



Singapore Healthcare  
Management 2019

# Digitise It!

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## BACKGROUND



Upon examination, endocrine doctors will order specialized endocrine tests for patients with thyroid hormonal disorder



Room assistants will go around clinic to look for appointment book to log the appointment for patient

## PROBLEM!



Due to manual booking, there is no tracking and overview of appointments made, which may lead to overbooking or sub-optimization of resource.

### Problem:

- ✗ Inefficient use of time as staff have to search for book and manually log the cases
- ✗ Low staff satisfaction due to not being able to cope with workload
- ✗ Patients unable to self-register, resulting in higher workload at registration counters
- ✗ Patients unable to receive SMS reminders for their appointments

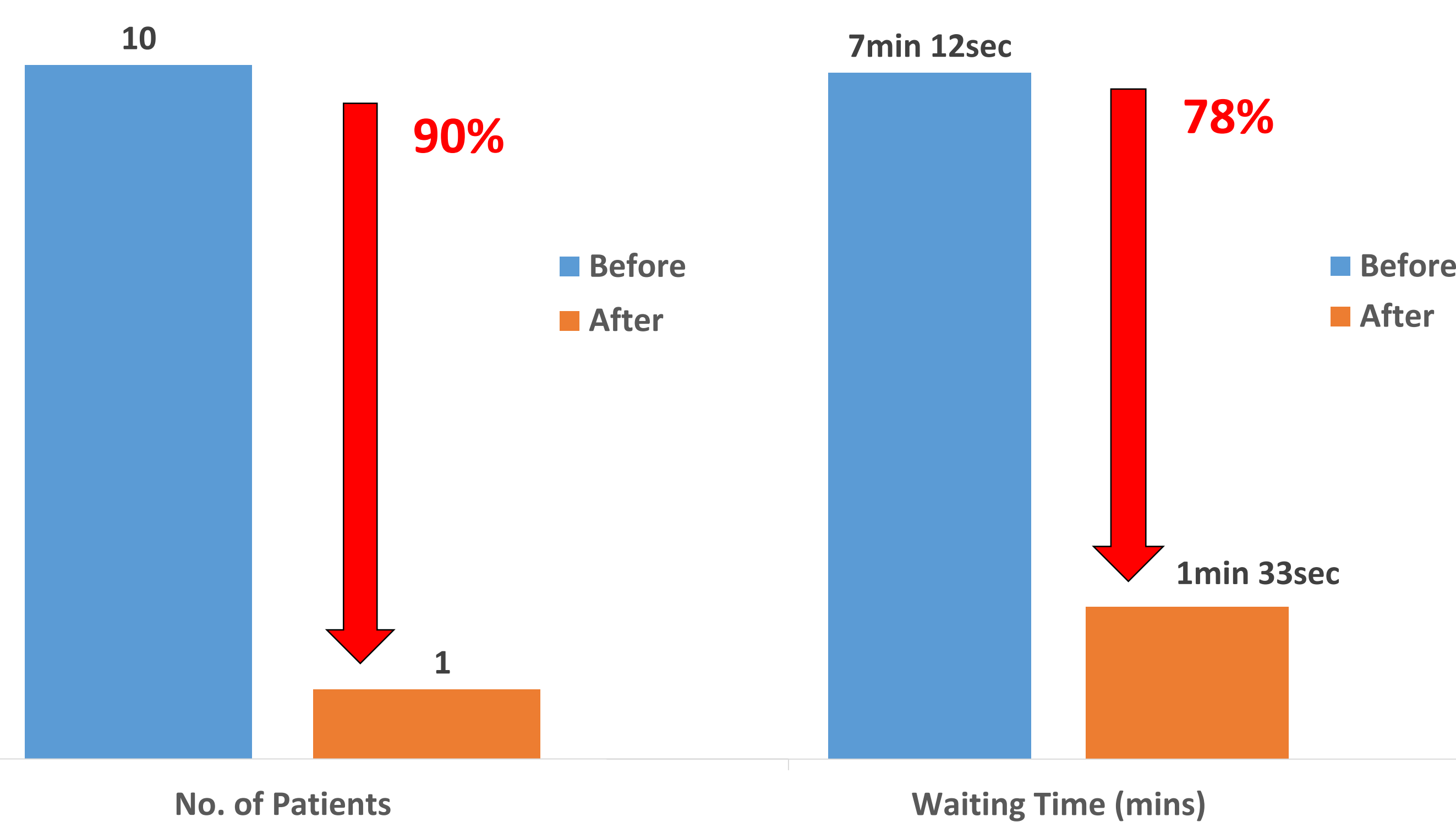
## AIM

To streamline appointment scheduling process for endocrine tests to enhance patient care, allowing greater efficiency for registration at clinic.

## RESULTS

Appointments Registered @ Counters  
(for every 10 patients)

Appointment Booking Time for  
Endocrine Test (mins)



### Tangible Results

- ✓ Reduced workload at registration counter by **90%** as patients are able to self-register via kiosk
- ✓ Reduced appointment booking time by **78%** as appointments are made available for booking online

### Intangible Results

- ✓ Improved productivity for registration, resulting in staff being able to take on other duties
- ✓ Room assistants can book appointments directly into the system instead of searching for the physical book, improving staff morale
- ✓ Improved patient satisfaction due to simpler registration processes and the reduced waiting time
- ✓ Patients are able to receive SMS reminders for their appointments
- ✓ More timely and accurate patient care can be provided
- ✓ Endocrine nurses are happier as the workload for endocrine test is evenly distributed, reducing their stress and anxiety level
- ✓ Patients feedback the waiting time feels shorter as they can proceed directly to the Procedure Room instead of waiting at counter

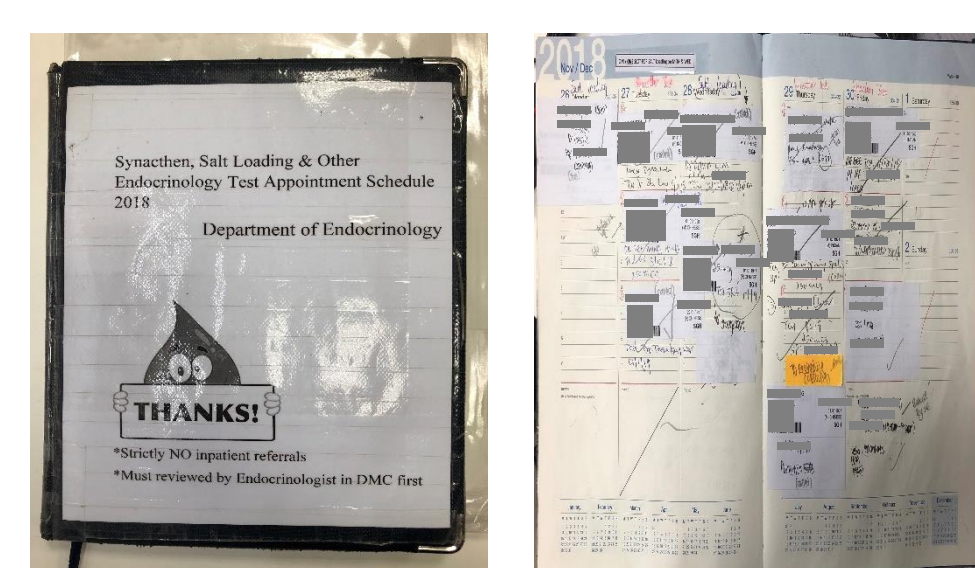
## METHODOLOGY

The **cross-functional team** engaged various groups of staff to understand the current situation and analyzed the problem using the **5-WHYs** approach:

- WHY?** Staff are unhappy with appointment booking for endocrine patients with endocrine tests ordered
- WHY?** Staff are unable to book doctor follow-up appointment which is dependent on the endocrine tests results
- WHY?** Staff are unable to book the appointment for endocrine tests
- WHY?** Staff are unable to locate the physical book in clinic to log the patient's case for endocrine test
- WHY?** Manual booking of endocrine test appointments where physical book is shared among all room assistants in clinic

The team brainstormed and thoroughly studied the past records of tests scheduled to propose the resource setup for endocrine tests in the appointment system to systemize appointment bookings.

Guidelines and trainings were conducted to ensure correct booking of appointments by the counter staff.



Before: Manual recording  
After: Systemized appointment slots

Sl. No.	Dr. Name	Dr. Specialty	Dr. Gender	Dr. Availability	Dr. Location	Dr. Contact No.	Dr. Email Address	Dr. Mobile No.	Dr. Fax No.	Dr. Home No.	Dr. Work No.	Dr. Pager No.	Dr. Email Address	Dr. Mobile No.	Dr. Fax No.	Dr. Home No.	Dr. Work No.	Dr. Pager No.
1	Dr. Yeo Shuan Khiag	Endocrinology	Male	Available	Endocrinology	6734 1234	shuan.khiag@sgsh.com.sg	9765 4321	6734 1234	9765 4321	6734 1234	9765 4321	shuan.khiag@sgsh.com.sg	9765 4321	6734 1234	9765 4321	6734 1234	9765 4321
2	Dr. Susheela D/O Periak Aruppan	Endocrinology	Female	Available	Endocrinology	6734 1234	susheela.aruppan@sgsh.com.sg	9765 4321	6734 1234	9765 4321	6734 1234	9765 4321	susheela.aruppan@sgsh.com.sg	9765 4321	6734 1234	9765 4321	6734 1234	9765 4321
3	Dr. Zhang Xiaoping	Endocrinology	Male	Available	Endocrinology	6734 1234	xiaoping.zhang@sgsh.com.sg	9765 4321	6734 1234	9765 4321	6734 1234	9765 4321	xiaoping.zhang@sgsh.com.sg	9765 4321	6734 1234	9765 4321	6734 1234	9765 4321
4	Dr. Tan Teck Choon	Endocrinology	Male	Available	Endocrinology	6734 1234	teck.choon@sgsh.com.sg	9765 4321	6734 1234	9765 4321	6734 1234	9765 4321	teck.choon@sgsh.com.sg	9765 4321	6734 1234	9765 4321	6734 1234	9765 4321

## CONCLUSION

With the introduction of endocrine test resource in the appointment system, clinic staff are able to book the appointments for patients more efficiently and effectively.

Appointments are better scheduled which **reduces waiting time** and **clinic resources are optimised**. Patients receive reminders which assure timely follow up and help improve patient outcomes.

**Overall, patient care and satisfaction for both internal and external stakeholders are enhanced.**

