R³ Report | Requirement, Rationale, Reference

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Published for Joint Commission-accredited organizations and interested health care professionals, *R3 Report* provides the rationale and references that The Joint Commission employs in the development of new requirements. While the standards manuals also may provide a rationale, *R3 Report* goes into more depth, providing a rationale statement for each element of performance (EP). The references provide the evidence that supports the requirement. *R3 Report* may be reproduced if credited to The Joint Commission. Sign up for email delivery.

Provision of Care, Treatment, and Services standards for maternal safety

Effective July 1, 2020, 13 new elements of performance (EPs) will be applicable to Joint Commission-accredited hospitals. These new requirements are within the Provision of Care, Treatment, and Services (PC) chapter at PC.06.01.01 and PC.06.01.03 and are designed to improve the quality and safety of care provided to women during all stages of pregnancy and postpartum. The United States ranks 65th among industrialized nations in terms of maternal death.[1] Because of worsening maternal morbidity and mortality, The Joint Commission evaluated expert literature to determine what areas held the most potential impact. The literature review revealed that prevention, early recognition, and timely treatment for maternal hemorrhage and severe hypertension/preeclampsia had the highest impact in states working on decreasing maternal complications. This approach was supported by a technical advisory panel assembled by The Joint Commission, resulting in the development of EPs that focus on these complications.

Engagement with stakeholders, customers, and experts

In addition to an extensive literature review and public field review, The Joint Commission obtained expert guidance from the following groups:

- Technical Advisory Panel (TAP) of subject matter experts from various health care and academic organizations and professional associations from the maternal health field.
- Standards Review Panel (SRP) comprised of clinicians and administrators who provided a "boots on the ground" point of view and insights into the practical application of the proposed standards.

The prepublication version of the maternal safety standards will be available online until June 30, 2020. After July 1, 2020, please access the new requirements in the E-dition or standards manual.

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1. Centers for Disease Control and Prevention. Reproductive Health, Pregnancy Mortality Surveillance System webpage. Page last reviewed: June 4, 2019. Accessed Aug. 20, 2019.

Provision of Care, Treatment, and Services chapter

Standard PC.06.01.01: Reduce the likelihood of harm related to maternal hemorrhage.

Requirement	EP 1: Complete an assessment using an evidence-based tool for determining maternal hemorrhage risk on admission to labor and delivery and on admission to postpartum. (See also PC.01.02.01, EPs 1 and 2; PC.01.02.03, EP 3; RC.02.01.01, EP 2)
Rationale	Assessing and discussing patients' risks for hemorrhage allows the team to identify higher-risk patients and be prepared. The risk of hemorrhage may change during a patient's stay depending on the clinical situation.
Reference	Harvey CJ. "Evidence-Based Strategies for Maternal Stabilization and Rescue in Obstetric Hemorrhage." *Advanced Critical Care*. 2018;3(29):284-94.
Requirement	EP 2: Develop written evidence-based procedures for stage-based management of pregnant and postpartum patients who experience maternal hemorrhage that includes the following: • The use of an evidence-based tool that includes an algorithm for identification and treatment of hemorrhage • The use of an evidence-based set of emergency response medication(s) that are immediately available on the obstetric unit • Required response team members and their roles in the event of severe hemorrhage • How the response team and procedures are activated • Blood bank plan and response for emergency release of blood products and how to initiate the organization's massive transfusion procedures • Guidance on when to consult additional experts and consider transfer to a higher level of care • Guidance on how to communicate with patients and families during and after the event • Criteria for when a team debrief is required immediately after a case of severe hemorrhage *Note: The written procedures should be developed by a multidisciplinary team that includes representation from obstetrics, anesthesiology, nursing, laboratory, and blood bank.*
Rationale	Having defined procedures to manage patients experiencing severe hemorrhage is integral to ensuring that everyone caring for a patient functions well as a team so delays in critical processes are minimized. Communication between team members during an emergency is a key factor for success. It is important for an organization to standardize the language team members will use to identify patients with severe hemorrhage and trigger a predetermined response from staff. Post-emergency debriefs are valuable for summarizing how well the team followed procedures and to determine if there are opportunities for improvement.
Reference	Committee on Practice, Bulletins-Obstetrics. "Practice Bulletin No. 183: Postpartum Hemorrhage." Obstetrics & Gynecology. 2017;130(4):e168-e186. Kogutt BK and Vaught AJ. "Postpartum Hemorrhage: Blood Product Management and Massive Transfusion." Seminars in Perinatology. 2019;43(1):44-50. American College of Obstetricians and Gynecologists. "Preparing for Clinical Emergencies in Obstetrics and Gynecology." ACOG Committee Opinion No. 590. Obstetrics & Gynecology. 2014;123:722-725. World Health Organization. WHO Recommendations for the Prevention and Treatment of Postpartum Hemorrhage. Geneva, Switzerland: World Health Organization. 2012.
Requirement	EP 3: Each obstetric unit has a standardized, secured, dedicated hemorrhage supply kit that must be stocked per the organization's defined process and, at a minimum, contains the following: • Emergency hemorrhage supplies as determined by the organization • The organization's approved procedures for severe hemorrhage response

Rationale	Having all supplies to treat hemorrhage in one place is essential to minimizing delays in treatment. Using defined processes during emergencies has been shown to improve adherence to recommended processes of care. Each organization should complete an assessment to determine the number of kits needed and the location to store them for easy access.
Reference	Agarwala AV, et al. "Bringing Perioperative Emergency Manuals to Your Institution: A "How To" From Concept to Implementation in 10 Steps." *The Joint Commission Journal on Quality and Patient Safety*. 2019;45(3):170-179. Bereknyei MS, et al. "Use of an Emergency Manual During an Intraoperative Cardiac Arrest by an Interprofessional Team: A Positive-Exemplar Case Study of a New Patient Safety Tool." *The Joint Commission Journal on Quality and Patient Safety*. 2018;44(8):477-484. World Health Organization. WHO Recommendations for the Prevention and Treatment of Postpartum Hemorrhage. Geneva, Switzerland: World Health Organization. 2012.
Requirement	EP 4: Provide role-specific education to all staff and providers who treat pregnant and postpartum patients about the organization's hemorrhage procedure. At a minimum, education occurs at orientation, whenever changes to the processes or procedures occur, or every two years.
Rationale	For the care team to function optimally in a true emergency, it is essential that all members know the procedures they should follow in the event of hemorrhage. Although not required, in situ simulations that allow staff to practice organizational procedures in actual clinical settings are encouraged.
Reference	Committee on Practice, Bulletins-Obstetrics. "Practice Bulletin No. 183: Postpartum Hemorrhage." Obstetrics & Gynecology. 2017;130(4):e168-e186. American College of Obstetricians and Gynecologists. "Preparing for Clinical Emergencies in Obstetrics and Gynecology." ACOG Committee Opinion No. 590. Obstetrics & Gynecology. 2014;123:722-725.
Requirement	EP 5: Conduct drills at least annually to determine system issues as part of on-going quality improvement efforts. Drills include representation from each discipline identified in the organization's hemorrhage response procedure and include a team debrief after the drill.
Rationale	Multidisciplinary drills give an organization the opportunity to practice skills and identify system issues (e.g., unwillingness of the blood bank to release blood products despite authorization for this in the procedure) in a controlled environment. It is crucial to have members from as many disciplines identified in the organization's response procedure as possible available during drills to be able to test each level of the emergency and identify areas of improvement. This is crucial for identifying weaknesses in the response system and to identify opportunities for improvement. Organizations should assess their level of proficiency to determine the frequency drills should be performed; organizations that have reached a high level of mastery may need less frequent drills.
Reference	American College of Obstetricians and Gynecologists. "Preparing for Clinical Emergencies in Obstetrics and Gynecology." ACOG Committee Opinion No. 590. Obstetrics & Gynecology. 2014;123:722-725. Kyryabina E, et al. "What is the Value of Health Emergency Preparedness Exercises? A Scoping Review Study." *International Journal of Disaster Risk Reduction*. 2017;21:274-283. Lee A, et al. "Intrapartum Maternal Cardiac Arrest: A Simulation for Multidisciplinary Providers." MedEdPORTAL. 2018;14:1-8.
Requirement	EP 6: Review hemorrhage cases that meet criteria established by the organization to evaluate the effectiveness of the care, treatment, and services provided by the hemorrhage response team during the event.
Rationale	Continuous feedback loops are imperative for organizations to find errors and improve skills to ensure that patients are receiving the highest level of care. Root cause analysis, apparent-cause analysis, or similar tools to review the care in a rigorous, psychologically

	safe environment is critical to identify successes and opportunities for improvement in a way that creates a culture of safety and empowers staff to design safe and effective procedures and processes.
Reference	Callaghan WM, et al. "Facility-Based Identification of Women with Severe Maternal Morbidity: It is Time to Start." Obstetrics & Gynecology. 2014;123:978-981. Kilpatrick SJ, et al. "Standardized Severe Maternal Morbidity Review: Rationale and Process." Obstetrics & Gynecology. 2014;124:361-366.
Requirement	EP 7: Provide education to patients (and their families including the designated support person whenever possible). At a minimum, education includes: • Signs and symptoms of postpartum hemorrhage during hospitalization that alert the patient to seek immediate care • Signs and symptoms of postpartum hemorrhage that alert the patient to seek immediate care
Rationale	Women need to know what symptoms are considered dangerous, when to call for help during hospitalization, and when to seek care after discharge. Women should understand a) what amount of bleeding is concerning, and b) possible signs of internal bleeding that should prompt them to call for help or seek care even if no bleeding is seen (e.g., abdominal pain, extreme tiredness, or rapid heartbeat.)
Reference	American College of Obstetricians and Gynecologists. "Optimizing Postpartum Care." ACOG Committee Opinion No. 736. Obstetrics & Gynecology. 2018;131:e140-e150. Suplee PD, et al. "Discharge Education on Maternal Morbidity and Mortality Provided by Nurses to Women in the Postpartum Period. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2016;45:8994-904. Suplee PD, et al. "Improving Postpartum Education About Warning Signs of Maternal Morbidity and Mortality. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2016;20:552-567.

Not a complete literature review.

Standard PC.06.01.03: Reduce the likelihood of harm related to maternal severe hypertension/preeclampsia.

Requirement	EP 1: Develop written evidence-based procedures for measuring and remeasuring blood pressure. These procedures include criteria that identify patients with severely elevated blood pressure.
Rationale	Procedures should address appropriate blood pressure measurement, including cuff size, proper patient positioning, and frequency of measurement. Inaccurate measurement can lead to a mother not receiving proper treatment and being discharged with elevated blood pressure. Untreated hypertension can lead to morbidities or even death. Criteria for what constitutes a severely elevated blood pressure should be established by the organization utilizing current recommendations from national organizations.
Reference	Nathan H, et al. "Blood Pressure Management in Pregnancy." Royal College of Obstetricians and Gynaecologists. 2015;17:91-98.
Requirement	EP 2: Develop written evidence-based procedures for managing pregnant and postpartum patients with severe hypertension/preeclampsia that includes the following: • The use of an evidence-based set of emergency response medications that are stocked and immediately available on the obstetric unit • The use of seizure prophylaxis • Guidance on when to consult additional experts and consider transfer to a higher level of care • Guidance on when to use continuous fetal monitoring • Guidance on when to consider emergent delivery • Criteria for when a team debrief is required *Note: The written procedures should be developed by a multidisciplinary team that includes*

	representation from obstetrics, emergency department, anesthesiology, nursing, laboratory, and pharmacy.
Rationale	Studies have shown that delays in the diagnosis and treatment of severe hypertension/preeclampsia and receipt of suboptimal treatment of severe hypertension/preeclampsia are linked with adverse maternal outcomes. Having clear procedures in place and educating staff around these procedures should decrease failures to recognize and treat severe hypertension/preeclampsia.
Reference	American College of Obstetricians and Gynecologists. "Emergent Therapy for Acute-Onset, Severe Hypertension During Pregnancy and the Postpartum Period. ACOG Committee Opinion No. 767." Obstetrics & Gynecology. 2019;133:e174-180. American College of Obstetricians and Gynecologists. "Task Force on Hypertension in Pregnancy. Hypertension in Pregnancy Task Force Report." DOI: 10.1097/01.AOG.0000437382.03963.88 Troiano NH and Witcher PM. "Maternal Morbidity in the United States: Classification on Causes, Preventability and Critical Care Obstetric Implications." *Journal of Perinatalogy & Neonatal Nursing*. 2018;32(3):222-231.
Requirement	EP 3: Provide role-specific education to all staff and providers who treat pregnant/ postpartum patients about the hospital's evidence-based severe hypertension/preeclampsia procedure. At a minimum, education occurs at orientation, whenever changes to the procedure occur, or every two years. *Note: The emergency department is often where patients with symptoms or signs of severe hypertension present for care after delivery. For this reason, education should be provided to staff and providers in emergency departments regardless of the hospital's ability to provide labor and delivery services.*
Rationale	Decreasing the blood pressure through rapid recognition and treatment has been shown to decrease maternal morbidity and mortality. It is imperative to provide education for staff and providers on how to measure accurate blood pressures, recognize severe hypertension/ preeclampsia, and provide evidence-based treatments to lower blood pressure in a safe and timely manner. Although not required, *in situ* simulations that allow staff to practice organizational procedures in actual clinical settings are encouraged.
Reference	American College of Obstetricians and Gynecologists. "Task Force on Hypertension in Pregnancy. Hypertension in Pregnancy Task Force Report." DOI: 10.1097/01.AOG.0000437382.03963.88 Druzin JL, et al. Preeclampsia Toolkit — "Improving Health Care Response to Preeclampsia: A California Toolkit to Transform Maternity Care (2014)." Developed under contract #11-10006 with the California Department of Public Health; Maternal, Child and Adolescent Health Division. Published by the California Maternal Quality Care Collaborative. 2013.
Requirement	EP 4: Conduct drills at least annually to determine system issues as part of ongoing quality improvement efforts. Severe hypertension/preeclampsia drills include a team debrief.
Rationale	Multidisciplinary drills give an organization the opportunity to practice skills and identify system issues in a controlled environment. It is crucial to have members from as many disciplines as possible available during drills to truly be able to test each level of the emergency and identify areas of improvement. Organizations should assess their level of proficiency to determine the frequency drills should be performed; organizations that have reached a high level of mastery may need less frequent drills.
Reference	American College of Obstetricians and Gynecologists. "Preparing for Clinical Emergencies in Obstetrics and Gynecology." ACOG Committee Opinion No. 590. Obstetrics & Gynecology. 2014;123:722-725. Kyryabina E, et al. "What is the Value of Health Emergency Preparedness Exercises? A Scoping Review Study." *International Journal of Disaster Risk Reduction*. 2017;21:274-283. Lee A, et al. "Intrapartum Maternal Cardiac Arrest: A Simulation for Multidisciplinary

	Providers." MedEdPORTAL. 2018;14:1-8.
Requirement	EP 5: Review severe hypertension/preeclampsia cases that meet criteria established by the hospital to evaluate the effectiveness of the care, treatment, and services provided to the patient during the event.
Rationale	Continuous feedback loops are imperative for organizations to find errors and improve skills to ensure that patients are receiving the highest level of care. Root cause analysis, apparent-cause analysis, or similar tools to review the care in a rigorous, psychologically safe environment is critical to identify successes and opportunities for improvement in a way that creates a culture of safety and empowers staff to design safe and effective procedures and processes.
Reference	Callaghan WM, et al. "Facility-Based Identification of Women with Severe Maternal Morbidity: It is Time to Start." Obstetrics & Gynecology. 2014;123:978-981. Kilpatrick SJ, et al. "Standardized Severe Maternal Morbidity Review: Rationale and Process." Obstetrics & Gynecology. 2014;124:361-366.
Requirement	EP 6: Provide printed education to patients (and their families including the designated support person whenever possible). At a minimum, education includes: • Signs and symptoms of severe hypertension/preeclampsia during hospitalization that alert the patient to seek immediate care • Signs and symptoms of severe hypertension/preeclampsia after discharge that alert the patient to seek immediate care • When to schedule a post-discharge follow-up appointment
Rationale	Maternal mortality reviews have shown that some patients with severe hypertension/ preeclampsia due after discharge because they were unaware of which symptoms to watch for and when to seek care urgently. Women should understand their severe hypertension/ preeclampsia diagnosis and inform healthcare providers of their pregnancy history when the seek care after discharge to ensure correct diagnosis and treatment.
Reference	Brousseau CE, et al. "Emergency Department Visits for Postpartum Hypertension." *Hypertension in Pregnancy*. 2017;36(2):212-216. American College of Obstetricians and Gynecologists. "Optimizing Postpartum Care." ACOG Committee Opinion No. 736. Obstetrics & Gynecology. 2018;131:e140-e150. Suplee PD, et al. "Discharge Education on Maternal Morbidity and Mortality Provided by Nurses to Women in the Postpartum Period. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2016;45:8994-904. Suplee PD, et al. "Improving Postpartum Education About Warning Signs of Maternal Morbidity and Mortality. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2016;20:552-567.

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