

Project Title

Increasing Telehealth Referrals in the Dietetics Outpatient Setting

Project Lead and Members

Project lead: Lim Xin Ru Jazlyn

Project members: Dietetics Telehealth Team

Organisation(s) Involved

Ng Teng Fong General Hospital

Healthcare Family Group Involved in this Project

Allied Health

Applicable Specialty or Discipline

Dietetics

Project Period

Start date: October 2020

Completed date: November 2021

Aims

This project aims to increase the average percentage of actualised Telehealth outpatient appointments (both video and phone) at Dietetics Clinic A43 to 10% of the total actualised dietetics outpatient appointments by the end 2021.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

A good working relationship intra department (e.g. specialty operations, allied health office and cross institution NUH DNN) is pertinent to the success and viability of telehealth in NTFGH DNN.

Conclusion

See poster appended/ below

Project Category

Care & Process Redesign

Value-based Care, Utilisation

Keywords

Telehealth, Outpatient Dietetics

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INCREASING TELEHEALTH REFERRALS IN THE DIETETICS OUTPATIENT SETTING

PROJECT MEMBERS¹: LIM XIN RU JAZLYN AND DIETETICS TELEHEALTH TEAM

1. Dietetics and Nutrition

Define Problem, Set Aim

Problem/ Opportunity for improvement

Opportunity for improvement: Telehealth refers to the remote delivery of healthcare services using information and communications technology, such as video conference and phone calls[1]. Telehealth increases healthcare access and convenience, especially for vulnerable groups such as the elderly or immobile[2]. Beyond convenience, dietetics Telehealth consults are as effective as in-person consults in terms of clinical outcomes for medical conditions such as malnutrition, obesity and diabetes[3]. In 2020, the COVID-19 pandemic accelerated the use of Telehealth across public healthcare institutions in Singapore, due to the need to minimise physical contact. This provided a golden opportunity for the Ng Teng Fong General Hospital (NTFGH) Dietetics and Nutrition department (DNN) to leverage on Telehealth to improve the access and convenience of dietetics services.

Problem: Uptake of Telehealth was slow during the first few months of inception (Jun to Dec 2020): only an average of 2.9% of actualised outpatient dietetics appointments per month were for Telehealth, below the NUHS cluster goal of 30%. A survey of the NTFGH dietetics department was conducted in Dec 2020 to understand the reasons *why*. The results showed that poor uptake of Telehealth was due to 1) higher administrative work, 2) lack of familiarity with new processes, and 3) lack of data on benefits to patients and providers.

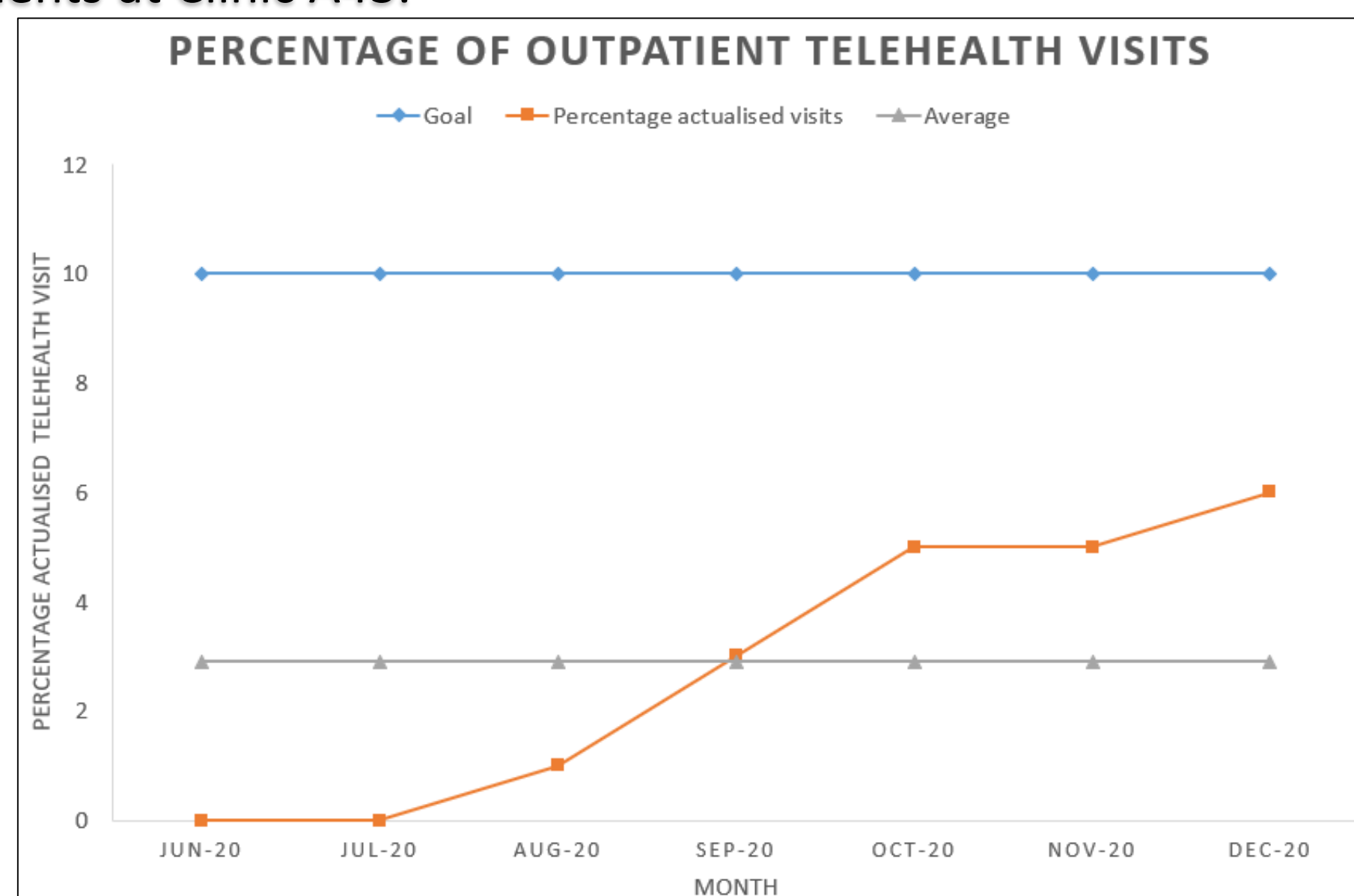
Aim

This project aims to increase the average percentage of actualised Telehealth outpatient appointments (both video and phone) at Dietetics Clinic A43 to 10% of the total actualised dietetics outpatient appointments by the end 2021.

Establish Measures

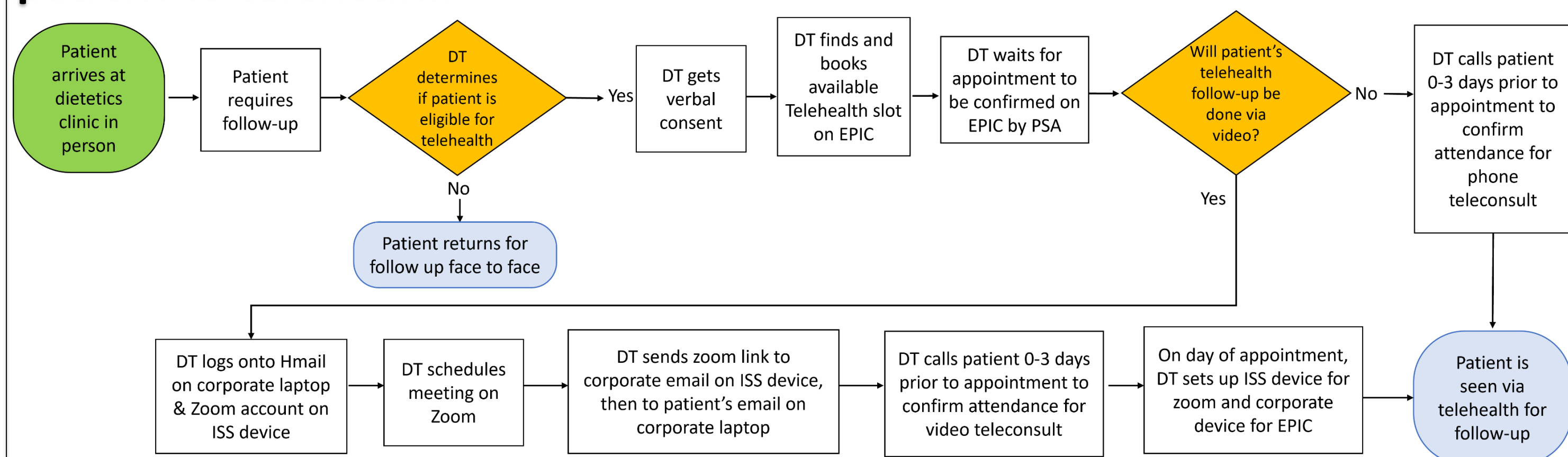
Baseline Data

From June to December 2020, there was an average of 2.9% of actualised outpatient telehealth dietetics appointments at Clinic A43.

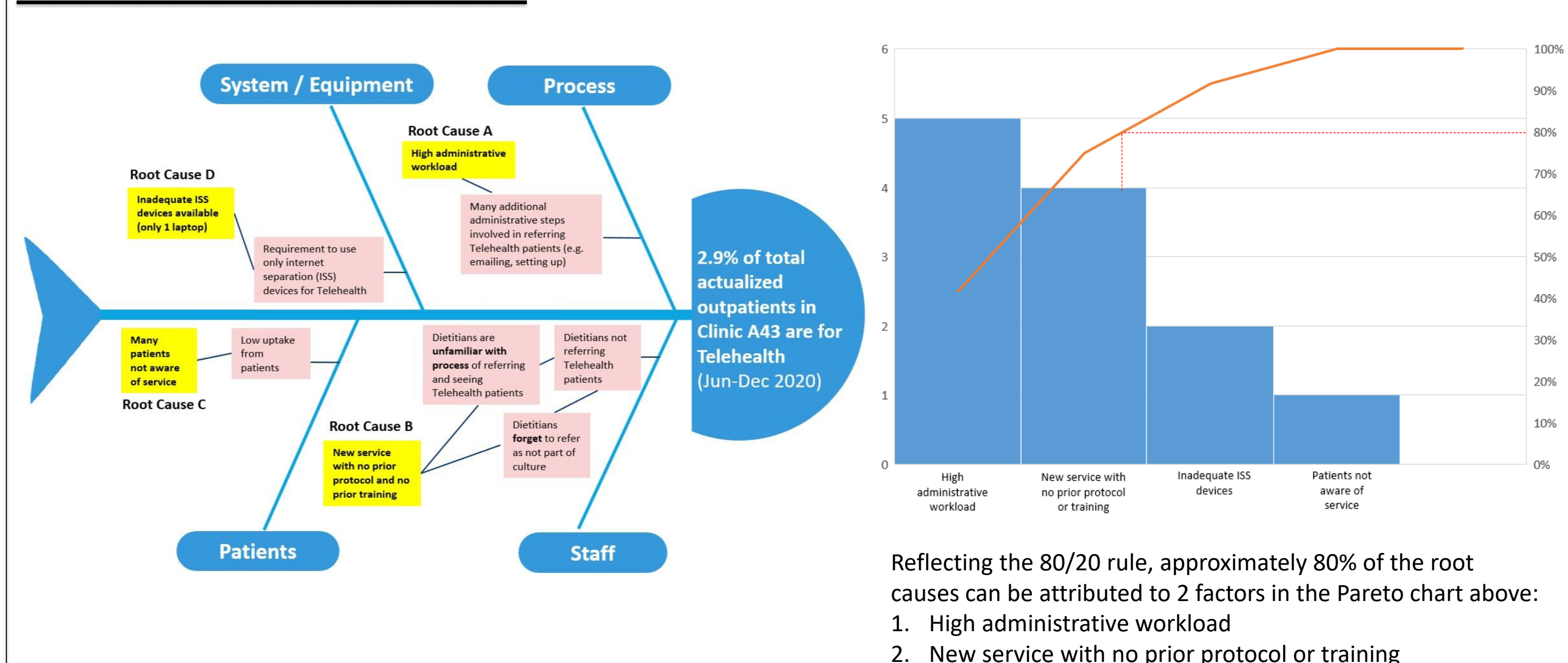


Analyse Problem

Baseline Process before Interventions – A Dietitian’s steps to referring a patient to telehealth



Probable Root Causes

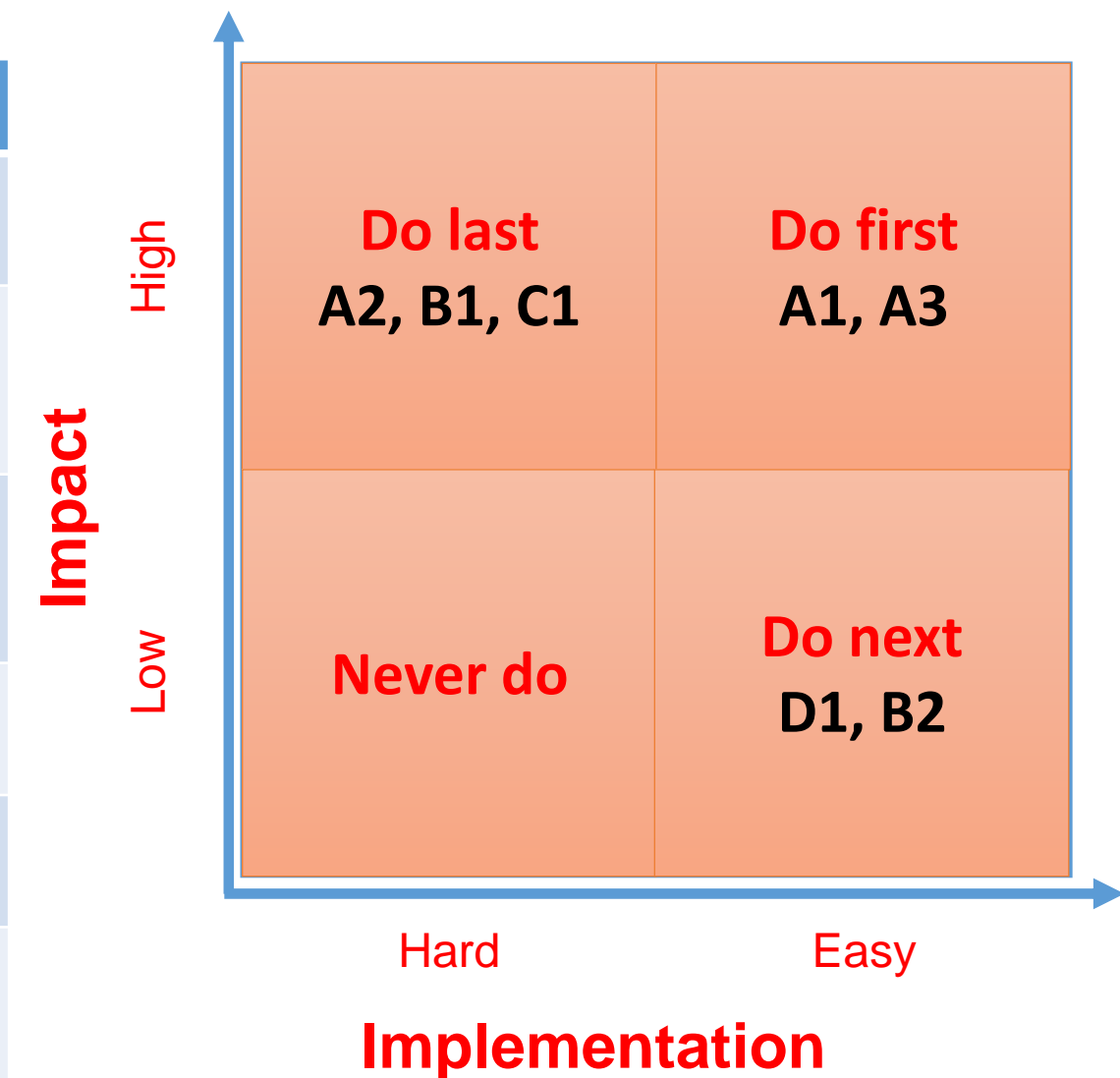


❑ SAFETY
✓ QUALITY
✓ PATIENT EXPERIENCE
✓ PRODUCTIVITY
❑ COST

Select Changes

Probable Solutions

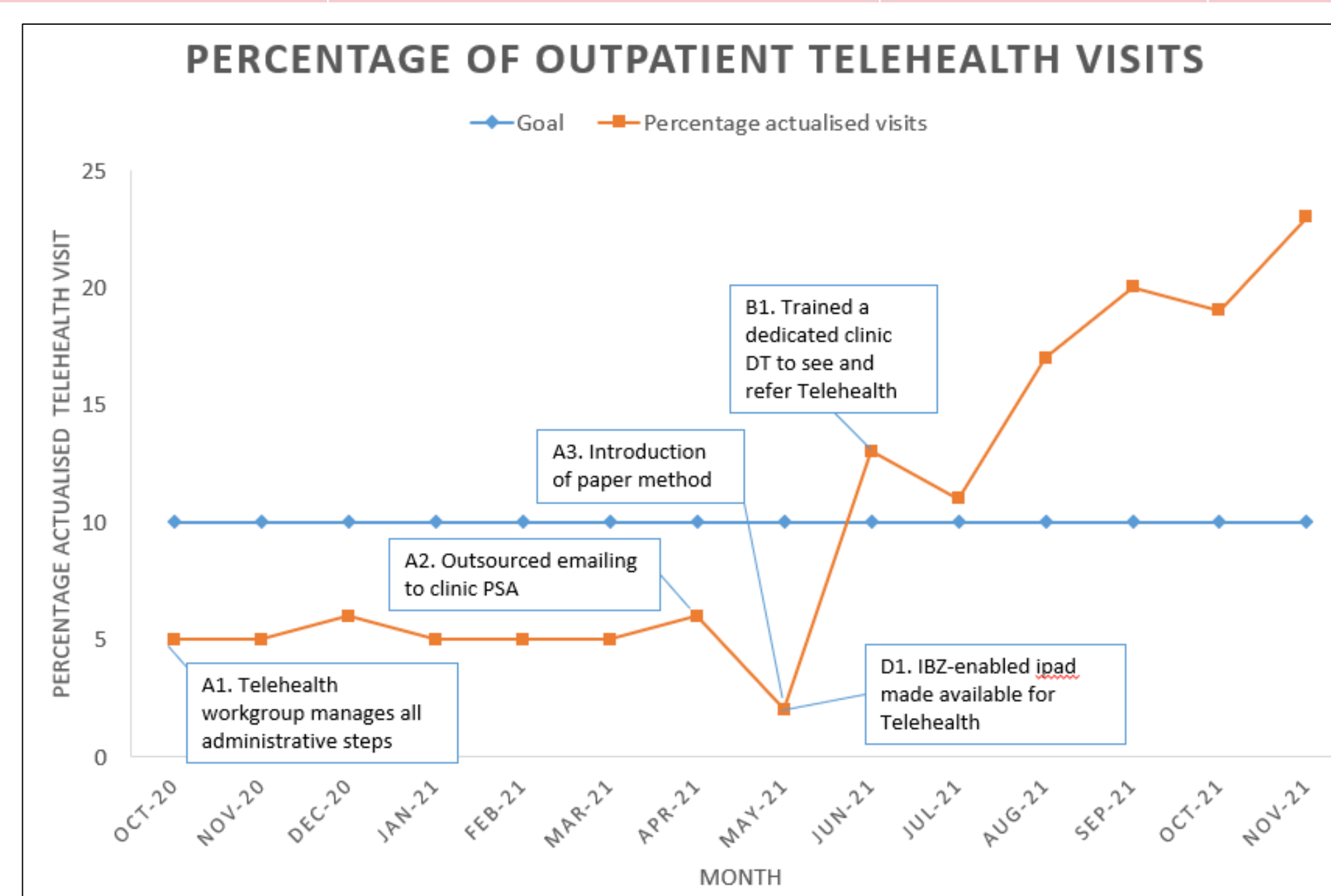
Root cause	Potential Solutions
A. High administrative workload (Many additional administrative steps involved in referring Telehealth patients (e.g. emailing, setting up))	A1 Set up a Telehealth workgroup to manage all administrative steps
	A2 Outsource some administrative steps (e.g. emailing) to Clinic Patient Service Associates (PSAs)
	A3 Use a less resource-intensive method (i.e. 'paper' method) to reduce the number of administrative steps
B. New service/ no prior protocol/ No training	B1 Assign a dedicated dietitian to see Telehealth patients and provide the necessary training
	B2 Put up physical reminders (e.g. posters) in clinic to remind dietitians to refer Telehealth patients
C. Patients unaware of Telehealth services	C1 Telehealth workgroup actively calls suitable face-to-face patients (e.g. those coming back for only one appointment) and convert to Telehealth
D. Inadequate Internet Separation Devices available	D1 Procure IBZ-enabled iPad for Telehealth use in clinic



Test & Implement Changes

Solution Implemetation

CYCLE	PLAN	DO	STUDY	ACT
1	Adoption of telehealth into work processes. The dietetics department was encouraged to offer telehealth follow-up to in-patients on discharged from October 2020 -April 2021.	This process was observed to be cumbersome as dietitians would need to look up in the system for available TCU slot, then offer to patient / caregiver and ensure booking is done quickly to prevent loss of slot. Thereafter, dietitian would need to send an email using department's email to caregiver/patient, enclosing zoom unique meeting ID and password.	Nil significant increase in actualized telehealth appointments, maintained at 5-6%.	Steps to telehealth work processes needed to be more streamlined to encourage dietitians to promote offer telehealth to patients/caregiver.
2	The emailing of patient/caregiver zoom details was delegated to clinic PSAs in April 2021.	Dietitians still felt many barriers to offering telehealth to in-patients, especially the need to look up in the system for an available TCU slot prior to offering telehealth follow-up, as this is not the usual practice.	% actualized telehealth appointments reduced to 2% in May 2021.	More improvements were needed to be made to streamline provision of zoom details as it was beyond PSA's scope of work to assist dietitians. Steps were taken to understand who (dietitians vs doctors) contributes to the bulk of DNN outpatient numbers.
3	Introduction of paper method in May 2021: providing patient / caregivers a piece of telehealth slip containing DNN's personal room meeting ID and password, with agreed time and date written on it. To understand who (dietitians vs doctors) contributes to the bulk of DNN outpatient numbers.	DNN was able to remove the reliance on PSAs to email patient / caregivers. However, dietitians felt challenging to offer telehealth to in-patients, especially the need to look up in the system for available TCU slot prior to offering telehealth follow-up, as this is not the usual practice. Study clinic referral list to understand if dietitians contributes significantly to total outpatient referrals.	Actualised telehealth appointments increased to 13% in June 2021.	Persists with paper method. Shift focus of offering of telehealth to patients at outpatient appointment.
4	Designated outpatient dietitian to refer telehealth to patients in June 2021. Telehealth workgroup to actively call and offer telehealth to upcoming clinic patients.	Training of designated outpatient dietitian to refer telehealth to suitable patient after each session. Suitable patients were called and offered to convert their upcoming outpatient appointment to telehealth.	Actualised telehealth appointments increased to above the goal of 10% for six months.	Continue with current method.



Spread Changes, Learning Points

What are/were the strategies to spread change after implementation?

- Workgroup continually engage designated outpatient dietitian to further streamline work process.
- In May 2022, Workgroup collaborated with Allied Health Office on a 'proof-of-concept (POC) – proof-of-value (POV) – mainstream' framework for telehealth services, and complied work instructions for allied health video teleconsult.
- Ongoing partnership with Allied Health Office to assist with video consultation platform (VCP) go-live on oneNUHS application

What are the key learnings from this project?

- A good working relationship intra-department (e.g. specialty operations, allied health office and cross institution – NUH DNN) is pertinent to the success and viability of telehealth in NTFGH DNN.

References

1. World Health Organization (WHO). Telemedicine: opportunities and developments in member states: report on the second global survey on eHealth 2009. Geneva: WHO; 2009. 96 p. ISBN 9789241564144.
2. Chong GJ, Png S, New SY. Cybersecurity, patient preference affecting teleaudiology amid COVID-19: lessons from Singapore. Hear J. 2020 Jul.
3. Kelly JT, Allman-Farinelli M, Chen J, Partridge SR, Collins C, Rollo M, et al. Dietitians Australia position statement on telehealth. Nutr Diet. 2020 Sep;77(4):406-415. doi: 10.1111/1747-0080.12619. Epub 2020 Jun 28.