



## Singapore Healthcare Management 2018



Changi  
General Hospital  
SingHealth

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# Improving Outpatient Experience (1 Queue)

## Aim

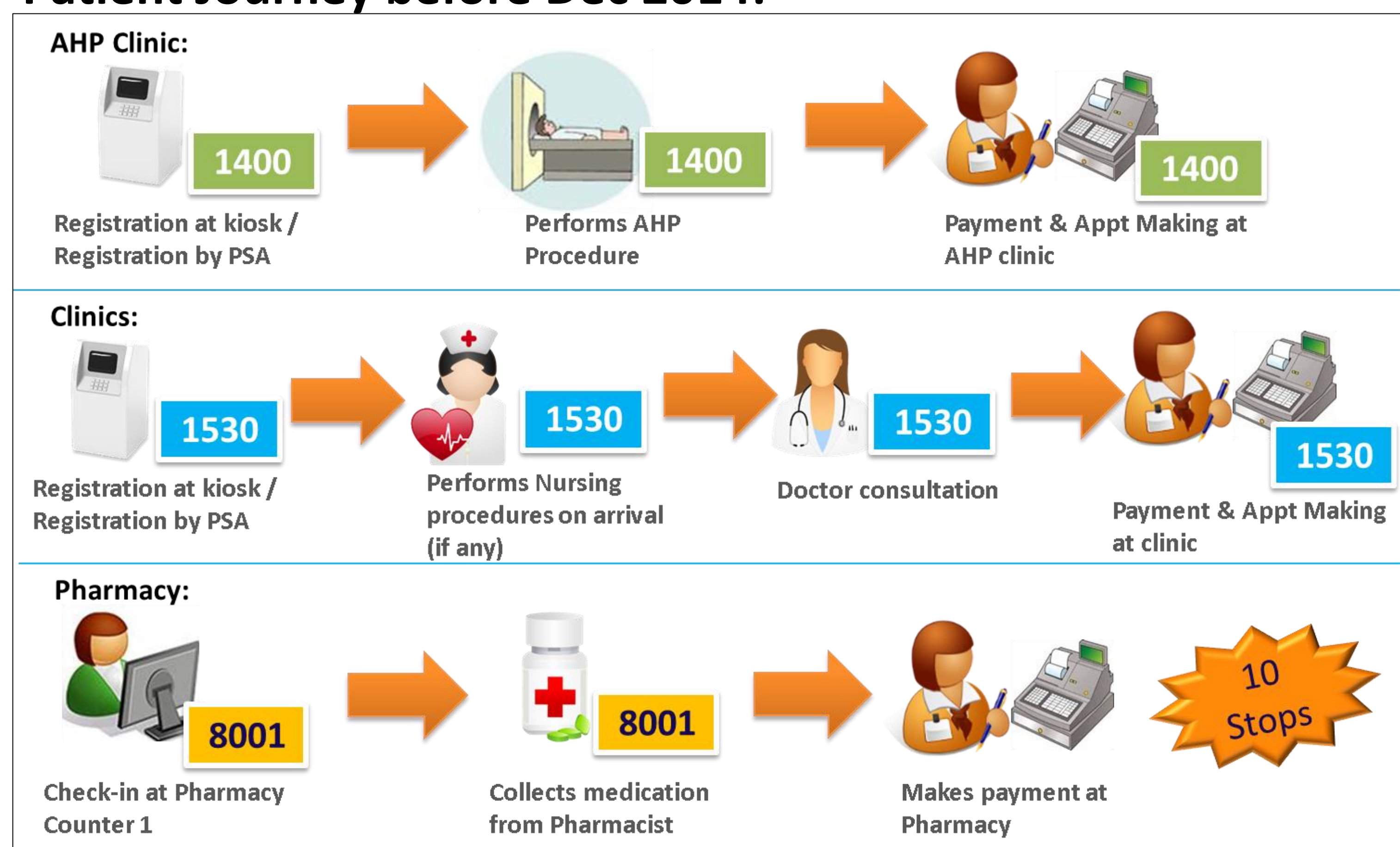
To improve the patient experience for CGH outpatient clinics, with a review of the existing work processes, and the rollout of 1Queue system across **all outpatient areas** in CGH.

## Problem Statement

Prior to Dec 2014:

1. Multiple registrations required for patients with multiple appointments on the same day, multiple queue numbers issued
2. Little or no visibility of the patient's entire journey
3. No visibility of completion of services done on arrival – queues were sent to the doctor's rooms directly upon registration (Clinic staff used manual paper slips to indicate services were completed)
4. Transcription by counter staff required for nursing services performed, indicated on hardcopy charge forms
5. No standard workflow between different outpatient areas – some were practiced payment at the last stop, whereas some practiced first-stop payment

## Patient Journey before Dec 2014:



## Methodology

- In Dec 2014, we started on the journey to implement 1Queue (i.e. single queue number) to 3 SOC's and 4 AHP areas located at The Integrated Building (IB). The ultimate intent was to rollout 1Queue to all outpatient areas.
- Started with the base 1Queue application used in NHCS, added numerous system enhancements to support our workflow
- Held extensive bi-weekly workgroup discussions with the key user reps from SC Ops, Pharmacy, Rehab Services, CMU, Xray, MSS, facilitated by IHIS
- Redesign of existing the workflows and standardise the processes across **all outpatient areas**.
- Training sessions were conducted for all frontline staff (PSAs, Nurses, doctors, AHP) - 54 trainers and 260 frontline staff

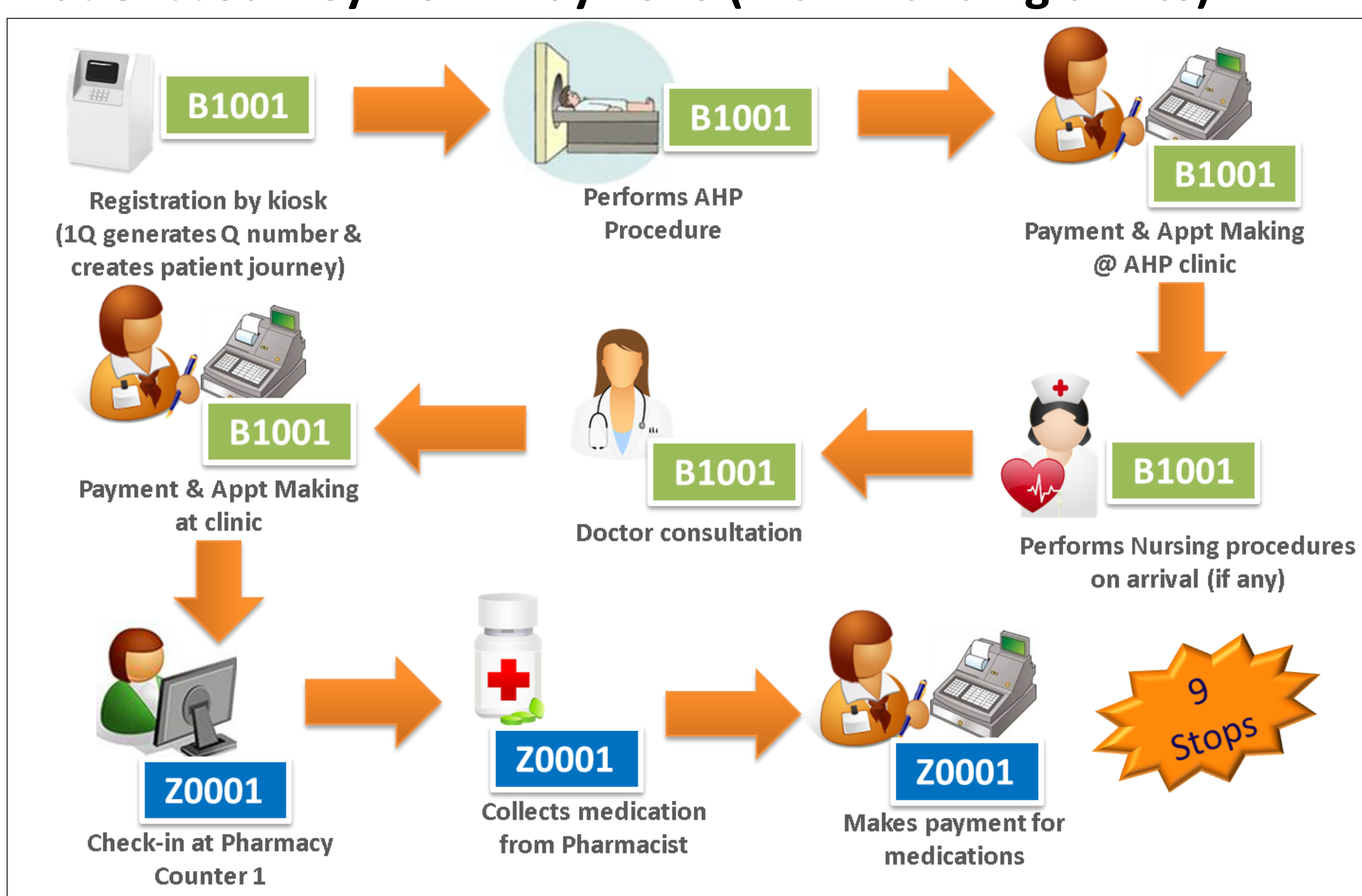
## Results

A full implementation of 1Queue system and the revised workflows were implemented across CGH **all outpatient areas** in May 2016, across the remaining 17 SOC clinics and 6 AHP areas in CGH Main Building.

Positive outcomes from this implementation:

1. Single-stop registration for all appointments – patients could register all of their appointments for the day at any kiosk
2. Increased visibility of the patient's journey for patients and staff with single queue journey – 1Q number
3. Increased accuracy of patient wait time and service time, as services performed on arrival or ordered post-consult were managed in the same journey
4. Refined algorithm in computing the number of patients in front of you, to consider patients who have yet to register
5. Eliminated transcription errors as charges were entered directly into OAS at the point of service

## Patient Journey from May 2016 (Main Building clinics):



## Conclusion

From Dec 2014, 1Queue 1Payment was achieved in the clinics at The Integrated Building. From May 2016, 1Queue was achieved in the Main Building clinics.

With the implementation of the 1Queue system across all outpatient areas within CGH, it has enhanced the patient experience as patients and staff reaped the benefits of greater visibility and accuracy of the patient's journey, and experienced a reduction in number of stops required.

## Future Works

Future workflow enhancements would include achieving 1Payment for all patients across all outpatient clinics, including Medication Orders by PSAs in the clinics.