Title:

ePASS – An Electronic Pre-Anaesthesia Self-Screening Questionnaire to Reduce Face-to-Face Consultations at the SGH Pre-Admission Centre (PAC)

Submitted by:

- Dr Eileen Sim Yilin (Main Author)
- Dr Hairil Rizal Bin Abdullah (Co-Author)
- Ng Kai Lee (Co-Author)
- Zhu Lulu (Co-Author)
- Goh Zewei (Co-Author)
- Reanne Lim (Co-Author)

Aim:

Patients undergoing elective surgery in SGH receive preoperative anaesthesia risk assessment and counselling at the SGH Pre-Admission Centre (PAC). PAC's patient load has been rising steadily in tandem with rising elective surgical load, with no commensurate increase in doctor manpower. This led to long waiting time for anaesthesia consultation at PAC. Among patients attending PAC, 10% are low medical-risk patients undergoing low-risk surgical procedures.

Thus, SGH embarked on a multi-disciplinary project comprising doctors, nurses and administrative staff to identify "low-risk patients" who can have their anaesthesia assessment and counselling performed by trained nurses over-the-phone before their PAC appointment. Thus, these patients can omit seeing an anaesthetist, and it allows SGH to allocate valuable PAC appointment slots for higher-risk or urgent-need patients.

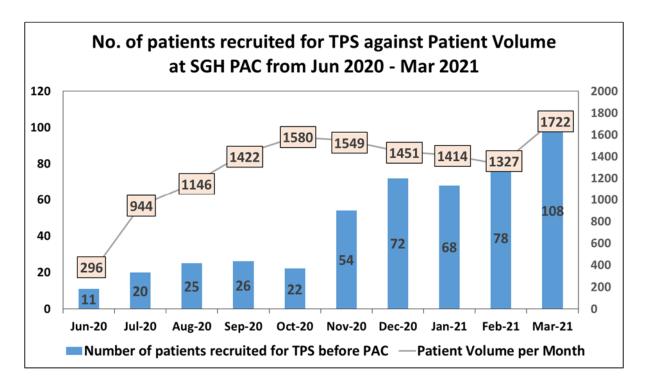
Methodology:

The intervention comprises three aspects:

- 1) Developing an Electronic Pre-Anaesthesia Self-Screening (ePASS) questionnaire on FormSG
- 2) Optimizing the workflow for sending SMS to patients for questionnaire submission.
- 3) Training PAC nurses to conduct Telephone screening (TPS).

Results:

- 6363 ePASS responses (50%) from June 2020-March 2021. Of these, 484 (7.6%) were recruited for TPS.
- Tweaked SMS sending frequency to achieve high response rate of 50%.
- Monthly recruitment of TPS patients improved from 20 (2%) to 108 (6%) of PAC's patient volume from July 2020-March 2021. This represents nearly 100% capture of all eligible "low-risk" patients amongst responders.
- No cancellations from inadequate risk assessments.
- 242 man-hours of anaesthetist's time saved, which translates to \$16,262 in medical manpower savings. Per annum assuming normal workload, expected manpower savings is \$43,545.



Conclusion:

Our project of developing a self-screening questionnaire that is easily completed by a layperson and yet, accurate in identifying low-risk patients has enabled PAC nurses to identify nearly all eligible patients and conduct telephone screening. This is a cost-effective and safe innovation to mitigate rising workload at PAC.