Project Title

A Quality Improvement Initiative to Reduce 72h ED Reattendance Turned Inpatient Cases

Project Lead and Members

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Organisation(s) Involved

Ng Teng Fong General Hospital

Healthcare Family Group Involved in this Project

Medical, Nursing, Healthcare Administration

Applicable Specialty or Discipline

Emergency Medicine

Aims

To reduce the percentage of patients who return to ED within 72 hrs and turn inpatient from average of 25.6% (YTD FY18) to the set institutional target of 23.8% by end FY19.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

1. Identify appropriate team members who will be able to reach out to the various stakeholders involved
2. Actively support, engage stakeholders and maintain feedback loop

Conclusion

See poster appended/ below

Project Category

Care & Process Redesign

Value Based Care, Safe Care

Keywords

72hr ED Reattendance, ED Treatment Unit, Discharge advice

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A QUALITY IMPROVEMENT INITIATIVE TO REDUCE 72H ED RE-ATTENDANCE TURNED INPATIENT CASES

MEMBERS: DR TAY WEI LING, DR CHAN CHUNN HOO, DR DE DIOS MICHAEL PANGANIBAN, DR LIM GHEE HIAN, DR JUAN SZE JOO, SSN TAN YI LIAN, SEN RAHIMAH BINTE NORDIN, MS JOYCE LOKE, MS YVONNE SOH

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

Define Problem, Set Aim

PROBLEM

Unscheduled re-attendance of patients to the Emergency Department (ED) who subsequently require admission within 72 hours of discharge from the initial ED visit strain the manpower and bed resources in ED. This group of patient need review regarding appropriate clinical management and patient safety at the initial visit (i.e. if these patients should have been admitted from initial visit)

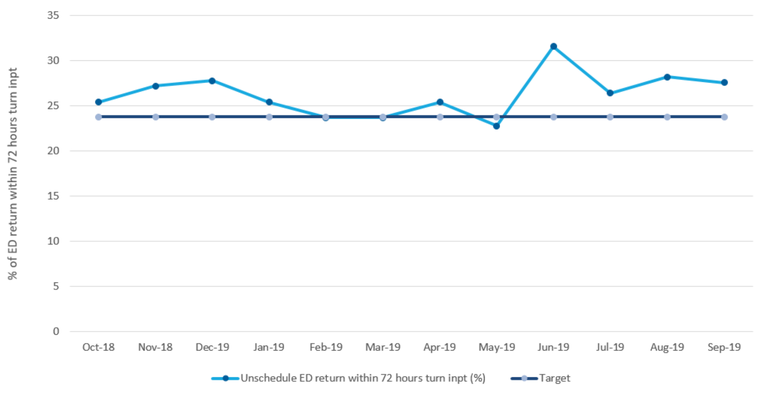
Between Apr-18 to Mar-19, the year-to-date (YTD FY18) percentage of patients who unexpectedly return to the ED and subsequently turn inpatient within 72 hours was 25.60% (ranging from 22.4% to 27.8%). This is below the set institutional target of 23.8%.

AIM

To reduce the percentage of patients who return to ED within 72 hrs and turn inpatient from average of 25.6% (YTD FY18) to the set institutional target of 23.8% by end FY19.

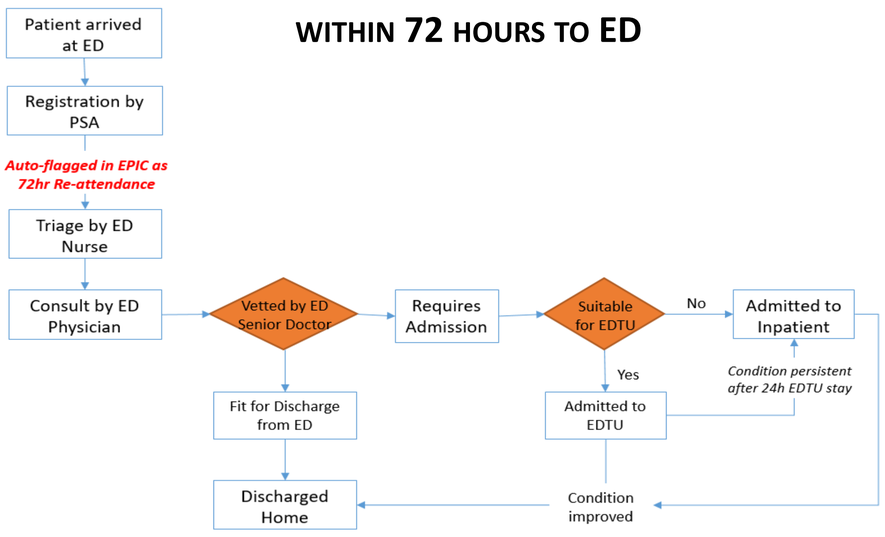
Establish Measures

UNSCHEDULED 72H ED REATTENDANCE TURNED INPATIENT
(OCT'18 TO SEP'19: AVERAGE 26.3%)



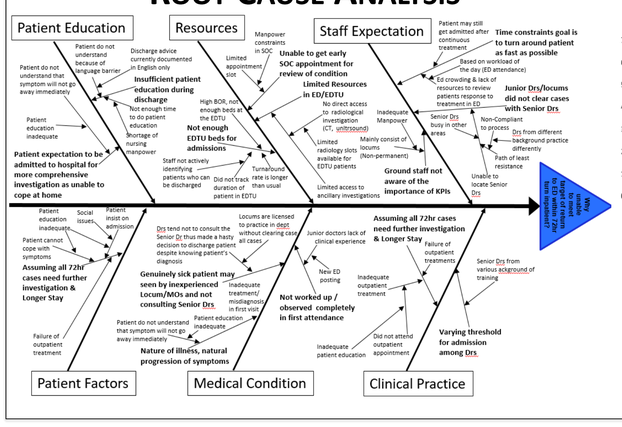
Analyse Problem

PROCESS FLOW OF UNSCHEDULED RE-ATTENDANCES WITHIN 72 HOURS TO ED

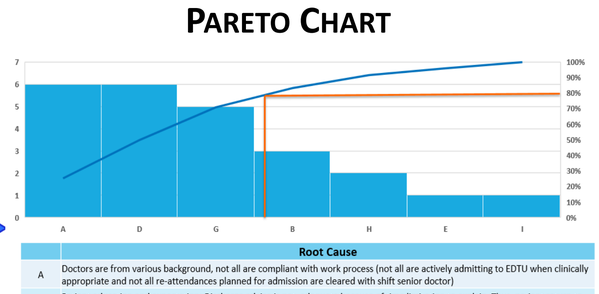


Audit was conducted of patients who reattended within 72 hours of discharge from ED and were admitted during the reattendance visit. It was found that majority of these cases were due to natural progression of the illness resulting in need for subsequent admission, or patient expectations for complete resolution of illness after the initial consult. Many of those requiring admission for natural progression of illness also had relatively short inpatient stays, suggesting that they could have been managed in the Emergency Department Treatment Unit (EDTU) instead of an inpatient ward.

ROOT CAUSE ANALYSIS



PARETO CHART



	Root Cause
A	Doctors are from various background, not all are compliant with work process (not all are actively admitting to EDTU when clinically appropriate and not all re-attendances planned for admission are cleared with shift senior doctor)
D	Patient education and expectation: Discharge advice is not adequate because of time limitation to explain. Thus, patient return to ED when they have persistent symptoms i.e. they expect to be completely well immediately, do not understand that some conditions take a longer period to recover.
G	Patient failed trial of outpatient treatment, conditions have deteriorated thus they need subsequent inpatient treatment
B	Not all doctors are compliant with work process to escalate re-attendances planned for admission because they have difficulty locating the senior doctor on shift to discuss case.
H	Ground staff is made up of staff of varying backgrounds (new staff, locums) not aware of department KPI
E	Inadequate or inappropriate treatment and misdiagnosis at first visit
I	ED overcrowding, limited resources to observe and review symptoms, thus, admit patient directly to inpatient

Select Changes

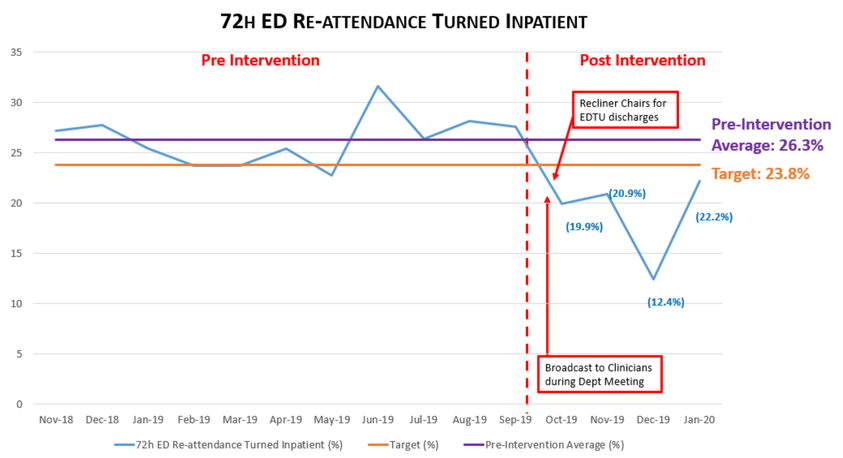
ROOT CAUSES	POTENTIAL SOLUTIONS
Doctors are from various backgrounds and training, not all are compliant with work processes and are aware of department quality indicators	To remind clinicians that • All ED re-attendances must be discussed with consultant on shift • ED clinicians should consider EDTU as an alternative to inpatient admission when clinically appropriate (Eg. Abdominal Pain, Gastroenteritis, Tonsillitis, Back Pain, Vertigo)
Unable to admit to EDTU as no EDTU bed available	• Utilize recliner chairs for patients awaiting discharge to improve turnover of beds
Discharge advice is not adequate because of time limitation to explain. Thus, patients return to ED when they have persistent symptoms i.e. they expect to be completely well immediately after first ED consult and do not understand that some conditions take a longer period to recover.	• Manage patient expectations • Standardize and improve discharge advice patient information sheets

Test & Implement Changes

CYCLE	PLAN	DO	STUDY	ACT
1	To remind clinicians of the following • 72h re-attendance turning inpatient rates as important clinical quality indicator. • Senior doctors to consider EDTU admission when clinically appropriate Fully utilize the EDTU capacity.	Message was broadcasted to ALL doctors regarding 72h re-attendance turned inpatient as a quality indicator. Clinicians reminded to consider admission to EDTU when clinically appropriate Utilization of recliner chairs in the ED for patients awaiting for discharge (patient selection: no fall risk, ADL independent)	Reduction in percentage of re-attendances turned inpatient was noted in Oct 2019. However on audit, it was noted that a few cases were not vetted by ED senior doctors.	Plan for reinforcement and reminders during clinical meeting and broadcasts.
2	To remind clinicians regarding requirement for vetting of all re-attendance cases by senior doctors	Issue was raised and discussed during department clinical meeting in Oct 2019 on vetting of re-attendance cases by senior doctors.	Further reduction in percentage of re-attendances turned inpatient was noted in Nov and Dec 2019	To continue regular reminders during clinical meeting and broadcasts.

There were initial plans to implement changes to improve patient discharge processes and patient education in order to better manage patient expectations on their conditions to avoid unnecessary re-attendances and requests for admission. This was however put on hold due to the COVID-19 situation and this QI project was terminated owing to closure of EDTU and diversion of resources to pandemic management.

72H ED RE-ATTENDANCE TURNED INPATIENT



Rate of 72h ED re-attendance turning inpatient dropped from pre-intervention rate of 26.3% to below target of 23.8% for 3 consecutive months following interventions in Oct 2019

Spread Changes, Learning Points

What are/were the strategies to spread change after implementation?

1. Support and buy-in from ED Head of Department and Senior Nurse Manager
2. Broadcast and buy in from stakeholders (i.e. Clinicians of all levels)
3. Tracking of outcome and feedback to stakeholders and sponsors

What are the key learnings from this project?

1. Identify appropriate team members who will be able to reach out to the various stakeholders involved
2. Actively support, engage stakeholders and maintain feedback loop

Ng Teng Fong General Hospital

Jurong Community Hospital