To Improve Patient Awareness and Preparedness for Medication Rounds

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1. BACKGROUND

Patients are frequently found missing from their bed during the medication rounds. Staff will end up spending a lot of time and effort to locate the missing patients so that they can receive their medication. Analysis has revealed that the key reason for delay in medication administration is the lack of awareness of the medication time by the patients.

This project presents a vital opportunity to build trust and rapport with patients by involving them to be aware and prepared for medication rounds. Better communication will reduce delays in medication administration in our cardiothoracic surgery and cardiovascular medicine wards ensuring timeliness and accuracy in medication administration. On time medication ensure optimal therapeutic levels for patient as medication administered before or after the scheduled timing may cause harm or result in sub-optimal therapy or pharmacological effect.

25%
Patients not by bedside during medication rounds

Project Goals
- Reduce unproductive time spent searching for patients.
- Improve staff collaboration in patients' care and time saving.
- Improve patient bedside attendance during medication rounds so that medication can be administered timely.
- Improve communication among nurses, physiotherapists and doctors.

2. METHODOLOGY

- Cause & Effect Diagram
- Gantt Chart
- Root Cause Analysis
- Creative Solutions Matrix
- Tree Diagram

3. SOLUTIONS & IMPLEMENTATION

Broadcast Medication Announcements
Public announcements are scheduled to be aired across the ward hallway twice daily, 30 minutes prior to the medication round to allow enough time for patients to return to bedside.

Strengthen Communication with Physiotherapist
The nurses collaborated with the Physiotherapists to put a halt to all physio rounds during medication time. The physiotherapists will ensure that the patients has taken their medication before continuing with the physio sessions.

Patient's next of kin help ensure that patients are back in bed during medication rounds
Patients and family member's education are reinforced so that they will be reminded to remain at bedside during medication rounds. This is done during patient's admission together with the patients by watching informative video on medication rounds.

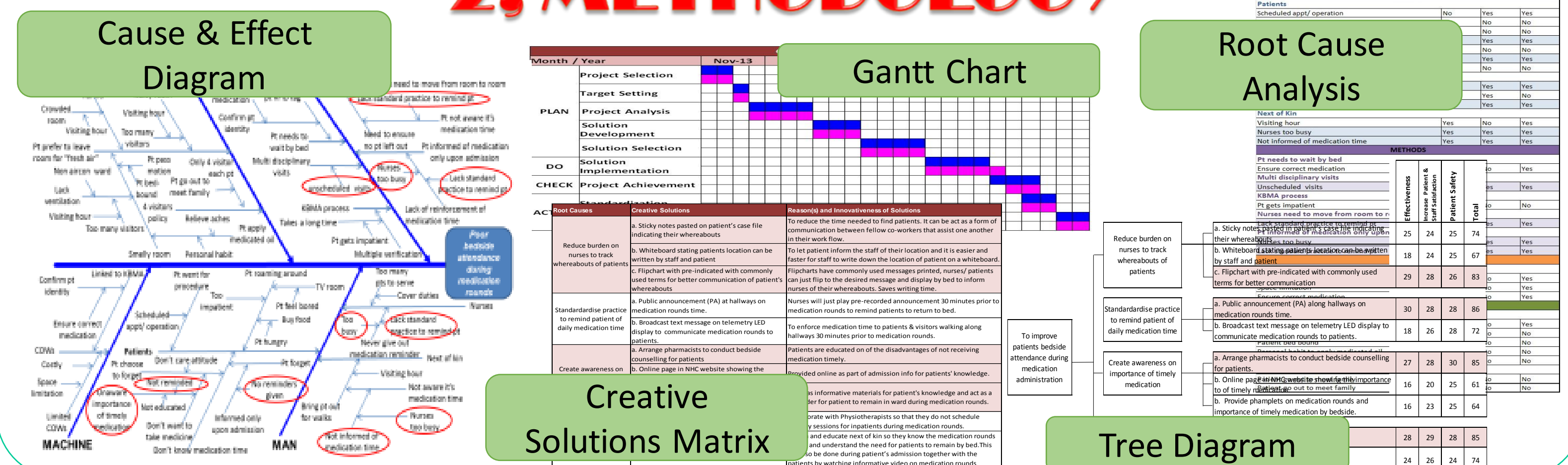**Flip Chart to communicate patient's whereabouts**
Simple tools like post-it notes and flip charts stating patient's whereabouts helps to reduce the time needed to find patients. It acts as an effective communication tool between fellow co-workers that assist one another in their work flow.

4. RESULTS

Tangible Outcome

Before

Step	Process Flow Chart of Medication Administration	Time Taken (mins)
1.	Log-in to citrix & Secure Rx MD — Log-in to citrix to start up with medication administration to patients	2
2.	Missing patient — Junior nurse (HCA/PCA/ EN) will go search for patient.	10
3.	Finding Out Details — RN will ask other staffs/ neighbouring patient if they have seen the patient or contact patient or family via phone.	3
4.	Trace RFID Tag — RN will trace patient's RFID tag to locate them.	3
5.	Identified Patient's Location — Junior nurse will be ask to fetch patient back to bedside	5
6.	Resume medication rounds — RN will be alerted to continue to give medication to patients	3
7.	Verify patient status — RN dispensing medication to patient will confirm the patient's identification using 2 identifiers.	1
8.	Identifying patients — Scan patient's RFID Tag	0.5
9.	Accessing to patient's medication drawer — Scan the barcode on the drawer to open the slot	0.5
10.	Start dispensing medications — RN will look through the medications to be given & dispense accordingly.	3
11.	Medication reach patient — RN will give the medications with explanation to the patients	3
	Total Time Taken	34

After

| Step	Process flow chart of Medication administration	Time Taken (mins)
1.	Log-in to Citrix & Secure Rx MD — Log-in to Citrix to start up with medication administration to patients	2
2.	Verify patient status — RN dispensing medication to patient will confirm the patient's identification using 2 identifiers.	1
3.	Identifying patients — Scan patient's RFID Tag	0.5
4.	Accessing to patient's medication drawer — Scan the barcode on the drawer to open the slot	0.5
5.	Start dispensing medications — RN will look through the medications to be given & dispense accordingly.	3
6.	Medication reach patient — RN will give the medications with explanation to the patients	3
	Total Time Taken	10

2920Hrs
Man-Hours Saved per Annum

Implementation of the PA system to inform patients of the medication time had eliminated the hassle of looking for them during medication rounds. Nurses will not have to waste time and effort to round up patients during medication rounds nor look for patients if they are absent from the bed. Communications between nurses and the NOKs have also improved. We save an estimate of 20 minutes of nurses' time with for every patient that return to bedside for medication upon hearing the announcement.

Before: Patients in bed 75% / Patients not in bed 25%
After: Patients in bed 92% / Patients not in bed 8%
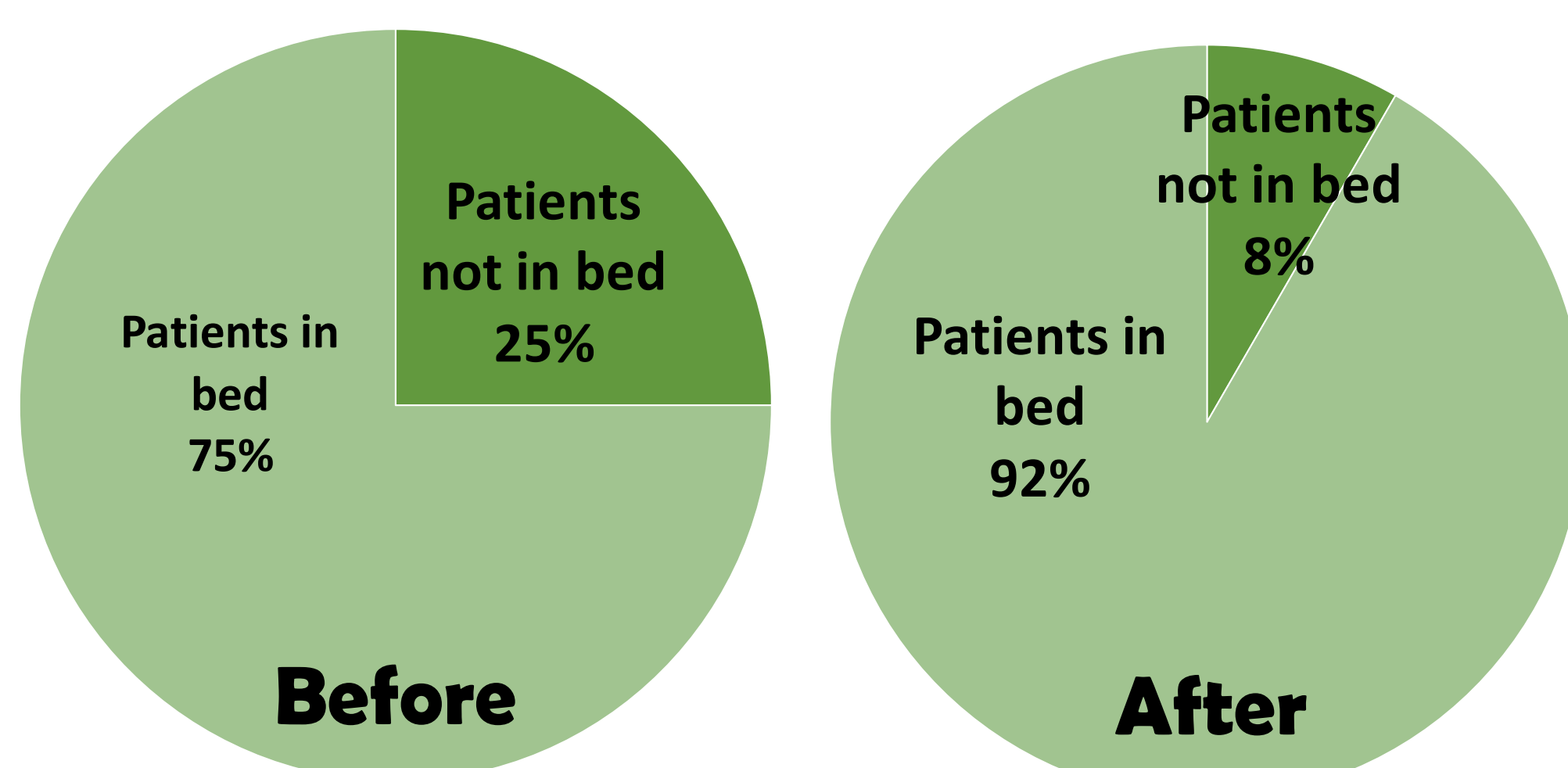
92%
Bedside attendance during medication rounds

With better communication, patients are more aware of the importance to have their medication on time and therefore, more likely to stay by their bedside during the medication rounds.

Tangible Outcome

Patient Safety
Patients' safety is enhanced with timely medication which aid in their recovery. We aligned our practices to safe medication administration guidelines to improve patient safety and well-being.

Cross-Department Team work
Working relationship between nurses and physiotherapists improved with better communication of care plans for patients. Mutual respect and understanding is strengthened between the departments.

Organisation's Performance and Business Objectives
The project is greatly aligned to our organisation's vision and mission of providing quality healthcare and achieving excellence in healthcare as a people-centred organisation.

5. CONCLUSION

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