



Singapore Healthcare
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“Formulate a Robust Evaluating Process for Reliability and Quality of Colonoscopies”



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Background

Department of Gastroenterology and Hepatology in Singapore General Hospital does a significant portion of endoscopy related diagnostic and therapeutic procedures. Colonoscopy is the gold standard diagnostic tool to detect colorectal cancer and its precursor, adenomatous polyp. Adenoma detection rate (ADR) is a known independent predictor of the risk of interval colorectal cancer after colonoscopy. *

Problem

SGH is accredited by the Joint Commission International (JCI) for meeting its defined standards in the performance expectations, structures, and functions that must be in place. There are broad measurements of processes and systems but not evidence-based measures of quality outcome. Missed diagnosis of adenoma or cancer during colonoscopy can be endoscopist dependent. Collection of performance data manually is labor intensive and unsustainable.

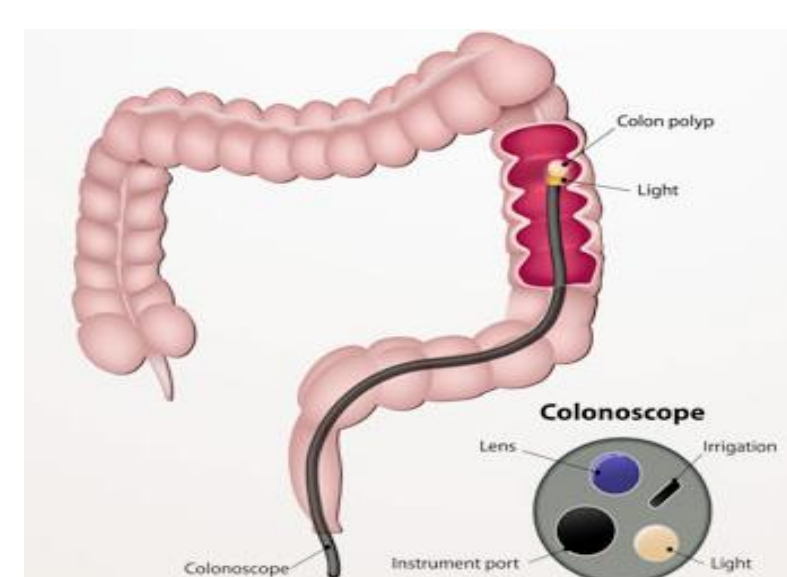
Methodology

Extraction of all cases discharged with new diagnosis of Colorectal carcinoma in 2016

Online Review of all these cases and look for Colonoscopy within past 3 years.

Identify any **missed lesion** during the previous colonoscopy

e-hints



9 probable missed cancer out of 318 Colorectal carcinoma cases diagnosed in 2016



Intervention

PSCS developed an evaluating process for reliability and quality of colonoscopies

2016 colonoscopy data was further reviewed and analysed for individual procedurist Adenoma Detection Rate

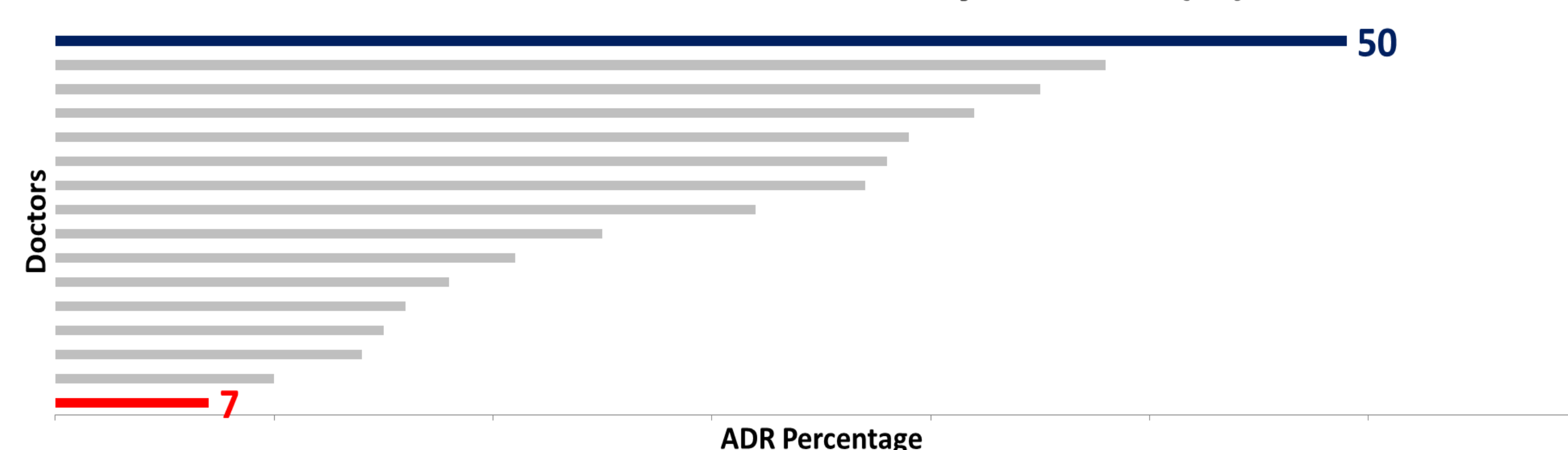
Comparison with International Standards



Results

GAS Department shared the quality indicators for colonoscopy as recommended by American Society for Gastrointestinal Endoscopy. The main quality indicator is adenoma detection rate (ADR).

Adenoma Detection Rate by Doctors (%)



Preliminary results showed wide variation in the ADR between endoscopists ranging between **7% to 50%**. This is a crude rate but nevertheless it shows that there is a wide variation in the detection rate within a department.

Conclusion

Colonoscopy outcomes are operator dependent and there is a wide variation between the procedurists within the same department. This range can be narrowed with quality improvement actions. Nevertheless we understand the presence of human factors. Introducing a quality measure and evaluating process will initiate changes in the processes leading to improvement, and help us to achieve our aim of “Target Zero Harm”.

It not only will enhance operational efficiency and Patient Safety but also will be more value added and cost effective for our Patients.