

STREAMLINING OUT-PATIENT SERVICES: A Step Towards Reducing Patient Wait-time.

INTRODUCTION

OPDs act as a window to hospital services and a patient's impression of the hospital begins at the OPD. This impression often influences the patient's sensitivity to the hospital and therefore it is essential to ensure that OPD services provide an excellent experience for customers. It is also well-established that 8-10 per cent of OPD patients need hospitalization.

Stakeholders' Comments

- 'Why I have been given an appointment at 11:00am if my Doctor doesn't arrive at this time?' –*patient voice*.
- 'What is the purpose of booking an appointment if I still have to wait' –*patient voice*.
- Every half an hour my turn is extended in the queue, how long I have to wait if I don't have an appointment with Doctor? –*walk-in patient*
- 'As waiting time increases, it becomes difficult to handle patients' queries, each patient is told about cause of delay, it causes crowding around Nurse counter' –*nurse*

RATIONALE

- The purpose of study was to understand the OPD patient flow process and come up with reforms to reduce patient wait time and then measure the effect of the reforms. It was seen that 92% patient complaints in OPD were about long waiting time. 50.06% of OPD patients came in as walk-ins, yet there was no provision in appointment schedule for walk-in patients. So long waiting times for walk-in patients was one of the biggest challenge. As OPD is first point of contact for most of the patients, their experience here determines their behavior towards other hospital services.

AIM

To reduce patient wait time.

Objectives:

- To calculate the waiting time for appointment and walk-in patients.
- To study the relation of waiting time with number of walk-in patients.
- To assess the need for increasing the number of appointment slots, if any.
- To study the effect of slot redesigning on waiting time.

Methodology

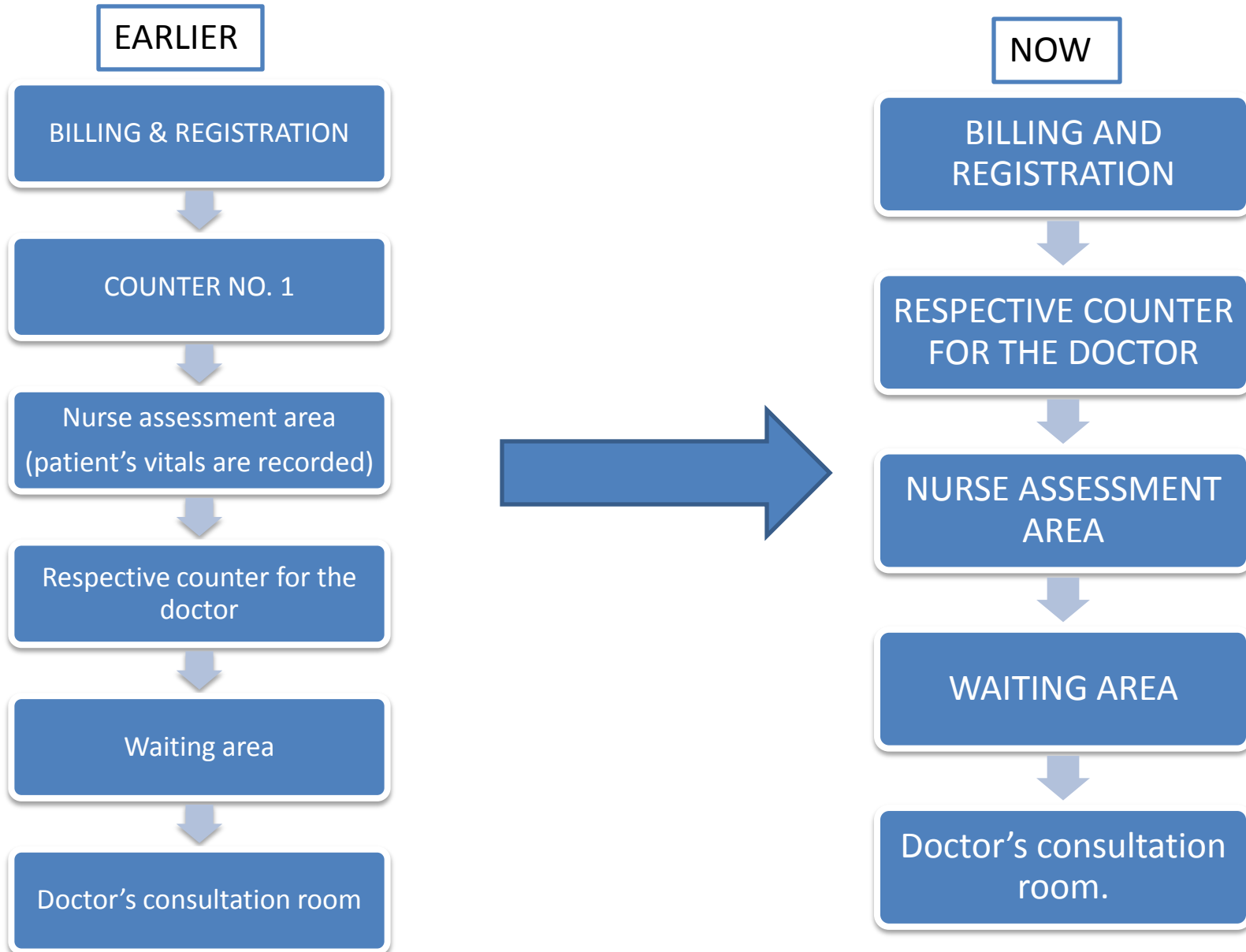
Sampling method: systematic stratified sampling method was used.

Sample size: 6% patients of all doctors were followed.

Study design: cross sectional analytical study.

Study area & duration: Gastroenterology Out-patient department of 1200 bedded multi-super specialty hospital. Duration of the study feb'14 to april'14.

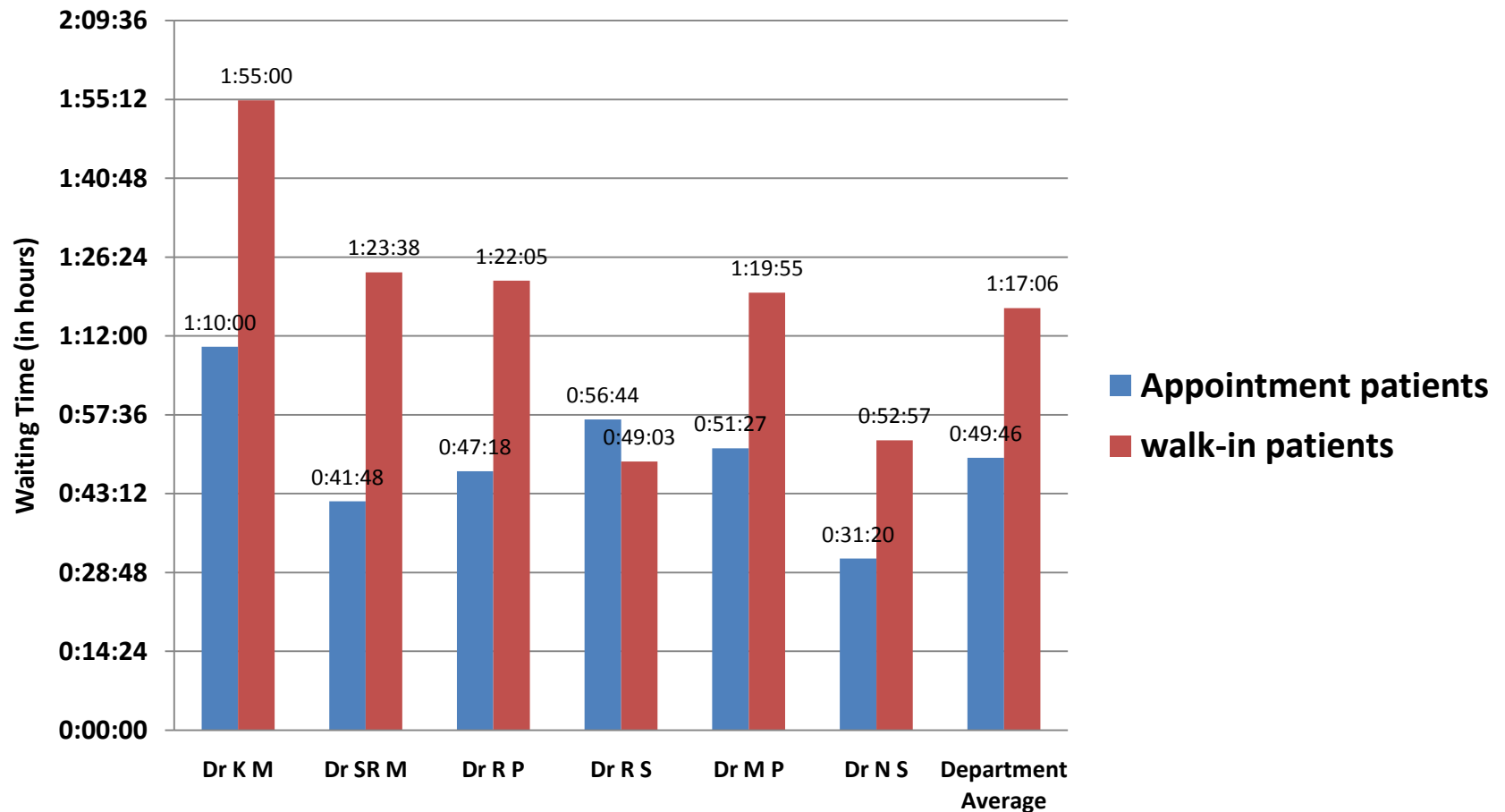
Patient flow



As a result...

- Simpler patient flow.
- Utilization of nurse at counter no. 1 was 104.16% whereas utilization of nurses at respective counters for doctors was 43.02%.
- Due to this new patient flow process, the need for nurse at counter no.1 was eliminated and utilization of other nurses increased to 67.41%.
- Thus leading to better manpower utilization.

Doctor-wise Waiting Time



Major Causes of Long Waiting Time

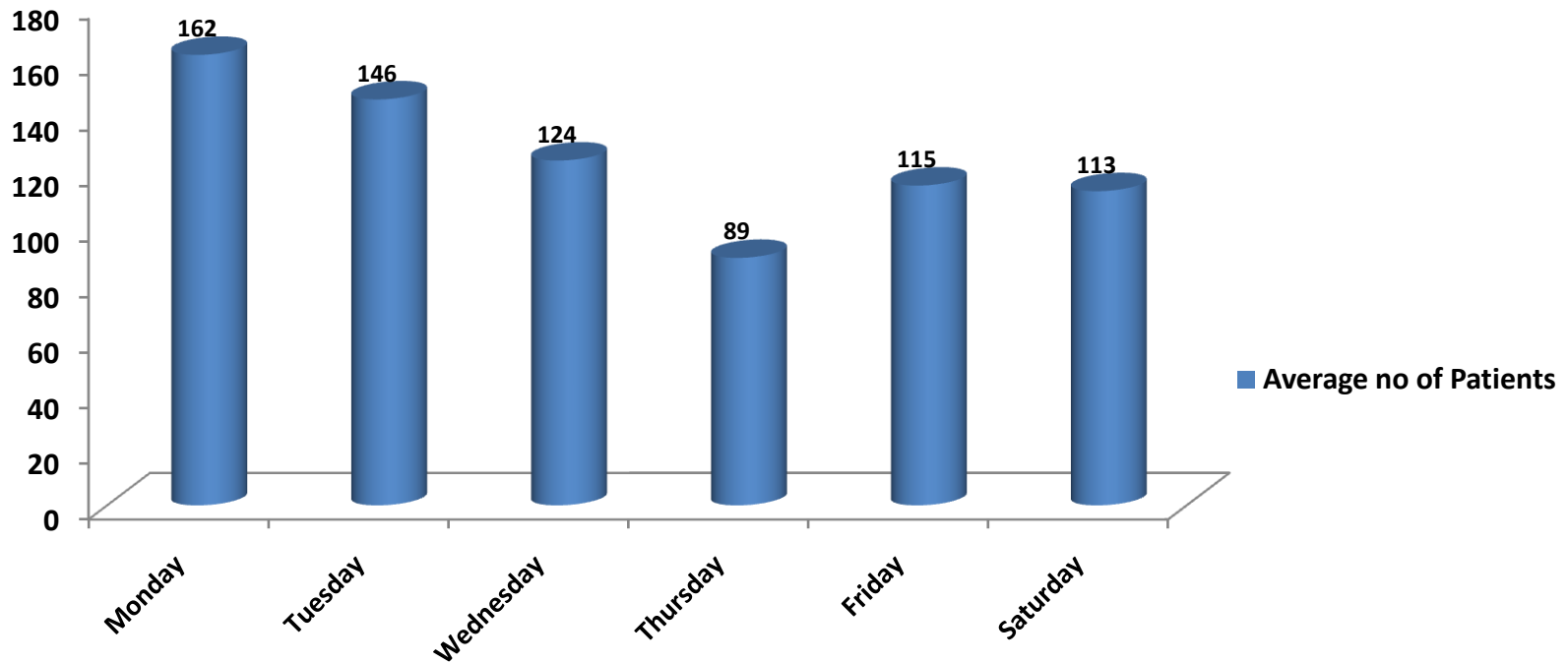
- 1) Delay in OPD start time.
- 2) Uneven patient flow during the week.
- 3) Large number of walk-in patients and no provision in appointment schedule for them.

Doctor	Average Delay in starting OPD
Dr K M	0:43:20
Dr M P	0:27:30
Dr N S	0:26:30
Dr R P	1:06:20
Dr S M	0:31:00
Dr S B	0:18:00
Department Average	0:35:27 min

Suggestion:

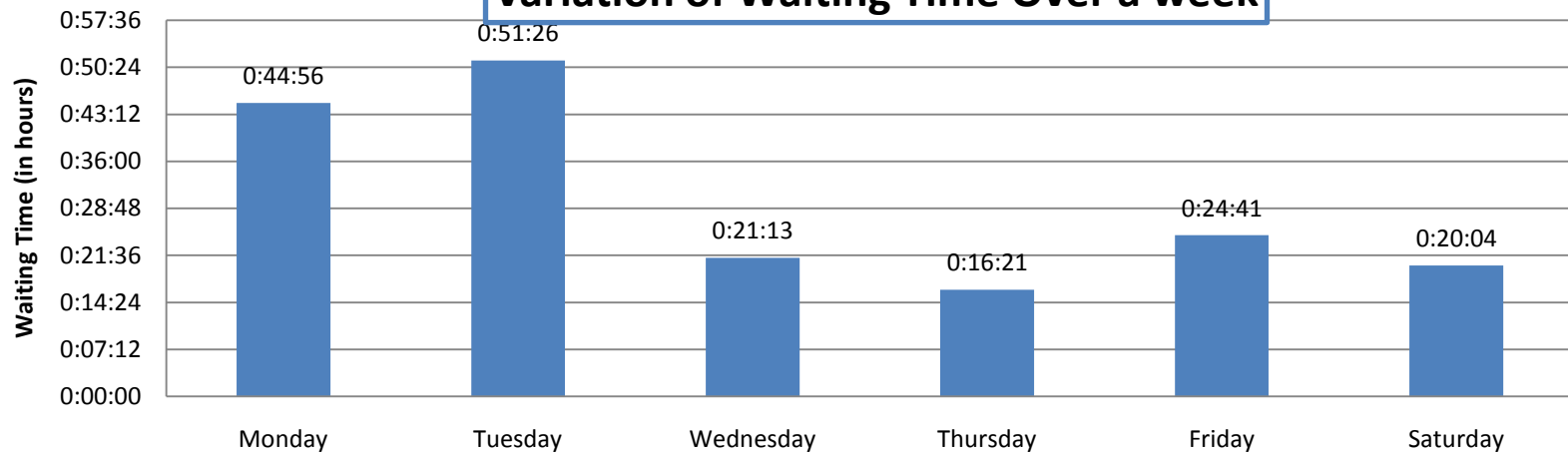
Delay of more than 15min should be recorded and weekly report to be shared with Chairman.

Uneven Patient Flow Over the Week

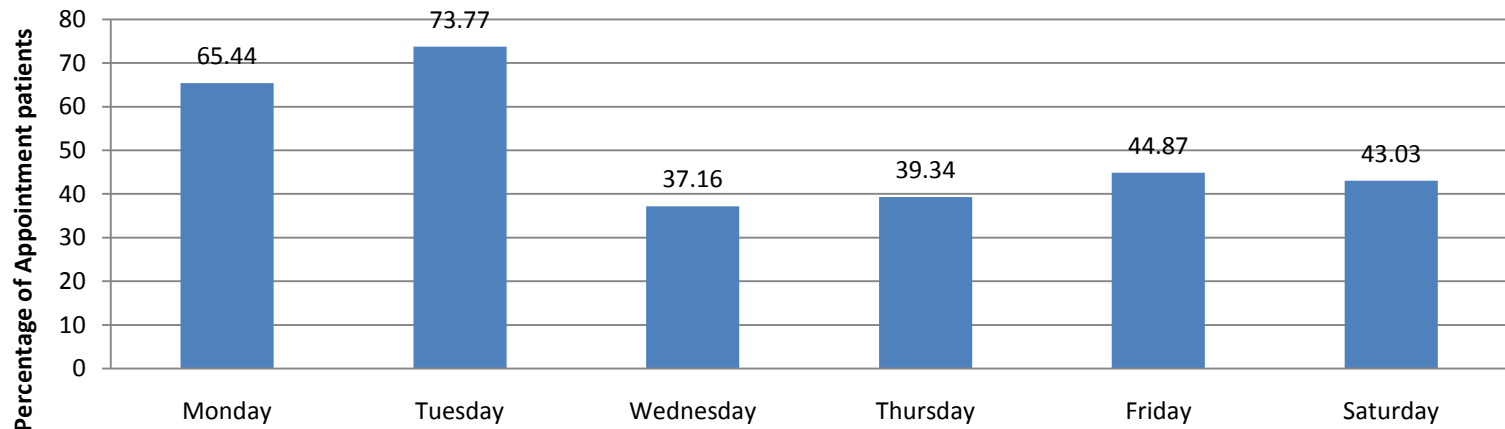


Variation of waiting time over the week follows the same pattern as the variation in number of consultations over the week and number of walk-ins. Days with more number of consultations and walk-ins have more waiting time.

Variation of Waiting Time Over a week



Percentage of Walk-ins over a week



The value of R is 0.9835. This is a strong positive correlation

Suggestion:

Encourage more appointments on Wednesday, Thursday and Saturdays.
Encourage patients to book a prior appointment.

Average Number of Consultations and Number of Appointment Slots Available

DOCTOR	consultations	slots	shortage
Dr K M	33	18	15
Dr M P	20	12	8
Dr N	9	9	0
Dr N S	20	12	8
Dr R P	28	18	10
Dr R S	58	45	13
Dr S M	18	12	6
Dr S B	22	12	10

Suggestions:

- Redesigning the appointment slots.
 - a) Increasing number of appointment slots.
 - b) Introducing buffer slots among appointment slots.
- Educating patients about booking an appointment before coming for consultation.
(Bilingual Leaflets for OPD patients)
- Designated 'On call' Gastro-Physician for walk-in patients.

Redesigning slots for Dr NS

Steps Taken

Impact

Total number of slots were increased from 12 to 20.



Created room for follow up patients, who are now motivated to book appointments.

Introduction of one Buffer slot after every three appointment slots.



Walk-in patients are accommodated in buffer slots.

Training the nursing staff for set business rule for prioritizing the patients



Better queue management.

Appointment Scheduling for Dr NS

EARLIER (12 slots)

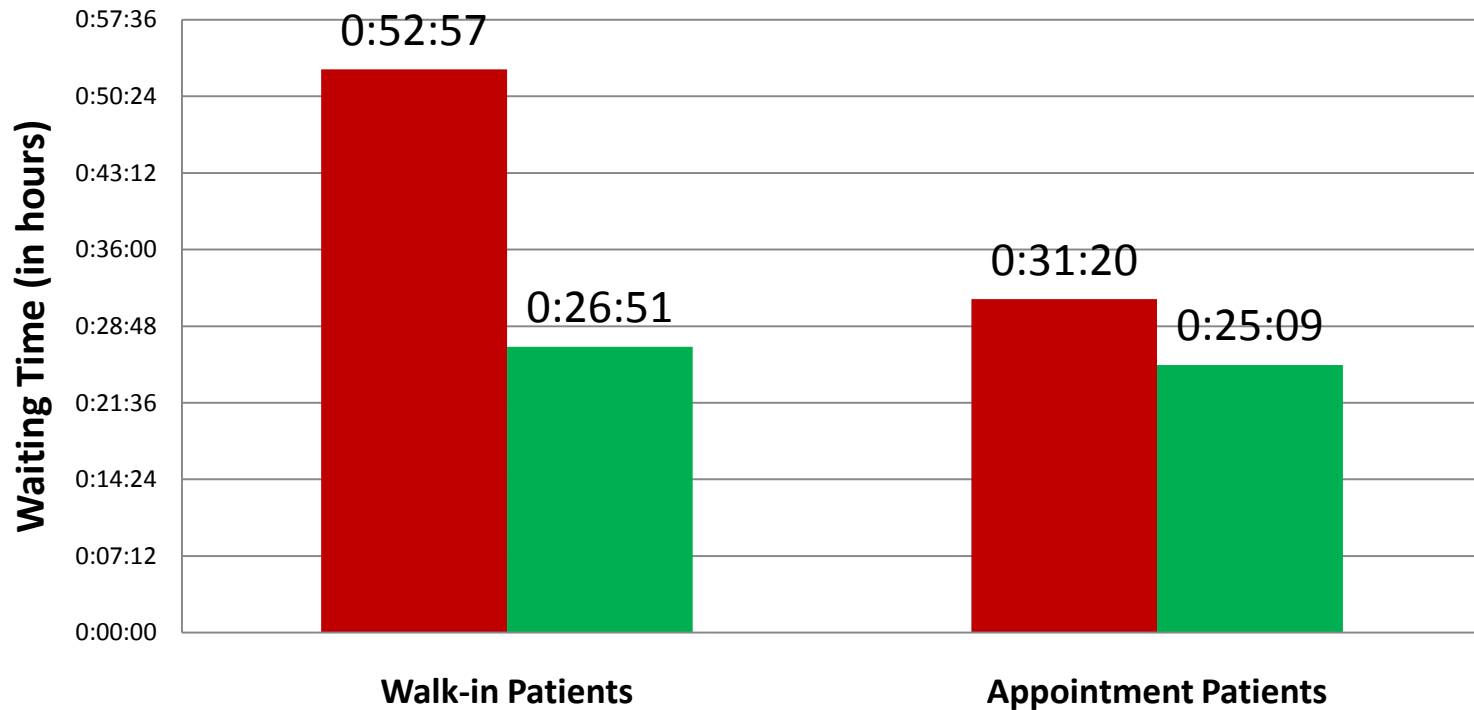
Time	Patient Details	visit type	Reason for Contact	Contact Details
12:00-12:10				
12:10-12:20				
12:20-12:30				
12:30-12:40				
12:40-12:50				
12:50-1:00				
1:00-1:10				
1:10-1:20				
1:20-1:30				
1:30-1:40				
1:40-1:50				
1:50-2:00				



NOW (20 slots)

Time	Patient Details	visit type	Reason for Contact	Contact Details
12:00-12:06				
12:06-12:12				
12:12-12:18				
12:18-12:24	blocked			
12:24-12:30				
12:30-12:36				
12:36-12:42				
12:42-12:48	blocked			
12:48-12:54				
12:54-1:00				
1:00-1:06				
1:06-1:12	blocked			
1:12-1:18				
1:18-1:24				
1:24-1:30				
1:30-1:36	blocked			
1:36-1:42				
1:42-1:48				
1:48-1:54				
1:54-2:00	blocked			

Result of Redesigning The Slots



*Waiting time of walking patients and appointment patients decreased by **49.29%** and **19.73%** respectively.*

THANK YOU