

### CHI Learning & Development (CHILD) System

### **Project Title**

Fast-Track Dental Referrals to Hip Fracture Patients

### **Project Lead and Members**

Project lead: Adj A/Prof Kevin Yik

Project members: Dr Natalie Ng, Adj Asst Amritpal Singh, Dr Jasmine Lim, Dr

Margaret Tan, Dr Alvin Ong, Adj A/Prof Fareed Kagda

### **Organisation(s) Involved**

Ng Teng Fong General Hospital

### **Healthcare Family Group Involved in this Project**

Medical

#### Aims

The team intends to double the proportion of medically eligible hip fracture patients with dental clearance, and double the proportion of such patients started on Anti-resorptive therapy by June 2022 because Anti-resorptive therapy can reduce risk of future fragility fractures by 50%.

### **Background**

See poster appended/below

#### Methods

See poster appended/below

#### **Results**

See poster appended/below



### CHI Learning & Development (CHILD) System

### **Lessons Learnt**

Increasing Anti Resorptive Treatment Rates in hip fracture patients have reduced the risk of future fragility fractures and strengthened multi disciplinary team efforts in this project

### Conclusion

See poster appended/below

### **Project Category**

Care & Process Redesign

Workflow Redesign

### **Keywords**

Hip Fracture Patients, Anti Resorptive Therapy

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# FAST-TRACK DENTAL REFERRALS FOR HIP FRACTURE PATIENTS

	SAFETY
$\checkmark$	QUALITY
$\checkmark$	PATIENT
	<b>EXPERIENCE</b>

PRODUCTIVITY
COCT

MEMBERS: ADJ ASST PROF KEVIN YIK (LEAD), DR NATALIE NG (CO-LEAD), ADJ ASST AMRITPAL SINGH, DR JASMINE LIM, DR MARGARET TAN, DR ALVIN ONG, ADJ A/PROF FAREED KAGDA(SPONSOR)

# Define Problem, Set Aim

## **Problem/Opportunity for Improvement**

- Anti-resorptive therapy for osteoporosis can reduce the risk of fragility fractures by 50% (Source: International Osteoporosis Foundation).
- Medically eligible patients are referred for dental clearance prior to starting Antiresorptive Therapy.

### Aim

The team intends to double the proportion of medically eligible hip fracture patients with dental clearance, and double the proportion of such patients started on Antiresorptive therapy by June 2022 because Anti-resorptive therapy can reduce risk of future fragility fractures by 50%.

## **Establish Measures**

### **Outcome Measures**

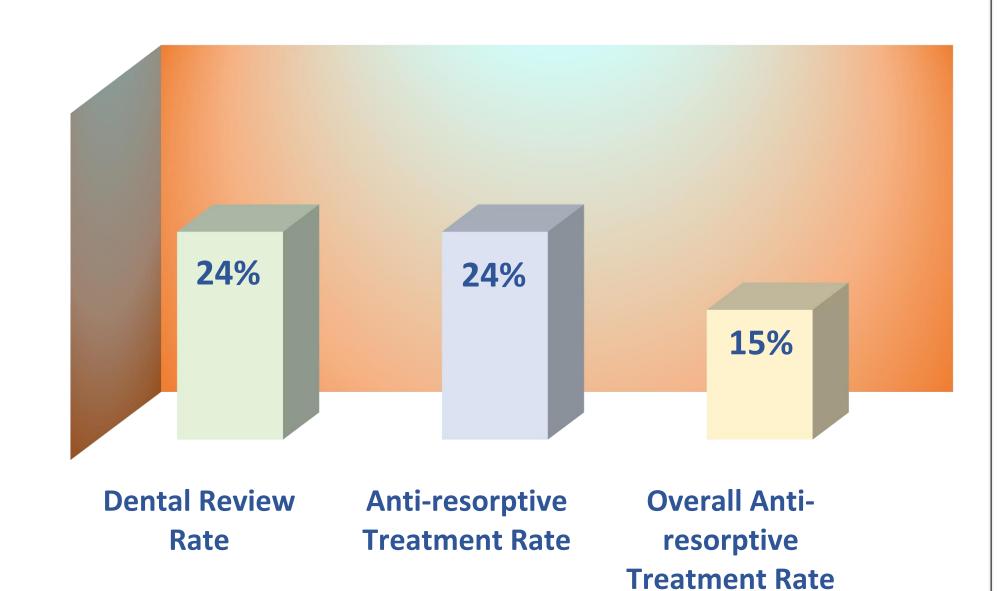
**Dental Review Rate (%)** - defined as percentage (%) of medically eligible hip fracture patients with dental clearance for Anti-resorptive Therapy. The % includes patients with dental clearance and patients who did not require dental clearance prior to starting Anti-resorptive Therapy (e.g. previously already on Anti-resorptive Therapy).

Anti-Resorptive Treatment Rate (%) - defined as percentage (%) of medically eligible hip fracture patients started on Anti-resorptive Therapy. The % includes patients started on, or restarted on Anti-resorptive Therapy (e.g. previously already on Anti-resorptive Therapy).

Overall Anti-resorptive Treatment Rate (%) - defined as % of hip fracture patients started on Anti-resorptive Treatment.

### **Baseline Performance**

60 Hip Fracture ICP patients admitted between October and December 2020 were analysed.

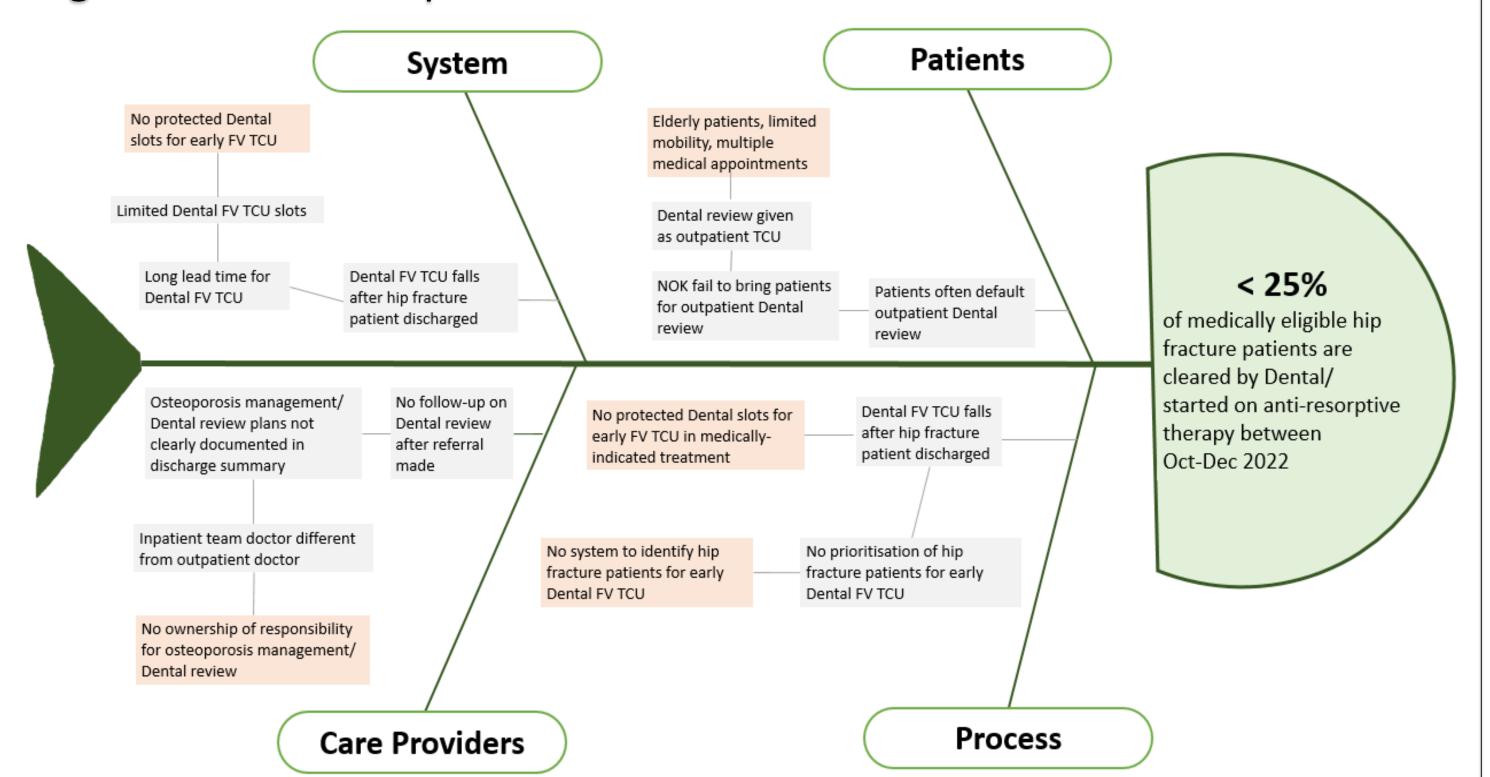


\*Patients may be medically or functionally contraindicated for anti-resorptive therapy.

# **Analyse Problem**

## Root Cause Analysis

Targeted areas for improvements were:



# Acknowledgements

The team would like to thank the respective staff from Orthopaedic Surgery and Dentistry for their tireless contributions in making this project a success.





# **Select Changes**

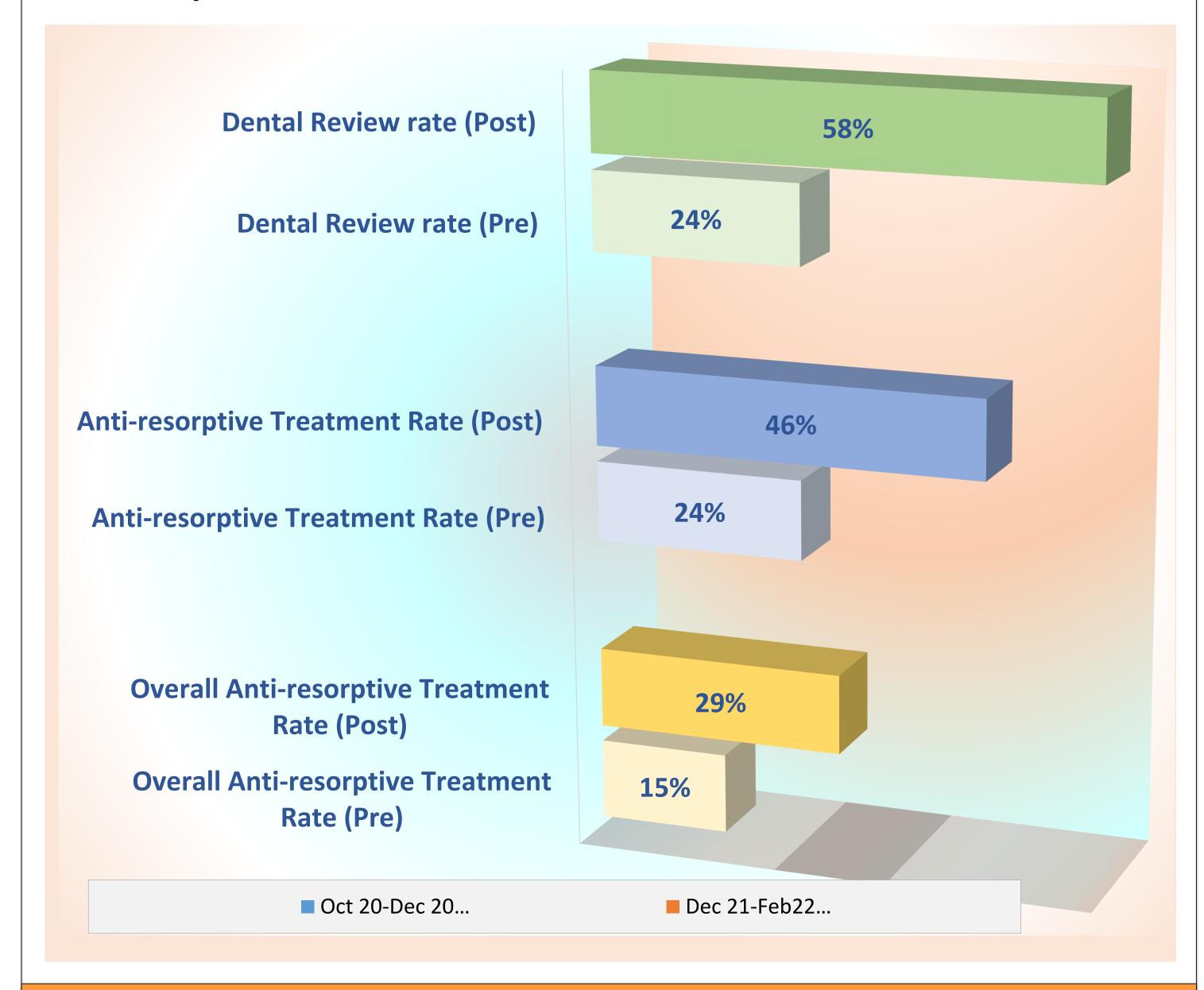
Root Cause	Probable Solutions
Staff: no ownership of responsibility	Standardised workflow for Fast Track Dental Referrals and clear documentation of outpatient follow-up plans in discharge summary.
System: No protected Dental slots for early FV TCU in hip fracture patients	Creation of protected, early Dental FV TCU slots for Medically-Indicated Treatment patients (including hip fracture patients)
Process: No identification of hip fracture patients for early Dental FV TCU	Standardised workflow for Fast Track dental referrals in hip fracture patients.
Patients: elderly, limited mobility, multiple medical appointments	Fast Track dental referrals in hip fracture patients to increase chance of Dental FV TCU while inpatient.

# **Test & Implement Changes**

PLAN	DO	STUDYY	ACT
Define Problem, Set Aims	Doctor to make EPIC Order	Total of 87 Hip	Fast Track
– Sept 2021	Dental Referral - 'DENTAL TCU	Fracture ICP	Dental Referrals
	FAST TRACK (MIT FOR HIP	patients admitted	hip fracture
	FRACTURE)'	between Dec 21	patients
Stakeholders	Ward PSA to email Dental Ops	and Feb 22	effectively
engagement; Establish	team about Fast Track Dental	analysed as post-	increases the
Outcome Measures;		intervention	rates of dental
Analyse Problems –		cohort.	clearance and
Oct 2021			anti-resorptive
Select and Test Changes	Dental FV to be Fast Tracked		treatment of
– Nov 2021	within 3 weeks of referral		osteoporosis.
Implement Changes –			
Dec 2021			

## Results

Comparing Pre-intervention (Oct 2020 to Dec 2020) and Post-intervention (Dec 2021 to Feb 2022), Dental Review rate increased by 34%. Anti-resorptive Treatment Rate increased by 22% whereas Overall Anti-resorptive Treatment rate increased by 14%.



# **Spread Changes, Learning Points**

- The Hip Fracture Fast Track Dental Referral Workflow will be adopted and monitored for sustained or further improvements in the respective outcome measures.
- Increasing Anti-resorptive Treatment Rates in hip fracture patients have reduced the risk of future fragility fractures and strengthened multi-disciplinary team efforts in this project.