

Project Title

Empowering Patients with Chronic Pain Management

Project Lead and Members

Project lead: Ms Jeslyn Foo

Project members: Ms Rahimah Binte Mohamed Rais, Dr Jane Mary Samuel, Dr Adeline Leong Xin Yu

Organisation(s) Involved

Sengkang General Hospital

Healthcare Family Group Involved in this Project

Nursing

Applicable Specialty or Discipline

Pain Medicine

Aims

To improve Target Patient Group*'s ability to self-manage pain, thereby extending the interval duration between clinic visits by 100% over 6 months

**Elderly Patient > 70 years and above with multiple comorbidities and ≥ 2 following problems:*

- (i) Poor social support and understanding of treatment
- (ii) On medication such as opioids or multiple sedative drugs
- (iii) Mobility impairment

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

See poster appended/ below

Conclusion

See poster appended/ below

Project Category

Care & Process Redesign

Quality Improvement, Clinical Practice Improvement, Workflow Redesign, Value Based
Care, Patient Satisfaction

Keywords

Nurse-Led Telephonic Support, Patient Self-Management

Name and Email of Project Contact Person(s)

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Empowering Patients with Chronic Pain Management

Sponsor: Dr Adeline Leong Xin Yu

QI Coach: Lim Jun Hui

Team: SSN Jeslyn Foo Jie Ling (Leader), PEN Rahimah Bte Mohamed Rais (Co-Lead), Dr Jane Mary Samuel

Background

Elderly chronic pain patients with high frailty scores tend to visit healthcare institutions frequently for pain treatment. A significant proportion of these patients have multiple comorbidities and mobility impairment with poor social background. As a result, many have poor treatment compliance and are unable to manage pain on their own, resulting in frequent clinic/emergency department (ED) visits and hospital admissions.

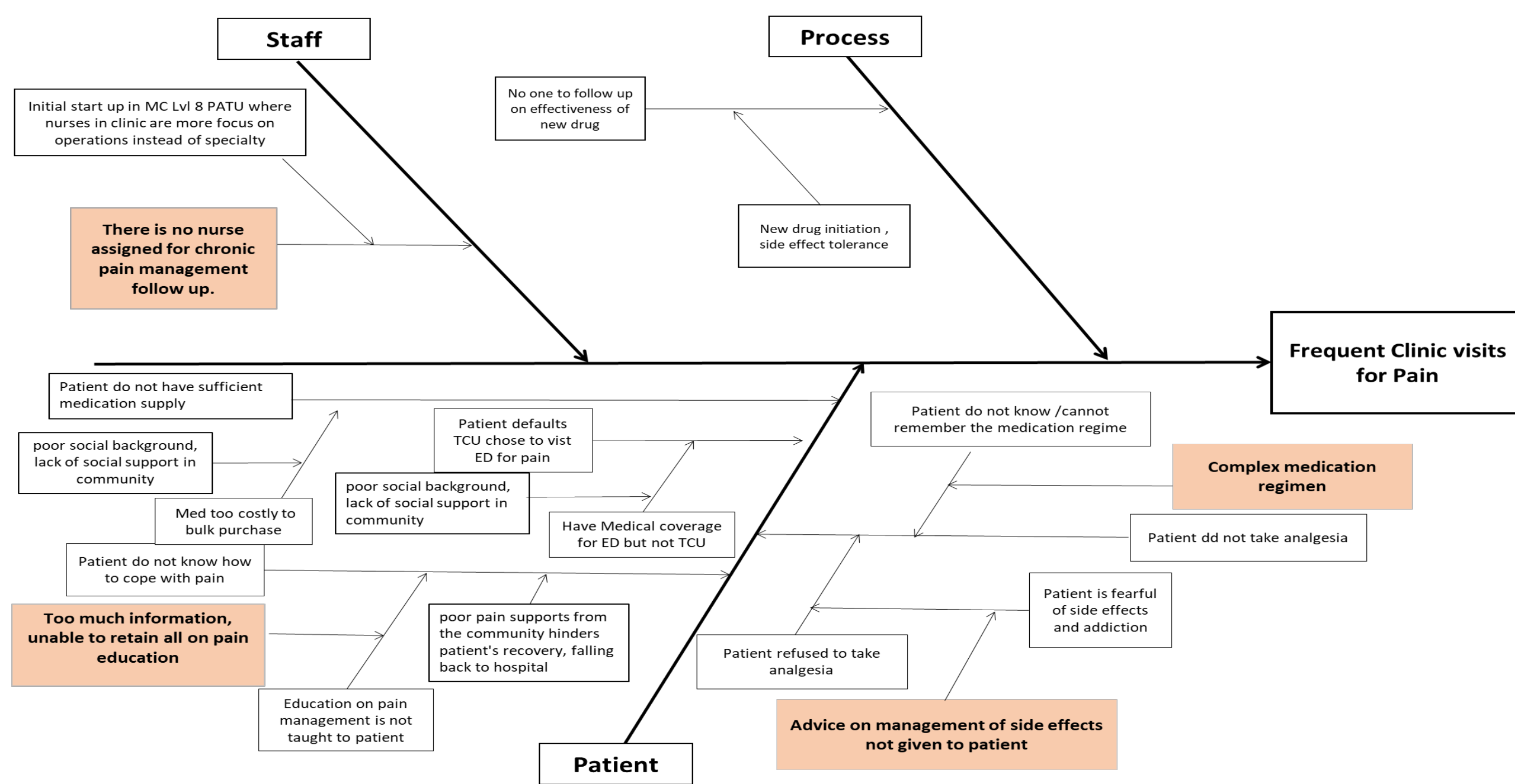
The average time interval between clinic visits (over 5 visits) for pain treatment among 17 elderly patients with chronic pain was **5.36 weeks**. The frequent visits are due to various reasons:

- ❖ Initiation of new drug and to follow up of side effects
- ❖ Managing acute flare of chronic pain closely during appointment visits to prevent ED admissions.
- ❖ Ensure patients are adhering to their medication regime

Such frequent clinic visit is not cost-effective. Patients are unsatisfied as they have to spend more time and money for each return visit, putting more stress on our healthcare system.

Methodology

A cause and effect diagram mapped out from staff and patients' feedback identified key causes such as no designated follow-up nurse, inappropriate medication management due to lack of knowledge and poor social coping mechanism.



Goals

To improve **Target Patient Group**'s ability to self-manage pain, thereby extending the interval duration between clinic visits by 100% over 6 months

* Elderly Patient > 70 years and above with multiple comorbidities and ≥ 2 following problems:

- (i) Having risk or history of admission or ED visits for pain
- (ii) Poor social support and understanding of treatment
- (iii) On medication such as opioids or multiple sedative drugs
- (iv) Mobility impairment

Actions/Interventions

S/N	Implementation Plan	Responsible	Date
1	Discussion of problem and target setting	Team	Jan 2022
2	Identify and carry out test plan of Nurse-Led Telephonic reviews for Chronic Pain patients	Team	Feb 2022
3	Collection of pre-implementation data	SSN Jeslyn Foo, PEN Rahimah	Feb – Jun 2022
4	Nurse Led Telephonic review training	SSN Jeslyn Foo, PEN Rahimah	March 2022
5	Implementation of Nurse-Led Telephonic reviews for Chronic Pain patients and gathering of post implementation data	SSN Jeslyn Foo, PEN Rahimah	Jun – Aug 2022
6	Analysis of results	Team	September 2022

Actions/Interventions



Figure 1: Photographs of nurses conducting telephonic reviews for patients with chronic pains

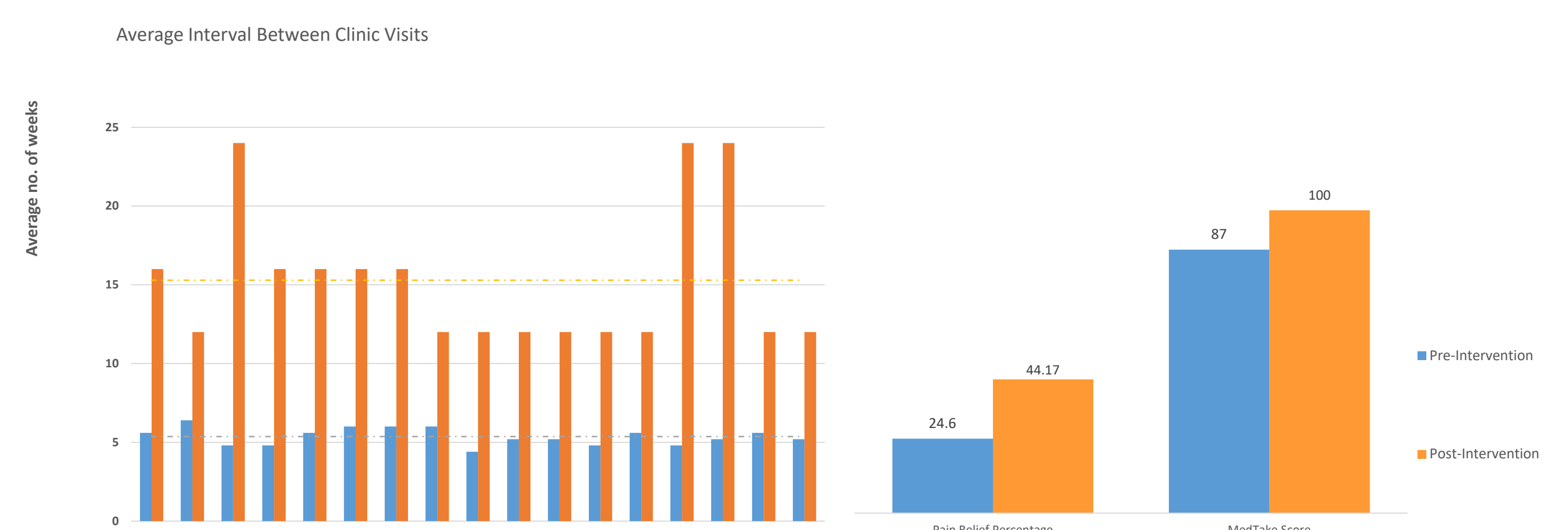
Guide patient in better self-management of chronic pain:

1. A nurse-led telephonic support to address any concern highlighted.
2. Referrals to appropriate institution such as community services or social services for suitable patients, assisting patients to integrate back into community.
3. Ensure that patient takes the correct regime of analgesia and manage the side effects well. Calls addressed non-adherence to pain medications through education.
4. Regular follow up on stable patients every 3 monthly via nurse-led telephone reviews to ensure patients are able to cope well with pain.

***Closely follow up on 1, 2, 3 for the first 2 months**

Results

The timeliness of these interventions (51 nurse led phone interviews), over a period of 6 months have helped to significantly increase the average time interval between clinic visits from **5.36 to 15.29 weeks (p value = $9.13 \times 10^{-08} < 0.05$) which is a 185% improvement**. At the same time, there were no ED visits and admissions for pain from the recruited 17 patients. Pain Relief percentage and Medtake Score showed improvement with the implementation of guided pain self-management supports and better knowledge of pain medications and its side effects.



A gathered patient experience feedback – “howRwe questionnaires” reported all good and excellent experiences. Patients are very grateful of this initiative and reported feeling more empowered in managing their own pain.

Conclusion

	Clinic Visits	Consultation Time/ 15 mins per session	Consultation cost / approx. \$41 per session
Pre	5	75 mins	\$205
Post	2	30 mins	\$82

As the average interval between clinic visits extended, frequency of pain clinic visits reduced from 5 to 2. Physicians can therefore free out slots for new consultations. Other patients can be seen and assessed earlier so as to prevent potential visits to ED for pain. Patients would be more satisfied with the healthcare services as they can spend less money and commute less with fewer clinic visits. From the recruited 17 patients, there is a total of **765mins consultation time and \$2,091 savings**. With such promising results, we aim to roll out this service to all high-needs patients at the Pain Management Clinic at SKH Medical Center.