Project Title

A Quality Improvement Initiative to Improve Door to Analgesia Time for Renal Colic Patients with Pain Score ≥4 at the Emergency Department

Project Lead and Members

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Organisation(s) Involved

Ng Teng Fong General Hospital

Aims

1.To increase the percentage of renal colic patients with pain score ≥ 4, achieve door to analgesia time of ≤ 20 minutes, from 20% (between October to December 2018) to 80% in the Emergency Department within 6 months. 2. To decrease the median door to analgesia time from 47 to 20 minutes.

Background

See poster below

Methods

See poster below

Results

See poster below

Lessons Learnt

It is important to identify the appropriate team members that can reach out to the various stakeholders. The team members must actively support and engage stakeholders and always maintain a feedback loop.

Conclusion

See poster below

Additional Information

See poster below

Project Category

Care & Process Redesign

Keywords

Ng Teng Fong General Hospital, Root causes analysis, Pareto Chart, Door to Analgesia Time, Renal Colic Patients

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A QUALITY IMPROVEMENT INITIATIVE TO IMPROVE DOOR TO ANALGESIA TIME FOR RENAL COLIC PATIENTS WITH PAIN SCORE ≥4 AT THE EMERGENCY DEPARTMENT

MEMBERS: DR JUAN SZE JOO, DR NG WEI MING, DR LOKE CHOY YIN, NC CHENG GUAT HOON, SN DORRIS NGIA, SN HII XIU ING, SN NADIAH BINTE ASWEN, MS CAI XUETING, MS CHAN GOK LIN

- ❑ SAFETY
- ❑ PRODUCTIVITY
- ☑ PATIENT EXPERIENCE
- ☑ QUALITY
- ❑ VALUE

Define Problem/Set Aim

Problem

Renal colic pain is described as the worst pain a patient can experience. Effective pain management is important in treating this group of patients . This process **should start at triage**, be monitored during their time in the ED and finished with ensuring adequate analgesia at, and if appropriate, beyond discharge.

The Royal College of Emergency Medicine standard of analgesia for **moderate and severe pain (pain score ≥4) is within 20 minutes of arrival in the ED.**

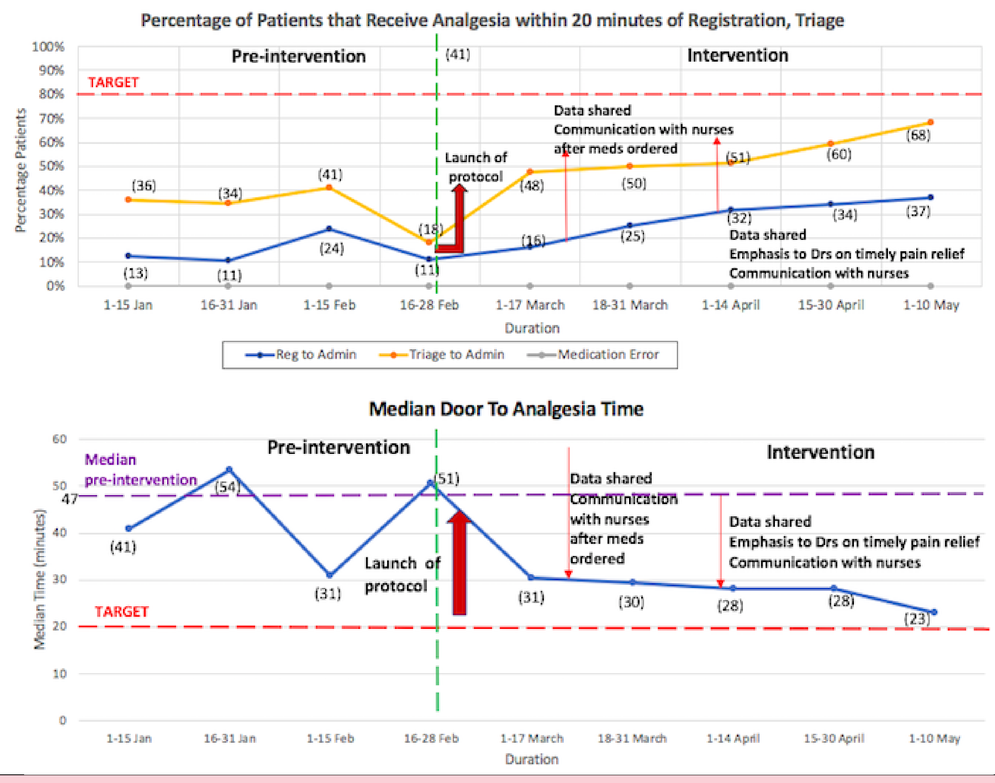
Quantify the problem: An audit of the door to analgesia time for renal colic patients with pain score ≥4 presenting to Emergency Department (ED) from October 2018 - December 2018 showed that only 20% received analgesia within 20 minutes. The median door to analgesia time was 47 minutes

Aim:

1.To increase the percentage of renal colic patients with pain score ≥ 4, achieve door to analgesia time of ≤ 20 minutes, from 20% (between October to December 2018) to 80% in the Emergency Department within 6 months .

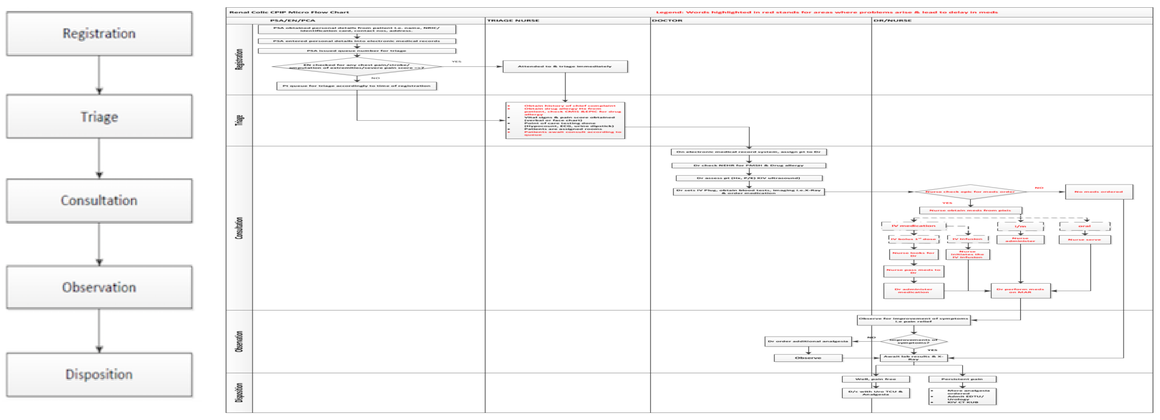
2. To decrease the median door to analgesia time from 47 to 20 minutes.

Establish Measures

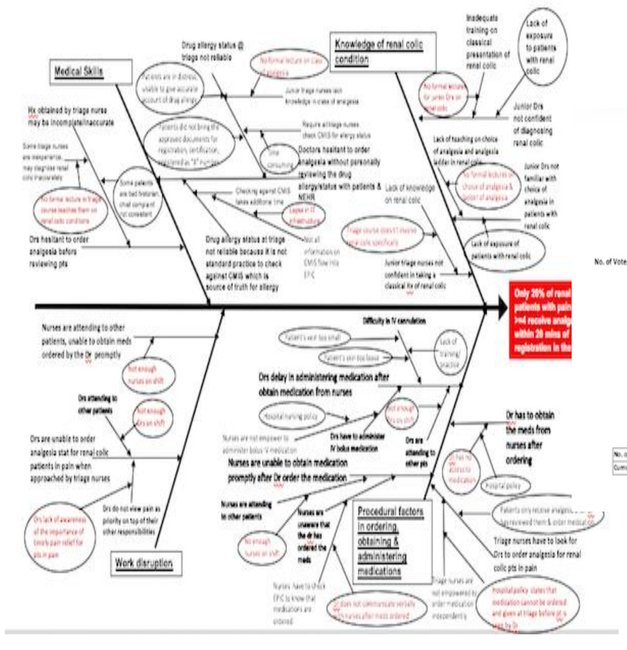


Analyze Problem

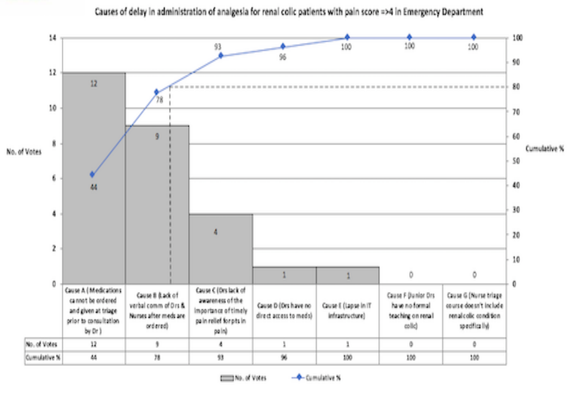
The current process



Root causes analysis



Pare to Chart



Select Changes

Root Causes	Potential Solutions
Analgesia cannot be ordered and administered at triage before the patient is assessed by the doctor.	Develop a **protocol to guide and empower** triage nurse to order and administer analgesia.
Lack of verbal communication between the Drs and nurses after analgesia is ordered	Drs are reminded to **communicate with nurses after the analgesia is ordered** and to administer ASAP after reviewing patients.
Inadequate awareness of the importance of timely pain relief	**Importance of timely pain relief** for patients in pain is emphasized to Drs and nurses

Test & Implement Changes

How do we pilot the changes? What are the initial results?

CYCLE	PLAN	DO	STUDY	ACT
1	Develop a protocol to guide and **empower triage nurses in ED** to order and administer analgesia	**1. Training of triage nurses** **-Education and training** of triage nurses of the protocol -**5 Rights** of administration of analgesia **2. Launch the protocol** on **1st March 2019** in the **ED** - Feedback from nurses and doctors	Improvement in median time from registration and triage to administration of analgesia	PAC 2 cases that were seen by Drs shortly after arrival had longer wait time to receive analgesia. (Protocol was not utilized and Drs took longer time to order analgesia, and to communicate the order to the nurses) Plan: -Continue the protocol -Emphasis to improve on PAC 2 patients
2	Emphasis on PAC 2 - Drs to improve communication with nurses after analgesia is ordered.	Drs were reminded during M&M, teaching sessions to **communicate with nurses after the analgesia is ordered and** to administer the analgesia ASAP after reviewing patients	- Not all triage nurses utilize the protocol to administer timely analgesia **-** Delay in Drs ordering and administering analgesia for patient in pain- (Drs tend to complete full assessment of patient and perform thorough investigations prior to ordering analgesia)	Data shared during M&M, teaching sessions and roll call. Plan: - Encourage the nurses to continue using the protocol - Emphasis the importance of timely analgesia to Drs

Spread Change/Learning Points

What are the strategies to spread change after implementation?

1. Support and Buy in from Head of Department ED and Chief Nurse
2. Broadcast and buy in from stakeholders i.e. triage nurses and Drs of ED
3. Tracking of outcome and feed back to stakeholders and sponsors.

What are the key learnings?

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

Ng Teng Fong General Hospital
Jurong Community Hospital
Jurong Medical Centre
Members of the NUHS