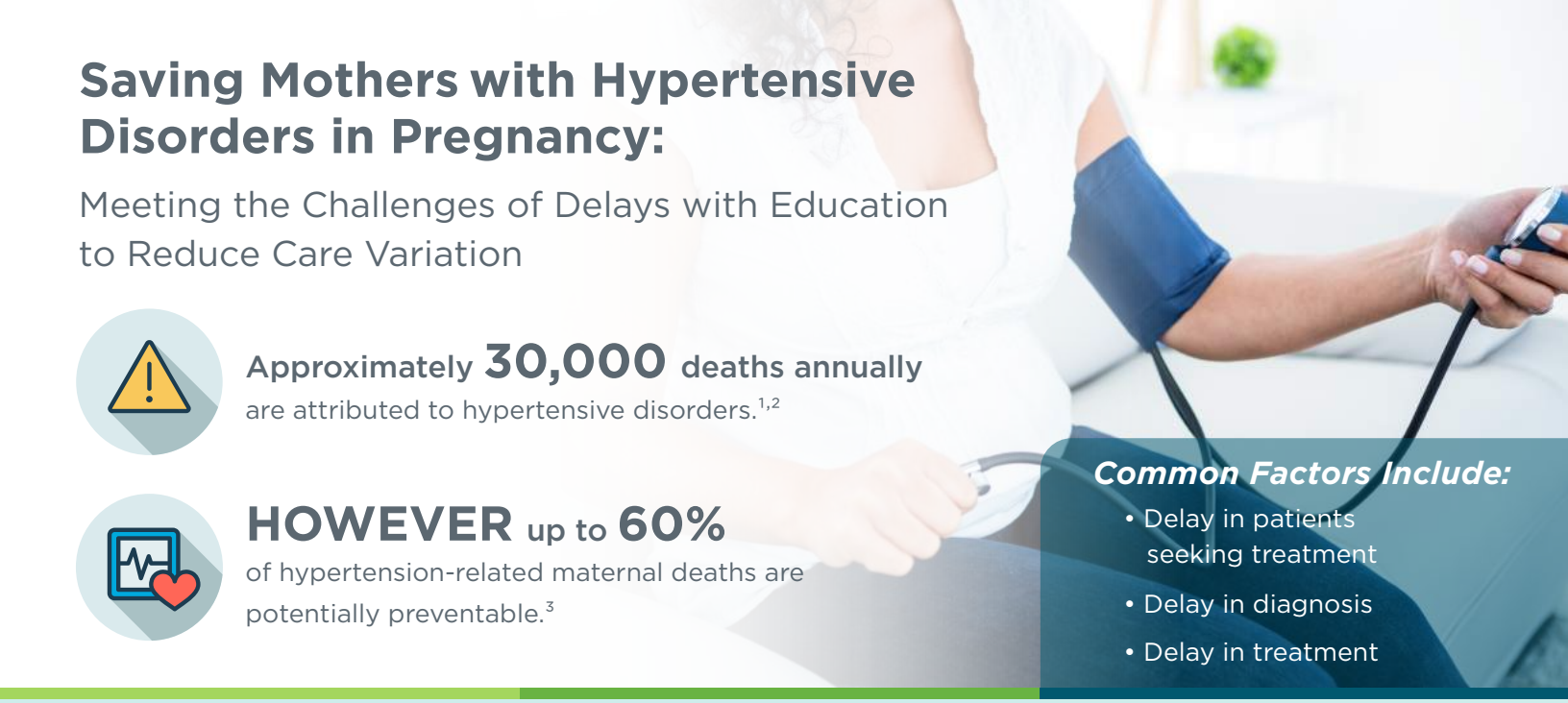
Saving Mothers with Hypertensive Disorders in Pregnancy:

Meeting the Challenges of Delays with Education to Reduce Care Variation



Approximately 30,000 deaths annually are attributed to hypertensive disorders.[1,2]

HOWEVER up to 60% of hypertension-related maternal deaths are potentially preventable.[3]

Common Factors Include:

- Delay in patients seeking treatment
- Delay in diagnosis
- Delay in treatment

Advanced, personalized learning is key to reducing variation in care among nurses and doctors to save more mothers' and babies' lives.

EFFECTIVE EDUCATION

- Provide preeclampsia education to all obstetrical patients, while identifying patients at increased risk for preeclampsia
- Provide additional education to patients with hypertensive disorder of pregnancy for early postpartum follow-up:
  - **Within 1 week (if medication was used to manage hypertension)**
  - **Within 1-2 weeks if medication was not used**

DIAGNOSIS

- **Evaluate pregnant patients with new onset or worsening hypertension in timely manner**
- Be aware of variability in disease presentation and progression

See Back for More

TREATMENT

- **Timely delivery for preeclampsia based on gestational age and severity of disease**
- **Timely treatment for severe hypertension** (160 mmHg systolic and/or 110 mmHg diastolic) within 60 minutes

RESOURCES

Relias OB is a comprehensive program designed to improve quality and patient safety in five high-acuity obstetrical areas, including hypertensive disorders.

Saving Mothers' Lives Now Toolkit includes valuable resources to help nurses, providers, hospitals and health systems on their mission to reduce maternal mortality and morbidity and includes information on our Mothers and Babies First project.

Driving Improvement in Hypertensive Disorders of Pregnancy webinar shares a health system's implementation of a system-wide strategy aimed at improving maternal safety and driving high-reliability care.

1. Lo JO, Mission JF, Caughey AB. Hypertensive disease of pregnancy and maternal mortality. Curr Opin *Obstet Gynecol.* 2013;25(2):124-132.
2. Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, et al. Global, regional, and national levels and causes of maternal mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. Lancet. 2014;384(9947):980-1004.
3. Main EK, McCain CL, Morton CH, Holtby S, Lawton ES. Pregnancy-related mortality in California: causes, characteristics, and improvement opportunities. *Obstet Gynecol.* 2015;125(4):938-947.

RELIAS

Sample Treatment Plan

for Severe Preeclampsia

Measure Blood Pressure

≥ **160** mmHg Systolic BP

≥ **110** mmHg Diastolic BP

Inform OB Team

CMQCC
California Maternal
Quality Care Collaborative

California Department of
PublicHealth

If Preeclampsia Present:

- IV Access
- Monitor FHT
- Send Labs

Seizure Prophylaxis

- Magnesium sulfate bolus dose **4-6 g (over 20 mins)**
- Magnesium sulfate maintenance dose **(1-2 g/hr)**
- Check magnesium levels (if indicated)

IV Antihypertensive Medication

LABETALOL

- **Labetalol 20 mg**
- Repeat BP in 10 mins; if elevated, administer **Labetalol 40 mg**
- Repeat BP in 10 mins; if elevated, administer **Labetalol 80 mg**
- Repeat BP in 10 mins; if elevated, administer **Hydralazine 10 mg**

Repeat BP in 10 mins; if remains elevated, **obtain anesthesia consult**

HYDRALAZINE

- **Hydralazine 5-10 mg**
- Repeat BP in 20 mins; if elevated, administer **Hydralazine 10 mg**
- Repeat BP in 10 mins; if elevated, administer **Hydralazine 10 mg**

Repeat BP in 20 mins; if remains elevated, **obtain anesthesia consult**

Emergent therapy for acute-onset, severe hypertension with preeclampsia or eclampsia. Committee Opinion No. 514. American College of Obstetricians and Gynecologists. Obstet Gynecol 2011; 118:1465-8

RELIAS