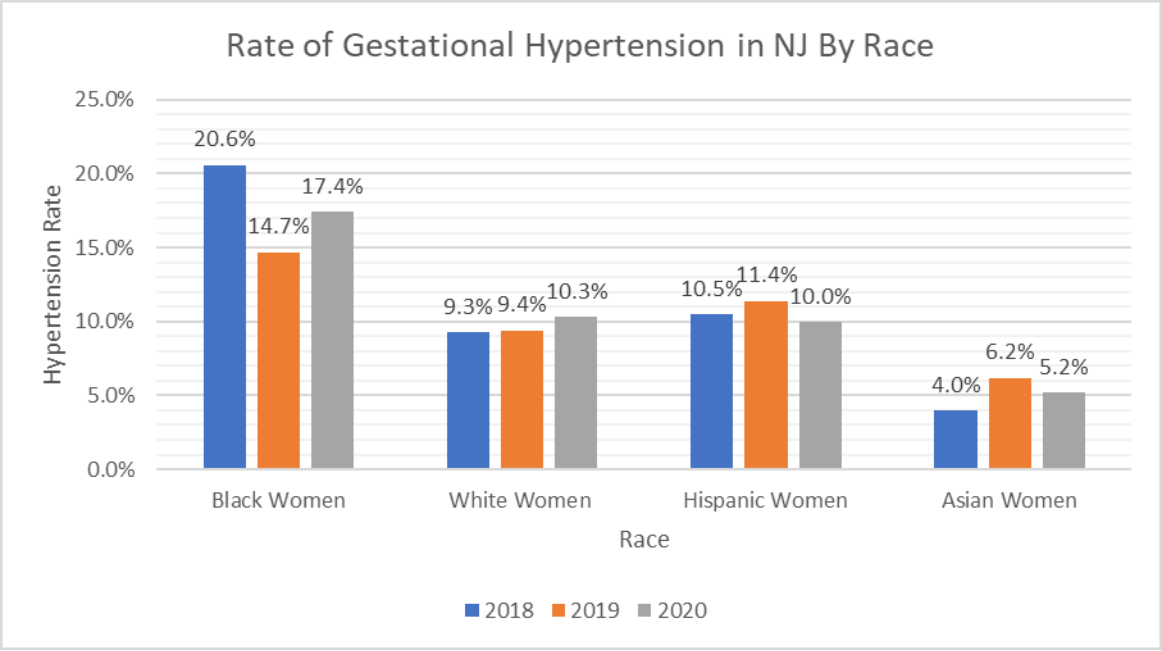


FIGURE 4. RATE OF GESTATIONAL HTN BY RACE/ETHNICITY[xii]

[†] In this study, Black serving hospital were ranked by the proportion of Black deliveries. High black-serving represents hospitals who had the highest proportion of Black deliveries (top 5%), medium black-serving (5% to 25% range), and low black-serving hospitals.

AIM

DOH has established statewide targets for improving the treatment of SHTN. These statewide targets set the benchmarks for how participating hospitals will earn funding through a gap-to-goal methodology each year throughout QIP-NJ.[xii]

The statewide targets related to the MLC goal are as follows:

QIP-NJ Measure ID#	Measure Title	Statewide Target
M01	SMM, Based on CDC measure	25.2/1000 delivery hospitalizations including transfusions
M07	Treatment of SHTN, Based on AIM measure	80%

The MLC aim is: By December 31, 2023, improve by 15% the rate of SHTN episodes treated with a first line agent within 30-60 minutes among birthing people ≥20 weeks GA-7 days postpartum receiving care at NJ acute care hospital inpatient maternity and ED units.

A focus of this initiative will be to identify, address, and reduce racial inequities and disparities for Black birthing people by focusing on the following key drivers:

- Readiness: Every Care Setting
- Recognition & Prevention: Every Patient
- Response: Every Event
- Reporting & Systems Learning: Every Unit
- Respectful, Equitable & Supportive Care: Every Unit/Provider/Team Member

WHY A COLLABORATIVE FOR L&D UNITS AND THE ED?

The MLC is focusing on L&D units and the ED as the primary locations of care because both areas are essential to successful identification and treatment of birthing persons experiencing SHTN. L&D units provide birthing persons with care during their deliveries and in the immediate postpartum period. The ED is frequently the initial point of care for pregnant and postpartum persons experiencing symptoms of SHTN outside of their hospital admission for delivery. It is necessary for both locations of care to have evidence-based, standardized systems in place to identify and provide proper treatment to birthing persons with SHTN.

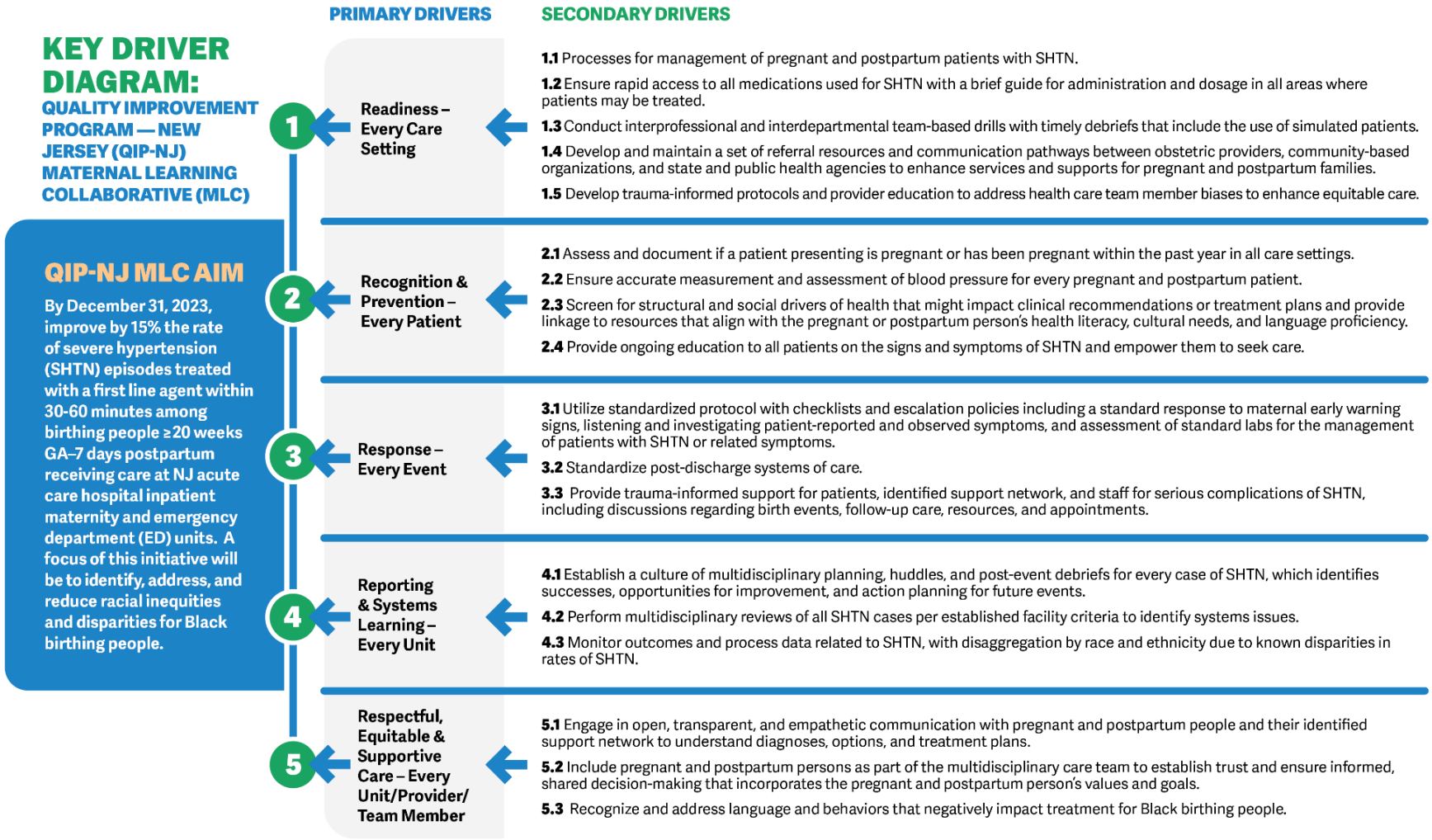
MEASURE DESCRIPTIONS – MATERNAL HEALTH

Note: All measures should be stratified by race and ethnicity, with the primary observed outcome being the rates for non-Hispanic Black birthing people, to allow teams to understand equity gaps and determine where improvements are most needed as well as improvements over time. There are two types of measures: outcome and process measures. Outcome measures evaluate the degree of change in the well-being of a defined populated related to an intervention. Process measures reflect the care delivery to the patient: what is done to, for, with, or by defined individuals or groups as part of the delivery of services.[xiii]

1	Treatment of Severe Hypertension	The percentage of birthing people aged 15 to 55 years old with a STHN episode that is treated within 30-60 min by a recommended first-line agent.	Outcome
2	Maternal Experience	Survey of experience of maternal care at participating hospital – specific tools and approaches to be confirmed.	Outcome
3	Severe Maternal Morbidity	Percent of birthing people with SHTN who experience severe maternal morbidities (e.g., Acute Renal Failure, ARDS, Pulmonary Edema, Puerperal CNS Disorder such as Seizure, DIC, Ventilation, Abruption)	Outcome
4	Discharge Education	The percent of birthing people with SHTN who receive facility-wide standardized postpartum discharge education prior to discharge from the hospital.	Process
5	Postpartum Follow-Up Care	The percent of birthing people with SHTN who have follow-up care (virtual or in person) within 7-10 days, or 72 hours for birthing people with SHTN on medications after discharge from hospital.	Process
7	BP Medications on Discharge	The percent of birthing people who have been prescribed blood pressure medications that have those medications at time of discharge	Process
6	Access to Home Blood Pressure Monitoring	The percent of birthing people who have access to at home blood pressure monitoring, if recommended, at time of discharge	Process
8	Clinician Education	Percent of nurses, delivering physicians and midwives that have completed within the last two years an education program on SHTN that includes the unit-standard protocols and measures.	Process

IMPROVEMENT FRAMEWORK

The driver diagram below depicts the primary drivers of change that will form the focus of the MLC. More details on the drivers and specific change ideas can be found in the MLC *Change Package*.



BENEFITS AND ELIGIBILITY

WHY PARTICIPATE IN THE MLC?

- Support to meet performance targets on some QIP-NJ pay-for-performance measures.
- Personalized coaching for frontline care team and hospital leadership from State and National clinical and improvement experts in the field.
- Increased quality improvement capacity across team members,
- Access to a peer learning network.
- Continuing professional education credits.

WHO IS ELIGIBLE TO PARTICIPATE?

DOH strongly encourages NJ acute care hospitals to participate in the MLC, which DOH believes will assist participating hospitals with achieving performance targets, sharing knowledge and best practices across hospitals to drive systemic changes, and supporting overall improvement in maternal outcomes for the state's Medicaid population. Hospitals interested in participating in the MLC must complete a *Participation Interest Form* by **end of day on August 26, 2022**. The *Form will be completed via a Qualtrics survey, and the link* can be found at https://qip-nj.nj.gov/Home/lc

All interested hospitals will be considered for participation. Questions and requests for additional information may be sent to: qip-nj@pcgus.com.

DESIGN

THE MLC SCHEDULE

Information Session #1	June 28, 2022, 12PM – 1PM EST
Information Session #2	August 9, 2022, 11AM – 12PM EST
Submit Participation Interest Form	August 26, 2022, 5PM EST
Pre-Work and Coaching Webinar	September 13, 2022, 12PM – 1PM EST
Learning Session #1	October 4 - October 5, 2022, 1PM – 4PM EST
Action Period #1 and one-on-one (1:1) coaching	October 2022 - January 2023
Learning Session #2	January 31– February 1, 2023, 1PM – 4PM EST
Action Period #2 and 1:1 coaching	February 2023 – May 2023
Learning Session #3	June 20 – June 21, 2023, 1PM – 4PM EST
Action Period #3 and 1:1 coaching	June 2023 – September 2023

OVERVIEW

The MLC will run from October 2022 to October 2023 and will be based on BTS model.[xiv] Key characteristics of the MLC will include:

- Voluntary participation by health systems and project teams.
- Peer-to-peer learning ("all teach, all learn").
- Real time data collection, regular data review and reporting.
- Implementation of rapid cycle, small tests of change through Plan, Do, Study, Act (PDSA) cycles.
- Personalized coaching from improvement advisors.

The MLC will focus on inpatient maternity units and EDs as priority settings to test changes for improvements in maternal care processes and outcomes for the state's Medicaid maternity population. An Expert Panel was convened by DOH and partners to develop a quality improvement toolkit, a resource for participating teams referred to as the *Change Package.*[xv] The *Change Package* is a set of evidence-based strategies to be tested, adapted, and implemented locally by each participating hospital team.

DESIGN

The BTS model/design relies on iterative cycles of testing and implementing changes and will include a variety of supports, described below:

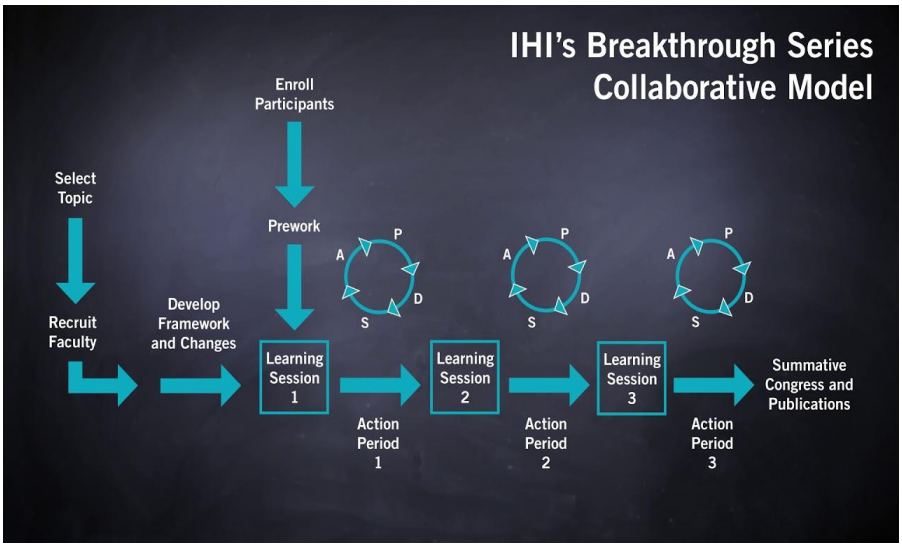


FIGURE 5. A VISUAL REPRESENTATION OF THE IHI'S BTS COLLABORATIVE MODEL.

Learning Sessions:

There will be three Learning Sessions throughout the course of the MLC. Teams will gain new knowledge from state and national experts on clinical practices, building community partnerships, and improving outcomes while addressing racial & ethnic disparities in SHTN. Learning Sessions will also include engagement activities where teams can work together to apply their new knowledge and build action plans for improvement while interacting with expert faculty. The MLC will feature special sessions to support maternal health and ED leadership in their effort to

advance their team's improvement work. Learning Sessions will consist of plenary presentations, workshops, storyboard rounding/presentations, and team development sessions.

Action Periods:

Between Learning Sessions, teams in the MLC will enter an Action Period. During Action Periods, teams test changes in practice and discover how to apply or adapt best practices to their local environment with support. Action Periods consist of the following support structures:

- Prework Webinar: Improvement advisors will lead a prework webinar to prepare teams for successful participation in Learning Session #1 and the MLC.
- Monthly Data Reporting: The MLC leadership team will provide data collection guidance and templates.
- Ongoing Coaching: Hospital teams will participate in facilitated coaching sessions with peers and receive 1:1 support from improvement advisors on a variety of key topics related to the MLC aim. Participating teams will be expected to participate by presenting their successes or challenges and/or providing advice and feedback to other teams. The data collected each month from all teams will be anonymized and used during these coaching sessions to guide discussion.

EXPECTATIONS OF PARTICIPATION

WHAT IS EXPECTED FROM PARTICIPANTS?

To support teams getting the most out of their participation, each hospital electing to participate in the MLC is asked to:

1. Form an interprofessional project team which would ideally include the following members:
    - Executive leader who will facilitate implementation of key system and cultural changes and help teams overcome administrative barriers (e.g., Department Chair, Medical Director, CQO or SVP of Quality).
    - Team Leader.
    - Quality Improvement lead.
    - IT champion to configure and pull data from the EHR system.
    - Representatives from staff who support maternity care (L&D unit & ED).
    - Representatives from key CBOs who support care for Maternity patients after discharge.
    - Patient and chosen family representatives.
2. Commit to improvement project team member participation in MLC learning events and activities and contribution to shared learning. Members of the improvement project team will work over the course of the 12-month MLC to test, adapt, and implement strategies for maternal health care process improvement.
    - Events will include, at minimum, Learning Sessions 1-3, and monthly coaching sessions during Action Periods.
    - Testing changes in practice to adopt best practices.
3. Share key information back to other stakeholders within their team, hospital, or larger hospital system, including leadership, so that improvements can be fully implemented, sustained, and spread.
4. Collect data and submit structured data reports to the MLC leadership monthly.

WHAT IS EXPECTED OF THE MLC LEADERSHIP TEAM?

To create an impactful, effective, and satisfying program for hospital teams, the MLC Leadership team from DOH and PCG will be expected to:

1. Create an engaging curriculum with access to experts in the field.
2. Provide training that enables teams to implement improvements towards the MLC's primary goal.
3. Provide one-on-one and group coaching to teams to help teams overcome individual challenges during the implementation process.
4. Disseminate best practices and effective strategies across the peer network based on the implementation experience of participating teams.
5. Connect hospital teams to applicable state resources or aligned programs aiming to make improvements related to the MLC aim.
6. Use the lessons learned from the MLC to impact future policy decisions.
7. Provide excellent participant support with timely replies to any question or issue communicated to us by a participating team.

[i] QIP-NJ's program design is contingent upon receipt of all necessary approvals from the federal Centers for Medicare and Medicaid Services. Please visit DOH's website at the following link: https://qip-nj.nj.gov/.

[ii] This document focuses on the Maternal component of QIP-NJ. For more information on QIP-NJ, please visit DOH's website at https://qip-nj.nj.gov/index.html.

[iii] *Home - Nurture NJ*. https://nurturenj.nj.gov/wp-content/uploads/2021/01/20210120-Nurture-NJ-Strategic-Plan.pdf.

[iv] "Maternal Mortality Rates in the United States, 2020." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 23 Feb. 2022, https://www.cdc.gov/nchs/data/hestat/maternal-mortality/2020/maternal-mortality-rates-2020.htm.

[v] Johnson, Jasmine D., and Judette M. Louis. "Does Race or Ethnicity Play a Role in the Origin, Pathophysiology, and Outcomes of Preeclampsia? an Expert Review of the Literature." *American Journal of Obstetrics and Gynecology*, vol. 226, no. 2, 2022, https://doi.org/10.1016/j.ajog.2020.07.038.

[vi] Fingar, Kathryn R, et al. "Delivery Hospitalizations Involving Preeclampsia and Eclampsia, 2005-2014." *Delivery Hospitalizations Involving Preeclampsia and Eclampsia, 2005-2014 #222*, https://hcup-us.ahrq.gov/reports/statbriefs/sb222-Preeclampsia-Eclampsia-Delivery-Trends.jsp.

[vii] Gyamfi-Bannerman, Cynthia, et al. "Preeclampsia Outcomes at Delivery and Race." *The Journal of Maternal-Fetal & Neonatal Medicine*, vol. 33, no. 21, 2019, pp. 3619–3626., https://doi.org/10.1080/14767058.2019.1581522.

[viii] *ACOG*. https://www.acog.org/-/media/project/acog/acogorg/files/forms/districts/smi-hypertension-bundle-slides.pdf.

[ix] Ananth, Cande V., et al. "Changes in the Prevalence of Chronic Hypertension in Pregnancy, United States, 1970 to 2010." *Hypertension*, vol. 74, no. 5, 2019, pp. 1089–1095., https://doi.org/10.1161/hypertensionaha.119.12968.

[x] Howell, Elizabeth A et al. "Black-white differences in severe maternal morbidity and site of care." American journal of obstetrics and gynecology vol. 214,1 (2016): 122.e1-7. doi:10.1016/j.ajog.2015.08.019

[xi] "New Jersey State Health Assessment Data New Jersey's Public Health Data Resource." *NJSHAD - Query Builder - New Jersey PRAMS Data - Gestational Hypertension*, https://www-doh.state.nj.us/doh-shad/query/builder/prams/PRAMS/GestHyper.html.

[xii] For more information on QIP-NJ, please visit DOH's website at https://qip-nj.nj.gov/index.html.

[xiii]The Breakthrough Series: IHI's Collaborative Model for Achieving Breakthrough Improvement. IHI Innovation Series white paper. Boston: Institute for Healthcare Improvement; 2003. (Available on www.IHI.org)

[xv] A panel of interprofessional experts was convened in February 2021 to design the improvement strategy for the BH Collaborative. Panelists included state policy experts, addiction medicine and emergency psychiatry clinicians, consumer experience and harm reduction experts and a social worker. See QIP-NJ MLC *Change Package* available at https://qip-nj.nj.gov/Home/lc