Pre-Registration of New Case Patients for Seamless Outpatient Onsite Experience

Yuen Bi Huan, Lynette Cheah, Sylvia Sim, Teo Jing Chun, Zaiton Soedar, Rosnah Ismail, Jenny Chang, Tay Wai Na, Ginny Lim, Azlinah Binte Mohd Adam

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KK Women's and Children's Hospital — SingHealth

Background & Aim

New Cases in KKH Women's clinics are able to self-register at kiosks, while New Cases in Paediatric clinics have to register at counters due to the need for verification of patient and next-of-kin (NOK) particulars with supporting documents, such as birth certificate, re-entry permit, etc. For Reproductive Medicine patients, husbands need to be registered in advance for doctors to order specific tests as it is a couple treatment, and verification of particulars by counter staff is required.

With the move towards improving productivity at clinics' counters, this project aims to:

- Enable verification of patient and NOK particulars and ordering of required tests in advance
- Enable New Cases to self-register successfully and bypass registration counters for faster turnaround time for patients and staff
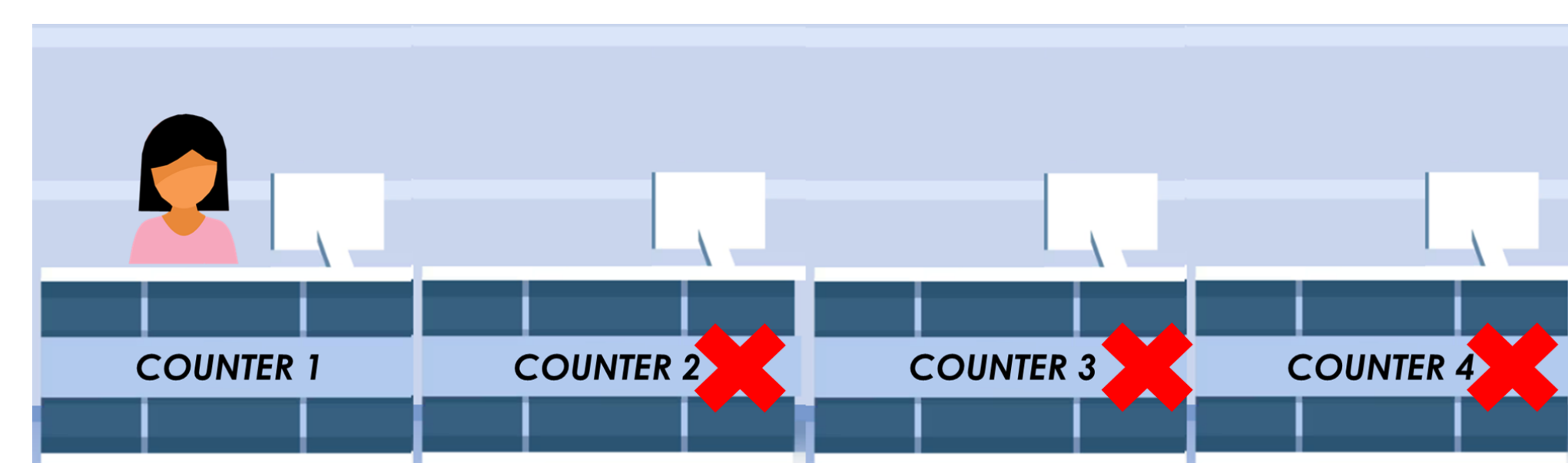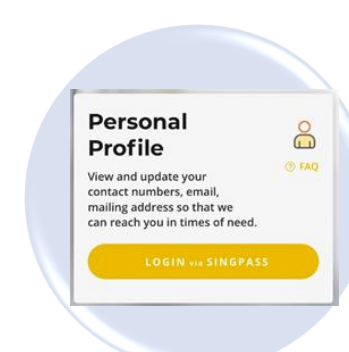
Methodology

Phase 1

A workgroup was formed to review and brainstorm on contributing factors for seamless registration processes, and identify the key information required for patient and NOK verification.

Feasibility of Health Buddy Personal Profile enhancements to pre-register new cases using MyInfo data was explored.

Pilot projects using FormSG for new case pre-registration were launched at one Women's clinic (Reproductive Medicine Centre) and one Paediatric clinic (KKH@Halifax), where tagging and registration of NOKs over the counter are an essential part of new case registration. SMS/Push Notifications to submit patients' and NOKs' particulars via FormSG were sent during appointment booking and 7 days prior to appointment. Submissions were verified and processed backend.

Phase 2 (work in progress)

With limitations in the possible scope of Personal Profile enhancements, pre-registration of new cases will have to continue making use of existing resources, while tapping on more innovative means of automating data entry through exploring Robotic Process Automation (RPA).

Phase 3 (work in progress)

Implement FormSG for new case pre-registration and further develop RPA at more clinic locations.

Results

Reproductive Medicine (RM) Centre

Piloted since end-May 2023 for RM patients
- Started with subsidised templates; subsequently opened to private templates since Oct 2023.
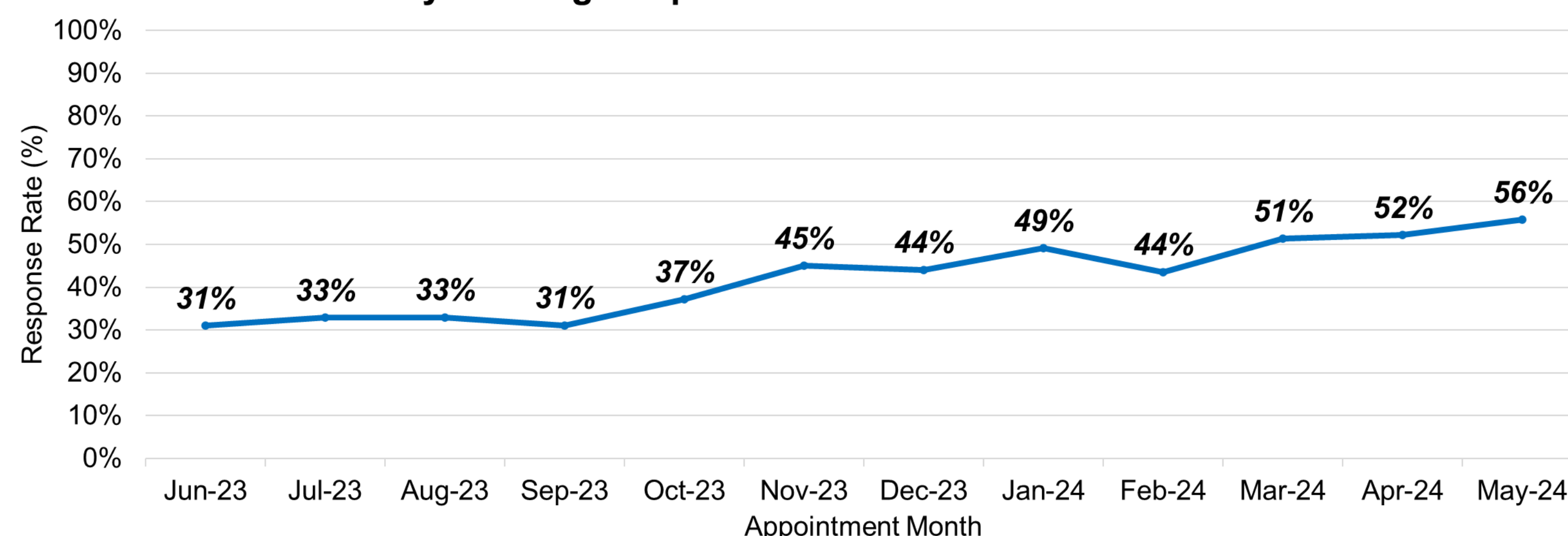
Overall response rate: 43%
- 2,895 actualised new case appts between 1 Jun 2023 to 31 May 2024, of which, 1,232 submitted a FormSG response.

79% of respondents submitted information at least 3 days before appt
- An increased take-up rate was observed since project commencement, where staff also shared that they felt reduced stress from not having to register NOKs inside the consult rooms due to the fast nature of consultations.

Monthly Pre-Reg Response Rate - New Case RM Patients

Appointment Month	Response Rate (%)
Jun-23	31%
Jul-23	33%
Aug-23	33%
Sep-23	31%
Oct-23	37%
Nov-23	45%
Dec-23	44%
Jan-24	49%
Feb-24	44%
Mar-24	51%
Apr-24	52%
May-24	56%

Pilot at KKH@Halifax

Piloted since mid-Sep 2023 for Paediatric Dermatology, Paediatric Psychiatry and Paediatric General Med patients
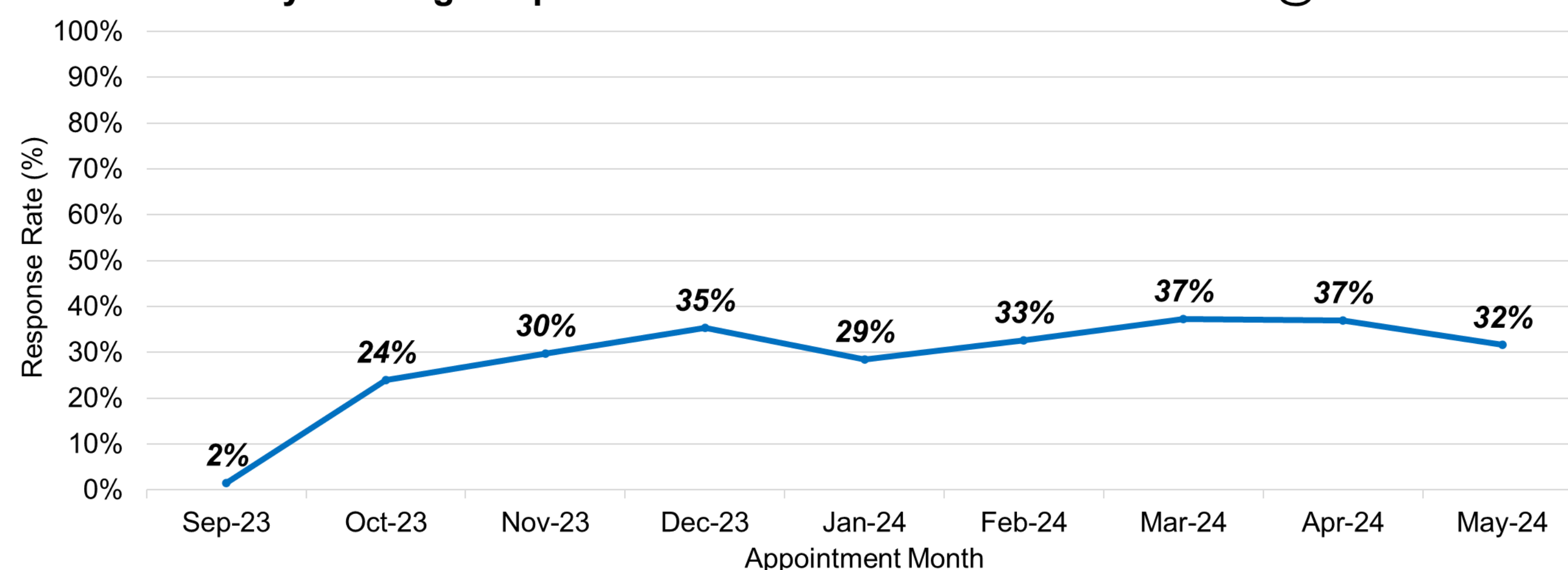
Overall response rate: 29%
- 5,741 actualised new case appts between 20 Sep 2023 to 31 May 2024, of which, 1,692 submitted a FormSG response.

71% of respondents submitted information at least 3 days before appt
- Documents were received in advance for verification and NOK tagging, and new patients were able to successfully self-register at kiosks on the day of visit, which reduces crowding at front counter area.

Monthly Pre-Reg Response Rate - Paediatric New Cases at KKH@Halifax

Appointment Month	Response Rate (%)
Sep-23	2%
Oct-23	24%
Nov-23	30%
Dec-23	35%
Jan-24	29%
Feb-24	33%
Mar-24	37%
Apr-24	37%
May-24	32%

Conclusion

The use of FormSG for pre-registration has allowed Patient Services Associates at front counters to be reassigned for other duties when the manpower needs arise, and is also in line with the move towards a counter-less concept in the outpatient clinics. While backend administrative processing of FormSG data is still required, the workflow has potential for further automation via RPA, to address manpower challenges for manual NOK tagging and pre-registration of new patients in OAS. Patients are also able to self-register more seamlessly at kiosks when they arrive on the day of appointment if they had completed the pre-registration FormSG prior, and necessary tests can be ordered in advance for spouses of RM patients as part of their treatment regime.