



# STREAMLINING OF CLINICAL PATHWAY FOR PATIENT UNDERGOING ROOT CANAL TREATMENT TO CROWN ISSUANCE

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## Introduction

Arising from a senior management meeting in December 2015, it has been identified that there is opportunity to streamline process for patients undergoing root canal to crown issuance treatment.

A sample of 115 patient have been analyzed to determine the time taken for each procedure and the baseline turn around time. This is an improvement project which involves specialties; Endodontics, Periodontics and Prosthodontics in Restorative Department.

## Current Situation

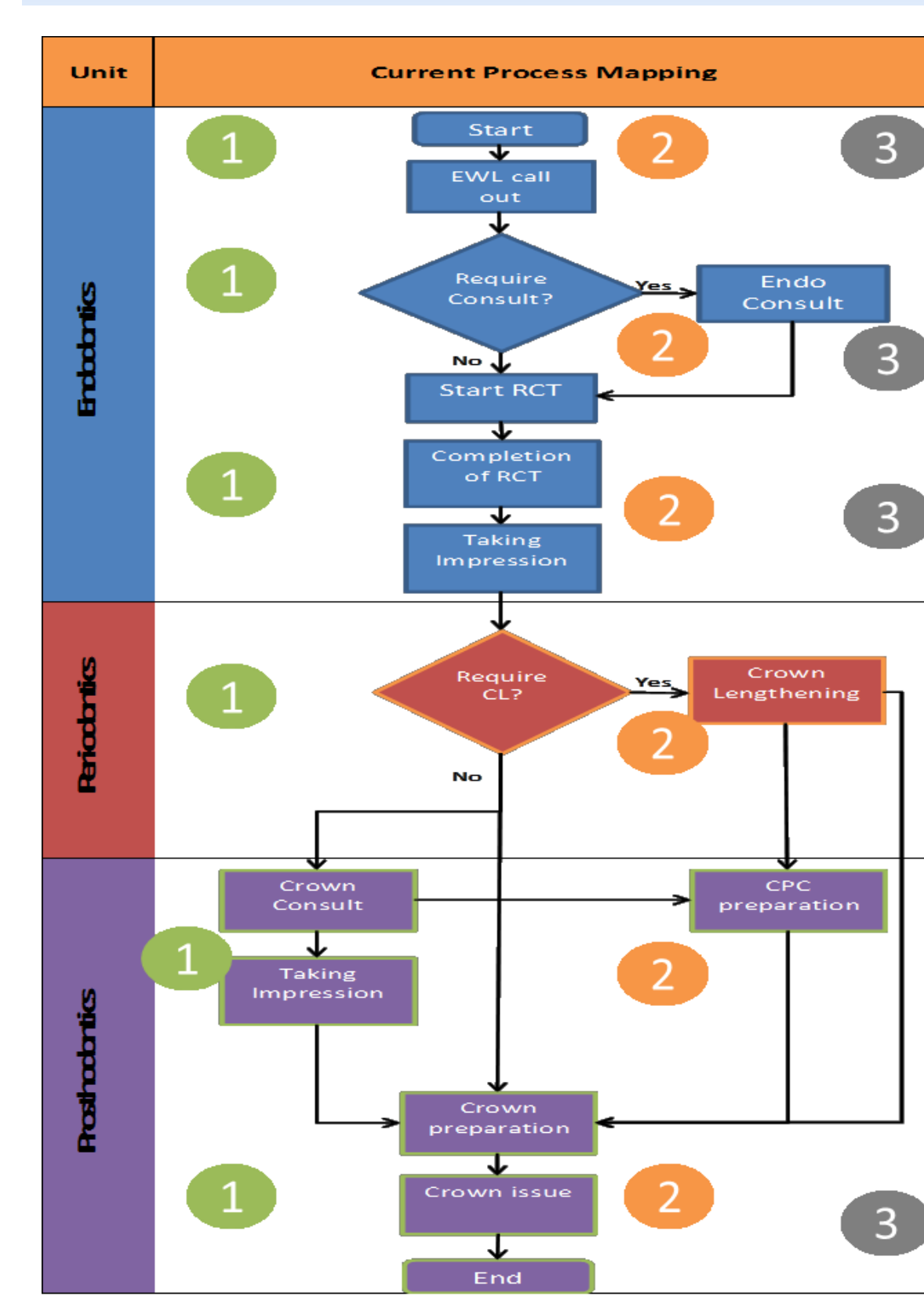


Figure 1

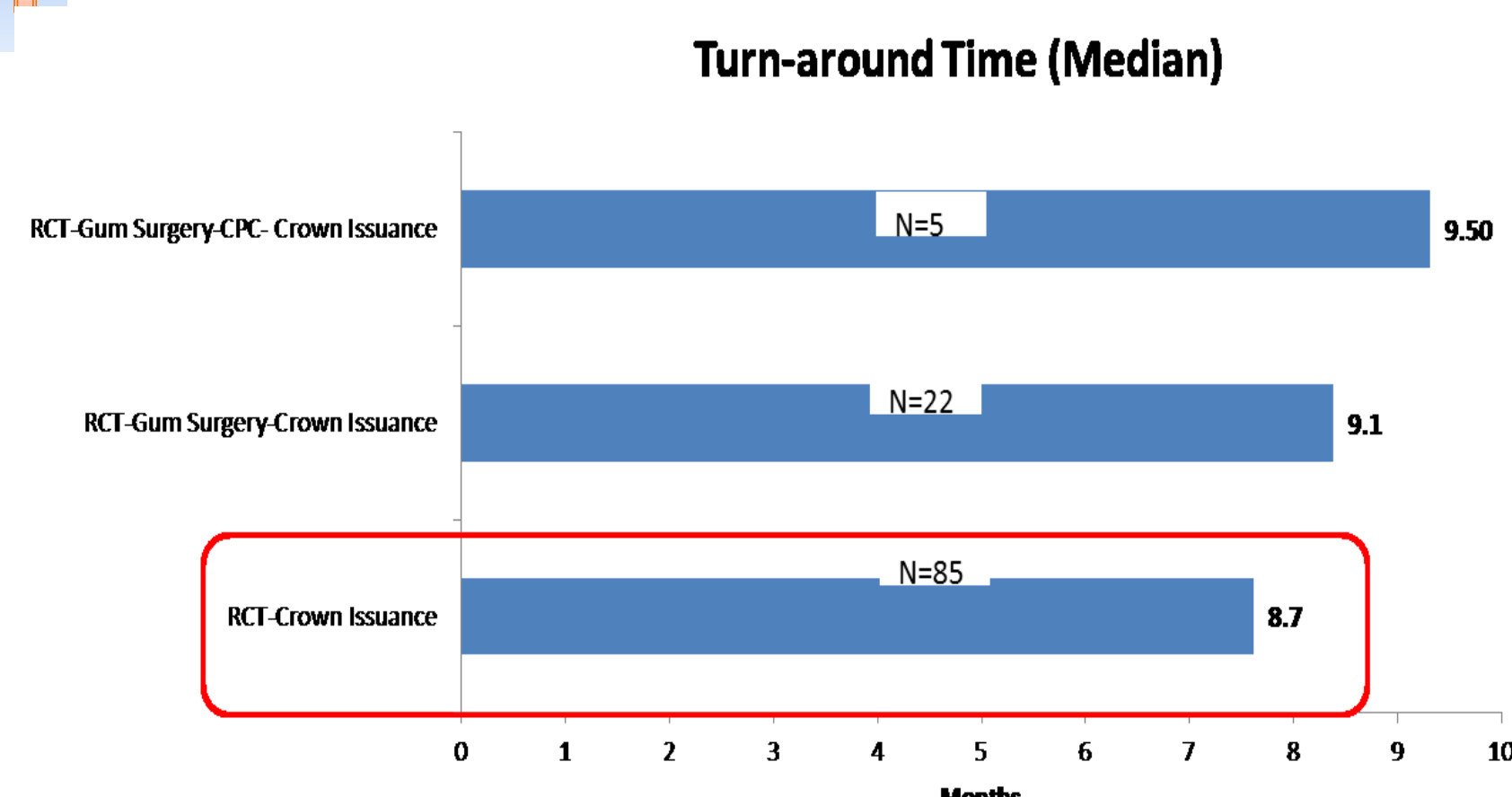


Figure 2

### Variance:

The team map out the current clinical pathways as shown in Figure 1 that the patient will go through, depending on their dental conditions:

1. RCT->CL->Crown Issuance

2. RCT->CL->CPC->Crown Issuance

3. RCT->Crown Issuance

The turnaround time for the different pathway and it ranges from 8.7 months to 9.50 months as shown in Figure 2.

## Root Cause Analysis

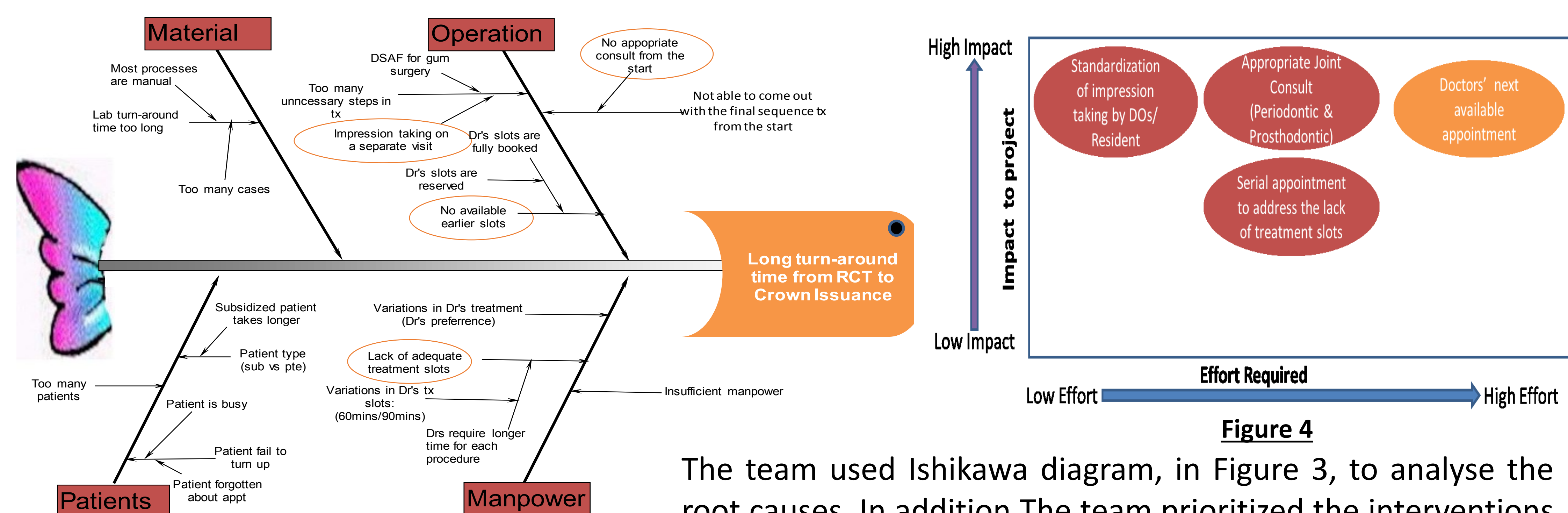


Figure 3

Figure 4

## Objective



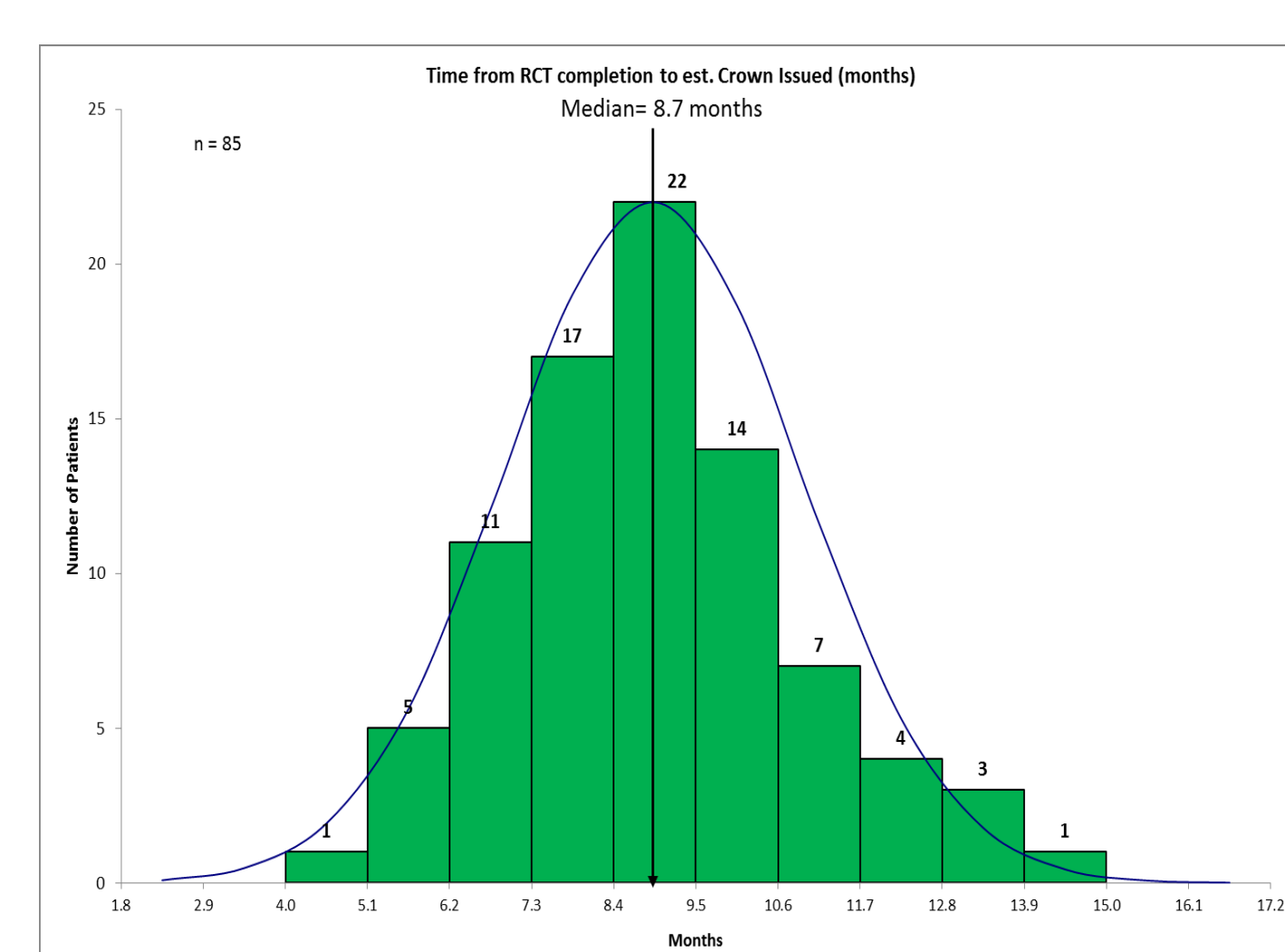
To streamline the clinical pathway from RCT to Crown Issuance so as to reduce the turnaround time from 8.7 month to 7 month in 15 month at clinic 4.

## Interventions

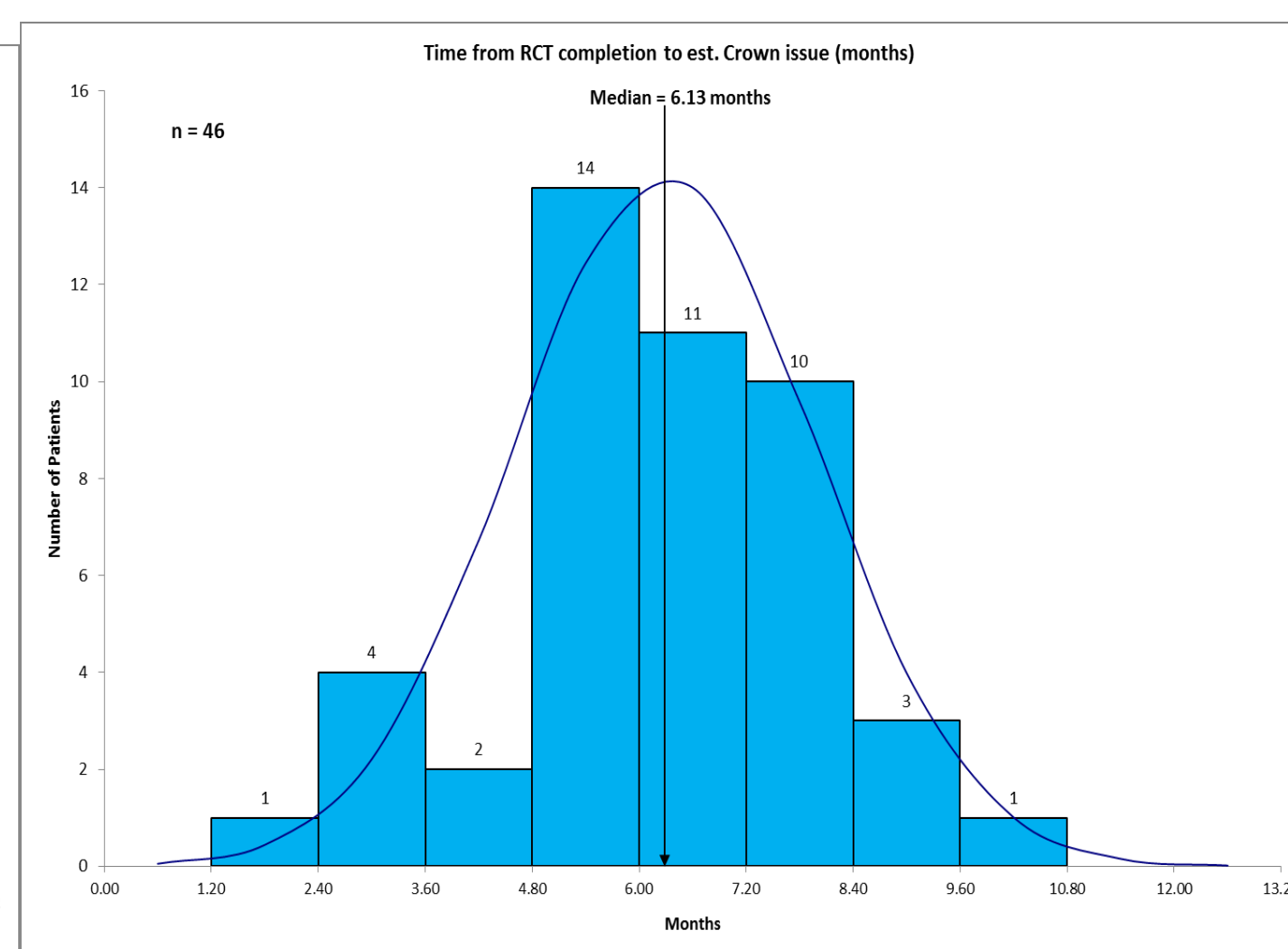
PDSA#	Intervention	Date of Intervention	Learnings from PDSA
1	Impression taking by DOs/Resident and Model tracing by CE	April 2016	•Appropriate clinicians received the study models. •Model tracing went smoothly when closely monitored by CE
2	Appropriate referrals	June 2016	•Majority of straightforward sub cases were referred to prosthodontics DOs for management
3	Appropriate consults	August 2016	•Majority of Endodontics residents were compliant with arranging for the appropriate consults
4	Effectiveness of serial appointment booking	October 2016	Within the same time frame, Turnaround time was <b>Baseline:</b> Turnaround time for no serial appointments was 8.7 months.  <b>After Interventions:</b> Turnaround time for serial appointments was 6.13 months.  Patients without serial appoints generally received their crowns almost up to 3 months later.

## Result

**Before Interventions**  
Median= 8.70 months



**After Interventions**  
Median= 6.13 months



There is a significant reduction in the turnaround time from **8.7 month to 6.13 month (30% improvement)** post interventions, which surpassed our target!

### Next Step:

- The interventions have proven their effectiveness and shown sustainability.
- The issue on doctor's next available appointment is still work in progress and the team is exploring the following additional intervention to address issue :
  - Ring-fenced certain clinical sessions for patient