Reduce Hospital Fall Rate through Individualised Fall Prevention Strategies

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Background

Patient's condition changes rapidly in acute care setting. In Singapore General Hospital (SGH), nurses assess patient's risk for fall daily based on Morse Fall Scale and perform standardized fall prevention care plan for patients according to the fall risk group. Since FY2014, there is an increase of patient falls despite fall prevention programmes have been implemented.

Aims

This project aims to reduce the rate of inpatient falls by introducing a new fall prevention programme. A systematic workflow involves multidisciplinary teams was designed to guide the nurses during fall risk assessment for patients. Nurses conduct standard fall prevention strategies followed by individualised fall prevention interventions tailored to patient's needs based on different risk factors identified from Morse Fall Scale.

Methodology

Yearly falls data was analysed and multidisciplinary root cause analysis was conducted before the team brainstorm on the best solutions in line with different care plan approach.

A systematic workflow was developed to guide the nurses to render appropriate fall prevention strategies based on patient's fall risk variables as stated in Morse Fall Scale.

The new initiative was piloted in 2 inpatient wards. A systematic algorithm was designed to guide the nurses during the fall risk assessment (Figure 1). After the assessment, nurses are required to perform individualised fall prevention strategies according to the risk factors identified from Morse Fall Scale variables (Figure 2).

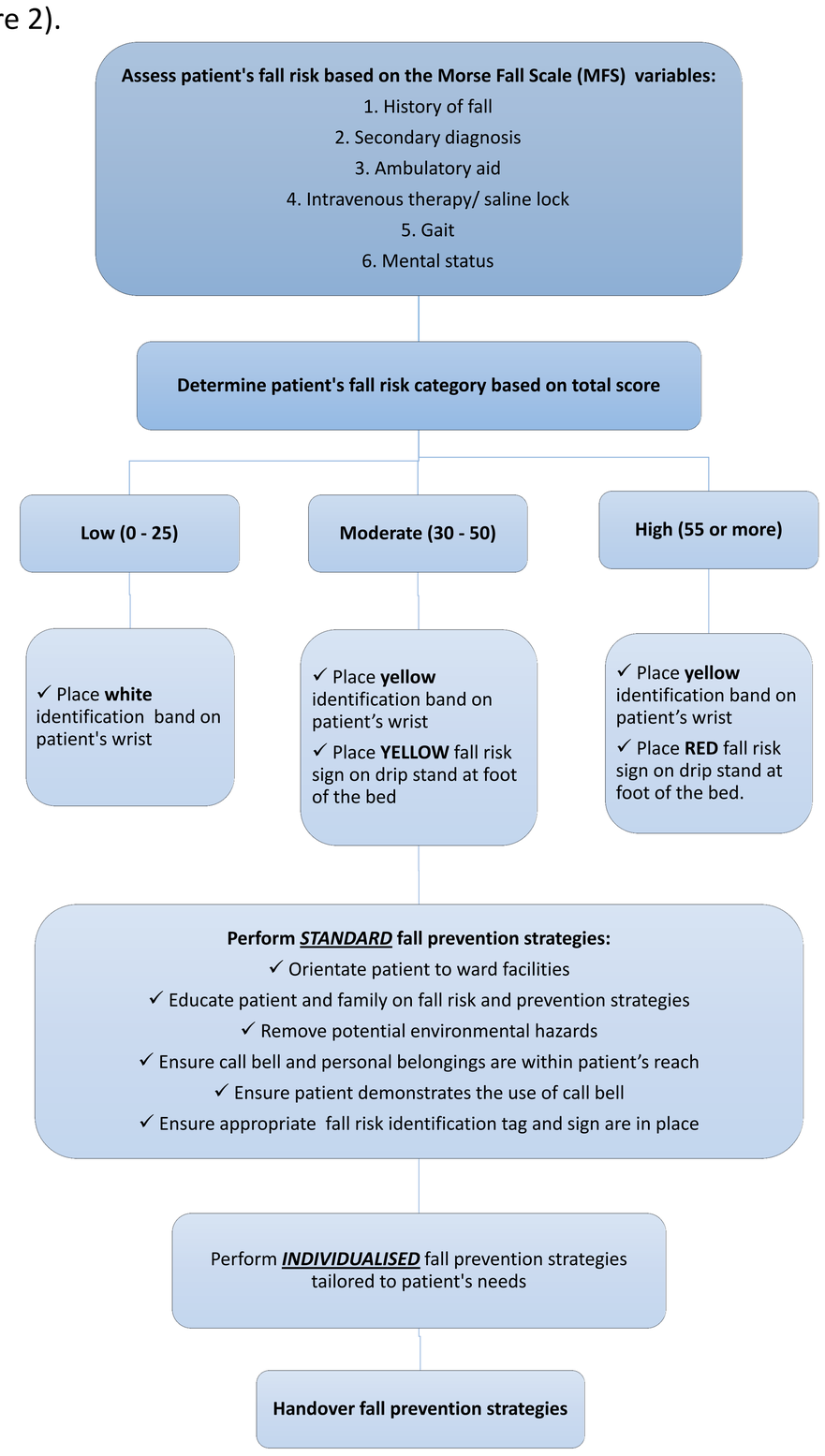


Figure 1: A systematic algorithm for the new workflow

Fall Variables	Risk Factor	Fall Interventions
History of Fall To prevent recurrence of fall	Yes	Communicate fall history
		Refer Physiotherapist, if: • Age >65 AND • Fell in the past 1 year
	No	
Secondary Diagnosis To determine interaction from poly-pharmacy	Yes	Doctor to review medications with *FALL RISK ALERT*
		Frequent rounding: For patient who has drowsiness, frequent urination/ bowel movement
	No	
Use of ambulatory aid To assess appropriate aids	None/bed bound/CRIB/RIB/nurse assist	
	Crutches/ Cane/ Walker/ Furniture	If ambulatory aid is appropriate: Educate patient to use it safely
		If ambulatory aid is inappropriate: Refer physiotherapist
Intravenous Therapy/ Saline Lock To maximize safe ambulation, reduce urinary urgency	Yes	Frequent rounding: Assist patient in ADLs
		Doctor to review: need for IV therapy, drains, catheters
	No	
Gait To assess impairment of gait and balance	Normal/ bed bound	
	Weak/ Impaired	ONE person assist
		TWO person assist
		If gait changes: Refer physiotherapist
Mental Status Improve orientation and acceptance of changed abilities	Normal	
	Over-estimates abilities/ Forgets limitations	If caregiver is available: Encourage caregiver to stay
		Nurse patient close to nurses' station
		Activate bed exit alarm
		Frequent rounding

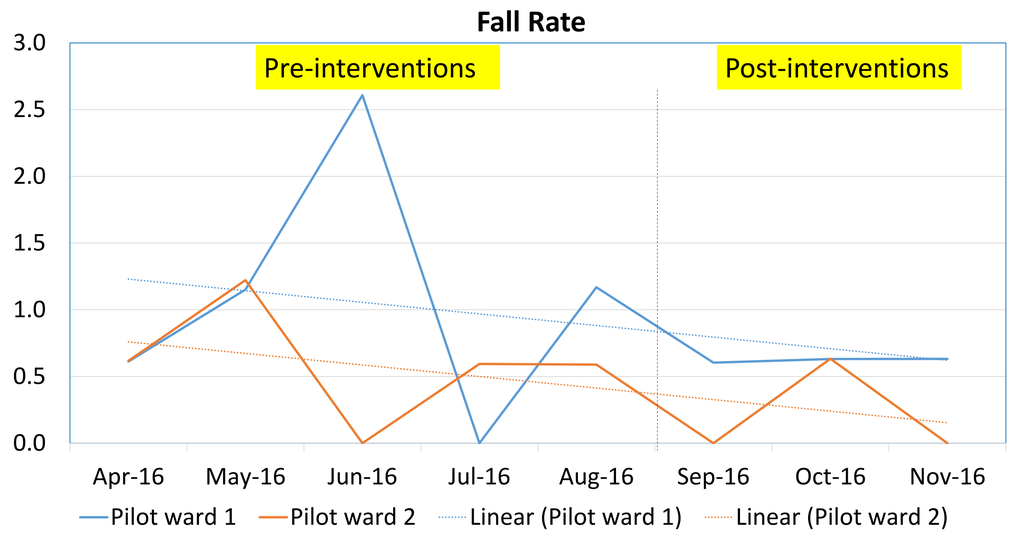
Figure 2: Individualised Fall Prevention Strategies

Results

The pilot wards' fall rate for pre- and post- intervention was monitored closely. Table 1 illustrates a decrease of the average fall rate in the pilot wards after the new intervention was implemented. Graph 1 demonstrates a downward trend of the monthly fall rate in the pilot wards.

	Average fall rate	
	Pre-intervention	**Post-intervention**
Pilot ward 1	1.1	0.6
Pilot ward 2	0.6	0.2

Table 1: Average fall rate in pilot wards



Graph 1: Monthly fall rate in piloted wards

Conclusion

Evidence suggests most falls can be prevented. Integrated safety in our patient-centered care model is always the utmost priority to us. Our new initiative not only helps nurses to focus more on patient's specific risk areas but also reduces the fall rate by addressing patient's needs.