IMPROVING PATIENTS' SAFETY INDICATORS (PROBLEM LIST REVIEW & MEDICATION RECONCILIATION) IN JURONG COMMUNITY HOSPITAL

MEMBERS: DR LOW LI LIAN (SRP, PACC), DR ELAINE JUMALON (RP, PACC), DR ALVIN ONG (CONSULTANT, PACC), MS JASMINE CHUA (SNR ASST MANAGER, CLINICAL QUALITY)

- ☑ SAFETY
- ☑ QUALITY
- ☐ PATIENT EXPERIENCE
- ☐ PRODUCTIVITY
- ☐ COST

Define Problem, Set Aim

Problem/Opportunity for Improvement

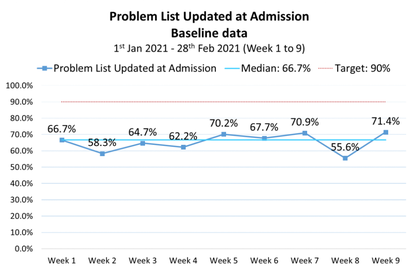
It was noted at a campus level audit meeting that certain patient safety indicators are poorly adhered to, namely: "Problem list updated on admission and discharge", "Discharge medication reconciliation". These are important trackers as they are crucial clinical handover checkpoints that ensure a safe and proper handover/continuity of a patient's care journey. The team endeavor to use the principles of QIP to introduce relevant interventions and track the improvements of these indicators.

Aim

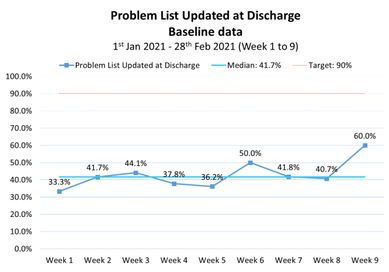
We aim to improve the safety of patients' clinical handover by increasing the percentages of problem list updated on admission and discharge ; and discharge medications reconciliation on the EMR from monthly average of 66.7%, 41.7% and 82% respectively in Jan - Feb 2021 to more than 90%, 90% and 95% by Dec 2021.

Establish Measures

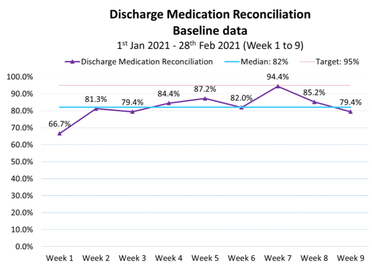
Current Performance



In the first 24 hours of hospital admission, the problem list was updated to indicate a hospital problem.



An update was made to the problem list 24 hours before or after discharge.



Percentage of discharges hospital medications were reconciled within 24 hours. Patient's encounter includes at least one order that needs to be reconciled. Order was never new at discharge

In addition, we developed the following measures to help us assess the interventions' effectiveness in relation to the above outcome measures:

Process measures

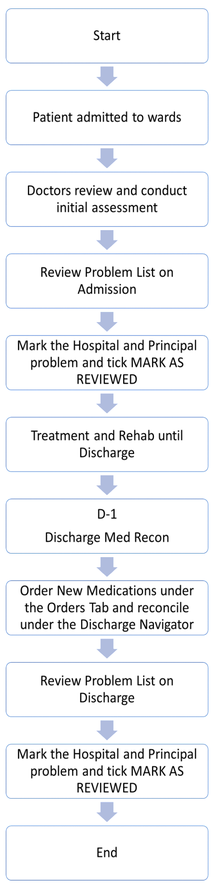
- Admission clerking notes & Discharge summary 'Smartlink' compliance rate

Outcome measures

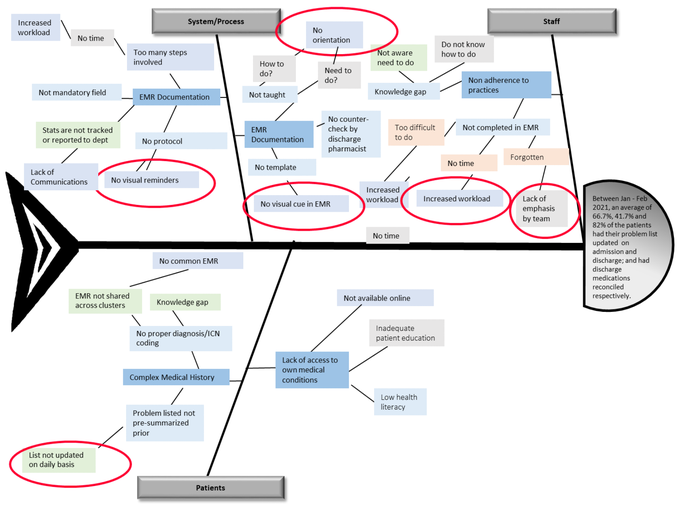
- Staff satisfaction score
- Time taken to do pre-discharge

Analyse Problem

Process before interventions



Probable Root Causes



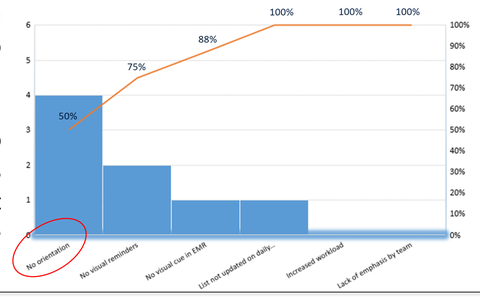
Main reasons contribute to poor adherence to patient safety indicators:

I. Lack of awareness and reminders
II. System issue: lack of system cues/reminders

Key Root Cause

Multi-voting was used to reach consensus on the root cause to prioritise improvement efforts.

The results showed in a Pareto chart that **"no orientation"** is deemed the most important issue contributing to the problem.

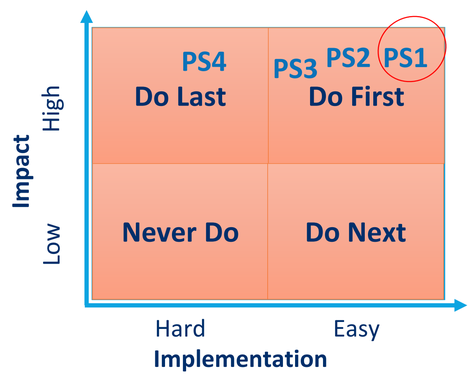


Select Changes

Probable Solutions

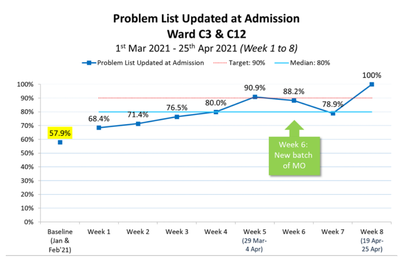
Root Cause		Potential Solutions
No orientation	*1*	Orientation
	2	Develop a patient safety handbook
	3	A short course on patient safety
	4	EPIC hard stop

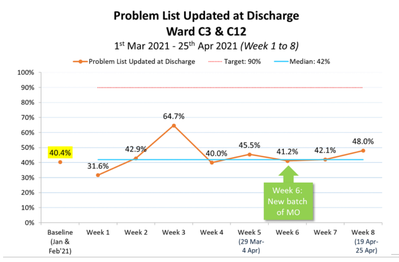
Selected Solutions



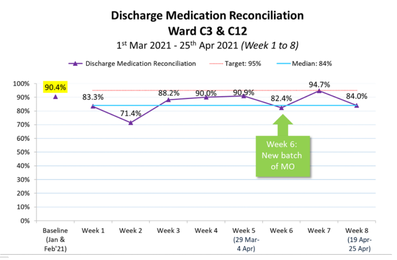
Test & Implement Changes

#	PLAN	DO	STUDY	ACT
1	Conduct a survey to understand the doctor's current practice and knowledge on patient safety indicators and staff satisfaction. Orientate the doctors on the background and required steps for the Problem list updated at admission & discharge and Discharge medication reconciliation. 4 weeks pilot at Ward C3 & C12 starting 1st March 2021.	End of 4 weeks: Problem list updated at Admission improved significantly. However, the Problem list updated at Discharge did not improve as expected and the process measures showed a declining trend or low compliance rate.	The doctors had forgotten to document 'Problem list reviewed (smartlink)' in the admission clerking notes and discharge summary.	Remind the doctors to update the problem list at admission & discharge within 24hrs and document the 'Problem list reviewed (smartlink)' in the admission clerking notes and discharge summary. Repeat PDSA cycle
2	Continue pilot for 4 weeks. Conduct a survey at the end of the cycle.	End of 4 weeks: Problem list updated at Admission achieved 100% in week 8. However, the Problem list updated at Discharge did not improve as expected. The process measures showed low compliance rate.	New batch of MO in week 6 showed decline in performance. Post- intervention survey showed that the staff satisfaction score improved and it seemed that it did not require more time to document 'Problem list reviewed' in admission clerking notes and discharge summary.	Audit and analyse the non-compliance cases. Sub-analysis showed that the system did not accurately reflect the Metric for Discharge Medication Reconciliation.





Increase in compliance observed (Median: 71%) when count in those problem list updated at D -1 & D -2 and problem list updated within 24hrs but not captured in system.



From Week 1 to 8, it was found out that those that did not comply had u-turned to acute hospital. This group should be excluded from metric scale. However, noted 1 case failed metric due to nursing ordering wound product upon discharge

Spread Changes, Learning Points

Learning points

Based on our survey results, there is improvement in patient handover documentation without significantly increasing time taken for admission and discharge process.

With adequate reminders and orientation to inculcate change behaviour, compliance with Problem List review as well as medication reconciliation can be improved, leading to proper documentation for continuity of care of the patient.

Spread changes

Next phase: A second ward will be selected to implement the PDSA cycle with continual process to gather feedback from the clinicians on the feasibility and sustainability of the interventions, prior to full implementation to all wards in JCH.

Ng Teng Fong General Hospital

Jurong Community Hospital