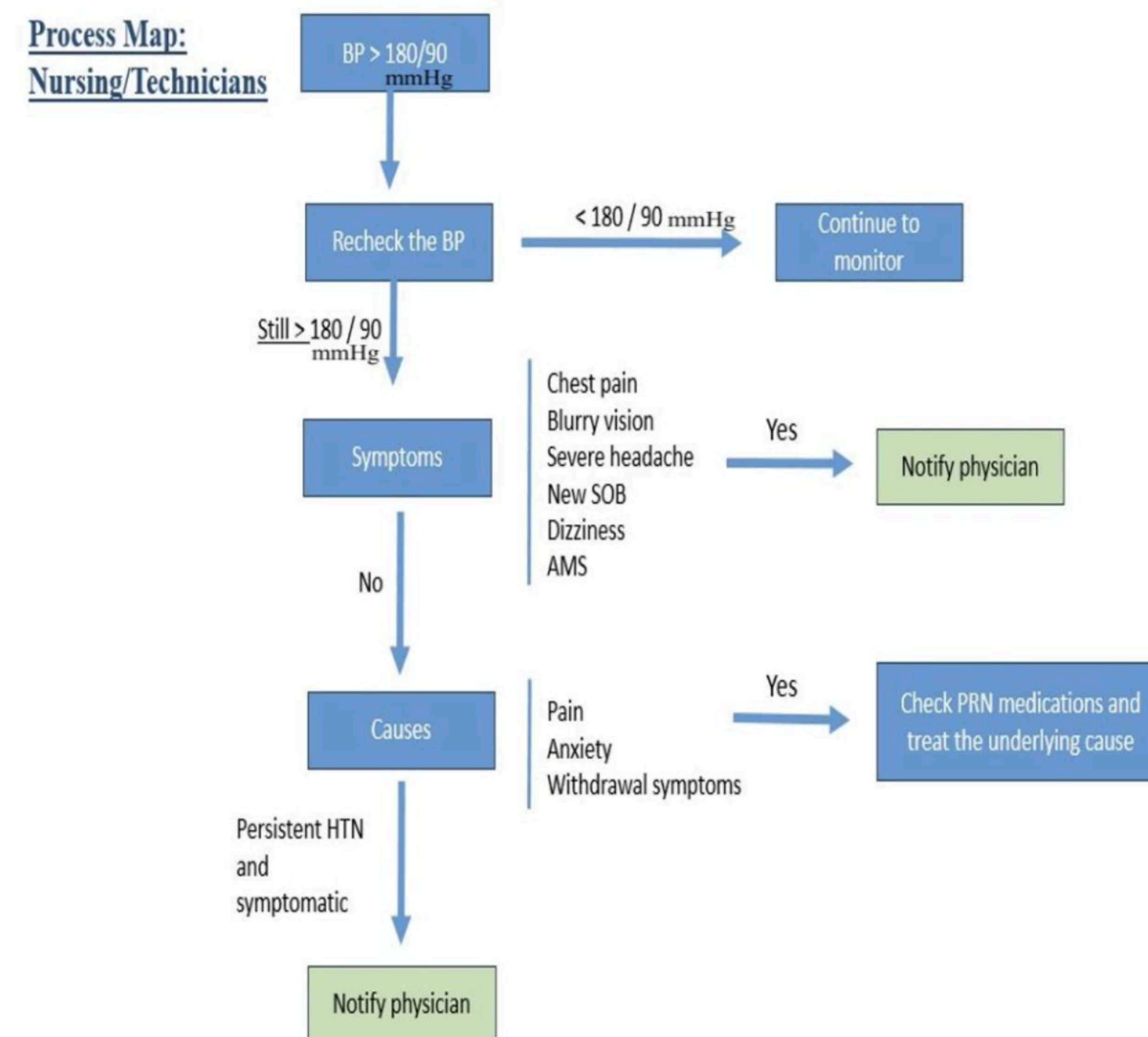


INTRODUCTION

Hypertension is a prevalent condition in both outpatient and inpatient settings, with an estimated prevalence of 28% in the former and a staggering 72% in the latter. Despite its frequency, there is a notable lack of standardized guidelines for managing inpatient hypertension, leading to inconsistent practices and potentially unnecessary treatment interventions. Emerging evidence suggests that aggressive treatment of asymptomatic hypertension in hospitalized patients is common, often without clinical justification, and may result in adverse outcomes.

OBJECTIVES

The primary objective of this quality improvement project was to standardize the management of inpatient hypertension on a general medicine floor. Specifically, the project aimed to reduce the use of intravenous (IV) antihypertensive medications (Labetalol and Hydralazine) by 25% within a two-month period by implementing a standardized treatment algorithm.



Proposed Algorithm for the Management of Inpatient Hypertension

METHODS

A retrospective observational study was conducted, collecting data on IV antihypertensive use from the pharmacy department for two months before and after the algorithm's implementation. The study included all adult patients admitted to a specific general medicine floor. Key measures included the prevalence of IV antihypertensive use, the number of hypertension-related communications to residents, and the rate of Rapid Response Team (RRT) activations due to hypertensive emergencies.

RESULTS

Following the implementation of the treatment algorithm, the use of IV antihypertensives decreased by 30.7% between pre-intervention and post-intervention. This reduction indicates a successful adoption of the standardized approach, leading to less aggressive treatment of asymptomatic hypertension. Implementing a standardized algorithm for managing inpatient hypertension on a general medical floor reduced unnecessary use of IV antihypertensives. These results support the further scaling of this approach across other hospital units to optimize hypertension management and improve patient outcomes.