

Spreading Change Package for Assessment and Management of Postural Hypotension in Hospitalized Older Patients

Li F¹, Png GK¹, Ong SY¹, Punithavathi A¹, Zhou L¹, Jismy TJ¹, Bantilan ALP¹, Ping ZE¹, Lim SC², Goh KS²

¹ Department of Nursing; ² Department of Geriatric Medicine

*Email Address: fuyin_li@cgh.com.sg



Problem Statement

Postural hypotension is a common problem in 42% of the hospitalized older patients in CGH, often associated with falls. The project team found that unrecognized postural hypotension in several fall related serious reportable events in patients with high falls risk, which these falls resulted in severe complications.

Prior to the implementation, it was not a common practice for nurses to measure postural blood pressure or check for the presence of postural hypotension for patients admitted for falls on admission to the inpatient non geriatric wards.

Audit was done and shown:

- Percentage of at-risk patients having their postural blood pressure measured prior to implementation was low as 8% in average.
- Number of patients received education on non-pharmacological measures for postural hypotension was low at 4.5%.

Potential Solutions

Plan-Do-Study-Act (PDSA) methodology was used. There are several new solutions were tested and implemented. The change package included the following solutions:

- Standardized Training Materials Was Developed**
- Hospital Wide Train-The-Trainer (TTT) Sessions**
- Postural Hypotension Brochure was Developed for Patient Education**
- Workflow for Nursing Postural Blood Pressure Measurement**
- Evidence-based Postural Hypotension Protocol**
- Electronic Reminder**

Project Aim

The project's purpose is to address the assessment and management of postural hypotension in a more systematic manner. Our project aims are to:

- 1 Improve nursing assessment rate of postural blood pressure to at least 75% of the at-risk patients
- 2 Increase the rate of patients received non-pharmacological interventions
- 3 Reduce postural hypotension related inpatient falls

Lessons Learnt

The work by the pilot team and the postural hypotension workgroup over a period of 5 years led to the development and spread of a change package to seek improvement in assessment and management of postural hypotension. There has been a significant improvement in the hospital wide postural hypotension assessment rate. It has enhanced the patient's care in an integrated and systematic approach which led to better patient's management and outcome by reducing postural hypotension related fall incident. This has also increased satisfaction of the healthcare team.

Initially, it is not easy to gain compliance from the ward nurses and it was viewed as added workload and responsibility to their existing busy ward routine. The project team overcame the challenges with the following strategies.

- 1 Support from the stakeholders and ward supervisors
- 2 Regular engagement with ward champions to address barriers timely
- 3 Monthly audit to ensure the compliance and to identify areas for improvement

Outcomes & Impacts

There was significant improvement on nursing assessment rate of postural hypotension in the at-risk patients from average 8% to 92.3% (Figure 1).

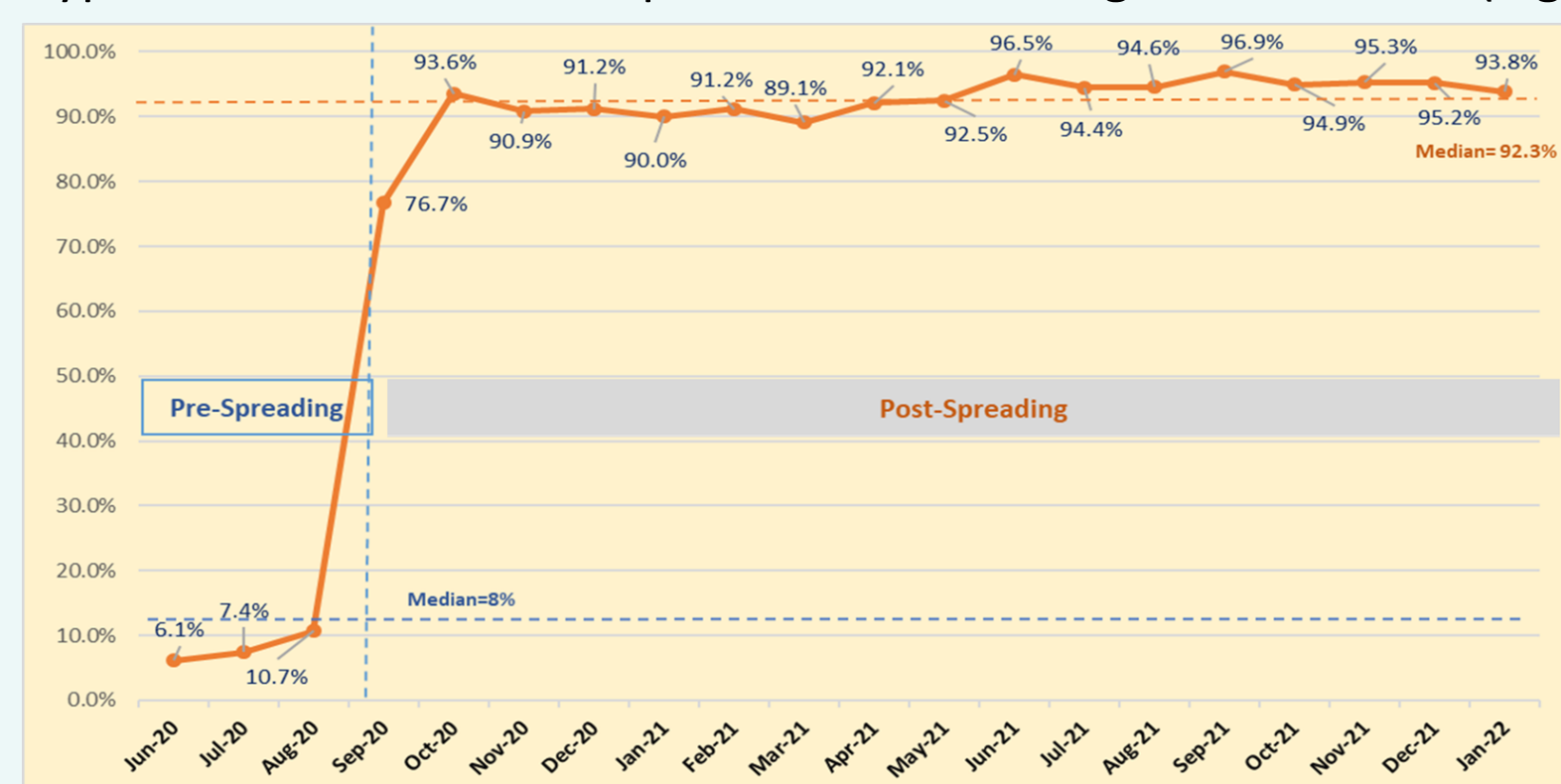


Figure 1

The rate (Figure 6) of patients received non-pharmacological interventions and education has increased from 4.5% to 76.3%. Zero case of postural hypotension related fall incident was reported.

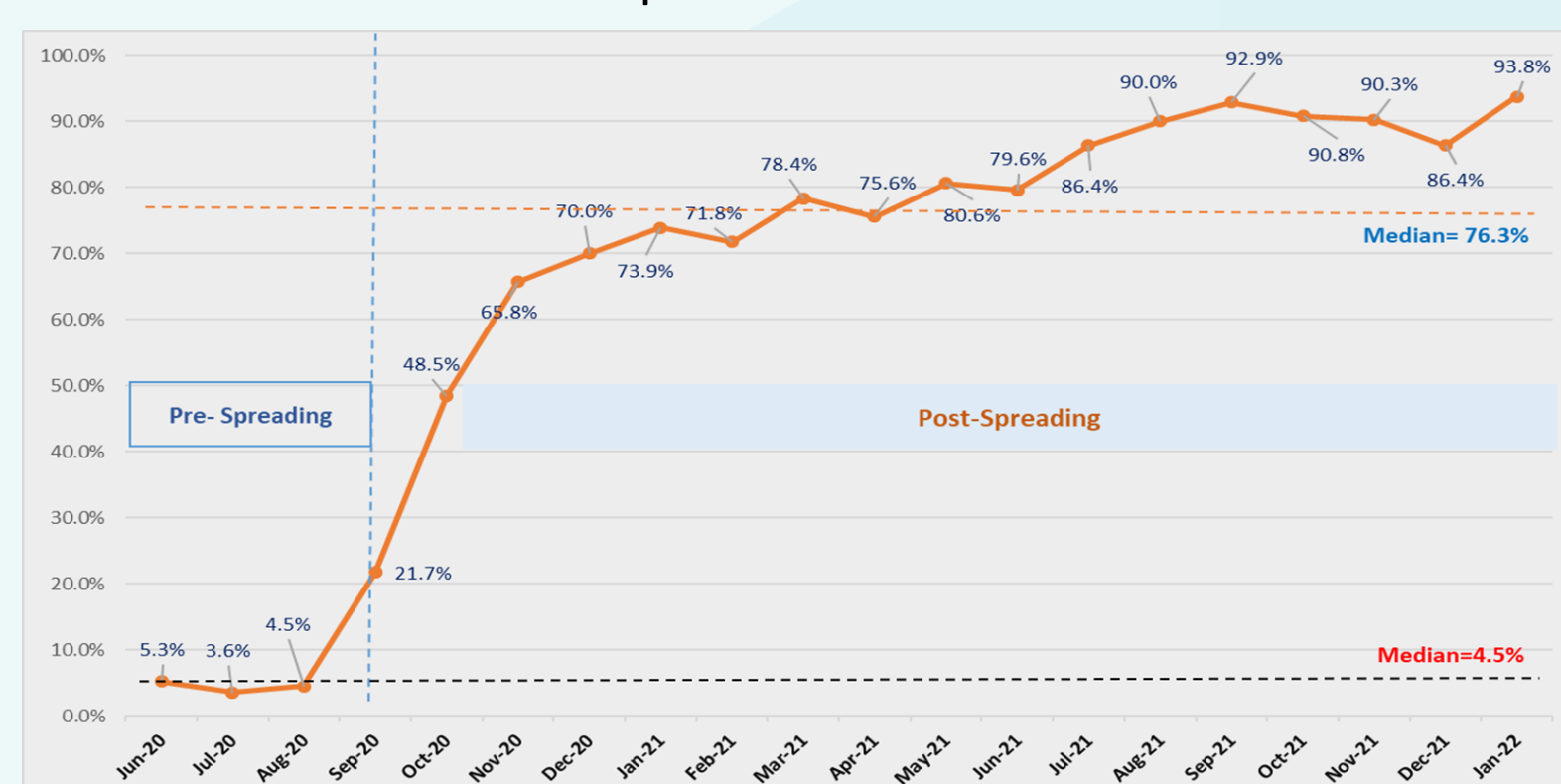


Figure 2