University of Chicago Medicine - Systematic Treatment and Management of Postpartum Hypertension (STAMPP-HTN)

Overview

Systematic Treatment and Management of Postpartum Hypertension (STAMPP-HTN) is a series of interventions to improve postpartum care for women with hypertensive disorders of pregnancy (HDP) implemented at the University of Chicago Medicine, a tertiary urban care center with a predominantly Black and publicly insured patient population.

The STAMPP-HTM team implemented an intervention bundle, including:

- education to all patients and care providers
- updated clinic protocols for patients
- distribution of a STAMPP-HTN kit, which included a blood pressure monitor, instructions, warning signs, and a preeclampsia alert wrist bracelet, to all postpartum patients with an HDP
- consistent scheduling of follow-up appointments before discharge
standardized protocols and workflows for the management of patients after hospital discharge

The initiative was implemented in phases to deploy additional interventions and further improvement over time. After the intervention bundle, telehealth visits and remote patient monitoring were made available.

These interventions significantly improved patient visit adherence and reduced the disparities between patient populations.

Results

At baseline, the rate of postpartum follow-up visit attendance within six weeks for a blood pressure check was:

- 30% for Black patients
- 53.5% for white patients

Once the intervention bundle was fully implemented, the rate of postpartum follow-up visit attendance improved to:

- 33.5% for Black patients
- 59.4% for white patients

Later, providing telehealth options (and continued use of the intervention bundle) further improved the rate of postpartum follow-up visit attendance to:

- 76.3% for Black patients
- 76.7% for white patients

This left only a 0.4% disparity between Black and white patients.

The final intervention, the implementation of a remote patient monitoring program, further improved the rate of postpartum follow-up visit attendance to 83.1%, with similar rates among Black and white patients, eliminating the disparity between Black and white patients.

Patients’ clinical outcomes also improved. After implementation, fewer patients experienced a blood pressure of 140/90 or higher at the first postpartum blood pressure check when compared with preintervention (18.5% vs. 39.1%, P<.004). The effect size did not differ by race.
Panel notes

The Tyson Award panel was impressed by the comprehensive, multi-level bundle of interventions, engagement across departments, convenient ways patients could access information and care, and patient education and empowerment. They noted that the disparity was approached in a holistic way.

Use of telehealth and remote patient monitoring, in addition to the clinical interventions, resulted in improvement across all populations, but most significantly, decreased the disparity for Black patients. The panel acknowledged the significant clinical relevance, noting the size and impact of the improvement was remarkable.

The panel perceived that postpartum hypertension is a very specific and actionable clinical area and the UChicago Medicine team addressed the disparity in a way that could be replicable – like a roadmap – for other organizations to implement similar interventions to reduce disparities for their postpartum hypertensive patients.

Congratulations to UChicago Medicine!