

### **Project Title**

Improving Timeline on Issuance of Implant Cards To Orthopaedic Patients  
Undergoing Surgery

### **Project Lead and Members**

Project lead: Dr Audrey Tan

Project members: Kelvinder Kaur, Dr Joseph Sharon Raj, Dr Tan Kuan Siang, Reena  
Riana Bte Jamil, Adeline Tan, Khin Aye Aye, Tang Min Yee, A/Prof Fareed Kagda

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

Ng Teng Fong General Hospital

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

Medical, Nursing, Operations

### **Applicable Specialty or Discipline**

Orthopaedic Surgery

### **Project Period**

Start date: September 2022

Completed date: May 2023

### **Aims**

Project team hopes to achieve 50% of patients receiving their implant cards within 2 weeks, AND median time after surgery for patients to receive implant cards to be 2 weeks or less by April 2023

### **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

## **Lessons Learnt**

The main reason for delay in generation of implant cards was batching and lack of time

Providing a weekly schedule for each step of card generation helped team members to allocate time and resulted in the timely generation of cards

Aiming to print cards within 1 week of surgery also meant that the cards would be delivered to clinic before the patient's next clinic appointment at 2 weeks after surgery for post-operative wound inspection and removal of sutures

## **Conclusion**

See poster appended/ below

## **Project Category**

Care & Process Redesign

Productivity, Time Saving

## **Keywords**

Implant Card, Orthopaedic, Surgery

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

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# IMPROVING TIMELINE ON ISSUANCE OF IMPLANT CARDS TO ORTHOPAEDIC PATIENTS UNDERGOING SURGERY

✓PATIENT EXPERIENCE

MEMBERS: DR AUDREY TAN, KELVINDER KAUR, DR JOSEPH SHARON RAJ, DR TAN KUAN SIANG, REENA RIANA BTE JAMIL, ADELINE TAN, KHIN AYE AYE, TANG MIN YEE, A/PROF FAREED KAGDA (SPONSOR)

## Define Problem, Set Aim

### Problem/Opportunity for Improvement

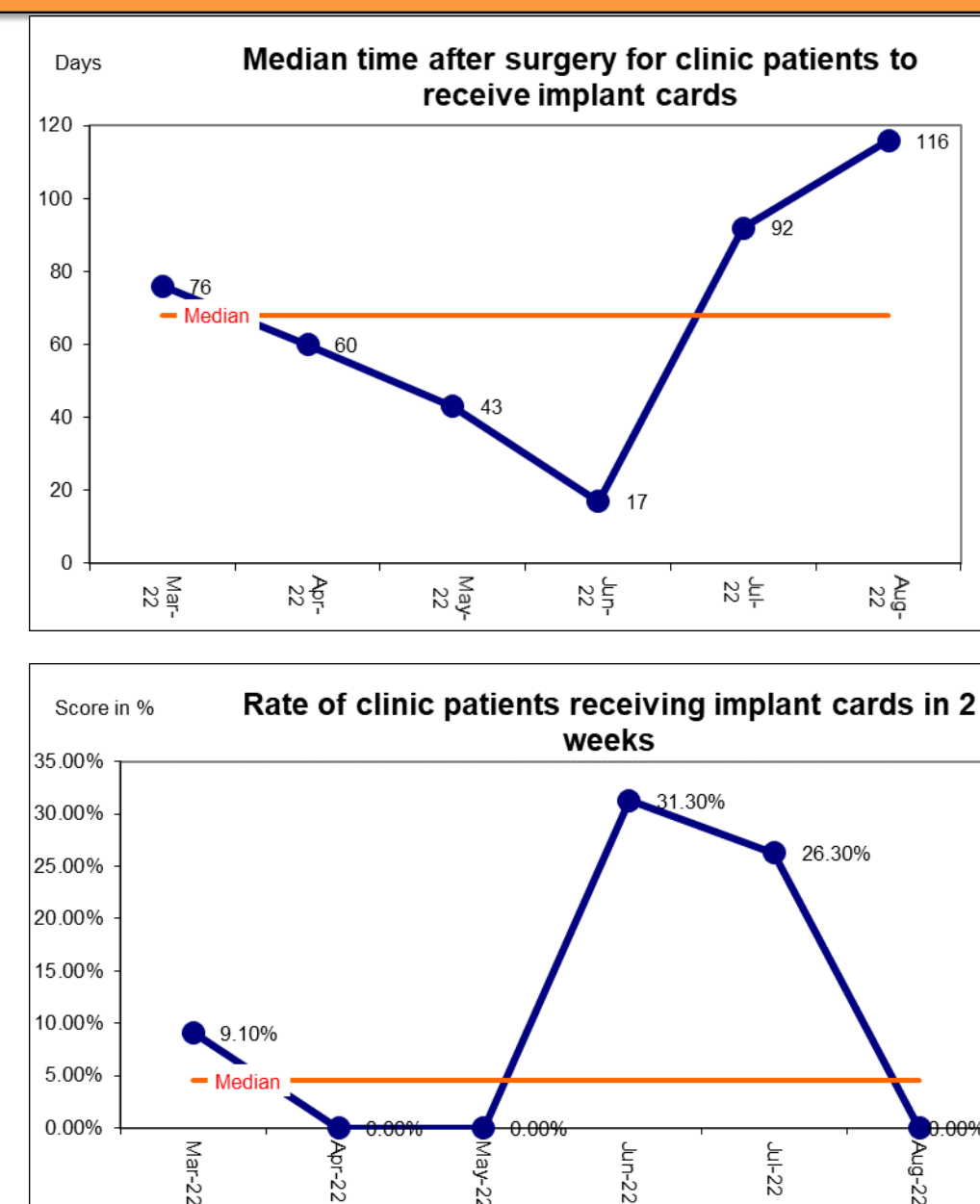
In the month of March 2022, 9.1% of patients received their implant cards within 2 weeks. This is well below the department's aim of 2 weeks, and affects patients who intending to travel or undergo other procedures, or have MRI scans done. The median time after surgery for clinic patients to receive implant cards was 2.5 months post operatively. This affects patient satisfaction, and generates more paperwork for doctors, who have to issue memos and clarification letters.

### Aim

Project team hopes to achieve 50% of patients receiving their implant cards within 2 weeks, AND median time after surgery for patients to receive implant cards to be 2 weeks or less by April 2023

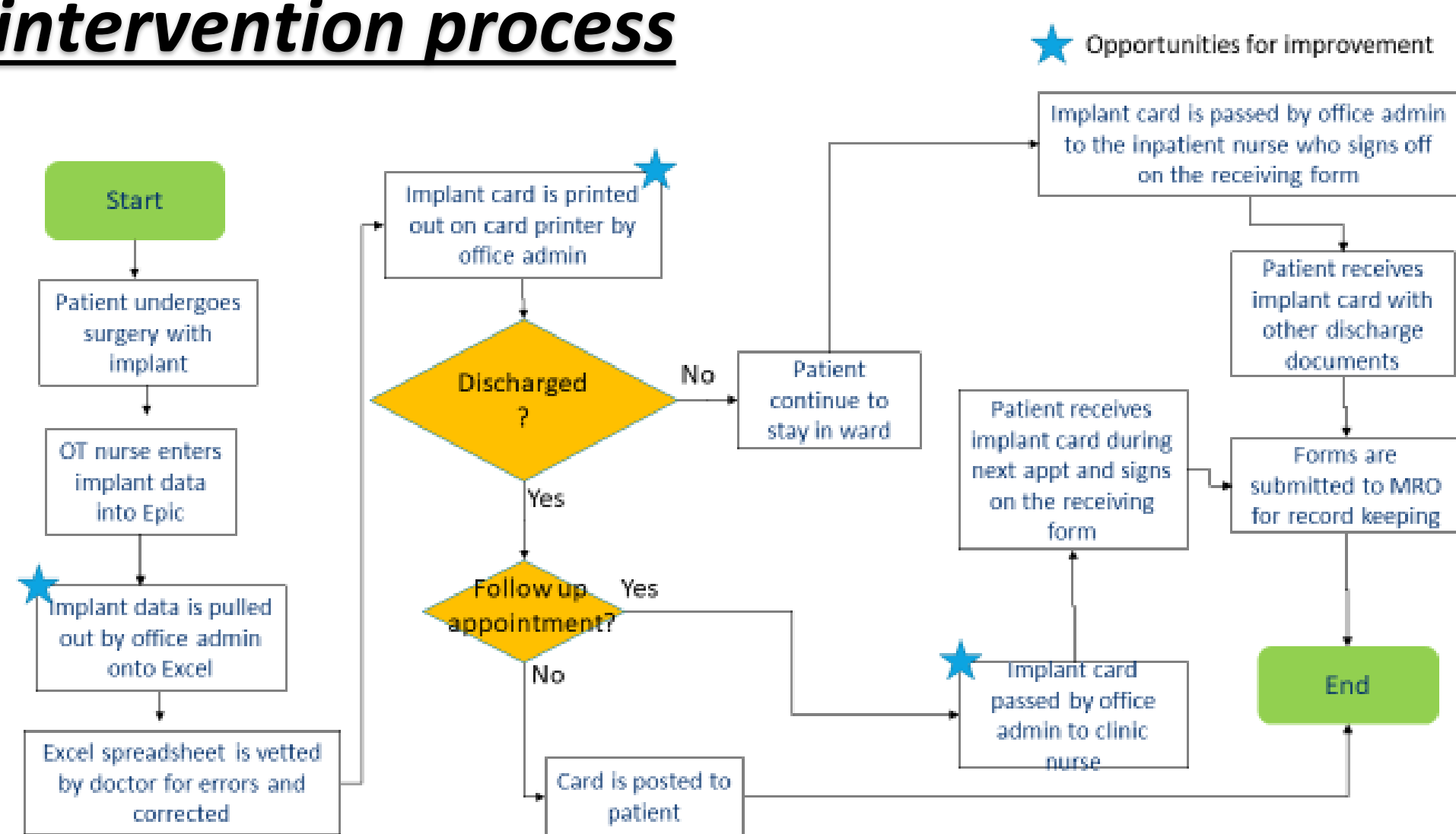
## Establish Measures

- Information from the implant database was taken for all implant surgery in the Orthopaedic Surgery department from March to Aug 2022
- 674 surgeries with implants were identified
- The implant card acknowledgement forms were traced from the Medical Records Office and the date the forms were signed off were recorded
- The range of days from surgery to receiving the cards was 11 to 134 days
- The median of days from surgery to card receipt was 68 days
- The median rate of clinic patients receiving implant cards in 2 weeks was 4.55%

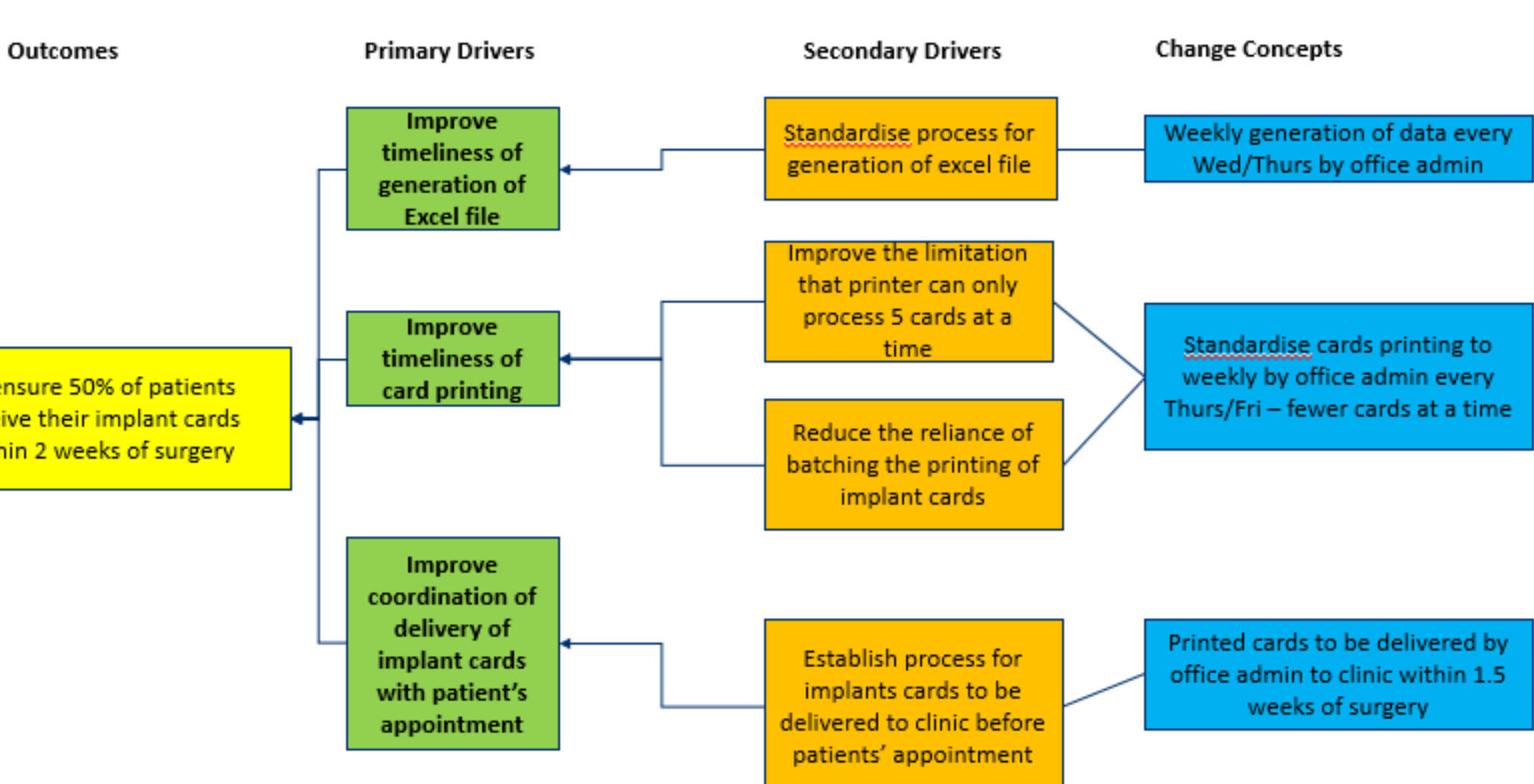


## Analyse Problem

### Pre-intervention process



### Driver diagram



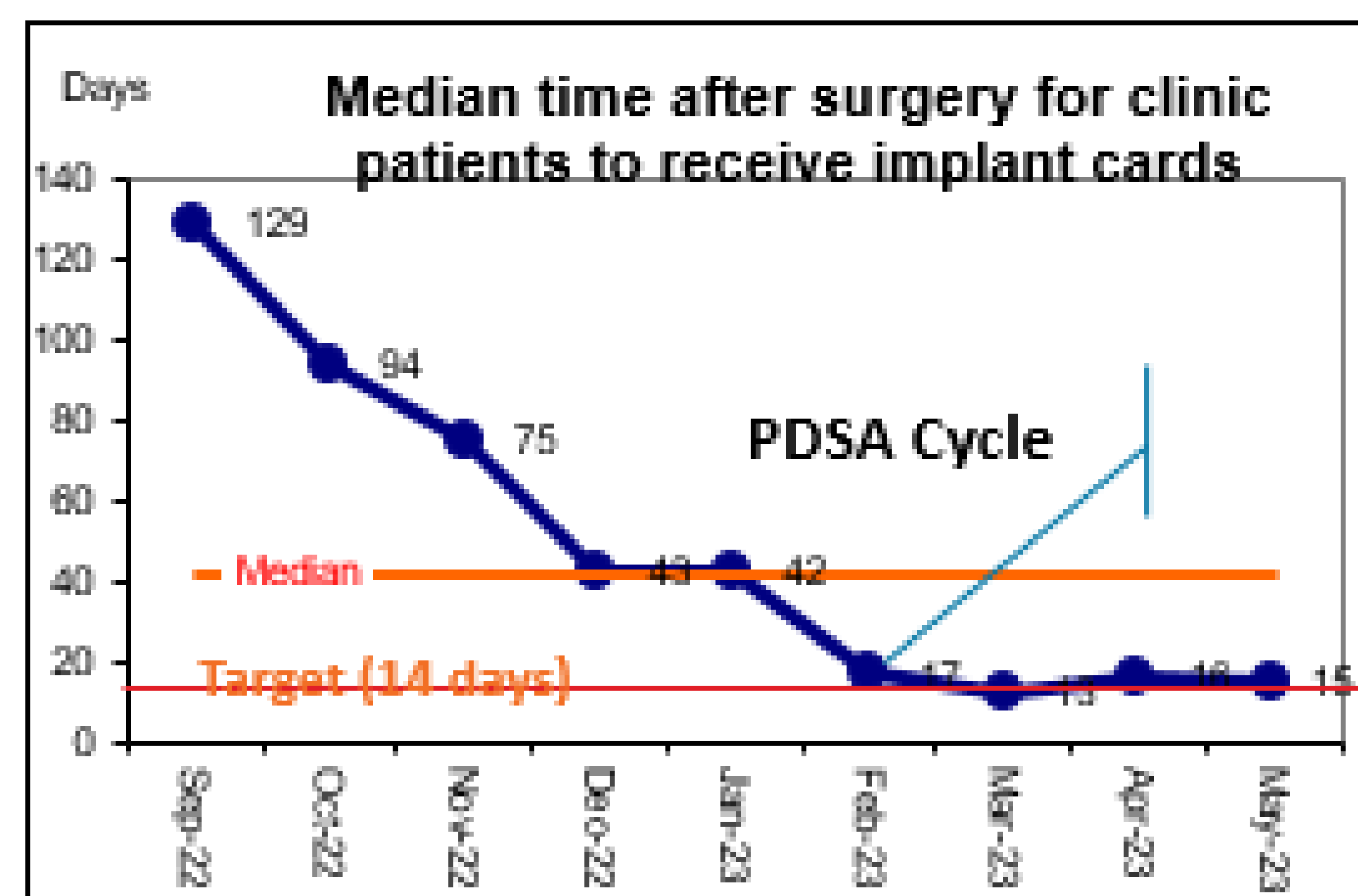
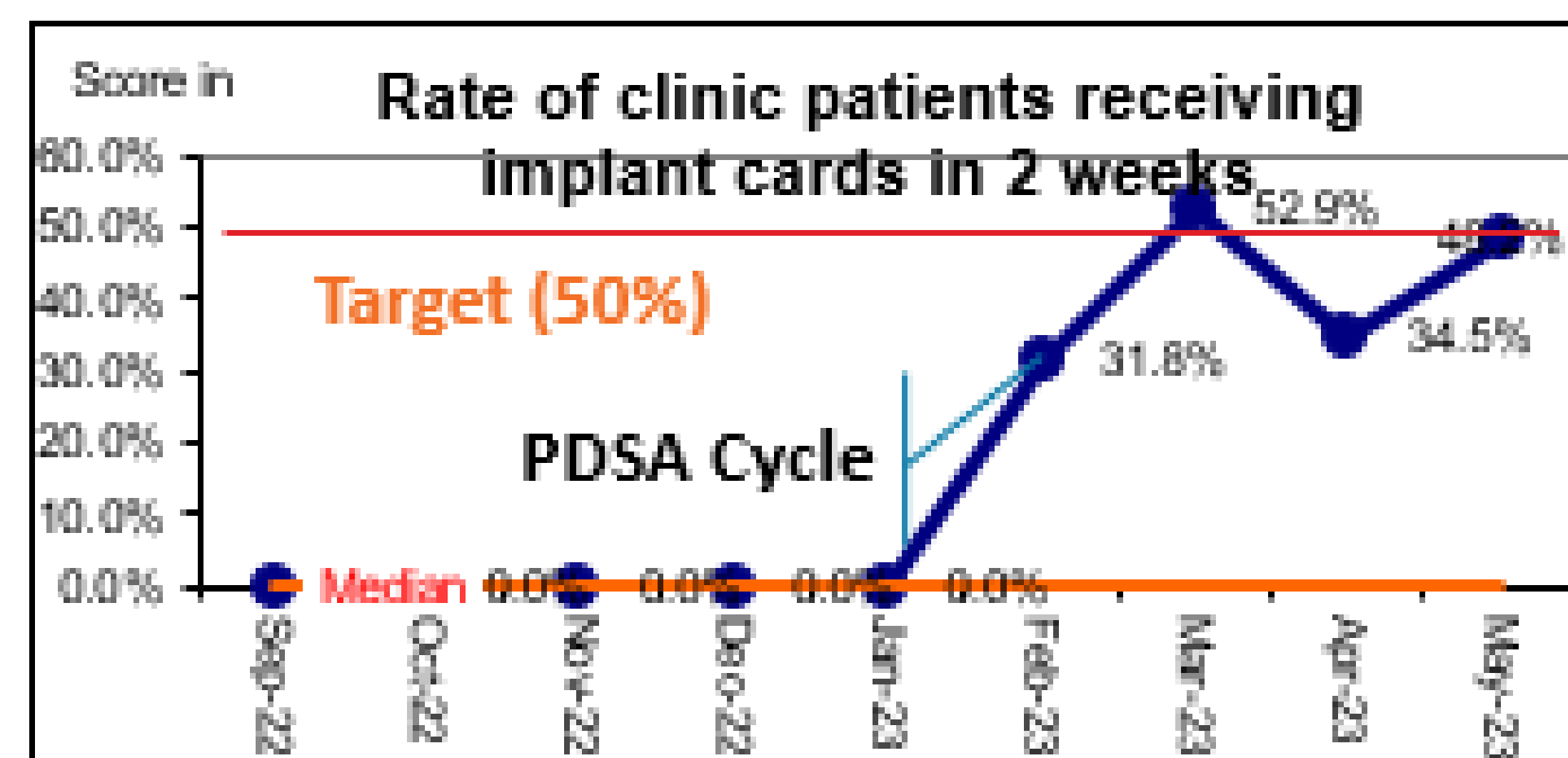
## Opportunities for Improvement

- Batching and lack of time were reasons identified for lack of timely implant card printing
- Clinic patients were also seen at approximately 2 weeks after surgery for wound care and removal of sutures, and if the implant cards were not given to clinic within 1.5 weeks after surgery, the next clinic review for the patient would be much later

## Test & Implement Changes

### How do we pilot the changes? What are the initial results?

CYCLE	PLAN	DO	STUDY	ACT
1	Changing to workflow from batching of cards to weekly printing <ul style="list-style-type: none"> <li>Weekly generation of data every Wed/Thurs by office admin</li> <li>Standardise cards printing to weekly by office admin every Thurs/Fri</li> <li>Printed cards to be delivered by office admin to clinic within 1.5 weeks of surgery</li> </ul>	<ul style="list-style-type: none"> <li>Test went as planned</li> </ul>	<ul style="list-style-type: none"> <li>Average time to print one card dropped with fewer numbers of card per batch printed</li> <li>Scheduled times to print cards and timeline for card printing helped the team prioritise and plan when to print the cards</li> </ul>	<ul style="list-style-type: none"> <li>Adopt</li> </ul>



## Learning Points

- The main reason for delay in generation of implant cards was batching and lack of time
- Providing a weekly schedule for each step of card generation helped team members to allocate time and resulted in the timely generation of cards
- Aiming to print cards within 1 week of surgery also meant that the cards would be delivered to clinic before the patient's next clinic appointment at 2 weeks after surgery for post-operative wound inspection and removal of sutures