

Project Title

Formation of Early Management (ELMa) Ward for Medically Stable COVID Patients

Project Lead and Members

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Organisation(s) Involved

Changi General Hospital

Aims

To innovatively set up an alternate isolation ward for COVID 19 patients so as to provide timely and safe medical intervention in the midst of a nationwide shortage of inpatient beds and other resources.

Background

See poster appended / below

Methods

See poster appended / below

Results

See poster appended / below

Conclusion

See poster appended / below

Additional Information

Singapore Healthcare Management (SHM) Conference 2021 – Merit Award
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Project Category

Care & Process Redesign

Keywords

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INTRODUCTION

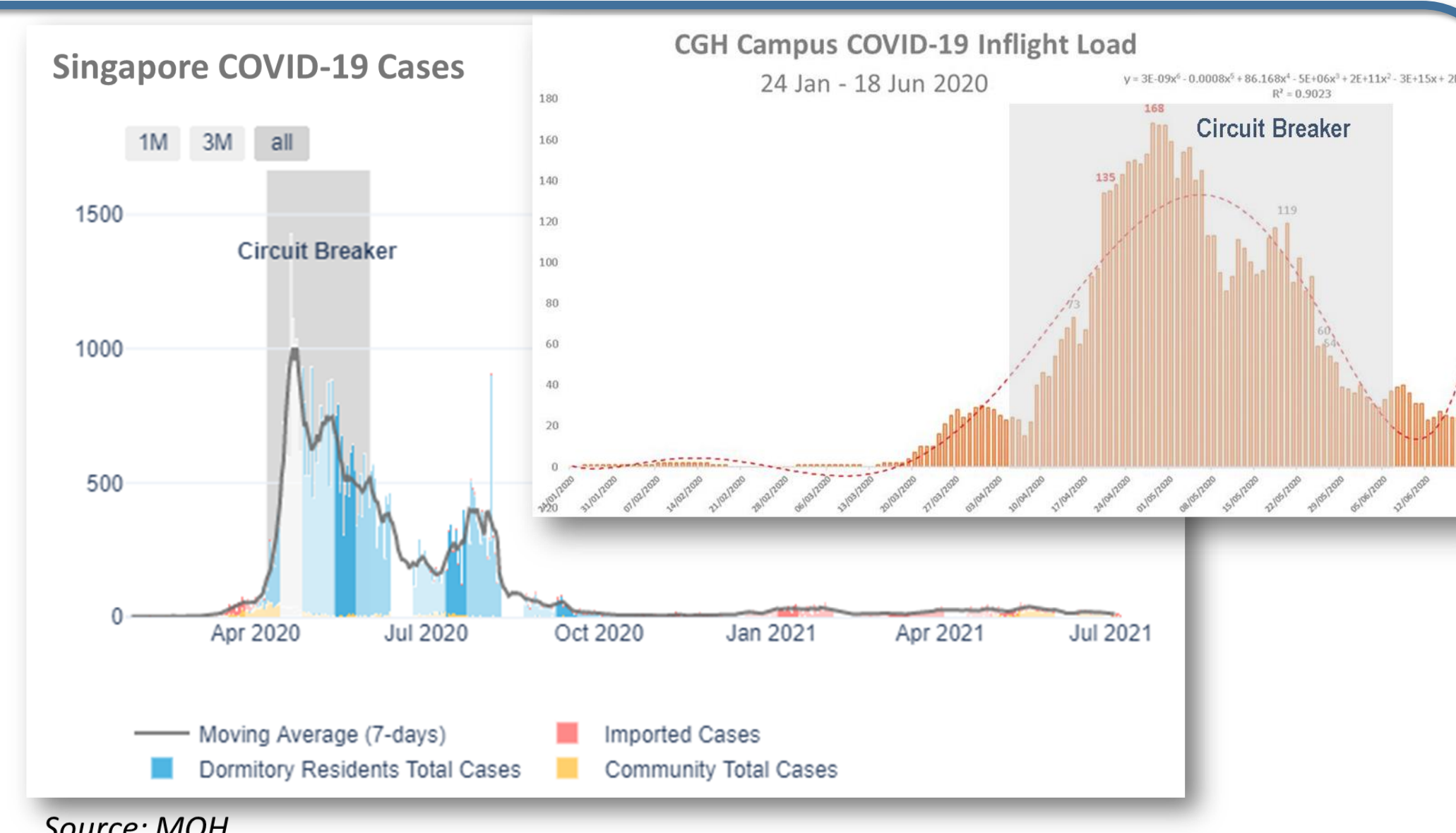
BACKGROUND:

- At the peak of COVID-19 in April 2020, hospital wards were converted rapidly with 6 wards being used for positive COVID-19 patients within a couple of weeks
- CGH was admitting up to 168 patients / day at the peak of Circuit Breaker (CB)
- Majority of the patients were migrant workers from dormitories who were medically stable but needed isolation and little or minimal medical treatment had no discharge placements
- In addition, non-essential services were not available during CB

PROBLEM:

- Insufficient inpatient beds for both COVID-19 patients and other patients who required acute care needing hospitalisation
- Discharges were slow and aggravated by the lack of vacancy in the Community Care Facilities (CCFs)
- Shortage of resources worldwide, exacerbated by the closure of non-essential services, made it hard to procure resources for the influx of patients

AIM: To **innovatively** set up of an alternate isolation ward for COVID-19 patients so as to provide **timely** and **safe** medical intervention in the midst of a nationwide shortage of inpatient beds and other resources.



Source: MOH

METHOD

Workflow:

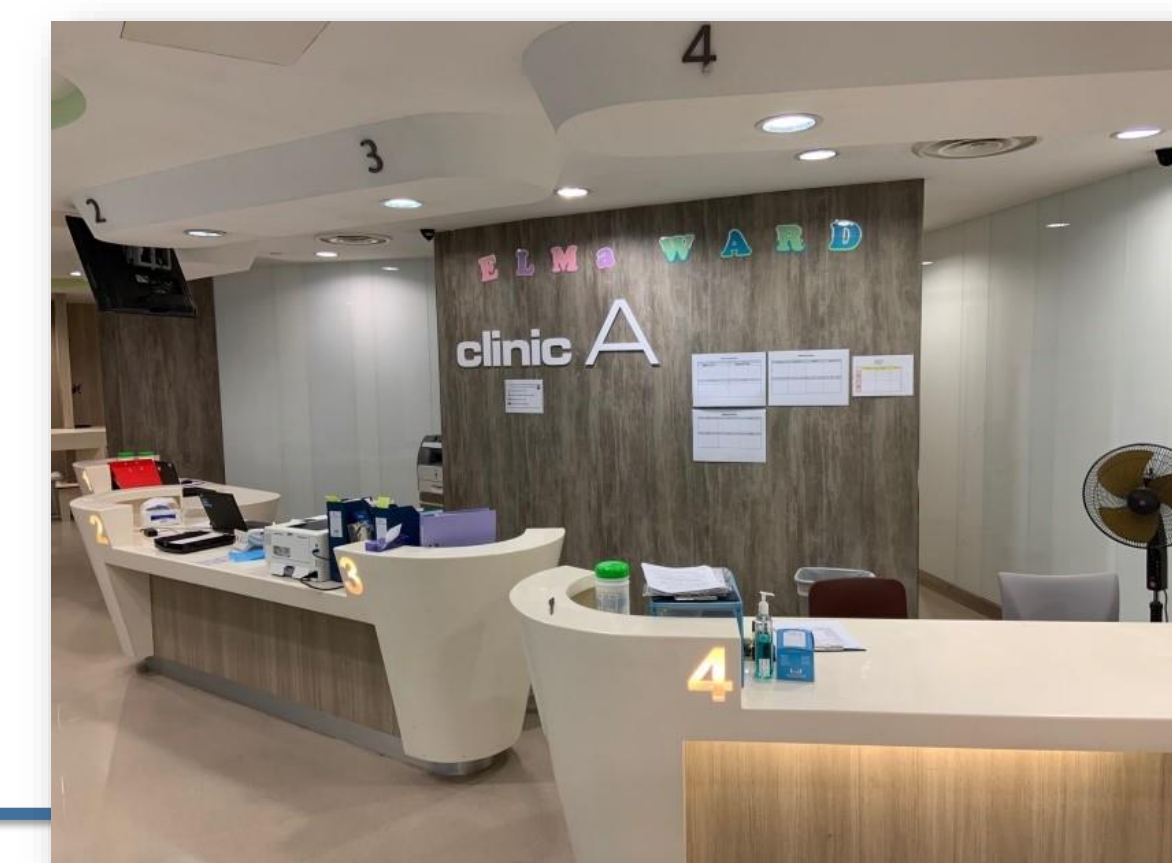
- Assembling of Care Team from different professions and many of who would not have much to cross path during peacetime
- Operating as a point of transition between outpatient and inpatient → an **unique integrated workflow** blending inpatient and outpatient processes
- Approval was sought and obtained from MOH for this innovative set-up

Location:

- Strategically** located in the old clinics (Clinic A & B), above CGH Accident & Emergency and opposite Hospital Swab-and-Send-Home Isolation Facility (HOSIF) → Able to send COVID + patients over with minimal transfer journey

Facilities:

- ELMa Ward could be flexed to hold more patients if need be → Up to 100 beds can be assigned for a surge situation
- Necessary clinical equipment such as crash cart, vital signs machines, etc, were also rallied and pulled together from many clinical areas due to the crunch in the supply chain.



RESULTS

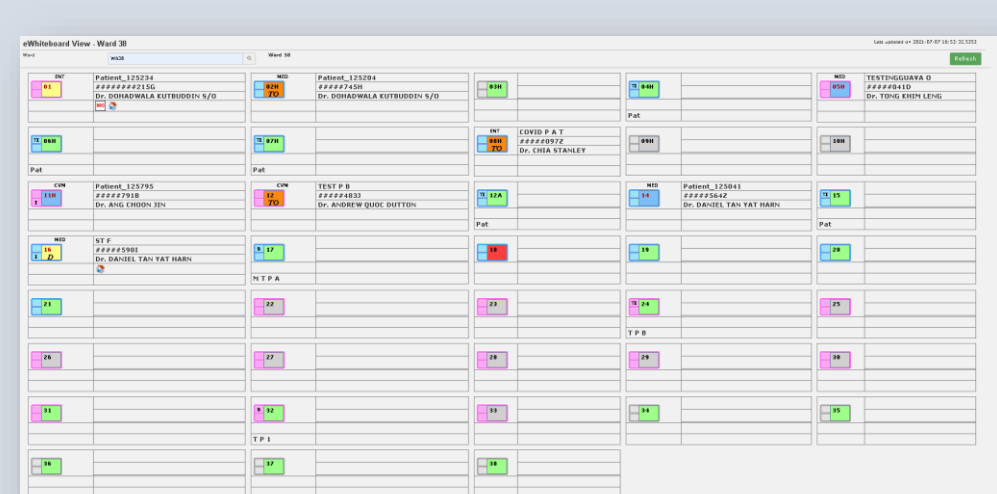
Before

Full suite of hospital beds when hospitalised were provided (e.g. **beds, call bells**)

Lack of showering facilities within the old clinics

Inpatient drugs were administered to patients according to each dosage

Automated Ward View within Patient Information Management System (PIMS)



After

With limited supply in hospital beds, the team **obtained safari beds, stand alone call bells** to ensure patients are adequately cared for



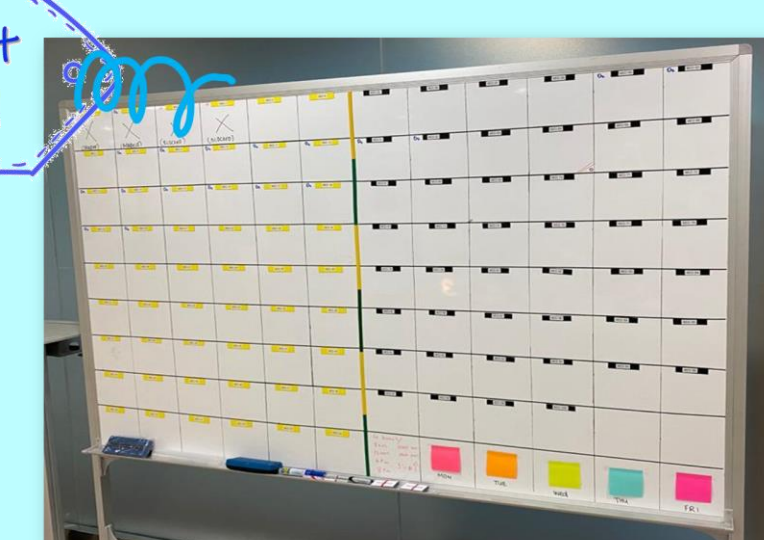
- Toilets were repurposed with shower facilities for patient **hygiene**
- Portable screens added to provide **privacy at entrance**



Medication was given in advance **empowering** patient to self medicate

Due to the short notice, physical whiteboard was created in place of the PIMS' e-whiteboard to the care team to provide an overview of patient's information and allow for easier care planning

Patient Board



SUSTAINABILITY

- Staff welfare and morale were not forgotten. Dedicated area was provided for them to rest and have their meals
- Care packs which included toiletries were also given to patients to stay fresh and comfortable



SCALABILITY

- In the event of a surge, ELMa-2 & ELMa-3 can be activated at other available space
- ELMa Ward is highly configurable → When chokepoint moved from discharges to CCFs, Discharge Holding Area (DHA) was carved out from ELMa Ward as a to create beds for recovered C+ patients awaiting placements

CONCLUSION

“ Never let a **good crisis** go to waste
- Winston Churchill ”

- Medically stable COVID-19 patients can be right-sited and Inpatient hospital beds can be freed up for medically acute patients
- Through changes in protocol and allowing patients to self-help, (e.g. self-medicating, temperature taking); the staff to patient ratio was reduced
- The teamwork continued to be displayed and the team stayed resilient even as the landscape moved from Dorscon Orange to Circuit Breaker and back to BAU mode, all with the necessary infection control in place
- This set up was shared with the rest of the SingHealth intuitions end of April '20



A total **93 patients** were admitted/transferred into ELMa Ward. This equated to **222 bed days** avoided in the general wards.