

# 2D BARCODE LABELLING SYSTEM

#### **Singapore Healthcare** Management 2019

Maurice Wong, NHCS Edmund Lim, IHIS Teo Bao Yun Irene, NHCS Chiong Siau Chien, NHCS Ng Lay Choo, IHIS



National Heart Centre Singapore SingHealth

# Introduction

The project is to transcribe patient information from the code, into the healthcare systems to support QR operational and business needs. It eliminate the need for manual data entry of patients' details into different screen designs of the different cardiac diagnostic devices and machines, thereby improving patient safety through better data integrity and staff's efficiency. As a result, better workflow leading to faster turnover of laboratory test requests.

### Benefits

#### **Reduced Waiting Time**

Reduced waiting time at the procedure room for the

# Objectives

- Integrate 2D barcode into NHCS' OAS patient sticky label
- Scanning the 2D barcode label to transcribe patient information into the healthcare systems

#### staff to manually enter patient information into the medical devices

#### **Patient Safety**

Scanning the 2D barcode into the medical machines to eliminate data entry errors and ensure data integrity.

#### **Happier Patients**

Increase staff satisfaction and improved efficiency. Less time is spent on completing the fields for different medical machines.

## Methods

The current outpatient sticky labels contains a 1D barcode with only the patients' NRIC embedded. Hence, only the patients' NRIC will be reflected in the system when the barcode is scanned. Other patient's information such as, patient's name, date of birth and gender will have to be manually entered by staff.







Staff simply scan a 2D barcode on the patient label for procedure and the embedded barcode of patient information will automatically be filled in the medical system. The 2D barcode scanners are configured to interpret information in the 2D barcode and mapped the relevant fields into different types of cardiac diagnostic machines including ECG, ECHO, Vascular ultrasound machines, nuclear imaging, MRI machines and etc.

### Conclusion

The departments involved had seen improvement in productivity and efficiency from the automation of entering patient information into the machines. Which would lead to better staff's confidence and satisfaction. We have also seen less re-work done and fewer data entry errors. Staff is happy with this implementation.