

### BACKGROUND

**Significance of Preeclampsia:**

Preeclampsia is a leading cause of maternal and fetal complications, including seizures, stroke, heart failure, and renal damage. In Texas, it accounted for 11% of maternal deaths in 2013, highlighting its critical impact on maternal and fetal health.

**Healthcare Gap:**

There is a lack of standardized, comprehensive approaches to symptom recognition and management of preeclampsia, resulting in preventable maternal and fetal morbidity and mortality. This gap underscores the need for more consistent and proactive care.

**Need for Early Recognition:**

Timely symptom recognition and enhanced patient education are essential in improving outcomes. Early detection can reduce postpartum readmissions and prevent adverse outcomes, such as hypertensive crises, ICU admissions, and the need for magnesium sulfate treatments.

### LITERATURE REVIEW

**Preeclampsia Impact:** Preeclampsia contributes to severe complications, including stroke, renal failure, and maternal mortality (ACOG, 2020). In Texas, it accounted for 11% of maternal deaths in 2013 (Shields et al., 2016).

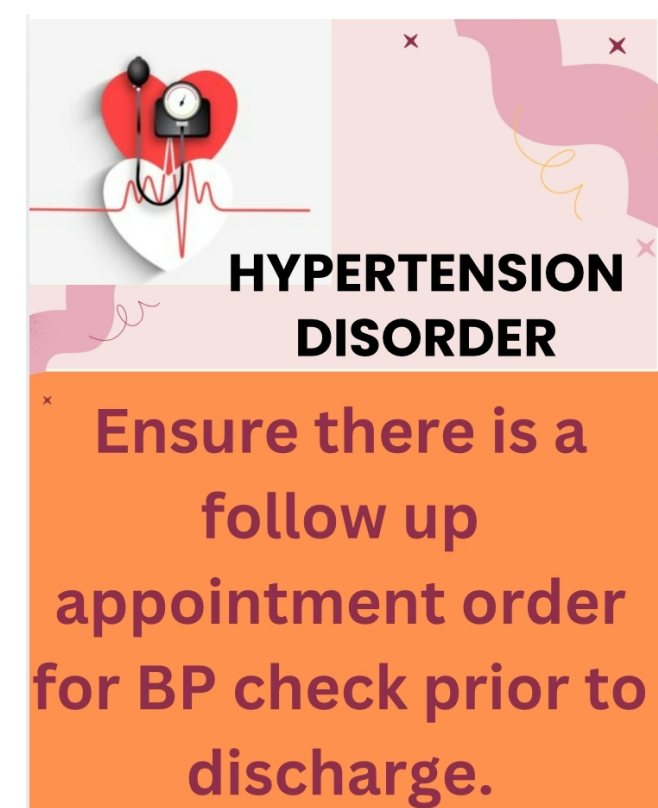
**Gaps in Current Practice:** Lack of standardized protocols results in preventable ICU admissions and poor patient outcomes.

**Evidence-Based Strategies Patient Education:** Teaching warning signs improves early detection and timely intervention (Shields et al., 2016).

**Home Blood Pressure Monitoring:** Enhances self-management and early symptom recognition (Minhas et al., 2021).

**Guiding Frameworks:** Health Belief Model: Encourages patient engagement in monitoring and prevention.

**Plan-Do-Study-Act (PDSA) Cycle:** Supports structured implementation and quality improvement.



### PURPOSE

- Implement a patient chart flag system to identify those at risk for preeclampsia.
- Ensure at risk patients have one-week follow up appointments for blood pressure checks.
- Provide access to free blood pressure cuffs for home monitoring to empower patients.
- Focus on improving education for at-risk populations, particularly minority women, to reduce healthcare disparities.

### METHODS

- Distributed patient-friendly educational materials in English and Spanish.
- Provided insurance specific QR codes for patients to receive free blood pressure cuff.
- Designed & implemented chart flags for patients needing a one-week postpartum follow-up.
- Collaborated with hospital leadership for protocol adoption and sustainability.

### OUTCOMES

**Pre-Intervention:** Less than 10% of patients attended follow-up BP checks.

**Post-Intervention:** Increased one-week follow-up rates from <10% to 72%.

- Improved provider adherence to new documentation and screening protocols.
- Enhanced patient education and access to BP monitoring resources.

### LIMITATIONS

- **Provider Resistance:** Some healthcare providers were hesitant to adopt new protocols, affecting consistency.
- **Patient Compliance:** Challenges with patient adherence to education and follow-up, especially among those with low health literacy.
- **Time Constraints:** Limited time for onboarding and assessing implementation due to the three-month project duration.
- **Data Collection:** Potential discrepancies in data due to reliance on chart reviews and self-reporting.
- **Resource Availability:** Limited access to free blood pressure cuffs due to insurance and distribution barriers.

### IMPLICATIONS FOR PRACTICE

**Patient Empowerment** – Education and home monitoring enhance self-management and early symptom recognition.

**Reduced Readmissions** – Timely follow-ups lower hypertensive crises, reducing hospital stays and ICU admissions.

**Health Equity** – Targeted outreach and multilingual resources improve access for at-risk populations. Integrating standardized screening, patient education, and digital tools enhances preeclampsia management, improves maternal outcomes, and reduces healthcare costs.

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