

Project Title

Reduce Preparation Time from In Procedure Room To Procedure Start Time

Project Lead and Members

Project lead: Veronica Kwok

Project members: Nur Idra, Lim Jia Min, Tan Yue Fang, Nirmala Rani Kasirajan

Organisation(s) Involved

Ng Teng Fong General Hospital

Healthcare Family Group Involved in this Project

Medical, Allied Health

Applicable Specialty or Discipline

Cardiology, Radiology

Project Period

Start date: Jul-2017

Completed date: Dec-2018

Aims

To shorten the preparation time from 20 minutes to 10 minutes by December 2018.

Background

See poster appended / below

Methods

See poster appended / below

Results

See poster appended / below

Lessons Learnt

Reduced patient's anxiety is an influential factor for preoperative complications

Conclusion

See poster appended / below

Project Category

Care & Process Redesign, Quality Improvement, Workflow Redesign, Value Based
Care, Patient Satisfaction

Keywords

Cardiovascular Lab Procedure, Preparation Time

Name and Email of Project Contact Person(s)

Name: Veronica Kwok

Email: veronica_kwok@nuhs.edu.sg

REDUCE PREPARATION TIME FROM IN PROCEDURE ROOM TO PROCEDURE START TIME

- SAFETY
- PRODUCTIVITY
- PATIENT EXPERIENCE
- QUALITY
- VALUE

VERONICA KWOK, NUR IDRA, LIM JIA MIN, TAN YUE FANG, NIRMALA RANI KASIRAJAN

Define Problem, Set Aim

Opportunity for Improvement

From Jun 2017 to Jun 2018, there was an increase in preparation time (more than 20 minutes) between in-procedure room and procedure start time for elective cardio cases. This caused unnecessary delay in treatment of patients, resulting in patients having to be fasted longer and increasing their anxiety while waiting for procedure.

Aim:

To shorten the preparation time from 20 minutes to 10 minutes by December 2018.

Establish Measures

Data from June 2017 to June 2018

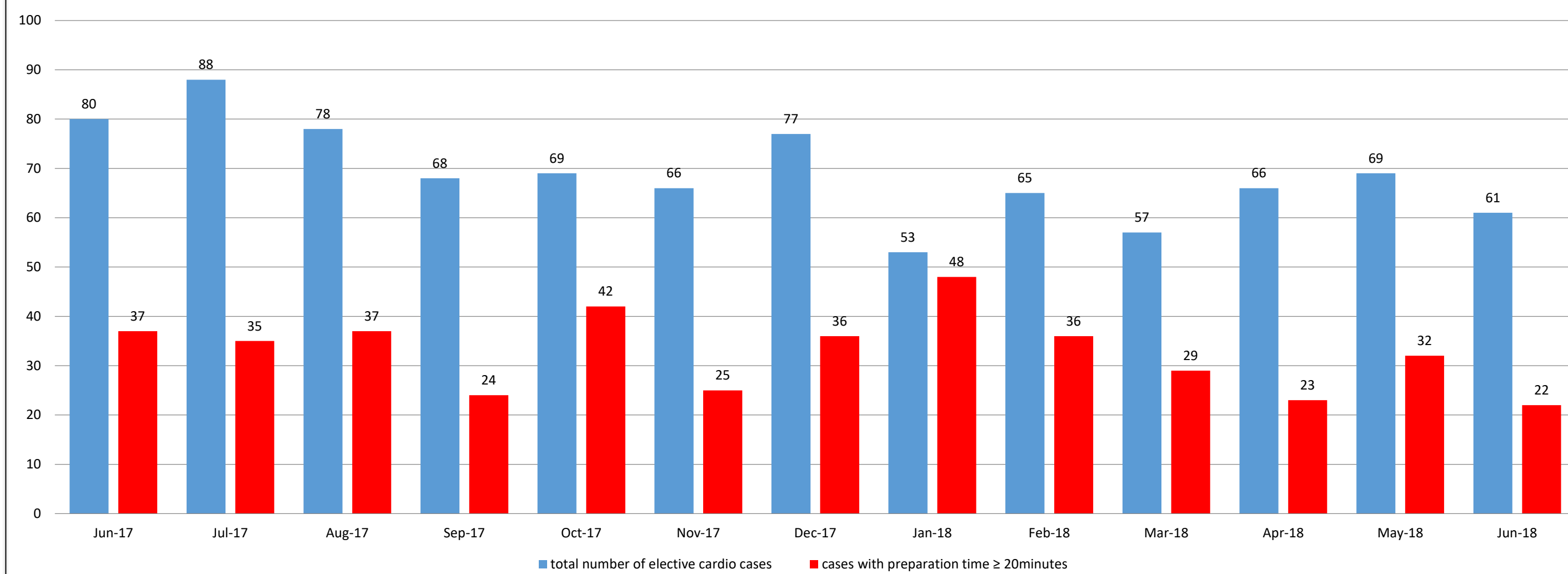


Figure 1.1 Result of total elective cardio cases and cases with preparation time ≥ 20 minutes -- from June 2017 – June 2018

Percentage of preparation time ≥ 20 minutes

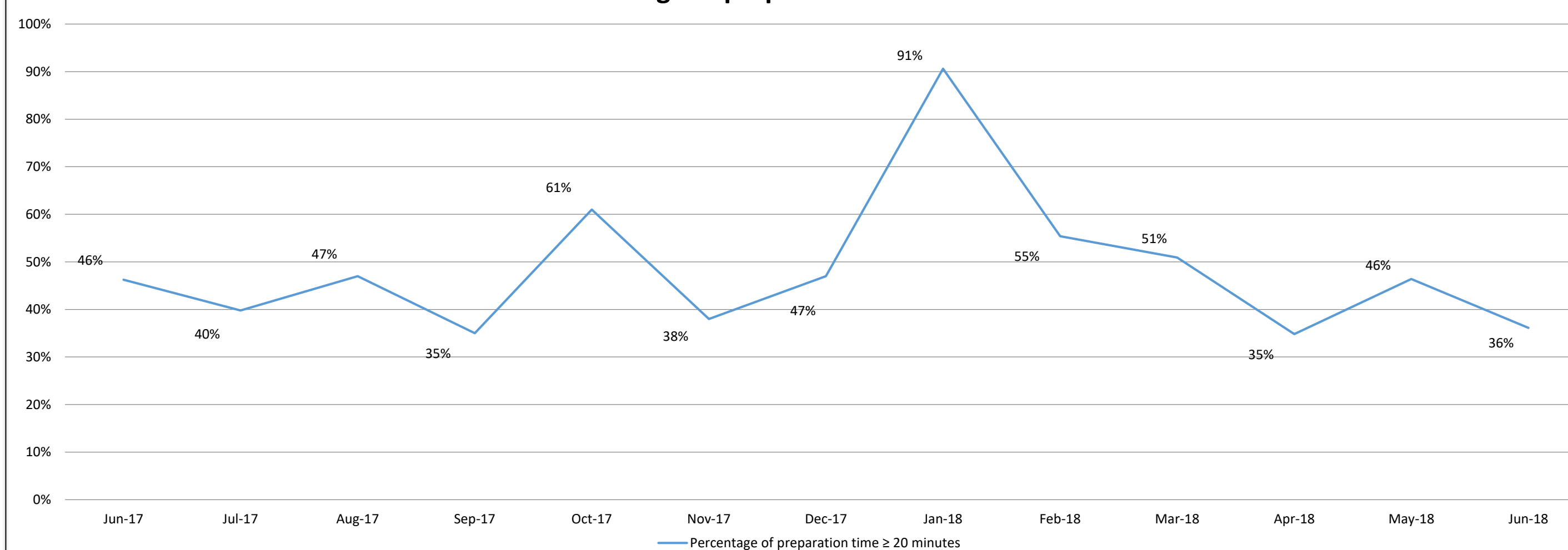
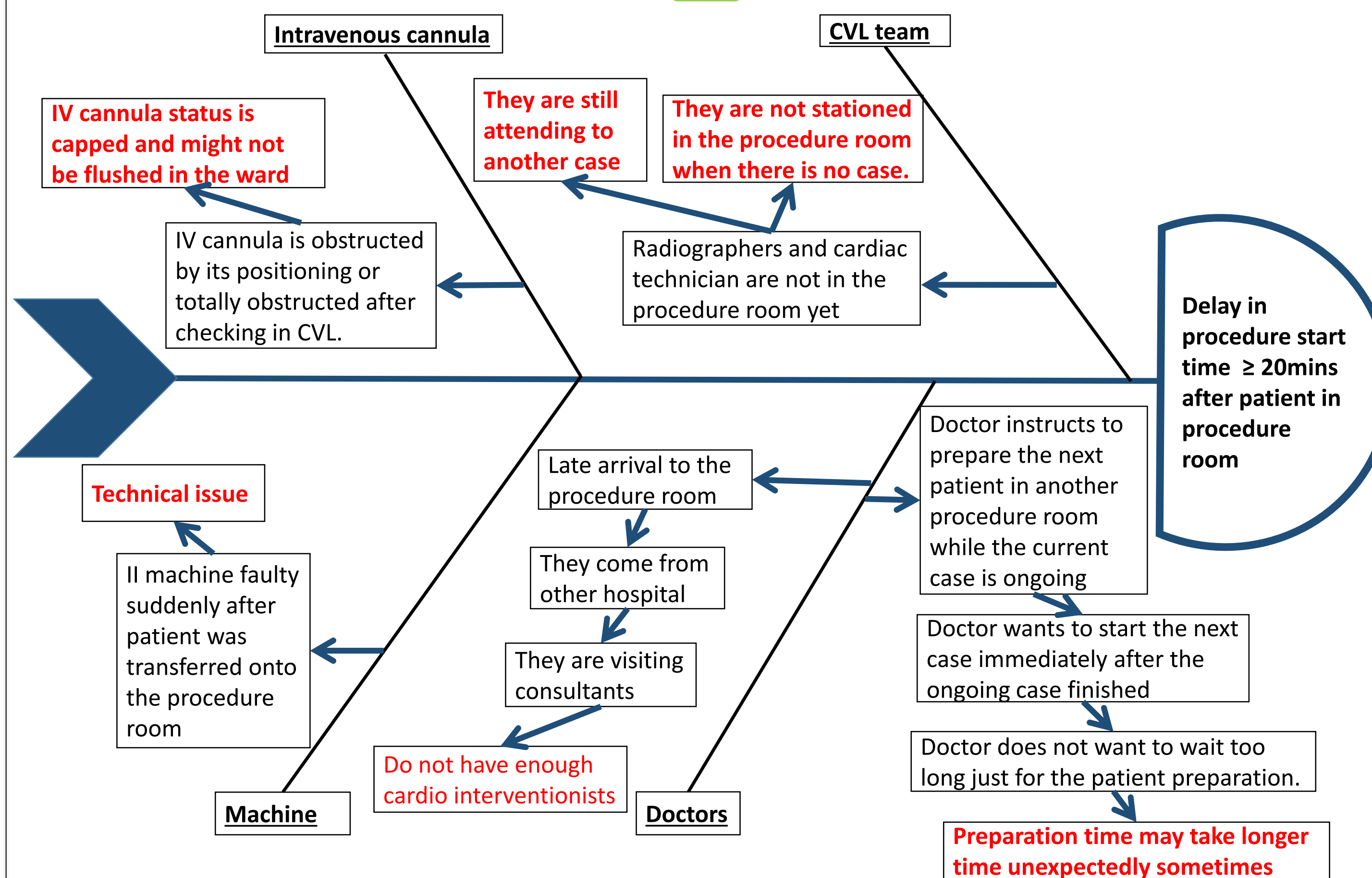
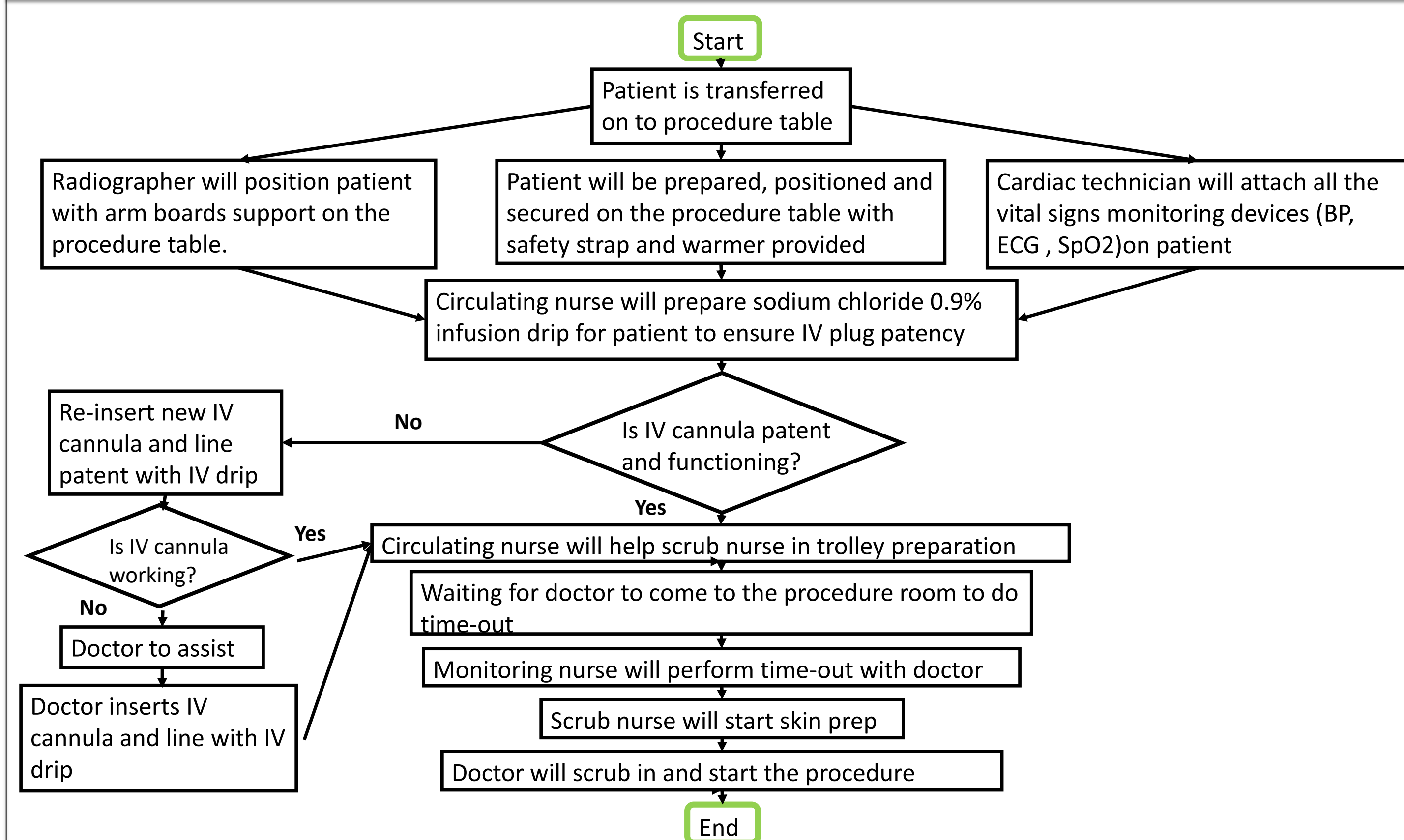


Figure 1.2 Result of percentage of cases required ≥20 minutes from June 2017 –June 2018

Analyse Problem



Select Changes

Rank	Potential Solutions
1	Doctor – Check with doctors the procedure start time before transferring patients to procedure room.
2	IV cannula - Inform ward staff to check patency of the IV cannula before sending patient for procedure.
3	CVL team - Ensure that the radiographer and cardiac technician are available before transferring patient to procedure room.
4	Machine - Ensure all the machines are in good working condition before starting procedure.

Test & Implement Changes

CYCLE	PLAN	DO	STUDY	ACT
1	<p>Staff nurse will confirm the procedure start time with doctor before transferring patient.</p> <p>Ensure radiographers and cardiac technicians are available.</p> <p>Ensure ward staff check the patency of IV cannula before sending the patient down for the procedure.</p> <p>Ensure all the machines are in good working condition before procedure start.</p>	<p>We carried out the plan from July 2018 onwards.</p> <p>We observed that less patients appear anxious when the preparation time is decreased.</p>	<p>The data shown in the run chart indicates that our plans are effective.</p>	<p>To adopt this change.</p>

Percentage of preparation time ≥ 20 minutes -- To reduce preparation time from 46% to 30%

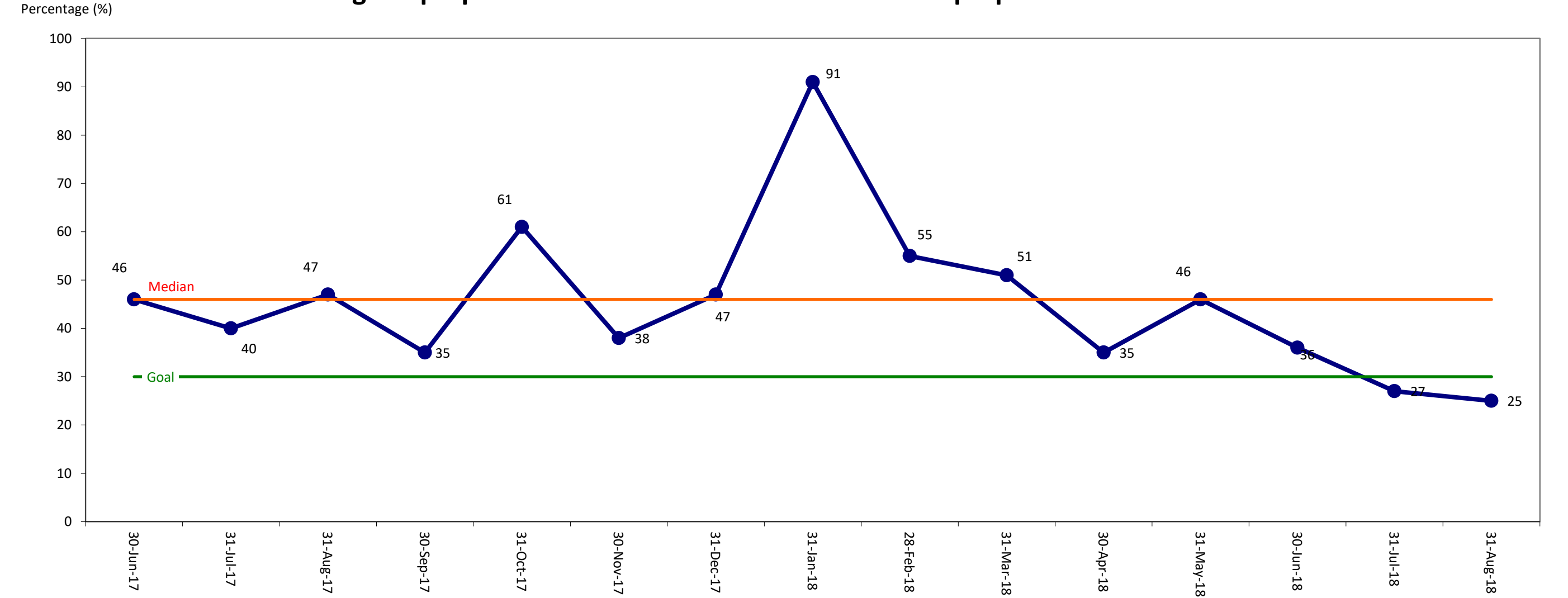


Figure 4: Percentage of cases used ≥ 20 minutes in procedure room and procedure start time in 2017 and 2018

Learning Points

Project Leader must clearly communicate the aim of the project to the team. All staff in the department should adopt best practices.

Key learnings

- ✓What is good? Reduced patient's anxiety which is an influential factor for preoperative complications.
- ✓What can be improved? Turn around time reduced resulting in more cases being handled (heavier workload).