

#### Project Title

Digitalisation of Registration Process for more Accessible Mammogram Screening

#### **Project Lead and Members**

Project lead: Kong Kum Yin

Project members:

- Valencia Khoo
- Jocelyn Chia

#### **Organisation(s) Involved**

National Healthcare Group Diagnostics

Partners: Singapore Cancer Society (SCS); Breast Cancer Foundation (BCF)

#### Aim

To transform various mammogram registration processes, making mammogram screening more accessible for busy housewives and working ladies, and to alleviate PDPA risks in the process

#### Background

See poster appended/ below

#### Methods

See poster appended/ below

#### Results

See poster appended/ below

#### **Lessons Learnt**

 Constantly look out for improvement opportunities – as more features and functions are available on FormSG, there is potential to further reinvent our processes.



#### CHI Learning & Development System (CHILD)

 Involve all stakeholders in the issues analysis and solutions implementation – looking at an issue from different perspectives enable us to develop a more robust solution as well as gain buy-in from various stakeholders in the final solution.

#### Conclusion

See poster appended/ below

#### **Additional Information**

We are happy that by initiating this process improvement, we could bring about many tangible and intangible benefits to our internal and external stakeholders. Our early adoption of FormSG to remove the use of hardcopies had enabled us to support operations during the pandemic.

The FormSG is a most versatile and secure form-builder, especially useful when requesting personal information from the public. We encourage more organizations to adopt it for their processes.

Patients are now happy and confident in using our services. Being able to self-help appointments means preventive screening is now more accessible to the busy housewives and working ladies. This enhances our outreach efforts.

Our partners Singapore Cancer Society (SCS) and Breast Cancer Foundation (BCF) could channel the cost savings reaped from the project to benefit more people through their outreach, thus putting their donors' funds to more meaningful use.

#### **Project Category**

Technology, Automation, IT & Robotics Innovation

#### Keywords

Technology, Automation, IT & Robotics Innovation, Preventive Care, Process Improvement, Healthcare Administration, Radiology, Radiography, Efficient Care, Cost Effectiveness, National Healthcare Group Diagnostics, Singapore Cancer Society,



CHI Learning & Development System (CHILD)

Breast Cancer Foundation, FormSG, Mammogram Screening, Mammobus, Registration Process, Appointment Booking, Business Development, Data Security

#### Name and Email of Project Contact Person(s)

Name: Kong Kum Yin

Email: Kum\_yin\_kong@diagnostics.nhg.com.sg

# Digitalization of Registration Processes for More Accessible Mammogram





Adding years of healthy life

## ABSTRACT

NHG Diagnostics (NHGD) is a business unit of the National Healthcare Group. We provide one-stop imaging and laboratory services to primary care and the community via our network of 30 over centres and a fleet of mobile centres.

NHGD adopted FormSG to transform our various mammogram registration processes, making mammogram screening more assessable for the busy housewives and working ladies, and alleviated PDPA risks in the processes. In addition, manpower and resources savings from the simplified and streamlined processes meant more effective deployment of resources to focus on patient care and benefit more ladies in preventive screening.

# **KEY OUTCOMES**

## **Tangible Benefits**

- 1. Manpower savings of \$16,300 per year
- 2. Partners' cost savings of \$30,800 per year for eliminating pre-printing of consent forms and engaging vendor to do data entry. These funds could then be re-directed to meaningful outreach efforts to benefit more patients.
- 3. 60% of our appointments are now using electronic forms.

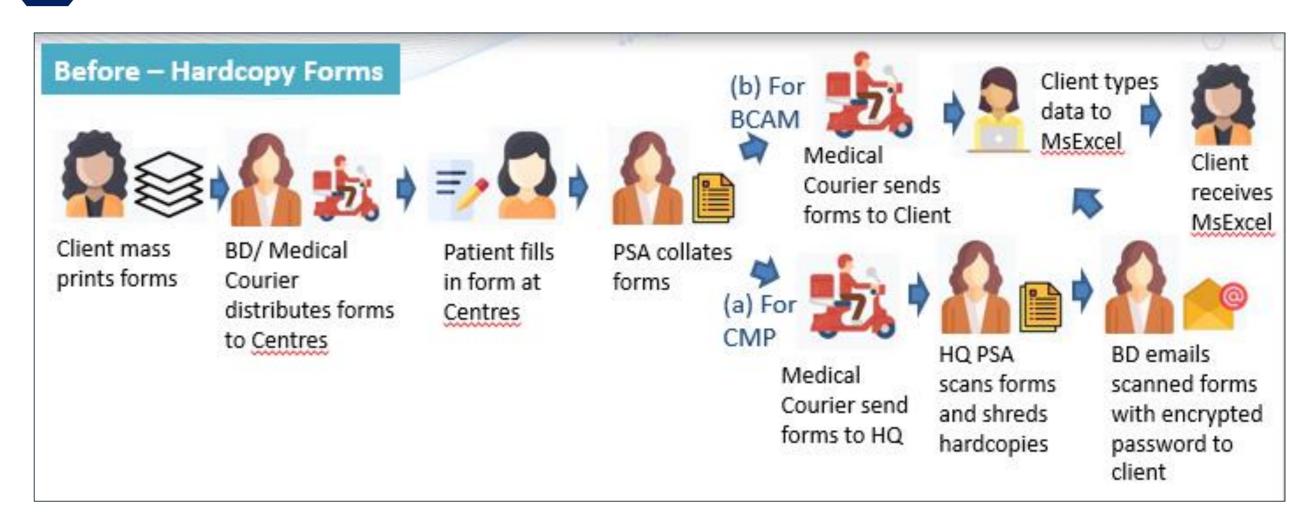
## Intangible benefit

 Patient satisfaction – Patients feel confident in signing up mammogram screening with us, and using our services. Ease of registration makes mammogram screening more accessible.
Data security – protect patients' data with direct collation in secured cloud storage and minimal human intervention. Data purging will be performed by Govtech upon request.

- 3. Data accuracy Eliminate errors and missing info when using manual forms
- 4. Speed up billing verification process
- 5. Eliminate physical handling of forms containing personal data



## Mammogram Programme Registration



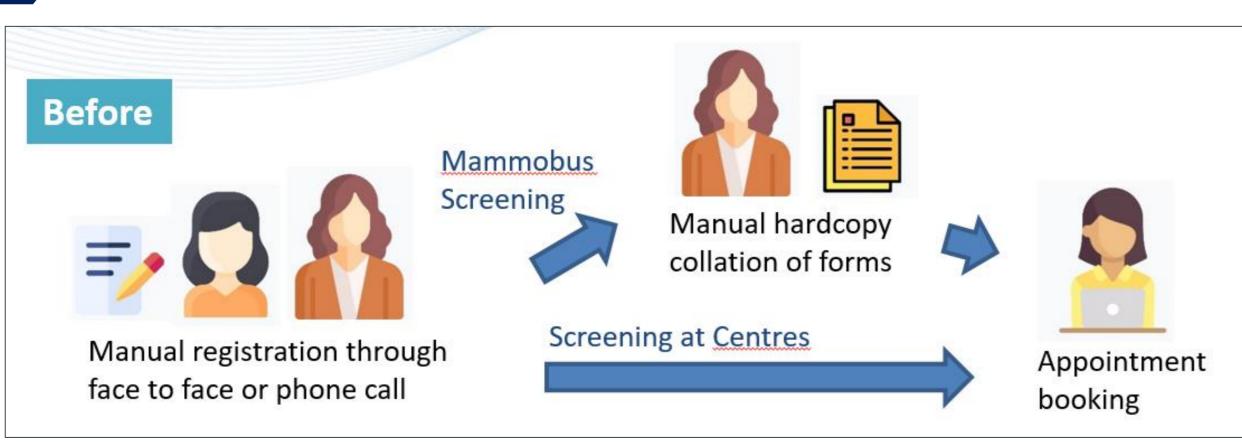
Patients who wish to enjoy Community Mammobus Programme (CMP) or Breast Cancer Awareness Month (BCAM) funding assistance for their mammogram screening were required to fill in hardcopy pre-printed consent forms from our partners Singapore Cancer Society (SCS) and Breast Cancer Foundation (BCF). Information includes patient personal information which has to be ultimately transferred to our partners SCS and BCF to be transcribed to MsExcel format and used for billing verification.

## WHAT WAS DONE

## PROBLEM

1

Mammobus and Mammogram Appointment Registration



PROBLEM & ACTIC

**STATEMEN1** 

TAKEN

ZO

Patients who wish to sign up for NHGD organised Mammobus screening or mammogram screening at our Centres had to sign-up with us either face to face or via a phone call as many were not comfortable with emailing their personal information such as NRIC and date of birth, which were essential for the registration. Some may choose to defer screening due to the inconvenience in registration. It also meant many missed opportunities of outreach as one to one contact opportunities are limited.

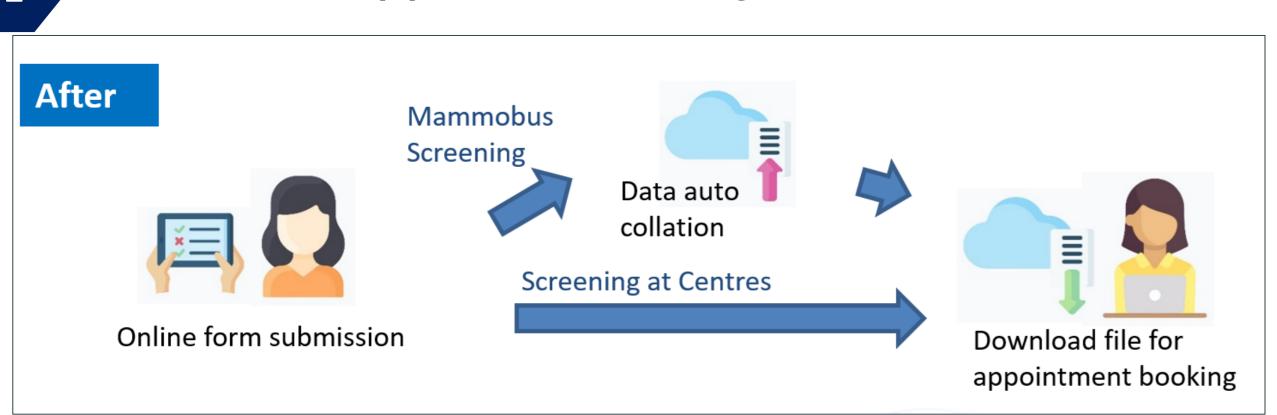
The processes involved multiple parties at multiple locations (12 Centres, HQ), is resource intensive, time consuming and subjected to PDPA risks.

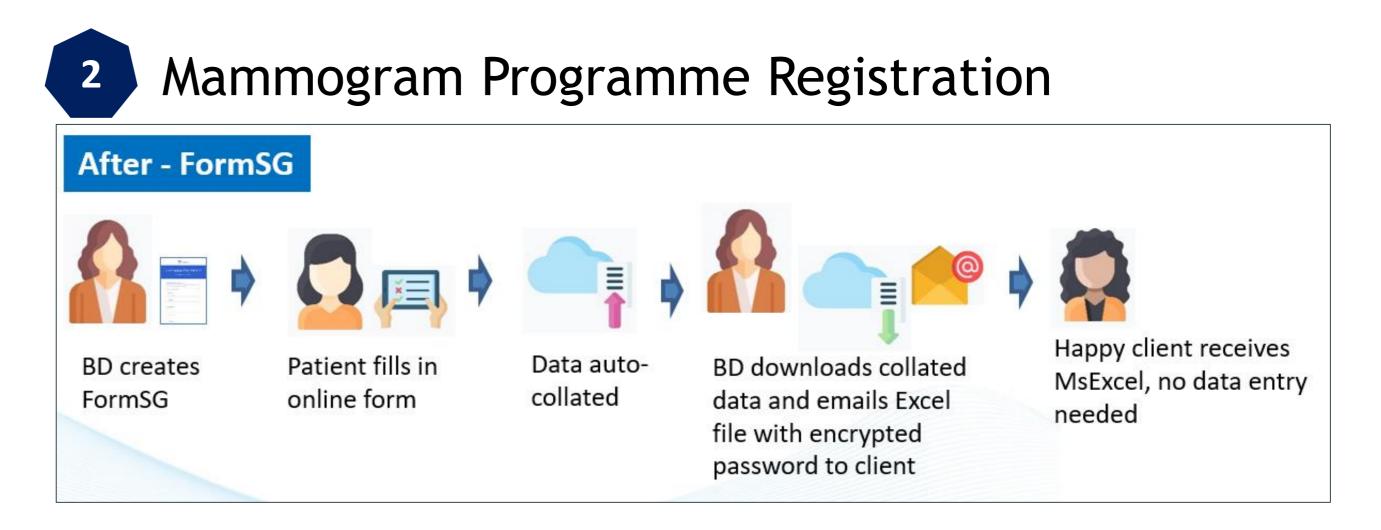
## WHAT HAS IMPROVED

We leveraged on FormSG to digitalize the processes as it is zero cost, secure and fast to implement. We revamped the processes, simplifying and streamlining the workflow. The new processes make signing up for mammogram and related funding assistance programmes fuss-free and safe for our patients.

**MPROVEMENTS** & BENEFITS

## Mammobus Appointment Registration





By making mammogram registrations seamless and safe means more convenient and assessible preventive screening for our patients. Patients gain the confidence in using our services and boosts our outreach efforts.

By simplifying the mammogram programme registration processes, we saved valuable manpower resources in our various teams to focus on patient care. Cost savings by our partners SCS and BCF meant that their donors' funds could be channeled to benefit more people in their outreach.

## INSIGHTS AND MOVING FORWARD

1) Constantly look out for improvement opportunities – as more features and functions are available on FormSG, there is potential to further reinvent our processes.

2) Involve all stakeholders in the issues analysis and solutions implementation – learning from different perspectives of an issue enable us to develop a more robust solution as well as gain buy-in from stakeholders in the final solution.

Our early adoption of FormSG eliminated hardcopies handling in our process, which supports our operations especially in the on-going pandemic as handling of hardcopies bears risks of cross-infection. We will continue to look at more opportunities to digitalize and transform our processes to benefit our stakeholders. We hope more organizations would adopt FormSG as it is zero cost, versatile and safe avenue to collect information.