

## **Project Title**

Reducing Care Fragmentation - One Care Team, One Appointment, under One Roof

## **Project Lead and Members**

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## **Organisation(s) Involved**

Alexandra Hospital

## **Project Period**

Start date: November 2018

Completed date: June 2019

## **Aims**

AH's patients are predominantly elderly and with multiple co-morbidities. Many patients have appointments at different institutions. This leads to care fragmentation, frustrations in navigating the system(s), duplicative tests, unnecessary costs and inconvenience for patients and their caregivers. Care needs to become holistic again, and re-centred around the patient and caregiver.

The project team decided to start with consolidating the outpatient appointments of inpatients at AH. This entails i) identifying a Principal Doctor and ii) eliminating unnecessary appointments.

To create a user-centric process which integrates the needs of the care team, patients and caregivers, the project team adopted a Design Thinking approach.

The team also aimed to create impact and deliver value as early as possible. Therefore, they adopted Scrum, an Agile framework whereby work was broken into Sprints (time-boxes of 2 to 4 weeks), and planning, development and rapid experimentation of prototypical workflows in the ward are done iteratively.

## **Background**

See attached

## **Methods**

See attached

## **Results**

See attached

## **Lessons Learnt**

1. Not all patients could have their care consolidated, e.g. prefer not to be consolidated to AH due to rapport with current doctors.
2. Agility made progress quick. Most team members worked in the ward so they could oversee experiments and implementation and garner feedback easily and quickly. Working in time-boxes allowed for a continuous pace of delivery. Decisions and changes were made quickly during short 15-minute daily huddles to update progress.

## **Conclusion**

See attached

## **Project Category**

Care Redesign

## **Keywords**

Care Redesign, Design Thinking, User Journey, Alexandra Hospital, Scrum, Sprints, Principal Doctor, Care Consolidation, Heuristic, Electronic Medical Records

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## THE PROBLEM

Alexandra Hospital (AH) is a member of the National University Health System (NUHS), which cares for a population of 1.1 million across 26 precincts in the Western region of Singapore. AH's patients are predominantly elderly and with multiple co-morbidities. Many patients have appointments at different institutions. This leads to care fragmentation, frustrations in navigating the system(s), duplicative tests, unnecessary costs and inconvenience for patients and their caregivers.

## THE SOLUTION APPROACH

A multi-disciplinary team was formed to explore how to reduce the care fragmentation. A Design Thinking approach was adopted to create a user-centric process which integrates the needs of the care team, patients and caregivers. Scrum, an Agile framework whereby work was broken into time-boxes of 2 to 4 weeks, and planning, development and rapid experimentation of prototypical workflows in the ward are done iteratively.

## THE CARE CONSOLIDATION PROCESS

There were two objectives to Care Consolidation:

1. Assign a Principal Doctor who works with other AH healthcare professionals as a care team to every eligible AH patient.
2. Minimise number of appointments and/or have them on the same day for the patient's convenience.

Care Consolidation starts upon the patient's admission in the ward so that upon discharge, the patient has a consolidated care plan for their follow-up appointments. As much as possible, the appointments will be kept to AH.



### The 4 steps of Care Consolidation

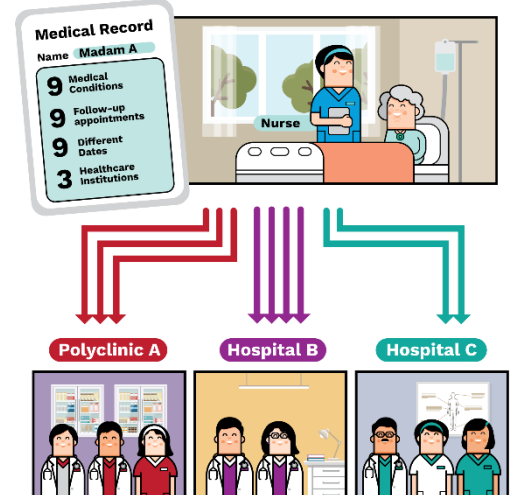
1. Medical Officer (MO) retrieves the patient's upcoming appointments at all institutions from electronic medical records including NEHR.
2. MO rationalises upcoming appointments, considers care needs stemming from the patient's stay and forms a consolidated care plan. The patient's Principal Doctor can be the consultant caring for the patient during the stay or a consultant who is currently managing one of the patient's conditions.
3. MO discusses the plan with the patient/caregiver and they make a shared decision for the plan.
4. MO presents the plan in the discharge summary for the patient's/caregiver's reference, and for the care team to book the appointments. MO sends the Principal Doctor a discharge memo highlighting important information about the care plan.

## THE IMPACT OF CHANGE

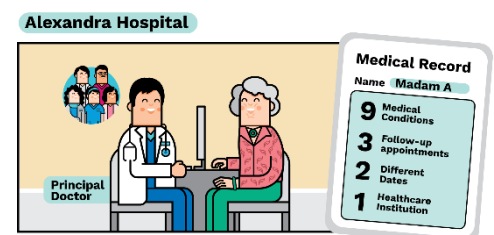
Care Consolidation was piloted in one AH general ward in January 2019. The proportion of patients discharged to a Principal Doctor in AH's Integrated Care clinic and Healthy Ageing clinic was used to measure the Care Consolidation efforts. Over the six months, the monthly percentage of patients with care consolidated was between 13% and 26%.

Majority of patients who had their number of appointments reduced had 1 to 3 fewer appointments; one had 9 appointments consolidated to 3 essential ones. Patients and caregivers alike were delighted by the convenience and cost savings brought about by Care Consolidation. More importantly, they valued having one Principal Doctor caring for them holistically with the care team.

### Before Care Consolidation



### After Care Consolidation



Percentage of patients with care consolidated

