

Project Title

NDCS 'Digital First' Specialist Outpatient Clinic

Project Lead and Members

Project lead: Ricky Hi Cheong Leong

Project members: Xu Jianxiong, Daniel Tay Ming Ming, Elaine Tan Li Yen, Shirley Tan E Ling, Willie Woo Shek Chow, Lim Szu Min, Michelle Lim Soong Cheng, Stara Tan Chieu Fern, Mastura Binte Mohd Yusof , Maslina Binte Wahab , Jojinee Binti Mohamed

Organisation(s) Involved

National Dental Centre Singapore

Healthcare Family Group(s) Involved in this Project

Allied Health, Healthcare Administration

Applicable Specialty or Discipline

General Practice, Healthcare Administrative

Project Period

Start date: Aug 2022

Completed date: Dec 2022

Aims

Its aim to transform their clinic to enable a unified patient journey centred on "digital-first" principles.

Background

Aligned with Singapore Smart Nation initiatives of building digital literacy, NDCS piloted at two SOCs a concept whereby patients transact almost entirely using digital platforms before, during and after their visit. The two "digital-first" clinics enabled us

to be almost fully counterless, hence empowering our patients, improving their experience and reducing their on-site dwell time.

COVID-19 has accelerated digital transactions and we assessed that it is timely to transit NDCS to a digital-first institution. The team sought to transform our clinic to enable a unified patient journey centred on “digital-first” principles.

From these efforts, mobile-registration rates are trending higher and mobile payment take-up has improved by 20.7%, while self- service appointment changes also increased by 8.9%. Not having to wait for counter services also reduces patients’ on-site dwell time by up to ~30 mins per visit.

Methods

See poster appended/below

Results

See poster appended/below

Conclusion

This pilot serves as a trial of how to successfully encourage and nudge patients towards digital services. We have demonstrated that by considering factors pertaining to People, Place and Process, we can successfully increase digital service usage in NDCS. With more patients able to accomplish their transactions through self-service modality, it also helps alleviate the concerns over rising workloads by optimising our processes better. NDCS will progressively extend the digital-first concept to the rest of NDCS. In FY24, we will extend the digital first concept to two more clinics (Clinic 2 and 4), and with this, 80% of our SOCs at NDCS will be on this model. By 2027, when NDCS moves to her new premise at the Elective Care Centre (ECC), our patients and staff will continue to enjoy the “digital first” experience. Change management and stakeholder involvement will be critical as we prepare our staff and continue to refine our processes to enhance the “digital-first” clinic.

Project Category

Technology

Digitalisation, Automation, Digital Platform

Keywords

Digital Literacy, Mobile Registration, Online Self Service, Transactions,

Name and Email of Project Contact Person(s)

Name: Mr Daniel Tay

Email: daniel.tay.m.m@ndcs.com.sg



NDCS 'Digital First' Specialist Outpatient Clinic

Ricky Hi Cheong Leong¹, Xu Jianxiong¹, Daniel Tay Ming Ming¹, Elaine Tan Li Yen², Shirley Tan E-Ling¹, Willie Woo Shek Chow¹, Lim Szu Min³, Michelle Lim Soong Cheng⁴, Stara Tan Chieu Fern⁵, Mastura Binte Mohd Yusof¹, Maslina Binte Wahab¹, Jojinee Binti Mohamed¹

1 Operations, National Dental Centre Singapore, SingHealth
2 Dept of Orthodontics, National Dental Centre Singapore, SingHealth
3 Organisational Planning and Performance, National Dental Centre Singapore, SingHealth

4 Office of Patient Experience, National Dental Centre Singapore, SingHealth
5 Corporate Communications and Development, National Dental Centre Singapore, SingHealth

SUMMARY AND BACKGROUND

Aligned with Singapore Smart Nation initiatives of building digital literacy, NDCS piloted at two SOCs a concept whereby patients transact almost entirely using digital platforms before, during and after their visit. The two "digital-first" clinics enabled us to be almost fully counterless, hence empowering our patients, improving their experience and reducing their on-site dwell time.

COVID-19 has accelerated digital transactions and we assessed that it is timely to transit NDCS to a digital-first institution.

The team sought to transform our clinic to enable a unified patient journey centred on "digital-first" principles.

From these efforts, mobile-registration rates are trending higher and mobile payment take-up has improved by 20.7%, while self-service appointment changes also increased by 8.9%. Not having to wait for counter services also reduces patients' on-site dwell time by up to ~30 mins per visit.

CREATING THE "DIGITAL FIRST" CLINIC

P
R
O
C
E
S

- 1 Induction of new patients to prepare them for "digital first" journey
- 2 Consolidated backend functions across 2 clinics
- 3 "Drop and Go" as a default without needing to wait on-site for payment

P
L
A
C
E

- 4 Counterless layout to promote "digital first"
- 5 Zoning for improved patient flow & wayfinding
- 6 Murals for patient education (QR codes) and "digital first" promotion

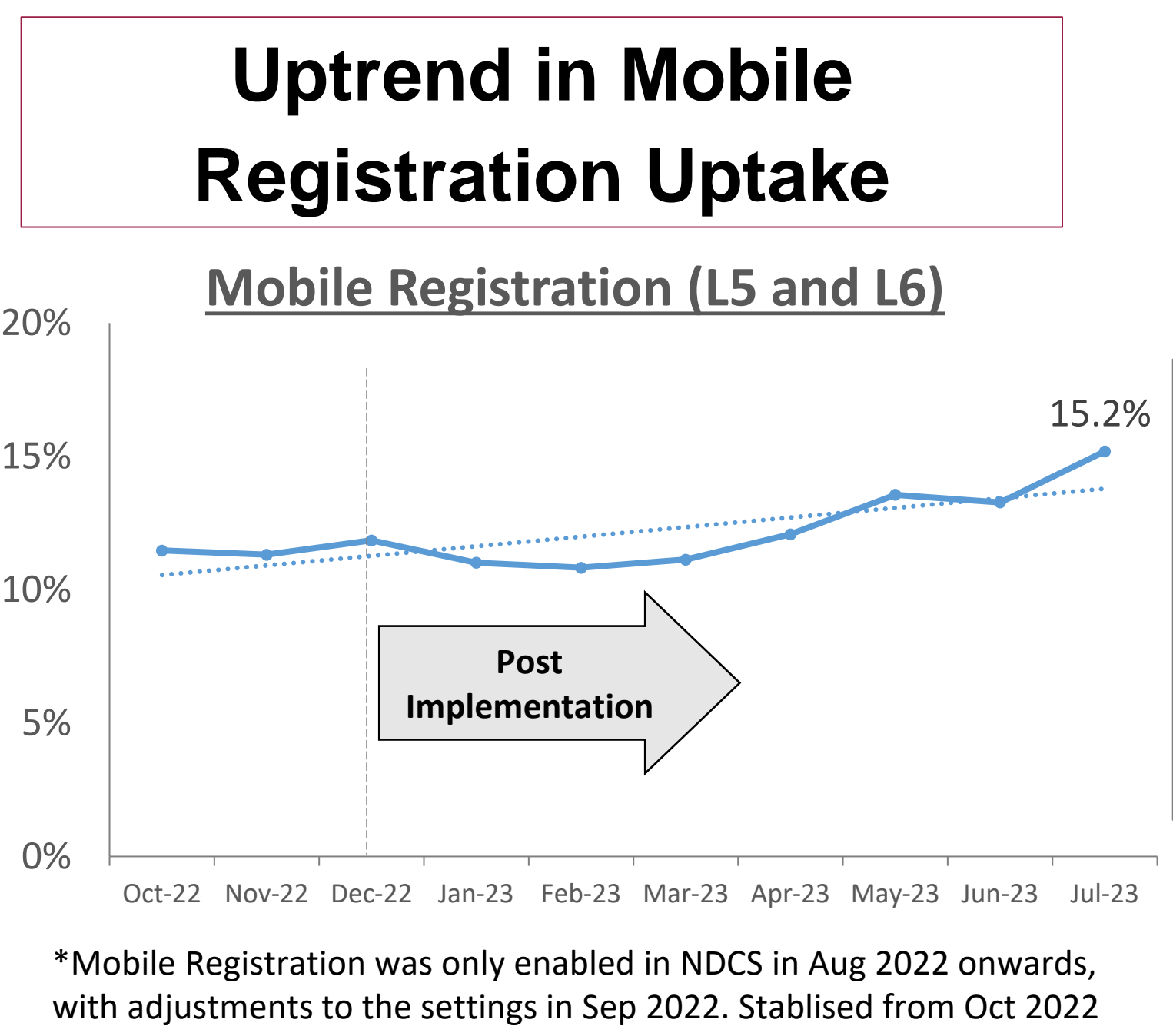
P
E
O
P
L
E

- 7 Redesigned roles to support "digital first"
- 8 Introduced new digital ambassador role
- 9 Retrained staff for re-designed roles

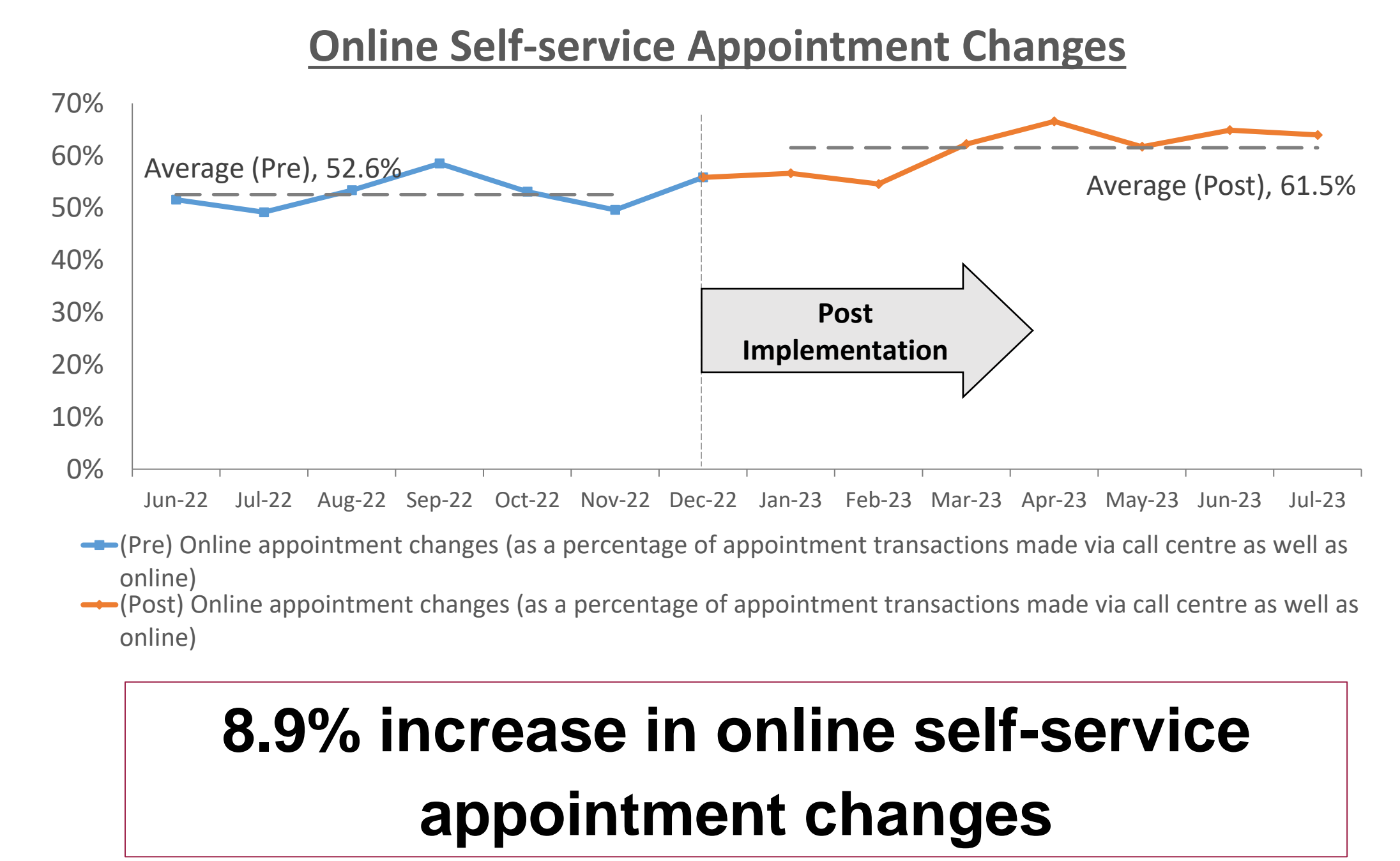
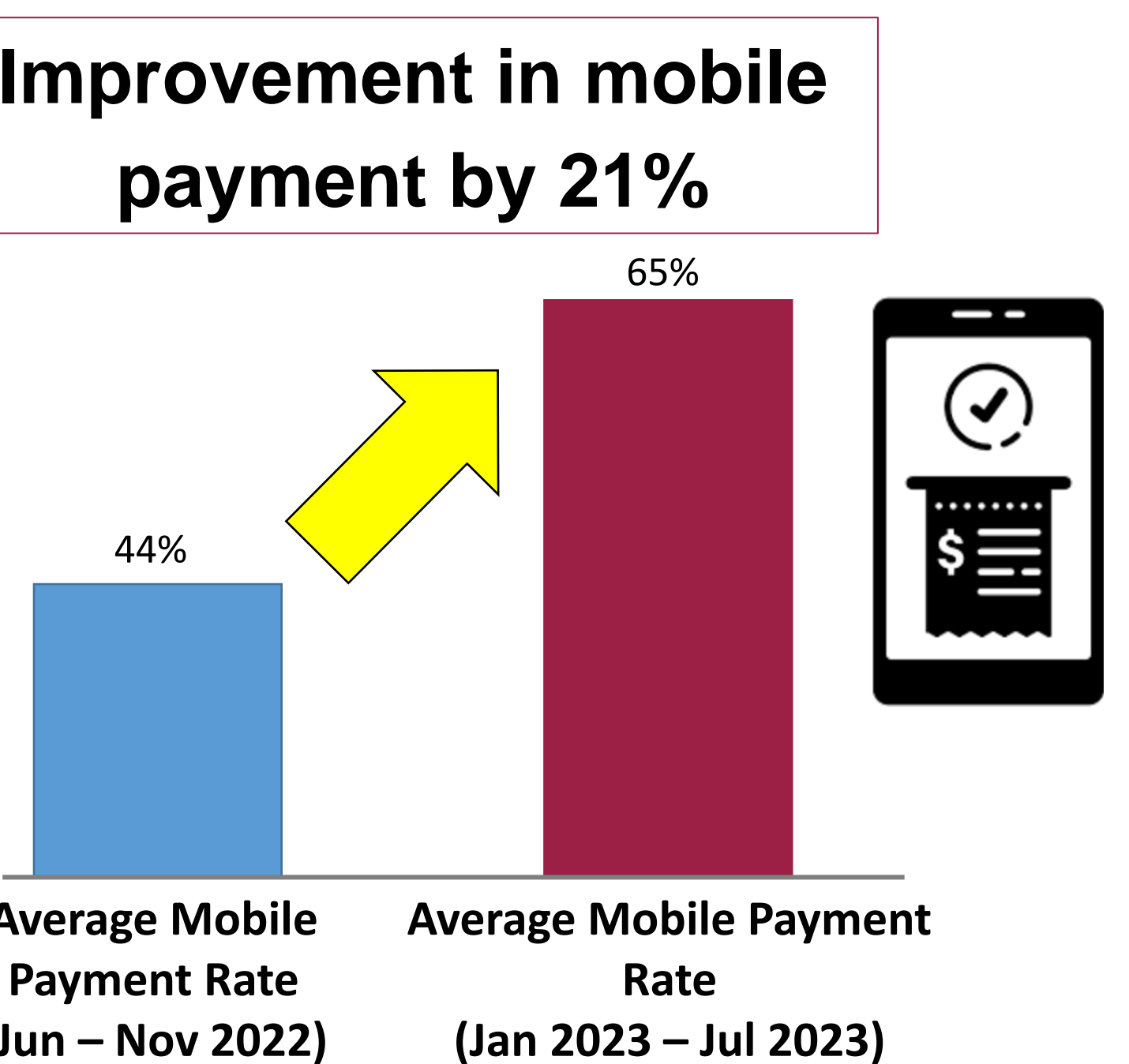
T
R
A
N
S
F
O
R
M
A
T
I
O
N

From this... *... to this*

RESULTS FOLLOWING IMPLEMENTATION OF "DIGITAL FIRST" CLINIC IN DEC 2022



Patients who can self service via Healthbuddy can save their on-site dwell time by up to ~30 mins



CONCLUSION

This pilot serves as a trial of how to successfully encourage and nudge patients towards digital services. We have demonstrated that by considering factors pertaining to People, Place and Process, we can successfully increase digital service usage in NDCS. With more patients able to accomplish their transactions through self-service modality, it also helps alleviate the concerns over rising workloads by optimising our processes better.

NDCS will progressively extend the digital-first concept to the rest of NDCS. In FY24, we will extend the digital first concept to two more clinics (Clinic 2 and 4), and with this, 80% of our SOCs at NDCS will be on this model. By 2027, when NDCS moves to her new premise at the Elective Care Centre (ECC), our patients and staff will continue to enjoy the "digital first" experience. Change management and stakeholder involvement will be critical as we prepare our staff and continue to refine our processes to enhance the "digital-first" clinic.