

Project Title

NUHS Harmonised Clinical Referral and One Appointment System for Faster
Scheduling Turnaround Time

Project Lead and Members

Project Lead(s): Evonne Ho
Project Members: Marissa Tan, Yvonne Chia, Rachel Goh, Jesslyn Ng

Organisation(s) Involved

National University Health System

Healthcare Family Group(s) Involved in this Project

Healthcare Administration, Medical

Project Period

Start date: Nov 2020
Completed date: Ongoing. Launched Feb 2022

Aim(s)

Streamline the turnaround time for referral to NUHS (National University Health System) from NUP (National University Polyclinics) via harmonization of clinical criteria to automate the referral screening process and centralized scheduling via OneNUHS Contact centre to schedule to all institutions in NUHS.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

See poster appended/ below

Conclusion

See poster appended/ below

Additional Information

See poster appended/ below

Project Category

Care & Process Redesign, Quality Improvement, Workflow Redesign, Productivity, Time Saving, Access to Care, Turnaround Time, Operational Management, Resource Allocation

Keywords

Referral Time, Appointment, Streamline, Scheduling, Turnaround Time, Workflow Redesign,

Name and Email of Project Contact Person(s)

Name: Evonne Ho

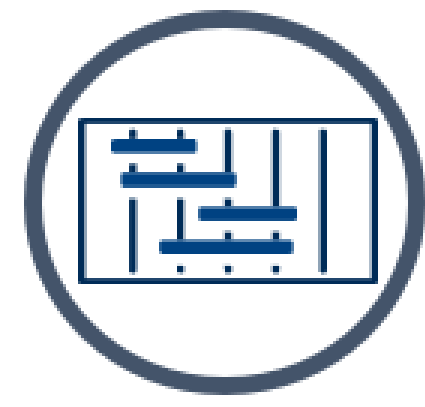
Email: evonne_jy_ho@nuhs.edu.sg

NUHS Harmonised Clinical Referral and One Appointment System for Faster Scheduling Turnaround Time

Objective:

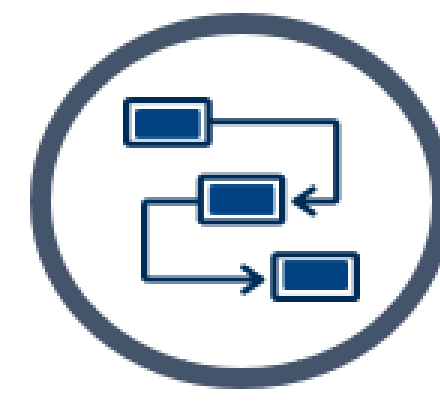
To enable One Contact Centre to make appointments across NUHS, so patients can be cared for within NUHS at the earliest possible time.

Benefits



Shortest time to definitive care

Provide patients with earliest appointment slots across institutions



Right site

Able to accurately refer patients into speciality of care at first instance



Help in Load levelling

Optimise resource utilisation across institutions

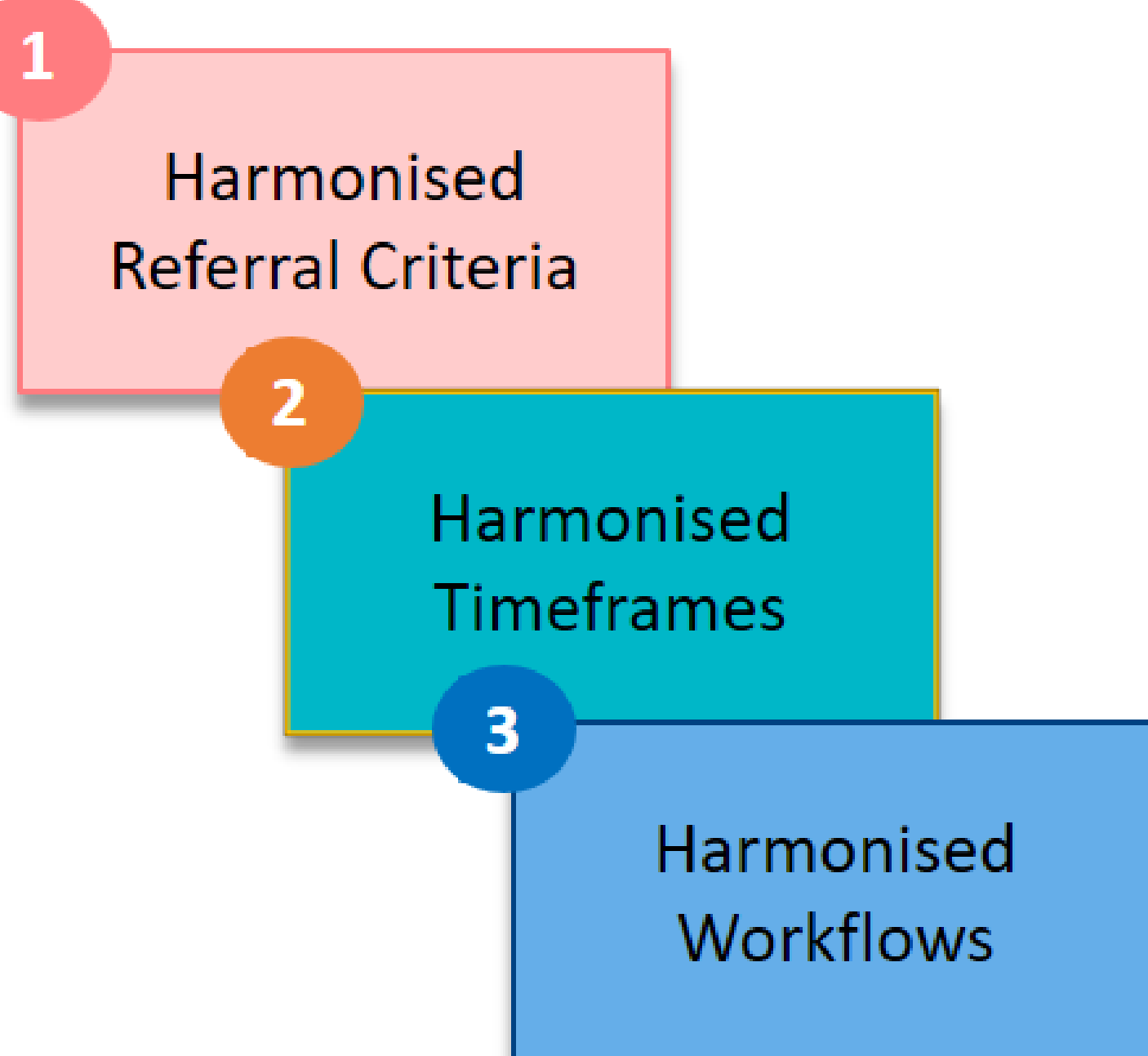
To create



Seamless care experience

To enable One Contact Centre to make appointments seamlessly across NUHS institutions

Key Enablers



The Challenge

The turnaround time for referral to NUHS (National University Health System) from NUP (National University Polyclinics) can be as high as 8 days (90th Percentile), with an average of 5.1 days from Jan 2021 – Jan 2022. It was found that this was due to excessive touchpoints and a relatively un-optimised workflow in the process of getting the referral scheduled.

The Solution

By streamlining this process via harmonization of clinical criteria in the shared physician referral order form (by each specialty), harmonised timeframes (urgency) and harmonised workflows so that we can automate the referral screening process and provide the earliest available appointment (oneNUHS Appointment System). This is further made possible by consolidating our Contact centre (oneNUHS Contact Centre) and empowering them to be able to schedule to all institutions within NUHS (Figure 2.0). The reduction in manual communication and assessment of the referral has led to a consistent reduction in NUHS Referral turnaround time from an average of **5.1 days to 1.8 calendar days**.

Vision – Seamless care experience

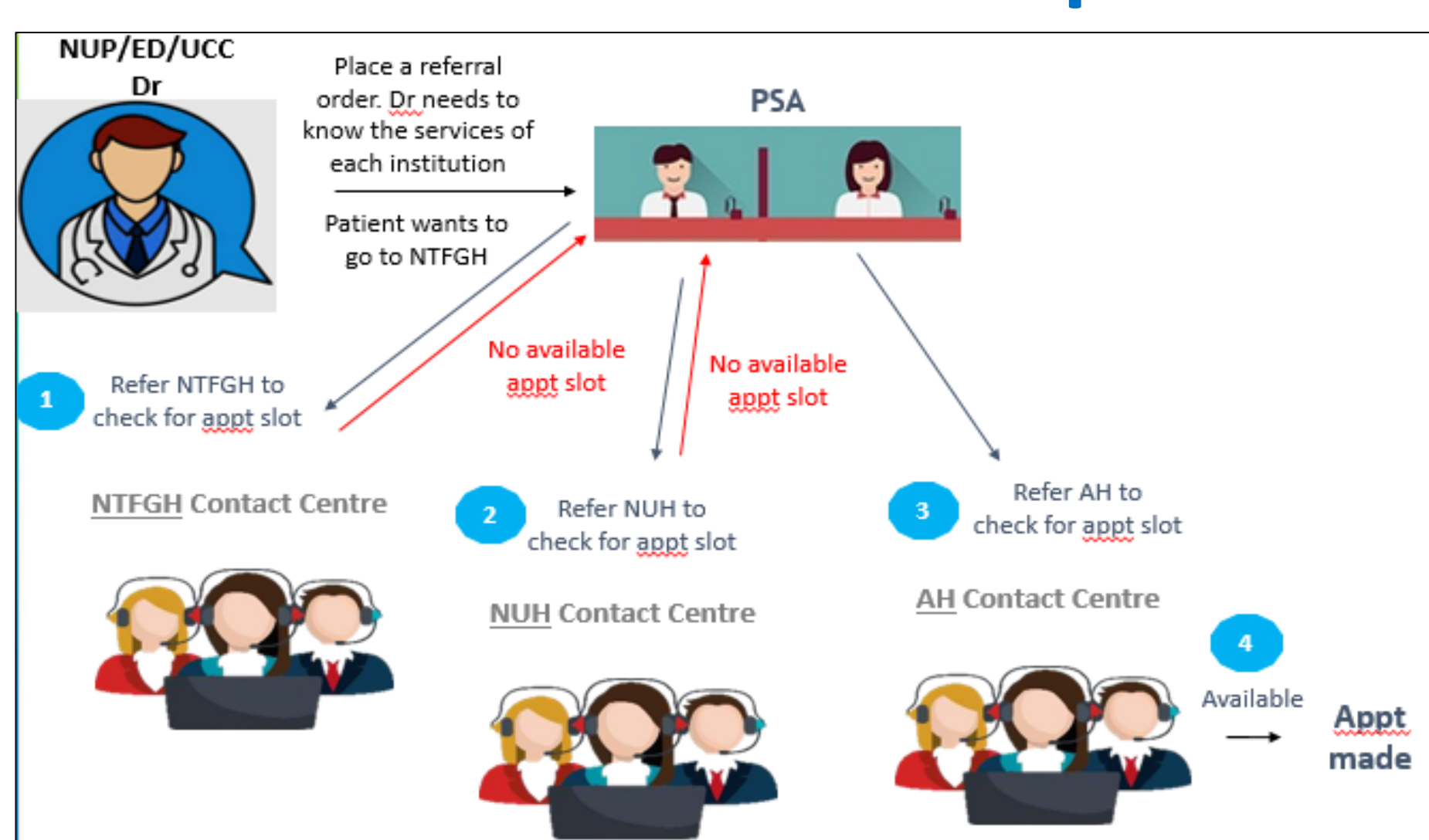


Figure 1.0

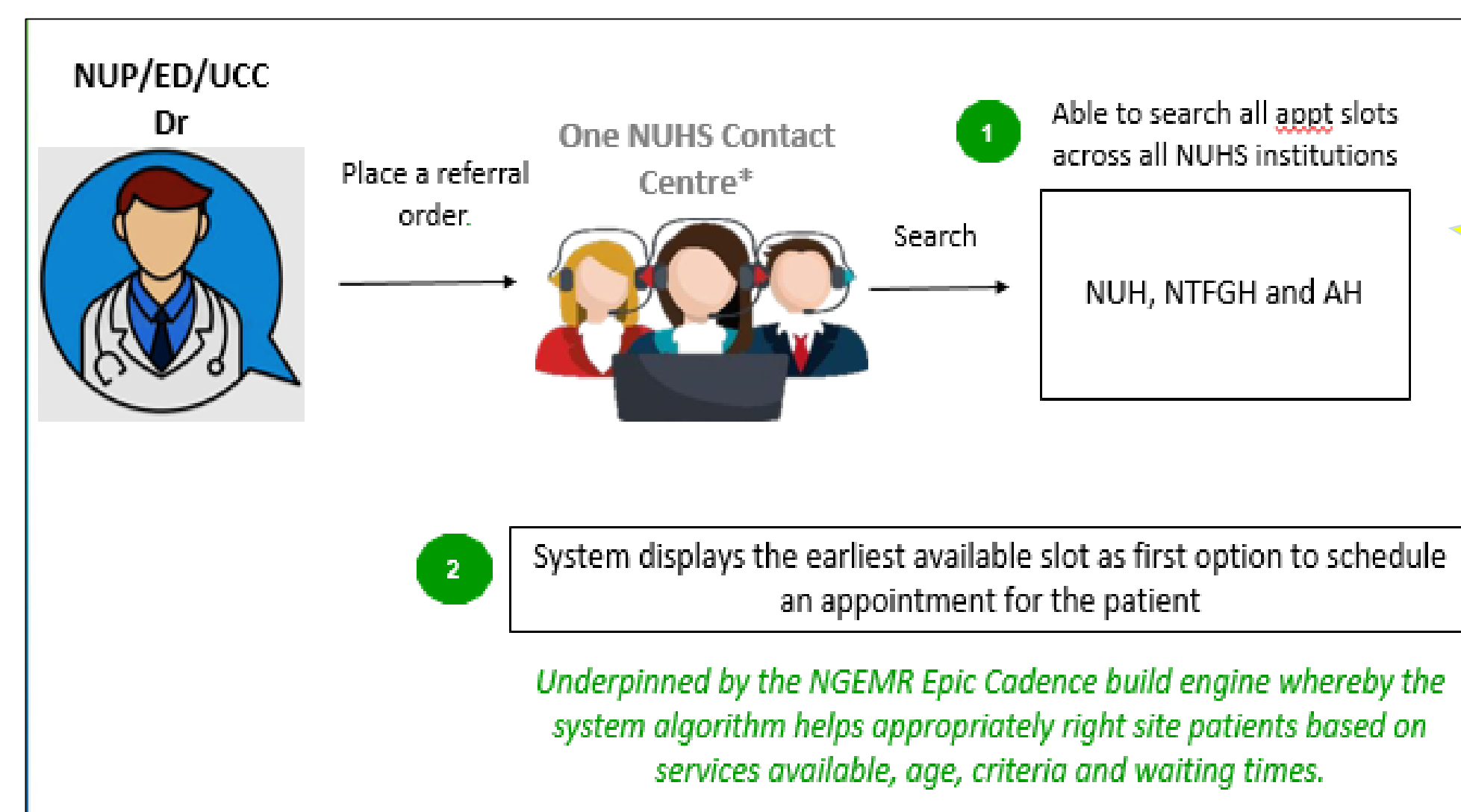
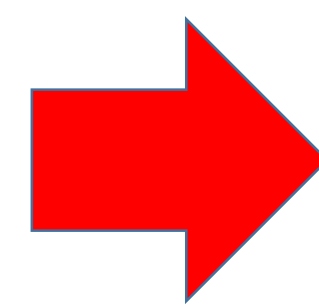
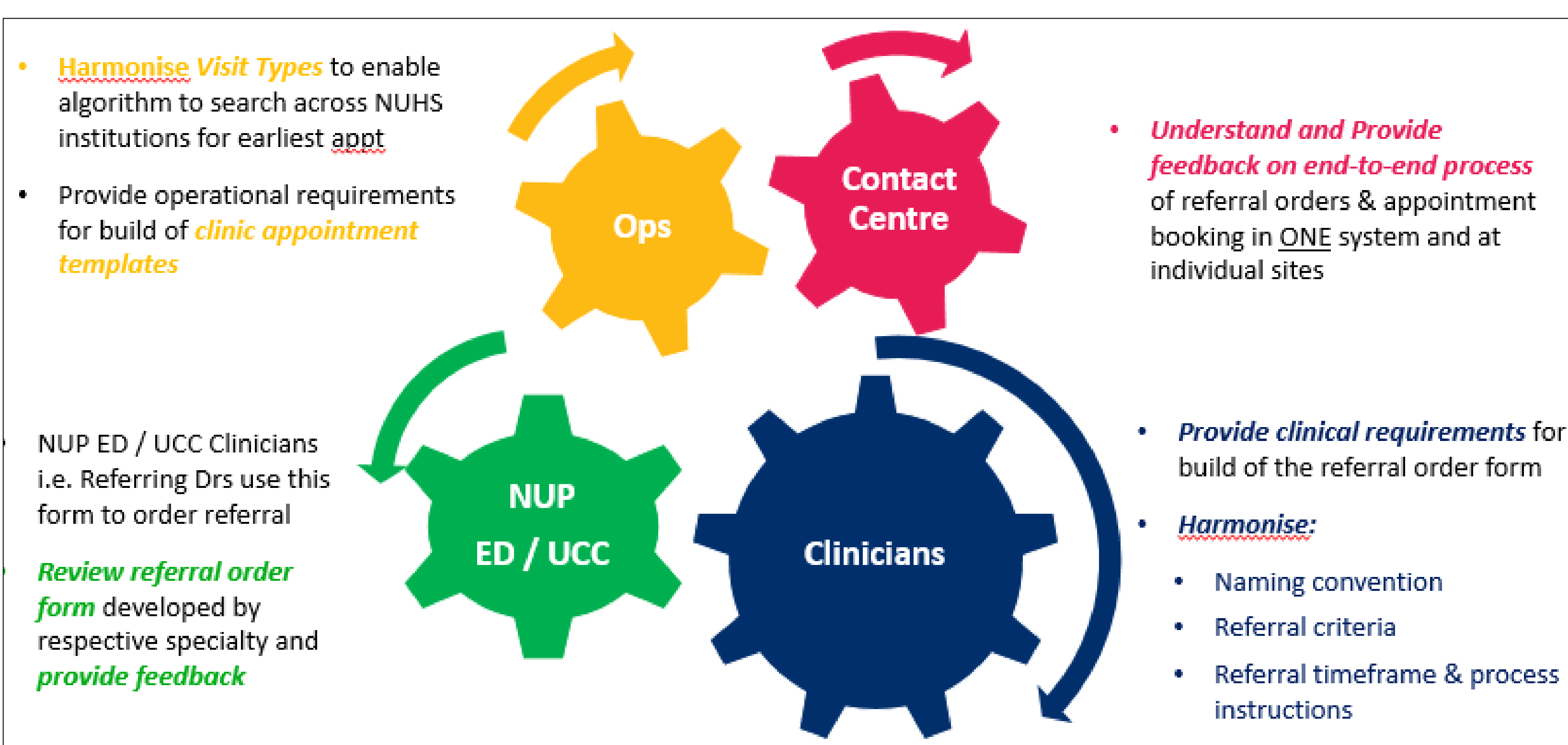


Figure 2.0

IMPROVED
Cross
institutional
Scheduling
Turnaround
time by
nearly 300%

How?

Strong buy in and collaboration between Group Ops/Institution Ops, Clinicians, Contact Centre and Group Medical Informatics Office (GMIO) and support by senior leadership and head of specialty departments.



Conclusion – user testimonial

Our turnaround time has increase in efficiency by close to 300% for our routine appointments and our handling time per referral is halved. We also use to have an average of 5 errors per month to current 1 error since we went live.

In terms of patient experience, patient will be given earliest access to treatment within NUHS if patient did not indicate location preference.

First Visits (FVs) at all 3 hospitals can now be made or rescheduled within the same call to the referral team. Before referral harmonisation, patients/referring locations have to call the 3 hospitals' contact centre themselves. So definitely an improvement to patient services as well.

~ Jesslyn Ng, Head, NUHS Group Contact Centre

Results

The **RED line** signifies the starting point since we implemented this together with NUHS NGEMR wave 3b go live in Feb 2022.

- ❑ We observed that highest reduction in referral turnaround time (TAT) is for NUH as they contribute to the largest volume of referrals from NUP/ED/UCC
- ❑ There is no change in the TAT for NTFGH and JMC because they were already harmonized in the referrals process within Jurong campus even prior to NUH/AH coming onboard NGEMR
- ❑ For AH (Alexandra Hospital), you see a slight increase is because they had a relatively smaller load and when they came onboard NGEMR, they see a higher but appropriate volume when the system automatically load balanced the appointments.

