

IMPROVING ELECTIVE GENERAL SURGERY(GS) MAJOR OPERATING THEATRE (MOT) FIRST-CASE STARTS

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Background

With expansion of surgical services at KTPH, improving utilization and organizational efficiency of the Major Operating Theatre (MOT) is key to maximizing this resource. An OT Committee pilot study in 2013 highlighted the 92% delayed start times as a Six Sigma low hanging fruit. This was chosen as the study problem for this CPIP project with a resurvey of the data in January – March 2015 and the study interventions from June – September 2015.

Method

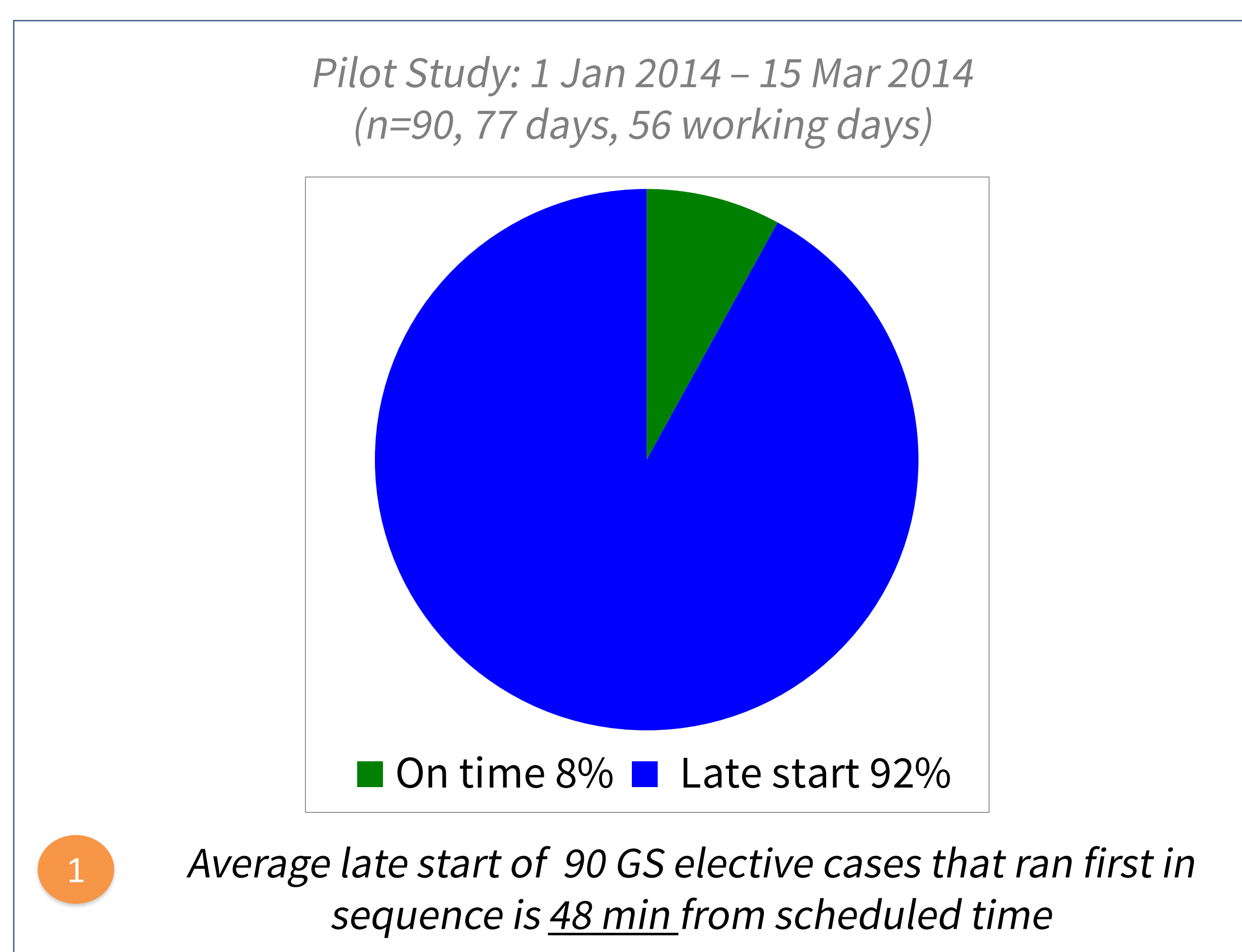
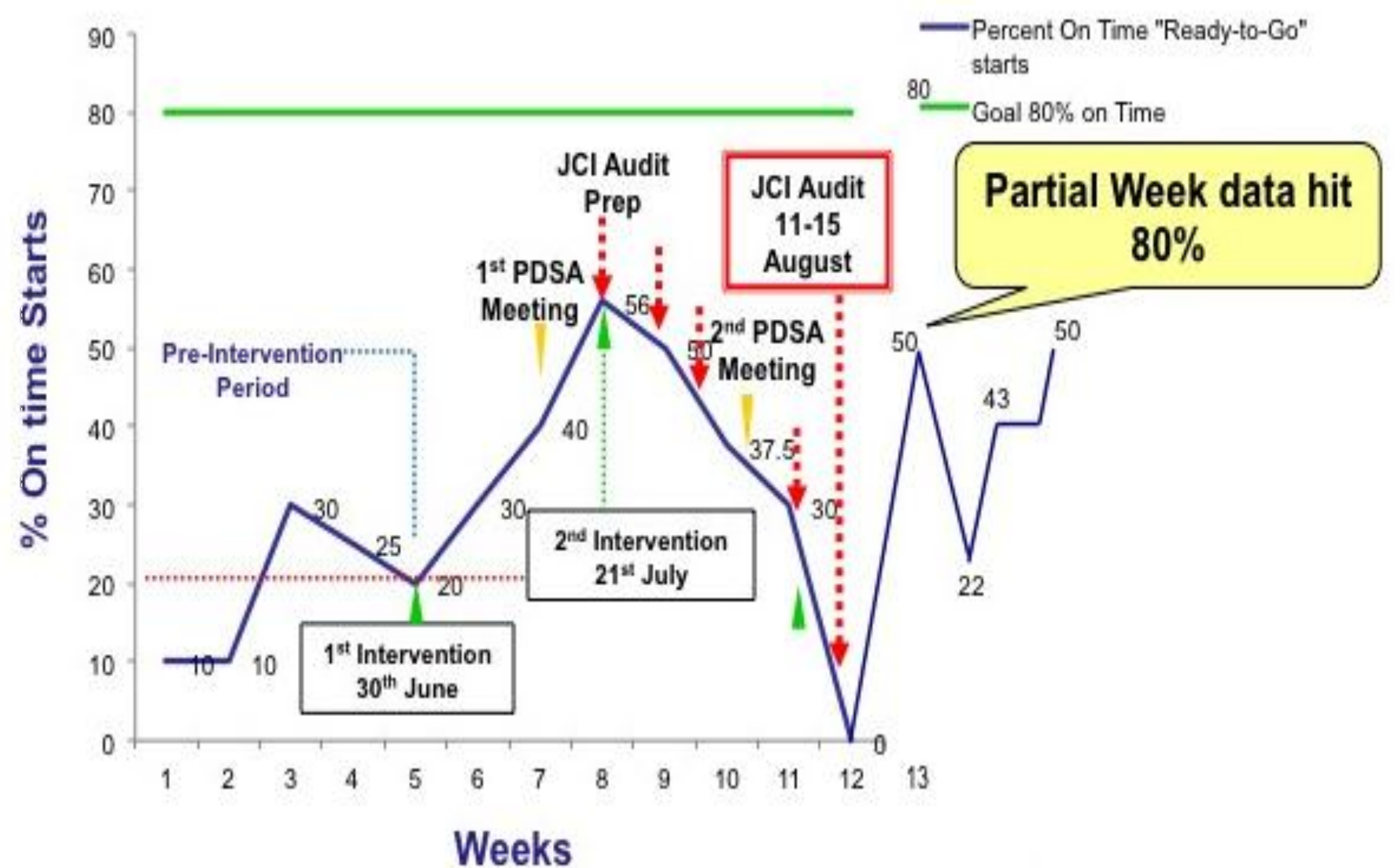
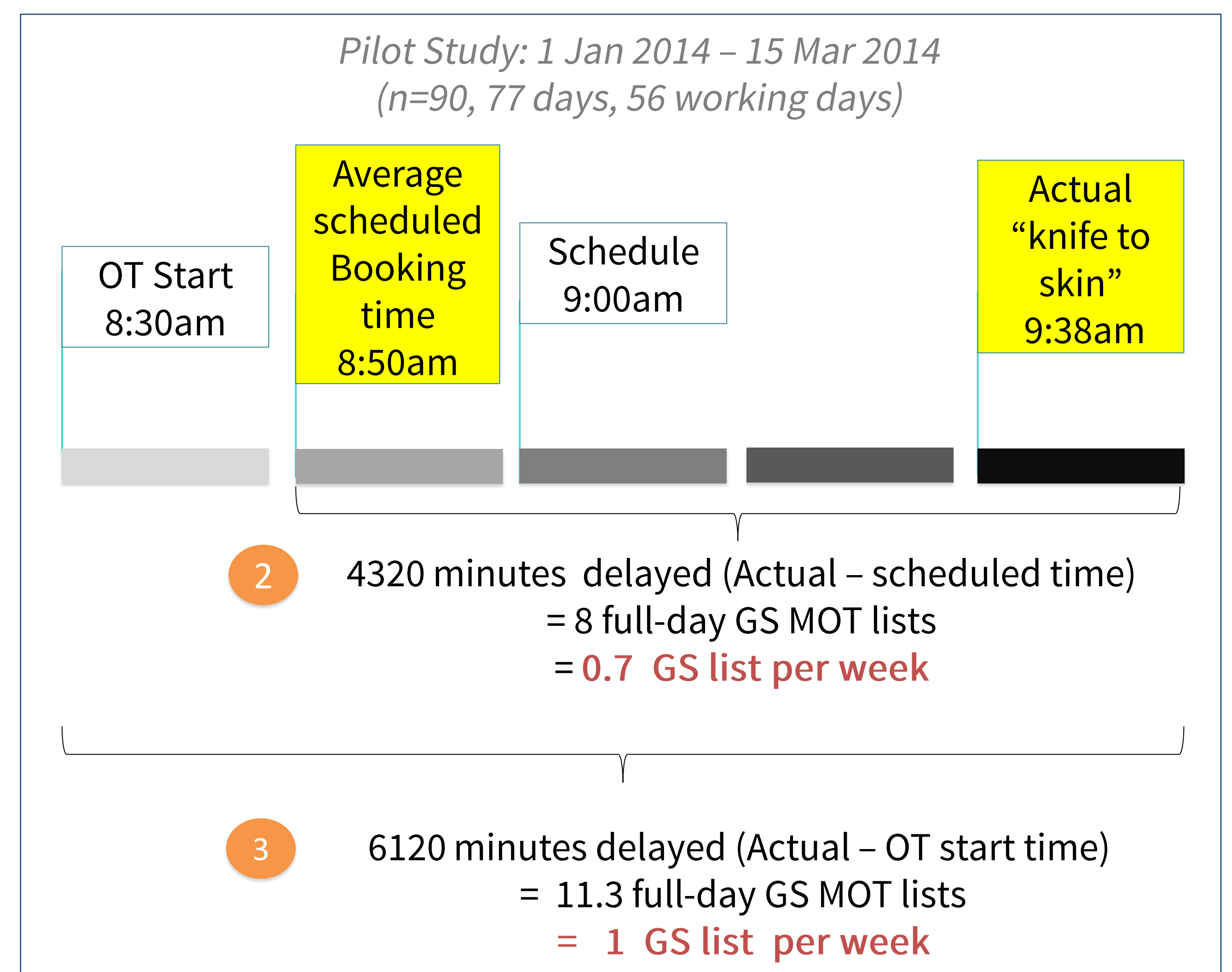
CPIP methodology was applied by the team comprising of GS, Anaesthesia, MOT and Perioperative services. The key outcome measure was defined as having the patient “Ready-to-Go” at the scheduled start time (acceptable variance of OT clocks ± 5 min).

The main factors identified as causing the delayed starts were:

- Morning Meetings
- Delay from Anaesthesia Procedures
- Post-Call/Ward Round Duties
- Inadequate Pre-op Counselling
- Invalid Consent
- Waiting for Site Marking
- Patient Medically Unfit
- Waiting for GS Consultant to induce anaesthesia

Interventions included:

- Raising awareness of operational definitions and SOPs
- Inclusion and exclusion criteria for elective first-cases
- Protocols for morning meetings and post-call scheduling
- Anaesthesia procedure times audit



Results

With the interventions, the delay in first-case starts was reduced from a base-line of 20% to less than 50%. The average length of delay reduced from 48min to 21min. A savings of 3.5hrs MOT time per week = 0.39 list per week = \$79,534/year at MOT utilization cost of \$437/hour.

Conclusion

This project showed that with commitment to communication and developing workable solutions across disciplines, there can be a significant impact on utilization of resources and in this case, reducing patient discomfort and anxiety. The team has suggested several areas for follow-on interventions and a wider implementation to all surgical disciplines.