Improving the Provision of Specialist-led Care for Otorhinolaryngology-Head and Neck Outpatients at SGH

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A/Prof Toh Song Tar[1], Dr Xu ShuHui[1], Mr Aung Myat Oo[2], Mr Dennis Yeo[2]
[1]Department of Otorhinolaryngology (ENT), [2]Clinical Quality & Performance Management Department (CQPMD)

Introduction

The Healthcare Performance Office (HPO) under the Ministry of Health (MOH) monitors performance indicators under the domain of "Appropriate Care". The focus of this project is based on one of HPO's indicator called *"Proportion of subsidised SOC patients reviewed by a specialist at first visit"*, for which the Department of Otorhinolaryngology-Head and Neck Surgery (ENT-HNS) saw one of the highest volume of patients daily with a large number of patients not reviewed by a specialist. The aim of this project is to ensure that patients are being provided with the appropriate level of care by the specialist, as well as ensuring effective and efficient utilization of available resources at SGH.

Project Aim

To increase the number of new subsidised otolaryngology outpatient reviewed by an ENT-HNS specialist from 60% to 85% in 6 months to meet both the 2019 and 2020 national average target.
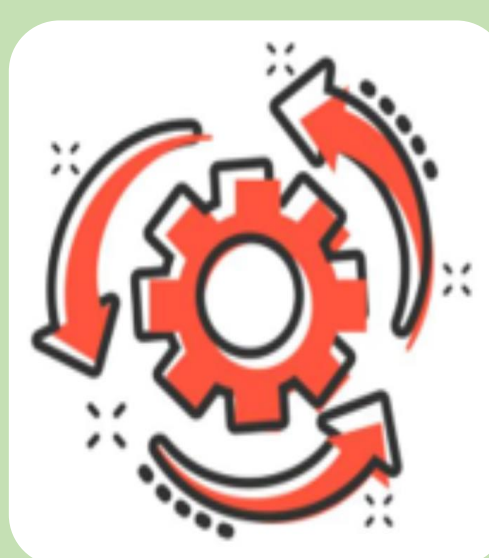
Analysis of problem & Interventions

Gap analysis
- Performed data analysis to identify departments with the highest proportion of SOC patients not reviewed by a specialist
- Studied how this indicator is managed by Sengkang General Hospital (SKH)
- Assessed the volume of patients and utilization of resources at ENT SOC
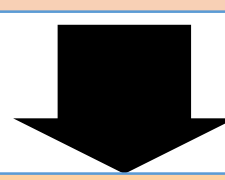
Interventions

PDSA 1: Streamlining workflow in consultation rooms
- Effectively utilized available manpower by assigning one Specialist to 2 consultation rooms instead of 1 specialist to 4 consultation rooms in the earlier configuration.

PDSA 1: Introduction of Smart Prompts (PDSA 1)
- "Smart" Prompts (Non-hard stop) were designed to enable proper documentation of outpatient notes when reviewing outpatients through highlighting the important fields. (E.g. "Reviewed by" field)
  - "Smart" prompt activation algorithm
- Activated based on the rank of the doctors (Specialist Vs Non-Specialist)
- Activated once in every 3rd visit or subsequent visits when not reviewed by Specialist
- The prompt function recognizes the document's name (initial, follow up) and document's prefix /department (SUR, OTO)

PDSA 2: Increased Emphasis with Education & Department Briefing
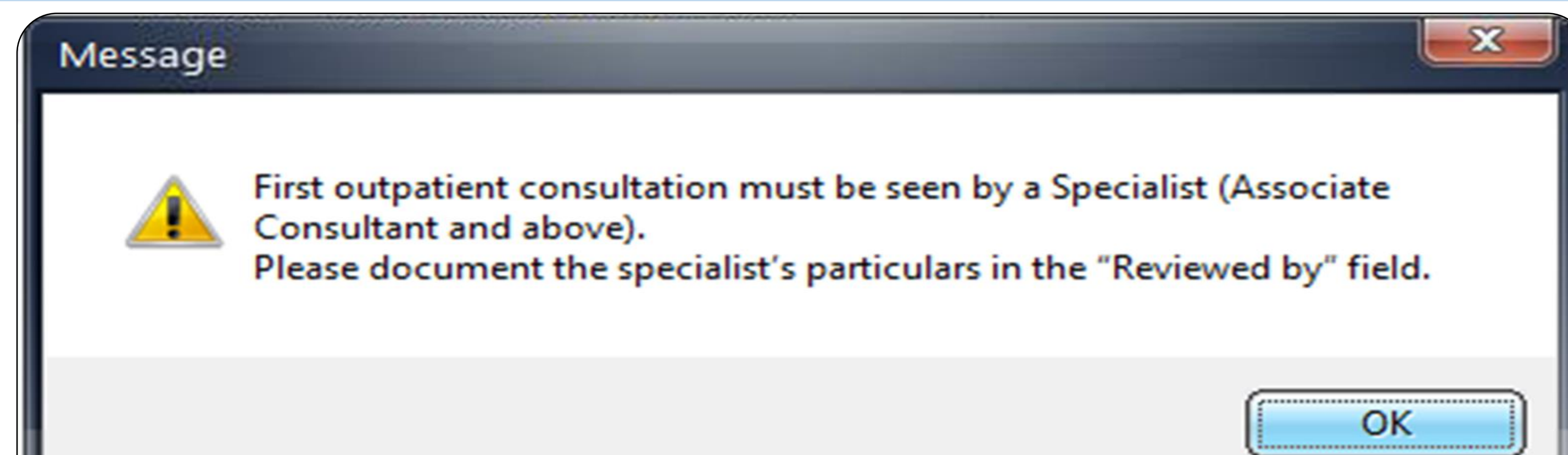- ENT-HNS adopted this indicator under CERA KPI, with monthly performance monitoring to facilitate faster follow-up action
- CQPMD conducted hospital-wide briefing to emphasize on proper electronic documentation.
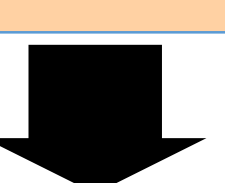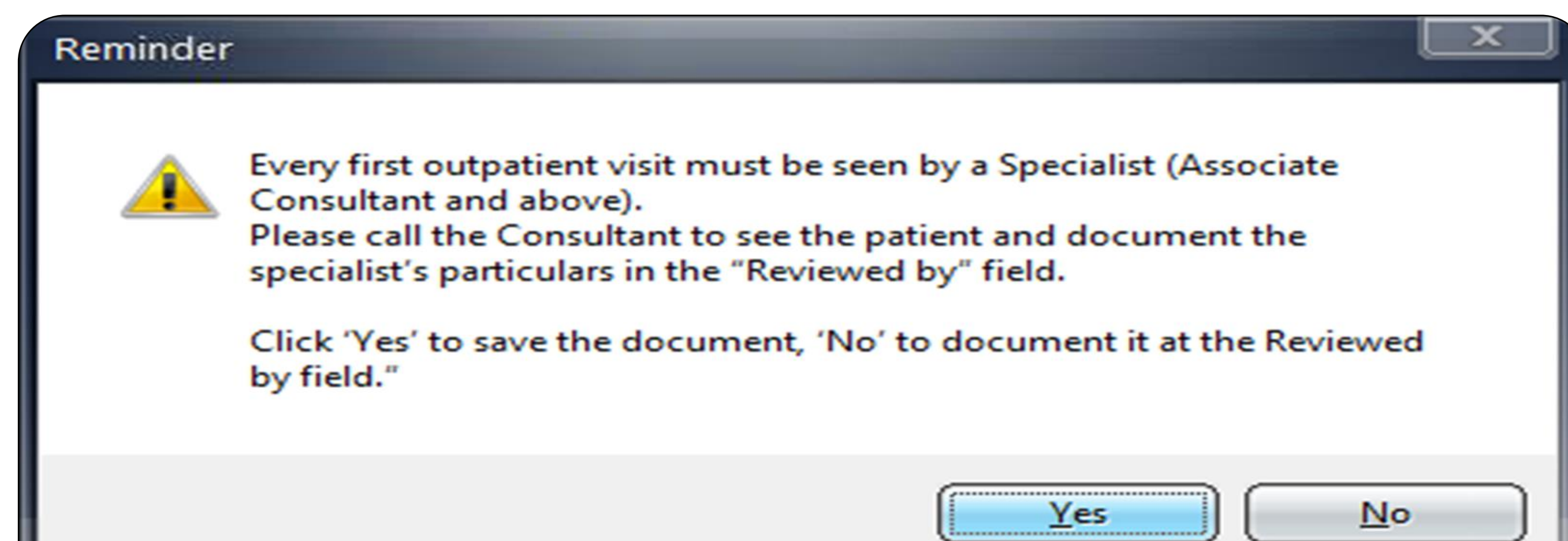
Statistical analysis
- Determined the difference in mean value before baseline and post-intervention period
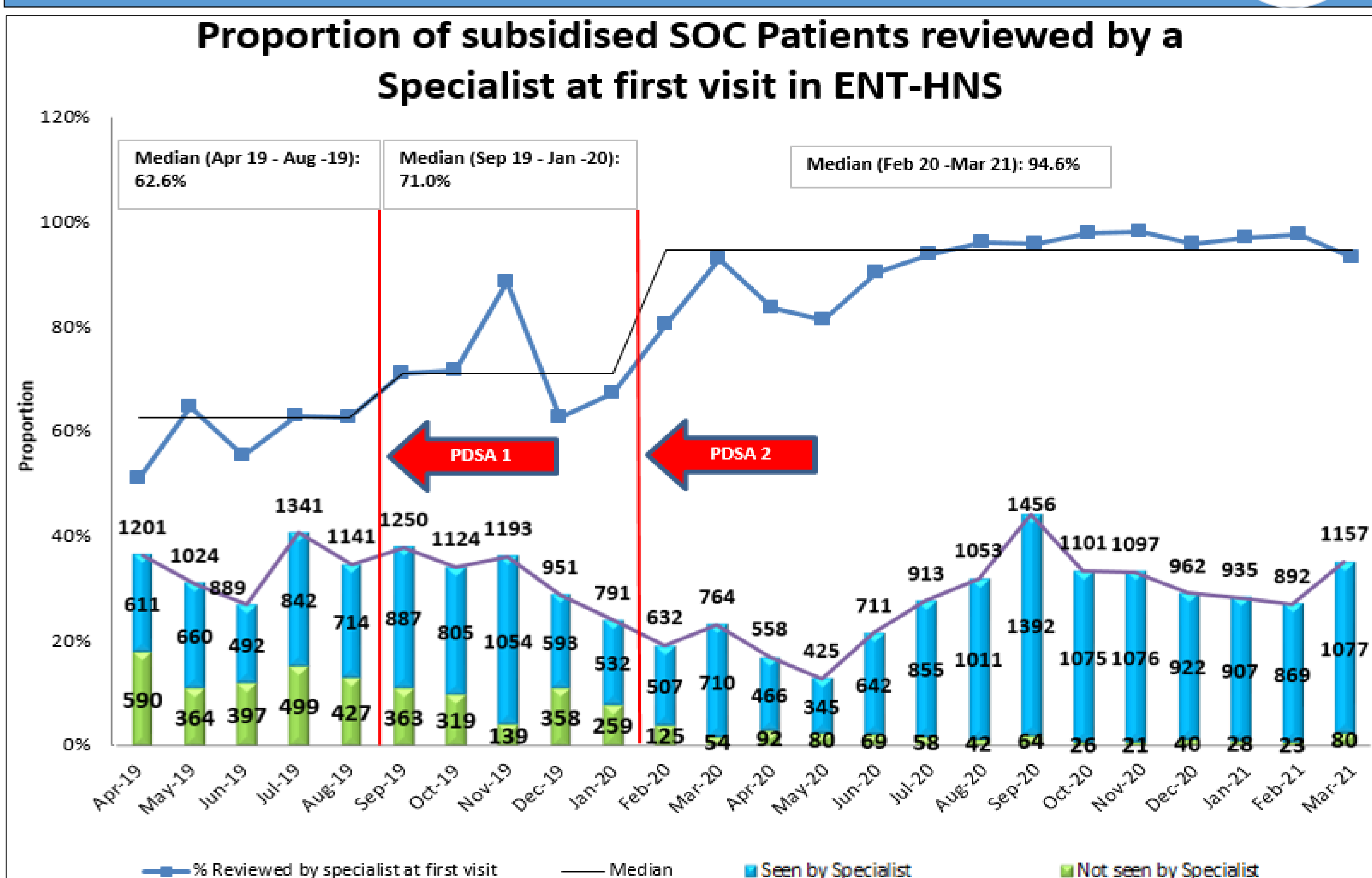- Increased data quality by employing non-sampling analysis instead of sampling.

Results

Message
First outpatient consultation must be seen by a Specialist (Associate Consultant and above).
Please document the specialist's particulars in the "Reviewed by" field.
[OK]

Opening Prompt: This appears for all Specialist Outpatient "Initial" Consult note when the document is opened only by a non-specialist doctor.

Reminder
Every first outpatient visit must be seen by a Specialist (Associate Consultant and above).
Please call the Consultant to see the patient and document the specialist's particulars in the "Reviewed by" field.
Click 'Yes' to save the document, 'No' to document it at the Reviewed by field."
[Yes] [No]

Closing Prompt: This appears upon saving the document if the particular note has yet to be documented as "Reviewed By" a specialist.

Proportion of subsidised SOC Patients reviewed by a Specialist at first visit in ENT-HNS

Median (Apr 19 - Aug -19): 62.6%
Median (Sep 19 - Jan -20): 71.0%
Median (Feb 20 -Mar 21): 94.6%

The performance throughout both PDSA cycles improved as illustrated by the increase in median from baseline (62.6%) to PDSA 1 (71.0%) and finally to PDSA 2 (94.6%), (*P<0.001*). The performance has also met its target after Jun 20.

The volume of cases in Mar 20 to May 20 declined due to COVID-19 outbreak and it corresponded to a dip in performance. Overall, the volume of cases gradually increased and the performance stabilised above 90.0% for more that 6 months after the height COVID-19 outbreak.

At the start of 2021, a HPO orientation video has been circulated to remind new incoming junior doctors on proper clinical documentation; this is in-lieu of conducting physical briefing sessions due to COVID-19 safe distancing measures.

Sustainability and spread

The simple intervention of streamlining the workflow to effectively utilize the available manpower together with the introduction of "Smart " prompts have worked in harmony. This in turn has translated to a significant improvement in providing specialist-led care to otorhinolaryngology-head and neck outpatients and a better hospital-wide performance of the MOH indicator. Future considerations can include new measures aimed to determine significant patient outcome of non-specialist versus specialist-led care. To conclude, the collaborative agreement on education initiative and strategies set forth by this project may be adopted by other departments within SGH.