Project Title

Reduce Home Medication Error In Ward B5

Project Lead and Members

Project lead: Liu Jingmin

Project members: Ng Hong Eng, Teh Fu Chang Engelbert, Rohaidah Bte Sa'at, Koh, Omadevi Tharuman

Organisation(s) Involved

Ng Teng Fong General Hospital

Aims

By October 2018, the project team seeks to eliminate the incidence of home medication errors for patients admitted to Ward B5

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

Effective change can revolve around simple change ideas (e.g. a visual cue). In addition, we need to keep team members motivated, outcome-driven and engaged in order to make an effective change

Conclusion

See poster appended/ below

Project Category

Care & Process Redesign

Keywords

Ng Teng Fong General Hospital, Service Design, Quality Improvement, Improvement Tools, Plan Do Check Act

Name and Email of Project Contact Person(s)

Name: Liu Jingmin

Email: liu_jingmin@nuhs.edu.sg

REDUCE HOME MEDICATION ERROR IN WARD B5

MEMBERS: LIU JINGMIN, NG HONG ENG, TEH FU CHANG, ENGELBERT, ROHAIDAH BTE SA'AT, KOH, OMADEVI THARUMAN

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

Define Problem, Set Aim

Problem/Opportunity for Improvement

Between Q1 2017 to Q2 2018, there were 14 incidences of medication errors, of which 6 incidences involved patients consuming home medication without the knowledge of the attending nurses. Home medication errors compromise patient safety, patient experience, and quality of care.

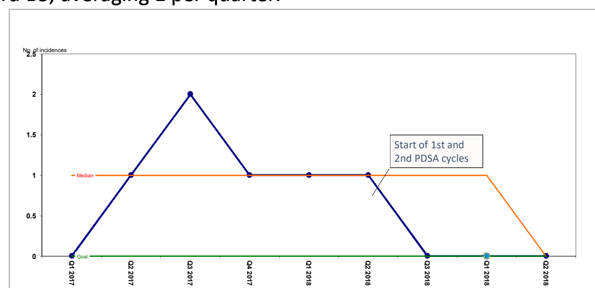
Aim

By October 2018, the project team seeks to eliminate the incidence of home medication errors for patients admitted to Ward B5.

Establish Measures

Outcome measure

No. of incidences of home medication errors for patients discharged from Ward B5, averaging 1 per quarter.



Process measure

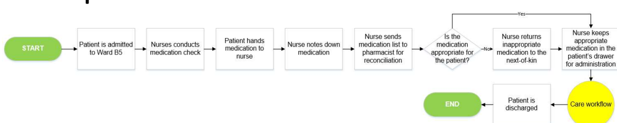
Rate of nurses' compliance to conducting medication checks upon admission (%), defined as the number of checks (numerator), divided by the total no. of patients in Ward B5 (denominator). This remained at 100% throughout.

Balancing measure

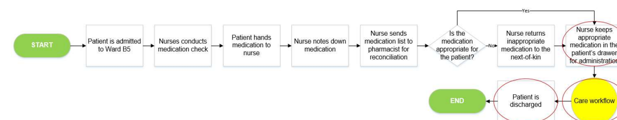
No. of nurses in the ward. This remained at 36 RNs throughout the project.

Analyse Problem

Process map

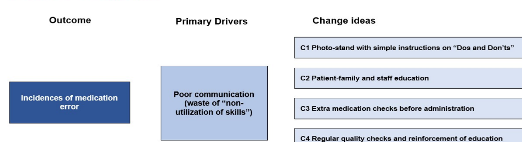


Waste identification



The project team identified the waste of "non-utilization of skills". In particular, the results of medication checks had not been communication across the administration of medication, care workflow, and patients' discharge. Correspondingly, the project team brainstormed 4 potential change ideas as countermeasures to the waste identified.

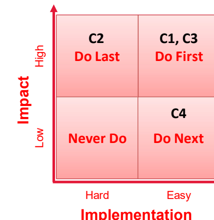
Driver diagram



Select Changes

The project team used the impact-implementation matrix to prioritize change ideas for PDSA cycles.

Primary Driver		Change Idea
Poor communication (waste of "non-utilization of skills")	C1	Photo-stand with simple instructions on "Dos and Don'ts"
	C2	Patient-family and staff education
	C3	Extra medication checks before administration
	C4	Regular quality checks and reinforcement of education



Test & Implement Changes

CYCLE	PLAN	DO	STUDY	ACT
1	On 2 May 2018 (Q2 2018), the project team rolled out change ideas 1 and 3 as part of the 1st PDSA cycle.	Test change was carried out as planned. We received positive feedback on the photo-stand.	There was a downward trend in the outcome measure. Despite positive feedback on the photo-stand, we learnt that reinforcing the information would important moving forward.	The project team decided to adopt the change ideas and incorporate them into a nursing standard operating procedure (SOP) for home medications. This would embed the change ideas into daily work.
2	On 7 May 2018 (Q2 2018), the project team rolled out change ideas 2 and 4.	Test change was carried out as planned. In conjunction with the new SOP, the "dosing" approach to reinforcing the information was effective. There was also no more patient complaints for home medication errors.	The incidence of home medication errors was eliminated and sustained for 2 quarters. We learnt that regular quality checks and reinforcement of education across different modes (e.g. "teach-backs", shift huddles etc.) were key to success.	The project team decided to adopt the change ideas. Following quality planning and appropriate quality control, the sustainability of results suggest that no further quality improvement is necessary. The changes are ready for spread and scale, after further engagement with management.

Spread Changes, Learning Points

In Q1 2019, the project team engaged Chair, Medication Sub-Committee with the project details and findings. We will contribute to spread change by engaging management, as well as facilitating the adaptation of our change ideas within other wards, considering different operating contexts.

Key learnings

1. Effective change is *simple* change. Our change ideas revolved around change idea 1, a photo-stand (i.e. visual cue), yet was enough to sustain change over 2 quarters.
2. Effective change is *people* change. Keeping colleagues motivated, outcome-driven, and engaged on a regular basis enables us to make a real difference.

Ng Teng Fong General Hospital
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