

Project Title

Sustainability Phase: Transforming Hindrances to Opportunities & Resources (THOR)

Project Lead and Members

Project lead: Dr Don Pek Chern Kuok

Project members: Dr Wong Wan Yi, Dr Jacob Chin Yu Hang, Dr Kwok Jian Wah, Ms Pauline Gan Seok Choon, Ms Alicia Chang Sook Ping, Mr Ryan Tay Hsiung Jren, Ms Angela Ang Bee Peng, Ms Chua Ming Shan, Ms Ruby Cheong Sok Yee, Mr Darius Seow Zhi Wei

Organisation(s) Involved

Tan Tock Seng Hospital

Healthcare Family Group(s) Involved in this Project

Healthcare Administration, Medical, Nursing

Applicable Specialty or Discipline

Ophthalmology, PACE

Project Period

Start date: 04 June 2018

Completed date: 05 January 2020

Aims

Improving the percentage of live listed patients at TTSH Day Surgery Operating Theatre and NHG 1-Health from 31% to 100% over a sustained period

1. Live Listed Patients: Patient confirms operation date on same day after seeing doctor
2. Cohort of Patients:
 - Inclusion Criteria: TTSH subsidised cataract patients
 - Exclusion Criteria: Non-cataract surgeries

Project Attachment

See poster attached/below

Background

See poster attached/below

Methods

See poster attached/below

Results

See poster attached/below

Lessons Learnt

1. CPIP is elegant tool to identify the crux to a complex process
2. Given enough manpower, money and time, only the symptom of an underlying problem can be solved, not the problem itself.
3. Changing upstream processes have big impact on downstream systems

Conclusion

See poster attached/below

Additional Information

Accorded the NHG Quality Day 2021 (Category A: Improving and Sustaining Quality & Safety) Best Award

Project Category

Care & Process Redesign

Quality Improvement, Job Effectiveness

Technology

Digitalisation

Keywords

Cataract Surgery, PACE, Live listing

Name and Email of Project Contact Person(s)

Name: Dr Chin Yu Hang, Jacob

Email: Jacob_YH_CHIN@ttsh.com.sg

Dr Don, Pek Chern Kuok
Department of Ophthalmology

Mission Statement

Improving the percentage of live listed patients at TTSH Day Surgery Operating Theatre and NHG 1-Health from 31% to 100% over a sustained period

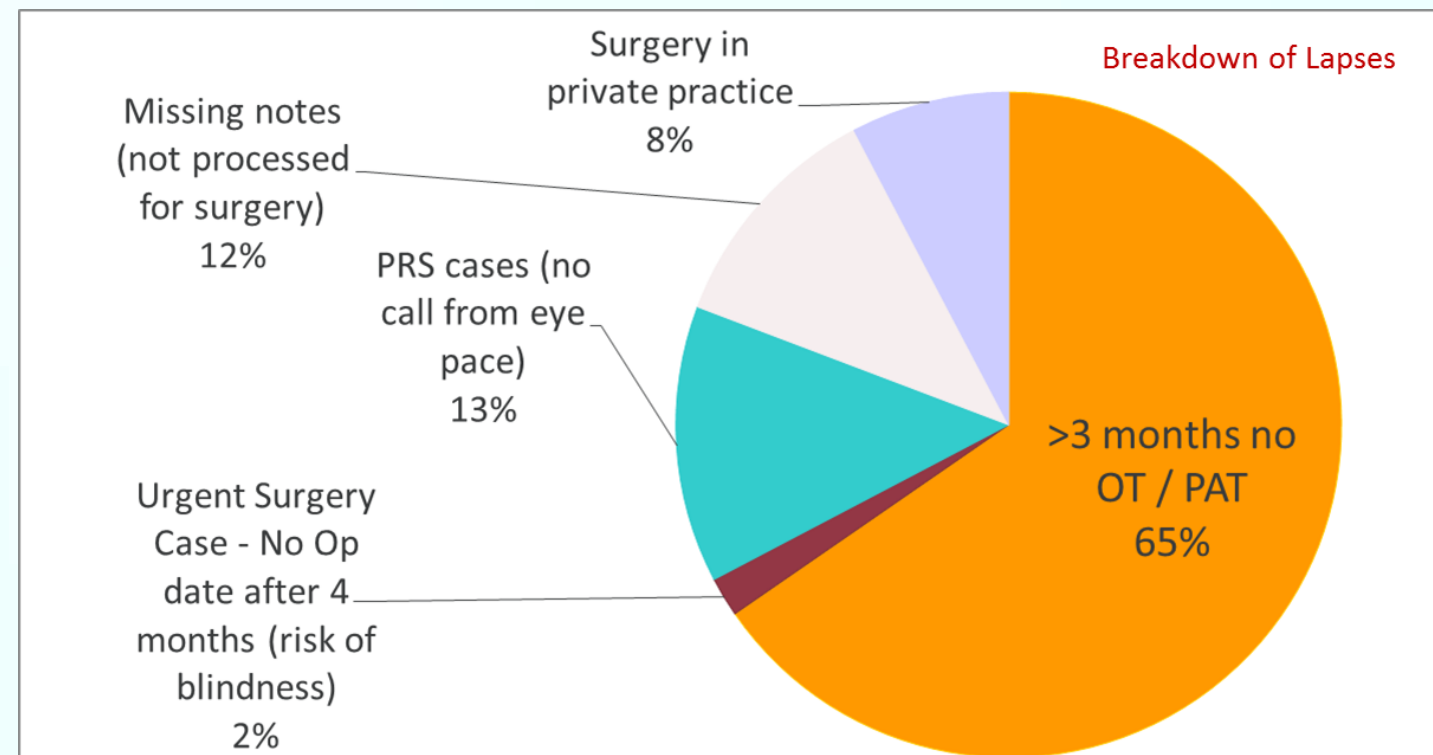
1. Live Listed Patients: Patient confirms operation date on same day after seeing doctor
2. Cohort of Patients:
 - Inclusion Criteria: TTSH subsidised cataract patients
 - Exclusion Criteria: Non-cataract surgeries

Team Members

Role	Name	Designation
Team Leader	Dr Don Pek Chern Kuok	TTSH Eye Senior Consultant, CIC Eye PACE Director NHG 1-Health, Eye
Team Members	Dr Wong Wan Yi	TTSH Anaesthesia Consultant
	Dr Jacob Chin Yu Hang	TTSH Eye Associate Consultant (EMR)
	Dr Kwok Jian Wah	TTSH Eye PACE Resident Physician
	Ms Pauline Gan Seok Choon	TTSH Eye Admin Director
	Ms Alicia Chang Sook Ping	TTSH Operating Theatre Nursing Manager
	Mr Ryan Tay Hsiung Jren	TTSH Senior Optometrist (Roster)
	Ms Angela Ang Bee Peng	TTSH Eye PSA Executive (Roster)
	Ms Chua Ming Shan	TTSH Eye PSA Supervisor
	Ms Ruby Cheong Sok Yee	TTSH Eye PACE Nurse Screening
	Mr Darius Seow Zhi Wei	TTSH Eye Clinic + PACE Phone Listing
Patients and NOK	Via Survey	
Sponsor	Adj A/Prof Vernon Yong Khet Yau, TTSH Eye Head of Department	
Mentor	Adj A/Prof Tai Hwei Yee, NHG Group Chief Quality Officer	

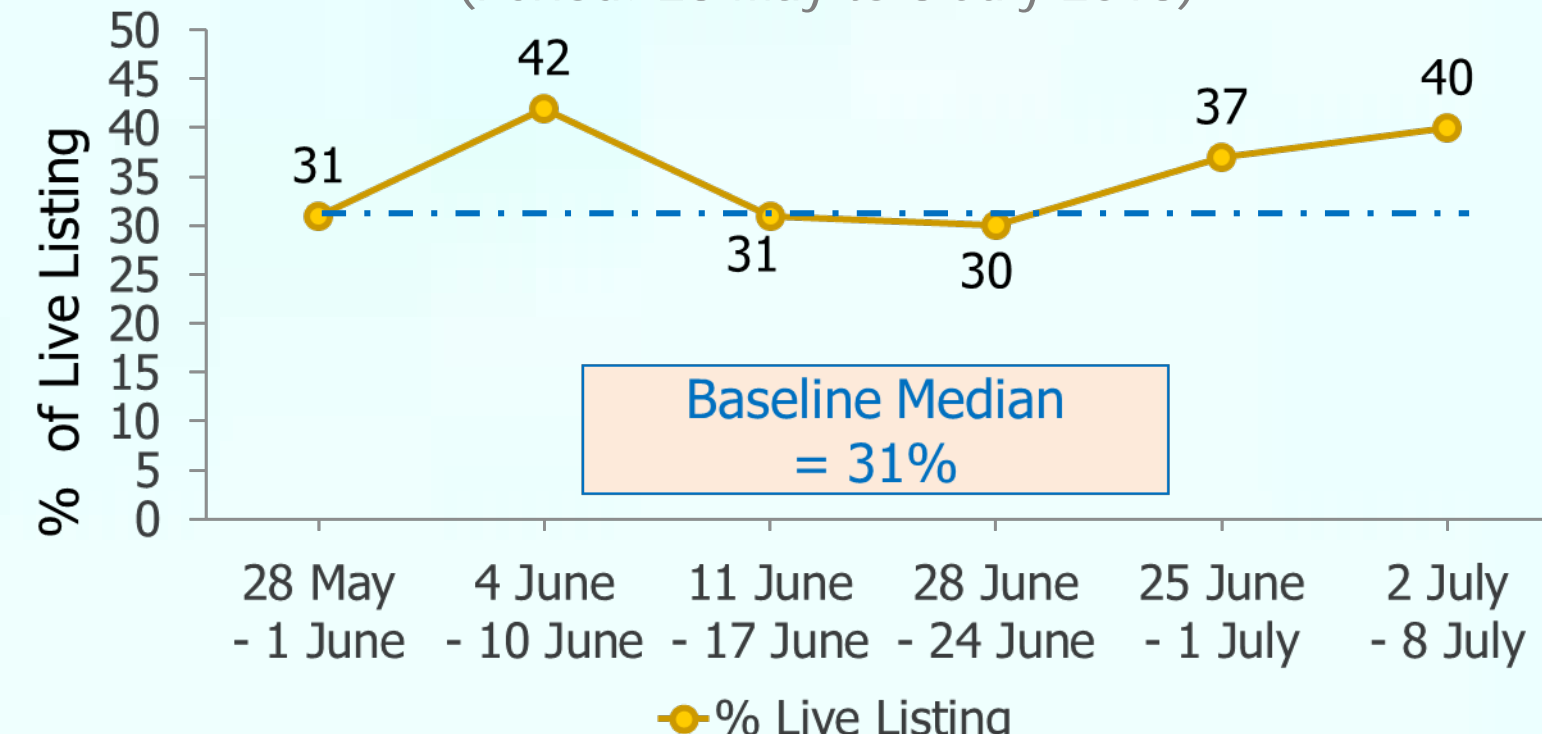
Evidence for a Problem Worth Solving

Audit 1-30 June 2018: ~80 of 700 cases



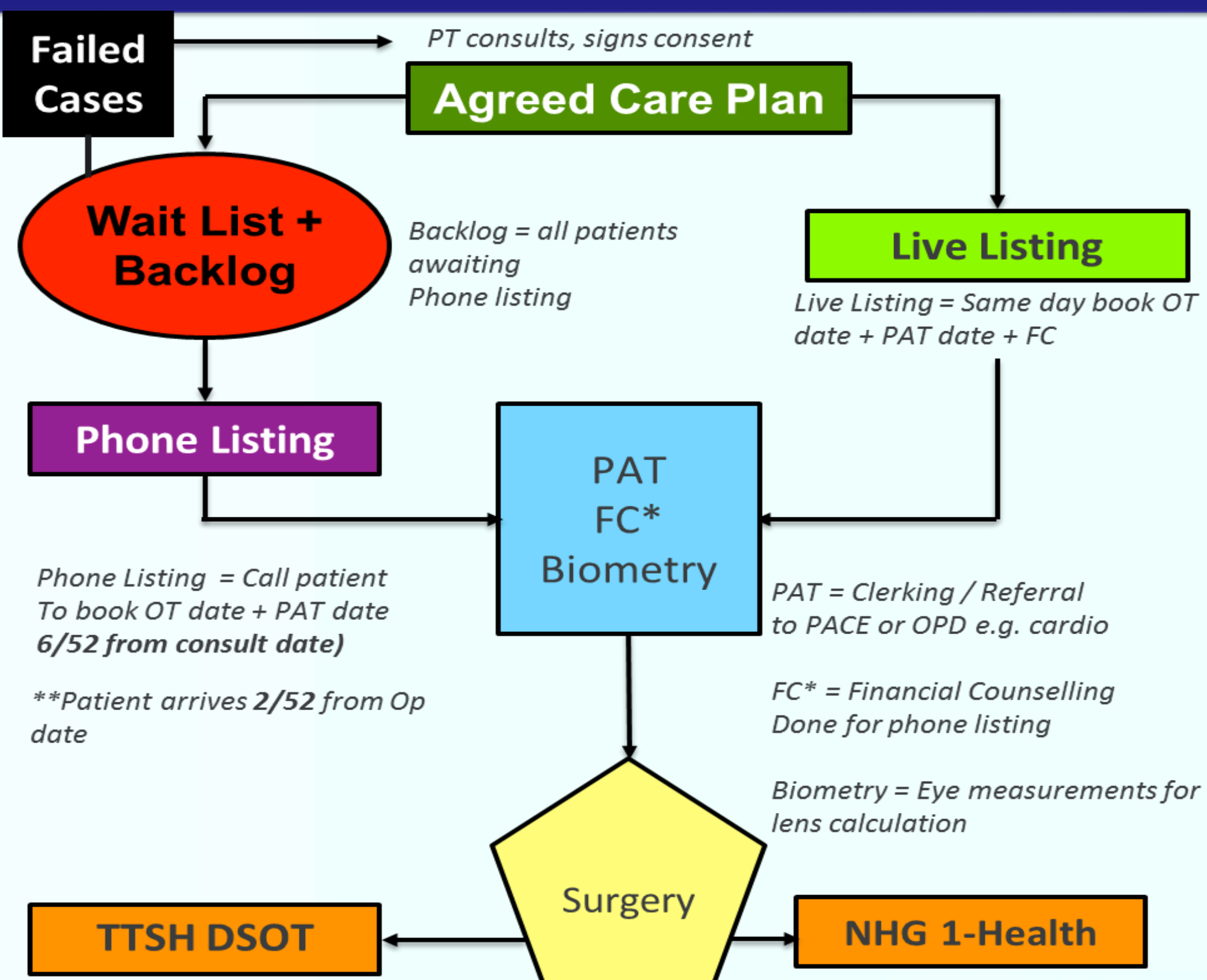
52 out of 80 Cases showed significant lapses resulting in inability to provide clinical needs of patients

% Live Listing Runchart
(Period: 28 May to 8 July 2018)



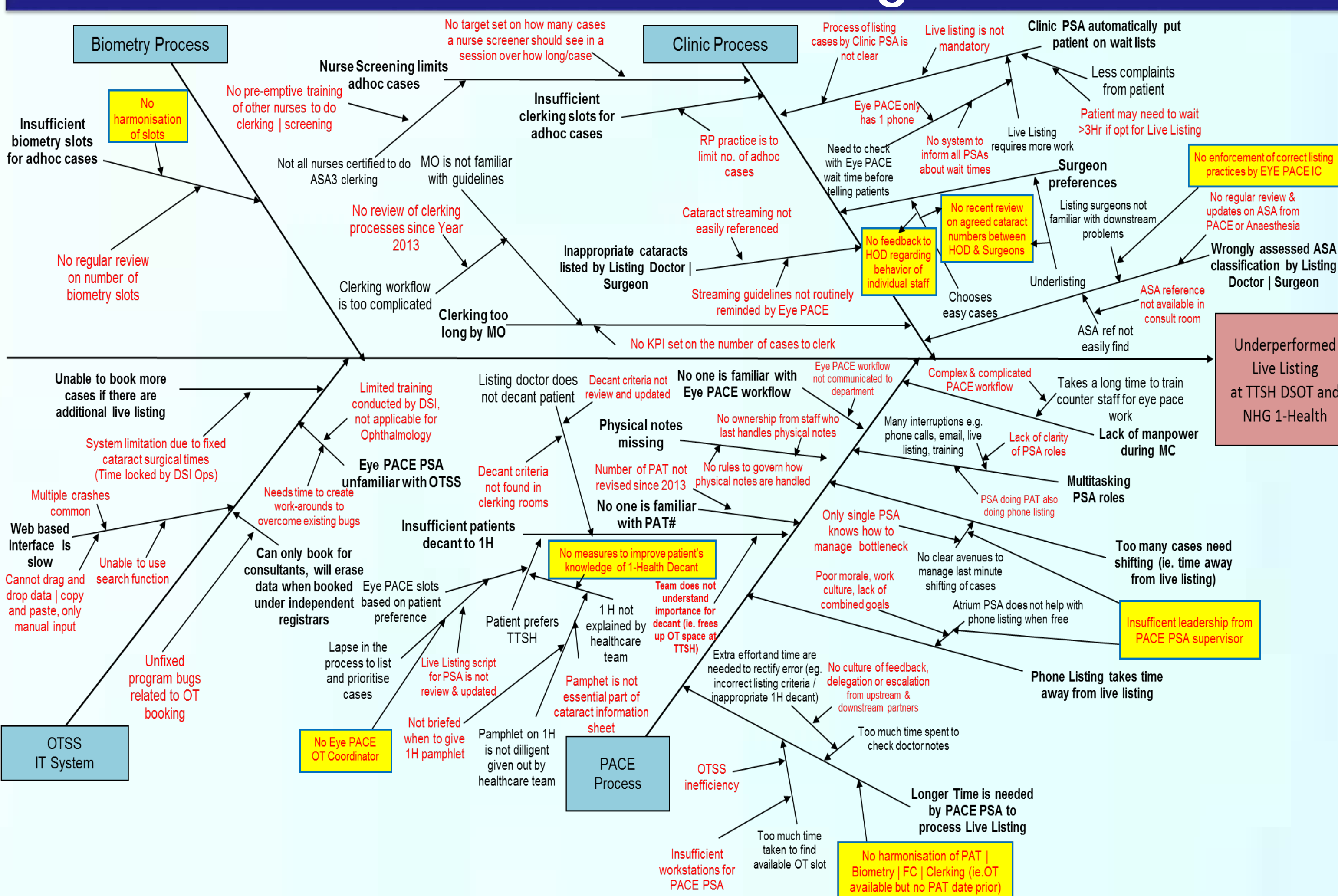
Period	28 May - 1 June	4 June - 10 June	11 June - 17 June	28 June - 24 July	25 June - 1 July	2 July - 8 July
Total Listed	173	116	161	182	149	162

Flow Chart of Process

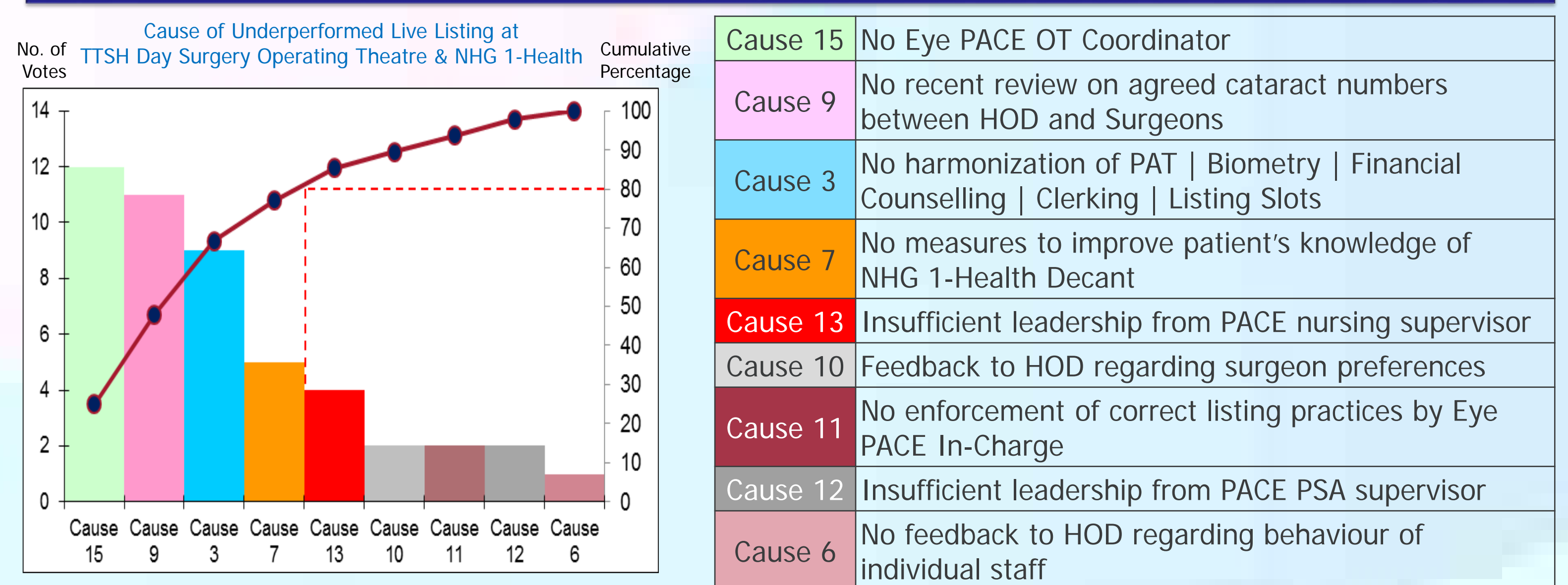


Abbreviation: PT = Patient; PAT = Pre Admission Test; FC = Financial Counselling; OT = Operating Theatre; OPD = Outpatient Department; PACE = Pre-Admission Counselling and Evaluation; Cardio = Cardiology

Cause and Effect Diagram



Pareto Chart

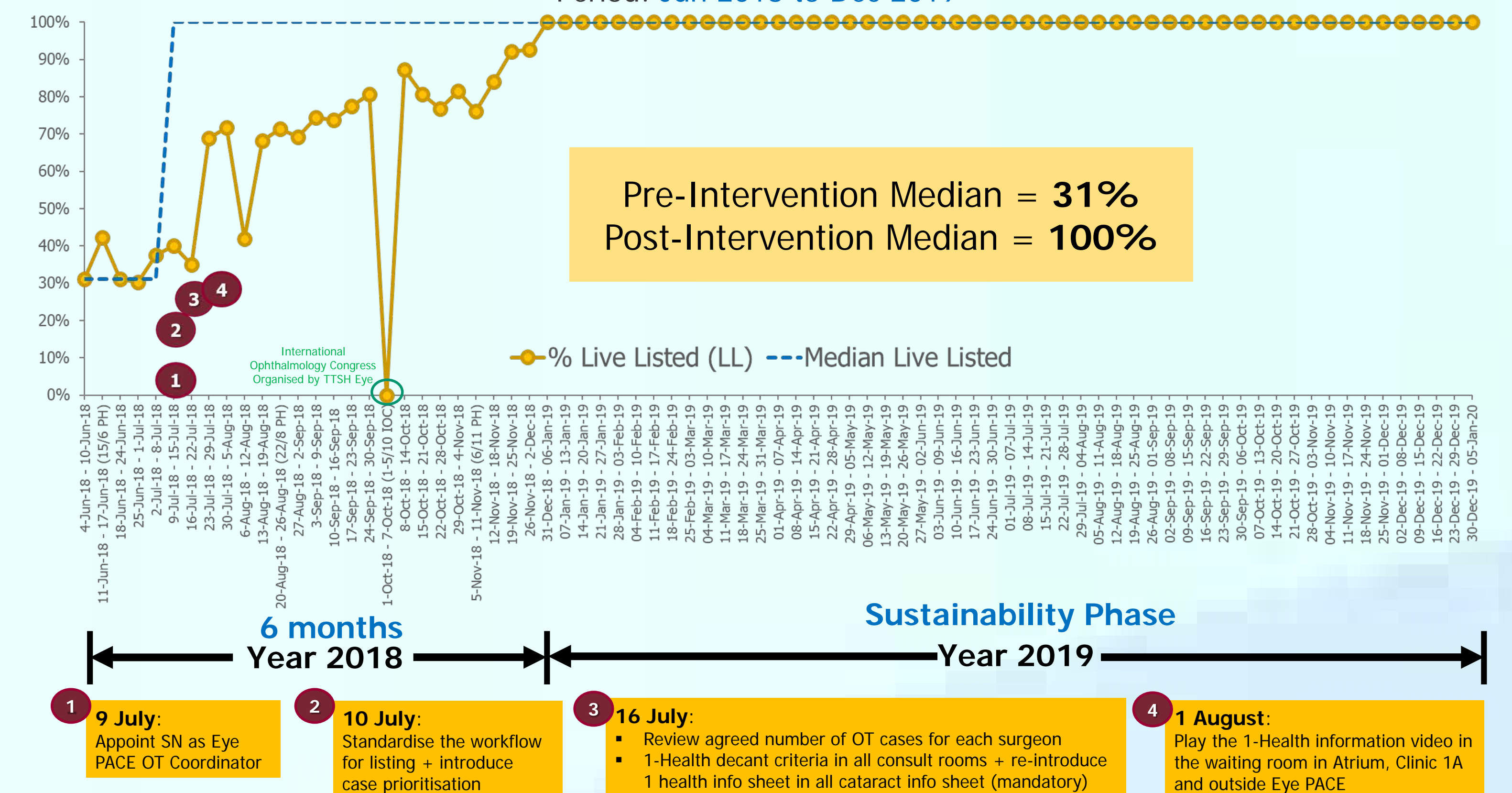


Implementation

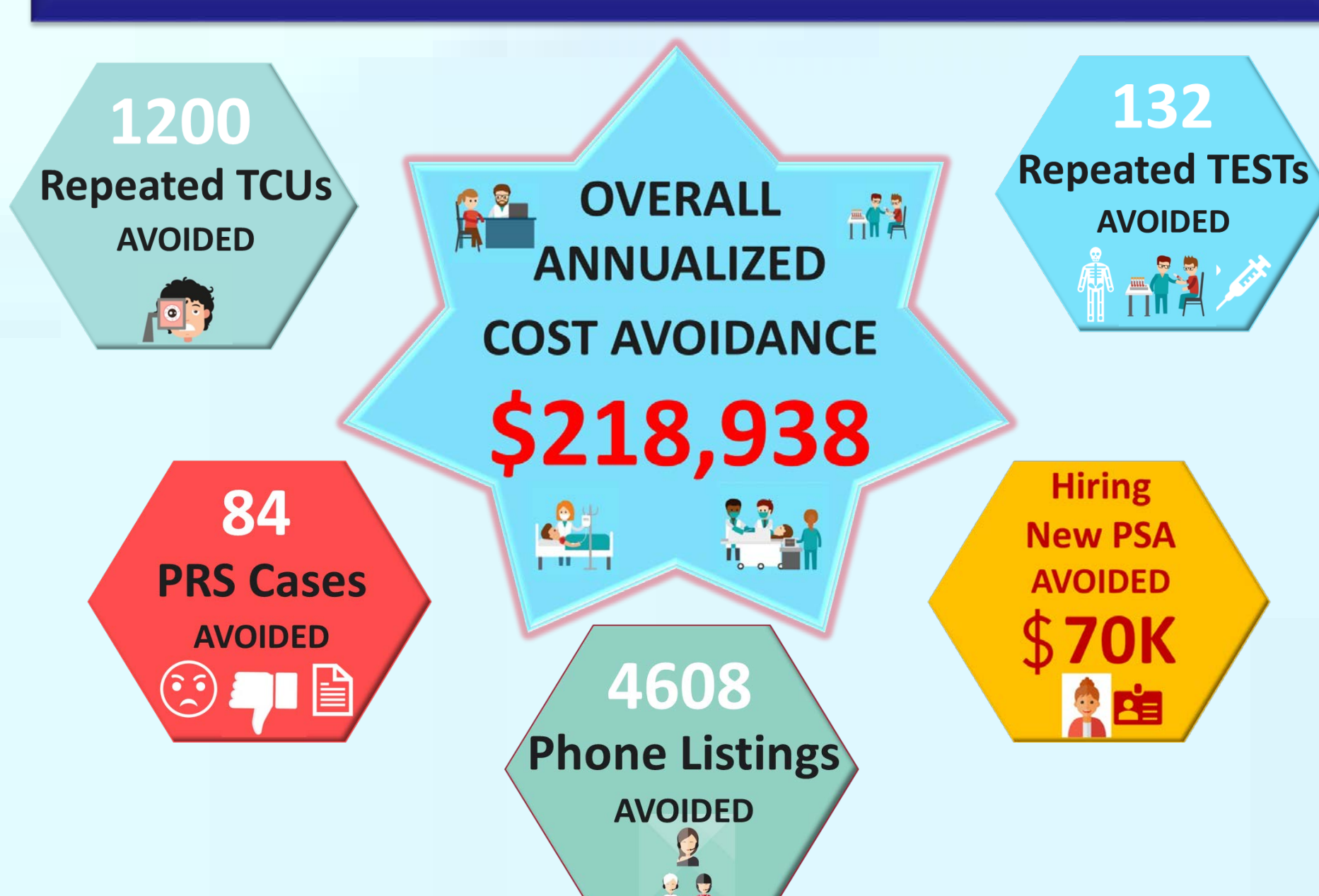
Root Cause	Intervention	Date
15) No Eye PACE OT Coordinator	Train Volunteer Staff Nurse to coordinate PSA Listing Team to Optimise Underused OT Slots	9 Jul
9) No recent review on agreed cataract numbers between HOD & Surgeons	Obtained agreement of all surgeons to increase the number of surgery slots	16 Jul
3) No harmonization of PAT Biometry Financial Counselling Clerking Listing Slots	1. Developed Standard Operating Procedure to orchestrate the expected series of sequential tasks 2. Harmonised Number of required time-based sessions from Biometry to PAT and Clerking Slots 3. Created Phone / Live Listing Script to increase awareness of NHG 1-Health for patients and to ensure correct cases were matched to the correct operating theatres by staff 4. Created One-Way Chat Group to notify all Room Assisting PSAs of the expected waiting time at Eye PACE 5. Introduced Open Door Concept at Financial Counselling Room giving PSAs better visibility of the queue	10 Jul 16 Jul 1 Aug 17 Nov
7) No measures to improve patient's knowledge of NHG 1-Health Decant	1. Placed Posters on Compliance to Cataract Listing & NHG 1-Health Decant Criteria in every Consult Room. Provided Email Feedback on Failure of Compliance. 2. Worked with TTSH Facilities to allow Screening of NHG 1-Health Video to all 27 television screens throughout Eye Clinics	16 Jul 1 Aug

Results

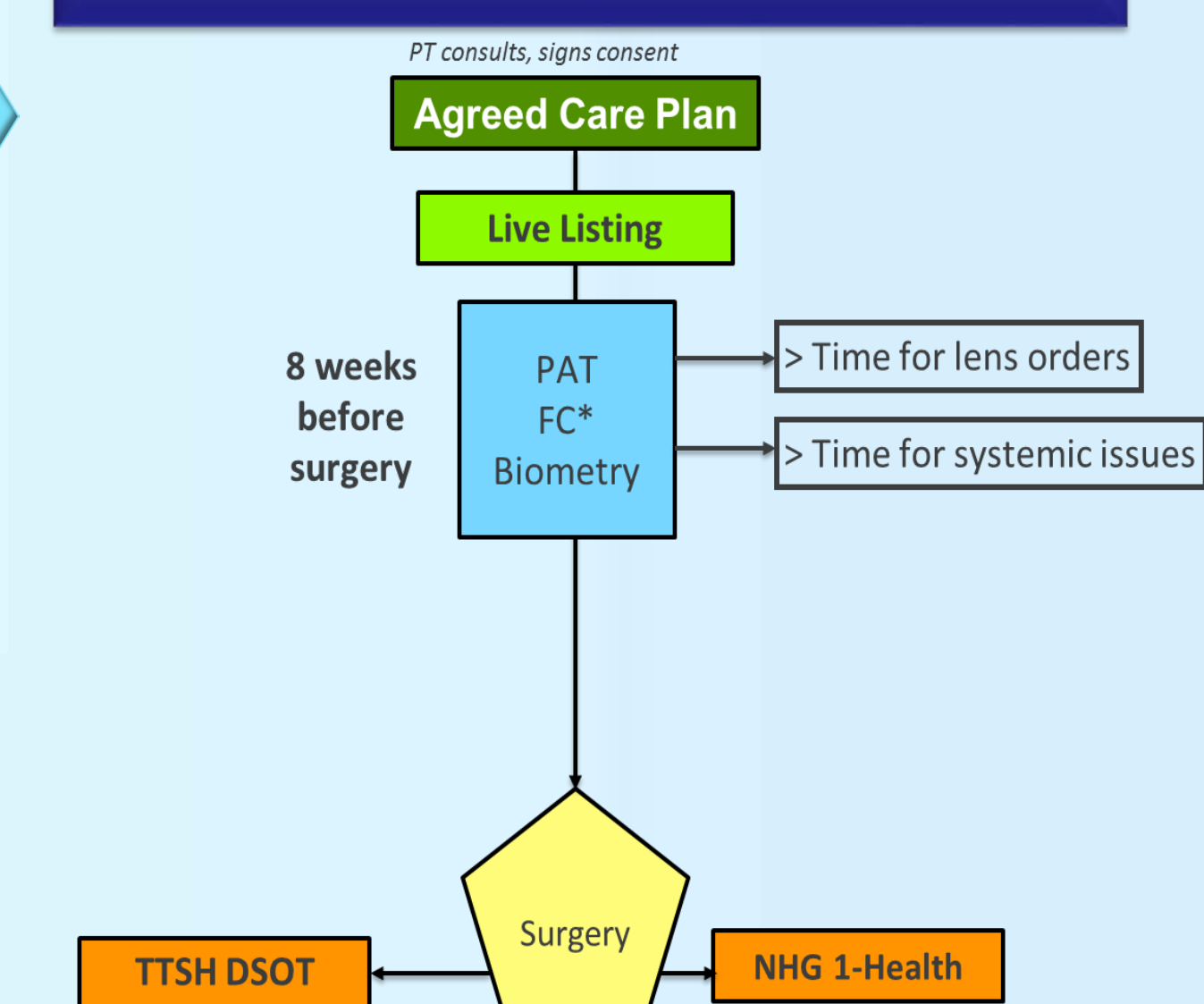
Percentage of Live Listed Patients at TTSH Day Surgery Operating Theatre & NHG 1-Health
Period: Jun 2018 to Dec 2019



Cost Avoidance



Changes to Macro Flow



Lessons Learnt

1. CPIP is elegant tool to identify the crux to a complex process
2. Given enough manpower, money and time, only the symptom of an underlying problem can be solved, not the problem itself.
3. Changing upstream processes have big impact on downstream systems

Strategies to Sustain

1. Monitor efficiency of Eye PACE using statistics e.g. number of backlog, number of free slots, percentage of OT utilization, number of failed cases.
2. Compliance = SOP for reference for complex process + teaching
3. Create group goals + healthy work culture
4. "The goal of EYE PACE is to restore vision"