Reducing Maternal Morbidity Initiative

Theory of Change Documents

- Definitions
- Driver Diagram
- Change Package
- Resources & References
Definitions

**Definition of a Driver Diagram**: A Driver Diagram is a tool to help form and display a current workable theory of change towards improvement. The Primary and Secondary Drivers attempt to include current knowledge and understanding of the processes that are necessary and sufficient to achieve the intended desired Outcomes. They [usually] include three elements: structures that comprise the system, processes that represent the work of the system and operating norms that demonstrate the explicit and tacit culture of the system.” (Bennet and Provost 2015 What’s your Theory? Quality Progress.com)

**Definition of a Change Package**: A change package is a concise and practical document that includes ideas and inspiration for teams seeking to apply QI methods to increasing the effectiveness and efficiency of their care processes and outcomes. Change packages focus on a specific condition, care process, or health system feature and generally include background material; a summary of evidence or best practices; and specific tools, strategies, and examples that can be applied to improvement work. (National Pediatric Cardiology Quality Improvement Collaborative)
Driver Diagram

Achieve a 20% reduction in severe maternal morbidity among pregnant/postpartum women who experience hemorrhage or severe HTN in LaPQC participating facilities in 12 months and to narrow the Black-White disparity in this outcome in 12 months.

**Reliable Clinical Processes**
- Assure readiness
- Improve recognition and prevention
- Understand & reduce variation in response
- Eliminate waste

**Respectful Patient Partnership**
- Design for partnership
- Invest in improvement

**Effective Peer Teamwork**
- Reduce variation in reporting
- Change the work environment
- Improve work flow

**Engaged Perinatal Leadership**
- Manage for quality & systems learning
- Enhance patient and family relationships
- Change the work environment
Driver Definitions

Key Leverage Points: “The Primary and Secondary Drivers ...identify the elements in the system that are necessary and sufficient to achieve the intended Outcomes. They [usually] include three elements: structures that comprise the system, processes that represent the work of the system and operating norms that demonstrate the explicit and tacit culture of the system.” (Bennet and Provost 2015 What's your Theory? Quality Progress.com)

• The Reliable Clinical Processes Driver may be described as “applying best evidence and minimizing non-patient specific variation, with the goal of failure–free operation over time”. (IHI WHITE PAPER: A Framework for Safe, Reliable, and Effective Care). For the purposes of this project, the focus of reliable clinical processes is within the scope of the LaPQC AIM and centered on the four secondary drivers. The Key Change Ideas or Descriptions associated with the Clinical Process Drivers are actionable changes known to or have potential to improve the system, processes or operating norms and that can be tested by caregivers, management and leadership.

• The Respectful Patient Partnership may be described as activities and behaviors taken to improve respectful, equitable partnership. The Key Change Ideas or Descriptions associated with the Patient Partnership Drivers are actionable changes known to or have potential to improve the system, processes or operating norms to better support equitable respect, trust, partnership and engagement within patient care and improvement of the healthcare system. These changes can be tested by the care team, leadership and patients, family and caregivers.

• The Effective Peer Teamwork may be defined as behaviors and activities undertaken by the Care Team to provide clinical care. The Care Team for this LaPQC effort may be defined as a “multidisciplinary team usually organized under the leadership of a physician; each member of the team has specific responsibilities and the whole team contributes to the care of the patient”. (Reference.MD) The Key Change Ideas or Descriptions associated with the Peer Teamwork Drivers are actionable changes known to or have potential to improve equity and effectiveness in the behaviors, processes, system structure or operating norms of the care team. These changes can be tested by the care team and leadership.

• The Engaged Perinatal Leadership Driver maybe best be described using the following quote: “The primary function of leaders in health care is to influence their “followers” to develop behaviors, habits, processes, and technologies that result in outstanding and ever-improving performance.” Leaders are not identified by position or rank; they exist at all levels and in all groups, including patients and their families. In fact, the framework is indifferent to the leadership title: it tacitly acknowledges that senior leaders develop strategy or create alignment; middle-level leaders predominantly manage; and clinical leaders focus on the clinical acumen of their staff. These different attributes are key to each specific leadership role; however, the framework indicates that there are some similar expectations of every leadership position, regardless of role. (A Framework for Safe, Reliable, and Effective Care Institute for Healthcare Improvement). The Key Change Ideas or Descriptions associated with the Perinatal Leadership Drivers are actionable changes known to or have potential to improve the system, processes or operating norms that can be tested by those who work within or manage the system.
<table>
<thead>
<tr>
<th>RELIABLE CLINICAL PROCESSES</th>
<th>CHANGE CONCEPTS</th>
<th>KEY CHANGE IDEAS OR DESCRIPTIONS (ELEMENTS COMMON TO AIM BUNDLES ARE IN BOLD)</th>
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| ASSURE READINESS | Standardization: Care Structure | • Standardize immediate rapid, access to key medications & tools with creation and maintenance of a hemorrhage cart, stocking of anti-hypertensives on labor & postpartum floors  
• Standardize administration, dosage of vital medications for hemorrhage and hypertension management  
• Develop protocols for specific high-risk situations: who to call (i.e. designated response team) and what to do when help is needed (i.e. Massive and Emergency Release Blood Transfusion Protocol, Severe Hypertension Protocol, criteria for activation)  
• Generate standards for early warning signs, diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia & symptomatic anemia (include order sets and algorithms)  
• Ensure timely triage and evaluation of pregnant and postpartum individuals with elevated blood pressures in obstetric and non-obstetric settings (include emergency rooms, outpatient clinics)  
• Create a collaborative regional system plan for timely escalation, appropriate consultation, and maternal transport at all perinatal levels of care |
| IMPROVE RECOGNITION AND PREVENTION | Improve and Standardize Care Processes | • Assessment of hemorrhage risk for every patient, every time, at the appropriate times (i.e. during prenatal care, on labor floor admission, immediately following birth)  
• Measurement of quantitative and/or cumulative blood loss  
• Develop a shared protocol for active management of third stage of labor across providers and services  
• Use mistake-proofing improvement methods (reminders, differentiation, constraints, affordances) to improve towards very high-reliability processes (i.e. checklists)  
• Create, implement, and measure improvement on use of standard protocols for measurement and assessment of blood pressure and related laboratory values and for all pregnant and post-partum women.  
• Identify, measure and continually improve towards consistent, patient-engaged response to maternal early warning signs |
| DEVELOP RESPONSE | Understand and Manage Variation | • Establish systems to accurately document patient primary language, self-identified race, and ethnicity  
• Explore potential clinical segments of population and design reliable processes to assess needs of that population, in partnership with patient advisors i.e. women with obesity, adolescents.  
• Provide staff-wide education on implicit bias with focus on timely and impactful clinical response  
• Have available an in-house maternity care provider or coverage that guarantees timely and effective responses to labor problems and escalation in risk due to hemorrhage or hypertension. |
| ELIMINATE WASTE | Waste of Overutilization/Overspecification | • Track appropriate metrics to assess trend towards induction and surgical intervention resulting from organizational changes seeking to promote safety  
• Measure and continue improvement on standardized induction scheduling to ensure proper selection and preparation of women undergoing induction of labor at less than 39 weeks. |
# Change Package

## Respectful Patient Partnership

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| Design for Partnership | Care Delivery | ● Develop customized interdisciplinary care plan reflecting collaboration with patient and family to meet needs safely: "Nothing about me without me"  
● Design processes for partnership in care  
● Include patients and families in discussions that involve them while respecting confidentiality i.e. give shift reports at the bedside and include the patient and family in the reports; include in bedside rounding with their social support if desired; white boards articulating shared goals  
● Using well established tool (i.e. IHI Perinatal Patient and Family Assessment based on IPFCC Assessment) evaluate structure and process for patient partnerships |
| Transparent Communication for Trust | Engage Patients | ● Develop support and standardized communication plan for patients, family and staff in event of serious outcome or escalation of care with transfer to intensive care unit or higher level facility  
● Develop process to support interaction in teaching or discharge instructions (i.e. “teach-back” method, also known as the “show-me” method or “closing the loop”) with emphasis on those at high risk for hemorrhage and those with hypertensive disease  
● Create a therapeutic relationship prior to critical moments: Introduce self and ask how the patient would like to be addressed.  
● Provide patients with orientation to specific improvement efforts relevant to their risks and vulnerabilities (e.g. Tell a woman with preeclampsia that we are attempting to improve time to administration of IV medication in event of systolic > 160).  
● Champion organizational processes to support transparency of healthcare information, i.e. patients access to medical record, shared decision making captured in medical record, access through MyChart  
● Study variation in partnership with patients, ensure understanding of why BMI, primary language, self-identified race/ethnicity is collected  
● Optimize and disseminate available interpreter services |
| Invest in Equitable Improvement | Discharge Navigation Tools | ● Consider co-design as a method for improvement (i.e. Experience Based Co-design).  
● Standardize facility approach to pregnant and postpartum patient education on clinical signs of hypertension, preeclampsia, symptomatic anemia, or excessive bleeding with materials that meet patients’ health literacy, language, and cultural needs  
● Establish reliable, available mechanisms for patients, families, and staff to report inequitable care, episodes of miscommunication or disrespect, perceived neglect.  
● Design and test standardized discharge navigation, counseling and coordination tools (home visiting referral) post childbirth that meet literacy and language needs, ensuring that women have appropriate follow-up care and understand warning signs/when necessary to return to their health care provider.  
● Designate a facilitator for team meetings in event of critical events to support understanding and engagement for patient and staff team members. |

## Invest in Equitable Improvement

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| Engage Patients | Engage Patients | ● Include Patients as Improvement Team members  
● Include patients and families in improvement training for staff i.e. share personal experience.  
● Develop training for patients that might want to be involved in improvement efforts. |
# Change Package

## Effective Peer Teamwork

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| Reduce Variation (in Reporting) | Standardization: Communication and Team Response | Utilize techniques for effective team communication (i.e. SBAR; Appropriate Assertion)  
 Develop a process for routine Huddles after sentinel events or complications and explore other methods to support team communication, such as briefings before transfer to operating room or intensive care unit, debriefings, trigger tools  
 Establish and standardize Team Response Protocols (i.e. Code Crimson, Obstetric Hemorrhage)  
 Explore adaptation of checklists as a method to reduce miscommunication and reliance on memory |
| Improve Work Flow | Handoffs | Minimize number of handoffs by providers and standardize handoff process  
 Establish standardized criteria for handoffs that include hemorrhage risk stratification and reporting on management of cases of severe hypertension (i.e. identify four key pieces of information in each case type to communicate)  
 Establish multidisciplinary rounds on all patients at beginning and end of day  
 Implement and use read back technique integrating patients and families for critical information during patient handoffs |
| Change the Work Environment | Emphasize Natural and Logical Consequences | Support processes of accountability for own behavior (i.e. start meetings on time, individual responsible for obtaining update, logs, minutes, incentives beyond traditional reward and punishment) |
| Access to Information | | Conduct meetings with a multidisciplinary focus to share same information |
| Develop and Provide Effective Training | | Design Simulations for learning and testing changes before implementing in patient care environment.  
 Unit education on protocols, unit-based drills (with post-drill debriefs)  
 Use effective adult learning principles and methods to design learning opportunities  
 Incorporate critical learning and processes into provider/staff orientation, i.e. Just Culture, common language  
 Implement Cross-training across specialties, disciplines and roles  
 Use well developed and affordable national educational materials to enhance team communication (i.e. TeamSTEPPS) |
## Change Package

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<th><strong>PERINATAL LEADERSHIP</strong></th>
<th><strong>CHANGE CATEGORY</strong></th>
<th><strong>CHANGE CONCEPTS</strong></th>
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| Manage for Quality & Systems Learning | Focus on Core Processes and Purpose | Multidisciplinary review of all severe hypertension/eclampsia cases and hemorrhage cases meeting local severe maternal morbidity criteria  
Support development of a safety culture. Move from culture of blame, hierarchy, and intimidation which act as barriers to effective communication and teamwork. (i.e. Just Culture in Healthcare)  
Build a culture of change and collaboration within and across institutions.  
Use methods to evaluate core processes and outcomes such as harm, i.e. IHI Deep Dive Tool, IHI Perinatal Trigger Tool, then use data to prioritize and resource improvement efforts.  
Manage Senior Leadership attention to Unit needs and improvement efforts. |
| Use Proper Measurements | | Use a balanced set of macro-departmental measures  
Invest in accurate hospital discharge coding to improve data quality on outcomes measure  
Include TJC Perinatal Core and Harm Measure as macro-departmental Clinical measures. Consider clinical & financial measures for improvement projects & and estimate ROI for both.  
Create meaningful reports from EMR to reduce manual abstraction  
Align Unit Measures, Strategies, and Projects with Organizational Measures, Strategy, and Goals. |
| Use Sampling | | Use well designed sampling methods that can provide information as good as or even better than 100% checking, i.e Bundle Sampling, Trigger Tool |
| Invest More Resources in Improvement | | Build improvement capacity and provide resources for improvement efforts.  
Develop leadership for improvement  
Take advantage of National improvement efforts i.e. AIM, AHRQ |
| Change the Work Environment | Take Care of Basics | Develop a competent, trained and available workforce.  
Use industry standard guidelines for documentation and staffing i.e. ACOG and AWHONN.  
Create a physical environment that supports care delivery and healing.  
Consistent evidence-based practice (including policies, guidelines, procedures, staff education around changing definitions and guidelines) |
| Consider People in the Same System | | Create consistent expectations for performance and behavior across all disciplines. Behavioral issues are linked to credentialing requirements i.e. Disruptive Behavior standards (ACOG, TJC etc)  
Establish credentialing of core competency and training for all providers and licensed staff.  
Establish a multidisciplinary team to review all concerns within the Labor and Delivery environment. Set expectations consistently across all disciplines. |
| Enhance the Patient and Family Relationship | Listen to Customers | Develop a process to identify, mitigate, understand, and learn from patient feedback related to experience.  
Develop processes to consistently obtain information from patients regarding needs and experience i.e. focus groups, interviews |
| | | Develop structure for a patient advisor; consider a paid position and other resources needed to support patient advisors.  
Consider development of a Consumer Advisory Board.  
Cultivate Community relationships |
References and Resources (work in progress!)

Improvement Guide
• http://www.ihi.org/resources/Pages/Changes/UsingChangeConceptsforImprovement.aspx
• http://www.ihi.org/resources/Pages/Tools/Driver-Diagram.aspx

Reliable Clinical Processes

Respectful Patient Partnership
• http://www.ihi.org/resources/Pages/IHIWhitePapers/AchievingExceptionalPatientFamilyExperienceInpatientHospitalCareWhitePaper.aspx
• http://www.ihi.org/communities/blogs/co-design-with-your-patients-and-your-staff
• https://www.kingsfund.org.uk/projects/ebcd

Effective Peer Teamwork
• http://www.ihi.org/resources/Pages/IHIWhitePapers/IdealizedDesignofPerinatalCareWhitePaper.aspx
• https://www.ahrq.gov/teamstepps/index.html
• Fair and Just Culture, Team Behavior, and Leadership Engagement: The Tools to Achieve High Reliability

Engaged Perinatal Leadership
• http://www.ihi.org/resources/Pages/IHIWhitePapers/Framework-Safe-Reliable-Effective-Care.aspx
• http://www.ihi.org/resources/Pages/IHIWhitePapers/HighImpactLeadership.aspx
• http://www.ihi.org/resources/Pages/IHIWhitePapers/IHIGlobalTriggerToolWhitePaper.aspx
• http://www.ihi.org/resources/Pages/IHIWhitePapers/LeadershipGuidetoPatientSafetyWhitePaper.aspx
• Patient Safety and the "Just Culture": A Primer for Health Care Executives
• AHRQ Primer on Disruptive and Unprofessional Behavior
• Perinatal Trigger Tool and Perinatal Deep Dive Structure Tool (pdf)

Equity and Quality Improvement to Alleviate Racial Disparities
• http://www.ihi.org/resources/Pages/IHIWhitePapers/Achieving-Health-Equity.aspx (also see Equity Self-Assessment Tool on pages 32-36)