

# TROA CLEAN-UP USING PARETO PRINCIPLE

Lorem Ipsum Clinic  
(fictional demonstrative clinic)

Average Monthly Headcount~ 3100



## IMPROVEMENT AREA & AIM

The COVID-19 pandemic disrupted continuity of care for patients in all sectors, including those on anti-retroviral treatment (ART). Holani Clinic experienced high numbers of patients missing their clinic appointments during this time, resulting in a declining number of total patients remaining on ART (TROA). **This project aimed to** reduce the number of ART patients reported as having missed their clinic appointments from 117 in March 2021 to 50 by June 2021 by using the Pareto Principle evaluating the missed appointment lists (MAL) to discern which patients were true missed versus those who were misclassified due to data errors and address accordingly.



## DESCRIPTION

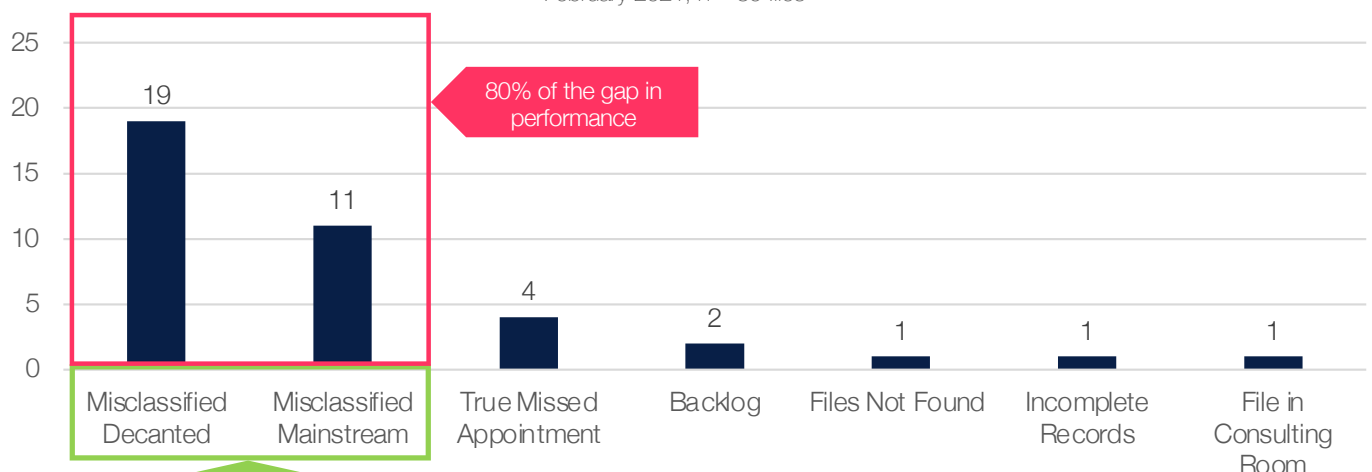
Pareto Principle — also known as the 80/20 rule which states that in any group of factors that contribute to an overall effect, roughly 80% of the effect (in this case a large MAL) comes from 20% of the factors. Factors included: patients who were misclassified decanted, misclassified mainstream, patient files backlogged in TIER.net data entry, files unable to be found, incomplete records in files, or files in the consulting room. When these 7 possibilities were ranked into a Pareto Chart, it was clear that 2 of the root causes (or roughly 20%) turned out to account for 80% of the reasons patients were ending up on the MAL. This allowed the clinic to determine which patients required follow-up and adjust their numbers to reflect their true TROA.



## OUTCOMES

After two months implementing the Pareto Principle, the number of ART patients on the MAL declined from 117 in January 2021 to 47 by the end of April 2021, meeting their goal. Ongoing efforts focused on early tracing and recall of ART patients. TROA quickly improved once patients were properly classified demonstrating how focusing on the vital few led to the maximum impact.

Lorem Ipsum Clinic Pareto Principle  
February 2021, n = 39 files



20% of the root causes

# STEPS TO IMPLEMENT

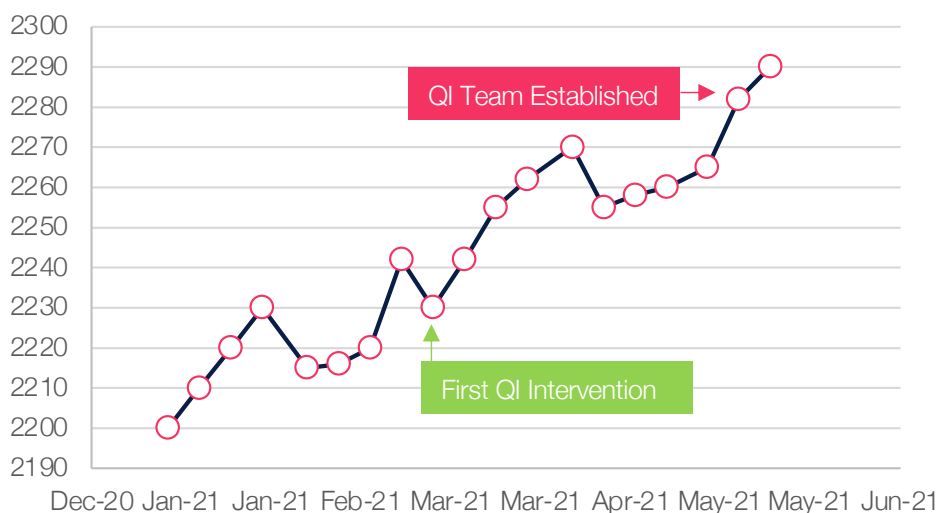
## PRE-IMPLEMENTATION

- ❑ Establish QI team with clearly defined roles and responsibilities for each team member using team formation guide.
- ❑ Orientate QI team on QI processes and tools (problem and system analysis using brainstorming sessions, process mapping, root cause analysis, testing change ideas to find solutions using PDSA cycles for change).
- ❑ Orientation of QI team on how to use Pareto Principle and Pareto Charts in the TROA clean up process.

## IMPLEMENTATION:

- ❑ Linkage officer (LO) randomly selects ART patient names for chart review from MAL.
- ❑ LO shares list of patient names with filing clerk (FC) for retrieval of files.
- ❑ FC documents files not found and shares those found with the clinical officer (CO).
- ❑ LO audits files to ascertain if patients are "true" missed appointments or were misclassified.
- ❑ LO captures reasons for appearing on MAL using the variables in the Pareto Tool (files not found, misclassified decanted, misclassified mainstream, incomplete clinical stationery, "true" missed appointment, capturing backlog, files in consulting room and duplicate files).
- ❑ Quality Improvement Coach (QIC) then ranks reasons for appearing on missed appointment list from highest frequency to lowest.
- ❑ Cumulative percentage contribution is calculated using the Pareto Chart.
- ❑ QIC conducts root cause analysis on vital few elements that account for 80% of reasons patients appear on missed appointment list.
- ❑ TROA clean up efforts focus on tracing and recalling true missed appointments, addressing misclassification of mainstream and decanted patients.

Total Retained on ART (TROA) Trends  
Lorem Ipsum Clinic



## ABBREVIATIONS

- ✓ CO – clinical officer
- ✓ FC – file clerk
- ✓ LO – linkage officer
- ✓ MLA
- ✓ PHCC – Primary Healthcare Coordinator
- ✓ QI – Quality Improvement
- ✓ QIC – quality improvement coach
- ✓ uLFTU – Unconfirmed Loss to follow up

## RESOURCES

- ✓ A4 papers
- ✓ QI Tools
- ✓ Lever Arch files
- ✓ Tier.net reports
- ✓ SYNCH computer

## STAFFING

- ✓ OM
- ✓ OPIQ team
- ✓ Data Capturer
- ✓ Linkage Officer
- ✓ Clinicians including DSP clinicians
- ✓ Clinic Service Officer

## RECOMMENDATIONS & LESSONS LEARNED

- ✓ Focus your efforts on highest priority problems using Pareto principles
- ✓ Involvement of DoH Clinical staff for ownership; buy in and sustainability
- ✓ Ongoing mentoring and support by DSP
- ✓ Team become motivated and adopt the change if there is a visible positive impact
- ✓ Saved on unnecessary phone calls by following the approach of chart audits and verification on SYNCH database before actually calling patients on the LMA list