

## **Project Title**

New Case Video Consultation for Positive Faecal Immunochemical Test (FIT)

## **Project Lead and Members**

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- Dr Koo Chee Hoe
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## **Organisation(s) Involved**

Singapore General Hospital

## **Healthcare Family Group(s) Involved in this Project**

Surgical

## **Applicable Specialty or Discipline**

Colorectal Surgery

## **Project Period**

Start date: 01 June 2022

Completed date: 14 April 2023

## **Aim(s)**

- To review positive Faecal Immunochemical Test (FIT) results via Video Consultation (VC)
- To reduce the waiting time to first appointment for patients with positive FIT results.

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

## **Conclusion**

See poster appended/ below

## **Additional Information**

Singapore Healthcare Management (SHM) Congress 2023 – Merit Prize (Operations category)

## **Project Category**

Technology

Digital Health, Telehealth, Tele-Collaboration

## **Keywords**

Video Consultation, Faecal immunochemical Test, Colorectal Cancer Screening

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# New Case Video Consultation for Positive Faecal Immunochemical Test (FIT)

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**Singapore Healthcare Management 2023**

## Aim

- To review positive Faecal Immunochemical Test (FIT) results via Video Consultation (VC)
- To reduce the waiting time to first appointment for patients with positive FIT results

## Background

The Health Promotional Board (HPB) launched the National Colorectal Cancer Screening Programme in 2011, recommending FIT tests at least once a year for individuals aged above 50 years. FIT kits are issued by Singapore Cancer Society, and can also be obtained from Community Health Assist Scheme (CHAS) General Practitioner (GP) clinics. With the screening programme gaining popularity, the hospital is seeing more of such patients, resulting in increased outpatient waiting time.

## What is FIT?

FIT is a screening test for colorectal cancer. It detects trace amount of blood in the stool which could arise from cancer. Each screening kit comes with a stick that can be used to scrape up a small amount of stool. No fasting or dietary restrictions are necessary, and the test can be comfortably performed at home without altering one's diet.

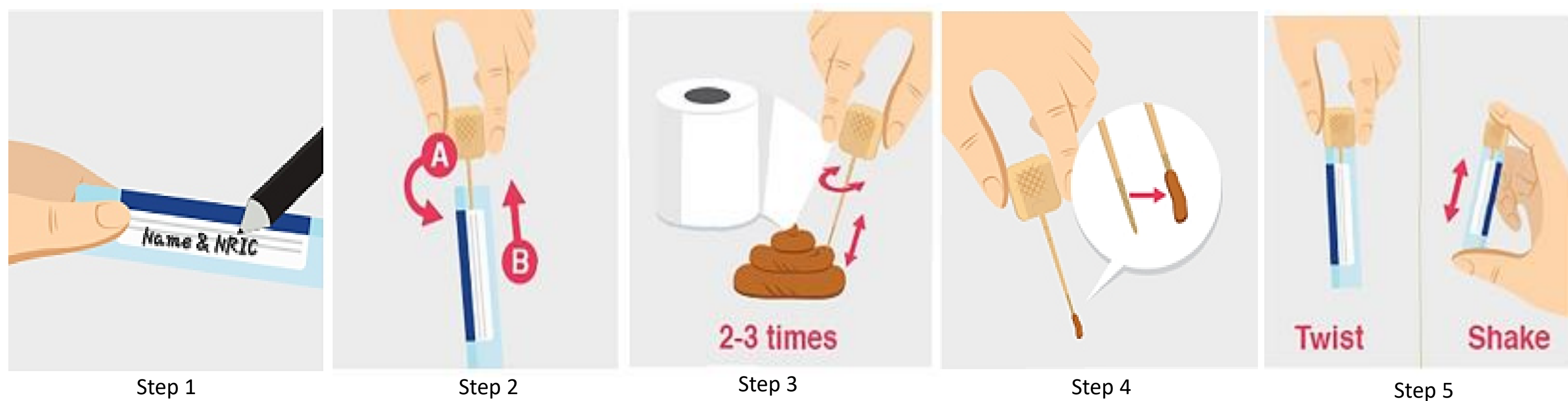


Figure 1. Steps to collecting stool sample for FIT kits

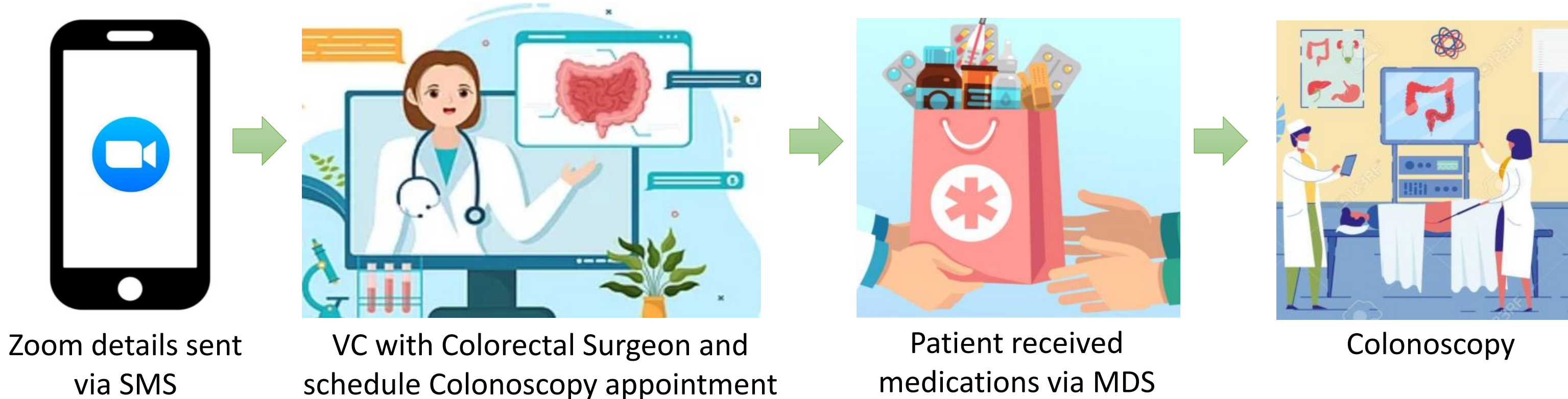
## Impact of COVID-19

During the COVID-19 pandemic, many patients were hesitant to visit the hospital, leading to frequent postponements of appointments for FIT first consultation. Outpatient numbers were also reduced to prevent crowding.

## Role of VC

The next test following FIT positive would be a colonoscopy. If deemed suitable, the patient's scope will be scheduled for the following week, by the listing team. This reduces the need for hospital attendance and time away from work, and in-person attendance will only be required for the colonoscopy.

## Patient Journey



On the day of the appointment, the patient simply needs to click on the Zoom link provided to connect with the specialist. A date for colonoscopy will be scheduled, and the diet advice and bowel preparations will be sent to patient via SMS. Documents such as Care Cost Form, bowel preparation information sheet and bowel preparation medication will be delivered to the patient via medication delivery service (MDS). The consent form is signed on the day of procedure.

Patients with a normal colonoscopy will be discharged from our care.  
 Patients with polyps removed may be reviewed in the VC polyp clinic.  
 Patients with other significant findings may be reviewed in the clinic for further discussions.

This way, the need for physical presence at the hospital is significantly reduced, from three visits to just one.

	Diagnosis	Follow-up actions
Outcome 1	Patient is well	<b>DISCHARGED</b>
Outcome 2	Colon Polyps	Physical consultation OR VC
Outcome 3	Colon Cancer	Physical consultation

Figure 2. Typical patient journey for FIT positive patients

Outcomes after Colonoscopy

## Listing Team Workflow



Receives Electronic Admission Form and schedules the scopes accordingly



Packs documents (Care Cost form, bowel preparation instructions, diet advice) and bowel preparation medication for delivery



Obtains preferred delivery date and time of scope preparation package and advises patient via phone call regarding:

- Scope date and time
- Estimated bill size
- Diet advice and bowel preparation instructions



Patient's sticker (with home address)	Mailing Address	Contact Number	Delivery Date "Earliest" working days, NO delivery on Sun/PH	Delivery Time	Name of Listing Staff	Scheduled By (Pharmacy Staff)
	<input type="checkbox"/> Same as sticker's home address <input type="checkbox"/> Different from sticker's home address, pls specify:			10am to 2pm <input type="checkbox"/> 2pm to 6pm <input type="checkbox"/> 6pm to 10pm <input type="checkbox"/>		

Completes the dispatch/handover checklist. The package and checklist are placed at the collection point in Centre for Digestive and Liver Diseases (CDLD)



CDLD porter collects the packages and dispatches them to the Pharmacy for delivery via MDS

## Results

Between June 1, 2022, and April 14, 2023, a total of 842 referrals were received from HPB. Out of these, 72% agreed to proceed with their treatment at SGH, while 28% declined. Nearly half of the patients chose video consultation instead of visiting SGH for their initial consultation.

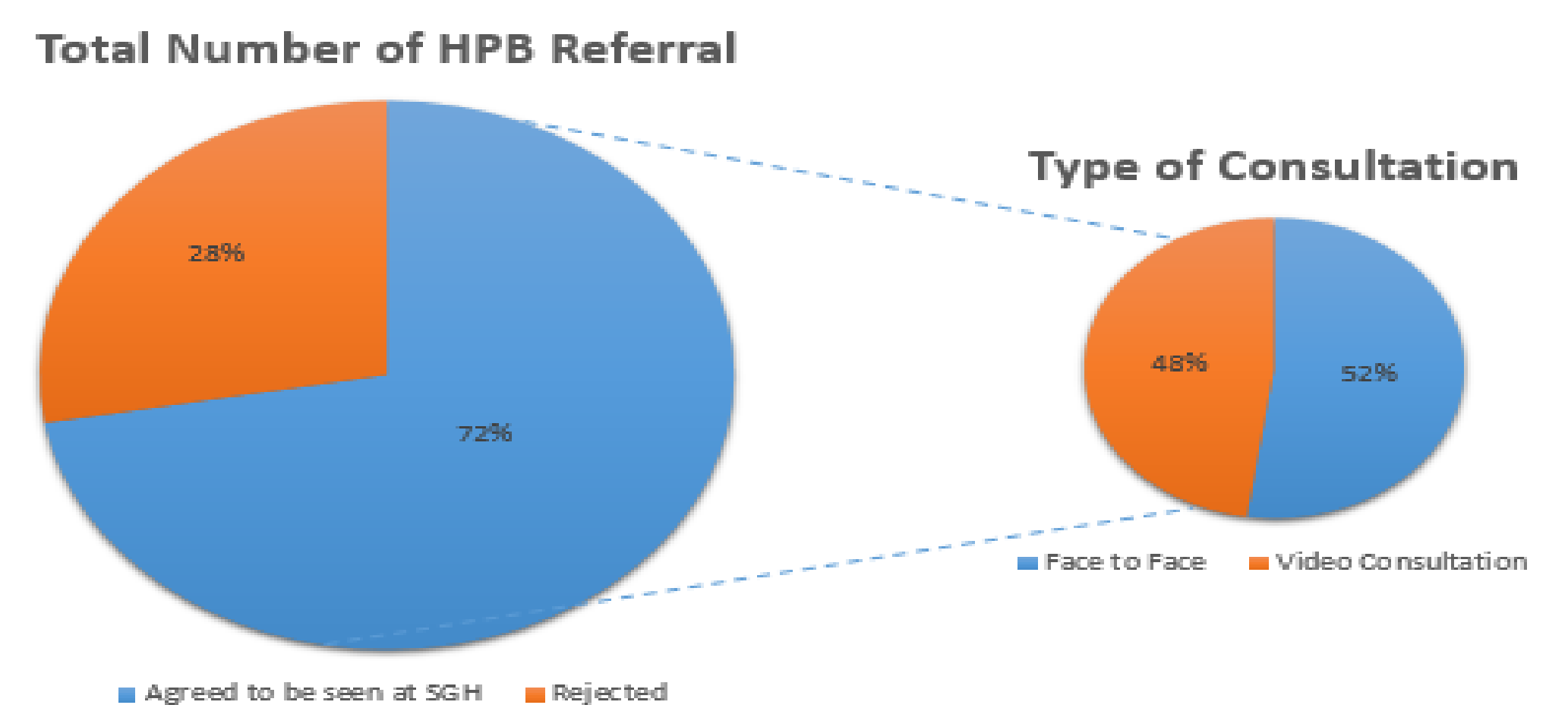


Figure 3. Referrals received and seen in SGH

The average waiting time to see a doctor decreased to 1.36 weeks from 2 weeks for physical consultations, resulting in a 32% improvement.

The average waiting time for colonoscopy was 2 weeks for video consultation and 3.45 weeks for physical consultation.

Overall, patients saved up to 2 weeks by opting for the VC route. This is in line with MOH and HPB audit guidelines, patients should be scoped within 5 weeks of referral from HPB.

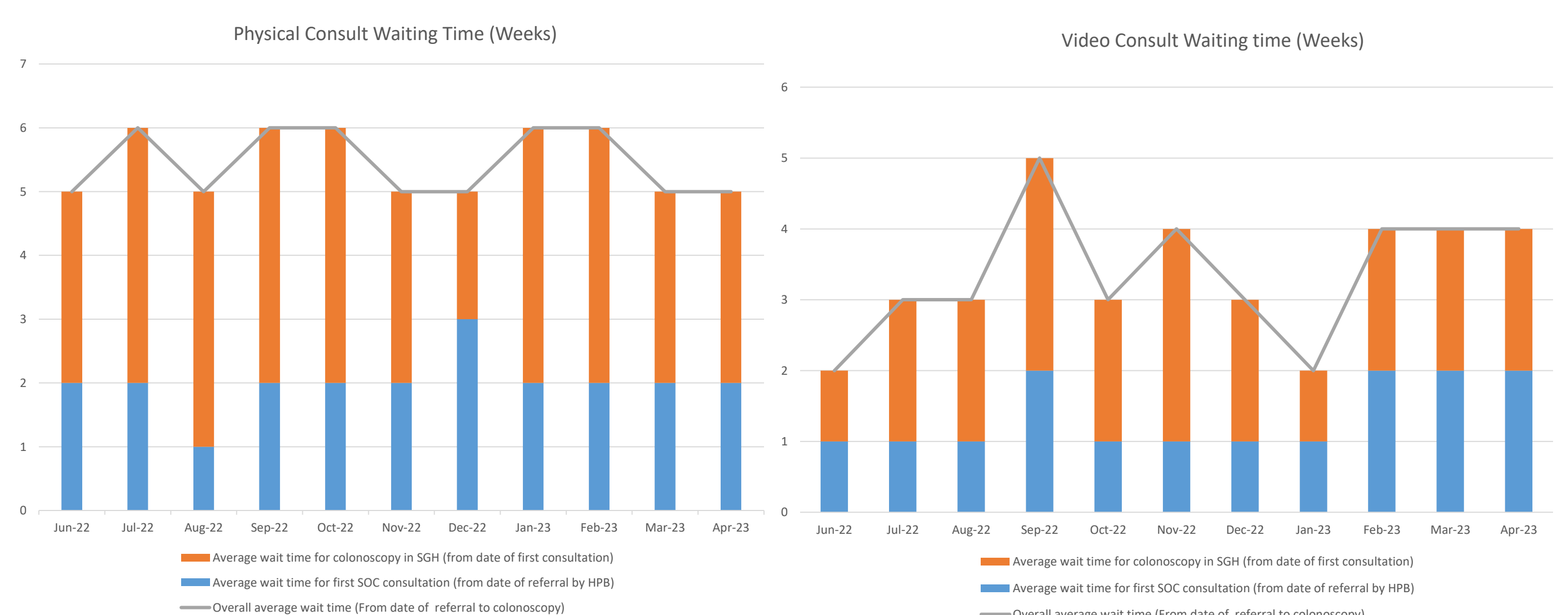


Table 1. Physical vs Video Consult Waiting Time (Weeks)

## Conclusion

With a system in place, VC can reduce hospital attendance and lead-time to endoscopy. The patient is also saves on travelling and waiting time with VC.

This workflow adjustment also reduces lead-time to consultation for cases that are not suitable for VC. The department continues to explore new boundaries and leverage the latest technology to improve patient care.