CHI Learning & Development (CHILD) System



Project Title

Implementation of Video Consultation services for Pre-operative Evaluation Clinic (PEC)

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Organisation(s) Involved

Sengkang General Hospital

Healthcare Family Group(s) Involved in this Project

Healthcare Administration, Medical

Applicable Specialty or Discipline

Outpatient Clinic Operations, Anesthesiology

Project Period

Start date: Dec 2020

Completed date: Mar 2022

Aim(s)

- To improve Overall Patient's Experience
- Reduce Risk of Coronavirus disease 2019 (COVID 19)
- Align with the Ministry of Heath, Singapore





Background

See poster appended/ below

Methods

See poster appended/below

Results

See poster appended/ below

Conclusion

See poster appended/ below

Additional Information

Singapore Healthcare Management Congress 2022 – Merit Award (Operations category)

Project Category

Care & Process Redesign, Quality Improvement, Workflow Redesign

Keywords

Patient Experience, Video Conferencing, Pre-Operative Evaluation Clinic, Anesthesia Assessment, Pre-Admission Test

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Implementation of Video Consultation services for Pre-operative Evaluation Clinic (PEC)

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Introduction

- Patients who are scheduled for surgery under General or Regional Anaesthesia are required to undergo a pre-operative anaesthesia assessment and a series of Pre-Admission Tests (PATs) prior to surgery.
- For Specialist Outpatient Clinic (SOC) patients, they are required to visit the SKH Pre-operative Evaluation Clinic (PEC) on a separate day to complete PATs (blood tests, ECG and chest X-ray) and anaesthesia assessment.
- In the COVID'19 pandemic, the need for safe-distancing measures highly encouraged healthcare providers to adopt telemedicine whenever possible to reduce virus transmission.

Aims



Improve Overall Patient's Experience

- Minimizes an additional trip back to the hospital for PEC consultation
- ✓ Increases convenience for the patients as they are able to attend consultation from home
- ✓ All family members may participate in the consultation, with no limitations in numbers.





Reduce Risk of Coronavirus disease 2019 (COVID-19)

✓ Risk of COVID-19 virus transmission and exposure for patients, NOKs and staffs are reduced

Align with the Ministry of Heath, Singapore

- ✓ To adopt telemedicine such that patient care is not compromised in times of COVID-19
- Ensures that safe management measures are in place number of patient's physical visits were reduced

Methodology

[1] Streamlined Patient's Journey (Patients complete all PATs on same day):

PEC Video Consultation (VC) eligibility criteria include low risk surgeries (duration < 4 hours with minimal expected blood loss), patient age 21-65 years, American Society of Anaesthesiologists (ASA) class 1 or 2, body mass index < 35 and ability of patient to use Zoom video conferencing.

Surgery Listing Day

SOC

(Listing for Surgery)

PEC (MO screening + Vital signs)

Counter (Financial **Counselling**)

L3 Phlebotomy Counter (Blood tests)

L3 Treatment Room (ECG)

L2 Radiology (Chest X-ray)

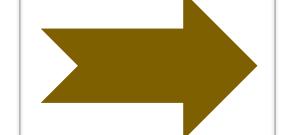
I PEC VC Day (For pre-op anaesthesia assessment)

[2] Key Phases of Project:

Pilot with **Orthopaedics Surgery**

(Phase 1: Dec-Apr'21)

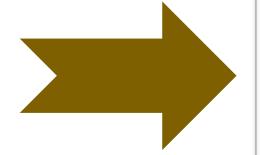
- A pilot was first conducted with Orthopaedics Surgery to determine feasibility.
- Provided time for various stakeholders to familiarise with the new workflow and to iron out the issues faced.



Expansion to all Surgical Specialties

(Phase 2: May-Oct'21)

- With the teething issues identified and ironed out, PEC VC was further expanded to all other surgical disciplines.
- Posters promoting PEC VC (Fig.1) were also prominently displayed across medical centre.



Engagement of SOC PSAs for screening eligibility

(Phase 3: Nov-Mar'22)

- Engaged the help of SOC room assistants to help screen for patient's eligibility based on the Electronic Admission Form (EAF).
- Ground engagements were also conducted by Anaesthesia team with the surgeons.

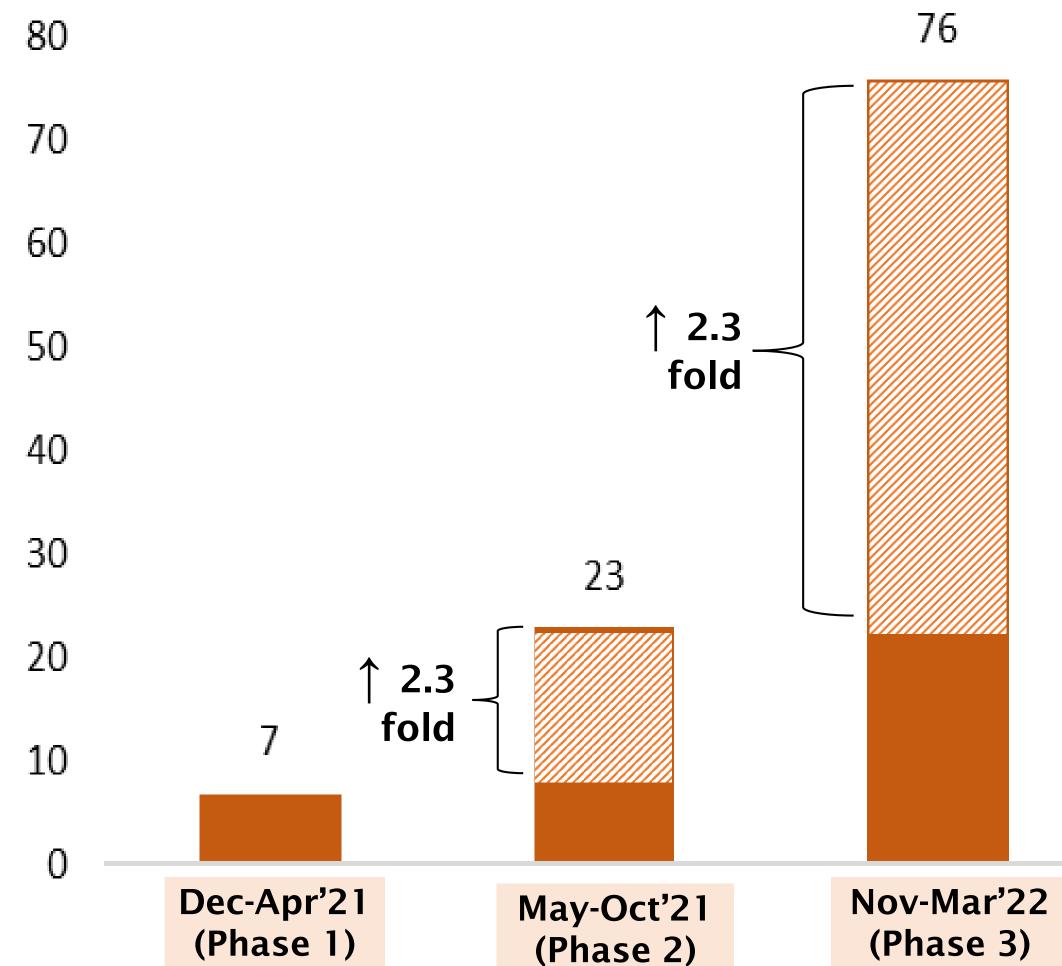
Results

- In Phase 1, 7 patients were enrolled.
- In Phase 2, 23 patients were enrolled (2.3 fold increase).
- In Phase 3, 76 patients were enrolled (2.3 fold increase).
- All enrolled PEC VC patients successfully completed surgeries with <u>0% surgical</u> cancellation rate.

Conclusion

- With the implementation of PEC VC, patients were able to reduce an additional trip back to the hospital for PEC consultation.
- This has greatly increased patient's convenience and also reduced the risk of COVID-19 virus transmission/exposure for both patients and staff.
- This has led to overall improved patients' satisfaction and experience in SKH.

No. of PEC VC patients enrolled



Pre-Operative Anaesthesia **Video Conferencing** and why you should consider it Discuss your anaesthetic plan for

surgery with our anaesthesiologists over a video call.

Stay at home Save yourself a trip to the hospital, meet with our doctors

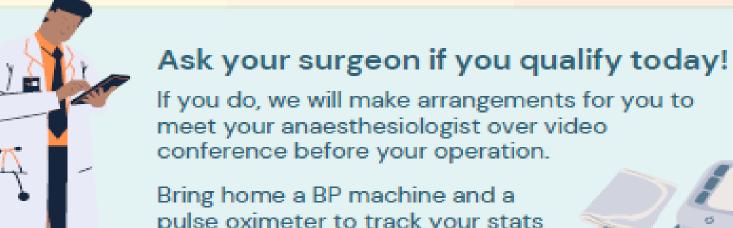
from anywhere.

waiting time You won't have to sit in our waiting room for your turn.

Minimise

No visitor limits Your family can join in, unaffected by the hospital's

visitor policy.



pulse oximeter to track your stats until the day of your operation, and receive a \$10 NTUC voucher when you return the equipment to us.

Sengkang General Hospital

Fig.1 Poster promoting PEC VC