# Orthostatic Blood Pressure Vital Signs: Educating Staff to Keep Our Geriatric Population Safe

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# BACKGROUND/INTRODUCTION

The majority of geriatric patients on a 30-bed transitional trauma unit in an academic, Magnet® hospital are admitted due to a fall. These patients have multiple co-morbidities that may cause orthostatic hypotension, defined as a decrease in systolic BP of 20mmHg or a decrease in diastolic BP of 10mmHg within three minutes of standing from a supine or sitting position. Ideally, all geriatric fall patients should have orthostatic blood pressure (OBP) taken prior to standing upright.

This poster details an evidence-based practice project by nurse residents to improve compliance with the nurse ordering OBP and associated documentation compliance.

## METHODS

### Sample Population

Patients 65-years and older, admitted to the unit with a fall

### Pre- & Post-Implementation Data Collection

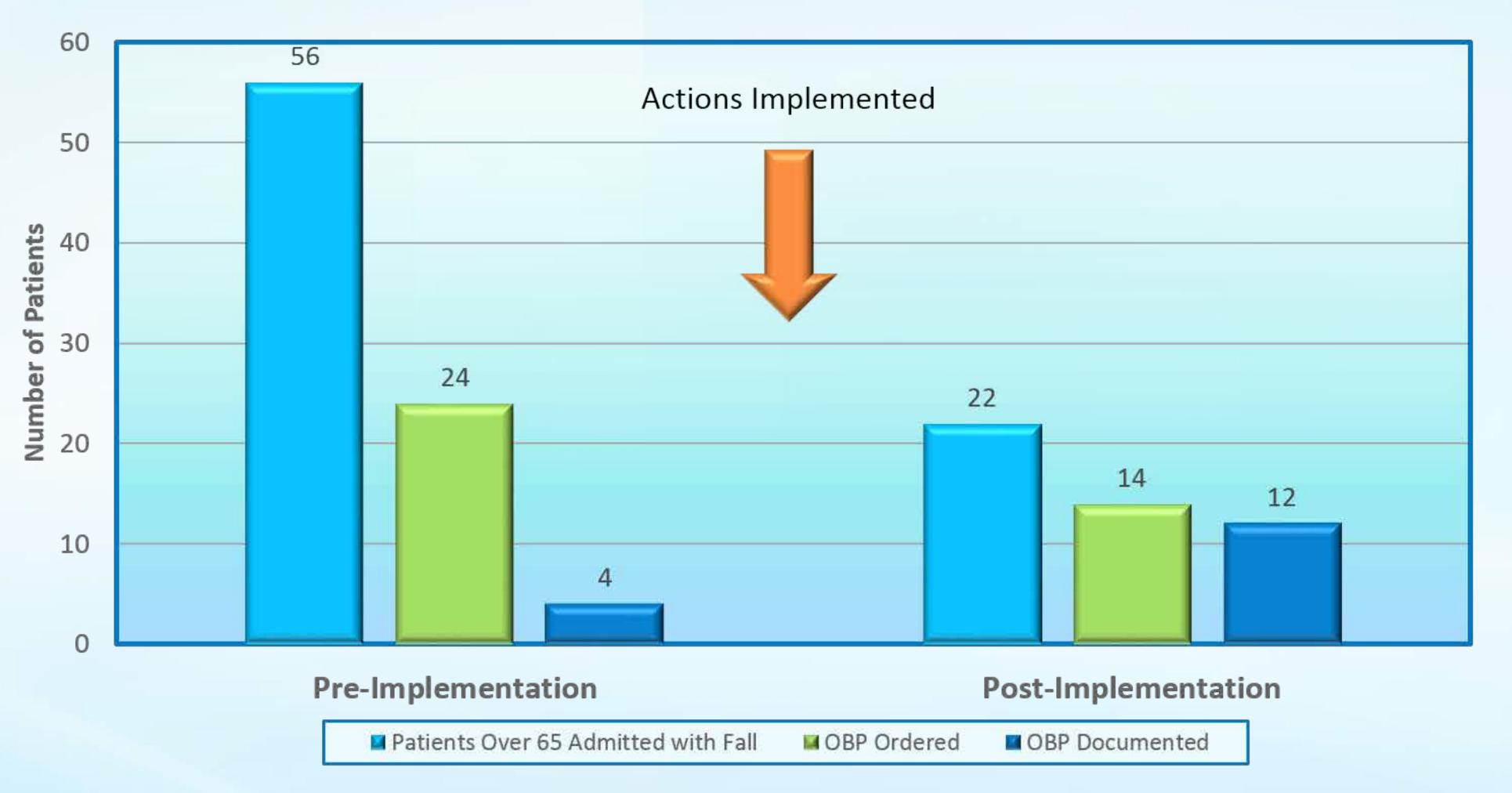
- Was OBP ordered?
- If yes, was it documented?

### Implemented Actions

- Staff education
  - need for nurse ordered OBP
  - how to perform OBP
  - requirement to document
- Patient room door signage to identify patients to have OBP
- Posters in patient room as visual cue to do OBP and correct method

# RESULTS

### Orthostatic Blood Pressure Orders & Documentation



- OBPs ordered improved from 42.8% to 63.6%.
- OBPs documented improved from 7.1% to 54.5%.
- Qualitative anecdotes relate licensed and non-licensed staff more aware of when and how to properly perform OBP and when to report changes.

# IMPLICATIONS & NEXT STEPS

- Staff members needed education and visual cues related to the need for OBP.
- Admission checklist was revised to include OBPs for appropriate population.
- A formal policy and procedure for OBP in the geriatric fall population is being considered.
- Awareness of orthostasis may prompt changes in medication regimens and fall prevention strategies.

### References:

- 1. Lagro et al. (2013). Impaired systolic blood pressure recovery directly after standing predicts mortality in older falls clinic patients. *The Journals of Gerontology*, 69(4), 471-478. doi: 10.1093/gerona/glt111.
- 2. Lanier, J., Mote, M., & Clay, E. (2011). Evaluation and management of orthostatic hypotension. *American Family Physician*, 84(5), 527-536.
- 3. Center for Disease Control and Prevention (2015). *Measuring Orthostatic Blood Pressure.*
- http://www.cdc.gov/steadi/pdf/measuring\_orthostatic\_blood\_pressure-a.pdf
- 4. Hiitola, P., Enlund, H., Kettunen, R., Sulkava, R., & Hartikainen, S. (2009). Postural changes in blood pressure and the prevalence of orthostatic hypotension among home-dwelling elderly aged 75 years or older. *Journal of Human Hypertension*, 23(1), 33-39.

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