Current Situation & Problem

- **Current Situation**

Turn Around Time

Mean:
71 minutes
95th Percentile:
150 minutes

- **Problem Prioritization**

Pareto Analysis is used to prioritize identified problems.

The study focuses in addressing the top 3 problems identified, namely:
1) Queuing system of consult cubicles. Multiple queues.
2) Patient Appointment Scheduling.
3) Non-value adding procedures

Background of Clinic E

Clinic E is one of the twenty specialist outpatient clinics situated in the National University Hospital (NUH). It provides eye consultation services mainly to subsidized patients. As NUH is a teaching hospital, the clinic is also committed to provide training and teaching to its clinical staffs. As such, around one-third of the doctors in Clinic E are trainee doctors.
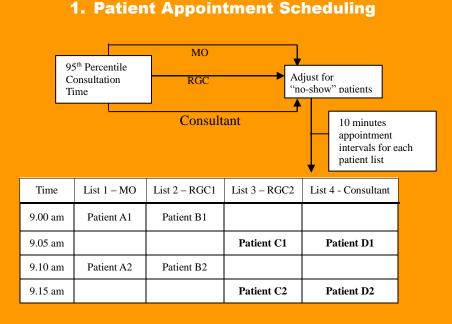
Project Objective

- **Objective**
  - To reduce Mean Patient's Turnaround Time
  - To reduce 95th percentile of Patient's Turnaround Time.

Patient's Turnaround time is defined as the total duration a patient spends in the clinic, starting from the time he enters the clinic until he leaves.

Solution Approaches

1. Patient Appointment Scheduling

Time	List 1 – MO	List 2 – RGC1	List 3 – RGC2	List 4 - Consultant
9.00 am	Patient A1	Patient B1		
9.05 am			**Patient C1**	**Patient D1**
9.10 am	Patient A2	Patient B2		
9.15 am			**Patient C2**	**Patient D2**

2. Process Redesign

30% of the Patients need to do dilatation. They will wait for more than 1 hour for consultation after Visual Acuity check. This is mainly due to the series process they are experiencing currently.

In the proposed model, patients who need to do dilatation will wait for consultation calling and wait their eyes to be dilated at the same time. Therefore reduce their average waiting time.

3. Work Standardization

The standardization work chart is designed to reduce the service variability of the nurses, which also incorporate the new designed process.
Red color word - an action that the nurse needs to perform
Blue color word - the object that the action is act upon
Green color word - the destination of the action

Results & Recommendations

Recommendation	Estimated Result
- Extend schedulable time per day from 5.5 hours to 6 hours - Plan 1 patient every 10 minutes for each and every patient list	- Reduce mean turn around time from 71min to 53.6 min - Reduce 95th percentile turn around time from 150min to 103.6 min
- Remove "wait for eye to be dilated" process	
- Standardize arrangement of case notes - Standardized work chart	- Stabilize process - Reduce 95th percentile TAT

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