

## **Project Title**

Identifying ward patients for cardiac Test at Clinic A34 Cardiology Clinic

## **Project Lead and Members**

Project lead: Lynn Chen

Project members: Sandra Yow, Jasmine Goh, Loh Yu Xuan, Nuratasha Nabilah,

## **Organisation(s) Involved**

Ng Teng Fong General Hospital

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

Nursing, Allied Health, Healthcare Administration

## **Aims**

The goal is to achieve 10% or less patients wait more than 30 minutes by end of December 2020.

## **Background**

See poster appended/below

## **Methods**

See poster appended/below

## **Results**

See poster appended/below

## **Lessons Learnt**

- Improvements and efficiency of the clinic work flow requires attributes such as good team work from multidisciplinary working groups.
- Streamlined work processes reduce variations and improve work flow.
- Effective communications is the most important part of teamwork.

**Conclusion**

See poster appended/below

**Project Category**

Care & Process Redesign

Quality Improvement, Workflow Redesign, Value Based Care, Productivity

**Keywords**

Cardiac Test, Inpatient, Cardiology Clinic, Wait time

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# IDENTIFYING WARD PATIENTS FOR CARDIAC TEST AT CLINIC A34 CARDIOLOGY CLINIC

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- SAFETY
- QUALITY
- PATIENT EXPERIENCE
- PRODUCTIVITY
- COST
- TEAMWORK
- COMMUNICATION

## Define Problem, Set Aim

### Opportunity for Improvement

A34 Cardiology Clinic provides Cardiac Diagnostic Laboratory tests and nursing procedure for patients from both Wards and Clinics. About 10% of patients from Wards gave verbal feedback with regards to the long waiting time for both pre and post Cardiac test/procedure, this resulted delay of treatment. An average of 13% of patients waited more than 30 minutes before test/procedure, and 39% of patient waited more than 30 minutes after the test/procedure.

### Aim

To improve patient experience and patient safety at A34 Cardiology Clinic through improving wait time and ensure all patients' needs are attended immediately without delay and confusion. The goal is to achieve 10% or less patients wait more than 30 minutes by end of December 2020.

## Establish Measures

### Current performance (Before implementation)

- 13% of patients waited more than 30 minutes for test/procedure
- 39% of patients waited more than 30 minutes after the test/procedure
- 7% of patients missed out scheduling porter after test/procedure

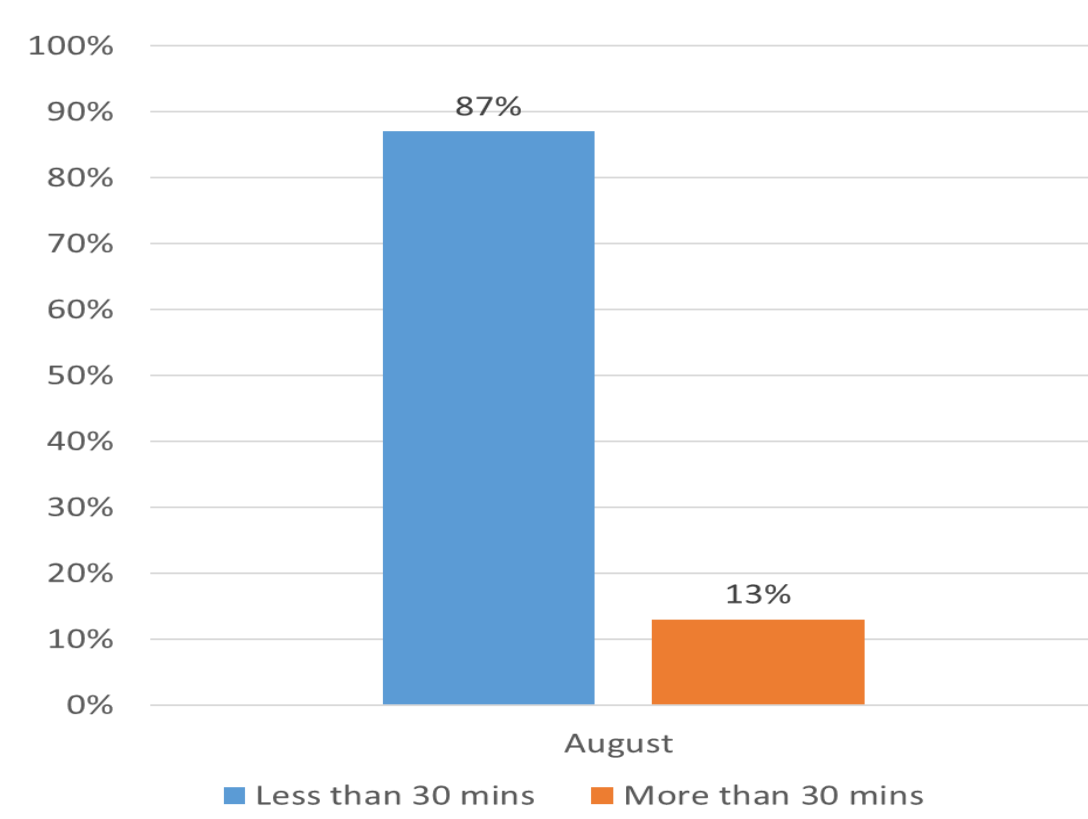


Figure 1: Pre-procedure waiting time > 30 mins (1st Aug 2019–30th Aug 2019)

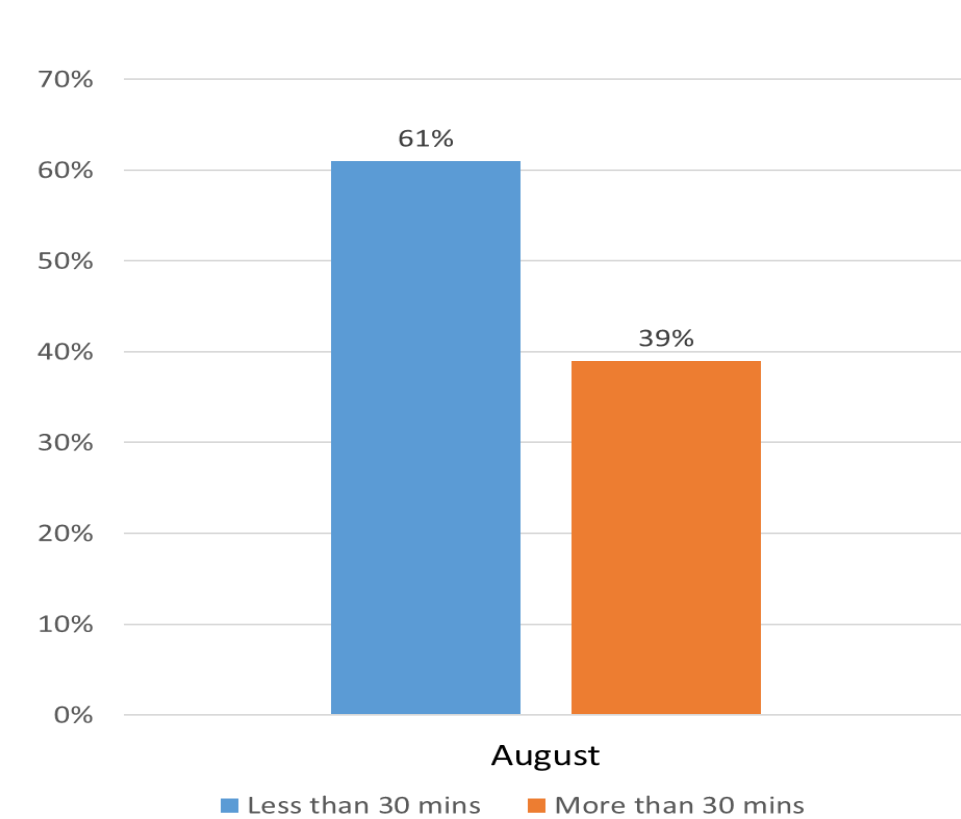
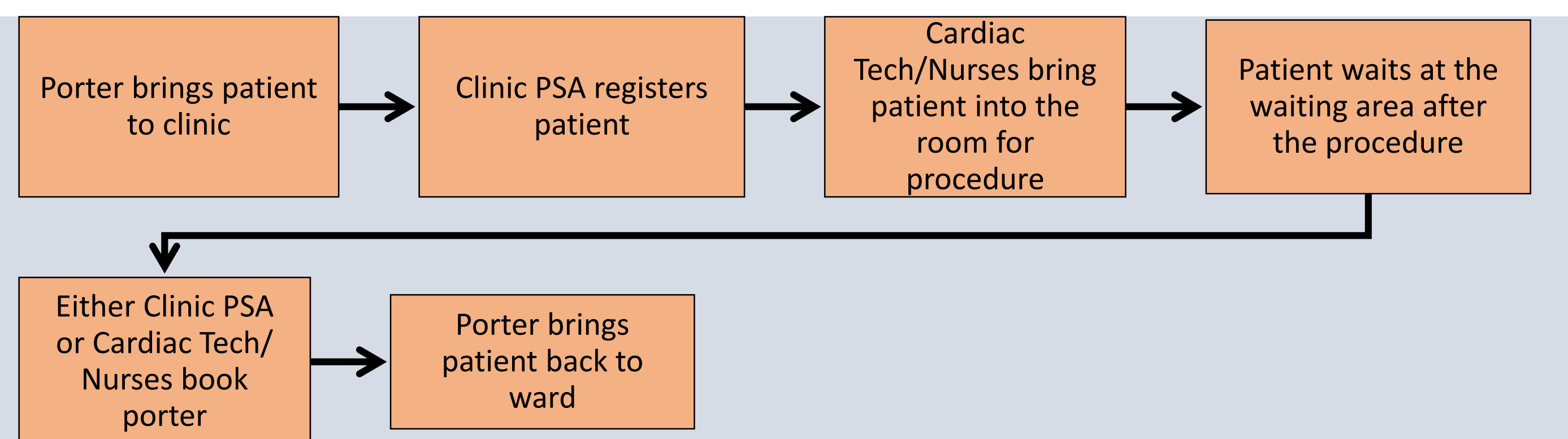


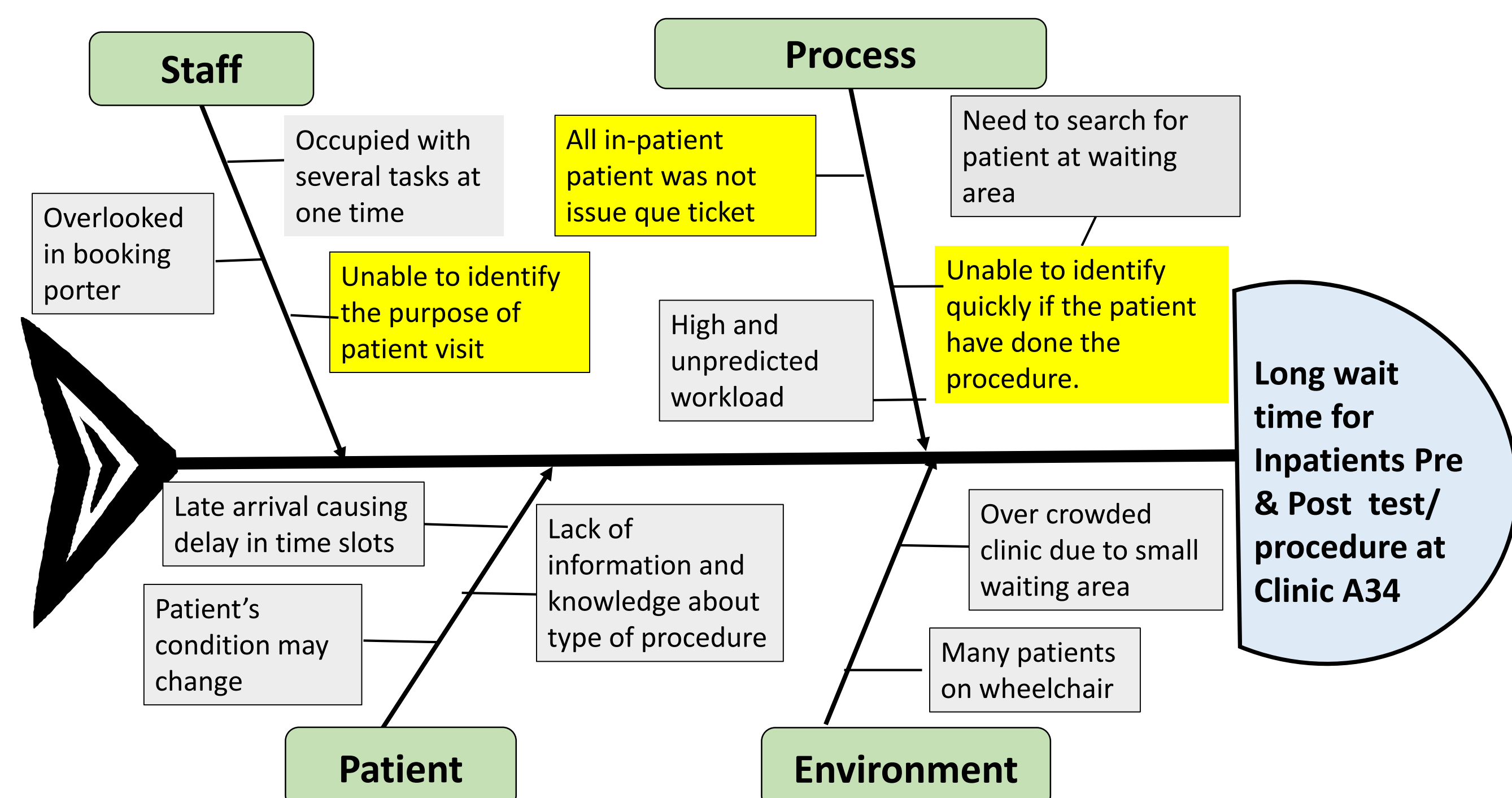
Figure 2: Post-procedure waiting time > 30 mins (1st Aug 2019–30th Aug 2019)

## Analyse Problem

### Current Process



### Probable Root Causes & Solutions



Probable Root Causes	Probable Solutions
Unable to identify the purpose of patient visit	Implement identification tag for patients from Ward
Unable to identify if patient has done the test/procedure	Use color coded identification tags
Patients are not issued queue ticket	Enhance the queue system to issue Q nos for inpatients

## Select Changes

Identification tags to be implemented to enable ease of identification of patients and improve workflow efficient, especially those patients on wheelchair:

- Type of test/ procedure for patient
- Status of test/procedure to reduce waiting time to the ward

CYCLE	PLAN	DO	STUDY	ACT
1	Implement identification tags for patients from Ward came to at A34 Cardiology Clinic for test/procedures.	Clinic staff and porters place identification tags for patients from Ward for CDL test/nursing procedure	<ul style="list-style-type: none"> <li>Reduced patient waiting time for pre and post procedure.</li> <li>Staff forgot to hang the tag</li> <li>Manpower shortage for porters to transfer patients.</li> </ul>	<ul style="list-style-type: none"> <li>Continued the project, staff were reminded to hang the identification tags for patients.</li> <li>Follow up with Porter Dept for manpower issue.</li> </ul>

**Inpatient comes to A34 for procedure**

**Colour Tag**

- To indicate that the patient is waiting for which procedure
- Counter PSA to actualise patient and hang up the Colour Tag
- CDL Diagnostics Lab procedure (Yellow)
- Room 64 - Treatment Room (Orange)

**CDL**

**RM 64**

**Inpatient comes to A34 for procedure**

**Green Tag**

To indicate that the procedure is completed

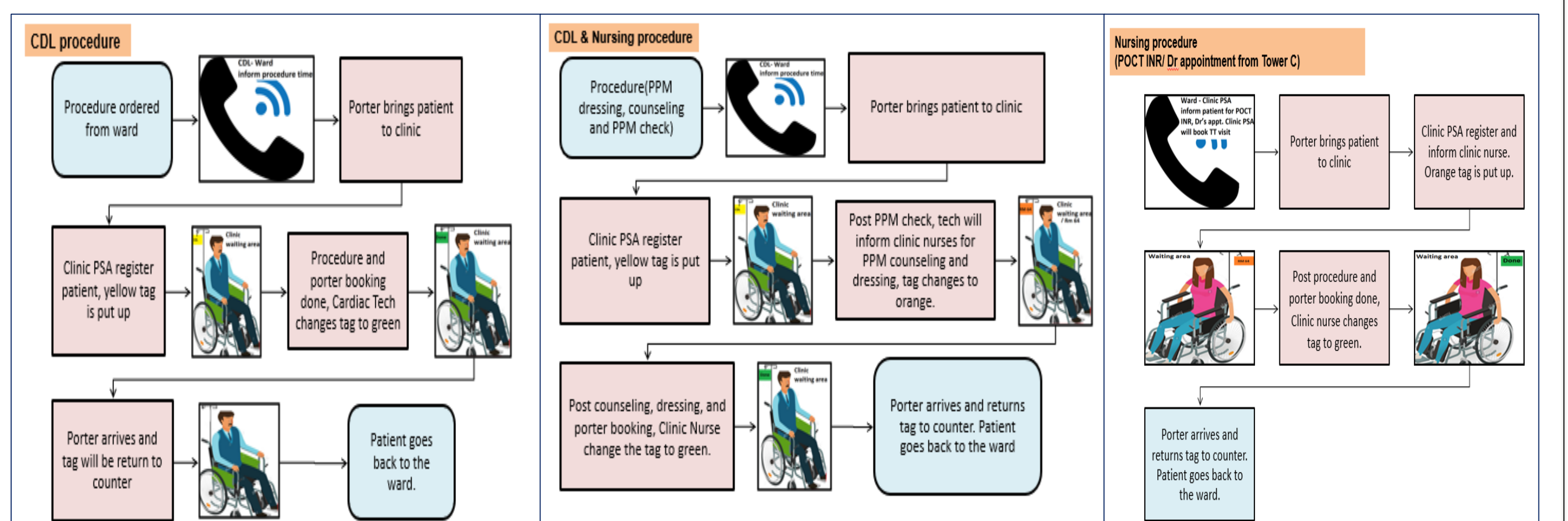
- After procedure is completed, Cardiac Technologist to book porter to hang the green tag on patient's wheelchair
- Done (Procedure is completed)

**DONE**

**DONE**

## Test & Implement Changes

### New Workflow



### Result

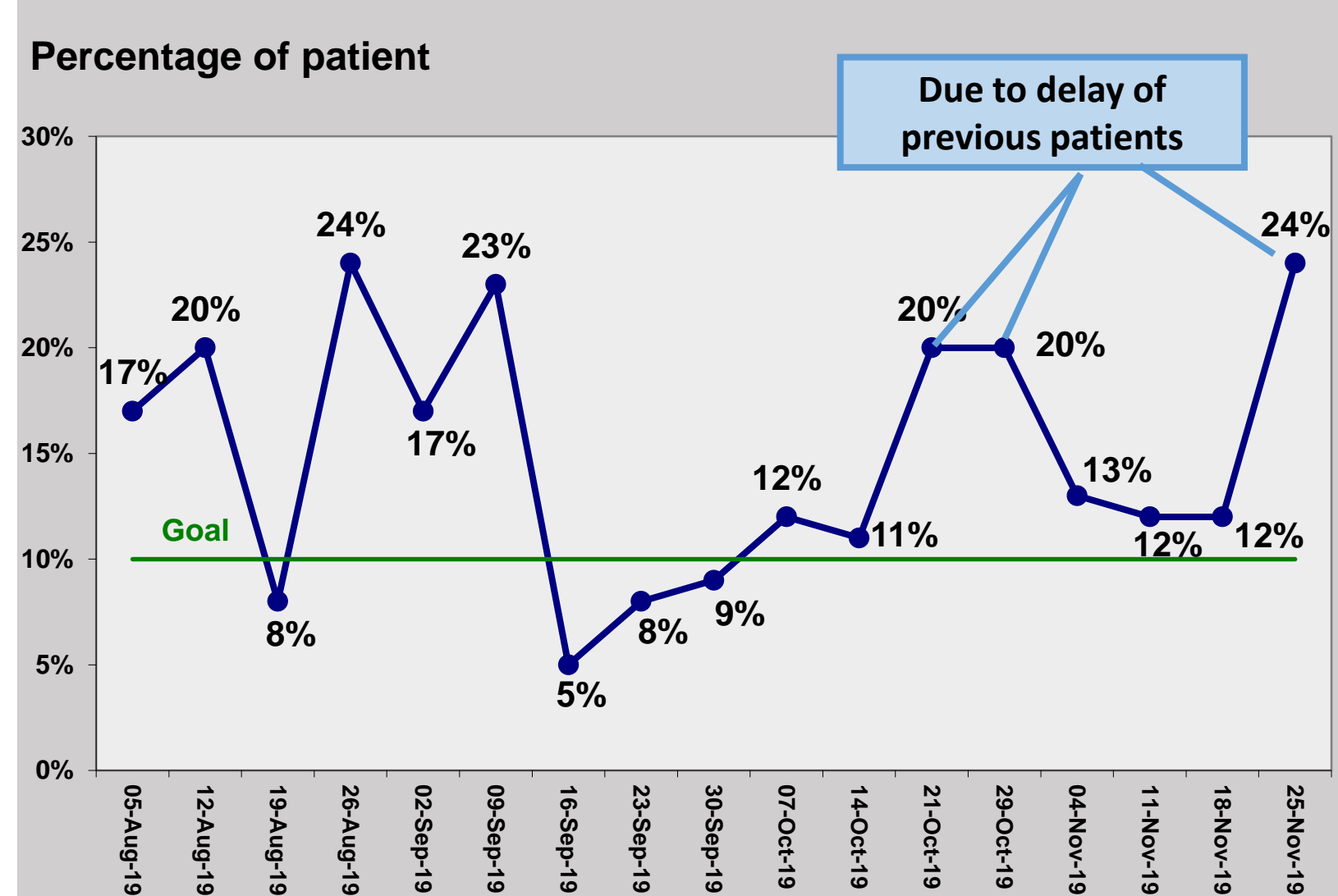


Figure 3: Pre-procedure waiting time > 30 mins (Sep 2019– Dec 2019)

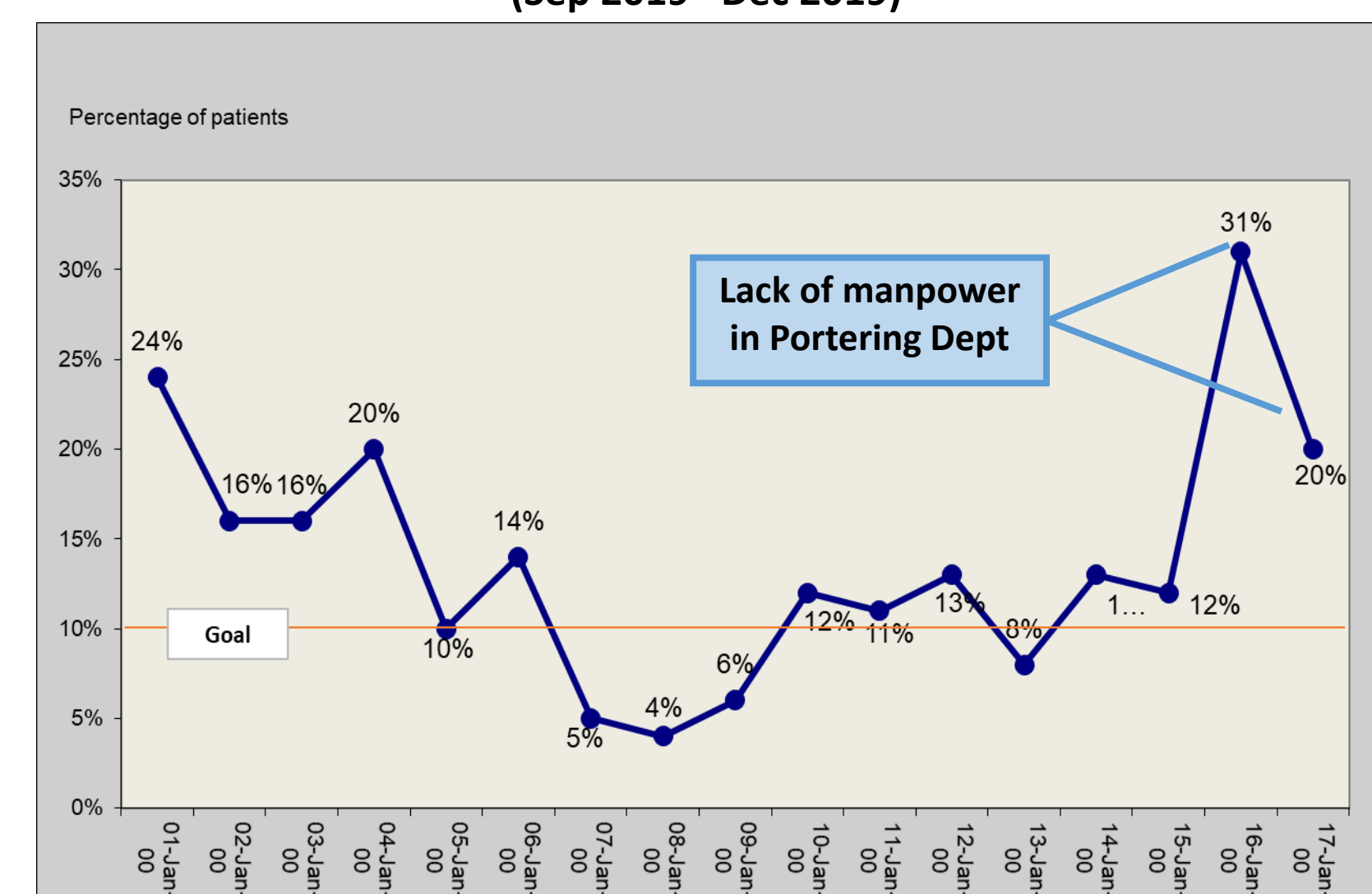


Figure 4: Post-procedure waiting time > 30 mins (Sep 2019– Dec 2019)

Post implementation of the Identification Tag in Sep 2019, there were improvements to the flow in the clinic:

- Patient waiting time pre-procedure more than 30 mins reduced to average of **9%** in the period of 16 Sep 2019 to 14 Oct 2019.
- Patient waiting time post procedure more than 30 mins reduced to average of **10%** in the period of 2 September 2019 to 11 November 2019.
- For patient experience, only **2%** of patients feedback that they had long waiting time.
- Achieved **0 incident** that post procedure porter was not booked.
- Decreased overcrowding** at clinic waiting area that enables A34 staff being able to better manage and maximize the number of patient.

## Spread Changes, Learning Points

### Key learnings

- Improvements and efficiency of the clinic work flow requires attributes such as good team work from multidisciplinary working groups.
- Streamlined work processes reduce variations and improve work flow.
- Effective communications is the most important part of teamwork.