Delirium Prevention for Older Adults in a Medical Unit of an Acute Care Hospital: A Quality Improvement Project

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Mission Statement
To reduce incidence of Delirium developing during hospitalization from 20% to 10% in all elderly patients above age of 65 admitted to TTSH non geriatric medical unit Ward 9D within the next 6 months.

- Inclusion criteria: Elderly patients aged above 65 years old who have at least one risk factor of cognitive or functional impairment.
- Outcome Measures: Daily review for delirium incidence based on Confusion Assessment Method (CAM) criteria.

Team Members

<table>
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<tr>
<th>Role</th>
<th>Name</th>
<th>Designation</th>
<th>Department</th>
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<td>Division of Medicine</td>
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Evidence for a Problem worth solving

- Older adults admitted for acute medical illness are vulnerable to adverse event associated with hospitalization like delirium & functional decline.
- Delirium is highly prevalent amongst hospitalised older patients: 25%-50% has delirium upon admission, and another 5-35% developed delirium during admission.\(^1\)
- Ward 9D, a general medical unit, was studied. Its incidence of delirium, shown in Table 1 was similar to international statistics prior to intervention.

Flow Chart of Process

Table 1

<table>
<thead>
<tr>
<th>Delirium Prevention HELP Protocol</th>
<th>Prevalence (Pre)</th>
<th>Postvalence (Post)</th>
<th>Reduction</th>
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<td>20%</td>
<td>10%</td>
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Cost Savings

- By reducing the overall number of delirium days, we estimated a potential reduction in cost of $3007.80 if the delirium episode is the main driver of the LOS in an acute ward.
- Intangible benefits include better utilization of nursing resources.

Problems Encountered

- Visual cue of windmill tends to go missing at times after patient discharge.
- Difficult to monitor adherence to delirium prevention interventions.
- Difficult to train a sustainable pool of volunteers.
- Ensuring staff detect delirium in a consistent manner during the environment of multiple competing nursing tasks.

Strategies to Sustain

- Need to train a pool of sustainable volunteers to carry out the HELP program.
- Build a culture of prevention and understand that putting efforts upfront in Delirium prevention is better than dealing with subsequent functional decline and other complications.
- WRNs and GRNs can help to identify patients at risk with help of Allied Health professionals and Doctors working together in Delirium prevention.

The Hospital Elder Life Program (HELP), an evidenced base model of care for Delirium prevention was adapted, localized and implemented as a protocol to integrate into the daily care process for the hospitalized older patients using colourful visual cue and simple acronym of “SOSSAD” (Picture 1 & 2).

Results

After implementation of the modified HELP protocol, there was a significant reduction in the incidence of delirium during hospitalization: 18.8% (Pre) versus 3.2% (Post).

Intervention 1

Stafftraining (Start 18th Sept 2015) Implement HELP protocol (Start 1st Oct 2015)

Intervention 2

Volunteers training (started 2nd Nov 15) Volunteers render HELP (started 3rd Nov 15)

Pareto Chart

1. Lack of standardised way to prevent delirium
2. Staff priority at work
3. Lack of awareness on delirium
4. Task oriented culture (get things done)
5. Lack of suitable items for delirium prevention

*Table 1: Delirium Prevention HELP Protocol


\(\text{LOS} = \text{length of hospital stay} \ (\text{in} \ \text{days})\)

\(\text{HELP} = \text{Hospital Elder Life Program}\)