

Project Title

Adapting Cloud Based Platform for Real Time Updates of Surgeon's Surgery Preference Card to Achieve Efficiency in Surgery Preparation

Project Lead and Members

- Ye Biyin
- Tan Chooi Peck
- Kang Hui Gek,
- Christina Ong Shi Ya
- Adora Yeo Gek Peng

Organisation(s) Involved

Sengkang General Hospital

Healthcare Family Group Involved in this Project

Nursing

Applicable Specialty or Discipline

Surgery

Project Period

Start date: Unknown

Completed date: Unknown

Aims

To improve accessibility and reliability of surgeons' preference cards to enhance efficiency and boost nurses' confidence in surgical preparations.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Conclusion

See poster appended/ below

Project Category

Technology

Digitalization

Keywords

Cloud-Based, Surgery Preference, Surgery Preparation

Name and Email of Project Contact Person(s)*

Name: Ye Biyin

Email: singaporehealthcaremanagement@singhealth.com.sg



BACKGROUND

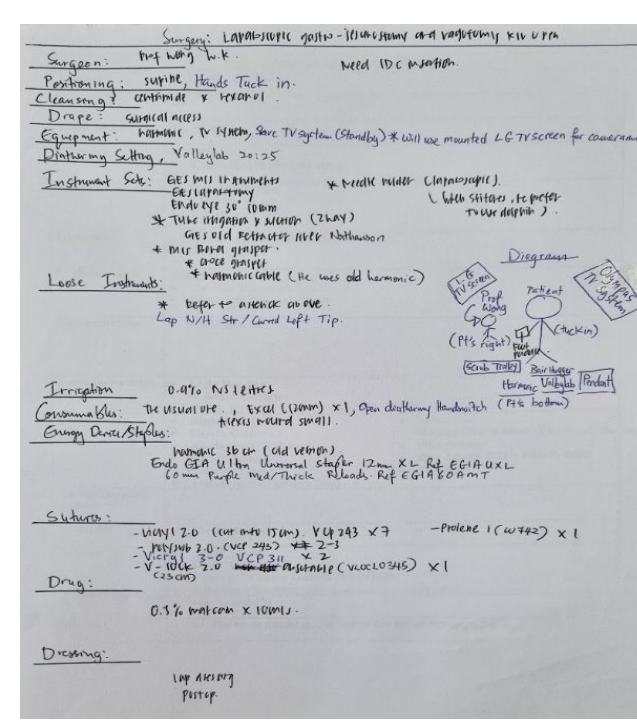
In Operating Theatre, nurses use preference cards as a reference to preoperative preparations for various surgeries.

Prior to this project, the perioperative nurses in SKH encountered several constraints when using the hard copy preference cards which includes the following:

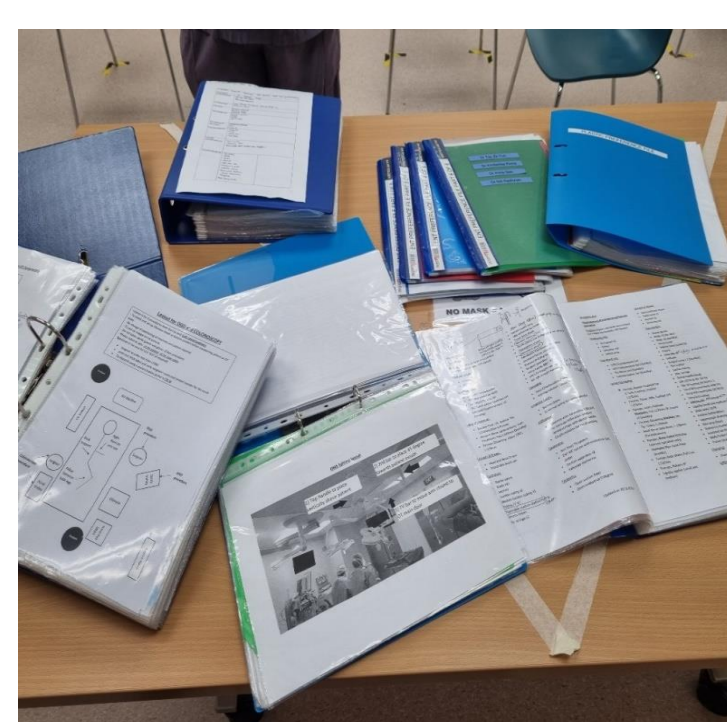
- ❖ Only available to one person each time
- ❖ Notes were either handwritten or printed as hard copies (Pic 1 & 2)
- ❖ Usage of physical records tend to consist of outdated information
- ❖ High wastage of paper to keep information up to date (Pic 3)



Pic. 1: Staff used hardcopy preference file



Pic. 2: Handwritten preference (which was messy & unsightly)



Pic. 3: Multiple files and paper were used

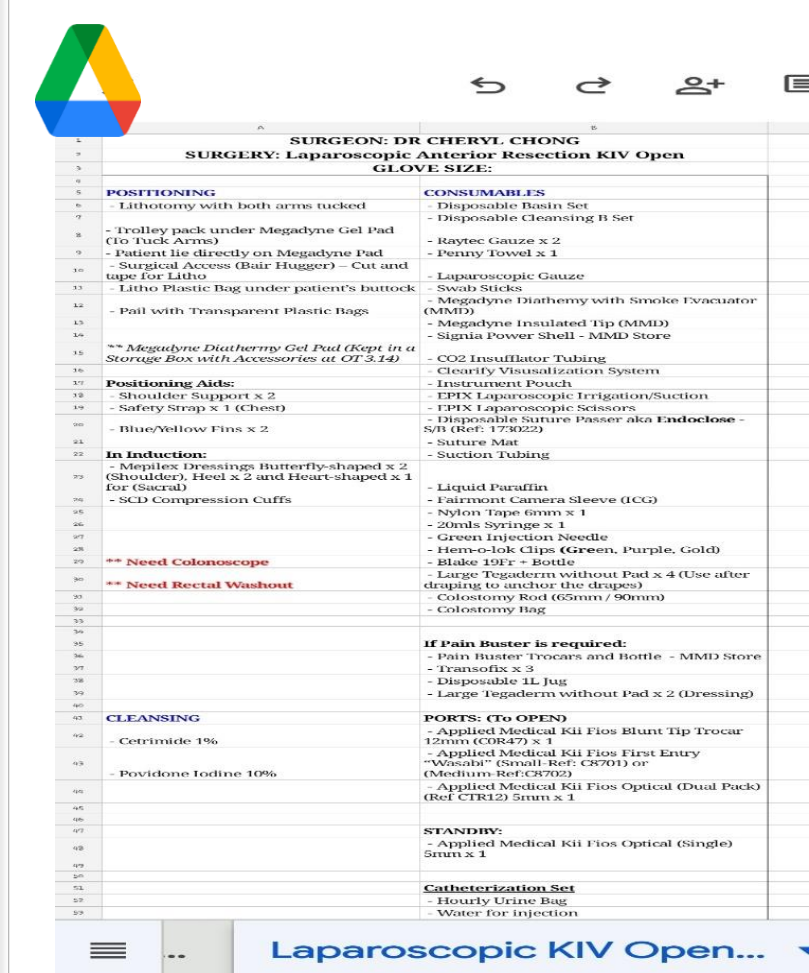
INTERVENTIONS

A standard template on the cloud platform was created with access granted to all perioperative nurses:

- ❖ Surgical notes of new procedures or updates of current procedures are transcribed into the standard softcopy template (Pic 5).
- ❖ Project team members review, consolidate and update changes in the cloud-based platform.
- ❖ Nurses are able to access surgeon preference details in the cloud-based platform through their mobiles to prepare and order instrument sets needed for specific surgery (Pic 6).

To further improve **accessibility** and **sustainability**:

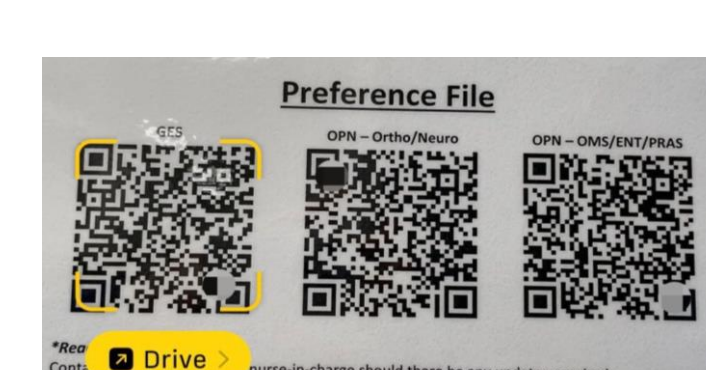
- ❖ QR codes (Pic 7) linked to the relevant documents were generated and placed in convenient places for easy access (Pic 8).
- ❖ Documents uploaded are reviewed and updated according to new changes of surgeons' preference or new procedures.



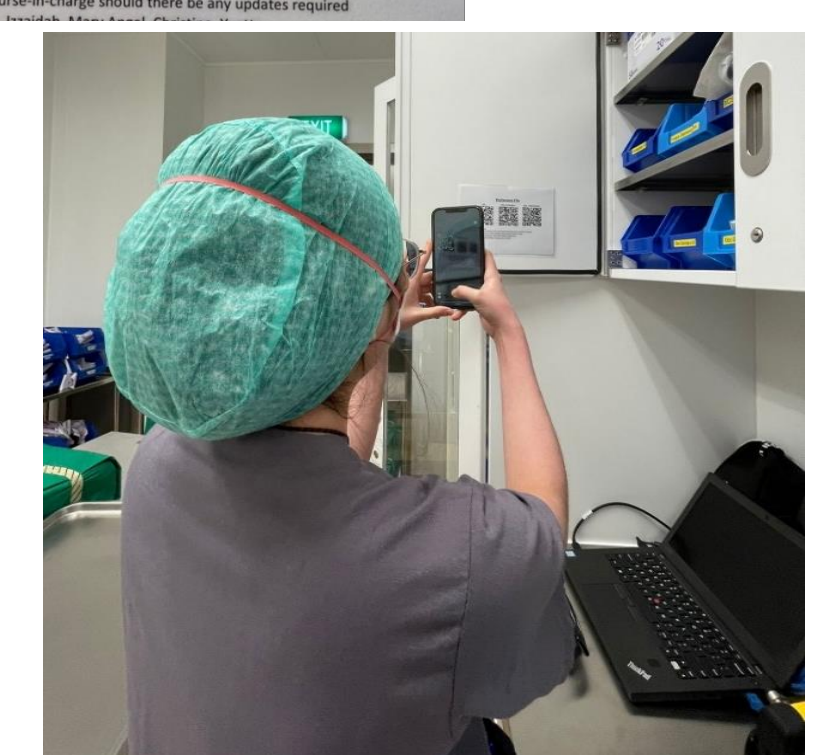
Pic. 5: Sample viewing of Surgeon Preference



Pic. 6: Staff uses the Google Drive on her mobile for ordering of instruments on SKH Campus TimsWeb in SKH Infopedia.



Pic. 7: QR code placed in Sterile Core in the Operating Theatre



Pic. 8: Staff scans QR Code to view Google Drive according to Discipline

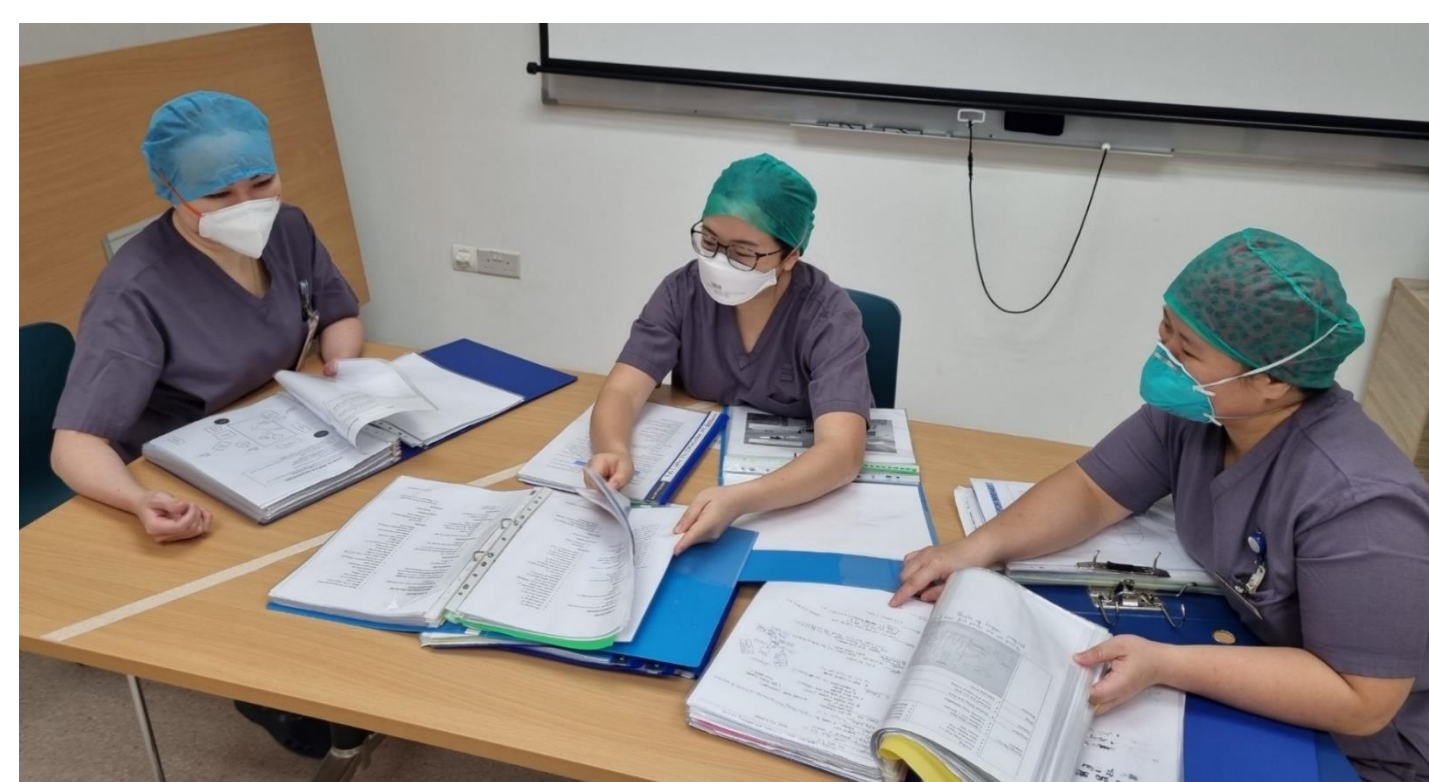
AIM / PROJECT OBJECTIVE

To improve accessibility and reliability of surgeons' preference cards to enhance efficiency and boost nurses' confidence in surgical preparations.

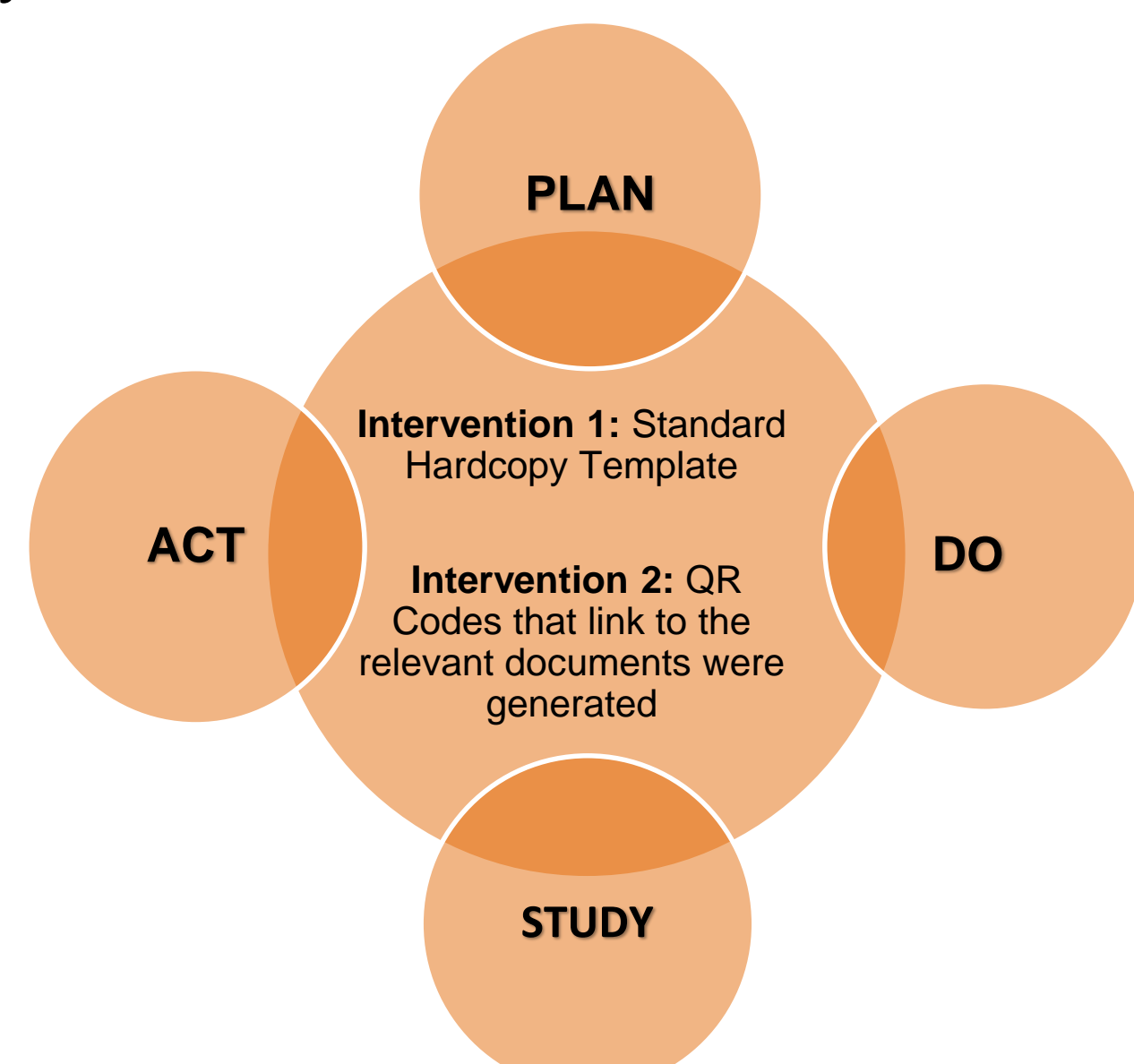
METHODOLOGY

Through a focus group discussion (Pic 4) and a pilot trial, the team decided that the use of cloud platform would be beneficial to streamline the work process.

- ❖ After the trial period, a post-survey was conducted to gauge for staff's satisfaction and compliance rate.
- ❖ The initiation and review took a period of 6 months, with 100% usage amongst 142 scrub nurses by the end of 12 months.



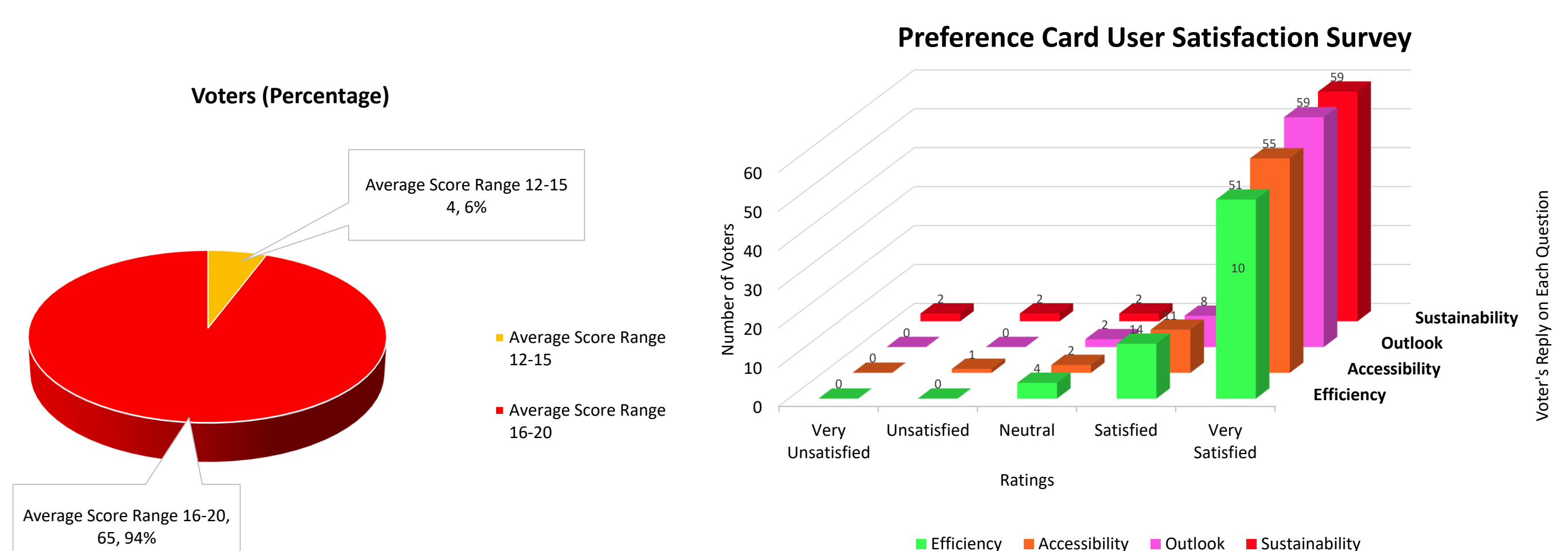
Pic. 4: Discussion & reviewing of hardcopy preference documents



RESULT

A post survey was conducted amongst 142 perioperative nurses with 69 responses evaluated the four aspects of **Efficiency**, **Accessibility**, **Outlook** and **Sustainability** of the Cloud-based Surgeon Preference Card. Out of the 69 nurses:

- ❖ 65 nurses (94%) rated **Satisfied / Very Satisfied** across these four aspects which suggested a high level of satisfaction with this project.



CONCLUSION

The initiation of this cloud-based platform has produced a positive impact to its users.

- ❖ In each discipline, a team of nurses are enthusiastic to upkeep and update these surgeons preferences as necessary for a timely **'real-time'** update.
- ❖ > 600 preference cards have been created since its initiation with a **high level of satisfaction**.
- ❖ This platform has the capacity to include more detailed information for each surgery i.e. pictures of specific items.
- ❖ Future versions and enhancement to this are always **accessible** & possible.