

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

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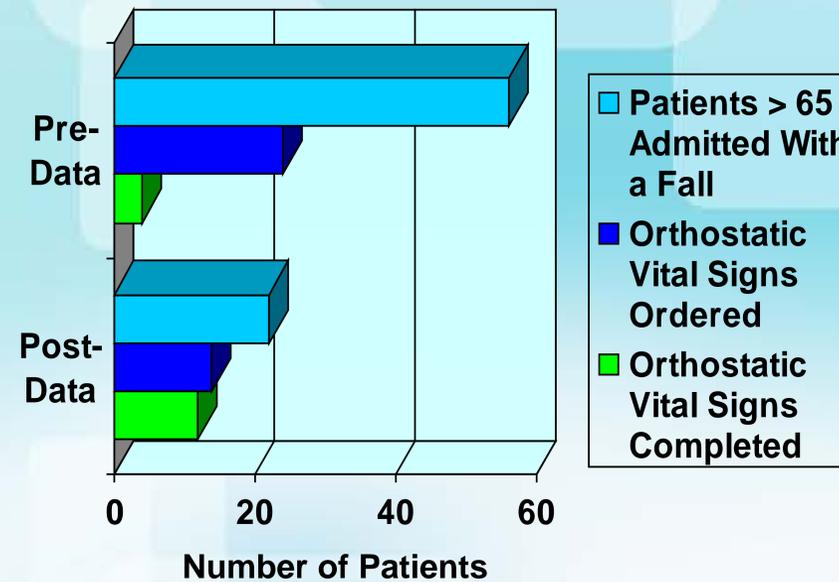
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- Majority of geriatric patients are admitted to the Transitional Trauma Unit due to a fall. These patients have multiple co-morbidities that cause a decrease in blood pressure when changing positions. This causes them to have symptoms of lightheadedness, dizziness, blurred vision, weakness, fatigue, nausea, resulting in an increased risk for falls.
- Orthostatic blood pressure is a decrease in systolic blood pressure of 20mmHg or a decrease in diastolic blood pressure of 10mmHg within one minute or three minutes of standing from supine or sitting position.
- Staff members are an integral part of detecting orthostatic changes in our patient population. These results can be communicated to physicians to

METHODS

- Collected pre-data of patients who were 65-years and older, admitted to the unit with a fall, if orthostatic vital signs ordered, and if they were completed by staff.
- Educated staff on proper way to perform orthostatic blood pressures by sending out a power point presentation.
- Placed handouts in patients' rooms to serve as a reminder to do orthostatic blood pressures and how to properly perform. Placed blood pressure sign outside of patients door.
- Collected post-data of patients who were 65-years and older, admitted to the unit with a fall, if orthostatic vital signs ordered, and if they were completed by staff after staff was properly educated on how to perform orthostatic blood pressures.

Orthostatic Vital Sign Data Collection



*Patient census was low during Post-Data collection

OUTCOMES

- Staff have increased compliance with completing orthostatic vital signs from 7% in pre-data collection to 54% in post-data collection.
- Staff are more aware of when and how to properly perform orthostatic vital signs and when to report changes to healthcare providers.
- With increased awareness of orthostasis in the geriatric population, physicians have been able to implement changes in medication regimen.

- The Transitional Trauma Unit staff members showed an improvement in obtaining orthostatic vital signs and charting results in EPIC.
- Communication between licensed and unlicensed staff facilitates compliance.



•Blitstein, M. (2016). *Why Is My Blood Pressure Reading So High? 10 Factors that Affect BP Readings.* <http://adctoday.com/blog/why-my-blood-pressure-reading-so-high-10-factors-affect-bp-readings>

- 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
- Lanier, J., Mote, M., & Clay, E. (2011). Evaluation and management of orthostatic hypotension. *American Family Physician*, 84(5), 527-536.
- Center for Disease Control and Prevention. (2015). *Measuring Orthostatic Blood Pressure.* http://www.cdc.gov/steady/pdf/measuring_orthostatic_blood_pressure-a.pdf
- Rutan, G. H., Hermanson, B., Bild, D. E., Kittner, S. J., LaBaw, F., & Tell, G. S. (1992). Orthostatic hypotension in older adults: The Cardiovascular Health Study. *CHS Collaborative Research Group*, 19(6 Pt 1), 508-519.
- 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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