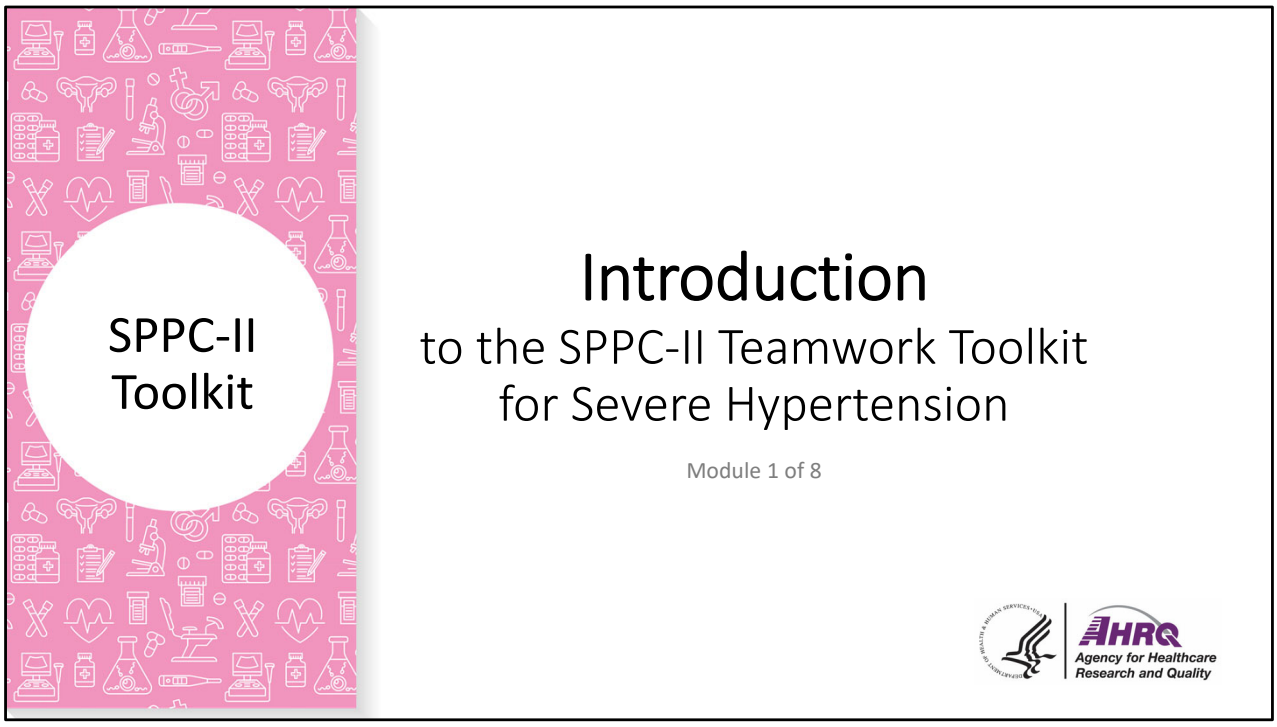


SCRIPT

Thank you for participating in the Safety Program for Perinatal Care II (also known as SPPC-II) presented by the Johns Hopkins University, Agency for Healthcare Research and Quality, and the Alliance for Innovation on Maternal Health (AIM). This module will introduce you to the SPPC-II program and the Teamwork Toolkit for the Severe Hypertension bundle. It will serve as the foundation to the remaining training modules, which will cover a suite of useful teamwork tools and their application to managing severe hypertension in accordance with the AIM framework.

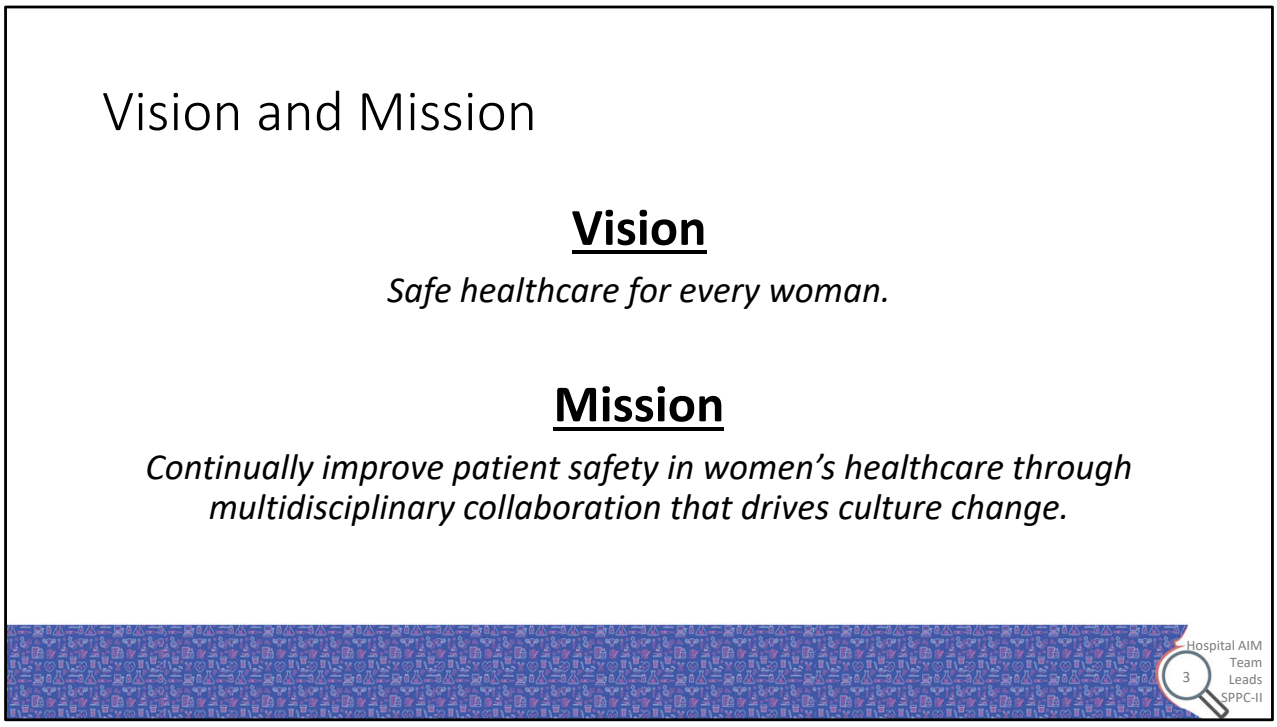
Overview

- Mision and Vision
- Care Components: Technical and Adaptive
- SPPC-II Teamwork Toolkit
- The 4 Rs of AIM Patient Safety Bundles
- The Master Clinical Scenario: Maternal Severe Hypertension

SCRIPT

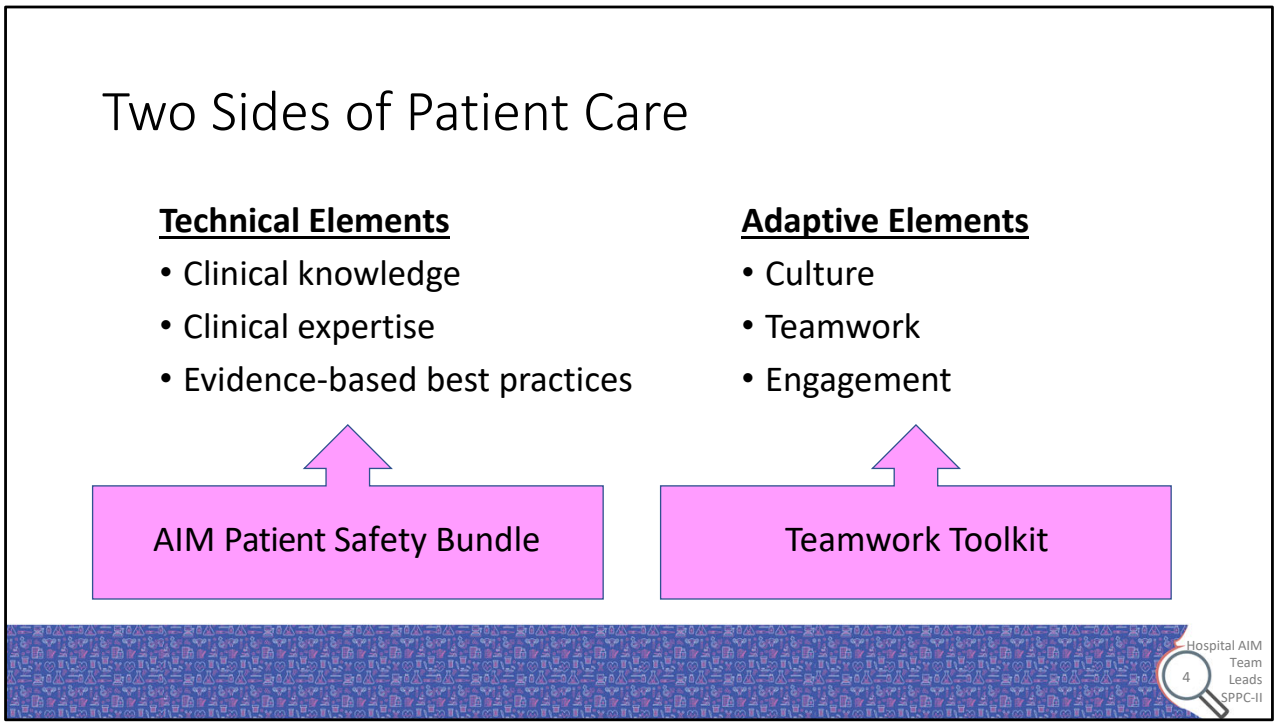
A brief outline of this session is:

- To provide an overview of AIM's mission and vision
- Explain the technical and adaptive sides of patient care improvement work
- Situate the SPPC-II Teamwork Toolkit within this framework and mission
- Provide an overview of the 4 Rs of AIM's Severe Hypertension patient safety bundle
- Introduce the clinical scenario of severe hypertension, which will serve as the basic scenario in which we will demonstrate all of the tools covered in this workshop



SCRIPT
Guided by the vision to achieve safe healthcare for every woman, the AIM program is working toward elimination of all preventable maternal mortality and severe morbidity across the United States. We will share maternal mortality and severe maternal morbidity statistics later in the day during the Evaluation Module (Module 8).

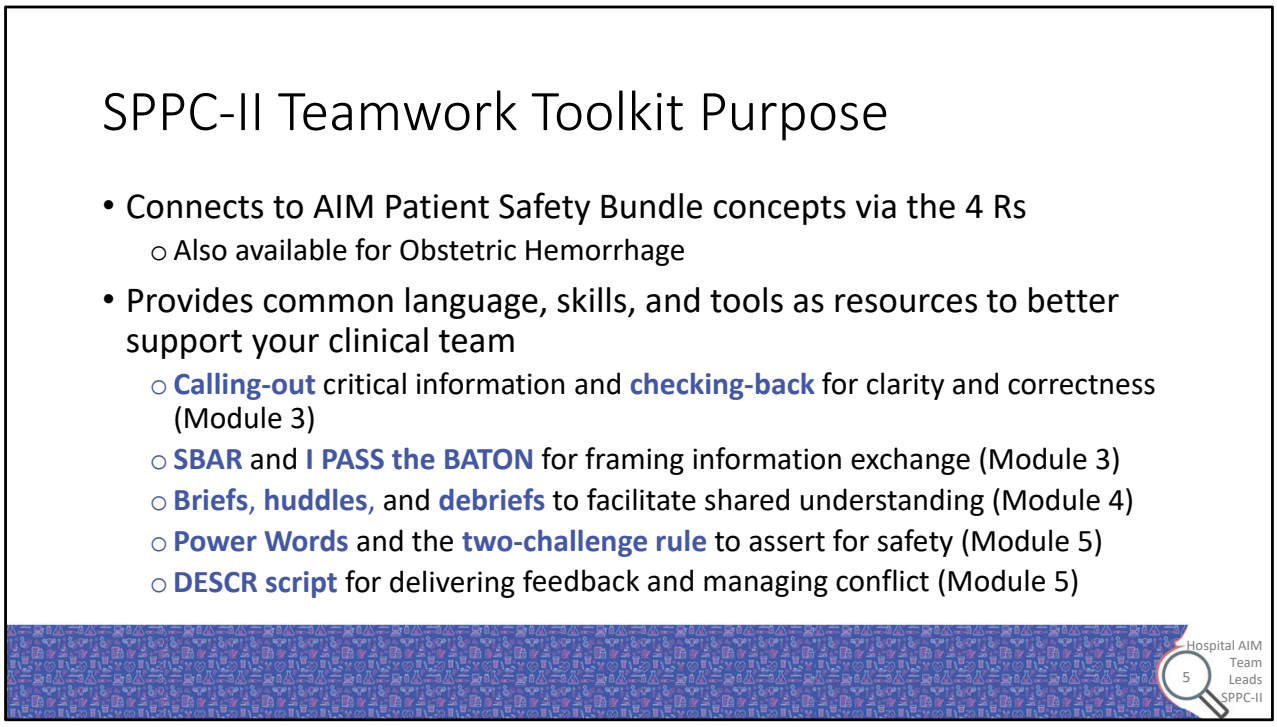
The mission of AIM is to continually improve patient safety in women's healthcare through multidisciplinary collaboration that drives culture change. To this end, AIM has created multiple patient safety bundles designed to address specific concerns within obstetric care, such as severe hypertension. Working toward the improvement of overall maternal health outcomes, AIM partners with state teams and health systems to align national-, State-, and hospital-level quality improvement efforts and implementation of the patient safety bundles.



SCRIPT

We know you are working hard to align yourself with the AIM mission and vision statements by committing all you can to your clinical practice. You may be surprised to learn that patient safety isn't simply about the application of clinical knowledge and expertise. While these technical elements are essential, there is a second side to care that complements clinical skills. Termed "adaptive" because they enable translation of technical competence into practice, these components include the cultural and socio-emotional elements that deeply affect the way technical elements of care are delivered. Consider for a moment how your ability to do your job is enhanced or hindered by your working relationships. Imagine how the care you provide might be or feel different when you're completely in sync with your teammates versus what it might look like if you had completely dysfunctional team dynamics. Totally different, right?

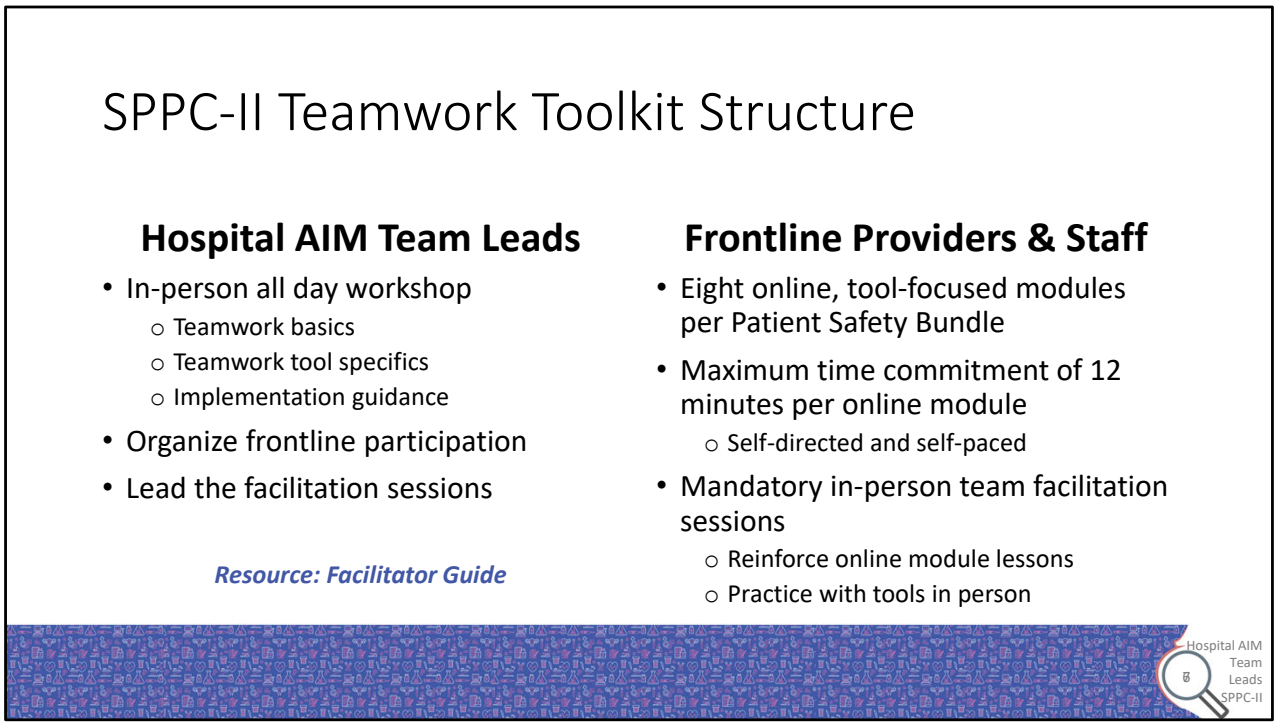
Hopefully, what you take away from this simple mind exercise is the understanding that, when we have the goal to provide safe care to every woman, we have to consider both whether we are caring for her with the best clinical knowledge available and within the most effective adaptive setting. The AIM patient safety bundles that your organization is implementing satisfy the technical side. This teamwork toolkit aligns with those bundles to help improve the adaptive side of patient care. The SPPC-II Teamwork Toolkit will do so by providing you with specific tools and strategies you can use when working with your colleagues to provide team-based care to your patients.



SCRIPT

This toolkit has been designed to connect established teamwork concepts within the context of AIM's Patient Safety Bundle for Severe Hypertension in Pregnancy using AIM's 4R's framework. A similar toolkit is available for AIM's Obstetric Hemorrhage Patient Safety Bundle. The SPPC-II Teamwork Toolkit is comprehensive in its ability to teach language, skills, tools, and strategies you can utilize with your team daily and presents a case scenario that demonstrates how these strategies may be used while caring for a severely hypertensive mother. Not only does the SPPC-II Teamwork Toolkit provide instruction on the adaptive skills that allow you to best engage in teamwork that keeps your patients' safety and quality of care at the forefront of everything, but it also discusses how to have difficult conversations and interactions with coworkers/colleagues that come when working in a stressful and busy environment.

We will discuss the terms and concepts on this slide as we proceed throughout today's workshop. Your frontline providers and staff will also be expected to complete online modules covering each of these topics, though their numbering will be different from that presented here.

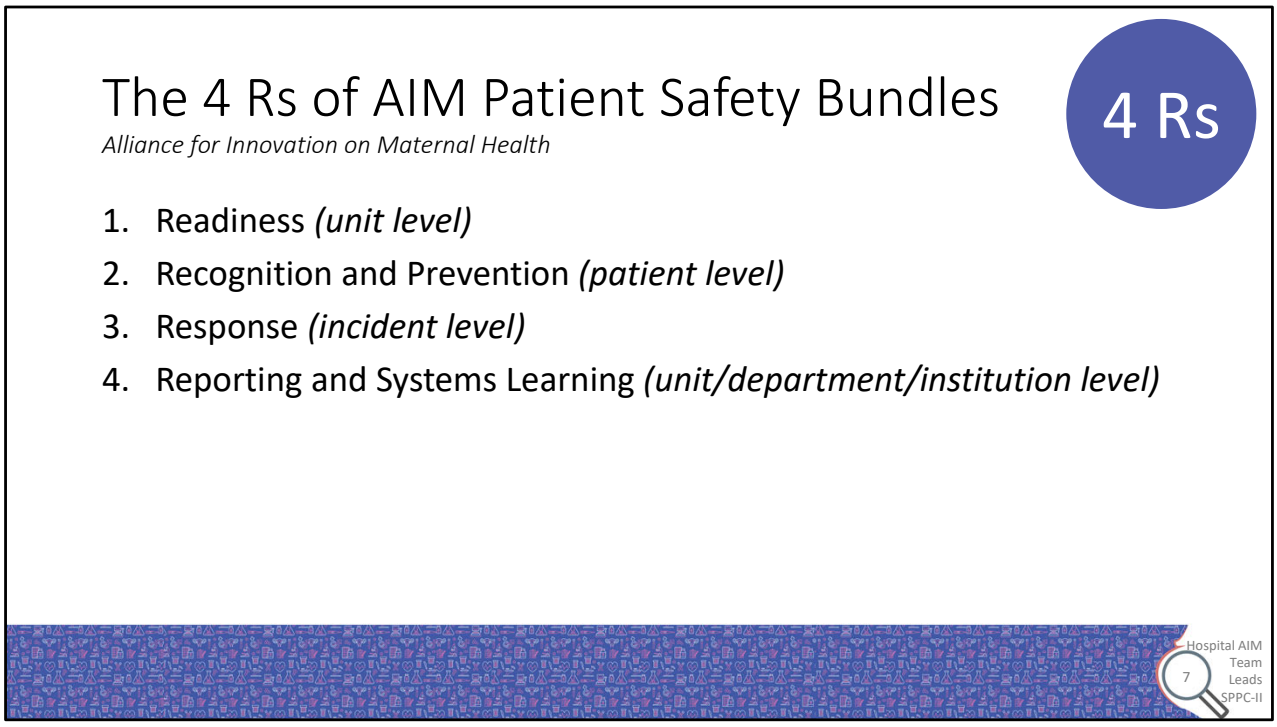


SCRIPT

There are two audiences for this toolkit: Hospital (or OB) AIM Team Leads and the frontline providers and staff. All of you here today are part of your Hospital AIM Team and responsible for leading the efforts for rolling out both the AIM clinical bundles and this SPPC-II Teamwork Toolkit to your frontline staff at your home institutions.

As our Tier 2 audience, you'll participate in this in-person workshop during which you will learn teamwork basics, teamwork tool specifics, and implementation necessities. We will help you organize frontline participation and teach you how to lead the facilitation sessions.

Your frontline providers and staff are what we call our Tier 1 audience as they will really only learn about teamwork tool specifics that are the foundation to everything else you will learn. The training developed for the frontline include eight online tool-focused modules that have been tailored to each patient safety bundle. We have kept each of these modules purposefully short—under 12 minutes each. However, to supplement this information and demonstration-based training, we expect you to schedule in-person team facilitation sessions so lessons from the training are reinforced through demonstrated commitment to their use and practice. See the Facilitator Guide for more explicit guidance on how to mange the rollout of these materials.



SCRIPT

AIM is a national data-driven maternal safety and quality improvement initiative based on proven implementation approaches to improving maternal safety and outcomes in the United States. AIM provides evidence-based frontline resources for birth facilities and provider/public health teams to adapt and implement a series of action steps (patient safety bundles) on high-risk maternal conditions. These patient safety bundles are standardized evidence-informed processes to reduce variation in response to maternal care. They are developed by multidisciplinary work groups of experts in the field representing each of our AIM partners and specialty organizations.

Each patient safety bundle consists of four domains, known as the 4 Rs. These include readiness, recognition and prevention, response, and reporting. Specifics of each domain is tailored to each patient safety bundle.

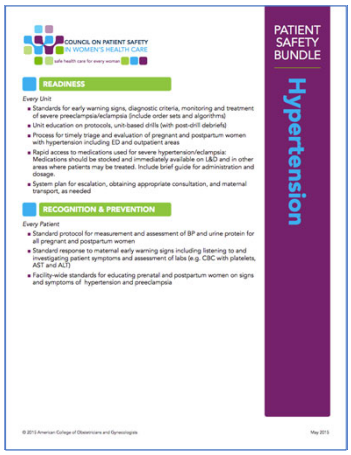
This module will focus on the 4 Rs associated with the Severe Hypertension bundle.

Severe Hypertension: Readiness

READINESS

Every Unit

- Standards for early warning signs, diagnostic criteria, monitoring and treatment of severe preeclampsia/eclampsia (include order sets and algorithms)
- Unit education on protocols, unit-based drills (with post-drill debriefs)
- Process for timely triage and evaluation of pregnant and postpartum women with hypertension including ED and outpatient areas
- Rapid access to medications used for severe hypertension/eclampsia: Medications should be stocked and immediately available on L&D and in other areas where patients may be treated. Include brief guide for administration and dosage.
- System plan for escalation, obtaining appropriate consultation, and maternal transport, as needed



Hospital AIM Team Leads SPPC-II

8

SCRIPT

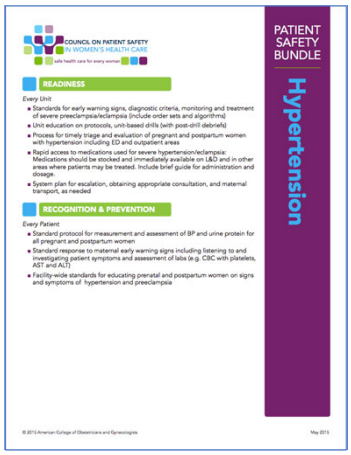
Every birth unit and outpatient triage area needs to prepare for the emergency situation of maternal hypertension—developing protocols, educating staff, and creating quick access to medications. Drills and other staff education in responding to severe maternal hypertension are critical as well as creating the systems to assure timely and adequate treatment centering on patient needs.

Severe Hypertension: Recognition

RECOGNITION & PREVENTION

Every Patient

- Standard protocol for measurement and assessment of BP and urine protein for all pregnant and postpartum women
- Standard response to maternal early warning signs including listening to and investigating patient symptoms and assessment of labs (e.g. CBC with platelets, AST and ALT)
- Facility-wide standards for educating prenatal and postpartum women on signs and symptoms of hypertension and preeclampsia



Hospital AIM Team Leads SPPC-II

9

SCRIPT

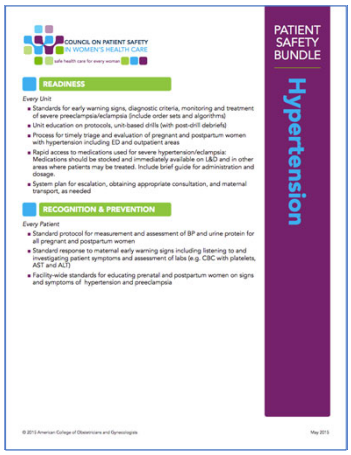
Early recognition of severe maternal hypertension is lifesaving. Staff must note that the hemodynamics of pregnancy require action even when the pregnant woman has lived with chronic hypertension. Every unit working with pregnant and postpartum women should review correct blood pressure measurement with cuffs that are appropriate for the size and requirement of the woman. Staff should respond to early-warning signs, especially unremitting headaches.

Severe Hypertension: Response

RESPONSE

Every case of severe hypertension/preeclampsia

- Facility-wide standard protocols with checklists and escalation policies for management and treatment of:
  - Severe hypertension
  - Eclampsia, seizure prophylaxis, and magnesium over-dosage
  - Postpartum presentation of severe hypertension/preeclampsia
- Minimum requirements for protocol:
  - Notification of physician or primary care provider if systolic BP =/> 160 or diastolic BP =/> 110 for two measurements within 15 minutes
  - After the second elevated reading, treatment should be initiated ASAP (preferably within 60 minutes of verification)
  - Includes onset and duration of magnesium sulfate therapy
  - Includes escalation measures for those unresponsive to standard treatment
  - Describes manner and verification of follow-up within 7 to 14 days postpartum
  - Describe postpartum patient education for women with preeclampsia
- Support plan for patients, families, and staff for ICU admissions and serious complications of severe hypertension



Hospital AIM Team Leads SPPC-II

10

SCRIPT

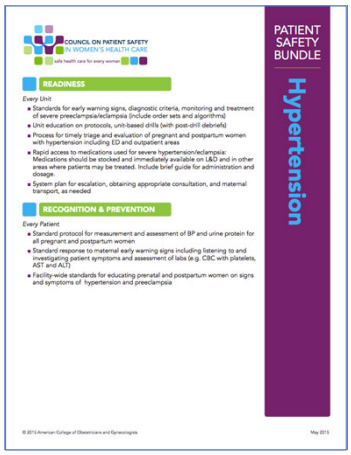
Every unit engaged with pregnant or postpartum women should have a single protocol for response and treatment and an escalation protocol when the protocol cannot be followed.

Severe Hypertension: Reporting and Systems Learning

REPORTING/SYSTEMS LEARNING

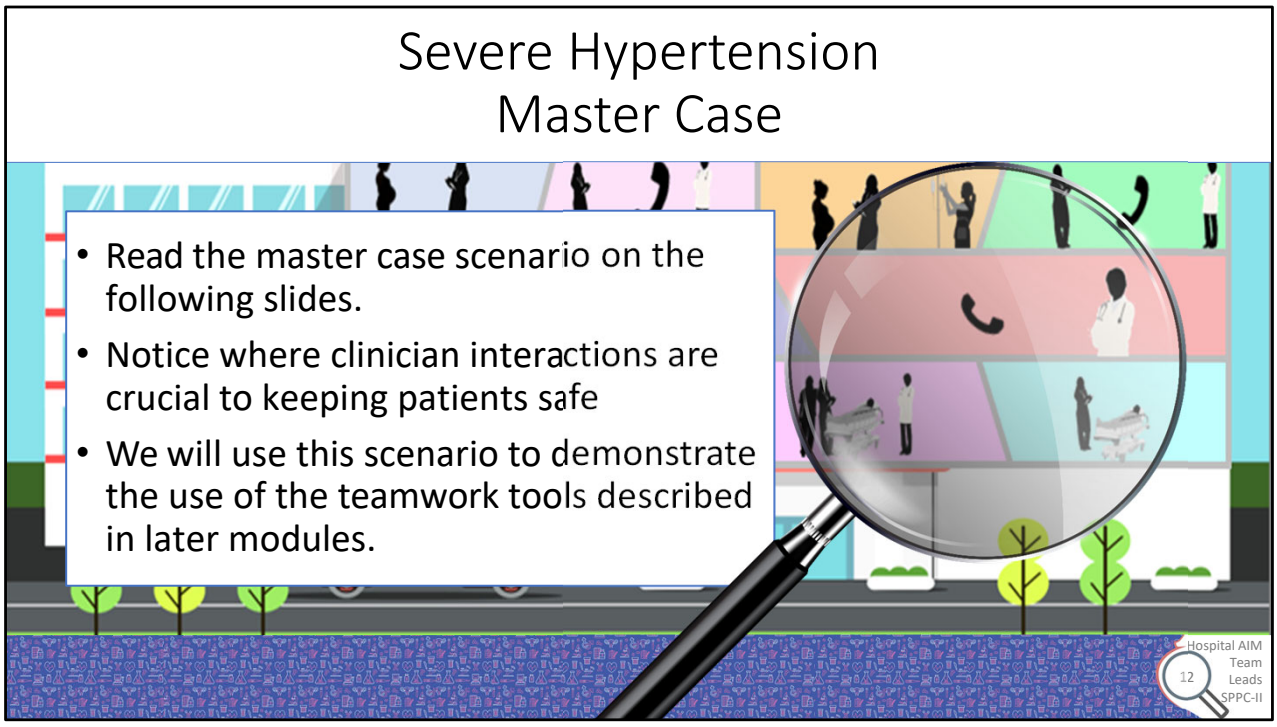
Every unit

- Establish a culture of huddles for high risk patients and post-event debriefs to identify successes and opportunities
- Multidisciplinary review of all severe hypertension/eclampsia cases admitted to ICU for systems issues
- Monitor outcomes and process metrics



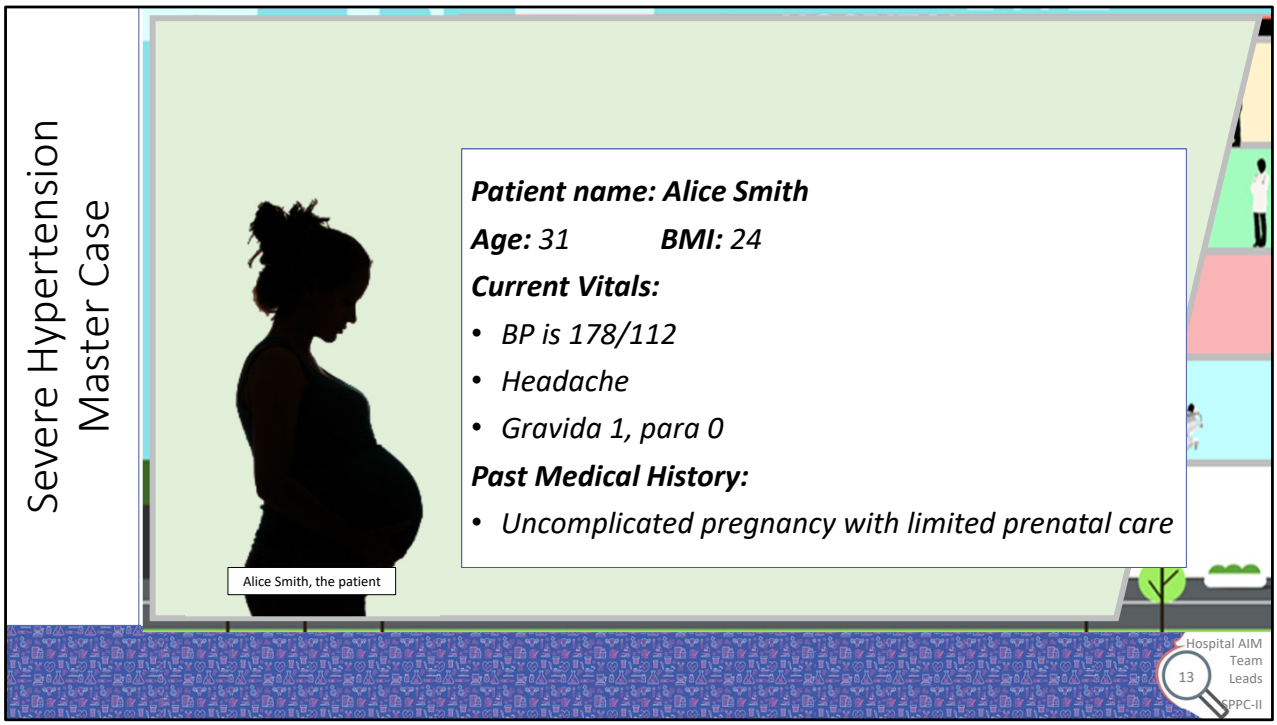
SCRIPT

We learn from every instance of severe hypertension through post-event debriefs and multidisciplinary case reviews. These should take place as soon after the incident as possible.



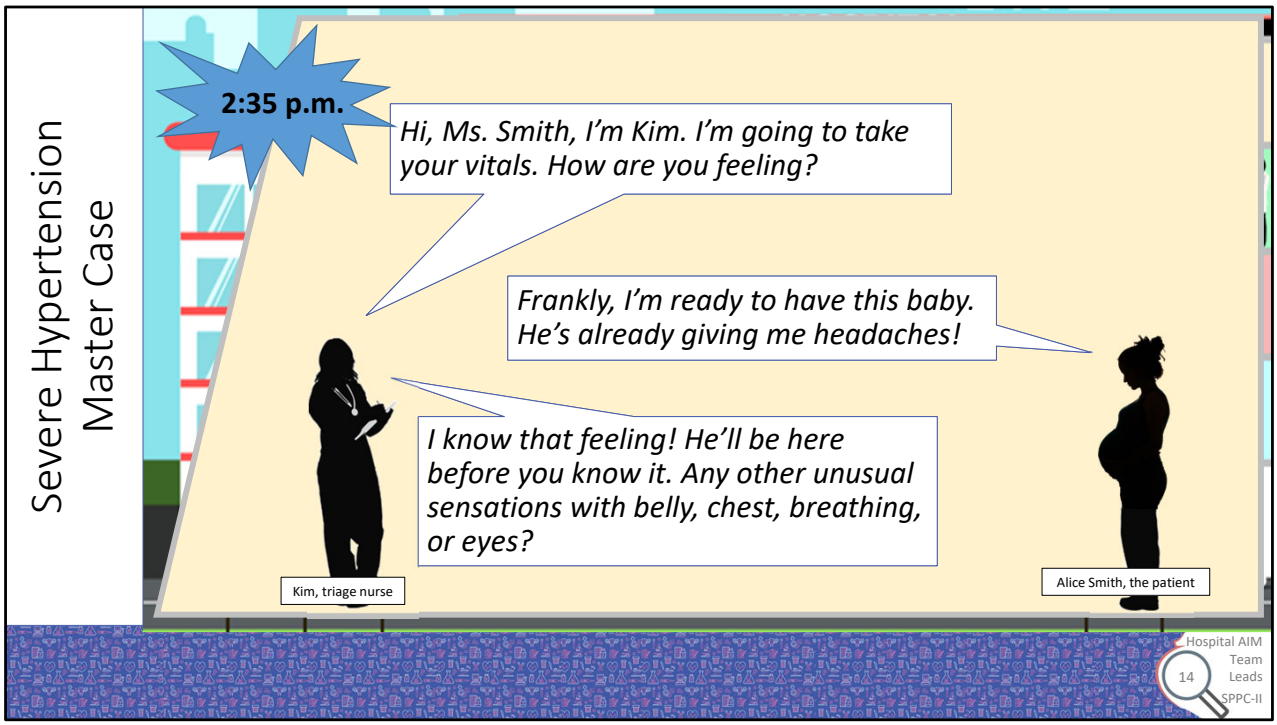
SCRIPT

We conclude the introduction module with the master case scenario related to a severe hypertension case. Read through the case, which has been positioned in a comic strip layout, to see the scenario which will be used and referenced throughout the entire SPPC-II teamwork toolkit training. At certain points in this case, you may see places where clinicians could provide more and better interactions to keep their patients safer, but these instances will be explored during the other online modules in which the teamwork tools are individually introduced.



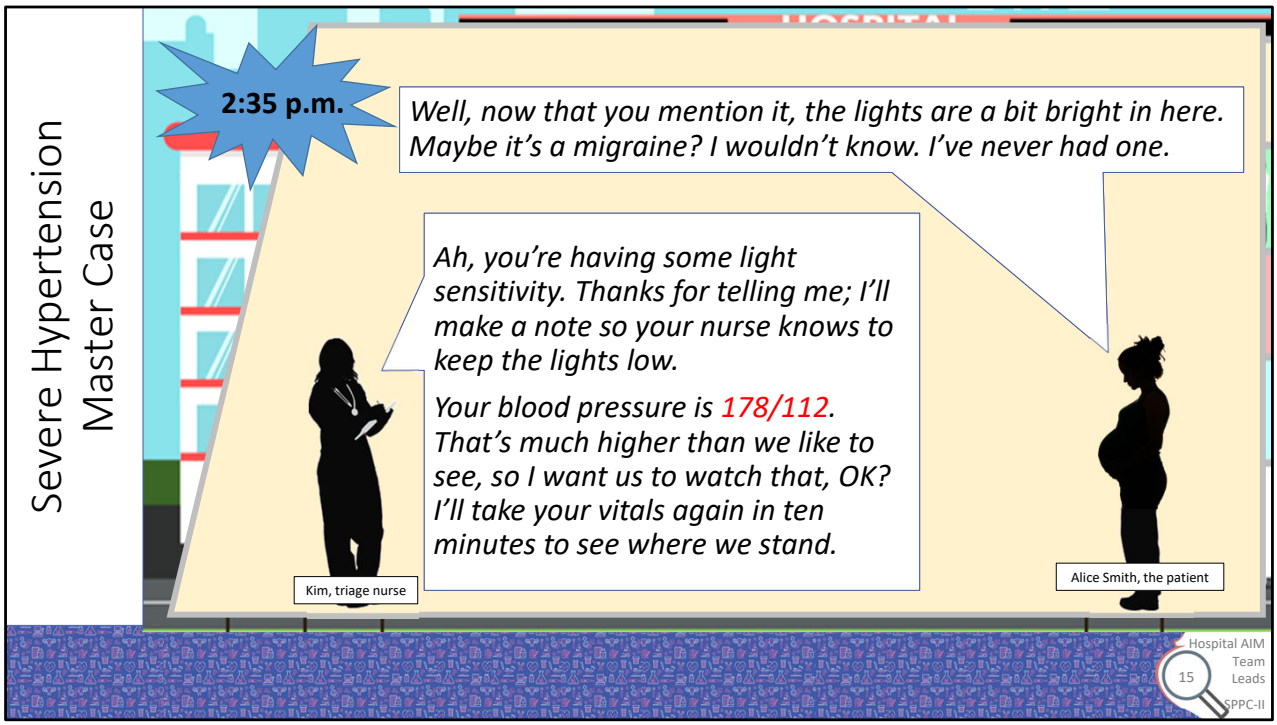
SCRIPT

Alice Smith is a 31-year-old primiparous female who is 36 weeks and 2 days pregnant when she presents to L&D triage with complaints of a headache. She has no pertinent medical history, and her pregnancy has thus far been uncomplicated except for limited prenatal care.



SCRIPT

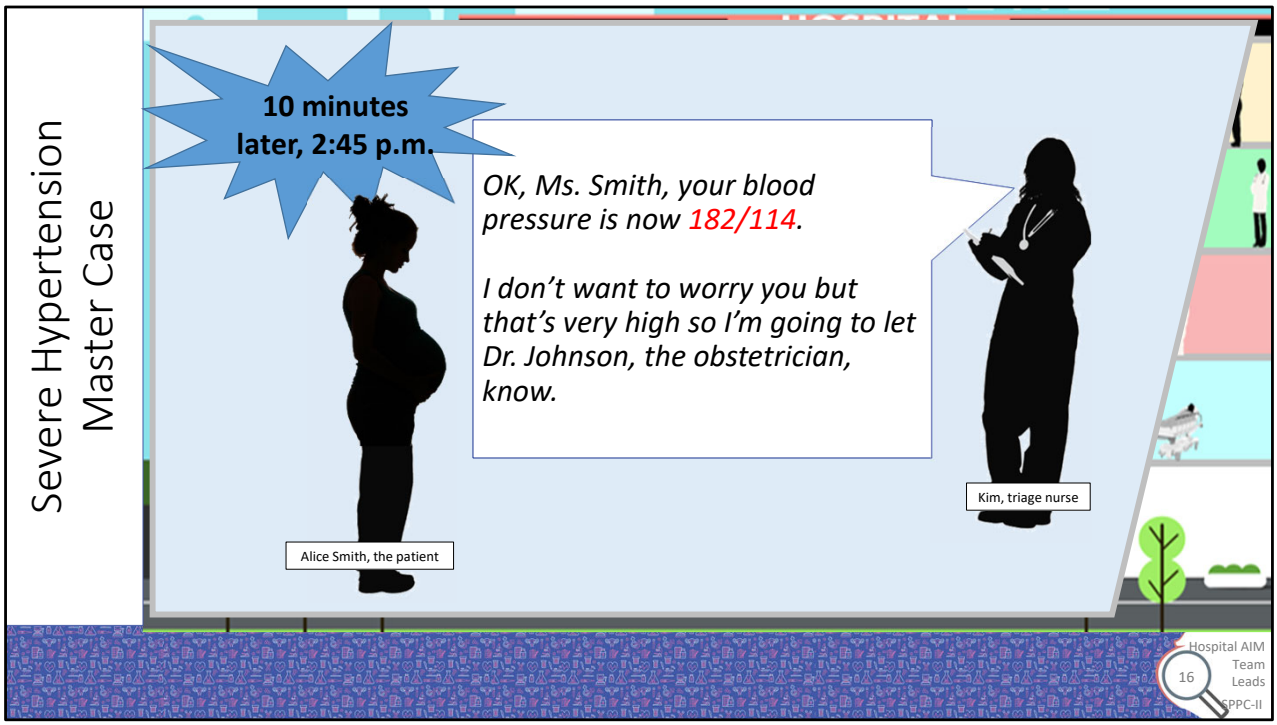
Kim, the triage nurse, greets Ms. Smith at 2:35 p.m. and checks her vitals. As she does so, they casually joke about Ms. Smith's headache and readiness to greet her son. Kim tactfully follows up, asking Ms. Smith to tell her about any other symptoms such as chest pain, belly pain, nausea, breathing difficulty, or vision spots that would be consistent with hypertension.



SCRIPT

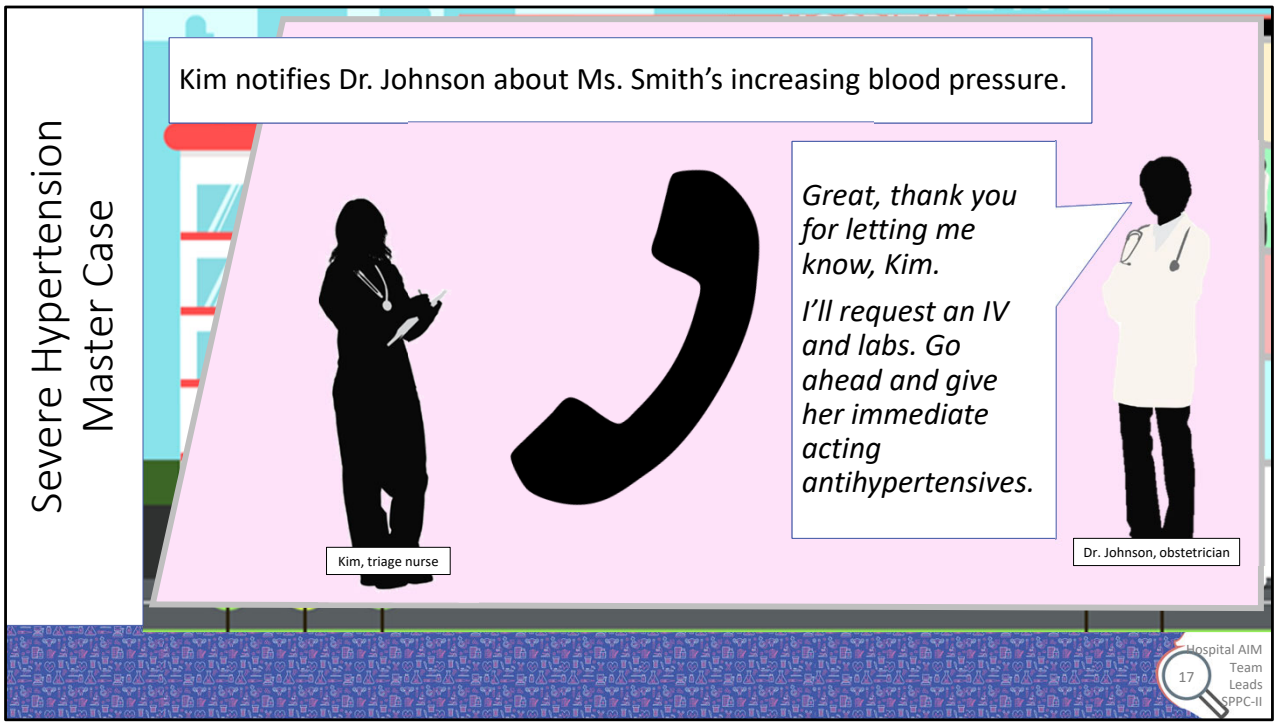
Ms. Smith tells Kim that she's experiencing some light sensitivity, which is abnormal for her as she's not prone to migraines. Kim adds the note to Ms. Smith's chart.

Kim also notes that Ms. Smith's blood pressure is 178/112, which is significantly higher than her baseline. Kim informs Ms. Smith and tells her that she would like to take her vitals again in a few minutes to see where they stand.



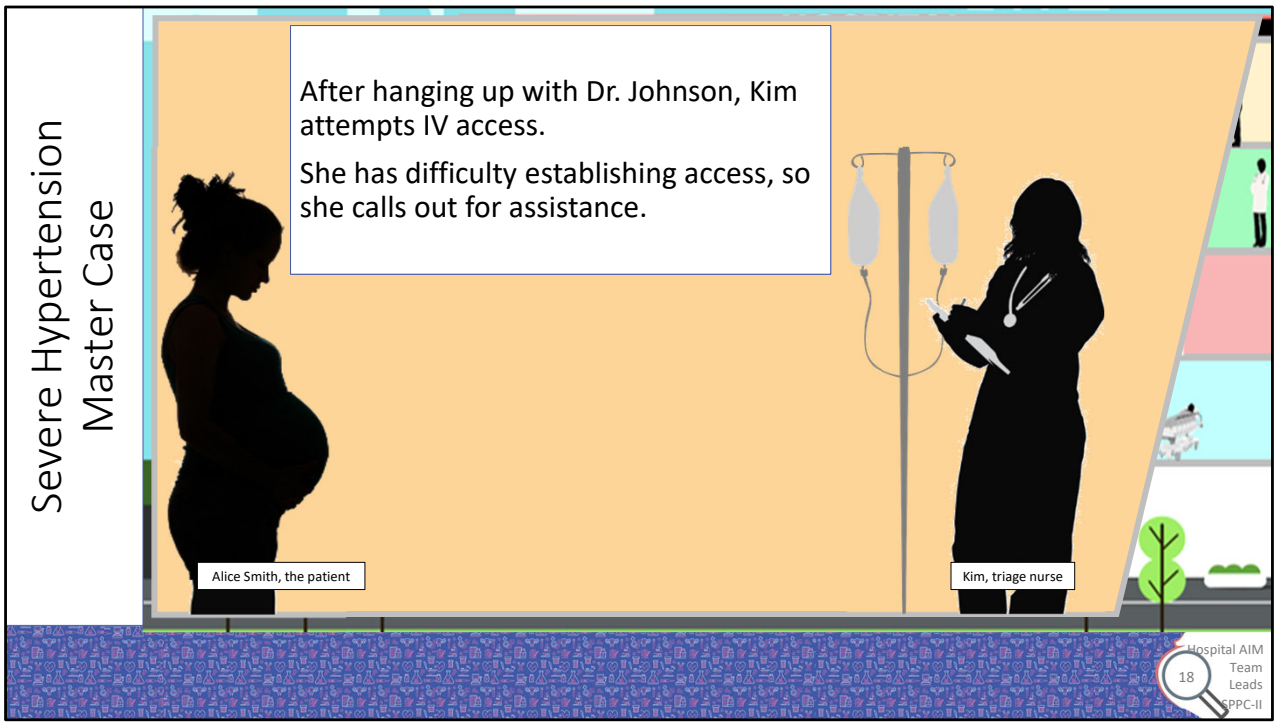
SCRIPT

In the meantime, Kim initiates routine admission paperwork and begins to obtain consent from Ms. Smith for admission to triage. Ten minutes later, Ms. Smith's blood pressure has increased to 182/114. Kim is concerned so at this point she informs Ms. Smith and notifies the covering obstetrician, Dr. Johnson.



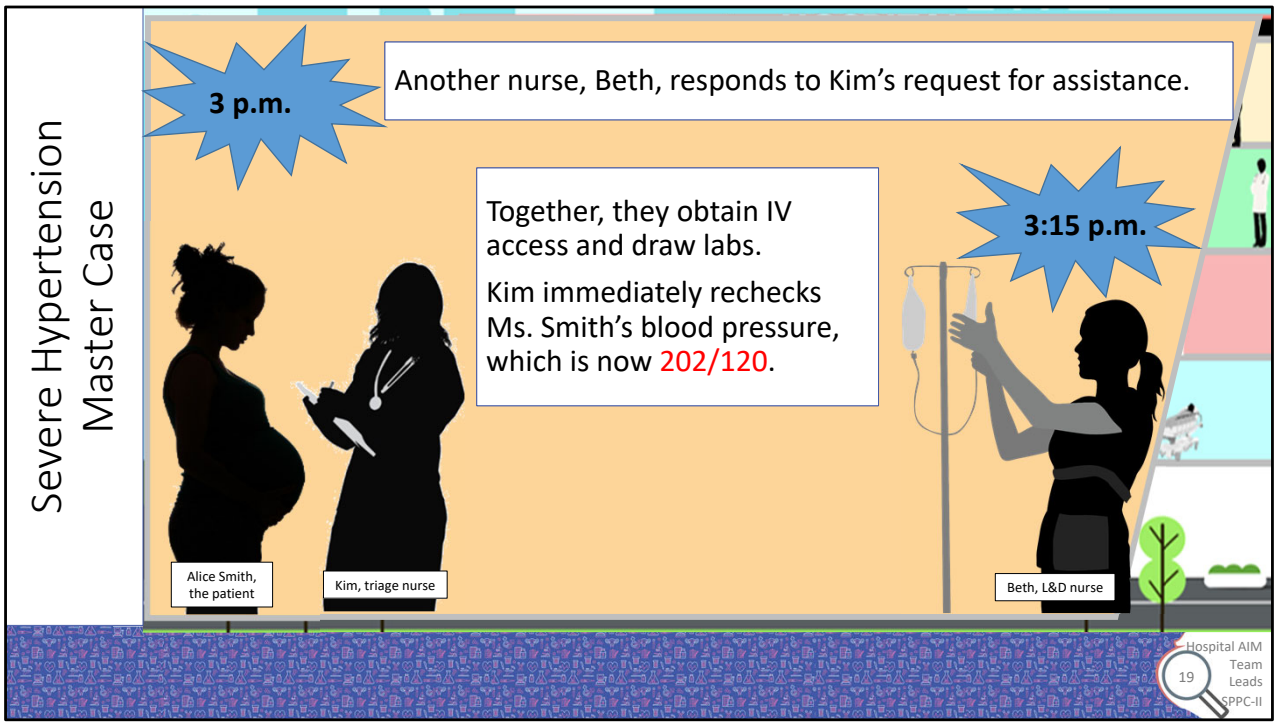
SCRIPT

Kim calls Dr. Johnson, who listens intently to Kim's concerns about Ms. Smith's rising blood pressure. Following Kim's briefing, Dr. Johnson requests an IV and labs, and orders immediate acting antihypertensives to treat Ms. Smith's severe-range blood pressure.



SCRIPT

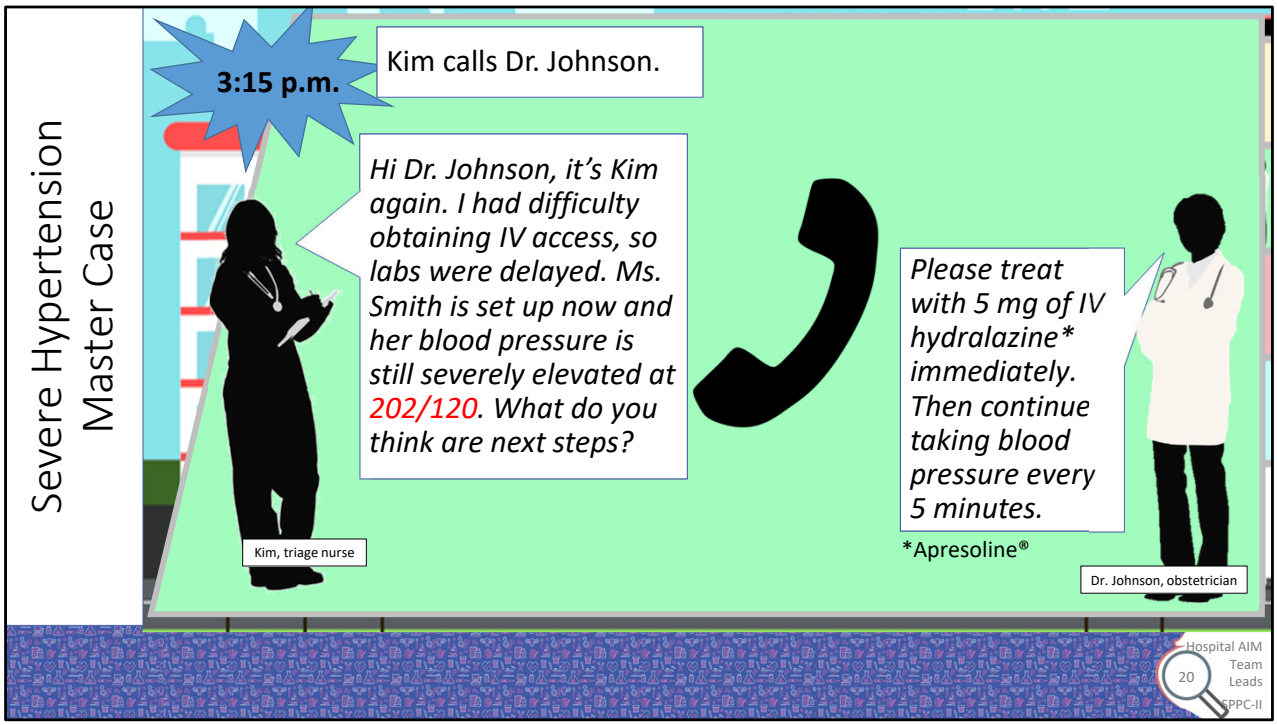
After hanging up with Dr. Johnson, Kim attempts IV access in order to obtain labs and administer IV antihypertensives. She has difficulty establishing access, so she calls out for assistance.



SCRIPT

At 3 p.m., another nurse, Beth, comes to attempt additional IV placement and blood draw.

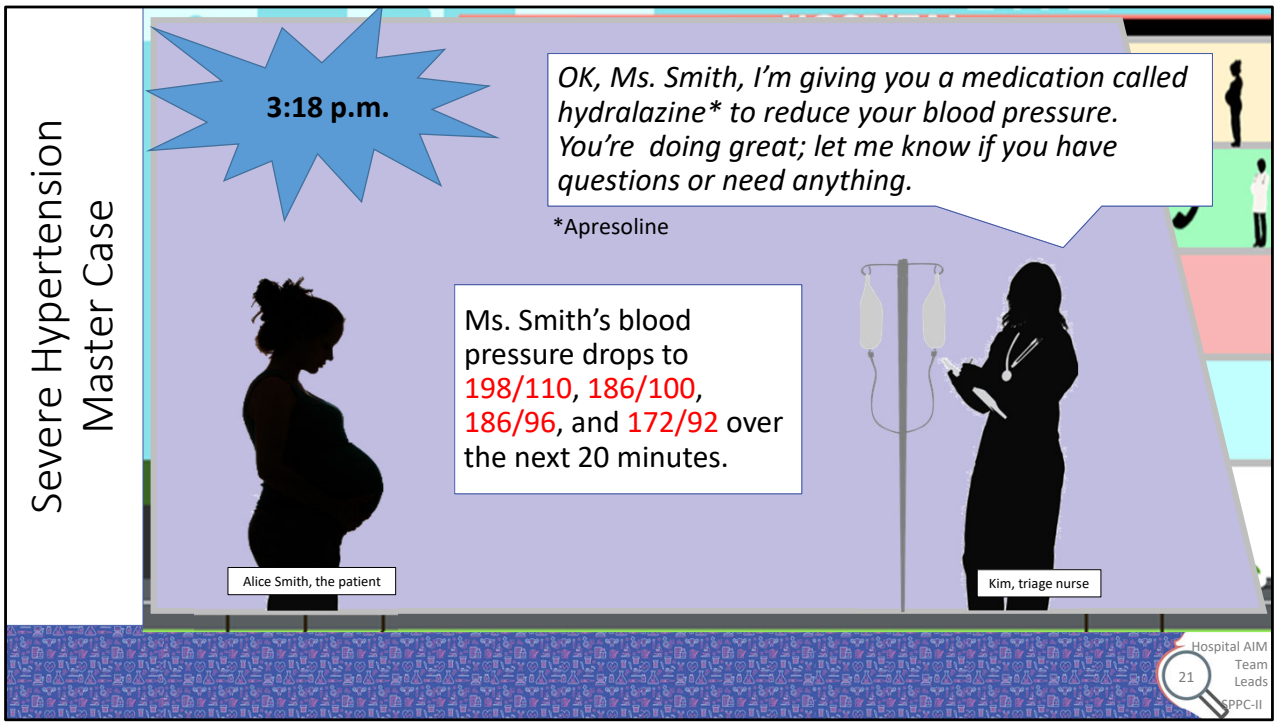
At 3:10 p.m., with Beth's help they successfully obtain IV access and draw labs. Kim immediately rechecks Ms. Smith's blood pressure, which is now 202/120.



SCRIPT

Kim calls Dr. Johnson again to deliver an update on Ms. Smith's severe-range blood pressure, explaining that the difficulty in obtaining IV access led to a delay in treatment.

Dr. Johnson emphasizes immediate treatment with 5 mg of IV hydralazine (Apresoline®) and instructs Kim to continue taking blood pressure measurements every 5 minutes.

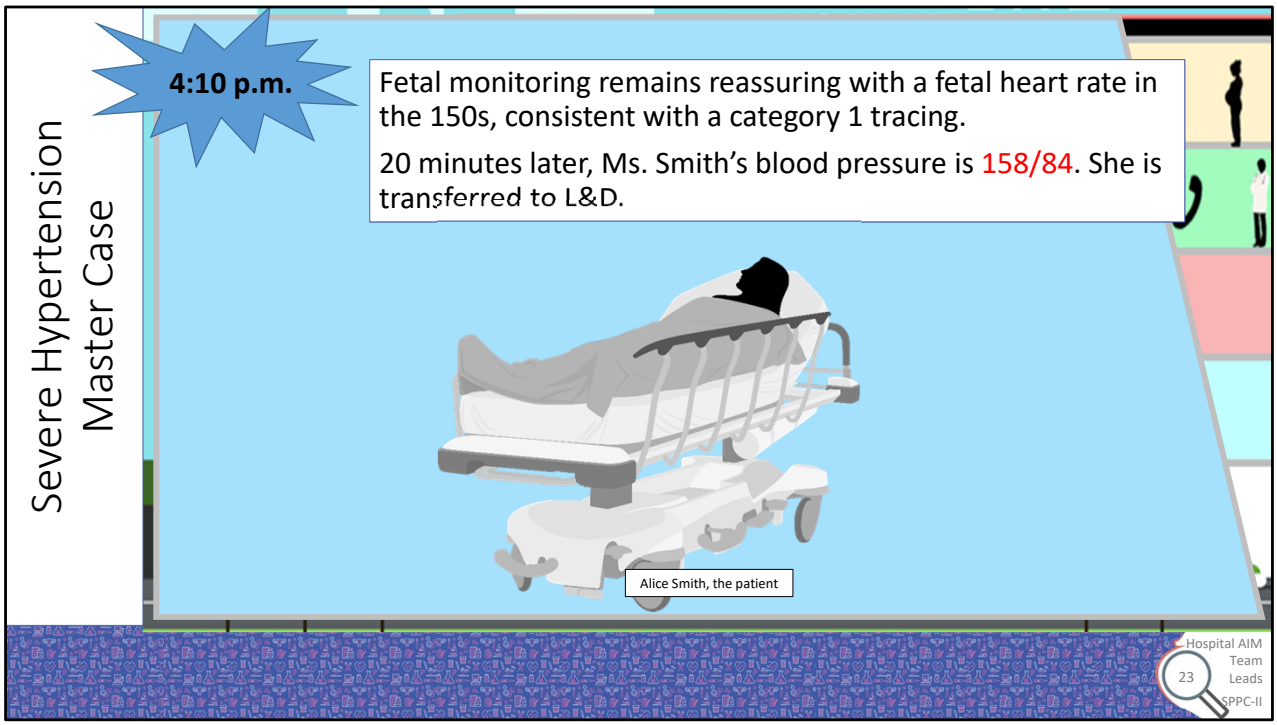


SCRIPT

Ms. Smith receives IV hydralazine (Apresoline)
at 3:18 p.m. Her blood pressure drops to 198/110, 186/100, 186/96, and 172/92 over the next 20 minutes.

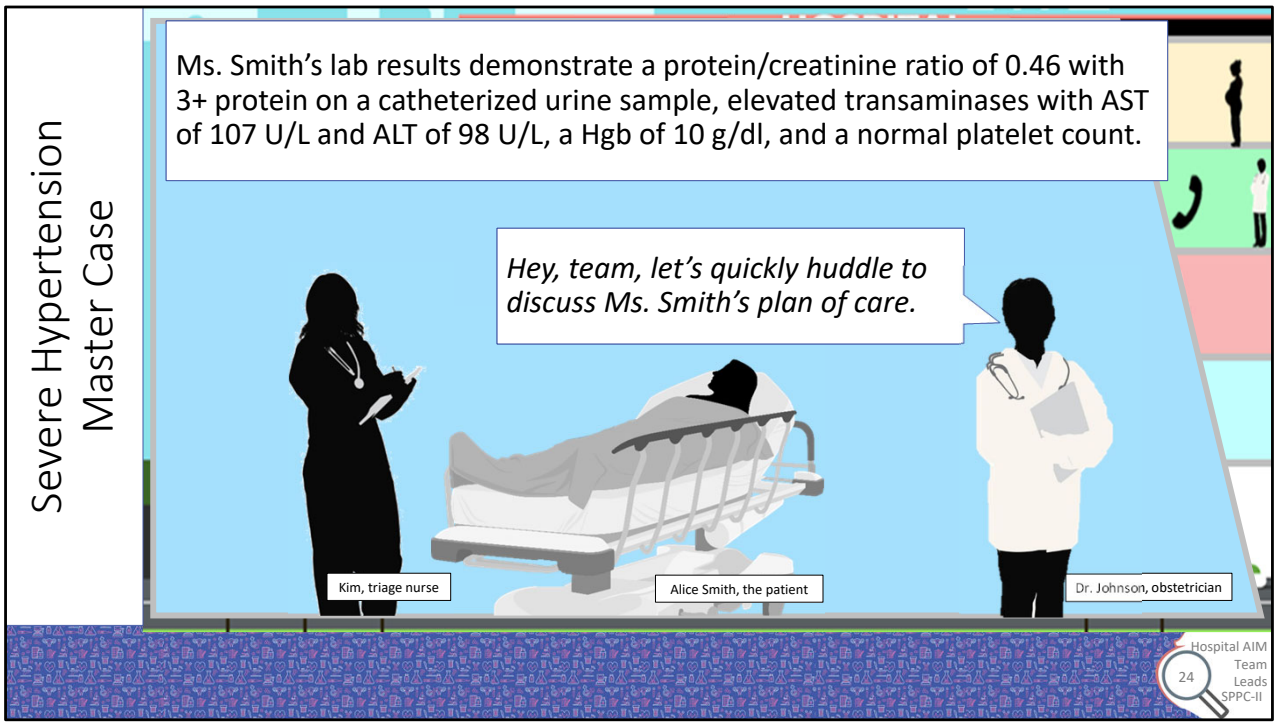
SCRIPT

Kim calls Dr. Johnson to deliver an update at 3:40. Still not satisfied with the improvement, Dr. Johnson orders an additional 10 mg of IV hydralazine (Apresoline).



SCRIPT

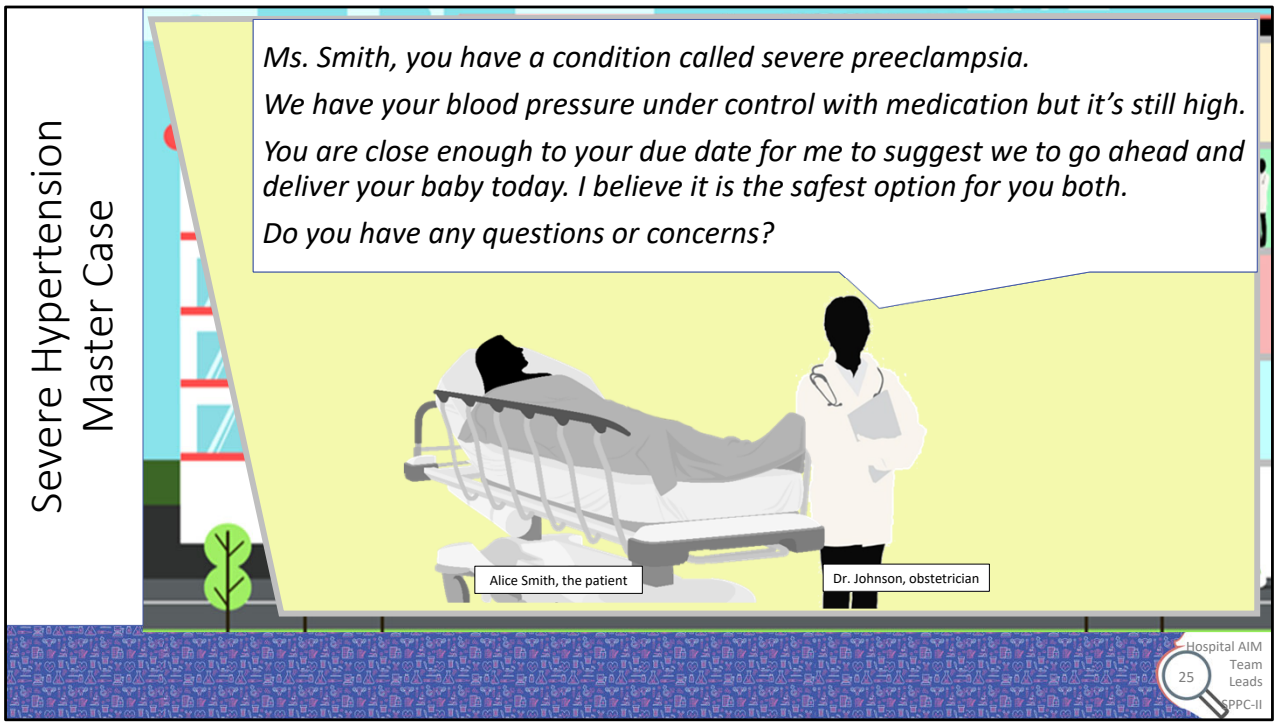
In the meantime, fetal monitoring remains reassuring with a fetal heart rate in the 150s, consistent with a category 1 tracing. However, 20 minutes following the second hydralazine (Apresoline) administration, Ms. Smith's blood pressure is 158/84, so she is transferred to L&D given her persistent severe-range blood pressure.



SCRIPT

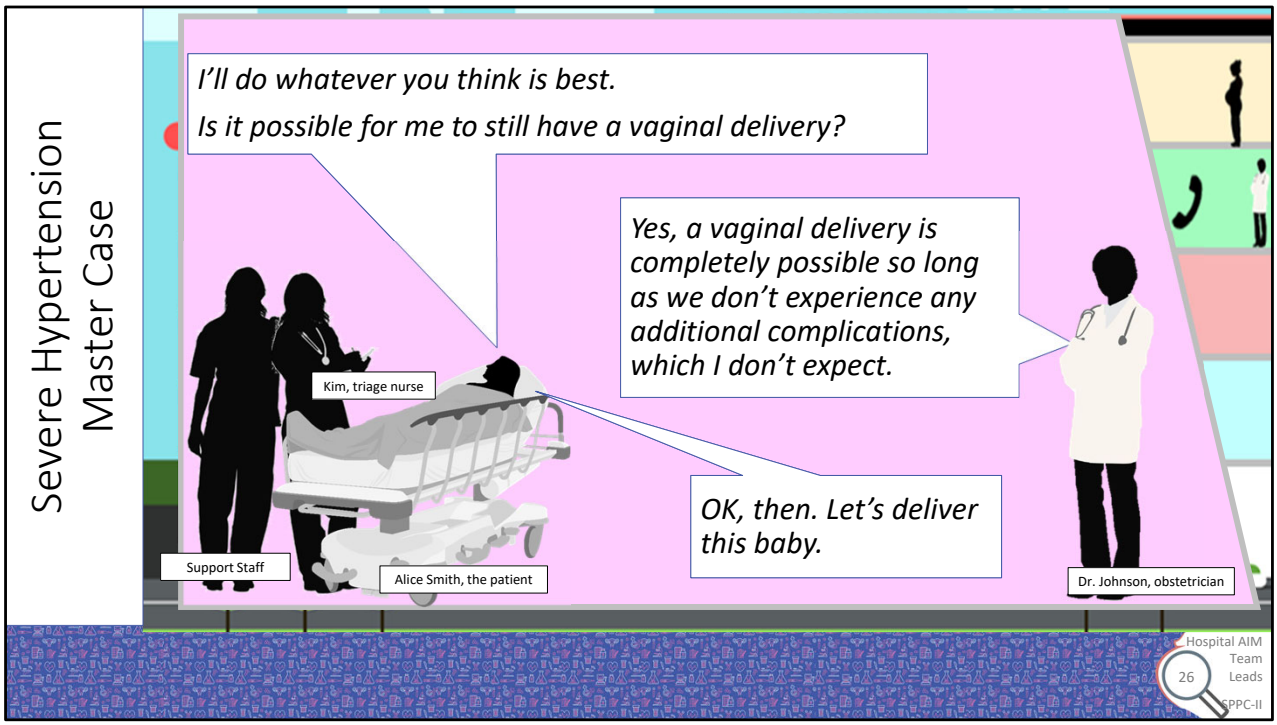
Ms. Smith's lab results return shortly after her arrival to L&D and demonstrate a protein/creatinine ratio of 0.46 with 3+ protein on a catheterized urine sample, elevated transaminases with AST of 107 U/L and ALT of 98 U/L, a Hgb of 10 g/dl, and a normal platelet count.

Dr. Johnson reviews Ms. Smith's vital signs and laboratory values, and calls a huddle with the L&D treatment team to discuss the plan of care moving forward.



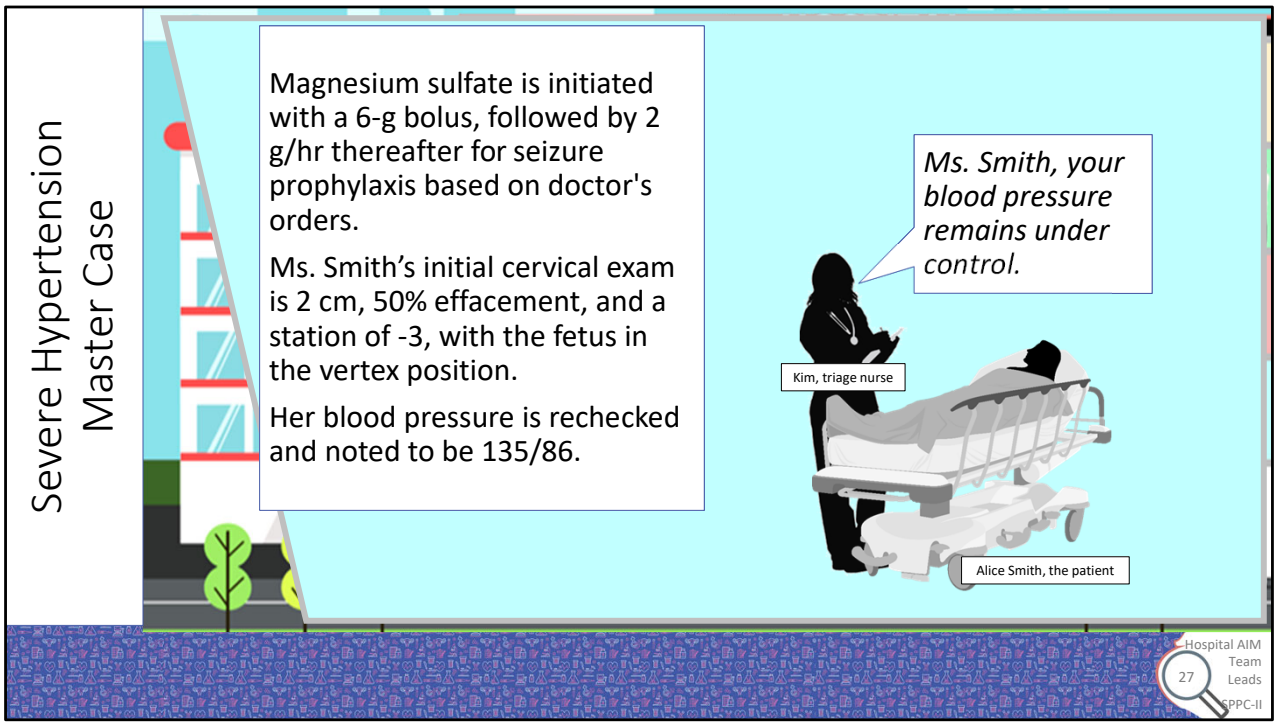
SCRIPT

Ms. Smith is diagnosed with severe preeclampsia and recommended to undergo an induction of labor. Her blood pressure will continue to be monitored closely, and severe-range pressure will be treated when encountered.



SCRIPT

Ms. Smith agrees with the plan of care, asking about whether she is still able to deliver vaginally. Dr. Johnson assures her that a vaginal delivery is still possible unless additional complications arise.



SCRIPT

Dr. Johnson and the team agree to initiate magnesium sulfate with a 6 g/hr bolus, followed by 2 g/hr thereafter for seizure prophylaxis. Dr. Johnson orders for start of the magnesium sulfate. Her initial cervical exam is 2 cm, 50% effacement, and a station of -3, with the fetus in the vertex position. Her blood pressure is rechecked and noted to be 135/86.

Summary

- Revisit this introduction module anytime throughout training
- Encourage your frontline providers and staff to complete training
- Coordinate in-person practice sessions
- Motivate your frontline providers and staff to use the SPPC-II teamwork tools in their patient care activities
- Be accessible to your frontline providers and staff

Resource: Facilitator Guide

SCRIPT
In conclusion, this introduction module sets the foundation for the SPPC-II Teamwork Toolkit. The remaining modules will draw from and build on the case scenario that we just walked through in order to demonstrate each of the teamwork tools and strategies within an example of a severe hypertension case. It is the same scenario your frontline providers and staff will see in their introduction modules.

Ultimately, it is your responsibility as a Hospital AIM Team Lead to enable and encourage your frontline providers and staff to participate in the eight online modules associated with your clinical patient safety bundle and coordinate practice sessions that will reinforce the use of these tools within your organization.

To do so, be accessible to your frontline and feel free to adopt a training approach that works best for your local needs and check out the Facilitator Guide for more explicit guidance on how to mange the rollout of these materials.

Resources

- Severe Hypertension in Pregnancy Patient Safety Bundle link:

  https://saferbirth.org/wp-content/uploads/U1-FINAL_AIM_Bundle_SHP2022.pdf

SCRIPT

Complete information about the severe hypertension in pregnancy patient safety bundle, including the 4 Rs, can be found at:

- https://saferbirth.org/wp-content/uploads/U1-FINAL_AIM_Bundle_SHP2022.pdf

Acknowledgments

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