

## **Project Title**

Improving Discharge Planning With Implementation of Daily Board Multi-Disciplinary Meeting

## **Project Lead and Members**

- Surendra Varman
- Sharen Lim Pei-Wen
- Alvin Tan Wee Beng
- Gurinderjit Kaur Sidhu
- Li Fuyin
- Long Soon Luan

## **Organisation(s) Involved**

Changi General Hospital

## **Project Period**

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## **Project Category**

Quality Improvement, Process Improvement

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Multi-Disciplinary Meeting, Plan-Do-Study-Act, Advanced Practice Nurse Department,  
Fishbone Diagram, Pilot, Run Chart, Plan-Do-Study-Act, Data Analysis

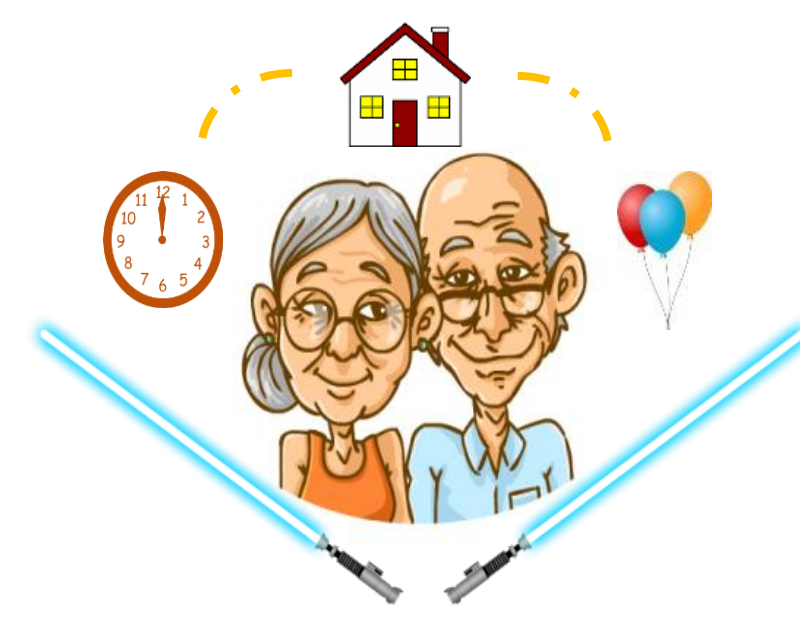
**Name and Email of Project Contact Person(s)**

Name: Surendra Varman

Email: [varman.surendra.doraiswamy@singhealth.com.sg](mailto:varman.surendra.doraiswamy@singhealth.com.sg)



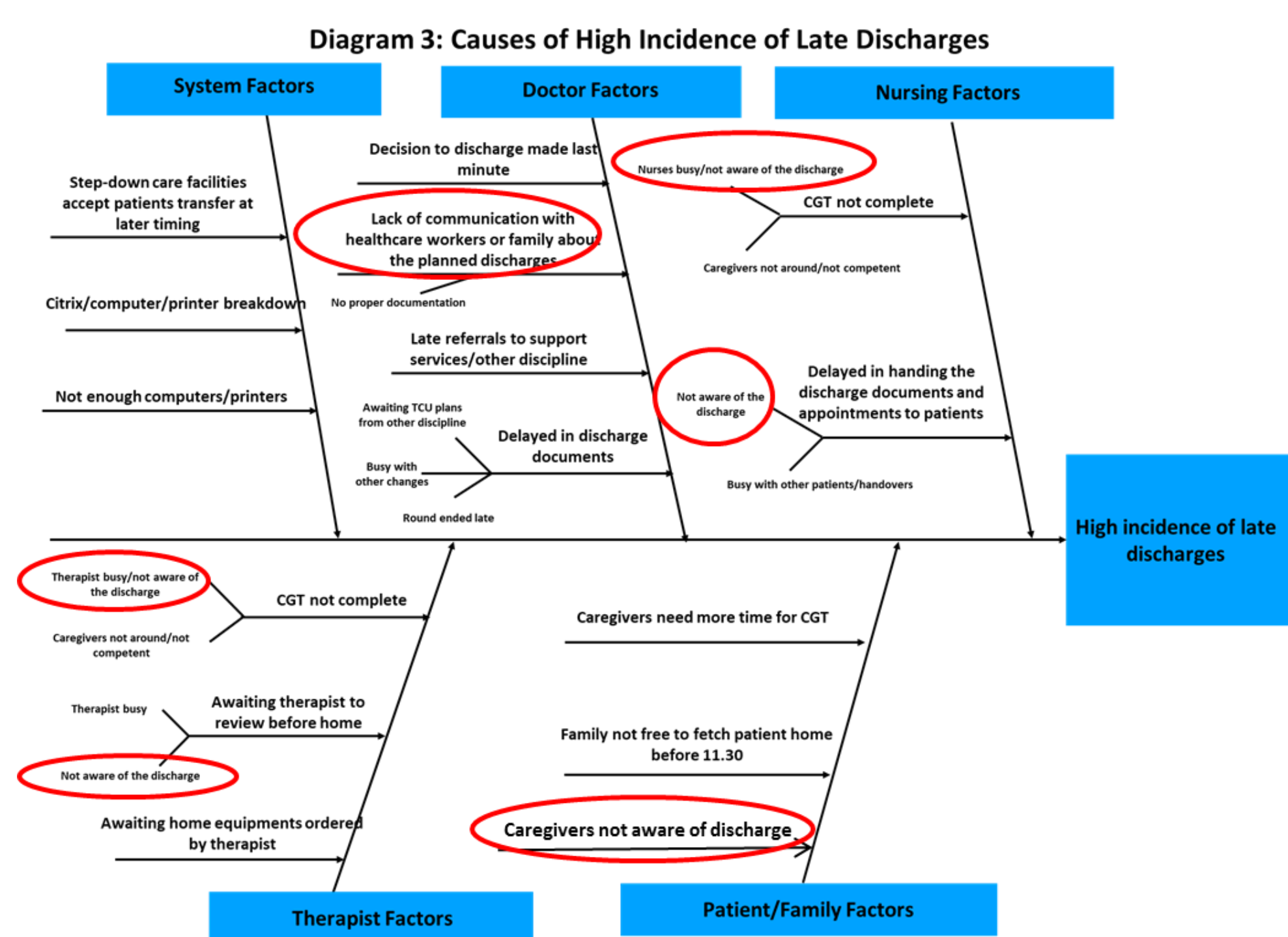
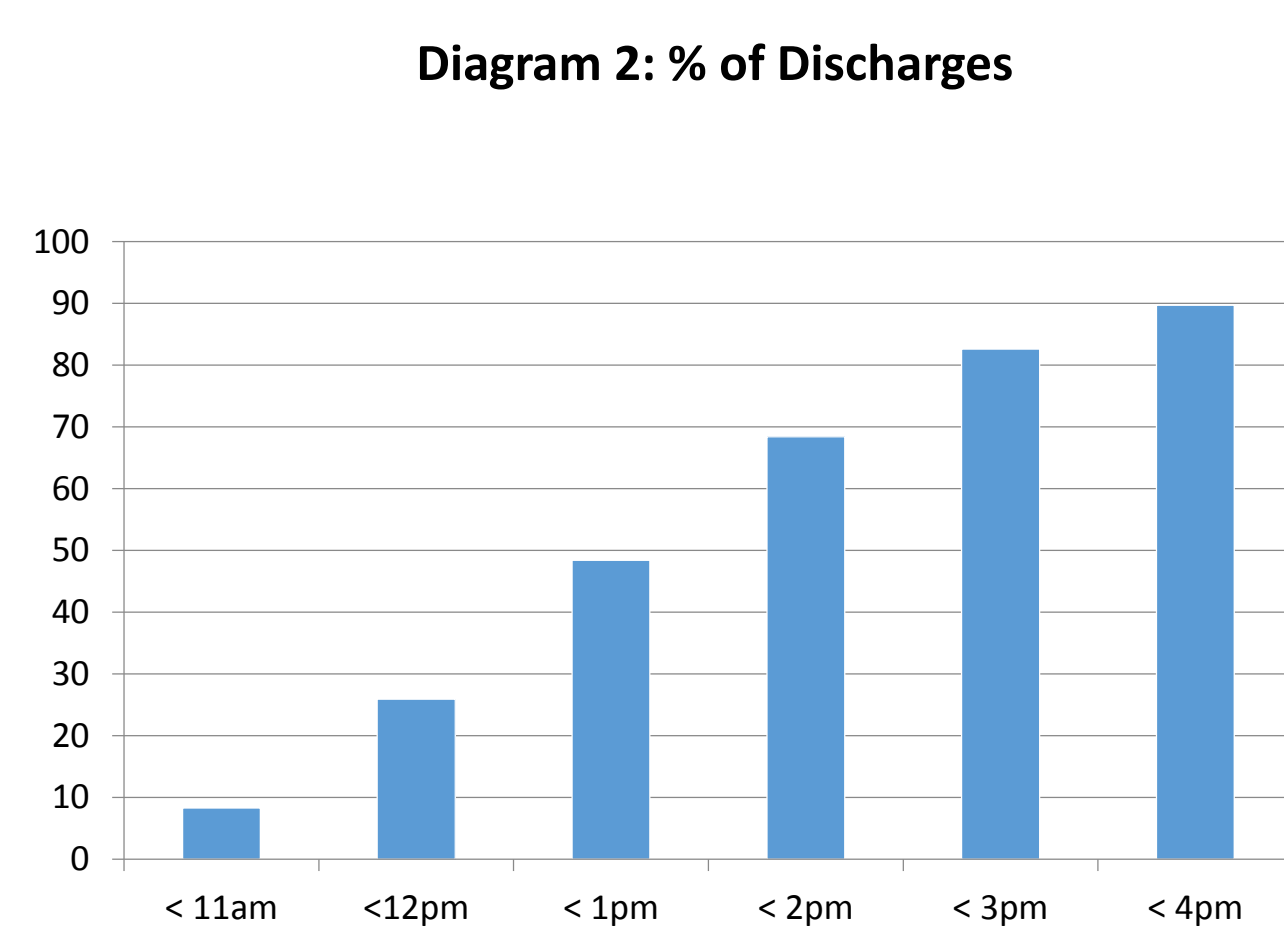
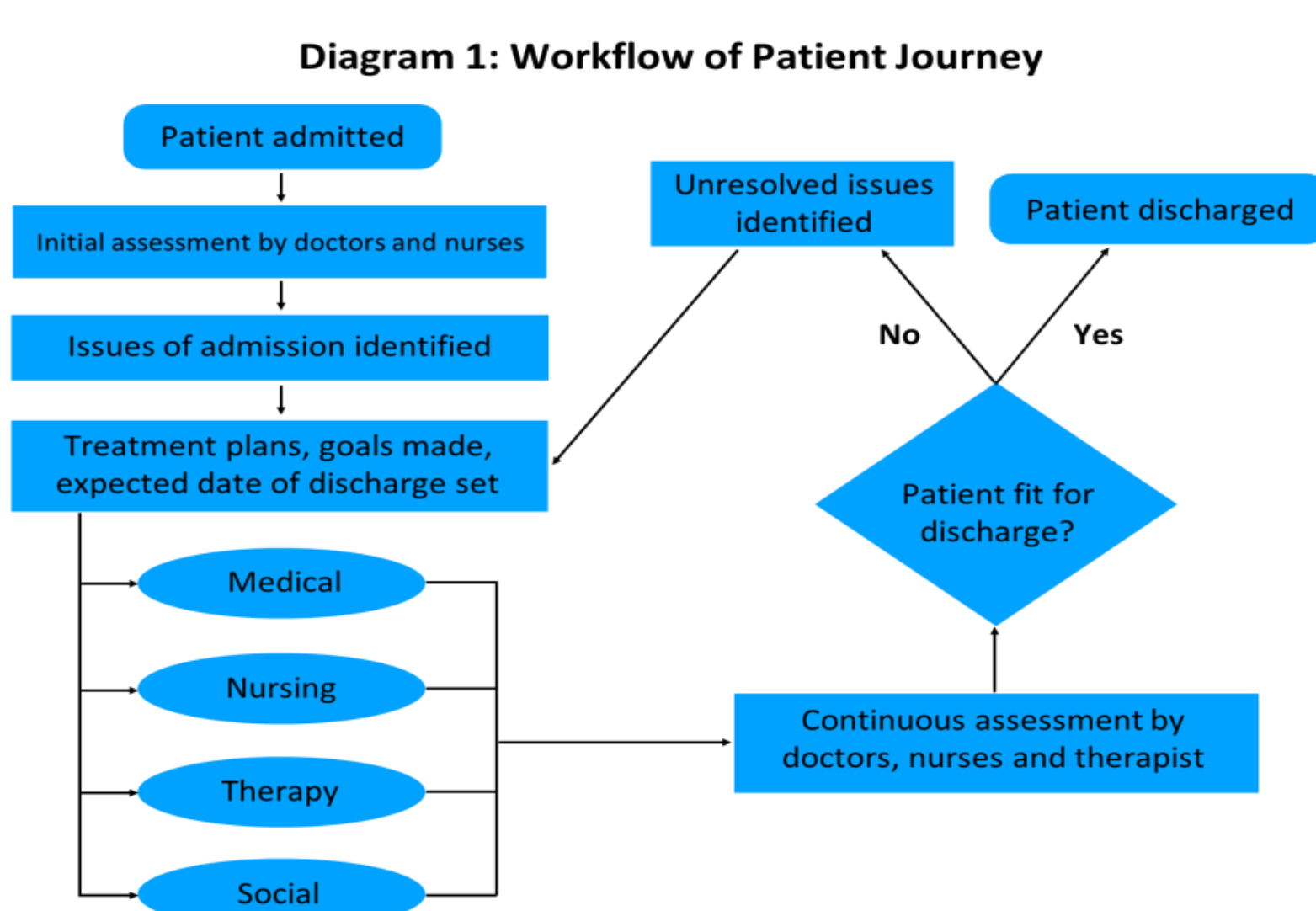
# Improving Discharge Planning With Implementation of Daily Board Multi Disciplinary Meeting



Team Name: The Rise of the Silver Force  
 Team Members: Surendra Varman<sup>1</sup>, Sharen Lim Pei-Wen<sup>1</sup>, Alvin Tan Wee Beng<sup>1</sup>, Gurinderjit Kaur Sidhu<sup>1</sup>, Li Fuyin<sup>2</sup>, Long Soon Luan<sup>3</sup>  
<sup>1</sup>Department of Geriatric Medicine, <sup>2</sup>APN development, <sup>3</sup>Ward 66

## 1. Background

- Effective discharge planning encompasses a good teamwork between the doctors, nurses and various allied healthcare workers.
- A typical patient's journey in an inpatient Geriatric Ward is shown in Diagram 1.
- An analysis of discharges from the Geriatric Wards from Jan 17 to Jun 17 in the Integrated Building (IB), in Changi General Hospital (CGH) shows that most discharges happen late, as illustrated in Diagram 2.
- The various reasons for late discharges is shown in the fishbone diagram (Diagram 3).
- We believe that the main reason for late discharges is a breakdown in the communication between the doctors and various healthcare workers involved in patients care.
- We therefore initiated a Quality Improvement project aim to improve the communication between all team workers to have a more effective discharge planning.



## Mission Statement

- Implementing a Daily Board Multi-disciplinary Meeting (MDM) in Ward 67, Changi General Hospital to improve the median discharges before 11.30am from 12.5% to 50%, without an increase in 30-day readmission rate and the average length of stay.
- Primary aim: Improve the percentage of discharges before 11.30am in Ward 67, CGH (This aim is chosen because it is the hospital wide initiative to improve discharges before 11.30am).
  - Secondary aim: Improve the percentage of 30-day readmissions and average length of stay in Ward 67, CGH.

## 2. Changes (Methods)

- Implement a PILOT daily Board MDM in an acute Geriatric Ward 67 over a span of 4 months starting from 21st Sep 2017.

PDSA Cycle	Date	Description	Evaluation
1	21 Sep 2017	<p><b>Plan:</b> Map the daily board MDM with section for admission/expected discharge date, medical, nursing, physiotherapy, occupational therapy, social/MSW/community services and others for all the 32 patients in ward 67 on laminated paper board with green/red stickers for task status.</p> <p><b>Do:</b> The doctors in-charge do the daily board MDM after ward round together with the nurses in-charge and update the latest plans on the board. Green stickers (for settled issues) and red stickers (for unsettled issues)</p> <p><b>Study:</b> Study the result of measured outcomes and gather feedbacks (refer next box) from all the healthcare workers (MDM team)</p> <p><b>Act:</b> Change to mobile magnetic white board, used green/red magnets for task status, included categories for speech therapist and dietician, incorporated the D-1 discharge checklist, timing of board MDM was fixed at 10.30am daily and a goal of 15 minutes to complete the board MDM</p>	<p>Verbal feedback from MDM team:</p> <ul style="list-style-type: none"> <li>- Paper board was flimsy and small-sized, impeding its visibility and effectiveness as a visual memory aid</li> <li>- Staff nurses had to be physically present during the board MDM as the board MDM is not mobile – difficult for them to attend to urgent patient needs</li> <li>- Some of the categories in board MDM overlapped</li> <li>- Board MDM took place at a time during the day when there was manpower constraint and inability of the nurses to attend (QI team felt that the issue lay more with appropriate allocation of time within the nursing schedule)</li> <li>- Allow other healthcare staff (ie: physiotherapy, occupational therapy, speech therapy and dietician) to take part in the board MDM</li> </ul> <p>Verbal feedback from GRM doctors via a department presentation on 5.10.17:</p> <ul style="list-style-type: none"> <li>- To use a proper white board for better visual effect</li> <li>- Use magnets to save time instead of stickers</li> <li>- Incorporate the discharge checklist (D-1) that was created by another ongoing QI project in the department</li> </ul>
2	21 Oct 2017	<p><b>Plan:</b> Map the daily board MDM on a mobile magnetic white board, used green/red magnets for task status, included categories for speech therapist and dietician, incorporated the D-1 discharge checklist</p> <p><b>Do:</b> Daily board MDM was fixed at 10.30am daily and a goal of 15 minutes was set to complete the board MDM. Also created a feedback form to be distributed to the doctors and nurse involved.</p> <p><b>Study:</b> Study the result of measured outcomes, the feedback form and gather verbal feedback from MDM team.</p> <p><b>Act:</b> Continue with daily board MDM with no dateline set</p>	<p>Verbal and written feedback from MDM team:</p> <ul style="list-style-type: none"> <li>- The now-portable board removed the need for nurses to leave the cubicles to participate in board round</li> <li>- The larger board size also improved its visibility</li> <li>- Survey of feedback form given to doctors and nurses involved showed positive result and feedback</li> </ul>

## 3. Measures (Results, Outcomes and Figures)

### Data Collection Process

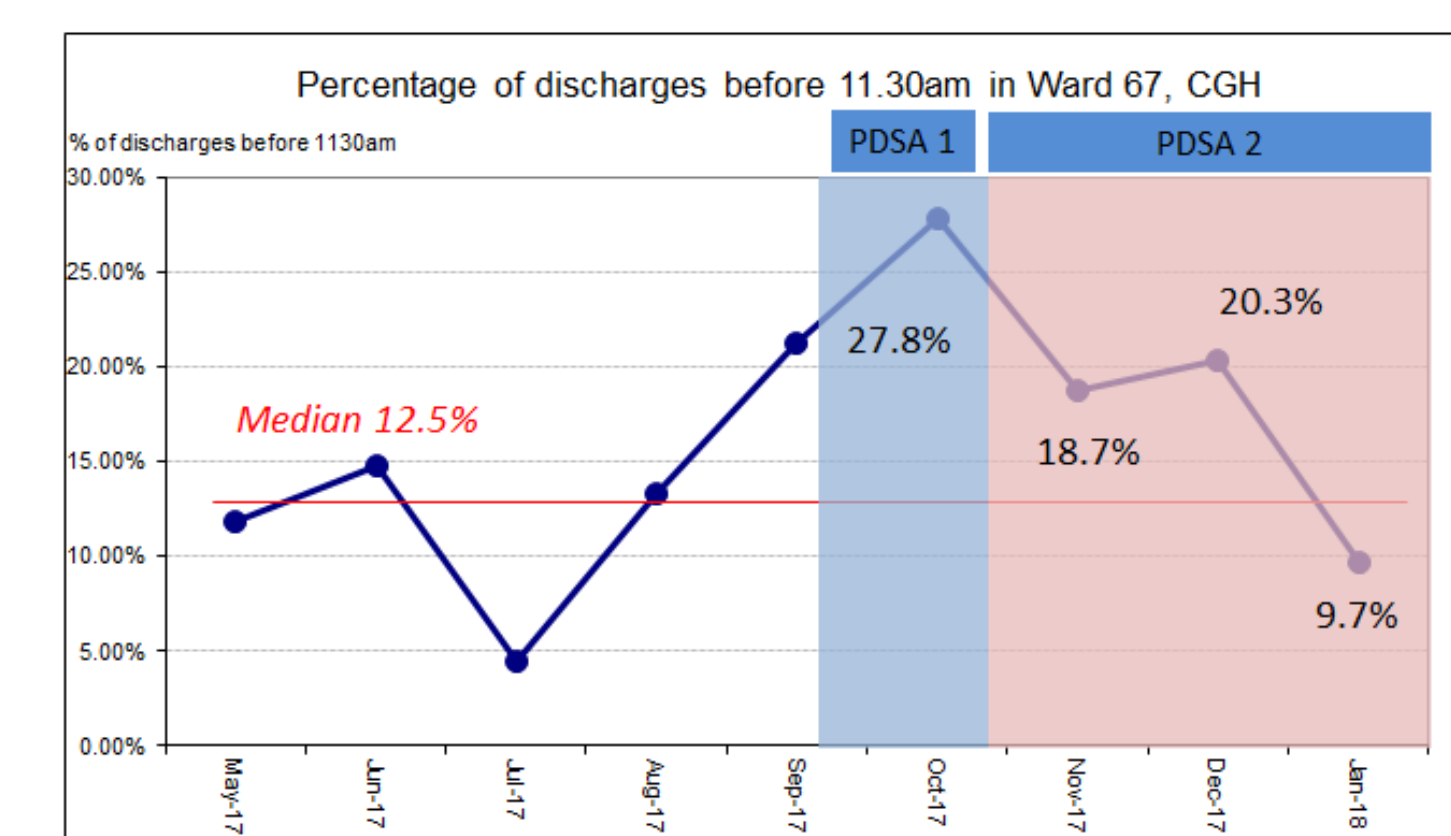
- Department of Medical Informatics, Changi General Hospital.
- Retrieved data on discharges before 1130am, 30-day readmission rate, average length of stay.
- Sample size: 749 discharges from May 17 – Jan 18, 111 re-admissions within 30 days.

### Data Analysis

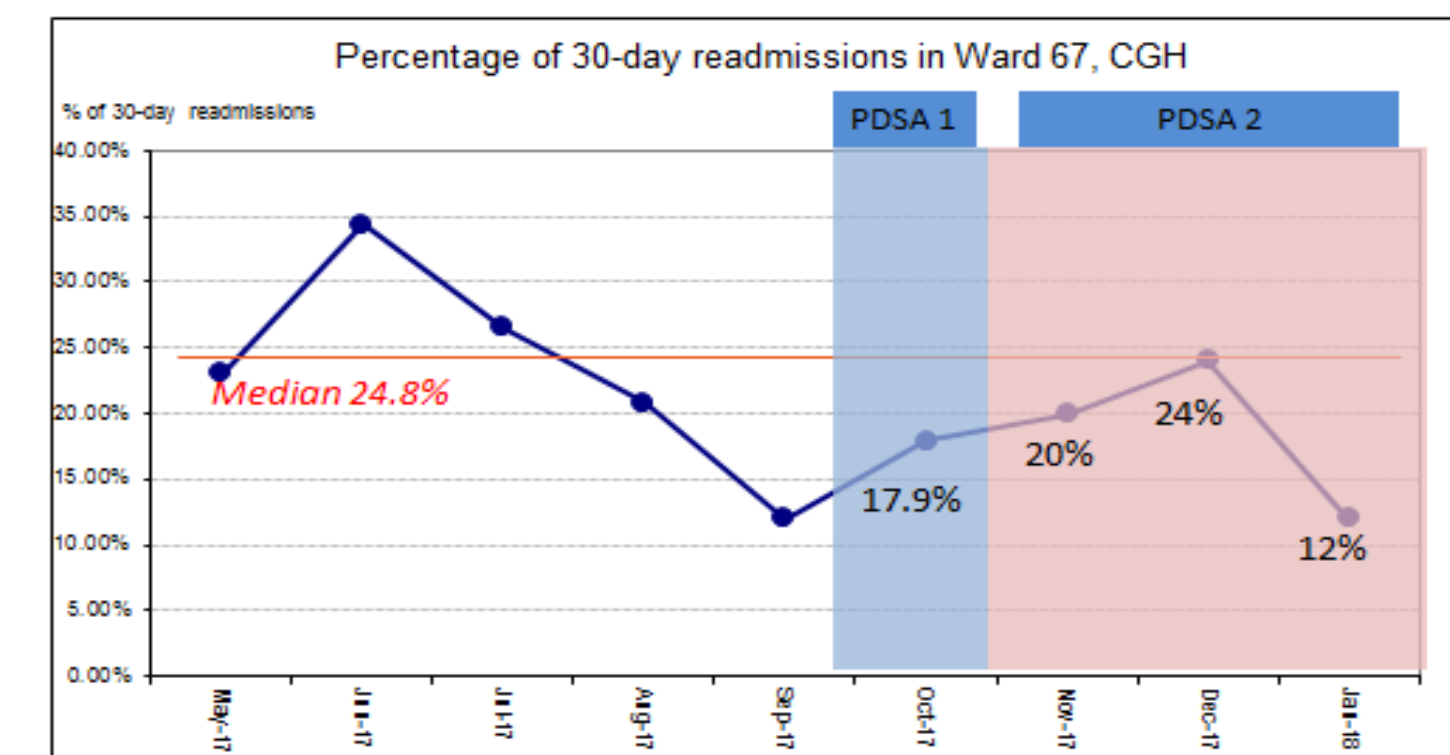
- Used Run Chart for data analysis.
- Post-intervention data (October-January 18) was compared to the baseline median data (May-August 17) before the intervention on 21st Sept 2017.

### Results

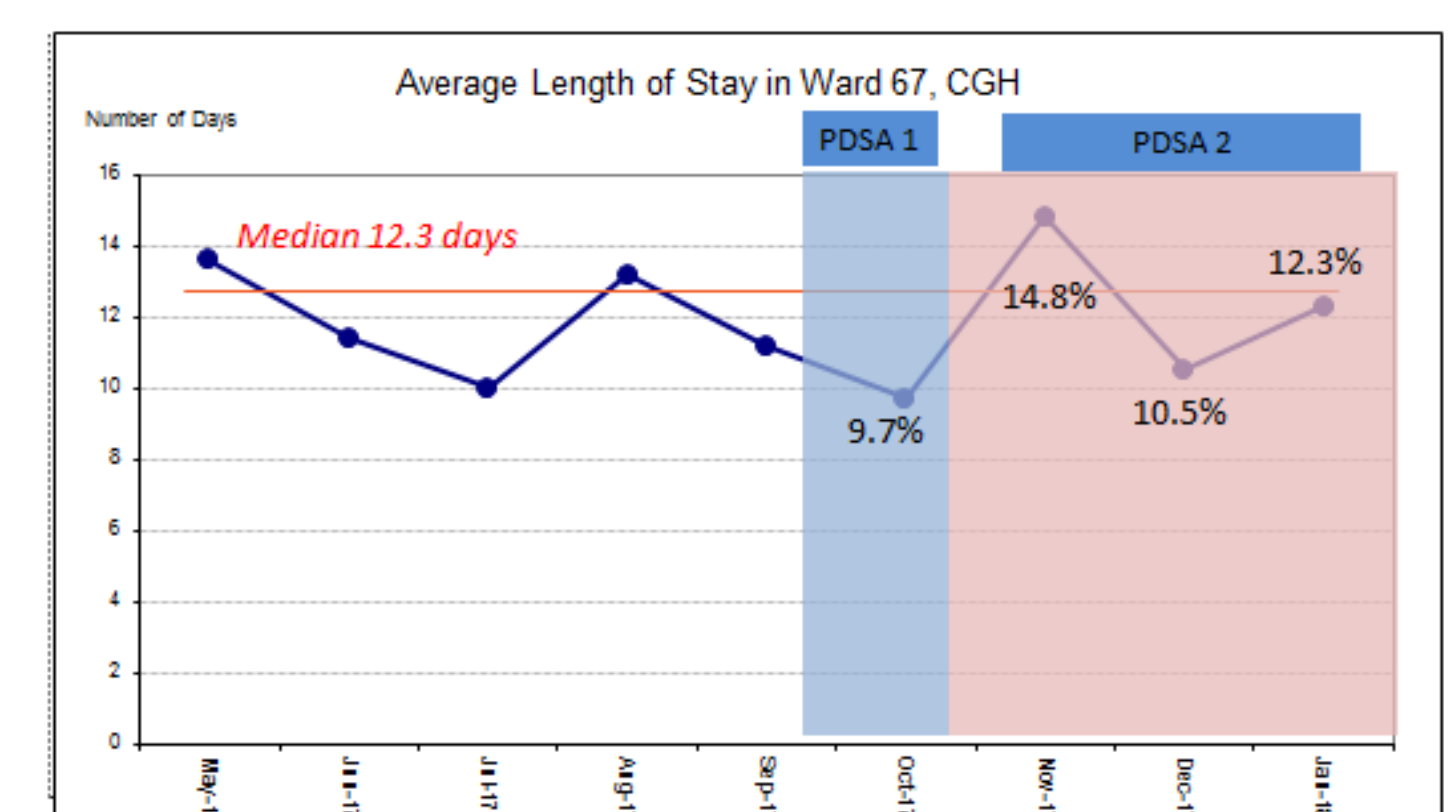
#### Percentage of discharges before 1130am



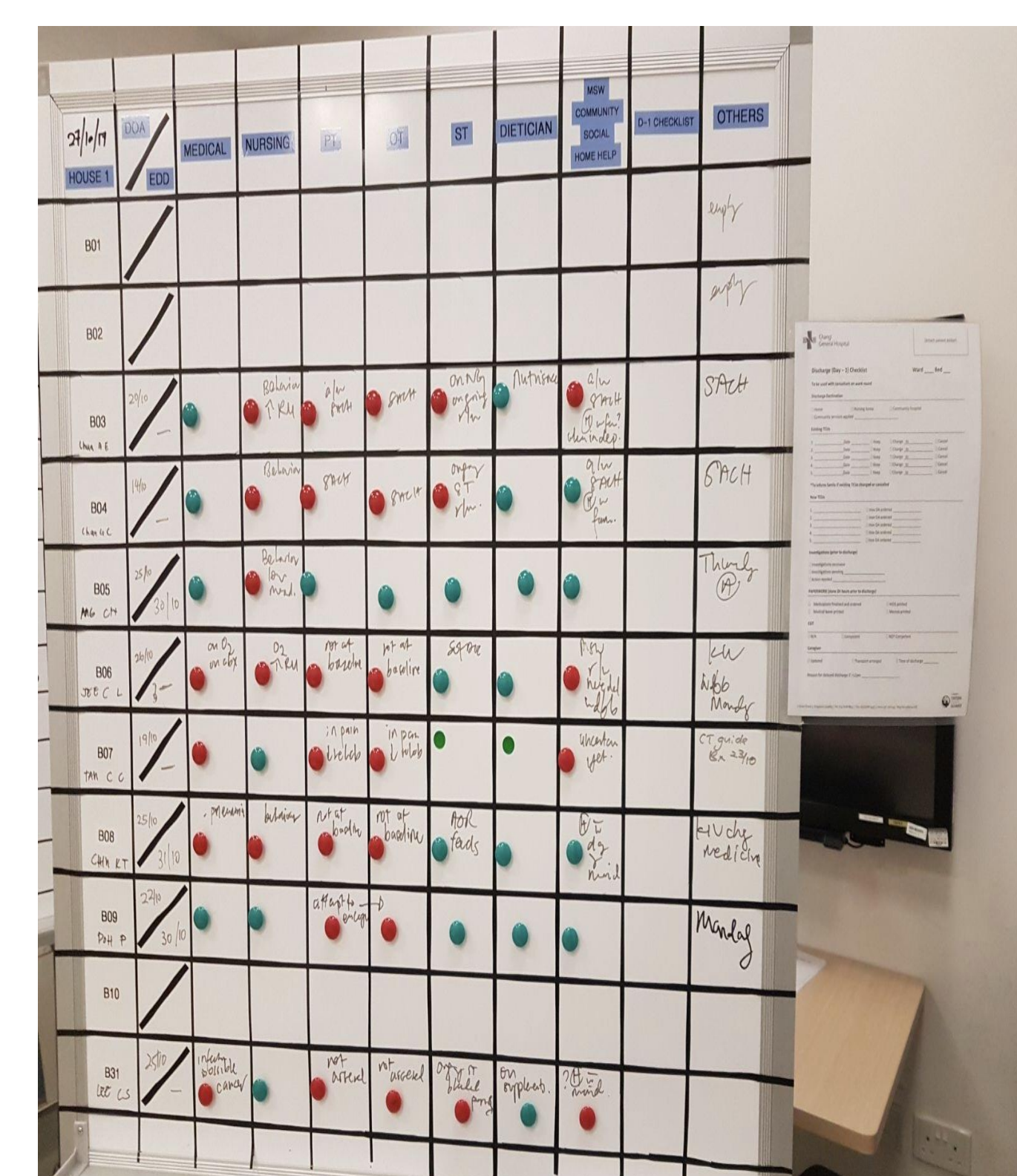
#### 30 day readmissions



#### ALOS



PDSA 1



PDSA 2

## 4. Conclusion

- Discharges before 1130am improved from a median of 12.5% to 19.5%, 30-day readmission rate improved from a median of 24.8% to 18.95% and ALOS improved from a median of 12.3 days to 11.4 days.
- Given appropriate training, supervision and participation, the board round is useful in contributing to improved rates of early ward patient discharges. This is achieved by improved communication, understanding and consolidation of day-to-day ward tasks by the medical and other healthcare workers.
- Future directions of this project include: further refinements to the process and perhaps converting to an electronic form to improve user-friendliness, adapting the process to allow its use in non-geriatric wards to improve day-to-day patient care and pre-discharge workflow on those wards as well.