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To increase the Video Consultation (VC) take up rates among Hospital to Home (H2H) patients.

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Introduction

Since the COVID pandemic hit Singapore in Feb 2020, there had been several restrictions and new policies from MOH on healthcare professionals conducting home visits for patients at home. At the early phases of Circuit Breaker (CB), the Hospital 2 Home (H2H) nurses also faced several challenges in conducting home visits for patients due to uncertainty, fear and patient/NOK refusing home visits. On average, H2H enrolls approximately 100 patients a week, however during COVID the enrolment dropped to around 40 per week.

Our team strongly believes that H2H Transitional Care program is pivotal in ensuring patients are transited safely from hospital to home. Evidence has shown that the first 2 weeks of discharge is crucial in identifying and managing post discharge adverse events such as medication error, deconditioning & falls, caregiver stress, etc. Transitional care plays an important role in improving and promoting health [Naylor, 2008], reducing healthcare utilization, length of stay, cost and improving patient satisfaction and quality of life [Nasrabad, 2018].

However, despite the restrictions and fear of home visits, our team quickly adapted Videoconferencing (VC) as a means of communicate and assess our patients. Video consult, although has its limitations (physical assessment), enabled our nurses to visually assess their patient's coping at home.

Months into VC and with CB easing up, we noticed that the VC take up rate is on a downward trend. This quality improvement project aims to identify the root causes, challenges and develop innovative solutions to increase and sustain the use of VC in H2H Transitional Homecare.

Objectives

To increase the take-up rate of video-consultation (VC) among H2H patients from 6 per month to >12 per month within 6 months

Methodology

The team used various Quality Improvement (QI) tools and methodologies, such as the Cause and Effect diagram to identify root causes, and Pareto Chart to identify key root causes, and Tree Diagram & Prioritization Matrix to brainstorm solutions.
Listed below are the interventions implemented.

Provide VC refresher training with competency theory test via Wizlearn to all H2H Community Nurses

Introduction :
Community Nurse VC Refresher Training

Put up VC user guide at all VC station

Video Consultation Reference Materials
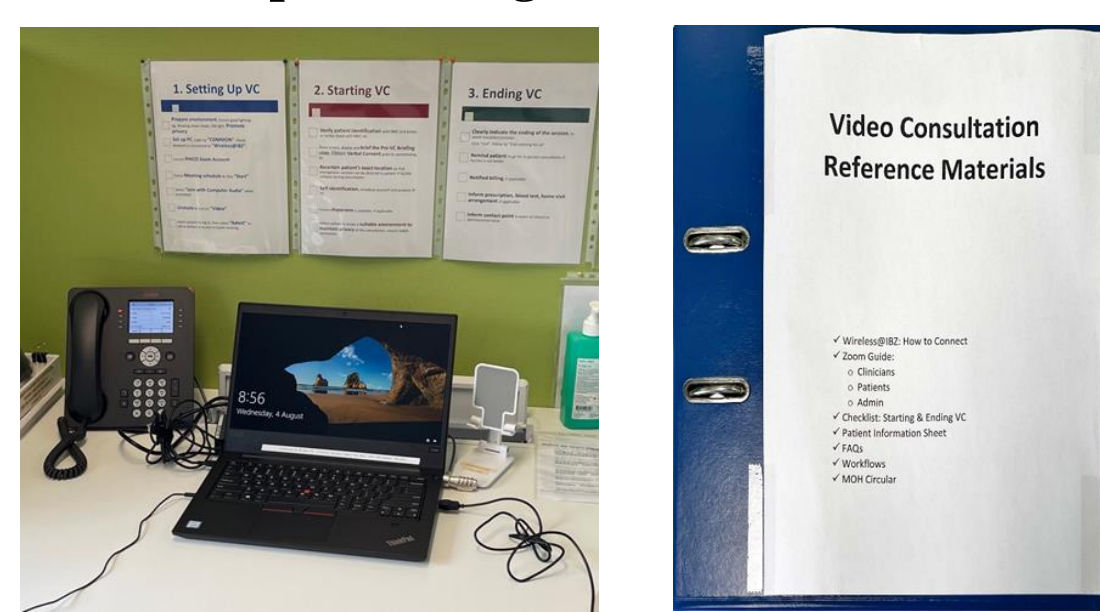
**Easier identification of VC suitable patients via VC suitability assessment tool to be used in first home visits**

| Zone	Total Visits done	Total no. of 1st Visit (including pre-enrolment visits)	Total VC assessment Done	1. Patient/ Caregiver has tablet/HP and data network?		2. Patient/Caregiver is familiar with Zoom app?		3. Patient/ Caregiver is open to VC?		4. Patients has sub-acute condition/ requires FTF assessment in next review?	
				Yes	No	Yes	No	Yes	No	Yes	No
East											
West											

Practical training for CCA (Care Coordinator Associate) on facilitating VC for patients at home

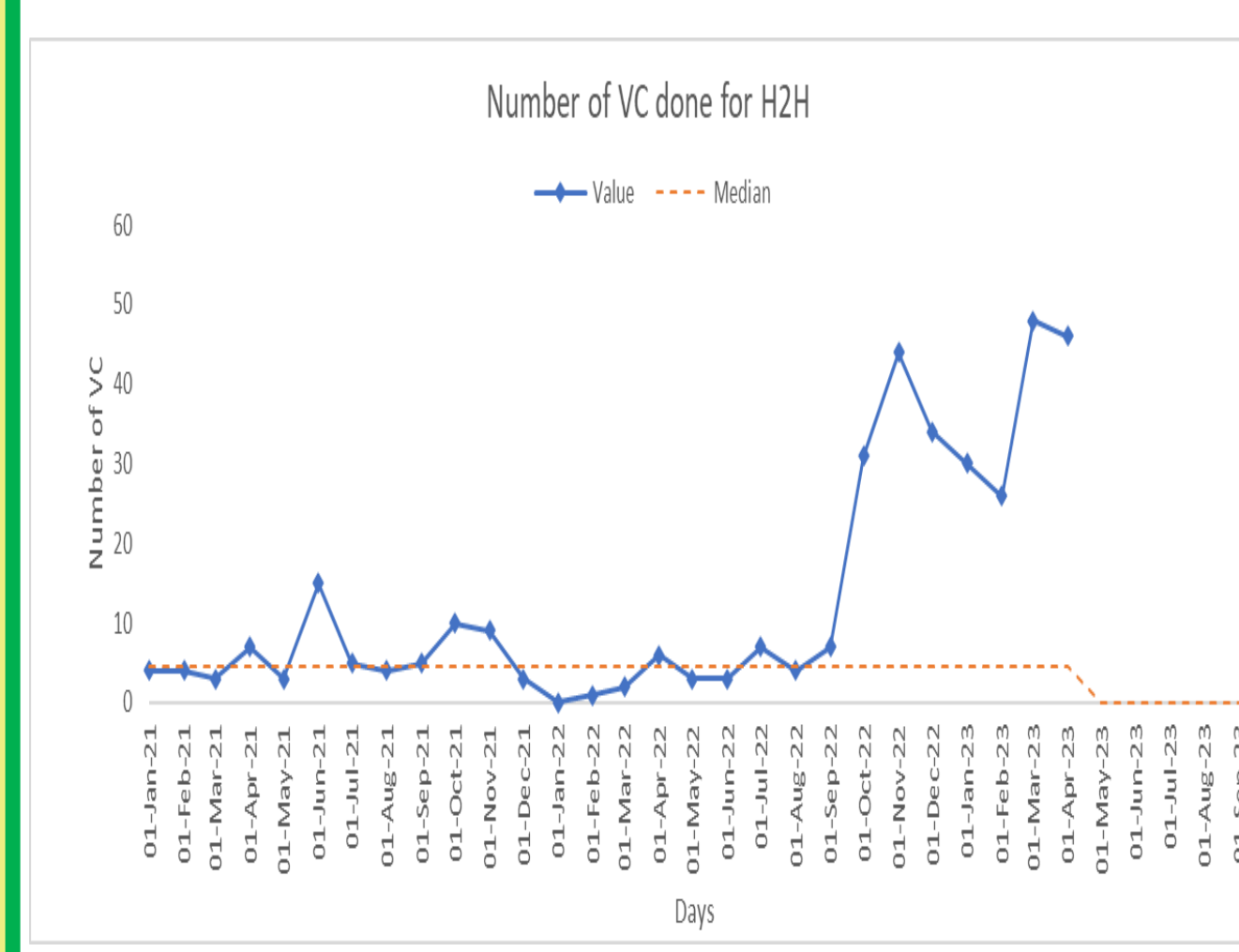**CCA facilitate VC at patient's house using department's data SIM enabled device**
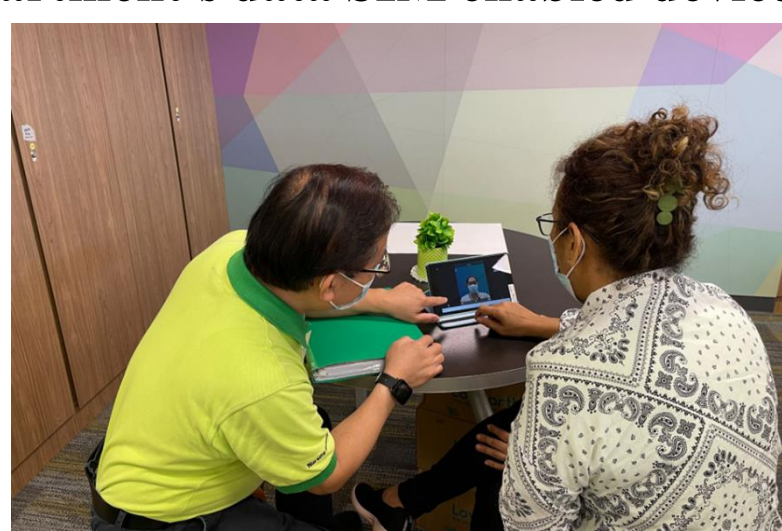
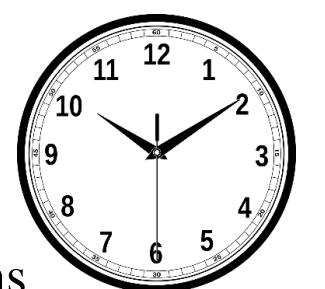**Provide patient with VC guide video (Step by step doing VC)**

Using Zoom for Video Consultation
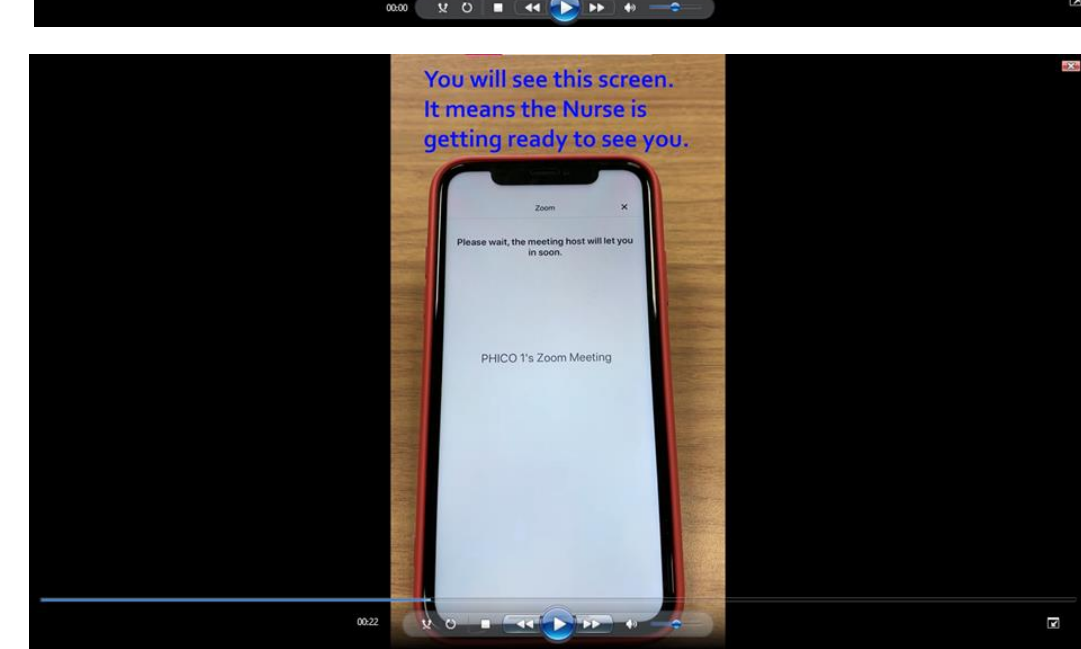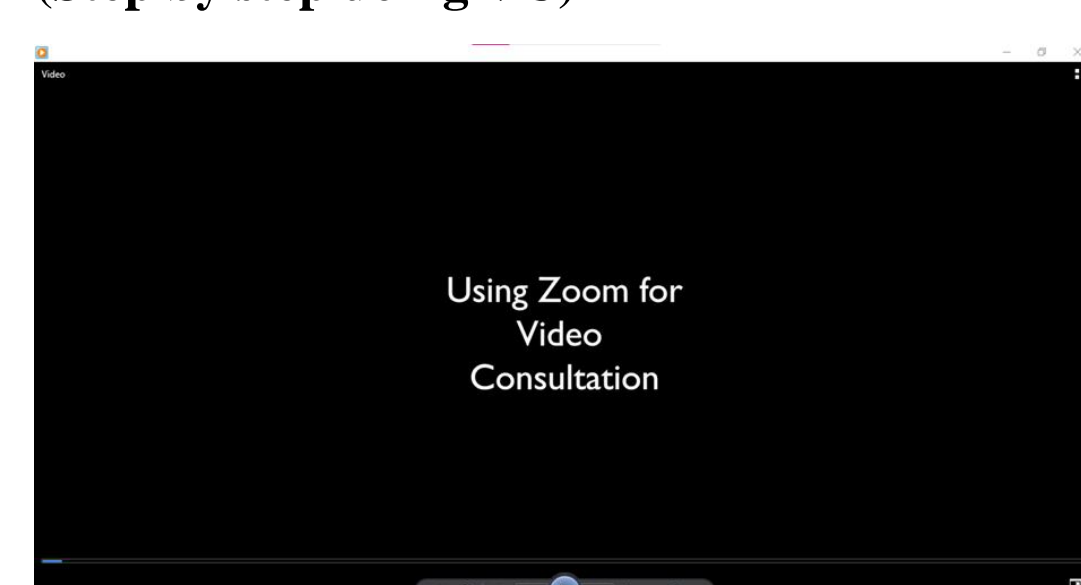
Results

Result 1:

Significant increase in the number of VCs done, from baseline 6 to 28 per month.

Number of VC done for H2H

Result 2:

Total Man-hours saved from nurses doing home visit = 728 hours per annum

Time taken for 1 HV = 150 mins
[transport to and fro (60 mins), preparation (15 mins), at patient's home (60 mins), documentation (15 mins)]

Time taken for 1 VC (preparation + actual VC + documentation) = 20 mins

Time saved when 1 HV is converted to VC = 150 - 20 = 130 mins

Total average VC (Jul-22 to Apr-23)= 28/month
VC per annum= 28 x 12= 336
Manhours cost savings per Annum (for 336 VCs) = (336 x 130)/60 = 728 hours

Result 3:

Total manpower savings = $33,633.60 per annum

Instructions (Please enable content for Macros):
1) Select the Professional Group Category. (Yellow Cell)
2) Select the Job. (Blue Cell)
You may refer to Job Category tab for more information.
3) Input the time saved in minutes. (Brown Cell)
4) Press Calculate button to generate savings amount.

Professional Group	
1) Category	Nursing
2) Job	SN/ SSN/ ANC

Total Manpower Savings	
3) Time Saved (minutes) per annum	43680

Estimated Savings per year $ 33,633.60   Calculate

Result 4:

Total transport cost saving $18,816 per annum

Transport cost for each HV (to and fro) = $28 x 2 = $56

Transport cost saved per annum (for 336 HVs converted to VCs) = $56 x 336 = $18, 816

Total cost savings for this project amounted to $52,449

Conclusion

This project demonstrated that the interventions were effective in increasing the number of VCs. Patients who refused home visit were still able to be followed up by a community nurse post discharge through this platform. VC is not just convenient for patients as it can be done in the comfort of their own home, but also saved the nurses travelling time.

Time saved on travelling could be used to see more patients. There was also cost savings from transportation (taxi rides), making this option a more environmentally friendly. These initiatives are currently implemented into our daily workflow for sustainability. We have also installed Telehealth Pods (Pic 8) to make VC more conducive for the nurses.

Pic 8: Telehealth Pod