

Project Title

A Quality Improvement Initiative to Improve Door to Analgesia Time for Renal Colic Patients with Pain Score \geq 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 \geq 4, achieve door to analgesia time of \leq 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 \geq 4 AT THE EMERGENCY DEPARTMENT

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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 \geq 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

SAFETY PRODUCTIVITY PATIENT EXPERIENCE QUALITY \checkmark VALUE

Select Changes

Root Causes

Potential Solutions

Analgesia cannot be ordered and Develop a protocol to guide and administered at triage before the empower triage nurse to order and patient is assessed by the doctor. administer analgesia.

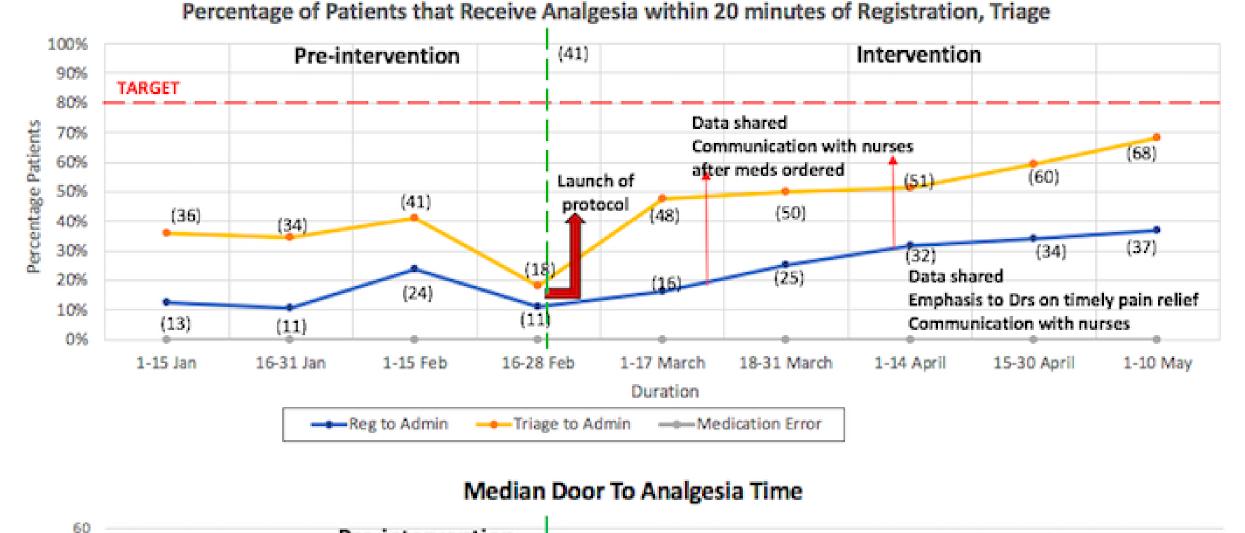
of verbal communication Drs are reminded to communicate with Lack between the Drs and nurses after nurses after the analgesia is ordered analgesia is ordered and to administer ASAP after reviewing patients.

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



Pre-intervention Intervention Data shared

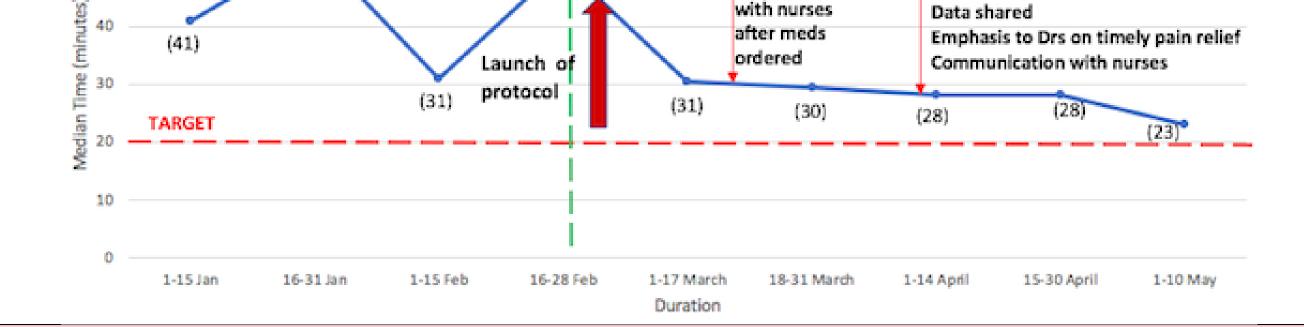
Inadequate of the **Importance of timely pain relief** for awareness patients in pain is emphasized to Drs and importance of timely pain relief

nurses

Test & Implement Changes

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

CYCLE PLAN	DO	STUDY	ACT
111<	 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 	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)



Analyze Problem

The current process

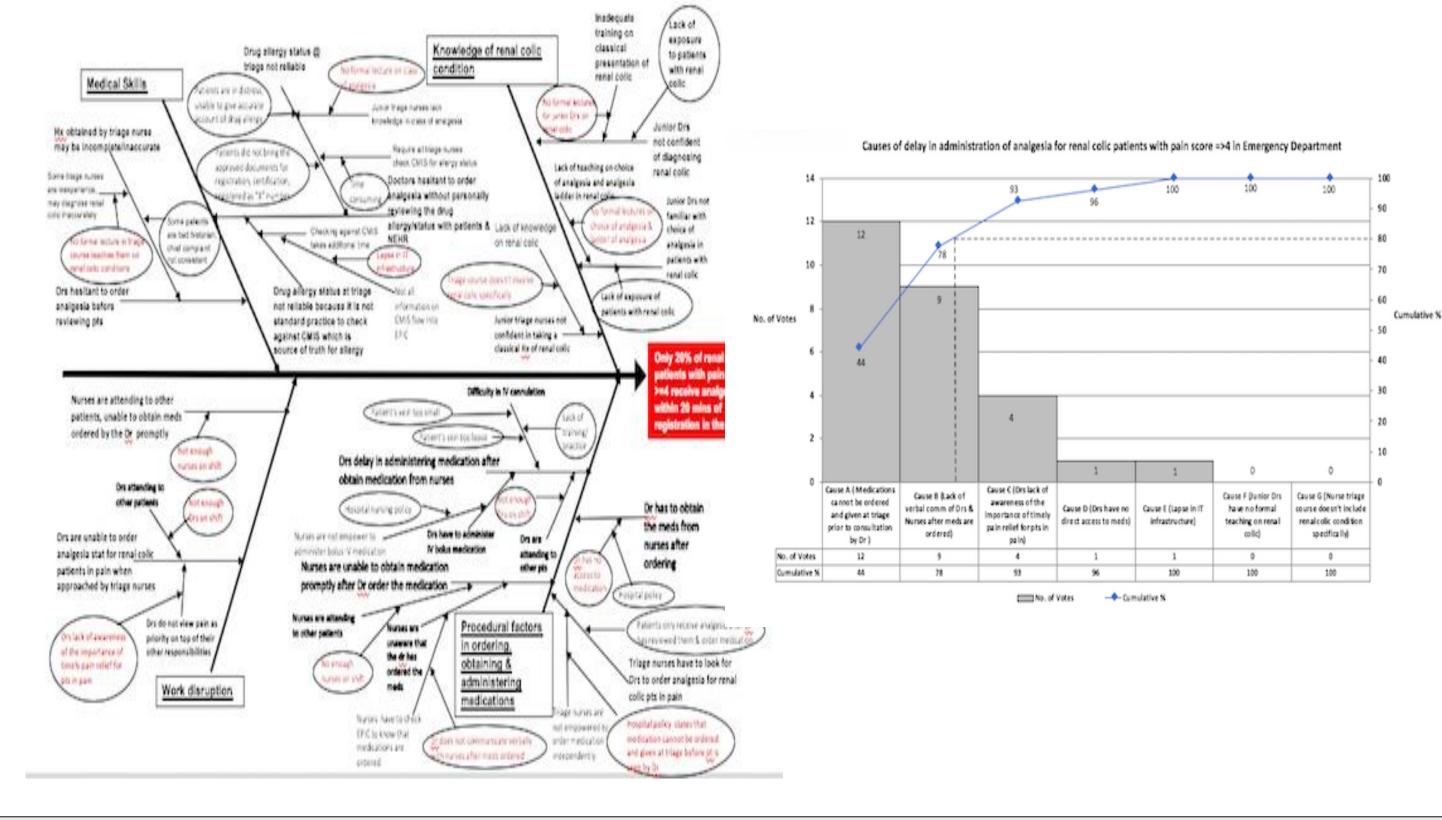
Root causes analysis

	Renal Colic CPIP Micro Flow Chart		Legend: Words highlighted in red stands for areas where p	
Registration	PSA/EN/PCA P2A obtained personal details from patient Le. name, NRIC/ identification card, contact nos, address. P3A entered personal details from patient Le. name, NRIC/ identification card, contact nos, address. P3A entered personal details into electronic medical records P3A issued queue number for triage P3A issued queue number for triage P3A issued queue pain score	Attended to & triage immediately	DOCTOR	DR/NURSE
Triage	Triage	Obtain Instary of shief complaint Obtain detect Office of the term patient, these CMIS & EFIC for drug Vital up, shield a score obtained (werbail or face shari) (werbail or face shari)		
Consultation	Consultation		On electronic medical record system, assign pt to Dr Dr check REHR for PMSH & Drug allergy Dr assos pt (Hx, P/E) RIV ultrasound) Dr asts IV Phug. obtain toxts, imaging i.e.X-Ray & order medication	No made order VES Ves Ves Ves Ves Ves Ves Ves Ves
Disposition	Observation		Or order additional analgesia	A pain free Persistent pain
	Disposition		D/c w	the trop TCU & trop T

Pare to Chart

- Feedback from -Continue the nurses and doctors protocol -Emphasis to improve on PAC 2 patients - Not all triage nurses utilize the Data shared protocol to Drs were during M&M, administer timely reminded during teaching sessions analgesia and roll call. M&M, teaching - Delay in Drs Emphasis on PAC sessions to ordering and communicate with Plan: administering - Drs to improve nurses after the Encourage the analgesia for 2 analgesia is communication nurses to patient in painordered and to with nurses after continue using (Drs tend to analgesia is administer the the protocol complete full ordered. Emphasis the analgesia ASAP assessment of after reviewing importance of patient and patients timely perform thorough analgesia to investigations Drs prior to ordering analgesia)

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?

- Identify the appropriate team members that will be able to reach out to the various stakeholders.
- 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