

## **Project Title**

Long-Term Indwelling Catheters: Can We Extend the Interval Between Changes?

## **Project Lead and Members**

Project lead: Liang Qing, Dr Loke Wei Tim

Project members: Ong Siew Kuan, Soh Xin Kai, Chung Ping Ping, Priscilla Lin Hou Eng,  
Nur Suhailah Osnan

## **Organisation(s) Involved**

Ng Teng Fong General Hospital

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

Medical, Nursing

## **Applicable Specialty or Discipline**

General Surgery, Urology

## **Aims**

The aim of this project is to increase the percentage of patients seen at the Urology Clinic who have a long-term IDC change interval time of 60 days or more from 27% to 50% in 8 months.

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

## **Lessons Learnt**

The run chart showed that more patients can have their IDC change interval extended if the doctor is aware of this. Timely reminder to the healthcare staff is a useful tool to improve patient care experience.

Patient education and involvement in their own care is critical for long term care issues.

The future plan to look at indwelling catheter related complications to improve the percentage even more.

## **Conclusion**

See poster appended/ below

## **Project Category**

Care & Process Redesign

Valued Based Care, Patient reported Outcome Measures, Patient Reported Experience Measures, Patient Satisfaction, Functional Outcome, Productivity, Time Saving, Cost Saving, Man Hour Saving

Care Continuum, Preventive Care, Patient Education

## **Keywords**

Transurethral, Suprapubic Indwelling Catheters

## **Name and Email of Project Contact Person(s)**

Name: Liang Qing

Email: liang\_qing@nuhs.edu.sg

# LONG-TERM INDWELLING CATHETERS: CAN WE EXTEND THE INTERVAL BETWEEN CHANGES?

MEMBERS: LIANG Q., DR LOKE W.T., DR HENG C.T., ONG S.K., SOH X.K., CHUNG P.P., LIN H.E., SUHAILAH OSNAN.

- SAFETY
- QUALITY
- PATIENT EXPERIENCE
- PRODUCTIVITY
- COST
- VALUE

## Introduction

In urology clinic, there are a group of patients require transurethral or suprapubic indwelling catheters (IDC) as a long-term care management for voiding dysfunction. The current practice is that the catheters are commonly changed between four to eight weeks (one to two months).

If catheters change intervals extend more than two month to three months which recommended by manufacture, this will reduce each episode uses resources (consumables, procedure room, doctors and nurses).

Between Sep to Nov 2019, only 27% of the patient's IDC change interval time more than 60 days. This drives increased patient costs including service cost and transportation cost and low patient satisfaction rates.

The aim of this project is to increase the percentage of patients seen at the Urology Clinic who have a long-term IDC change interval time of 60 days or more from 27% to 50% in 8 months.

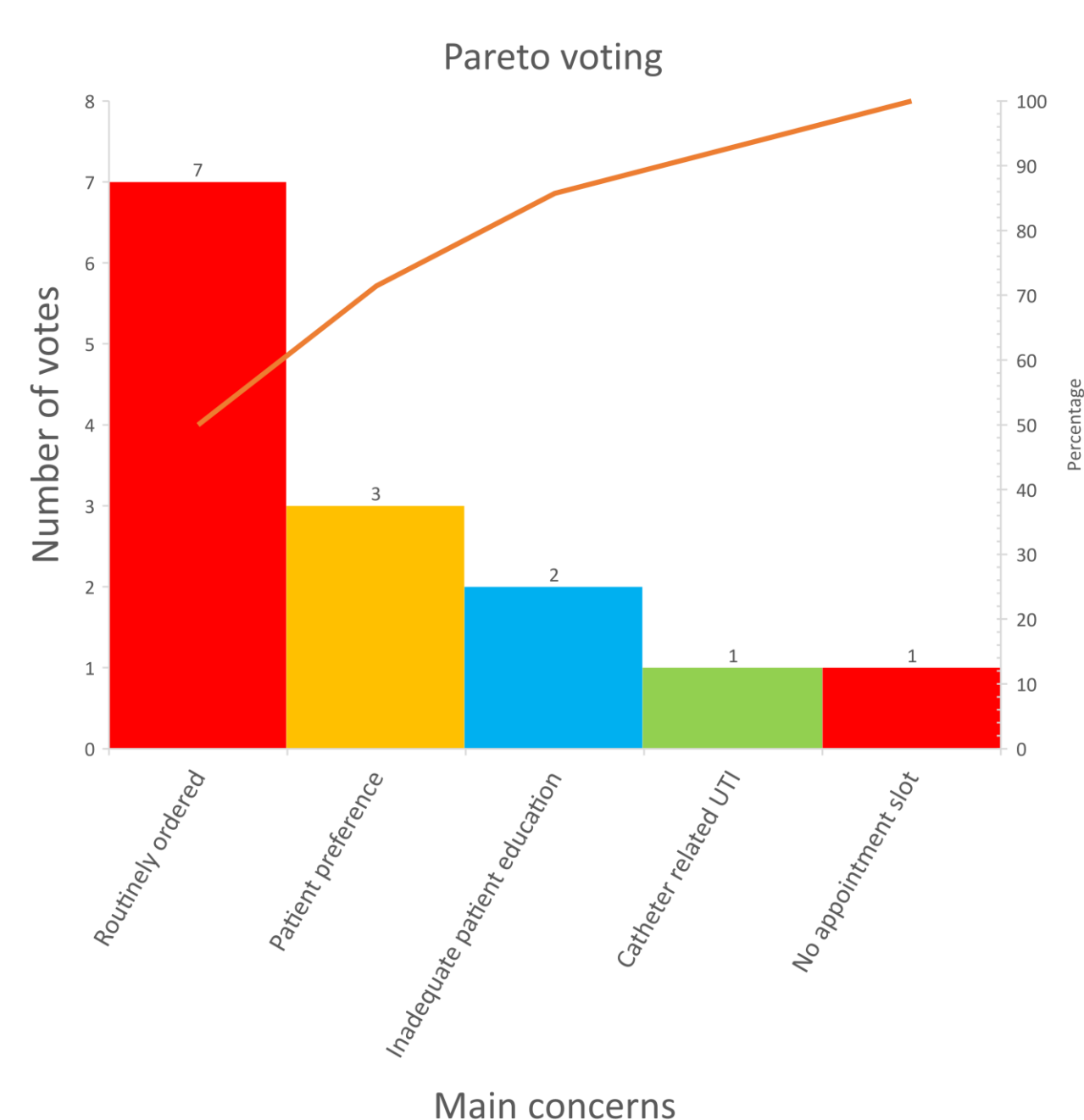
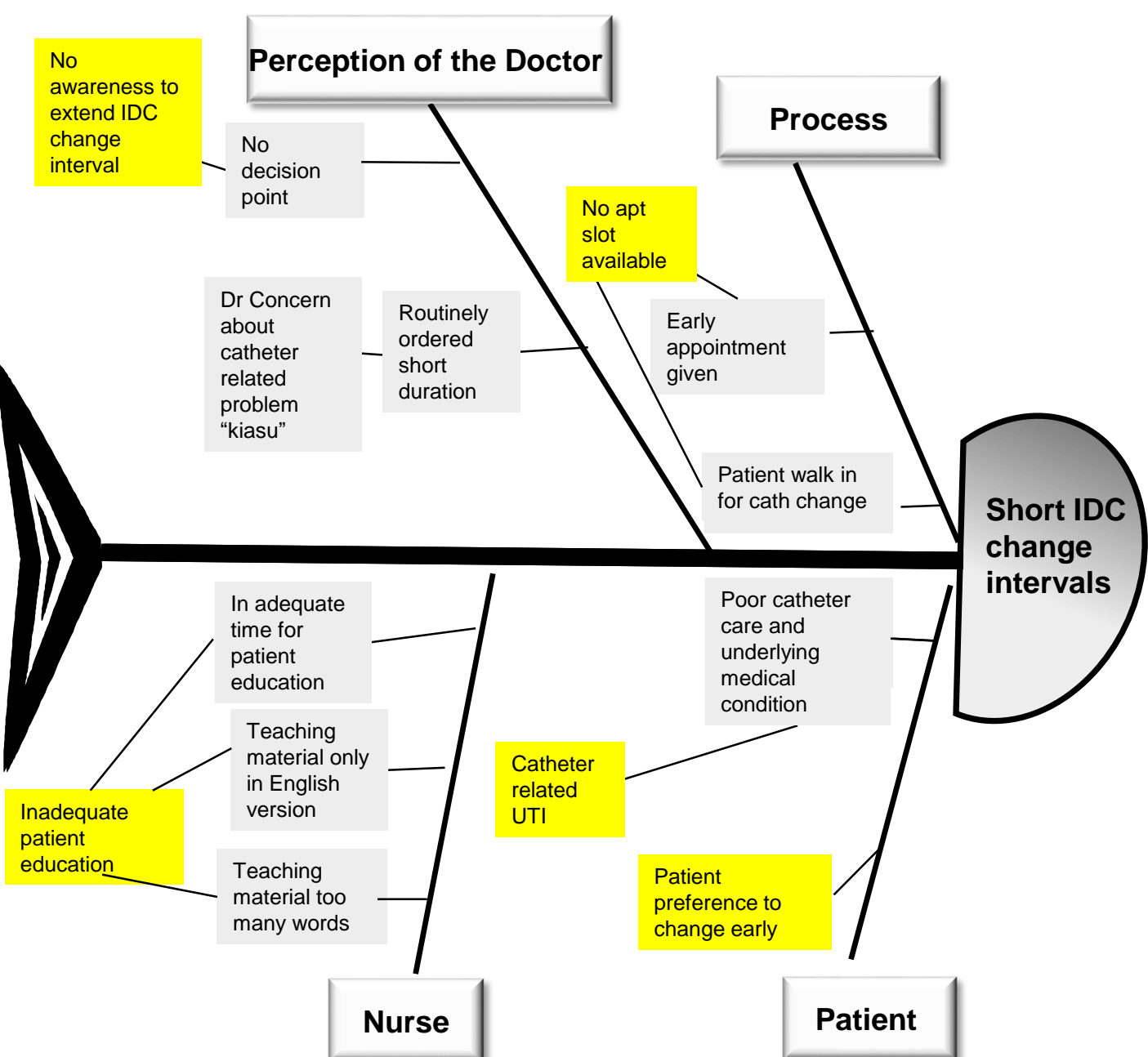
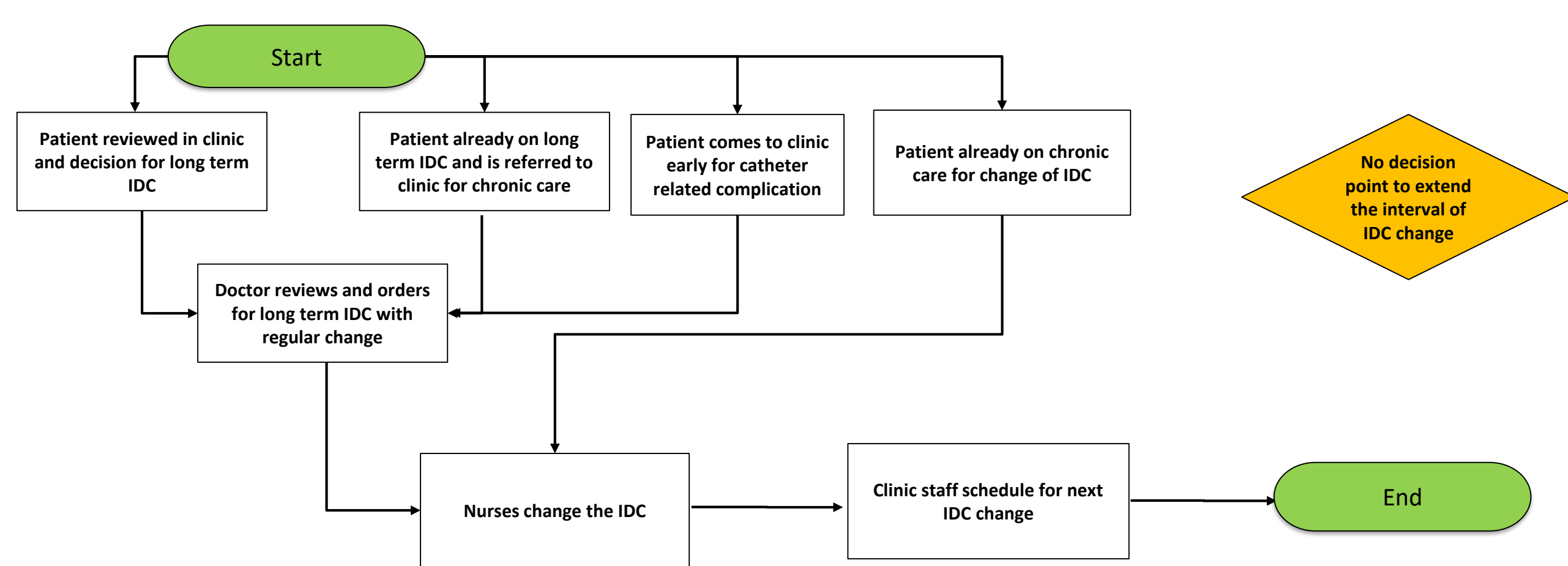
## Baseline performance

Baseline data was gathered from Sept to Nov 2019. It showed that on average 27% of patients had their catheter change interval of more than 60 days.

(please see the run chart in the results section)

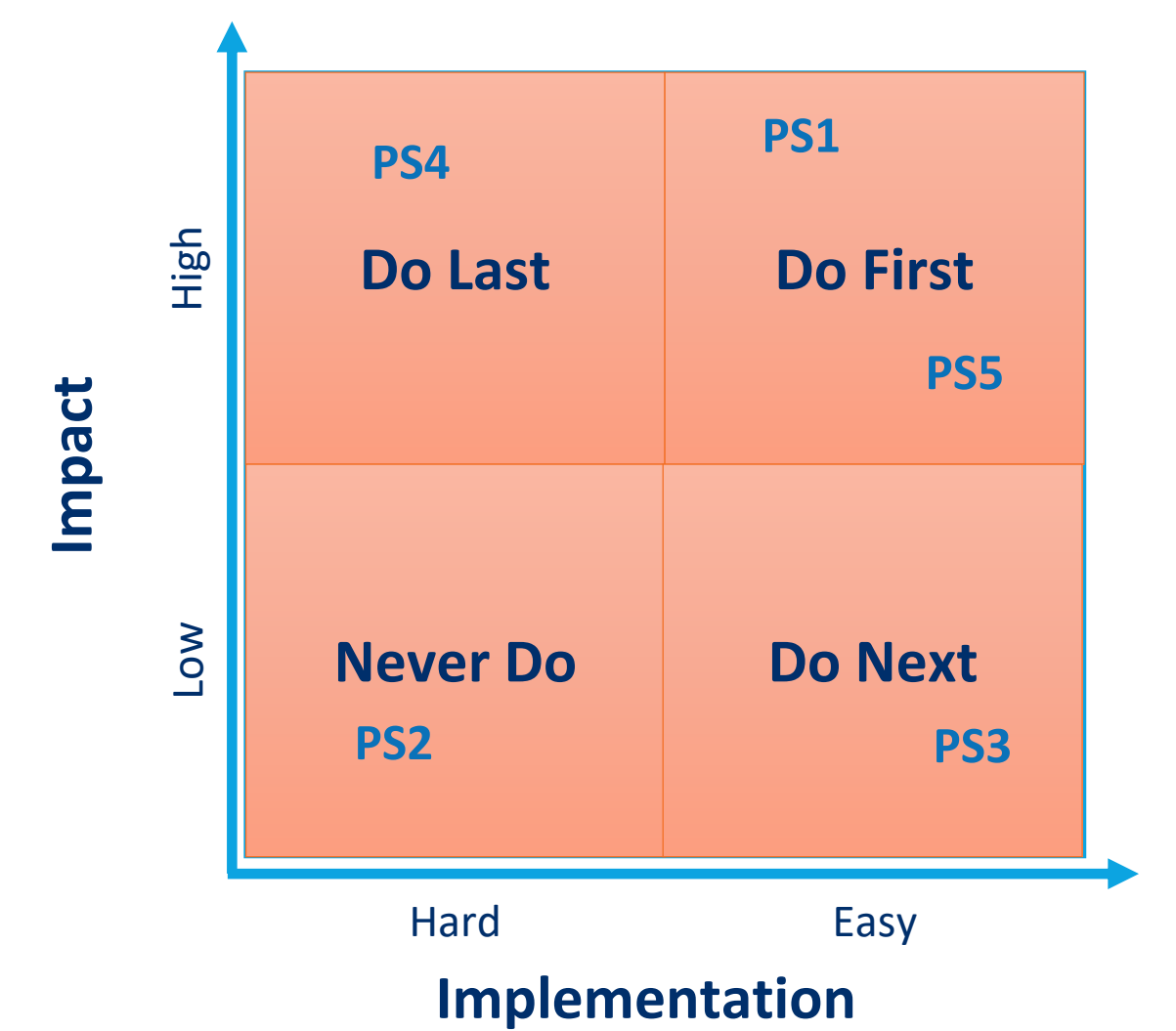
The data collected concurs with our initial impression that about two thirds of our patients change their catheters less than 60 days.

## Analyse Problem



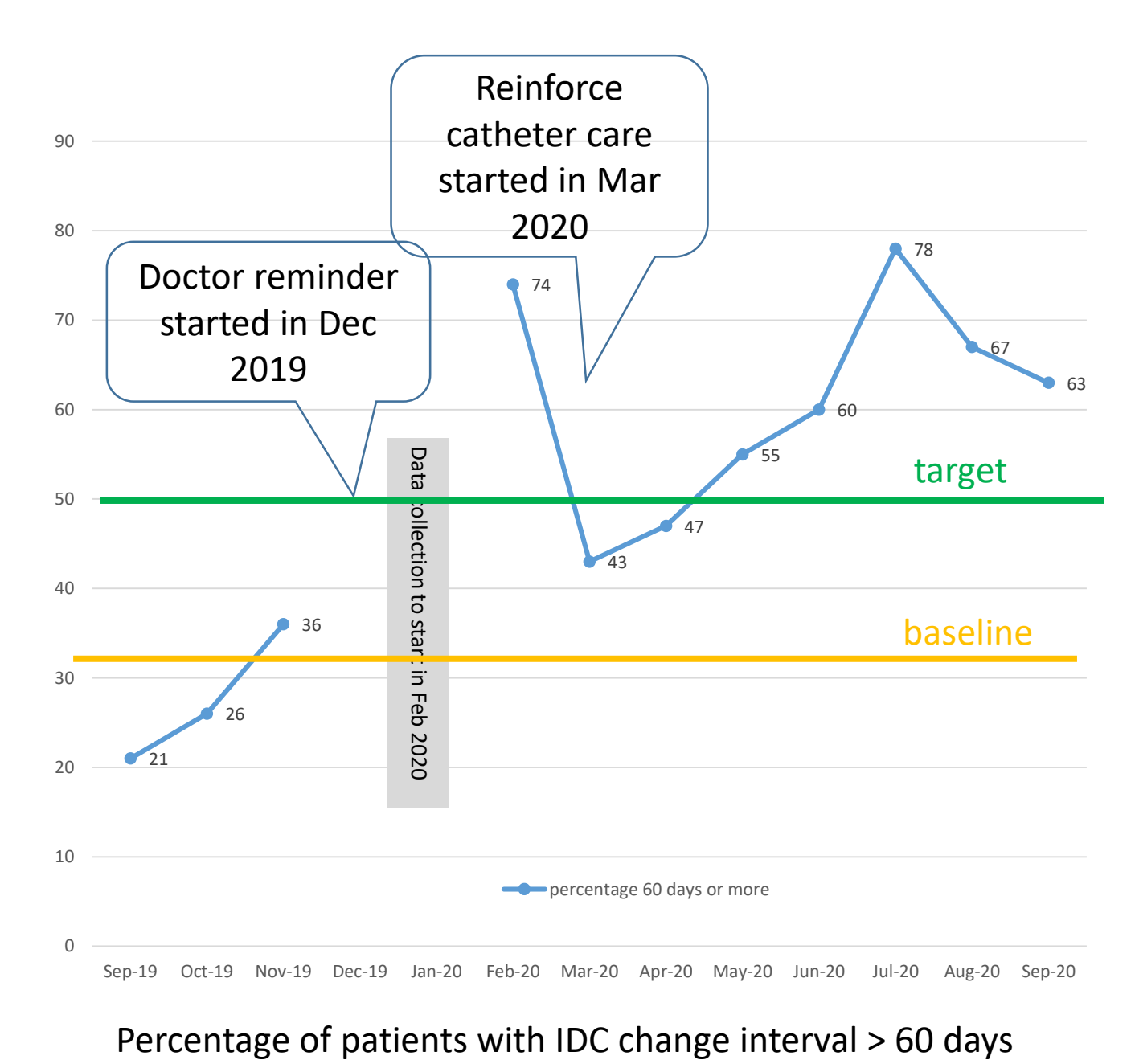
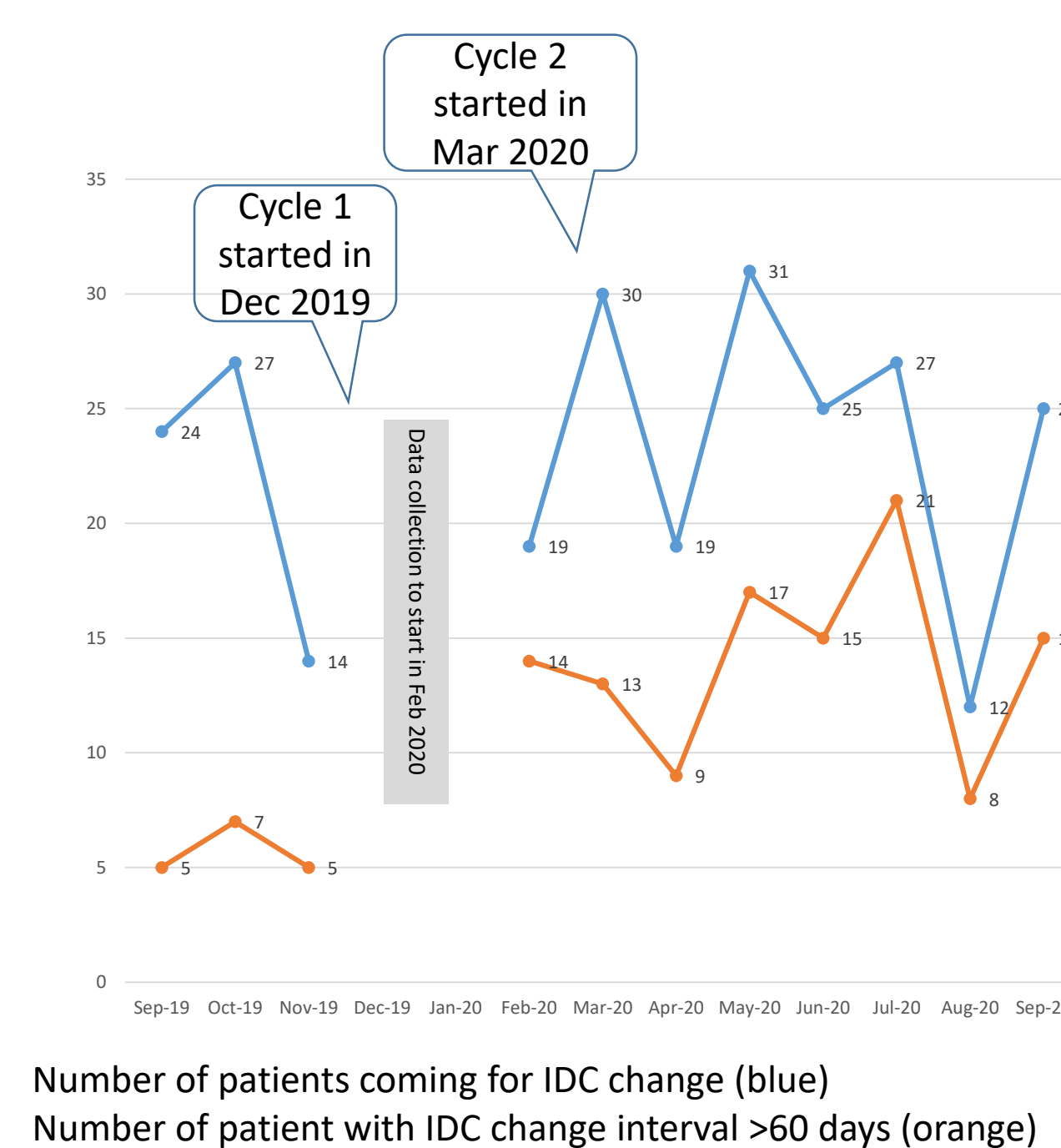
## Select Changes

Root Cause	Potential solutions
Routinely ordered	PS1: Remind doctor to consider extending IDC change interval PS2: mandatory extension of IDC change interval
Patient preference and inadequate patient education	PS3: Pictorial education material PS4: Home visit to check catheter condition PS5: Reinforce catheter care during IDC change



## Test & Implement Changes

CYCLE	PLAN	DO	STUDY	ACT
1	To increase the doctor's awareness that the catheter change can be extended, and to order appropriately.	Nurses note the interval during IDC change and suggest to the doctor if the interval can be extended.	See run chart. We showed that the normal routine can be changed with a change of perception	To continue with initiative. This communication also helps the team work together
2	To improve the patient's confidence that catheter can be kept for longer.	A few extra minutes taken to reinforce and review catheter care issues with patient and care giver	See run chart. This was implemented without much impact to the clinic workflow. Patient/care giver also appreciate the time and instruction given	To continue with initiative. This improves patient outcome and experience



## Spread Changes, Learning Points

The run chart showed that more patients can have their IDC change interval extended if the doctor is aware of this. Timely reminder to the healthcare staff is a useful tool to improve patient care experience.

Patient education and involvement in their own care is critical for long term care issues.

The future plan to look at indwelling catheter related complications to improve the percentage even more.