

**Category:** Clinical Quality Improvement

**Project title:** Decreasing Patient Waiting Times for SKH Anaesthesia Pre-operative Evaluation Clinic

**Authors:** Leong Kah Mun, Denise Desiree Bi Si Quah, Lim Wan Yen, Sharon Ong Gek Kim

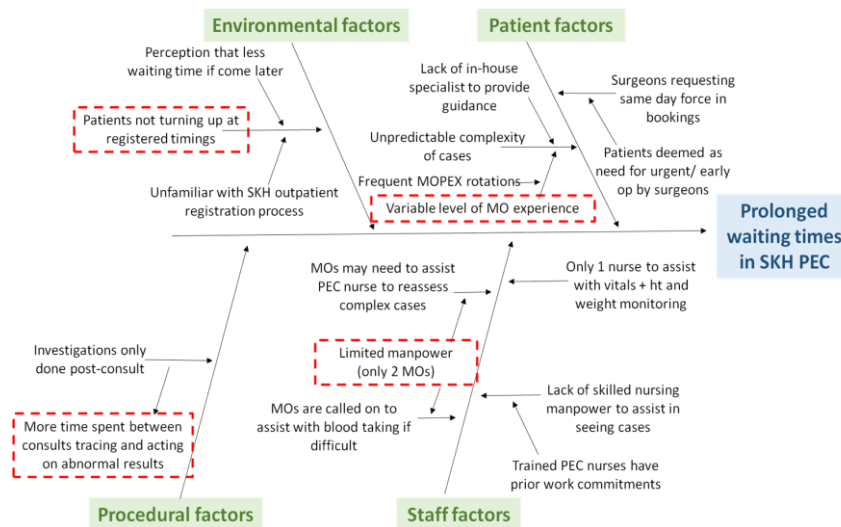
**Presenting authors:** Leong Kah Mun, Denise Desiree Bi Si Quah

**Abstract:**

**Aim:**

Comprehensive assessment and risk counselling at the Anaesthesia Pre-operative Evaluation Clinic (PEC) is integral in the safe delivery of anaesthetic care to patients. Subspecialty referrals may be required for further optimization, leading to prolonged and unpredictable consultation waiting times. Median waiting time was 31.5 minutes, extending to 87 minutes (95th centile). This resulted in patient dissatisfaction and complaints. As such, we targeted a 50% reduction in median waiting times over 9 months.

**Methodology:**



Baseline patient waiting times were collected from January 2020 to February 2021 from the electronic 1Queue system. Root cause analysis was performed with use of an Ishikawa chart. An electronic survey was conducted amongst the Anaesthesia medical officers and resident physicians and responses were analysed with a Pareto Chart. The **lack of blood test results prior to consultation, manpower shortage and variable level of medical officer experience** were identified as root causes.

First PDSA cycle: Revamping clinic workflow and resource allocation

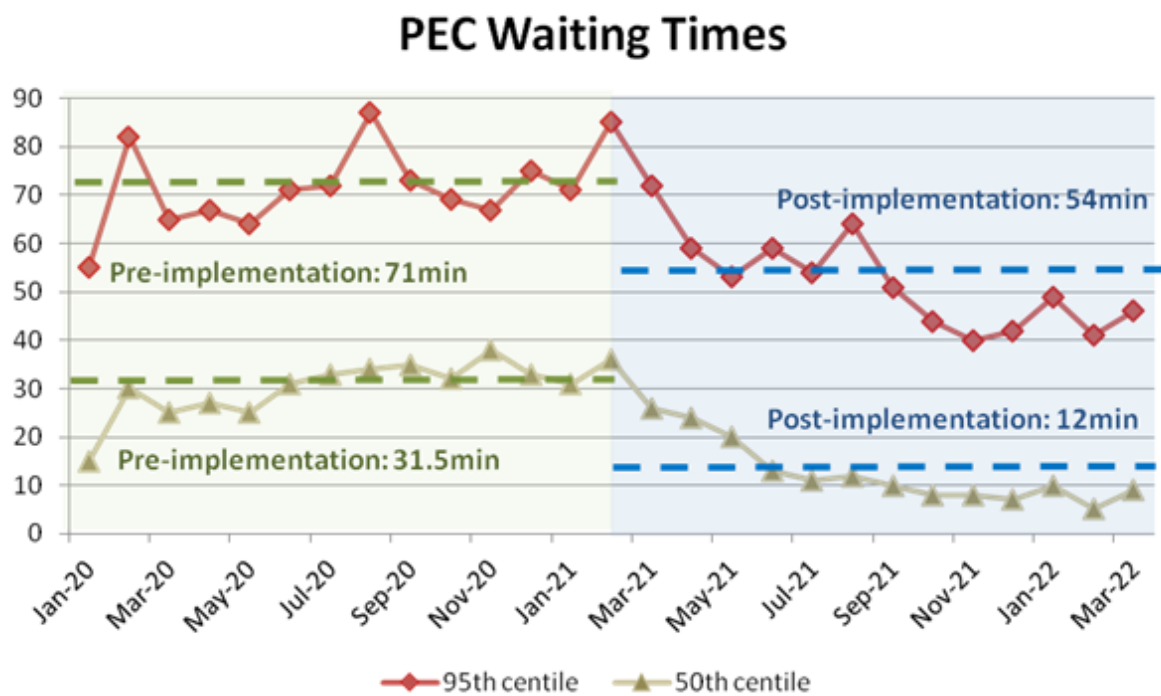
- Optimising time pre-consult: Routine blood investigations done pre-consultation so that abnormal results could be addressed promptly during consultation and less time spent between consultations tracing prior patients' results.

- Improving bottleneck resources: decreased consultation duration (from 1 hour to 45 minutes) to maximise clinic session; reduced morning and increased afternoon appointment slots for demand matching.

#### Second PSDA cycle: Demand trigger workflow

- PEC consultant informed if there were  $\geq 4$  patients in queue, triggering deployment of more manpower to PEC to assist with the backlog of patients.

#### Results:



There was a 61% decrease in median waiting times (from **31.5 to 12 minutes**). The 95th centile median waiting time was also reduced from 71 to 54 minutes.

#### Conclusion:

PEC caseload variability and complexity often results in unpredictable waiting times. Workflow changes and resource allocation led to a sustained decrease in waiting times.

(Word count: 295 words)